



AMENDED - AGENDA
Regular Meeting
June 8, 2023 at 5:30 PM
Legion Hall – Below City Hall
216 East Park Street
McCall, ID
AND MS TEAMS Virtual

ANNOUNCEMENT:

American with Disabilities Act Notice: The City Council Meeting room is accessible to persons with disabilities. If you need assistance, please contact City Hall at 634-7142 at least 48 hours prior to the meeting. Council Meetings are available for in person and virtual attendance. Any member of the public can join and listen only to the meeting at 5:30 pm by calling in as follows:

Dial 208-634-8900 when asked for the Conference ID enter: 547 899 799#

Or you may watch live by clicking this link:

<https://youtube.com/live/uguXIhEob4M?feature=share>

OPEN SESSION

PLEDGE OF ALLEGIANCE

APPROVE THE AGENDA

CONSENT AGENDA

All matters which are listed within the Consent Agenda have been distributed to the City Council in advance for reading and study. Items listed are considered routine by the Council and will be enacted with one motion unless a Council Member specifically requests an item be removed from the Consent Agenda to be considered separately. Staff recommends approval of the following

ACTION ITEMS:

1. City Council Regular Minutes – April 27, 2023 (ACTION ITEM)
2. City Council Regular Minutes – May 25, 2023 (ACTION ITEM)
3. City Council Special Minutes – May 26, 2023 (ACTION ITEM)
4. Payroll Report for the period ending May 26, 2023 (ACTION ITEM)
5. Warrant Register – GL (ACTION ITEM)
6. Warrant Register – Vendor (ACTION ITEM)
7. Accept the Minutes of the following Committees (ACTION ITEM)
 - a. Housing Advisory Committee – October 10, 2022
 - b. McCall Area Planning and Zoning Commission – February 1, 2023
 - c. McCall Area Planning and Zoning Commission – March 7, 2023
 - d. Library Board of Trustees – March 13, 2023
 - e. McCall Area Planning and Zoning Commission – April 4, 2023
 - f. Airport Advisory Committee – April 5, 2023
 - g. McCall Historic Preservation Commission – April 10, 2023
 - h. Public Art Advisory Committee – April 24, 2023
8. AB 23-122 City Licenses Report to Council Per McCall City Code (ACTION ITEM)

GENERAL PUBLIC COMMENT

HOW TO SUBMIT GENERAL COMMENTS

On the City's website at <https://www.mccall.id.us/packets> you may leave a public comment or signup to make a comment live online or to call-in prior to 3:00 pm the day of the meeting. Once we receive your request to make public comment online, a link will be sent to you with instructions. The public are welcome to attend the meeting in person. All comments are limited to 3 minutes.

REPORTS

Chamber Report

Monthly Department Reports

Council Report

PRESENTATION

AB 23-116 Environmental Protection Agency Presentation and Discussion on the Cinnabar Mine Site

PUBLIC HEARING

AB 23-121 Request to Approve Subdivision Preliminary Plat (SUB-22-06) and Conditional Use Permit (CUP-22-06) – Simmons Street Townhomes for Steve Callan at 209-217 Simmons Street (ACTION ITEM)

PUBLIC HEARING COMMENT

HOW TO SUBMIT PUBLIC HEARING COMMENTS

On the City's website at <https://www.mccall.id.us/packets> you may leave a public comment or signup to make a comment live online or to call-in prior to 3:00 pm the day of the meeting. Be sure to leave your comment under the relevant Public Hearing topic. Once your request is received to make public comment online, a link will be sent to you with instructions. The public are welcome to attend the meeting in person. All comments are limited to 3 minutes.

BUSINESS AGENDA

~~AB 23-123 Request to Approve the Findings of Fact, Conclusions, of Law, and Decision Document for CUP-21-03, Middle School Expansion, for the McCall Donnelly School District (ACTION ITEM) REMOVED 6/6/23~~

AB 23-119 Wildlife Public Engagement Recap and Direction to Staff (ACTION ITEM)

AB 23-120 Request to Adopt Resolution 23-10 Establishing the Revised Lake Shore Disposal Rates for the City of McCall (ACTION ITEM)

AB 23-118 Request to Adopt Resolution 23-09 Consenting to Participate in the Proposed Ambulance Service District and upon Voter Approval Consenting to the Board of Valley County Commissioners dissolving the existing Valley County Emergency Service District (ACTION ITEM)

AB 23-124 Request to Approve Letter of Support for Valley County's Application for an Idaho CPF (Capital Projects Fund) ARPA (American Rescue Plan Act) Broadband Infrastructure Grant application (ACTION ITEM)

AB 23-117 Deinhard Lane, SH-55 to Samson Trail: Recommendation to Award Change Order for Water Main Upgrade (ACTION ITEM)

Upcoming Meeting Schedule Discussion and Direction (ACTION ITEM)

ADJOURN

MINUTES

**McCall City Council
Regular Meeting
McCall City Hall -- Legion Hall
VIA TEAMS Virtual
April 27, 2023**

Call to Order and Roll Call
Pledge of Allegiance
Approve the Agenda
Consent Agenda
Public Comment
Business Agenda
Adjournment

CALL TO ORDER AND ROLL CALL

Mayor Giles called the regular meeting of the McCall City Council to order at 5:30 p.m. Mayor Giles, Council Member Maciaszek, Council Member Nelson, Council Member Nielsen, and Council Member Throver all answered roll call.

City staff members present were Anette Spickard, City Manager; Bill Punkoney, City Attorney; Sarah Porter, Deputy Clerk; Erin Greaves, Communications Manager; Linda Stokes, City Treasurer; Michelle Groenevelt, Community Development Director; Brian Parker, City Planner; Kurt Wolf, Parks and Recreation Director; Eric McCormick, Golf Course Superintendent; Chris Curtin, Information Systems Manager; Traci Malvich, Human Resources Manager; Dallas Palmer, Police Chief; Nathan Stewart, Public Works Director; Meredith Todd, Assistant City Planner; Amanda Payne, Local Option Tax and Short-term Rental Administrator.

Also, in attendance was Ryan Garber, Captain of Fire Prevention and Code Enforcement McCall Fire District.

Mayor Giles led the audience in the Pledge of Allegiance.

APPROVE THE AGENDA

Council Member Maciaszek moved to approve the agenda as submitted. Council Member Nielsen seconded the motion. In a voice vote all members voted aye, and the motion carried.

CONSENT AGENDA

Staff recommended approval of the following ACTION ITEMS. All matters which are listed within the consent section of the agenda have been distributed to each member of the McCall City

Council for reading and study. The items listed are considered routine by the Council and were enacted with one motion.

1. City Council Regular Minutes – March 30, 2023
2. City Council Special Minutes – April 13, 2023
3. Payroll Report for the period ending April 14, 2023
4. Warrant Register – GL
5. Warrant Register – Vendor
6. **AB 23-081 City Licenses Report to Council Per McCall City Code**

Per McCall City Code Title 4 Chapter 9, the City Council has determined the City Clerk shall be delegated the authority to process and grant or deny all alcoholic beverage license applications, other than certain circumstances involving catering permits, which the City Clerk shall review the application for catering permit for completeness and forward said application to the Police Chief. The Police Chief upon receipt of the application shall make a recommendation to the City Clerk to approve or deny the application. Whenever the City Clerk shall determine that an application for alcoholic beverage license transfer or renewal is complete, the City Clerk shall approve or deny such application. All decisions of the City Clerk shall be reported to the City Council at the next regularly scheduled City Council meeting after such a decision. The City Clerk is also responsible for all processing of business, taxi, snow removal, pawnbroker, child daycare licenses, vendor and short-term rental permits, and public event applications.

Action: Review the license report.

7. **AB 23-082 Treasurer’s Report as Required by IC 50-208**

Treasurer’s report of accounts and office activity during March 2023 regarding care, management, or disposition of moneys, property, or business of the City. *Action: Review the Treasurer’s report.*

8. **AB 23-083 Treasurer’s FY22 4th Quarter Report as Required by IC 50-208**

Treasurer’s quarterly report of accounts and office activity during July, August, and September 2022 regarding care, management, or disposition of moneys, property, or business of the City. *Action: Review the Treasurer’s report.*

9. **AB 23-084 Treasurer’s FY23 2nd Quarter Report as Required by IC 50-208**

Treasurer’s quarterly report of accounts and office activity during January, February, and March 2023 regarding care, management, or disposition of moneys, property, or business of the City. *Action: Review the report.*

Council Member Nelson moved to approve the Consent Agenda as submitted. Council Member Maciaszek seconded the motion. In a roll call vote, Council Member Nelson, Council Member Maciaszek, Mayor Giles, Council Member Nielsen, and Council Member Thrower all voted aye, and the motion carried.

PUBLIC COMMENT

Mayor Giles called for public comment at 5:33 p.m.

Sixteen (16) written comments were received and are included in Attachment A.

David Gallipoli, 200 Scott St

Mr. Gallipoli addressed the Council regarding the local deer herd. Mr. Gallipoli noted speaking to experts about controlling the population of deer using vaccines. Feeding the herd already kills the deer and it is only a matter of time until chronic wasting disease shows up.

Joey Petri, 225 Valley Spring Rd

Mr. Petri echoed Mr. Gallipoli's concerns for the local deer herd. Additionally, Mr. Petri requested a partnership between private and public entities for the pulverization of glass for recycling to limit the waste going to the landfill.

Hearing no further comments, Mayor Giles closed the comment period at 5:40 p.m.

BUSINESS AGENDA

AB 23-090 Wildlife Public Engagement and Education Plan and Direction to Staff

Communications Manager Erin Greaves presented to the City Council stating that on April 13th, 2023, the Council gave staff direction to develop a plan for a community conversation surrounding the concept of a wildlife Ordinance in the City of McCall. Manager Greaves reviewed a public outreach and education plan that included details of the planned community meeting for May 4, 2023, and the expected next steps in the process. Highlights included an exit survey for any public attending as well as a survey available for members of the public that were unable to attend, sharing wildlife data in response to the Council's request, and the creation of a community data matrix encompassing other cities dealing with the same issue.

Council Member Nelson complimented Manager Greaves on the process of community involvement planned. Council Member Thrower agreed with the format presented to the Council and requested additional scientific studies and smaller tables if there is a large turnout to the meeting. Manager Greaves noted that the Idaho Department of Fish and Game and Idaho Conservation League will be in attendance for educational purposes.

Council Member Maciaszek noted the need for messaging to include that the city and community are in this together and there needs to be a plan of action to work together. Additionally, it is important to understand and gather information to see if the community sees deer as an issue and what the community sees as a solution. Council Member Nielsen noted agreement with Council Member Maciaszek and the need for positive conversations with positive actions. Council Member Thrower asked if it is possible to get the studies and information out before the forum. Manager Greaves noted that the information will be presented at the meeting and not before; this meeting is the start of a process to provide a good solution for the community.

Mayor Giles noted having a lot of confidence in the direction staff is headed. Council Member Nelson noted interest in knowing if the lice are transmittable to other animals including pets and the risk to the animal community of McCall. Mayor Giles noted that most people agree on the goal of a healthy and wild deer herd. The goal is not to eliminate all the deer.

AB 23-088 Captain Ryan Garber, McCall Fire and EMS, will give an update to Council regarding the Fire Inspection Process for Short-Term Rentals and ask for Direction from Council regarding Sleeping Areas

Ryan Garber Captain of Fire Prevention and Code Enforcement, McCall Fire & EMS performs the fire inspection of all Short-term Rentals (STR). Captain Garber presented the numbers of inspections on STRs to date and of those inspections how many have passed and how many have failed the inspection. He discussed the primary failure points including windows and other egress issues. Highlights included the process to educate homeowners, fire prevention instead of suppression, and review of inspection numbers. Captain Garber noted that a prevalent annoyance to homeowners is having to have the fire extinguisher visible. Allowing anything other than the standards that Idaho has adopted will not occur during the STR inspections as it is important to be consistent. About 25% of owners have had an issue with window size or placement but several owners have begun replacing windows to be compliant. Another egress issue comes with condo units that do not have egress in loft spaces that are currently being used as sleeping areas. Council Member Maciaszek noted some of the condos were built for commercial use but were converted into living spaces.

Mayor Giles noted that, in general, the City Council takes safety seriously and the regulations for the fire safety inspection are reasonable. Council Member Maciaszek asked how a loft is treated during the fire inspection. Captain Garber noted all sleeping spaces are treated the same regardless of whether it is a loft, a living room, or a separate room. Council Member Maciaszek noted that if the owner of the property wants to sleep in the loft without an egress window the owner can do so. Captain Garber noted that yes, it is that person's choice and used the example of the choice to wear a seatbelt or not wear a seatbelt when in a vehicle. The law requires the use of a seatbelt, but any person can make a choice not to wear a seatbelt. Council Member Maciaszek noted the City of McCall is not reinventing the wheel with the regulations currently in place for health and safety.

Council Member Nelson noted that if it is not up to code it is not safe, and the codes have been put in place for public safety. Council Member Thrower noted that enforcing the code without exception is the expectation but input from the community and property management companies on how the process is going with the new regulations should be sought. Additionally, Council Member Thrower asked if Captain Garber sees most of the issues being residences that were built before the code or if the problem spaces were not designed to be sleeping areas. Mr. Garber noted the residential building code has been in place since 1979 in the State of Idaho, but homeowners can change out windows without a building permit which can change the egress to not meet the code. Council Member Nielsen agrees with Mr. Garber not setting any leniency for the inspection process and requirements.

AB 23-089 4th of July Fireworks Update and Direction to Staff

Parks and Recreation Director Kurt Wolf presented to the City Council. Due to cost increases and contractor availability, the fireworks display which was previously done by the McCall Chamber of Commerce has gone from an estimated \$10,000 - \$16,000 to \$15,000 - \$25,000. City Staff were able to secure a contractor for the show, however, the only way the company can justify a show in McCall on the 4th of July is for it to be a much larger display which comes at a higher cost. The same company can justify a smaller scale show on Saturday, July 1 for a cost of \$15,000, but to schedule a show on July 4 the cost jumps to \$25,000.

City staff has researched various funding mechanisms to offset the cost increase, including the following:

- Community Sponsorship Program – based on a tiered level sponsorship model.
- Partnership program with other agencies such as McCall Fire, Southern Idaho Timber Protection Association, Payette National Forest, and Valley County to promote a community show on the lake and a more fire-safe community.
- General operating budgets: (surplus auction revenue, marketing line item, parks operating line items.)

The Council consensus was to keep the firework show on the 4th of July.

AB 23-092 Request for consideration of a Code Amendment to McCall City Code 8.14.8(B) – Alcohol in City Parks

Police Chief Dallas Palmer presented to the City Council draft language that would amend McCall City Code 8.14.8(B) and provide 4th of July alcohol restrictions in a predetermined manner, eliminating the need for the City Council to revisit the restrictions and approve by resolution on an annual basis. However, the draft language still provides an opportunity for the City Council to revisit and adjust alcohol restrictions by resolution if the City Council were to determine it necessary. Chief Palmer reviewed previous City Council decisions regarding alcohol in city parks during the 4th of July and the new proposed code language.

Current Language:

“By resolution, the city council may prohibit the possession and/or consumption of alcoholic beverages in designated city parks on specific days from July 1 through July 7 each year. Signs will be posted in each park announcing the restrictions at least twenty-four (24) hours in advance of the beginning of any period of such restrictions.”

Proposed Draft Language:

“Unless otherwise set by resolution of the McCall City Council, the possession and/or consumption of alcoholic beverages is prohibited in lakeside city parks from 8:00 p.m. on July 3rd through 8:00 a.m. July 5th each year. Signs will be posted in each park announcing the restrictions at least twenty-four (24) hours in advance of the beginning of any period of such restrictions.”

The Council agreed with the code language aside from Council Member Nielsen who expressed being opposed to the ban on alcohol in City parks altogether.

AB 23-091 Request for Construction Contract Award: Davis Beach Intake Station Reconstruction Project

Public Works Director Nathan Stewart presented to the City Council. The City, in collaboration with Clear Solutions, Inc., has conducted formal bidding for the Davis Beach Intake Station Upgrades. This project provides various building and mechanical replacements/upgrades to meet regulatory requirements, improve performance and efficiency, and enhance aesthetics.

Major components include:

- Replacement of the raw water pressure main 12-inch flow meter

- Replacement of antiquated electrical and ventilation components
- Installation of variable frequency drives (VFDs) to improve pump performance, control, and energy efficiency.
- New roof, exterior siding, and architectural elements to maintain the structure and improve aesthetics.
- Epoxy coating of interior concrete flooring, new exterior doors, and exterior pavers at doorway entrances

No expansion of the building footprint or pump station capacity will occur with this project. All required design/architectural elements of the project have been submitted to the City Planner for Administrative Design Review Approval. The bid opening occurred on April 20, 2023. The bid was reviewed by the Project Engineer, Eric Landsberg of Clear Solutions Inc, for accuracy and responsiveness to the bidding specifications. Work on the exterior of the building is expected to be completed by late October 2023 but internal upgrades may take longer depending on part processing times and availability.

Council Member Nelson appreciated the aesthetics put into the building design in response to public comments previously received regarding the look of the building. Council Member Nielsen stated that it would be beneficial to have a pathway to the beach at the pump station location. Director Stewart reviewed working with Parks and Recreation Director Kurt Wolf for improvements to access to the pump station and the beach for public recreation.

Council Member Maciaszek moved to award the construction contract to the responsive low bidder Dalrymple Construction in the amount of 498,096.00 and change the order amount up to 10% over the contract amount and authorize the Mayor to sign all necessary documents. Council Member Thrower seconded the motion. In a roll call vote Council Member Maciaszek, Council Member Thrower, Mayor Giles, Council Member Nelson, all voted aye, Council Member Nielsen voted no, and the motion carried.

AB 23-085 Request to Reject Bid for the McCall Golf Course Clubhouse Access Improvements– Phase 2

Golf Course Superintendent Eric McCormick presented to the City Council stating that the Engineer’s Estimate for the clubhouse access improvements project construction cost, which accounts for the current volatile construction market, was \$208,742.98 for the combination of the Base Bid and Bid Alternate #1. The city advertised bids and received one bid from Dyrud Construction. The received bid is 80.31% above the Engineer’s Estimate. City Staff recommended that the bid be rejected, and the project be rebid in summer 2023.

The City Council had no questions regarding the request to reject the bid for the McCall Golf Course Clubhouse Access Improvements.

Council Member Nelson moved to reject the bid from Dyrud Construction for the McCall Gold Course Clubhouse Access Improvements – Phase 2 and authorize the Mayor to sign all necessary documents. Council Member Thrower seconded the motion. In a roll call vote Council Member Nelson, Council Member Thrower, Mayor Giles, Council Member Maciaszek, and Council Member Nielsen all voted aye, and the motion carried.

AB 23-086 Request to Appoint Dave Petty to the McCall Area Planning & Zoning Commission

City Planner Brian Parker presented to the City Council. Pursuant to McCall City Code Chapter 3.12, the McCall Area Planning and Zoning Commission consists of seven (7) members, four (4) of which are appointed by the McCall City Council. On March 7, 2023, the Commission vetted seven (7) letters of interest for the Planning and Zoning Commission vacancy and determined that only three (3) interested individuals were qualified pursuant to McCall Code Section 3.12.02 and still interested in serving: Toni Curtis, Dave Petty, and Mike Spilotros.

At the McCall Area Planning and Zoning Commission's April 4, 2023 meeting, the Commission further reviewed the remaining applicants and recommended appointing Dave Petty to the McCall Area Planning & Zoning Commission. The vacancy was advertised for two weeks in the Star-News and a thorough public outreach effort through the Communication Department. Mayor Giles asked Planner Parker for the reasons the Planning and Zoning Commission recommended Mr. Petty. Planner Parker noted Mr. Petty's financial background and business background.

Council Member Thrower moved to appoint Dave Petty to a three (3) year term on the McCall Area Planning & Zoning Commission. Council Member Nielsen seconded the motion. In a roll call vote, Council Member Thrower, Council Member Nielsen, Mayor Giles, Council Member Maciaszek, and Council Member Nelson all voted aye, and the motion carried.

AB 23-087 Request for Daily Vendor Fee Evaluation and Direction to Staff

Deputy City Clerk Sarah Porter presented to the City Council. On January 12, 2023, the City Council reviewed the Staff recommendation to change the Annual Vendor fee to \$140 to match the Business License fee for a new business and to cover the extra time it takes to get the proper approvals from the landowners. This fee would cover a Vendor that is in one location for a year. However, the Vendor would be required to pay the \$50 a day fee if they chose to move locations. At that time staff also recommend eliminating the 6-month permit fee. These fees more accurately cover staff time to administer. After considering Council's questions and comments staff later recommended the annual fee to be clarified as a 3-12-month permit in the same location, maintaining the \$50 a day fee if they choose to move locations.

On March 9, 2023, Council adopted Resolution 23-04 updating the Comprehensive fee schedule as follows:

\$50 Per Day

\$140 for 3-12 months in one location (Long Term fee)

\$50 Per Day is added to Long Term fee when moving locations.

After working with the new fee schedule, the Clerk realized that the per-day fee should be a per-day or per-event fee, whichever is applicable, as it does not take any more staff time to prepare a daily permit than it does a per-event permit. Staff is requesting to hold a public hearing to reconsider the daily permit fee and change it to a per-day or per-event fee, whichever is applicable. The daily or event fee would still be applicable to a long-term vendor who changes location.

The Council directed staff to schedule a public hearing to adopt the updated fee.

AB 23-080 Acknowledgement of an Open Meeting Law Violation and Cure

City Manager Anette Spickard presented to the City Council stating that the March 31, 2023 City Council Meeting Agenda did not get posted within 24 hours of the scheduled meeting as required by ID Code § 74-204(2). The City is self-reporting the violation and wishes to cure such violation as outlined in Idaho Code § 74-208. No action was taken at the March 31, 2023, Special Council Meeting, and therefore, there is nothing to declare void.

Council Member Nielsen moved to recognize the open meeting law violation of failure to post the Agenda for the March 31, 2023, Special Council Meeting, any actions taken at that meeting are void. Council Member Nelson seconded the motion. In a roll call vote, Council Member Nielsen, Council Member Nelson, Mayor Giles, Council Member Maciaszek, and Council Member Thrower, all voted aye, and the motion carried.

Upcoming Meetings Schedule Discussion

The Council discussed upcoming meetings.

EXECUTIVE SESSION

At 7:15 p.m. Council Member Thrower moved to go into Executive Session for:

- **Personnel - 74-206 (1)(b) To consider the evaluation, dismissal, or disciplining of, or to hear complaints or charges brought against, a public officer, employee, staff member or individual agent, or public-school student**
- **Records - Pursuant to Idaho Code §74-206 (1) (d) To consider records that are exempt from disclosure as provided in chapter 1, title 74, Idaho Code**

Council Member Nielsen seconded the motion. In a roll call vote, Council Member Thrower, Council Member Nielsen, Mayor Giles, Council Member Maciaszek, and Council Member Nelson all voted aye, and the motion carried.

Council discussed the City Manager’s annual evaluation.

ADJOURNMENT

Without further business, Mayor Giles adjourned the meeting at 8:01 p.m.

ATTEST:

Robert S. Giles, Mayor

BessieJo Wagner, City Clerk

MINUTES

**McCall City Council
Regular Meeting
McCall City Hall -- Legion Hall
VIA TEAMS Virtual
May 25, 2023**

Call to Order and Roll Call
Pledge of Allegiance
Approve the Agenda
Consent Agenda
Public Comment
Public Hearing
Business Agenda
Executive Session
Return to Open Session
Adjournment

CALL TO ORDER AND ROLL CALL

Mayor Giles called the regular meeting of the McCall City Council to order at 5:30 p.m. Mayor Giles, Council Member Maciaszek, Council Member Nelson, and Council Member Nielsen, all answered the roll call. Council Member Thrower was absent.

City staff members present were Anette Spickard, City Manager; Bill Nichols, City Attorney; BessieJo Wagner, City Clerk; Sarah Porter, Deputy Clerk; Linda Stokes, City Treasurer; Brian Parker, City Planner; Dallas Palmer, Police Chief; Sean Reilly, Network Administrator; Emily Hart, Airport Manager.

Mayor Giles led the audience in the Pledge of Allegiance.

APPROVE THE AGENDA

Council Member Nielsen moved to approve the agenda as submitted. Council Member Nelson seconded the motion. In a voice vote all members voted aye, and the motion carried.

CONSENT AGENDA

Staff recommended approval of the following ACTION ITEMS. All matters which are listed within the consent section of the agenda have been distributed to each member of the McCall City Council for reading and study. The items listed are considered routine by the Council and were enacted with one motion.

1. City Council Special Minutes – April 28, 2023

2. City Council Special Minutes – May 4, 2023
3. City Council Regular Minutes – May 11, 2023
4. Payroll Report for the period ending May 19, 2023
5. Warrant Register – GL
6. Warrant Register – Vendor
7. **AB 23-106 City Licenses Report to Council Per McCall City Code**
Per McCall City Code Title 4 Chapter 9, the City Council has determined the City Clerk shall be delegated the authority to process and grant or deny all alcoholic beverage license applications, other than certain circumstances involving catering permits, which the City Clerk shall review the application for catering permit for completeness and forward said application to the Police Chief. The Police Chief upon receipt of the application shall make a recommendation to the City Clerk to approve or deny the application. Whenever the City Clerk shall determine that an application for alcoholic beverage license transfer or renewal is complete, the City Clerk shall approve or deny such application. All decisions of the City Clerk shall be reported to the City Council at the next regularly scheduled City Council meeting after such a decision. The City Clerk is also responsible for all processing of business, taxi, snow removal, pawnbroker, child daycare licenses, vendor and short-term rental permits, and public event applications. *Action: Review the license report.*
8. **AB 23-108 Treasurer’s Report as Required by IC 50-208**
Treasurer’s report of accounts and activity of office during the month of April 2023 regarding care, management or disposition of moneys, property, or business of the City. *Action: Review the Treasurer’s report.*
9. **AB 23-107 Request to Approve a Fireworks Display Permit by the Sabala Foundation**
The Sabala Foundation is submitting a request and application for a June 24, 2023 Fireworks Display for the RJS Foundation Tournament. The Fireworks Display will be free and open to the public. The Airport Manager, Fire Chief, and Police Chief have approved the display application. McCall City Code states the following as it relates to Fireworks Displays: 5-3-430: PERMITTED POSSESSION: (A) A recognized civic organization having a genuine, material existence and purpose separate from obtaining a permit under this Section, may make an application for a permit for a fireworks display ..., to be held in connection with a national holiday or special local event. The application shall be made to the City Clerk, who shall route it through the police chief and fire chief and to the mayor and council. The mayor may make or direct such an investigation as he may deem appropriate. The permit shall be issued or denied by the mayor and council, considered for these purposes to be the fire prevention bureau, based upon consideration of the nature of the occasion, the nature of the applicant, and public safety. Any permit issued under this subsection shall be limited to one time only for which issued. *Action: Approve the Fireworks Display Permit for the Sabala Foundation for June 24, 2023, and authorize the Mayor to sign all necessary documents.*
10. **AB 23-111 Request for Approval of an Avigation Easement with Leslie Roberts, 300 Krahn Lane**
The Airport is taking steps to minimize incompatible land use in the Airport Impact Area. Among other steps, the Airport is requesting Avigation Easements from landowners within three miles of the airport as part of the Planning and Zoning permit approval process. In August of 2021, Council approved an Avigation Easement Template. All future Avigation Easements will be on Council’s Consent Agenda making the process more efficient for

Council and Staff. The City Attorney has reviewed this Template. Les Roberts, property owner of 300 Krahn Lane has reviewed and understands this avigation easement. *Action: Approve an Avigation Easement with Leslie Roberts, 300 Krahn Lane, and authorize the Mayor to sign all necessary documents.*

Council Member Nelson moved to approve the Consent Agenda as submitted. Council Member Maciaszek seconded the motion. In a roll call vote, Council Member Nelson, Council Member Maciaszek, Mayor Giles, and Council Member Nielsen all voted aye, and the motion carried.

PUBLIC COMMENT

Mayor Giles called for public comment at 5:32 p.m.

J.J. Campbell 1663 Timber Cir

Mr. Campbell noted a goal of opening a sober living non-profit in the community and updated the Council on the progress of obtaining that goal.

Hearing no further comments, Mayor Giles closed the comment period at 5:35 p.m.

PUBLIC HEARING

AB 23-109 Request Approval of Resolution 23-08 Adopting the City's Comprehensive Fee Schedule reflecting updated fees for Vendor Permits

Council Member Nelson moved to open the public hearing to discuss the fee schedule for City permits. Council Member Nielsen seconded the motion. In a roll call vote, Council Member Nelson, Council Member Nielsen, Mayor Giles, and Council Member Maciaszek all voted aye, and the motion carried.

City Clerk BessieJo Wagner presented to the City Council. This public hearing, pursuant to Section 63-1311A, Idaho Code, is intended for the City Council to hear testimony regarding the approval of Resolution 23-08 to adopt updated Vendor Fees. A public hearing notice was in the Star-News on May 11 and May 18, 2023. The recommended Vendor fees are as follows:

\$50 Per Day (non-event related)

\$50 Per Event

\$140 for 3-12 consecutive months in one location (Long Term fee)

\$50 Per Day or Event added to Long Term fee when moving locations for a day or an event.

On April 27, 2023, the Council directed staff to schedule a public hearing related to these fees.

Council Member Nelson clarified that the food court vendors would pay the long-term fee and any fee the food court charges the vendors. Clerk Wagner confirmed and noted that the \$140 long-term fee is the same as the annual business license fee.

Council Member Nelson moved to close the public hearing on the comprehensive permit fees. Council Member Nielsen seconded the motion. In a roll call vote, Council Member Nelson, Council Member Nielsen, Mayor Giles, and Council Member Maciaszek all voted aye, and the motion carried.

Council Member Nelson moved to approve Resolution 23-08 adopting the City's updated Comprehensive Fee Schedule reflecting the updated fees for Vendor Permits and authorize the Mayor to sign all required paperwork. Council Member Nielsen seconded the motion. In a roll call vote, Council Member Nelson, Council Member Nielsen, Mayor Giles, and Council Member Maciaszek all voted aye, and the motion carried.

AB 23-112 Request to Approve Subdivision Preliminary Plat (SUB-22-06) and Conditional Use Permit (CUP-22-06) – Simmons Street Townhomes for Steve Callan at 209-217 Simmons Street

Council Member Nelson moved to open the public hearing on the subdivision preliminary plat and conditional use permit CUP-22-06 townhomes on Simmons Street. Council Member Maciaszek seconded the motion. In a roll call vote, Council Member Nelson, Council Member Maciaszek, Mayor Giles, and Council Member Nielsen all voted aye, and the motion carried.

City Planner Brian Parker presented to the City Council. An Application for A Subdivision Preliminary Plat, Conditional Use Permit, Design Review, and Scenic Route Review to construct a 5-unit, mixed-use townhouse project including commercial workshop space on the ground floor and residential space on the upper floor. During McCall Area Planning and Zoning Commission's regularly scheduled February 7, 2023 meeting, the commission unanimously recommended approval of the Subdivision Preliminary Plat and Conditional Use Permit to the McCall City Council and approved the associated Design Review and Scenic Route Review applications. City Staff are collaborating with the applicant to rectify some remaining issues and requested that the Public Hearing be continued to the June 8, 2023, City Council Meeting.

Council Member Nielsen asked why the SUB and CUP are not ready when it was approved to go to the Council by the Planning and Zoning Commission. Planner Parker noted that staff wanted to refine the applications before heard by Council. Council Member Nielsen additionally noted that items coming before the Council from the Planning and Zoning Commission have seemed to not be as ready as they should be. Attorney Nichols noted City staff is trying to keep applications moving and must publish public hearing notices 3 weeks before the meeting. Some items do not fall into place in the expected time. Council Member Maciaszek asked where the proposed Simmons St is located. Planner Parker noted the proposed Simmons St would be around the Mission Street industrial area.

Council Member Nielsen moved to continue the public hearing for SUB-22-06 and CUP-22-06 to the June 8, 2023, City Council Meeting. Council Member Nelson seconded the motion. In a roll call vote, Council Member Nielsen, Council Member Nelson, Mayor Giles, and Council Member Maciaszek all voted aye, and the motion carried.

BUSINESS AGENDA

AB 23-110 Request to Approve Notice of Award and Construction Agreement with Granite Excavation, Inc., to Reconstruct Taxiway E

Airport Manager Emily Hart presented to the City Council. Taxiway E at McCall Municipal Airport is experiencing severe cracking, loose aggregates, oxidation, ponding, and settling due to frost heave. Bids were solicited for a full reconstruction. The Prebid Conference for Taxiway E Reconstruction took place at Hangar 100 on March 22. Knife River and Granite Excavation attended. Bids were opened at Legion Hall on March 29 and two bids were received. Knife River submitted a bid of \$1,129,298.00. Granite Excavation submitted a bid of \$617,582.66. The Engineer's Estimate (IFE) was \$663,218.60. Staff and TO Engineering evaluated bids and recommended an award to Granite Excavation. Staff requested FAA concurrence and after a review of the bid award documents, FAA concurs with an award to Granite Excavation. The agreement has been reviewed and approved by the City Attorney. The funding for the project will be provided by the FAA under AIP 034 at a 90% reimbursement rate. The project will start on July 10 and will be completed in phases to minimize impacts to hangar owners and other airport users.

Mayor Giles noted how far along the Airport taxiways have come and asked for clarification on the location of Taxiway E. Manager Hart noted Taxiway E runs north to south and is east of the diagonal Taxiway. Manager Spickard asked what the name of the new taxiway that replaces the diagonal Taxiway. Manager Hart noted that Taxiway Delta was completed last year and does replace the diagonal taxiway in part.

Council Member Maciaszek moved to award AIP 034 Construction Project to Granite Excavation, Inc. and approve the contract in the amount of \$617,582.66 and authorize the Mayor to sign all necessary documents. Council Member Nelson seconded the motion. In a roll call vote, Council Member Maciaszek, Council Member Nelson, Mayor Giles, and Council Member Nielsen all voted aye, and the motion carried.

Upcoming Meetings Schedule Discussion

The council discussed upcoming meetings.

EXECUTIVE SESSION

At 6:02 p.m. Council Member Nielsen moved to go into Executive Session for:

- **Exempt Records 74-206(d) To consider records that are exempt from disclosure as provided in chapter 1, title 74, Idaho Code;**
- **Litigation 74-206 (f) To communicate with legal counsel for the public agency to discuss the legal ramifications of and legal options for pending litigation, or controversies not yet being litigated but imminently likely to be litigated. The mere presence of legal counsel at an executive session does not satisfy this requirement.**

Council Member Maciaszek seconded the motion. In a roll call vote, Council Member Nielson, Council Member Maciaszek, Mayor Giles, and Council Member Nelson all voted aye, and the motion carried.

Council discussed a possible litigation issue.

RETURN TO OPEN SESSION

At 6:48 p.m. Council Member Nelson moved to return to Open Session. Council Member Maciaszek seconded the motion. In a voice vote, all members voted aye, and the motion carried.

ADJOURNMENT

Without further business, Mayor Giles adjourned the meeting at 6:50 p.m.

ATTEST:

Robert S. Giles, Mayor

BessieJo Wagner, City Clerk

MINUTES

**McCall City Council
Special Meeting
McCall City Hall -- Legion Hall
VIA TEAMS Virtual
May 26, 2023**

Call to Order and Roll Call
Work Session
Public Comment
Adjournment

CALL TO ORDER AND ROLL CALL

Mayor Giles called the special meeting of the McCall City Council to order at 9:00 a.m. Mayor Giles, Council Member Maciaszek, Council Member Nelson, and Council Member Thrower all answered roll call. Council Member Nielsen is absent.

City staff members present were Anette Spickard, City Manager; BessieJo Wagner, City Clerk; Sarah Porter, Deputy Clerk; Erin Greaves, Communications Manager; Linda Stokes, City Treasurer; Delta James, Economic Development Planner; Kurt Wolf, Parks and Recreation Director; Traci Malvich, Human Resources Manager; Sean Reilly, Network Administrator; Stefanie Bork, Parks and Recreation Business Manager Erik McCormick. Brian Parker.

Also, in attendance were Kristina Kachur, Logan Simpson Consultant; Jana McKenzie, Logan Simpson Consultant; Terri Lindberg, Treasure Valley Transit; Amber Kostoff, McPaws Regional Animal Shelter.

WORK SESSION

AB 23-114 Review of draft Parks, Recreation, and Open Space Plan

Economic Development Director Delta James introduced the consultant team from Logan Simpson. Kristina Kachur and Jana McKenzie with consultant firm Logan Simpson presented the draft Parks, Recreation, and Open Space (PROS) Plan and summarized collected findings from the final phase of community input, and reviewed prioritized action steps recommended within the plan document.

Council Member Nelson noted that the PROS plan is very comprehensive and ambitious. Council Member Thrower expressed that the Parks and Recreation department has previously shown the ability to complete ambitious projects. Council Member Nelson questioned using bonds and tax funding and the input from the public seems to have been towards creating a recreation district instead of using a bond when both options would require a new tax. Planner James noted that public input supported the idea of a recreation district to serve a large area instead of a smaller

taxing district serving just the City of McCall. Manager Spickard asked if the impact fee suggested would replace the current in lieu of parks fee for new developments. Planner James noted a park's impact fee on a new development would replace the current in lieu of parks fee requirement. Ms. McKenzie noted the importance of having a dedicated matching fund for grant opportunities. Council Member Nelson commented on the importance of parks and recreation for the community. The consultants complimented the city staff that collaborated on the PROS plan efforts.

The Council took a break at 9:40 am

The Council returned from break at 9:50 am

PUBLIC COMMENT

Mayor Giles called for public comment at 10:05 a.m.

No public comments were received.

Hearing no comments, Mayor Giles closed the comment period at 10:05 am.

WORK SESSION

AB 21-115 FY24 Budget Work Session and Direction to Staff

City Treasurer Linda Stokes and City Manager Anette Spickard presented to the City Council.

FY24 Budget Development Introduction

- AIC Budget Manual – Available Upon Request

Budget Request Presentations

- Treasure Valley Transit (TVT)
 - Terri Lindberg presented the TVT FY24 funding request. Ridership has increased by 33% from 2021 to 2022. Ms. Lindberg reviewed the challenges faced by TVT over the past year including fuel costs and lack of employees. TVT is asking for 4.5% more funding to assist with the employment challenges. Additionally, Ms. Lindberg reviewed the grant funding that TVT has applied for and how the funds have been used.
- McPaws Regional Animal Shelter (McPaws)
 - Amber Kostoff presented the McPaws FY24 funding request to the City Council. Ms. Kostoff reviewed the programs made available to the community through McPaws. Council Member Nelson asked if McPaws is at capacity with resources. Ms. Kostoff noted the staff and board members stretch every funding opportunity to the fullest. Council Member Thrower asked about the housing crisis's impact on pet surrenders or fostering. Ms. Kostoff noted that McPaws does try to help in situations where an owner may not be able to care for their pet over a short period of time due to housing, but it is not always feasible.

Basics of City Budgeting

- Roles & Responsibilities
- Budget Classification Structure
- Budget Best Practices

Council Priorities Discussion – City Manager Anette Spickard

- FY24 General Fund Budget Priorities (in no particular order)
 - Housing Action Plan Implementation
 - Fund Balance Reserve (Land Banking) – \$403,783
 - LOT – \$239,000
 - Housing Strategy Implementation (Comm Dev Budget \$20,126, Gem Grant \$25,000) – \$45,126
 - ADA Transition Plan Implementation
 - Library Expansion Project
 - Employee Recruitment/Retention Program
 - Impact Fee Analysis and Recommendation
 - Community Engagement & Education
 - Climate Action Planning/Electric Vehicle infrastructure
 - 5-Year Capital Improvement Plan
 - Maintain the current level of program services.

Overview of Major Revenue Sources

- Property Taxes
 - Homeowner’s Exemption – no change – \$125,000
 - 2022 December Net Taxable Value – \$3,144,654,028
 - Growth and Annexation due from County Assessor July 24 – no estimate available
 - Three percent Maximum Allowable Increase - \$217,537
 - Forgone Amount - \$509,513
 - One percent allowable for O & M – \$74,686
 - Three percent allowable for Capital – one-time use – Forgone balance is decreased after taken – \$224,058.
- Local Option Tax – Streets
- Water service revenue

Available Fund Balance

- General Fund – \$955,345
- Streets Fund – \$433,470
- Library Fund – \$280,180
- Airport Fund – \$664,903
- Streets LOT – \$2,301,698
- Golf – \$490,357
- Water – \$2,847,548

Council Discussion/Direction

Council Member Nelson asked about the amount kept in the general fund and how the staff feels about lowering that amount. Manager Spickard noted that the Council's long-term financial strategy has been to pay as you go and not incur debt. The left-over general fund balance has historically gone toward one-time CIP projects. Council Member Thrower noted employee retention is a very important principle for the Council to maintain and Council Member Nelson agreed.

The Council expressed the importance of being consistent with Council salaries getting a cost-of-living increase. Mayor Giles noted previous times that the City had a hard time filling open Council Member seats because the salary was so low and had not seen an increase for a long time. The Council also expressed the importance of increasing the Council salary overtime so there is not a large increase all at once.

Mayor Giles would like to see additional details regarding what would be needed from the budget to implement all the year-one items in the Housing Action Plan. Council Member Maciaszek and Council Member Nelson agreed with Mayor Giles.

FY24 Budget Development Next Steps

- Council Work Session on June 30, 9:00 AM to 1:00 PM
- Council Work Session on July 28, 9:00 AM to 1:00 PM Tentative Budget
Both Council Member Maciaszek and Mayor Giles will not be available on July 28th so the July 28th meeting will be held either July 21st or Aug 4th instead depending on budget progress.
- FY24 Budget Public Hearing on August 24, 5:30 PM
- FY24 Foregone Public Hearing on August 24, 05:30 PM

ADJOURNMENT

Without further business, Mayor Giles adjourned the meeting at 11:52 a.m.

ATTEST:

Robert S. Giles, Mayor

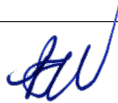
BessieJo Wagner, City Clerk

Report Criteria:

Selected pay codes: 9-02 (Comp Time Available)

Title	Hours Beg Bal	Hours Accrued	Hours Used	Hours Remain
9-02				
Total Airport:	49.86	.00	8.00	41.86
Total City Clerk:	.21	.00	.00	.21
Total City Manager:	6.83	7.50	3.75	10.58
Total Community Development:	72.02	1.50	10.50	63.02
Total Finance:	46.16	.00	.00	46.16
Total Golf Course Maint:	79.98	6.00	10.25	75.73
Total Info systems:	.00	.00	.00	.00
Total Library:	.00	.00	.00	.00
Total Local Option Tax:	.00	.00	.00	.00
Total Parks:	95.40	21.75	.00	117.15
Total Police:	256.17	6.75	25.50	237.42
Total PW/Streets:	254.58	13.50	11.00	257.08
Total Recreation Programs:	81.51	.00	.00	81.51
Total Water Distribution:	133.59	21.75	35.50	119.84

Emp No	Name	Total Gross Amount	2-00 Overtime Emp Amt	10-00 Overtime-G Emp Amt	
	Total Airport:				
		2	4,925.20	.00	.00
	Total City Clerk:				
		3	7,036.91	.00	.00
	Total City Manager:				
		5	15,937.93	.00	.00
	Total Community Development:				
		6	16,155.64	.00	.00
	Total Finance:				
		3	9,392.23	.00	.00
	Total Golf Course Maint:				
		13	19,570.25	622.85	.00
	Total Golf Professional:				
		23	9,623.14	.00	.00
	Total Info systems:				
		2	6,194.81	.00	.00
	Total Library:				
		7	10,005.65	.00	.00
	Total Local Option Tax:				
		1	1,804.00	.00	.00
	Total Parks:				
		9	13,951.33	.00	.00
	Total Police:				
		14	39,273.64	1,952.86	291.59
	Total PW/Streets:				
		14	35,530.26	41.09	.00
	Total Recreation Programs:				
		3	8,250.12	41.22	.00
	Total Water Distribution:				
		4	8,637.12	136.08	.00
	Total Water Treatment:				
		1	3,078.30	.00	.00
	Grand Totals:				
		110	209,366.53	2,794.10	291.59



Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
PAYROLL PAYABLES CLEARING						
03-22375 CHILD SUPPORT						
WASHINGTON STATE SUPPORT REGI	20230602 - 1	CASE #2281417	06/02/23	187.37	187.37	06/02/2023
IDAHO CHILD SUPPORT RECEIPTING	20230602 - 6	CASE# - 395109	06/02/23	106.62	106.62	06/02/2023
OREGON DEPT. OF JUSTICE	20230602 - 5	CASE ID - 41000000121812	06/02/23	252.00	252.00	06/02/2023
Total 03-22375 CHILD SUPPORT:				545.99	545.99	
Total :				545.99	545.99	
Total PAYROLL PAYABLES CLEARING:				545.99	545.99	
GENERAL FUND						
MAYOR & COUNCIL						
10-41-150-420.0 TRAVEL AND MEETINGS						
ASSOCIATION OF IDAHO CITIES	200010258	2023 CONFERENCE ADULT DELEGATE	05/23/23	357.00	.00	
Total 10-41-150-420.0 TRAVEL AND MEETINGS:				357.00	.00	
10-41-150-562.0 COMMITTEE RECOGNITION & AWARDS						
U.S. BANK - CARD SERVICES	0523-WAGNER	LUNCH - YOUTH COUNCIL RECRUITME	05/23/23	95.41	.00	
Total 10-41-150-562.0 COMMITTEE RECOGNITION & AWARDS:				95.41	.00	
Total MAYOR & COUNCIL:				452.41	.00	
INFORMATION SYSTEMS						
10-42-150-610.0 COMPUTER SOFTWARE						
CDW GOVERNMENT INC.	JW11248	Adobe Premiere Pro for MPD	05/30/23	296.76	.00	
Total 10-42-150-610.0 COMPUTER SOFTWARE:				296.76	.00	
10-42-150-620.0 COMPUTER HARDWARE						
CDW GOVERNMENT INC.	JW11248	Logitech MK345 Wireless Keyboard and	05/30/23	216.75	.00	
CDW GOVERNMENT INC.	JW11248	ASUS VG278QR-LCD Monitor	05/30/23	1,346.94	.00	
Total 10-42-150-620.0 COMPUTER HARDWARE:				1,563.69	.00	
Total INFORMATION SYSTEMS:				1,860.45	.00	
CITY MANAGER						
10-43-150-275.0 PUBLIC RELATIONS						
U.S. BANK - CARD SERVICES	0523-GREAVES	RETURN OF WHITE BOARD	05/25/23	148.39	.00	
U.S. BANK - CARD SERVICES	0523-GREAVES	TEAM CANVA - GRAPHICS	05/25/23	179.28	.00	
Total 10-43-150-275.0 PUBLIC RELATIONS:				30.89	.00	
10-43-150-435.0 BOOKS/PUBLICATIONS/SUBSCRIPTS						
U.S. BANK - CARD SERVICES	0523-GREAVES	CITY STAFF DIGITAL	05/25/23	119.00	.00	
Total 10-43-150-435.0 BOOKS/PUBLICATIONS/SUBSCRIPTS:				119.00	.00	
Total CITY MANAGER:				149.89	.00	
ADMINISTRATIVE COSTS						
10-44-150-200.0 OFFICE SUPPLIES						
OFFICE SAVERS ONLINE	20230525	BANDAGES, OINTMENT	05/25/23	22.62	.00	

Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total 10-44-150-200.0 OFFICE SUPPLIES:				22.62	.00	
10-44-150-420.0 TRAVEL AND MEETINGS						
TREASURE VALLEY COFFEE INC.	2160:09291305	TEA, SUGAR	05/31/23	9.50	.00	
U.S. BANK - CARD SERVICES	0523-WAGNER	LUNCH - ADA TRAINING	05/23/23	131.05	.00	
Total 10-44-150-420.0 TRAVEL AND MEETINGS:				140.55	.00	
10-44-150-450.0 CLEANING AND CUSTODIAL						
ALSCO	LBOI2084389	10 MATS	05/23/23	93.10	.00	
Total 10-44-150-450.0 CLEANING AND CUSTODIAL:				93.10	.00	
10-44-150-490.0 HEAT, LIGHTS, AND UTILITIES						
PAYETTE LAKES RECREATIONAL	06/23-0558	SEWER FEES - CIT4066	06/01/23	202.59	.00	
Total 10-44-150-490.0 HEAT, LIGHTS, AND UTILITIES:				202.59	.00	
10-44-150-490.2 WF HOUSING - TOASTER HOUSE						
PAYETTE LAKES RECREATIONAL	06/23-0567	SEWER FEES - CIT6962	06/01/23	40.52	.00	
Total 10-44-150-490.2 WF HOUSING - TOASTER HOUSE:				40.52	.00	
10-44-150-570.0 REPAIRS - BUILDING AND GROUNDS						
MCCALL CARPET & AIR DUCT CLEANI	1112278979	City Hall portion of Air Duct and carpet cle	05/13/23	6,020.20	.00	
Total 10-44-150-570.0 REPAIRS - BUILDING AND GROUNDS:				6,020.20	.00	
Total ADMINISTRATIVE COSTS:				6,519.58	.00	
FINANCE						
10-45-150-440.0 PROFESSIONAL DEVELOPMENT						
U.S. BANK - CARD SERVICES	0523-HAGEN	REFUND TAX ON HOTEL	05/25/23	19.11-	.00	
Total 10-45-150-440.0 PROFESSIONAL DEVELOPMENT:				19.11-	.00	
Total FINANCE:				19.11-	.00	
CITY CLERK						
10-46-150-210.0 DEPARTMENT SUPPLIES						
OFFICE SAVERS ONLINE	20230525	HEAVY DUTY FASTENERS	05/25/23	19.99	.00	
Total 10-46-150-210.0 DEPARTMENT SUPPLIES:				19.99	.00	
10-46-150-230.0 PRINTING AND BINDING						
AMERICAN LEGAL PUBLISHING	25444	ORD. 1015 CODIFICATION	05/18/23	846.17	.00	
Total 10-46-150-230.0 PRINTING AND BINDING:				846.17	.00	
10-46-150-300.0 PROFESSIONAL SERVICES						
VITRUVIAN PLANNING LLC	2023-38	ADA Transition Plan	06/01/23	7,469.41	.00	
Total 10-46-150-300.0 PROFESSIONAL SERVICES:				7,469.41	.00	
10-46-150-440.0 PROFESSIONAL DEVELOPMENT						
U.S. BANK - CARD SERVICES	0523-WILKINS	CREDIT - SALES TAX	05/25/23	19.11-	.00	

Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total 10-46-150-440.0 PROFESSIONAL DEVELOPMENT:				19.11-	.00	
Total CITY CLERK:				8,316.46	.00	
LOCAL OPTION TAX DEPARTMENT						
10-47-150-640.0 DIRECT COSTS						
U.S. BANK - CARD SERVICES	0523-PAYNE	CREDIT - SALES TAX	05/25/23	19.11-	.00	
U.S. BANK - CARD SERVICES	0523-PAYNE	DINNER - LOT COMMISSION MEETING	05/25/23	55.46	.00	
U.S. BANK - CARD SERVICES	0523-PAYNE	DINNER - LOT COMMISSION MEETING	05/25/23	62.73	.00	
U.S. BANK - CARD SERVICES	0523-WAGNER	DINNER - LOT COMMISSION MEETING	05/23/23	72.58	.00	
Total 10-47-150-640.0 DIRECT COSTS:				171.66	.00	
Total LOCAL OPTION TAX DEPARTMENT:				171.66	.00	
COMMUNITY DEVELOPMENT						
10-48-150-420.0 TRAVEL AND MEETINGS						
U.S. BANK - CARD SERVICES	0523-GROENEVEL	MTG - ECON - DEV - MT - JAMES	05/25/23	13.09	.00	
Total 10-48-150-420.0 TRAVEL AND MEETINGS:				13.09	.00	
10-48-150-435.0 BOOKS/PUBLICATIONS/SUBSCRIPTS						
U.S. BANK - CARD SERVICES	0523-GROENEVEL	AUDIBLE - TODD	05/25/23	15.85	.00	
Total 10-48-150-435.0 BOOKS/PUBLICATIONS/SUBSCRIPTS:				15.85	.00	
10-48-150-440.0 PROFESSIONAL DEVELOPMENT						
U.S. BANK - CARD SERVICES	0523-GROENEVEL	APA MEMBERSHIP - TODD	05/25/23	255.00	.00	
U.S. BANK - CARD SERVICES	0523-GROENEVEL	ICC MEMBERSHIP - POWELL	05/25/23	145.00	.00	
Total 10-48-150-440.0 PROFESSIONAL DEVELOPMENT:				400.00	.00	
10-48-150-571.0 MAINT. - PUBLIC ART						
MADACSI STUDIOS	2192	"Seasons" artwork repair	05/09/23	2,375.00	2,375.00	05/25/2023
Total 10-48-150-571.0 MAINT. - PUBLIC ART:				2,375.00	2,375.00	
Total COMMUNITY DEVELOPMENT:				2,803.94	2,375.00	
POLICE DEPARTMENT						
10-50-100-156.0 CLOTHING/UNIFORMS						
U.S. BANK - CARD SERVICES	0523-MOHR	WORK PANT - RYSKA	05/25/23	106.38	.00	
UNIFORMS2GEAR INC.	INV/2023/05/0611	UNIFORM NAMEPLATE - J. SPRAGUE	05/18/23	17.59	.00	
Total 10-50-100-156.0 CLOTHING/UNIFORMS:				123.97	.00	
10-50-150-210.0 DEPARTMENT SUPPLIES						
U.S. BANK - CARD SERVICES	0523-ARRASMITH	3M ARC PELTOR LEFT & RIGHT	05/25/23	741.24	.00	
U.S. BANK - CARD SERVICES	0523-JOHNSON	WATER FOR RANGE	05/25/23	8.97	.00	
U.S. BANK - CARD SERVICES	0523-MOHR	PRINTER PAPER	05/25/23	39.99	.00	
U.S. BANK - CARD SERVICES	0523-RYSKA	COFFEE	05/25/23	79.49	.00	
Total 10-50-150-210.0 DEPARTMENT SUPPLIES:				869.69	.00	
10-50-150-215.0 RANGE/AMMUNITION						
SALT LAKE WHOLESALE SPORTS	90112	Ammunition for long range firearms.	05/17/23	2,886.30	.00	
U.S. BANK - CARD SERVICES	0523-RYSKA	IMPACT SPORT SHOOTING EARMUFF	05/25/23	635.88	.00	

Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total 10-50-150-215.0 RANGE/AMMUNITION:				3,522.18	.00	
10-50-150-240.0 MINOR EQUIPMENT						
U.S. BANK - CARD SERVICES	0523-PALMER	GROUND POLE MOUNT	05/25/23	58.85	.00	
U.S. BANK - CARD SERVICES	0523-PALMER	LATCH & STACK TOTE	05/25/23	52.98	.00	
U.S. BANK - CARD SERVICES	0523-PALMER	CREDIT - HOME DEPOT	05/25/23	52.98-	.00	
U.S. BANK - CARD SERVICES	0523-RYSKA	NOISE CANCELLING SPEAKER MICRO	05/25/23	593.03	.00	
Total 10-50-150-240.0 MINOR EQUIPMENT:				651.88	.00	
10-50-150-250.0 MOTOR FUELS AND LUBRICANTS						
WEX BANK	89692257-PD	FUEL	05/31/23	2,508.54	.00	
Total 10-50-150-250.0 MOTOR FUELS AND LUBRICANTS:				2,508.54	.00	
10-50-150-260.0 POSTAGE						
U.S. BANK - CARD SERVICES	0523-GIESSEN	INCIDENT 23MP02428	05/25/23	16.26	.00	
Total 10-50-150-260.0 POSTAGE:				16.26	.00	
10-50-150-275.0 PUBLIC RELATIONS						
U.S. BANK - CARD SERVICES	0523-GIESSEN	INCIDENT 23MP02428	05/25/23	40.41	.00	
U.S. BANK - CARD SERVICES	0523-GIESSEN	INCIDENT 23MP02428	05/25/23	33.07	.00	
Total 10-50-150-275.0 PUBLIC RELATIONS:				73.48	.00	
10-50-150-300.0 PROFESSIONAL SERVICES						
REINHOLD, BEVERLY	1846	PRE EMPLOYMENT POLYGRAPH	05/13/23	250.00	.00	
U.S. BANK - CARD SERVICES	0523-PALMER	MOBILE - REGIONAL SUBSCRIPTION	05/25/23	150.00	.00	
Total 10-50-150-300.0 PROFESSIONAL SERVICES:				400.00	.00	
10-50-150-400.0 ADVERTISING/LEGAL PUBLICATIONS						
U.S. BANK - CARD SERVICES	0523-ARRASMITH	OFFICER RECRUITMENT	05/25/23	155.47	.00	
U.S. BANK - CARD SERVICES	0523-ARRASMITH	OFFICER RECRUITMENT	05/25/23	200.00	.00	
Total 10-50-150-400.0 ADVERTISING/LEGAL PUBLICATIONS:				355.47	.00	
10-50-150-420.0 TRAVEL AND MEETINGS						
ALBERTSONS LLC	00725866-051923-3	INTERAGENCY TRAINING - PD	05/19/23	45.95	.00	
U.S. BANK - CARD SERVICES	0523-PALMER	MEALS - CRISIS COMMUNICATIONS ME	05/25/23	51.99	.00	
U.S. BANK - CARD SERVICES	0523-PALMER	MEALS - COMMAND STAFF RETREAT	05/25/23	168.36	.00	
U.S. BANK - CARD SERVICES	0523-PALMER	MEALS - COMMAND STAFF RETREAT	05/25/23	97.82	.00	
Total 10-50-150-420.0 TRAVEL AND MEETINGS:				364.12	.00	
10-50-150-435.0 BOOKS/PUBLICATIONS/SUBSCRIPTS						
U.S. BANK - CARD SERVICES	0523-MOHR	THE STAR NEWS	05/25/23	63.13	.00	
Total 10-50-150-435.0 BOOKS/PUBLICATIONS/SUBSCRIPTS:				63.13	.00	
10-50-150-440.0 PROFESSIONAL DEVELOPMENT						
U.S. BANK - CARD SERVICES	0523-KIMMEL	FBI LEEDA - JOHNSON & KIMMEL	05/25/23	478.87	.00	
U.S. BANK - CARD SERVICES	0523-MCPHERSON	FIREARMS - ALL STAFF	05/25/23	135.67	.00	
Total 10-50-150-440.0 PROFESSIONAL DEVELOPMENT:				614.54	.00	

Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
10-50-150-450.0 CLEANING AND CUSTODIAL						
BLUE RIBBON LINEN SUPPLY INC.	460654	3 MATS, 3 FLOOR CARE	05/26/23	25.00	.00	
FIRST CLASS CLEANING LLC	62164	JANITORIAL/SWEEP, MOP BUFF	05/31/23	485.00	.00	
U.S. BANK - CARD SERVICES	0523-DUKE	CAR WASH	05/25/23	9.00	.00	
U.S. BANK - CARD SERVICES	0523-GIESSEN	CAR WASH	05/25/23	9.00	.00	
U.S. BANK - CARD SERVICES	0523-GIESSEN	CAR WASH	05/25/23	9.00	.00	
U.S. BANK - CARD SERVICES	0523-JOHNSON	CAR WASH	05/25/23	9.00	.00	
U.S. BANK - CARD SERVICES	0523-KIMMEL	CAR WASH	05/25/23	18.00	.00	
U.S. BANK - CARD SERVICES	0523-PALMER	CAR WASH	05/25/23	9.00	.00	
U.S. BANK - CARD SERVICES	0523-PALMER	CAR WASH	05/25/23	9.00	.00	
U.S. BANK - CARD SERVICES	0523-PALMER	CAR WASH	05/25/23	9.00	.00	
U.S. BANK - CARD SERVICES	0523-PAPE	CAR WASH	05/25/23	18.00	.00	
U.S. BANK - CARD SERVICES	0523-TATUM	CAR WASH	05/25/23	9.00	.00	
U.S. BANK - CARD SERVICES	0523-WANN	CAR WASH	05/25/23	9.00	.00	
Total 10-50-150-450.0 CLEANING AND CUSTODIAL:				627.00	.00	
Total POLICE DEPARTMENT:				10,190.26	.00	
Total GENERAL FUND:				30,445.54	2,375.00	
PUBLIC WORKS & STREETS FUND						
PUBLIC WORKS & STREETS						
24-55-150-210.0 DEPARTMENT SUPPLIES						
MAY HARDWARE INC.	71090	ELECTRONIC WIPES, MURPHY OIL SO	05/19/23	20.21	.00	
U.S. BANK - CARD SERVICES	0523-STEWART	CREAMER	05/25/23	11.98	.00	
U.S. BANK - CARD SERVICES	0523-WEAVER	TEA, PRESENTATION BOOK	05/25/23	27.59	.00	
U.S. BANK - CARD SERVICES	0523-WEAVER	POLY PORTFOLIO W/BRADS	05/25/23	65.40	.00	
U.S. BANK - CARD SERVICES	0523-WEAVER	ALARM KEYCHAINS, STICKY NOTES	05/25/23	71.36	.00	
Total 24-55-150-210.0 DEPARTMENT SUPPLIES:				196.54	.00	
24-55-150-211.0 MECHANIC SHOP SUPPLIES						
ALSCO	LBOI2084378	SHOP TOWELS, COVERALLS	05/23/23	73.06	.00	
JERRY'S AUTO PARTS	337086	ROD COUPLING NUT	05/23/23	1.60	.00	
LAWSON PRODUCTS INC.	9310625358	BOLTS, TIES, CLAMPS, DISCS, METAL	05/18/23	305.25	.00	
NORCO INC.	37779571	CARBON DIOXIDE/ARGON	05/22/23	98.76	.00	
STERLING BATTERY CO.	G79267	1 A65AA	05/22/23	120.95	.00	
U.S. BANK - CARD SERVICES	0523-WEAVER	POWER WHEELS ADAPTER	05/25/23	21.94	.00	
Total 24-55-150-211.0 MECHANIC SHOP SUPPLIES:				621.56	.00	
24-55-150-240.0 MINOR EQUIPMENT						
GRAINGER	9713582618	LIFTING MAGNET	05/19/23	271.08	.00	
GRAINGER	9715431392	STREETS CAMERA PROJECT	05/22/23	758.95	.00	
Total 24-55-150-240.0 MINOR EQUIPMENT:				1,030.03	.00	
24-55-150-250.0 MOTOR FUELS AND LUBRICANTS						
WEX BANK	89662734-PW	FUEL	05/31/23	4,016.47	.00	
JERRY'S AUTO PARTS	335635	WHT LITH GRS LOW VOC	05/15/23	88.44	.00	
Total 24-55-150-250.0 MOTOR FUELS AND LUBRICANTS:				4,104.91	.00	
24-55-150-300.0 PROFESSIONAL SERVICES						
McCALL DELIVERY SERVICE	2023-0386	DELIVERY - SPECIALTY CONST. SPLV.	05/17/23	100.00	.00	

Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total 24-55-150-300.0 PROFESSIONAL SERVICES:				100.00	.00	
24-55-150-450.0 CLEANING AND CUSTODIAL						
ALSCO	LBOI2084378	4 MATS	05/23/23	26.84	.00	
Total 24-55-150-450.0 CLEANING AND CUSTODIAL:				26.84	.00	
24-55-150-490.0 HEAT, LIGHTS, AND UTILITIES						
PAYETTE LAKES RECREATIONAL	06/23-0561	SEWER FEES - CIT4072	06/01/23	50.65	.00	
Total 24-55-150-490.0 HEAT, LIGHTS, AND UTILITIES:				50.65	.00	
24-55-150-491.0 STREET LIGHTS - POWER						
IDAHO POWER	0523-2226722953-P	ENERGY CHARGE PER KWH	05/10/23	2.38	.00	
Total 24-55-150-491.0 STREET LIGHTS - POWER:				2.38	.00	
24-55-150-543.0 STREET REPAIR - DUST ABATEMENT						
GMCO CORPORATION	23-5003	Dust Abatement for gravel roads. Quote is	05/26/23	14,955.32	.00	
FERGUSON ENTERPRISES #3007	1479255	SHORT POLY NIP, 6 BLT VB, HEAD TAN	05/02/23	210.37	.00	
Total 24-55-150-543.0 STREET REPAIR - DUST ABATEMENT:				15,165.69	.00	
24-55-150-547.0 SIGNS & POSTS						
TRAFFIC SAFETY SUPPLY CO. INC.	INV059577	NO PARKING SIGNS	05/24/23	140.71	.00	
Total 24-55-150-547.0 SIGNS & POSTS:				140.71	.00	
24-55-150-549.0 STREET REPAIR -STREET PAINTING						
BUILDERS FIRSTSOURCE INC.	87282067	BLUE CHALK	05/16/23	.00	.00	
MAY HARDWARE INC.	71371	GRILL BRUSHES	05/22/23	24.68	.00	
SHERWIN-WILLIAMS CO., THE	6954-9	5 GAL HL 2320 FDTP WB WH, RAC 5 ST	05/23/23	779.91	.00	
SHERWIN-WILLIAMS CO., THE	8091-2	PAINT	05/22/23	800.46	.00	
U.S. BANK - CARD SERVICES	0523-MALVICH	SURVEY MONKEY	05/25/23	81.78	.00	
Total 24-55-150-549.0 STREET REPAIR -STREET PAINTING:				1,686.83	.00	
24-55-150-551.0 STREET REPAIR - CRACK SEAL						
SPECIALTY CONSTRUCTION SUPPLY	0230629-IN	Crack Sealer	05/17/23	8,180.00	.00	
Total 24-55-150-551.0 STREET REPAIR - CRACK SEAL:				8,180.00	.00	
24-55-150-570.0 REPAIRS - BUILDING AND GROUNDS						
LAWSON PRODUCTS INC.	9310617080	GALV STEEL SHELF	05/16/23	112.60	.00	
Total 24-55-150-570.0 REPAIRS - BUILDING AND GROUNDS:				112.60	.00	
24-55-150-580.0 REPAIRS - AUTOMOTIVE EQUIPMENT						
COASTLINE EQUIPMENT CO.	1017087	JOHN DEERE OEM ENGINE	05/12/23	400.60	.00	
GLASS PRO INC.	3524	LABOR FOR INSTALLATION OF CUSTO	05/11/23	400.00	.00	
JERRY'S AUTO PARTS	336887	PL BONDER SYRINGE	05/22/23	18.12	.00	
JERRY'S AUTO PARTS	337158	CHEVY OR	05/23/23	23.64	.00	
LAWSON PRODUCTS INC.	93010640081	STEEL HOSE CLAMP	05/24/23	6.75	.00	
NORTHWEST EQUIPMENT SALES INC	325307BP	WC MIRROR HEATER, SUPPORT BEARI	05/22/23	187.93	.00	
NORTHWEST EQUIPMENT SALES INC	325597BP	WC MIRROR HEATER	05/23/23	56.82	.00	
NORTHWEST EQUIPMENT SALES INC	CM325307BP	SEAL, WC MIRROR HEATER, BEARING	05/23/23	187.93-	.00	
U.S. BANK - CARD SERVICES	0523-MALVICH	SOLENOID VALVE FOR SIDE BROOM	05/25/23	302.14	.00	

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Total 24-55-150-580.0 REPAIRS - AUTOMOTIVE EQUIPMENT:				1,208.07	.00	
24-55-150-590.0 REPAIRS - OTHER EQUIPMENT						
JERRY'S AUTO PARTS	335736	BATTERY	05/15/23	45.33	.00	
Total 24-55-150-590.0 REPAIRS - OTHER EQUIPMENT:				45.33	.00	
Total PUBLIC WORKS & STREETS:				32,672.14	.00	
Total PUBLIC WORKS & STREETS FUND:				32,672.14	.00	
LIBRARY FUND						
LIBRARY DEPARTMENT						
25-57-100-160.0 EMPLOYEE RECOGNITION						
U.S. BANK - CARD SERVICES	0523-LOJEC	STAFF APPRECIATION IN PREP FOR E	05/25/23	26.85	.00	
Total 25-57-100-160.0 EMPLOYEE RECOGNITION:				26.85	.00	
25-57-150-210.0 DEPARTMENT SUPPLIES						
MAY HARDWARE INC.	71591	LATCH STOR BOX	05/23/23	13.49	.00	
Total 25-57-150-210.0 DEPARTMENT SUPPLIES:				13.49	.00	
25-57-150-400.1 BLDG EXPANSION PROJ PUB INFO						
U.S. BANK - CARD SERVICES	0523-LOJEC	PUBLIC BUILDING EVENT	05/25/23	19.73	.00	
Total 25-57-150-400.1 BLDG EXPANSION PROJ PUB INFO:				19.73	.00	
25-57-150-430.0 DUES AND SUBSCRIPTIONS						
ALA MEMBERSHIP	20230517	REGULAR MEMBERSHIP BASIC DUES	05/17/23	155.00	.00	
Total 25-57-150-430.0 DUES AND SUBSCRIPTIONS:				155.00	.00	
25-57-150-435.0 BOOKS/PUBLICATIONS/SUBSCRIPTS						
AMAZON CAPITAL SERVICES INC	144G-LKXQ-3GT4	BOOKS	05/30/23	126.09	.00	
AMAZON CAPITAL SERVICES INC	16YJ-YJGX-3D11	BOOKS	05/30/23	117.55	.00	
AMAZON CAPITAL SERVICES INC	1GR9-XV9G-6JD4	BOOKS	05/16/23	37.23	.00	
Total 25-57-150-435.0 BOOKS/PUBLICATIONS/SUBSCRIPTS:				280.87	.00	
25-57-150-450.0 CLEANING AND CUSTODIAL						
MCCALL CARPET & AIR DUCT CLEANI	1112278979	Library portion of carpet and upholstery cl	05/13/23	740.00	.00	
Total 25-57-150-450.0 CLEANING AND CUSTODIAL:				740.00	.00	
25-57-150-462.0 AUDIO VISUAL MATERIALS						
AMAZON CAPITAL SERVICES INC	19TJ-JHMR-6HQD	AUDIO VISUAL MATERIALS	05/16/23	23.95	.00	
Total 25-57-150-462.0 AUDIO VISUAL MATERIALS:				23.95	.00	
25-57-150-465.0 CHILDREN'S BOOKS						
AMAZON CAPITAL SERVICES INC	144G-LKXQ-3GT4	CHILDREN'S BOOKS	05/30/23	97.74	.00	
AMAZON CAPITAL SERVICES INC	1R6F-W9MJ-34H1	CHILDREN'S BOOKS	05/30/23	15.55	.00	
BAKER & TAYLOR BOOKS	2037543772	CHILDREN'S BOOKS	05/18/23	21.79	.00	
Total 25-57-150-465.0 CHILDREN'S BOOKS:				135.08	.00	

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25-57-150-469.0 PROGRAMMING SUPPLIES						
ALBERTSONS LLC	00727667-052323-3	ESL MDSO VISIT	05/23/23	14.99	.00	
ALBERTSONS LLC	00802766-053123-3	BREMS DAY	05/31/23	5.00	.00	
MAY HARDWARE INC.	71992	VEGGIE GARDEN	05/26/23	103.18	.00	
MAY HARDWARE INC.	72007	VEGGIE GARDEN	05/26/23	29.66	.00	
MAY HARDWARE INC.	72488	TOPSOIL	06/01/23	8.98	.00	
Total 25-57-150-469.0 PROGRAMMING SUPPLIES:				161.81	.00	
25-57-150-490.0 HEAT, LIGHTS, AND UTILITIES						
PAYETTE LAKES RECREATIONAL	06/23-0559	SEWER FEES - CIT4067	06/01/23	113.96	.00	
Total 25-57-150-490.0 HEAT, LIGHTS, AND UTILITIES:				113.96	.00	
Total LIBRARY DEPARTMENT:				1,670.74	.00	
Total LIBRARY FUND:				1,670.74	.00	
RECREATION FUND						
RECREATION - PROGRAMS						
28-58-100-156.0 CLOTHING/UNIFORMS						
U.S. BANK - CARD SERVICES	0523-BORK	REC STAFF SHIRTS - BIKING-SUMMER	05/25/23	82.95	.00	
Total 28-58-100-156.0 CLOTHING/UNIFORMS:				82.95	.00	
28-58-150-210.0 DEPARTMENT SUPPLIES						
C & M LUMBER CO. INC.	510619	FIELD MARKER	05/19/23	235.44	.00	
SHOP STRANGE INC.	SO-020544	Baseball, softball and t-ball team jerseys a	04/22/23	1,571.00	.00	
U.S. BANK - CARD SERVICES	0523-BORK	REPLACEMENT EASLE, PHOTO PAPER	05/25/23	45.74	.00	
U.S. BANK - CARD SERVICES	0523-BORK	REC MOVIES	05/25/23	25.54	.00	
U.S. BANK - CARD SERVICES	0523-BORK	WHITE BOARD	05/25/23	25.98	.00	
U.S. BANK - CARD SERVICES	202305-WOODS	AWARDS FOR GAMES/TOURNAMENTS	05/25/23	242.54	.00	
U.S. BANK - CARD SERVICES	202305-WOODS	CAPS/TEE SHIRTS - KIDS TRIATHLON	05/25/23	149.84	.00	
U.S. BANK - CARD SERVICES	202305-WOODS	SCOOPER FOR GOLD GLOVE FIELD	05/25/23	49.99	.00	
Total 28-58-150-210.0 DEPARTMENT SUPPLIES:				2,346.07	.00	
28-58-150-300.0 PROFESSIONAL SERVICES						
BELISSMAPRINTSLLC@GMAIL.COM	1103	Screen printing of recreation shirts and hat	05/22/23	1,116.00	.00	
Total 28-58-150-300.0 PROFESSIONAL SERVICES:				1,116.00	.00	
28-58-150-420.0 TRAVEL AND MEETINGS						
BORK, STEFANIE	20230525	BASEBALL/SOFTBALL SUPPLY PICK UP	05/25/23	140.17	.00	
Total 28-58-150-420.0 TRAVEL AND MEETINGS:				140.17	.00	
28-58-150-430.0 DUES AND SUBSCRIPTIONS						
U.S. BANK - CARD SERVICES	202305-WOODS	ANNUAL MEMBERSHIP - SWIMOUTLET.	05/25/23	5.34	.00	
Total 28-58-150-430.0 DUES AND SUBSCRIPTIONS:				5.34	.00	
28-58-150-440.0 PROFESSIONAL DEVELOPMENT						
U.S. BANK - CARD SERVICES	0523-BORK	NRPA MEMBERSHIP - BORK	05/25/23	90.00	.00	
U.S. BANK - CARD SERVICES	202305-WOODS	MEALS - WOODS - BIKE TRAINING	05/25/23	36.80	.00	
U.S. BANK - CARD SERVICES	202305-WOODS	ANNUAL NRPA MEMBERSHIP - WOODS	05/25/23	180.00	.00	
U.S. BANK - CARD SERVICES	202305-WOODS	ANNUAL NRPA 2023 ANNUAL CONFERE	05/25/23	322.50	.00	

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Total 28-58-150-440.0 PROFESSIONAL DEVELOPMENT:				629.30	.00	
28-58-150-490.0 HEAT, LIGHTS, AND UTILITIES						
TREASURE VALLEY TRANSIT INC.	478	50% MAY 2023 UTILITIES IN MCCALL T	05/31/23	390.06	.00	
Total 28-58-150-490.0 HEAT, LIGHTS, AND UTILITIES:				390.06	.00	
Total RECREATION - PROGRAMS:				4,709.89	.00	
RECREATION - PARKS						
28-59-100-156.0 CLOTHING/UNIFORMS						
U.S. BANK - CARD SERVICES	0523-WOLF	Hi-Visibility Jackets (7 total) and Long Slee	05/25/23	1,318.85	.00	
U.S. BANK - CARD SERVICES	0523-WOLF	STAFF LONG SLEEVE T-SHIRTS	05/25/23	25.05	.00	
Total 28-59-100-156.0 CLOTHING/UNIFORMS:				1,343.90	.00	
28-59-100-160.0 EMPLOYEE RECOGNITION						
U.S. BANK - CARD SERVICES	0523-BORK	SPRING KICK OFF LUNCH - ALL STAFF	05/25/23	147.81	.00	
Total 28-59-100-160.0 EMPLOYEE RECOGNITION:				147.81	.00	
28-59-150-210.0 DEPARTMENT SUPPLIES						
FAIRBANK EQUIPMENT INC	S2402014.001	SPRAY SYS EXTENSION	05/16/23	44.67	.00	
CAPITAL ONE TRADE CREDIT	52158463	PUMP, SHOCKWAVE PACKO, STICK TR	05/20/23	878.95	.00	
LAWSON PRODUCTS INC.	9310621117	PORT CNC	05/17/23	65.82	.00	
MAY HARDWARE INC.	70951	UTIL KNIFE, 9V BATTERY, DUCT TAPE,	05/18/23	68.56	.00	
MAY HARDWARE INC.	70991	PAINT BUCKET, GROUT, CAULK	05/18/23	37.03	.00	
MAY HARDWARE INC.	71018	TORXBIT SCKTS	05/18/23	24.09	.00	
MAY HARDWARE INC.	71328	SCREWDRVR SET	05/22/23	17.99	.00	
MAY HARDWARE INC.	71329	PAINTING SUPPLIES	05/22/23	111.52	.00	
MAY HARDWARE INC.	71368	GLOVE	05/22/23	13.49	.00	
MAY HARDWARE INC.	71487	DUCT TAPE	05/23/23	11.86	.00	
MAY HARDWARE INC.	71560	GLOVES, PIN SHACKLE	05/23/23	28.42	.00	
MAY HARDWARE INC.	71612	HAMMER	05/24/23	44.99	.00	
MAY HARDWARE INC.	71822	NAIL SET, FINISH NAIL	05/25/23	10.60	.00	
MAY HARDWARE INC.	71900	WASTEBASKET, TOILET CAP	05/25/23	18.43	.00	
MAY HARDWARE INC.	71935	GLO PAINT, U BOLT, STRAP EMT	05/26/23	46.35	.00	
MAY HARDWARE INC.	71951	MARKING WAND PRO, MARKING PAINT	05/26/23	77.37	.00	
MAY HARDWARE INC.	72330	PAINT MIXER, 9V BATTERY, AA BATTER	05/31/23	110.58	.00	
MAY HARDWARE INC.	72403	CAUTION TAPE	05/31/23	25.18	.00	
U.S. BANK - CARD SERVICES	0523-BORK	FUEL CARD HOLDERS	05/25/23	20.10	.00	
U.S. BANK - CARD SERVICES	0523-BORK	FUEL CARD HOLDERS, ID CARD HOLD	05/25/23	35.19	.00	
U.S. BANK - CARD SERVICES	0523-BORK	PARK STAFF MTG - CITY BUSINESS	05/25/23	28.51	.00	
U.S. BANK - CARD SERVICES	0523-BORK	FUEL CARD HOLDERS	05/25/23	65.18	.00	
U.S. BANK - CARD SERVICES	0523-BORK	SHIPPING RETURN OF SPRAYERS	05/25/23	10.01	.00	
U.S. BANK - CARD SERVICES	0523-BORK	WHITE BOARD	05/25/23	25.98	.00	
U.S. BANK - CARD SERVICES	0523-TRAPP	PESTICIDE TRAINING CEU - TRAPP	05/23/23	52.98	.00	
U.S. BANK - CARD SERVICES	0523-WOLF	LABEL PRINTER KIT, HITCH	05/25/23	253.46	.00	
U.S. BANK - CARD SERVICES	0523-WOLF	ATV SPREADER	05/25/23	369.99	.00	
Total 28-59-150-210.0 DEPARTMENT SUPPLIES:				2,497.30	.00	
28-59-150-211.0 BATHROOM SUPPLIES						
GEM STATE PAPER & SUPPLY	3074485	45 GAL BAGS, 33 GAL BAGS, MARK & S	05/25/23	329.16	.00	
MAY HARDWARE INC.	70856	SPRAY BOTTLE, BOWL BRUSH, SCOUR	05/17/23	16.85	.00	

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Total 28-59-150-211.0 BATHROOM SUPPLIES:				346.01	.00	
28-59-150-223.0 FLOWERS						
MAY HARDWARE INC.	72358	GARDEN SOIL	05/31/23	17.18	.00	
Total 28-59-150-223.0 FLOWERS:				17.18	.00	
28-59-150-250.0 MOTOR FUELS AND LUBRICANTS						
WEX BANK	89655401-PR	FUEL	05/31/23	807.58	.00	
Total 28-59-150-250.0 MOTOR FUELS AND LUBRICANTS:				807.58	.00	
28-59-150-435.0 BOOKS/PUBLICATIONS/SUBSCRIPTS						
U.S. BANK - CARD SERVICES	0523-WOLF	ASLA ANNUAL MEMBERSHIP - WOLF	05/25/23	455.00	.00	
Total 28-59-150-435.0 BOOKS/PUBLICATIONS/SUBSCRIPTS:				455.00	.00	
28-59-150-440.0 PROFESSIONAL DEVELOPMENT						
U.S. BANK - CARD SERVICES	0523-BORK	NRPA MEMBERSHIP - BORK	05/25/23	90.00	.00	
U.S. BANK - CARD SERVICES	0523-TRAPP	PESTICIDE TRAINING CEU - TRAPP	05/23/23	45.00	.00	
U.S. BANK - CARD SERVICES	0523-TRAPP	AERATION IN AQUATIC ENVIRONMENT	05/23/23	30.00	.00	
U.S. BANK - CARD SERVICES	0523-TRAPP	PESTICIDE TRAINING CEU - TRAPP	05/23/23	30.00	.00	
U.S. BANK - CARD SERVICES	0523-WOLF	CREDIT - SALES TAX	05/25/23	26.72-	.00	
Total 28-59-150-440.0 PROFESSIONAL DEVELOPMENT:				168.28	.00	
28-59-150-490.0 HEAT, LIGHTS, AND UTILITIES						
PAYETTE LAKES RECREATIONAL	06/23-0551	SEWER FEES - CIT4045	06/01/23	50.65	.00	
PAYETTE LAKES RECREATIONAL	06/23-0552	SEWER FEES - CIT4046	06/01/23	50.65	.00	
PAYETTE LAKES RECREATIONAL	06/23-0553	SEWER FEES - CIT4047	06/01/23	202.59	.00	
PAYETTE LAKES RECREATIONAL	06/23-0554	SEWER FEES - CIT4048	06/01/23	75.98	.00	
PAYETTE LAKES RECREATIONAL	06/23-0555	SEWER FEES - CIT4049	06/01/23	101.29	.00	
PAYETTE LAKES RECREATIONAL	06/23-0560	SEWER FEES - CIT4071	06/01/23	50.65	.00	
PAYETTE LAKES RECREATIONAL	06/23-0563	SEWER FEES - CIT4075	06/01/23	101.29	.00	
PAYETTE LAKES RECREATIONAL	06/23-0565	SEWER FEES - CIT6750	06/01/23	50.65	.00	
PAYETTE LAKES RECREATIONAL	06/23-0566	SEWER FEES - CIT6931	06/01/23	50.65	.00	
Total 28-59-150-490.0 HEAT, LIGHTS, AND UTILITIES:				734.40	.00	
28-59-150-510.0 RENTAL - MINOR EQUIPMENT						
TATES RENTS INC	1727517-7	TILE SAW	05/17/23	234.08	.00	
TATES RENTS INC	1729682-7	TOWABLE BOOM - MUSEUM SITE	05/25/23	390.00	.00	
Total 28-59-150-510.0 RENTAL - MINOR EQUIPMENT:				624.08	.00	
28-59-150-570.0 REPAIRS - BUILDING AND GROUNDS						
BUILDERS FIRSTSOURCE INC.	87271402	2X8-8' #2&BTR DF	05/15/23	8.37	.00	
BUILDERS FIRSTSOURCE INC.	87277569	50# VERSABOND THINSET, 5" JOINT KN	05/16/23	58.37	.00	
BUILDERS FIRSTSOURCE INC.	87301522	WHT PINE ROTARY PARK	05/19/23	89.29	.00	
BUILDERS FIRSTSOURCE INC.	87330399	ROTARY PARK	05/24/23	129.05	.00	
INLAND MARINE LLC	4080	Spring-Summer dock repair service and m	05/25/23	1,062.50	.00	
MAY HARDWARE INC.	71052	TILE GROUTERS FLOAT	05/18/23	17.09	.00	
MAY HARDWARE INC.	71365	FLANGE, MISC FASTENERS	05/22/23	64.05	.00	
MAY HARDWARE INC.	71426	FAUCET, TEE, PLUMBERS PUTTY	05/22/23	88.45	.00	
MAY HARDWARE INC.	71436	STRAIN CUP	05/22/23	1.80-	.00	
MAY HARDWARE INC.	71495	FASTENERS, NUT/WASHER, TUBE	05/23/23	32.62	.00	
MAY HARDWARE INC.	71515	BATH FAN, DR CLOSER, FLANGE	05/23/23	199.59	.00	

Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
MAY HARDWARE INC.	71516	VENT KIT	05/23/23	99.00-	.00	
MAY HARDWARE INC.	71541	PLUG PULLOUT	05/23/23	8.63	.00	
MAY HARDWARE INC.	71577	PLUG	05/23/23	12.59	.00	
MAY HARDWARE INC.	72285	BALL VALVE	05/30/23	23.01	.00	
FERGUSON ENTERPRISES #3007	1567985	UNION, WOG, TAPE	05/23/23	224.32	.00	
FERGUSON ENTERPRISES #3007	1571932	HORN & BLT KIT, DRN, TRAP,	05/25/23	76.77	.00	
ROCKY MOUNTAIN SIGNS & APPAREL	24512	MILL ROAD PUBLIC PUBLIC PARKING S	05/26/23	444.00	.00	
Total 28-59-150-570.0 REPAIRS - BUILDING AND GROUNDS:				2,437.90	.00	
28-59-150-575.0 REPAIRS - CIHM						
BUILDERS FIRSTSOURCE INC.	87336694	MUSEUM	05/25/23	31.08	.00	
U.S. BANK - CARD SERVICES	0523-HEIDER	MUSEUM FLOORS	05/25/23	394.76	.00	
Total 28-59-150-575.0 REPAIRS - CIHM:				425.84	.00	
28-59-150-580.0 REPAIRS - AUTOMOTIVE EQUIPMENT						
JERRY'S AUTO PARTS	336228	BATTERY	05/18/23	54.81	.00	
JERRY'S AUTO PARTS	336893	ANTI FREEZE	05/22/23	15.18	.00	
JERRY'S AUTO PARTS	337116	OIL FILTERS	05/23/23	2.33	.00	
Total 28-59-150-580.0 REPAIRS - AUTOMOTIVE EQUIPMENT:				72.32	.00	
28-59-150-590.0 REPAIRS - OTHER EQUIPMENT						
HIGH DESERT BOBCAT dba	P07107	FILTERS	05/26/23	214.57	.00	
WESTERN STATES EQUIPMENT CO.	IN002394057	TIRE	05/15/23	269.80	.00	
Total 28-59-150-590.0 REPAIRS - OTHER EQUIPMENT:				484.37	.00	
Total RECREATION - PARKS:				10,561.97	.00	
GRANT EXPENSES						
28-60-250-616.0 VALLEY COUNTY WATERWAYS						
BOULDER CREEK LANDSCAPING/CO	6504	2-4" Crushed Basalt - Armoring Boat Ram	05/18/23	1,520.00	.00	
Total 28-60-250-616.0 VALLEY COUNTY WATERWAYS:				1,520.00	.00	
Total GRANT EXPENSES:				1,520.00	.00	
Total RECREATION FUND:				16,791.86	.00	
AIRPORT FUND						
AIRPORT DEPARTMENT						
29-56-100-160.0 EMPLOYEE RECOGNITION						
U.S. BANK - CARD SERVICES	0523-HART	JERRYS 7TH	05/25/23	46.63	.00	
U.S. BANK - CARD SERVICES	0523-HART	JERRYS 7TH	05/25/23	10.06	.00	
Total 29-56-100-160.0 EMPLOYEE RECOGNITION:				56.69	.00	
29-56-150-250.0 MOTOR FUELS AND LUBRICANTS						
WEX BANK	89709303-A	FUEL	05/31/23	145.09	.00	
U.S. BANK - CARD SERVICES	0523-BISOM	FUEL TO BOISE FOR WEED SPRAY	05/25/23	99.00	.00	
Total 29-56-150-250.0 MOTOR FUELS AND LUBRICANTS:				244.09	.00	
29-56-150-260.0 POSTAGE						
U.S. BANK - CARD SERVICES	0523-HART	POSTAGE	05/25/23	96.50	.00	
U.S. BANK - CARD SERVICES	0523-HART	POSTAGE	05/25/23	96.50	.00	

Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total 29-56-150-260.0 POSTAGE:				193.00	.00	
29-56-150-350.0 ENGINEER SERVICES						
T-O ENGINEERS INC.	05113 - 14142	CONTINUING SERVICE FEE	05/11/23	1,200.00	.00	
Total 29-56-150-350.0 ENGINEER SERVICES:				1,200.00	.00	
29-56-150-490.0 HEAT, LIGHTS, AND UTILITIES						
PAYETTE LAKES RECREATIONAL	06/23-0549	SEWER FEES - CIT4040	06/01/23	50.65	.00	
PAYETTE LAKES RECREATIONAL	06/23-0550	SEWER FEES - CIT4044	06/01/23	50.65	.00	
PAYETTE LAKES RECREATIONAL	06/23-0564	SEWER FEES - CIT4111	06/01/23	101.29	.00	
Total 29-56-150-490.0 HEAT, LIGHTS, AND UTILITIES:				202.59	.00	
29-56-150-570.0 REPAIRS - BUILDING AND GROUNDS						
D & B SUPPLY CO.	6991	WEED SPRAY	05/20/23	872.90	.00	
Total 29-56-150-570.0 REPAIRS - BUILDING AND GROUNDS:				872.90	.00	
29-56-150-590.0 REPAIRS - AIRPORT EQUIPMENT						
U.S. BANK - CARD SERVICES	0523-BISOM	HWY 55 GATE KEYPAD REPLACEMENT	05/25/23	516.46	.00	
Total 29-56-150-590.0 REPAIRS - AIRPORT EQUIPMENT:				516.46	.00	
29-56-150-598.0 FLY-IN/OUTREACH						
MAY HARDWARE INC.	71839	ANCHOR BOLT	05/25/23	34.52	.00	
U.S. BANK - CARD SERVICES	0523-HART	PARA BEAVER	05/25/23	23.31	.00	
U.S. BANK - CARD SERVICES	0523-HART	OPEN HOUSE	05/25/23	126.51	.00	
U.S. BANK - CARD SERVICES	0523-HART	OPEN HOUSE	05/25/23	10.86	.00	
Total 29-56-150-598.0 FLY-IN/OUTREACH:				195.20	.00	
Total AIRPORT DEPARTMENT:				3,480.93	.00	
GRANT EXPENSES						
29-60-250-730.0 FEDERAL - AIP PROJECT						
T-O ENGINEERS INC.	220656-3	AIP-034 TAXIWAY E RECONSTRUCTION	05/11/23	6,801.58	.00	
Total 29-60-250-730.0 FEDERAL - AIP PROJECT:				6,801.58	.00	
29-60-250-731.0 FEDERAL - CITY MATCH (AIP)						
T-O ENGINEERS INC.	220656-3	AIP-034 TAXIWAY E RECONSTRUCTION	05/11/23	755.73	.00	
Total 29-60-250-731.0 FEDERAL - CITY MATCH (AIP):				755.73	.00	
Total GRANT EXPENSES:				7,557.31	.00	
Total AIRPORT FUND:				11,038.24	.00	
LOCAL OPTION TAX FUND						
LOCAL OPTION TAX DEPARTMENT						
31-49-200-708.0 DAVIS-THOMPSON-SMB-MISSION						
U.S. BANK - CARD SERVICES	0523-WEAVER	SPRING MOUNTAIN BLVD DEQ LEW FIL	05/25/23	129.75	.00	
U.S. BANK - CARD SERVICES	0523-WEAVER	DAVIS/THOMPSON DEQ NOI FILING FE	05/25/23	207.00	.00	
Total 31-49-200-708.0 DAVIS-THOMPSON-SMB-MISSION:				336.75	.00	

Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total LOCAL OPTION TAX DEPARTMENT:				336.75	.00	
Total LOCAL OPTION TAX FUND:				336.75	.00	
GOLF FUND						
54-11600 GOLF SHOP CASH						
MCCALL, CITY OF	05222023-GOLF P	CASH FOR 2 REGISTERS @ \$200 EACH	05/22/23	900.00	900.00	05/25/2023
Total 54-11600 GOLF SHOP CASH:				900.00	900.00	
Total :				900.00	900.00	
GOLF PRO SHOP DEPARTMENT						
54-84-100-160.0 EMPLOYEE RECOGNITION						
U.S. BANK - CARD SERVICES	0523-DIMARTINO	TRAINING LUNCH - STAFF	05/25/23	66.18	.00	
Total 54-84-100-160.0 EMPLOYEE RECOGNITION:				66.18	.00	
54-84-150-210.0 DEPARTMENT SUPPLIES						
PRIDE MANUFACTURING COMPANY L	57646	vendor is golf scorecards. paying for scor	02/28/23	1,150.00	.00	
MAY HARDWARE INC.	71863	LATCH STORAGE BOX, VELCRO TAPE,	05/25/23	356.49	.00	
MAY HARDWARE INC.	72333	ROUNDUP, PLANT BRACKET	05/31/23	37.78	.00	
U.S. BANK - CARD SERVICES	0523-DIMARTINO	U TUBE	05/25/23	54.99	.00	
U.S. BANK - CARD SERVICES	0523-DIMARTINO	STICKERS FOR PRIVATE CARTS	05/25/23	235.54	.00	
U.S. BANK - CARD SERVICES	0523-DIMARTINO	UMBRELLA FOR STARTER	05/25/23	154.99	.00	
U.S. BANK - CARD SERVICES	0523-DIMARTINO	PRIME MEMBERSHIP FEE	05/25/23	14.99	.00	
U.S. BANK - CARD SERVICES	0523-DIMARTINO	MERCHANDISE LABELS	05/25/23	15.39	.00	
Total 54-84-150-210.0 DEPARTMENT SUPPLIES:				2,020.17	.00	
54-84-150-211.0 PRO SHOP MERCHANDISE						
ACUSHNET COMPANY	915690371	4-15 Titleist Stock club order	05/10/23	328.05	.00	
ACUSHNET COMPANY	915714264	4-15 Titleist Stock club order	05/15/23	328.04	.00	
ACUSHNET COMPANY	915749159	4-15 Titleist Stock club order	05/18/23	328.04	.00	
ACUSHNET COMPANY	915758650	7-28 Titleist Ball order 2% DISCOUNT BY	05/19/23	505.77	.00	
ACUSHNET COMPANY	915769991	4-15 Titleist Ball order 2% DISCOUNT BY	05/22/23	1,004.37	.00	
ACUSHNET COMPANY	915782608	4-15 Titleist Bag order 2% DISCOUNT by	05/23/23	135.24	.00	
CALLAWAY GOLF SALES CO	936478082	Callaway golf spring order	05/10/23	171.10	.00	
CALLAWAY GOLF SALES CO	936558727	Callaway golf spring order	05/25/23	171.10	.00	
VISTA OUTDOOR SALES LLC	911229	2023 Bushnell spring order discount 13.24	05/16/23	1,311.08	.00	
VISTA OUTDOOR SALES LLC	919760	2023 Bushnell spring order discount 6.17	05/21/23	610.42	.00	
MAY HARDWARE INC.	71098	SINGLE CUT KEY	05/19/23	10.76	.00	
Total 54-84-150-211.0 PRO SHOP MERCHANDISE:				4,903.97	.00	
54-84-150-260.0 POSTAGE						
U.S. BANK - CARD SERVICES	0523-DIMARTINO	SHIPPING CUSTOMER ORDER	05/25/23	20.51	.00	
Total 54-84-150-260.0 POSTAGE:				20.51	.00	
54-84-150-490.0 HEAT, LIGHTS, AND UTILITIES						
PAYETTE LAKES RECREATIONAL	06/23-0557	SEWER FEES - CIT4065	06/01/23	75.98	.00	
Total 54-84-150-490.0 HEAT, LIGHTS, AND UTILITIES:				75.98	.00	
Total GOLF PRO SHOP DEPARTMENT:				7,086.81	.00	

Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
GOLF OPERATIONS DEPARTMENT						
54-85-150-210.0 DEPARTMENT SUPPLIES						
ALSCO	LBOI2084382	SHOP TOWELS, LAUNDRY BAG, COVE	05/23/23	54.19	.00	
BUILDERS FIRSTSOURCE INC.	87205032-1	SANDING DISK	05/02/23	6.59	6.59	05/25/2023
LAWSON PRODUCTS INC.	9310621116	DEGREASER, GREASE CARTRIDGE, C	05/17/23	167.92	.00	
MAY HARDWARE INC.	70788	STRETCH FILM, MARKING PAINT	05/16/23	76.45	.00	
MAY HARDWARE INC.	70848	METAL RAKE, TOILET BOWL CLEANER	05/17/23	79.15	.00	
NORCO INC.	37608203	CYLINDER RENTAL	05/30/23	25.50	.00	
ROCKY MOUNTAIN SIGNS & APPAREL	24503	WALKING CLOSED FOR SEASON	05/26/23	137.50	.00	
SIMPLOT PARTNERS	216065230	Simplot Early order of specialty supply pro	05/15/23	471.60	.00	
Total 54-85-150-210.0 DEPARTMENT SUPPLIES:				1,018.90	6.59	
54-85-150-218.0 SUPPLIES - FERTILIZER						
SIMPLOT PARTNERS	216065230	Simplot Early order of specialty fertilizer pr	05/15/23	2,165.04	.00	
SIMPLOT PARTNERS	216065490	RAPTURE	05/24/23	302.64	.00	
Total 54-85-150-218.0 SUPPLIES - FERTILIZER:				2,467.68	.00	
54-85-150-222.0 CHEMICALS						
SIMPLOT PARTNERS	216065230	Simplot Early order of specialty chemical p	05/15/23	2,535.58	.00	
Total 54-85-150-222.0 CHEMICALS:				2,535.58	.00	
54-85-150-223.0 BIOLOGICAL PRODUCTS						
ESD WASTE2WATER INC.	138128	ESD 201 MICROBES, FILTER SCREEN	05/26/23	272.91	.00	
ESD WASTE2WATER INC.	138380	ESD 201 MICROBES, FILTER SCREEN	05/30/23	154.25	.00	
SIMPLOT PARTNERS	216065230	Simplot Early order of specialty biological	05/15/23	649.90	.00	
Total 54-85-150-223.0 BIOLOGICAL PRODUCTS:				1,077.06	.00	
54-85-150-227.0 IRRIGATION MAINTENANCE						
PDM DIVING LLC	26166	INSTALLED POND FOUNTAIN	05/17/23	750.00	.00	
SILVER CREEK SUPPLY LLC	0010814922-001	CLEARWATER SPINNER BEARING	05/25/23	672.94	.00	
Total 54-85-150-227.0 IRRIGATION MAINTENANCE:				1,422.94	.00	
54-85-150-250.0 MOTOR FUELS AND LUBRICANTS						
DIAMOND FUEL & FEED SUPPLY INC.	30888	Fuel and lubricants for FY23	05/25/23	1,256.92	.00	
DIAMOND FUEL & FEED SUPPLY INC.	30889	Fuel and lubricants for FY23	05/25/23	899.78	.00	
LAWSON PRODUCTS INC.	9310621116	LUBRICANTS	05/17/23	166.20	.00	
MAY HARDWARE INC.	70772	LP TANK	05/16/23	22.49	.00	
Total 54-85-150-250.0 MOTOR FUELS AND LUBRICANTS:				2,345.39	.00	
54-85-150-440.0 PROFESSIONAL DEVELOPMENT						
GCSA	1265678	ANNUAL DUES - E. MCCORMICK 07/01/	05/30/23	465.00	.00	
Total 54-85-150-440.0 PROFESSIONAL DEVELOPMENT:				465.00	.00	
54-85-150-490.0 HEAT, LIGHTS, AND UTILITIES						
MAY SECURITY	29166	MONTHLY ALARM SVC 20389631	04/01/23	30.00	.00	
MAY SECURITY	29743	MONTHLY ALARM SVC 20389631	06/01/23	30.00	.00	
PAYETTE LAKES RECREATIONAL	06/23-0556	SEWER FEES - CIT4064	06/01/23	50.65	.00	
Total 54-85-150-490.0 HEAT, LIGHTS, AND UTILITIES:				110.65	.00	

Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
54-85-150-570.0 REPAIRS - BUILDING AND GROUNDS						
MAY HARDWARE INC.	71651	ENTRY LOCK SET	05/24/23	28.79	.00	
ROGERS ELECTRIC INC	5014	Install PLUGINS AT RANGE SHACK	05/17/23	687.70	.00	
Total 54-85-150-570.0 REPAIRS - BUILDING AND GROUNDS:				716.49	.00	
54-85-150-575.0 REPAIRS - CLUBHOUSE						
ALL VALLEY FIRE INSPECTION	40123	ANNUAL FIRE SPRINKLR DRY & WET S	05/22/23	755.00	.00	
MAY SECURITY	000554	SERVICE CALL	03/08/23	149.00	.00	
MCCALL CARPET & AIR DUCT CLEANI	1112278981-1	Ductwork cleaning at the clubhouse	05/15/23	10,227.00	.00	
TAYLOR BROS. FIRE & SAFETY-IDAHO	12463459	SVC ANSUL SYSTEM/450 DEGREE FUS	05/23/23	301.00	.00	
Total 54-85-150-575.0 REPAIRS - CLUBHOUSE:				11,432.00	.00	
54-85-150-590.0 REPAIRS - OTHER EQUIPMENT						
JERRY'S AUTO PARTS	335905	2YR WTY BATTERY	05/16/23	118.14	.00	
JERRY'S AUTO PARTS	336874	V-BELT	05/22/23	14.83	.00	
JERRY'S AUTO PARTS	3375121	POWERSPORT STARTER	05/25/23	162.95	.00	
JERRY'S AUTO PARTS	338188	POWERSPORT STARTER	05/30/23	187.97	.00	
JERRY'S AUTO PARTS	338494	POWERSPORT STARTER	05/31/23	162.95-	.00	
R & R PRODUCTS INC.	CD2790381	RAKE - THATCHER RH	05/18/23	341.25	.00	
U.S. BANK - CARD SERVICES	0523-MCCORMICK	AIR FILTER, OIL FILTER	05/25/23	24.37	.00	
Total 54-85-150-590.0 REPAIRS - OTHER EQUIPMENT:				686.56	.00	
Total GOLF OPERATIONS DEPARTMENT:				24,278.25	6.59	
Total GOLF FUND:				32,265.06	906.59	
WATER FUND						
WATER DISTRIBUTION						
60-64-150-250.0 MOTOR FUELS AND LUBRICANTS						
WEX BANK	89699103-W	FUEL	05/31/23	981.81	.00	
Total 60-64-150-250.0 MOTOR FUELS AND LUBRICANTS:				981.81	.00	
60-64-150-260.0 POSTAGE						
U.S. BANK - CARD SERVICES	0523-SIMS	POSTAGE	05/25/23	11.72	.00	
U.S. BANK - CARD SERVICES	0523-SIMS	POSTAGE	05/25/23	27.66	.00	
U.S. BANK - CARD SERVICES	0523-SIMS	POSTAGE	05/25/23	29.45	.00	
U.S. BANK - CARD SERVICES	0523-SIMS	POSTAGE	05/25/23	27.88	.00	
Total 60-64-150-260.0 POSTAGE:				96.71	.00	
60-64-150-580.0 REPAIRS - AUTOMOTIVE EQUIPMENT						
JERRY'S AUTO PARTS	336155	Z HOSE END FITTING	05/17/23	38.00	.00	
Total 60-64-150-580.0 REPAIRS - AUTOMOTIVE EQUIPMENT:				38.00	.00	
Total WATER DISTRIBUTION:				1,116.52	.00	
WATER TREATMENT						
60-65-150-490.0 HEAT, LIGHTS, AND UTILITIES						
PAYETTE LAKES RECREATIONAL	06/23-0562	SEWER FEES - CIT4074	06/01/23	253.24	.00	
Total 60-65-150-490.0 HEAT, LIGHTS, AND UTILITIES:				253.24	.00	

Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total WATER TREATMENT:				253.24	.00	
Total WATER FUND:				1,369.76	.00	
Grand Totals:				127,136.08	3,827.58	

Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
GENERAL FUND						
ADMINISTRATIVE COSTS						
10-44-150-320.0 ATTORNEY - PROSECUTING						
MSBT LAW CHTD.	77624	PROSECUTING SERVICES-F2393-03	05/30/23	4,166.66	.00	
Total 10-44-150-320.0 ATTORNEY - PROSECUTING:				4,166.66	.00	
Total ADMINISTRATIVE COSTS:				4,166.66	.00	
Total GENERAL FUND:				4,166.66	.00	
Grand Totals:				4,166.66	.00	

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount
ACUSHNET COMPANY					
1654	ACUSHNET COMPANY	915690371	4-15 Titleist Stock club order	05/10/23	328.05
1654	ACUSHNET COMPANY	915714264	4-15 Titleist Stock club order	05/15/23	328.04
1654	ACUSHNET COMPANY	915749159	4-15 Titleist Stock club order	05/18/23	328.04
1654	ACUSHNET COMPANY	915758650	7-28 Titleist Ball order 2% DISCOU	05/19/23	505.77
1654	ACUSHNET COMPANY	915769991	4-15 Titleist Ball order 2% DISCOU	05/22/23	1,004.37
1654	ACUSHNET COMPANY	915782608	4-15 Titleist Bag order 2% DISCOU	05/23/23	135.24
Total ACUSHNET COMPANY:					2,629.51
ALA MEMBERSHIP					
1840	ALA MEMBERSHIP	20230517	REGULAR MEMBERSHIP BASIC	05/17/23	155.00
Total ALA MEMBERSHIP:					155.00
ALBERTSONS LLC					
1850	ALBERTSONS LLC	00725866-051	INTERAGENCY TRAINING - PD	05/19/23	45.95
1850	ALBERTSONS LLC	00727667-052	ESL MDSO VISIT	05/23/23	14.99
1850	ALBERTSONS LLC	00802766-053	BREMS DAY	05/31/23	5.00
Total ALBERTSONS LLC:					65.94
ALL VALLEY FIRE INSPECTION					
2111	ALL VALLEY FIRE INSPECTION	40123	ANNUAL FIRE SPRINKLR DRY &	05/22/23	755.00
Total ALL VALLEY FIRE INSPECTION:					755.00
ALSCO					
2300	ALSCO	LBOI2084378	4 MATS	05/23/23	26.84
2300	ALSCO	LBOI2084378	SHOP TOWELS, COVERALLS	05/23/23	73.06
2300	ALSCO	LBOI2084382	SHOP TOWELS, LAUNDRY BAG,	05/23/23	54.19
2300	ALSCO	LBOI2084389	10 MATS	05/23/23	93.10
Total ALSCO:					247.19
AMAZON CAPITAL SERVICES INC					
2321	AMAZON CAPITAL SERVICES IN	144G-LKXQ-3	BOOKS	05/30/23	126.09
2321	AMAZON CAPITAL SERVICES IN	144G-LKXQ-3	CHILDREN'S BOOKS	05/30/23	97.74
2321	AMAZON CAPITAL SERVICES IN	16YJ-YJGX-3D	BOOKS	05/30/23	117.55
2321	AMAZON CAPITAL SERVICES IN	19TJ-JHMR-6H	AUDIO VISUAL MATERIALS	05/16/23	23.95
2321	AMAZON CAPITAL SERVICES IN	1GR9-XV9G-6J	BOOKS	05/16/23	37.23
2321	AMAZON CAPITAL SERVICES IN	1R6F-W9MJ-3	CHILDREN'S BOOKS	05/30/23	15.55
Total AMAZON CAPITAL SERVICES INC:					418.11
AMERICAN LEGAL PUBLISHING					
2548	AMERICAN LEGAL PUBLISHING	25444	ORD. 1015 CODIFICATION	05/18/23	846.17
Total AMERICAN LEGAL PUBLISHING:					846.17
ASSOCIATION OF IDAHO CITIES					
3360	ASSOCIATION OF IDAHO CITE	200010258	2023 CONFERENCE ADULT DELE	05/23/23	357.00

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount
Total ASSOCIATION OF IDAHO CITIES:					357.00
BAKER & TAYLOR BOOKS					
3700	BAKER & TAYLOR BOOKS	2037543772	CHILDREN'S BOOKS	05/18/23	21.79
Total BAKER & TAYLOR BOOKS:					21.79
BELLISSIMAPRINTSLLC@GMAIL.COM					
1659	BELLISSIMAPRINTSLLC@GMAIL	1103	Screen printing of recreation shirts	05/22/23	1,116.00
Total BELLISSIMAPRINTSLLC@GMAIL.COM:					1,116.00
BLUE RIBBON LINEN SUPPLY INC.					
4745	BLUE RIBBON LINEN SUPPLY I	460654	3 MATS, 3 FLOOR CARE	05/26/23	25.00
Total BLUE RIBBON LINEN SUPPLY INC.:					25.00
BORK, STEFANIE					
5120	BORK, STEFANIE	20230525	BASEBALL/SOFTBALL SUPPLY PI	05/25/23	140.17
Total BORK, STEFANIE:					140.17
BOULDER CREEK LANDSCAPING/CONST LLC					
5150	BOULDER CREEK LANDSCAPIN	6504	2-4" Crushed Basalt - Armoring Boa	05/18/23	1,520.00
Total BOULDER CREEK LANDSCAPING/CONST LLC:					1,520.00
BUILDERS FIRSTSOURCE INC.					
5763	BUILDERS FIRSTSOURCE INC.	87205032-1	SANDING DISK	05/02/23	6.59
5763	BUILDERS FIRSTSOURCE INC.	87271402	2X8-8' #2&BTR DF	05/15/23	8.37
5763	BUILDERS FIRSTSOURCE INC.	87277569	50# VERSABOND THINSET, 5" JO	05/16/23	58.37
5763	BUILDERS FIRSTSOURCE INC.	87282067	BLUE CHALK	05/16/23	.00
5763	BUILDERS FIRSTSOURCE INC.	87301522	WHT PINE ROTARY PARK	05/19/23	89.29
5763	BUILDERS FIRSTSOURCE INC.	87330399	ROTARY PARK	05/24/23	129.05
5763	BUILDERS FIRSTSOURCE INC.	87336694	MUSEUM	05/25/23	31.08
Total BUILDERS FIRSTSOURCE INC.:					322.75
C & M LUMBER CO. INC.					
5980	C & M LUMBER CO. INC.	510619	FIELD MARKER	05/19/23	235.44
Total C & M LUMBER CO. INC.:					235.44
CALLAWAY GOLF SALES CO					
2985	CALLAWAY GOLF SALES CO	936478082	Callaway golf spring order	05/10/23	171.10
2985	CALLAWAY GOLF SALES CO	936558727	Callaway golf spring order	05/25/23	171.10
Total CALLAWAY GOLF SALES CO:					342.20
CAPITAL ONE TRADE CREDIT					
4755	CAPITAL ONE TRADE CREDIT	52158463	PUMP, SHOCKWAVE PACKO, STI	05/20/23	878.95

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount
Total CAPITAL ONE TRADE CREDIT:					878.95
CDW GOVERNMENT INC.					
6530	CDW GOVERNMENT INC.	JW11248	Adobe Premiere Pro for MPD	05/30/23	296.76
6530	CDW GOVERNMENT INC.	JW11248	Logitech MK345 Wireless Keyboar	05/30/23	216.75
6530	CDW GOVERNMENT INC.	JW11248	ASUS VG278QR-LCD Monitor	05/30/23	1,346.94
Total CDW GOVERNMENT INC.:					1,860.45
COASTLINE EQUIPMENT CO.					
7290	COASTLINE EQUIPMENT CO.	1017087	JOHN DEERE OEM ENGINE	05/12/23	400.60
Total COASTLINE EQUIPMENT CO.:					400.60
D & B SUPPLY CO.					
8440	D & B SUPPLY CO.	6991	WEED SPRAY	05/20/23	872.90
Total D & B SUPPLY CO.:					872.90
DIAMOND FUEL & FEED SUPPLY INC.					
9080	DIAMOND FUEL & FEED SUPPL	30888	Fuel and lubricants for FY23	05/25/23	1,256.92
9080	DIAMOND FUEL & FEED SUPPL	30889	Fuel and lubricants for FY23	05/25/23	899.78
Total DIAMOND FUEL & FEED SUPPLY INC.:					2,156.70
ESD WASTE2WATER INC.					
10100	ESD WASTE2WATER INC.	138128	ESD 201 MICROBES, FILTER SC	05/26/23	272.91
10100	ESD WASTE2WATER INC.	138380	ESD 201 MICROBES, FILTER SC	05/30/23	154.25
Total ESD WASTE2WATER INC.:					427.16
FAIRBANK EQUIPMENT INC					
2635	FAIRBANK EQUIPMENT INC	S2402014.001	SPRAY SYS EXTENSION	05/16/23	44.67
Total FAIRBANK EQUIPMENT INC:					44.67
FERGUSON ENTERPRISES #3007					
26140	FERGUSON ENTERPRISES #30	1479255	SHORT POLY NIP, 6 BLT VB, HEA	05/02/23	210.37
26140	FERGUSON ENTERPRISES #30	1567985	UNION, WOG, TAPE	05/23/23	224.32
26140	FERGUSON ENTERPRISES #30	1571932	HORN & BLT KIT, DRN, TRAP,	05/25/23	76.77
Total FERGUSON ENTERPRISES #3007:					511.46
FIRST CLASS CLEANING LLC					
10940	FIRST CLASS CLEANING LLC	62164	JANITORIAL/SWEEP, MOP BUFF	05/31/23	485.00
Total FIRST CLASS CLEANING LLC:					485.00
GCSA					
11860	GCSA	1265678	ANNUAL DUES - E. MCCORMICK	05/30/23	465.00
Total GCSA:					465.00

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount
GEM STATE PAPER & SUPPLY					
11940	GEM STATE PAPER & SUPPLY	3074485	45 GAL BAGS, 33 GAL BAGS, MA	05/25/23	329.16
Total GEM STATE PAPER & SUPPLY:					329.16
GLASS PRO INC.					
12080	GLASS PRO INC.	3524	LABOR FOR INSTALLATION OF C	05/11/23	400.00
Total GLASS PRO INC.:					400.00
GMCO CORPORATION					
2891	GMCO CORPORATION	23-5003	Dust Abatement for gravel roads.	05/26/23	14,955.32
Total GMCO CORPORATION:					14,955.32
GRAINGER					
32180	GRAINGER	9713582618	LIFTING MAGNET	05/19/23	271.08
32180	GRAINGER	9715431392	STREETS CAMERA PROJECT	05/22/23	758.95
Total GRAINGER:					1,030.03
HIGH DESERT BOBCAT dba					
8745	HIGH DESERT BOBCAT dba	P07107	FILTERS	05/26/23	214.57
Total HIGH DESERT BOBCAT dba:					214.57
IDAHO CHILD SUPPORT RECEIPTING					
14860	IDAHO CHILD SUPPORT RECEI	20230602 - 6	CASE# - 395109	06/02/23	106.62
Total IDAHO CHILD SUPPORT RECEIPTING:					106.62
IDAHO POWER					
15340	IDAHO POWER	0523-2226722	ENERGY CHARGE PER KWH	05/10/23	2.38
Total IDAHO POWER:					2.38
INLAND MARINE LLC					
15959	INLAND MARINE LLC	4080	Spring-Summer dock repair service	05/25/23	1,062.50
Total INLAND MARINE LLC:					1,062.50
JERRY'S AUTO PARTS					
16890	JERRY'S AUTO PARTS	335635	WHT LITH GRS LOW VOC	05/15/23	88.44
16890	JERRY'S AUTO PARTS	335736	BATTERY	05/15/23	45.33
16890	JERRY'S AUTO PARTS	335905	2YR WTY BATTERY	05/16/23	118.14
16890	JERRY'S AUTO PARTS	336155	Z HOSE END FITTING	05/17/23	38.00
16890	JERRY'S AUTO PARTS	336228	BATTERY	05/18/23	54.81
16890	JERRY'S AUTO PARTS	336874	V-BELT	05/22/23	14.83
16890	JERRY'S AUTO PARTS	336887	PL BONDER SYRINGE	05/22/23	18.12
16890	JERRY'S AUTO PARTS	336893	ANTI FREEZE	05/22/23	15.18
16890	JERRY'S AUTO PARTS	337086	ROD COUPLING NUT	05/23/23	1.60
16890	JERRY'S AUTO PARTS	337116	OIL FILTERS	05/23/23	2.33
16890	JERRY'S AUTO PARTS	337158	CHEVY OR	05/23/23	23.64
16890	JERRY'S AUTO PARTS	3375121	POWERSPORT STARTER	05/25/23	162.95

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount
16890	JERRY'S AUTO PARTS	338188	POWERSPORT STARTER	05/30/23	187.97
16890	JERRY'S AUTO PARTS	338494	POWERSPORT STARTER	05/31/23	162.95-
Total JERRY'S AUTO PARTS:					608.39
LAWSON PRODUCTS INC.					
18440	LAWSON PRODUCTS INC.	93010640081	STEEL HOSE CLAMP	05/24/23	6.75
18440	LAWSON PRODUCTS INC.	9310617080	GALV STEEL SHELF	05/16/23	112.60
18440	LAWSON PRODUCTS INC.	9310621116	LUBRICANTS	05/17/23	166.20
18440	LAWSON PRODUCTS INC.	9310621116	DEGREASER, GREASE CARTRID	05/17/23	167.92
18440	LAWSON PRODUCTS INC.	9310621117	PORT CNC	05/17/23	65.82
18440	LAWSON PRODUCTS INC.	9310625358	BOLTS, TIES, CLAMPS, DISCS, M	05/18/23	305.25
Total LAWSON PRODUCTS INC.:					824.54
MADACSI STUDIOS					
19625	MADACSI STUDIOS	2192	"Seasons" artwork repair	05/09/23	2,375.00
Total MADACSI STUDIOS:					2,375.00
MAY HARDWARE INC.					
20160	MAY HARDWARE INC.	70772	LP TANK	05/16/23	22.49
20160	MAY HARDWARE INC.	70788	STRETCH FILM, MARKING PAINT	05/16/23	76.45
20160	MAY HARDWARE INC.	70848	METAL RAKE, TOILET BOWL CLE	05/17/23	79.15
20160	MAY HARDWARE INC.	70856	SPRAY BOTTLE, BOWL BRUSH,	05/17/23	16.85
20160	MAY HARDWARE INC.	70951	UTIL KNIFE, 9V BATTERY, DUCT	05/18/23	68.56
20160	MAY HARDWARE INC.	70991	PAINT BUCKET, GROUT, CAULK	05/18/23	37.03
20160	MAY HARDWARE INC.	71018	TORXBIT SCKTS	05/18/23	24.09
20160	MAY HARDWARE INC.	71052	TILE GROUTERS FLOAT	05/18/23	17.09
20160	MAY HARDWARE INC.	71090	ELECTRONIC WIPES, MURPHY O	05/19/23	20.21
20160	MAY HARDWARE INC.	71098	SINGLE CUT KEY	05/19/23	10.76
20160	MAY HARDWARE INC.	71328	SCREWDRVR SET	05/22/23	17.99
20160	MAY HARDWARE INC.	71329	PAINTING SUPPLIES	05/22/23	111.52
20160	MAY HARDWARE INC.	71365	FLANGE, MISC FASTENERS	05/22/23	64.05
20160	MAY HARDWARE INC.	71368	GLOVE	05/22/23	13.49
20160	MAY HARDWARE INC.	71371	GRILL BRUSHES	05/22/23	24.68
20160	MAY HARDWARE INC.	71426	FAUCET, TEE, PLUMBERS PUTT	05/22/23	88.45
20160	MAY HARDWARE INC.	71436	STRAIN CUP	05/22/23	1.80-
20160	MAY HARDWARE INC.	71487	DUCT TAPE	05/23/23	11.86
20160	MAY HARDWARE INC.	71495	FASTENERS, NUT/WASHER, TUB	05/23/23	32.62
20160	MAY HARDWARE INC.	71515	BATH FAN, DR CLOSER, FLANGE	05/23/23	199.59
20160	MAY HARDWARE INC.	71516	VENT KIT	05/23/23	99.00-
20160	MAY HARDWARE INC.	71541	PLUG PULLOUT	05/23/23	8.63
20160	MAY HARDWARE INC.	71560	GLOVES, PIN SHACKLE	05/23/23	28.42
20160	MAY HARDWARE INC.	71577	PLUG	05/23/23	12.59
20160	MAY HARDWARE INC.	71591	LATCH STOR BOX	05/23/23	13.49
20160	MAY HARDWARE INC.	71612	HAMMER	05/24/23	44.99
20160	MAY HARDWARE INC.	71651	ENTRY LOCK SET	05/24/23	28.79
20160	MAY HARDWARE INC.	71822	NAIL SET, FINISH NAIL	05/25/23	10.60
20160	MAY HARDWARE INC.	71839	ANCHOR BOLT	05/25/23	34.52
20160	MAY HARDWARE INC.	71863	LATCH STORAGE BOX, VELCRO	05/25/23	356.49
20160	MAY HARDWARE INC.	71900	WASTEBASKET, TOILET CAP	05/25/23	18.43
20160	MAY HARDWARE INC.	71935	GLO PAINT, U BOLT, STRAP EMT	05/26/23	46.35
20160	MAY HARDWARE INC.	71951	MARKING WAND PRO, MARKING	05/26/23	77.37

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount
20160	MAY HARDWARE INC.	71992	VEGGIE GARDEN	05/26/23	103.18
20160	MAY HARDWARE INC.	72007	VEGGIE GARDEN	05/26/23	29.66
20160	MAY HARDWARE INC.	72285	BALL VALVE	05/30/23	23.01
20160	MAY HARDWARE INC.	72330	PAINT MIXER, 9V BATTERY, AA B	05/31/23	110.58
20160	MAY HARDWARE INC.	72333	ROUNDUP, PLANT BRACKET	05/31/23	37.78
20160	MAY HARDWARE INC.	72358	GARDEN SOIL	05/31/23	17.18
20160	MAY HARDWARE INC.	72403	CAUTION TAPE	05/31/23	25.18
20160	MAY HARDWARE INC.	72488	TOPSOIL	06/01/23	8.98
Total MAY HARDWARE INC.:					1,872.35
MAY SECURITY					
4322	MAY SECURITY	000554	SERVICE CALL	03/08/23	149.00
4322	MAY SECURITY	29166	MONTHLY ALARM SVC 20389631	04/01/23	30.00
4322	MAY SECURITY	29743	MONTHLY ALARM SVC 20389631	06/01/23	30.00
Total MAY SECURITY:					209.00
MCCALL CARPET & AIR DUCT CLEANING					
4511	MCCALL CARPET & AIR DUCT C	1112278979	City Hall portion of Air Duct and car	05/13/23	6,020.20
4511	MCCALL CARPET & AIR DUCT C	1112278979	Library portion of carpet and uphols	05/13/23	740.00
4511	MCCALL CARPET & AIR DUCT C	1112278981-1	Ductwork cleaning at the clubhouse	05/15/23	10,227.00
Total MCCALL CARPET & AIR DUCT CLEANING:					16,987.20
McCALL DELIVERY SERVICE					
20462	McCALL DELIVERY SERVICE	2023-0386	DELIVERY - SPECIALTY CONST.	05/17/23	100.00
Total McCALL DELIVERY SERVICE:					100.00
MCCALL, CITY OF					
6960	MCCALL, CITY OF	05222023-GOL	CASH FOR 2 REGISTERS @ \$200	05/22/23	900.00
Total MCCALL, CITY OF:					900.00
NORCO INC.					
22940	NORCO INC.	37608203	CYLINDER RENTAL	05/30/23	25.50
22940	NORCO INC.	37779571	CARBON DIOXIDE/ARGON	05/22/23	98.76
Total NORCO INC.:					124.26
NORTHWEST EQUIPMENT SALES INC.					
23102	NORTHWEST EQUIPMENT SAL	325307BP	WC MIRROR HEATER, SUPPORT	05/22/23	187.93
23102	NORTHWEST EQUIPMENT SAL	325597BP	WC MIRROR HEATER	05/23/23	56.82
23102	NORTHWEST EQUIPMENT SAL	CM325307BP	SEAL, WC MIRROR HEATER, BE	05/23/23	187.93-
Total NORTHWEST EQUIPMENT SALES INC.:					56.82
OFFICE SAVERS ONLINE					
22363	OFFICE SAVERS ONLINE	20230525	BANDAGES, OINTMENT	05/25/23	22.62
22363	OFFICE SAVERS ONLINE	20230525	HEAVY DUTY FASTENERS	05/25/23	19.99
Total OFFICE SAVERS ONLINE:					42.61

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OREGON DEPT. OF JUSTICE					
23603	OREGON DEPT. OF JUSTICE	20230602 - 5	CASE ID - 410000000121812	06/02/23	252.00
Total OREGON DEPT. OF JUSTICE:					252.00
PAYETTE LAKES RECREATIONAL					
24120	PAYETTE LAKES RECREATION	06/23-0549	SEWER FEES - CIT4040	06/01/23	50.65
24120	PAYETTE LAKES RECREATION	06/23-0550	SEWER FEES - CIT4044	06/01/23	50.65
24120	PAYETTE LAKES RECREATION	06/23-0551	SEWER FEES - CIT4045	06/01/23	50.65
24120	PAYETTE LAKES RECREATION	06/23-0552	SEWER FEES - CIT4046	06/01/23	50.65
24120	PAYETTE LAKES RECREATION	06/23-0553	SEWER FEES - CIT4047	06/01/23	202.59
24120	PAYETTE LAKES RECREATION	06/23-0554	SEWER FEES - CIT4048	06/01/23	75.98
24120	PAYETTE LAKES RECREATION	06/23-0555	SEWER FEES - CIT4049	06/01/23	101.29
24120	PAYETTE LAKES RECREATION	06/23-0556	SEWER FEES - CIT4064	06/01/23	50.65
24120	PAYETTE LAKES RECREATION	06/23-0557	SEWER FEES - CIT4065	06/01/23	75.98
24120	PAYETTE LAKES RECREATION	06/23-0558	SEWER FEES - CIT4066	06/01/23	202.59
24120	PAYETTE LAKES RECREATION	06/23-0559	SEWER FEES - CIT4067	06/01/23	113.96
24120	PAYETTE LAKES RECREATION	06/23-0560	SEWER FEES - CIT4071	06/01/23	50.65
24120	PAYETTE LAKES RECREATION	06/23-0561	SEWER FEES - CIT4072	06/01/23	50.65
24120	PAYETTE LAKES RECREATION	06/23-0562	SEWER FEES - CIT4074	06/01/23	253.24
24120	PAYETTE LAKES RECREATION	06/23-0563	SEWER FEES - CIT4075	06/01/23	101.29
24120	PAYETTE LAKES RECREATION	06/23-0564	SEWER FEES - CIT4111	06/01/23	101.29
24120	PAYETTE LAKES RECREATION	06/23-0565	SEWER FEES - CIT6750	06/01/23	50.65
24120	PAYETTE LAKES RECREATION	06/23-0566	SEWER FEES - CIT6931	06/01/23	50.65
24120	PAYETTE LAKES RECREATION	06/23-0567	SEWER FEES - CIT6962	06/01/23	40.52
Total PAYETTE LAKES RECREATIONAL:					1,724.58
PDM DIVING LLC					
23750	PDM DIVING LLC	26166	INSTALLED POND FOUNTAIN	05/17/23	750.00
Total PDM DIVING LLC:					750.00
PRIDE MANUFACTURING COMPANY LLC					
6414	PRIDE MANUFACTURING COMP	57646	vendor is golf scorecards. paying f	02/28/23	1,150.00
Total PRIDE MANUFACTURING COMPANY LLC:					1,150.00
R & R PRODUCTS INC.					
25320	R & R PRODUCTS INC.	CD2790381	RAKE - THATCHER RH	05/18/23	341.25
Total R & R PRODUCTS INC.:					341.25
REINHOLD, BEVERLY					
5782	REINHOLD, BEVERLY	1846	PRE EMPLOYMENT POLYGRAPH	05/13/23	250.00
Total REINHOLD, BEVERLY:					250.00
ROCKY MOUNTAIN SIGNS & APPAREL					
26280	ROCKY MOUNTAIN SIGNS & AP	24503	WALKING CLOSED FOR SEASON	05/26/23	137.50
26280	ROCKY MOUNTAIN SIGNS & AP	24512	MILL ROAD PUBLIC PUBLIC PAR	05/26/23	444.00
Total ROCKY MOUNTAIN SIGNS & APPAREL:					581.50

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ROGERS ELECTRIC INC					
26420	ROGERS ELECTRIC INC	5014	Install PLUGINS AT RANGE SHAC	05/17/23	687.70
Total ROGERS ELECTRIC INC:					687.70
SALT LAKE WHOLESALE SPORTS					
26945	SALT LAKE WHOLESALE SPOR	90112	Ammunition for long range firearms	05/17/23	2,886.30
Total SALT LAKE WHOLESALE SPORTS:					2,886.30
SHERWIN-WILLIAMS CO., THE					
27655	SHERWIN-WILLIAMS CO., THE	6954-9	5 GAL HL 2320 FDTP WB WH, RA	05/23/23	779.91
27655	SHERWIN-WILLIAMS CO., THE	8091-2	PAINT	05/22/23	800.46
Total SHERWIN-WILLIAMS CO., THE:					1,580.37
SHOP STRANGE INC.					
27865	SHOP STRANGE INC.	SO-020544	Baseball, softball and t-ball team jer	04/22/23	1,571.00
Total SHOP STRANGE INC.:					1,571.00
SILVER CREEK SUPPLY LLC					
27965	SILVER CREEK SUPPLY LLC	0010814922-0	CLEARWATER SPINNER BEARIN	05/25/23	672.94
Total SILVER CREEK SUPPLY LLC:					672.94
SIMPLOT PARTNERS					
28080	SIMPLOT PARTNERS	216065230	Simplot Early order of specialty ferti	05/15/23	2,165.04
28080	SIMPLOT PARTNERS	216065230	Simplot Early order of specialty sup	05/15/23	471.60
28080	SIMPLOT PARTNERS	216065230	Simplot Early order of specialty che	05/15/23	2,535.58
28080	SIMPLOT PARTNERS	216065230	Simplot Early order of specialty biol	05/15/23	649.90
28080	SIMPLOT PARTNERS	216065490	RAPTURE	05/24/23	302.64
Total SIMPLOT PARTNERS:					6,124.76
SPECIALTY CONSTRUCTION SUPPLY					
28660	SPECIALTY CONSTRUCTION S	0230629-IN	Crack Sealer	05/17/23	8,180.00
Total SPECIALTY CONSTRUCTION SUPPLY:					8,180.00
STERLING BATTERY CO.					
29120	STERLING BATTERY CO.	G79267	1 A65AA	05/22/23	120.95
Total STERLING BATTERY CO.:					120.95
TATES RENTS INC					
71114	TATES RENTS INC	1727517-7	TILE SAW	05/17/23	234.08
71114	TATES RENTS INC	1729682-7	TOWABLE BOOM - MUSEUM SIT	05/25/23	390.00
Total TATES RENTS INC:					624.08
TAYLOR BROS. FIRE & SAFETY-IDAHO					
29770	TAYLOR BROS. FIRE & SAFETY-	12463459	SVC ANSUL SYSTEM/450 DEGRE	05/23/23	301.00

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount
Total TAYLOR BROS. FIRE & SAFETY-IDAHO:					301.00
T-O ENGINEERS INC.					
30340	T-O ENGINEERS INC.	05113 - 14142	CONTINUING SERVICE FEE	05/11/23	1,200.00
30340	T-O ENGINEERS INC.	220656-3	AIP-034 TAXIWAY E RECONSTRU	05/11/23	6,801.58
30340	T-O ENGINEERS INC.	220656-3	AIP-034 TAXIWAY E RECONSTRU	05/11/23	755.73
Total T-O ENGINEERS INC.:					8,757.31
TRAFFIC SAFETY SUPPLY CO. INC.					
30443	TRAFFIC SAFETY SUPPLY CO. I	INV059577	NO PARKING SIGNS	05/24/23	140.71
Total TRAFFIC SAFETY SUPPLY CO. INC.:					140.71
TREASURE VALLEY COFFEE INC.					
30580	TREASURE VALLEY COFFEE IN	2160:09291305	TEA, SUGAR	05/31/23	9.50
Total TREASURE VALLEY COFFEE INC.:					9.50
TREASURE VALLEY TRANSIT INC.					
30630	TREASURE VALLEY TRANSIT IN	478	50% MAY 2023 UTILITIES IN MCC	05/31/23	390.06
Total TREASURE VALLEY TRANSIT INC.:					390.06
U.S. BANK - CARD SERVICES					
31020	U.S. BANK - CARD SERVICES	0523-ARRASM	OFFICER RECRUITMENT	05/25/23	155.47
31020	U.S. BANK - CARD SERVICES	0523-ARRASM	OFFICER RECRUITMENT	05/25/23	200.00
31020	U.S. BANK - CARD SERVICES	0523-ARRASM	3M ARC PELTOR LEFT & RIGHT	05/25/23	741.24
31020	U.S. BANK - CARD SERVICES	0523-BISOM	HWY 55 GATE KEYPAD REPLACE	05/25/23	516.46
31020	U.S. BANK - CARD SERVICES	0523-BISOM	FUEL TO BOISE FOR WEED SPR	05/25/23	99.00
31020	U.S. BANK - CARD SERVICES	0523-BORK	FUEL CARD HOLDERS	05/25/23	20.10
31020	U.S. BANK - CARD SERVICES	0523-BORK	FUEL CARD HOLDERS, ID CARD	05/25/23	35.19
31020	U.S. BANK - CARD SERVICES	0523-BORK	PARK STAFF MTG - CITY BUSINE	05/25/23	28.51
31020	U.S. BANK - CARD SERVICES	0523-BORK	REPLACEMENT EASLE, PHOTO	05/25/23	45.74
31020	U.S. BANK - CARD SERVICES	0523-BORK	FUEL CARD HOLDERS	05/25/23	65.18
31020	U.S. BANK - CARD SERVICES	0523-BORK	REC STAFF SHIRTS - BIKING-SU	05/25/23	82.95
31020	U.S. BANK - CARD SERVICES	0523-BORK	REC MOVIES	05/25/23	25.54
31020	U.S. BANK - CARD SERVICES	0523-BORK	SPRING KICK OFF LUNCH - ALL	05/25/23	147.81
31020	U.S. BANK - CARD SERVICES	0523-BORK	SHIPPING RETURN OF SPRAYER	05/25/23	10.01
31020	U.S. BANK - CARD SERVICES	0523-BORK	NRPA MEMBERSHIP - BORK	05/25/23	90.00
31020	U.S. BANK - CARD SERVICES	0523-BORK	NRPA MEMBERSHIP - BORK	05/25/23	90.00
31020	U.S. BANK - CARD SERVICES	0523-BORK	WHITE BOARD	05/25/23	25.98
31020	U.S. BANK - CARD SERVICES	0523-BORK	WHITE BOARD	05/25/23	25.98
31020	U.S. BANK - CARD SERVICES	0523-DIMARTI	U TUBE	05/25/23	54.99
31020	U.S. BANK - CARD SERVICES	0523-DIMARTI	TRAINING LUNCH - STAFF	05/25/23	66.18
31020	U.S. BANK - CARD SERVICES	0523-DIMARTI	SHIPPING CUSTOMER ORDER	05/25/23	20.51
31020	U.S. BANK - CARD SERVICES	0523-DIMARTI	STICKERS FOR PRIVATE CARTS	05/25/23	235.54
31020	U.S. BANK - CARD SERVICES	0523-DIMARTI	UMBRELLA FOR STARTER	05/25/23	154.99
31020	U.S. BANK - CARD SERVICES	0523-DIMARTI	PRIME MEMBERSHIP FEE	05/25/23	14.99
31020	U.S. BANK - CARD SERVICES	0523-DIMARTI	MERCHANDISE LABELS	05/25/23	15.39
31020	U.S. BANK - CARD SERVICES	0523-DUKE	CAR WASH	05/25/23	9.00
31020	U.S. BANK - CARD SERVICES	0523-GIESSEN	CAR WASH	05/25/23	9.00
31020	U.S. BANK - CARD SERVICES	0523-GIESSEN	INCIDENT 23MP02428	05/25/23	40.41

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount
31020	U.S. BANK - CARD SERVICES	0523-GIESSEN	CAR WASH	05/25/23	9.00
31020	U.S. BANK - CARD SERVICES	0523-GIESSEN	INCIDENT 23MP02428	05/25/23	33.07
31020	U.S. BANK - CARD SERVICES	0523-GIESSEN	INCIDENT 23MP02428	05/25/23	16.26
31020	U.S. BANK - CARD SERVICES	0523-GREAVE	RETURN OF WHITE BOARD	05/25/23	148.39-
31020	U.S. BANK - CARD SERVICES	0523-GREAVE	TEAM CANVA - GRAPHICS	05/25/23	179.28
31020	U.S. BANK - CARD SERVICES	0523-GREAVE	CITY STAFF DIGITAL	05/25/23	119.00
31020	U.S. BANK - CARD SERVICES	0523-GROENE	APA MEMBERSHIP - TODD	05/25/23	255.00
31020	U.S. BANK - CARD SERVICES	0523-GROENE	AUDIBLE - TODD	05/25/23	15.85
31020	U.S. BANK - CARD SERVICES	0523-GROENE	MTG - ECON - DEV - MT - JAMES	05/25/23	13.09
31020	U.S. BANK - CARD SERVICES	0523-GROENE	ICC MEMBERSHIP - POWELL	05/25/23	145.00
31020	U.S. BANK - CARD SERVICES	0523-HAGEN	REFUND TAX ON HOTEL	05/25/23	19.11-
31020	U.S. BANK - CARD SERVICES	0523-HART	POSTAGE	05/25/23	96.50
31020	U.S. BANK - CARD SERVICES	0523-HART	JERRYS 7TH	05/25/23	46.63
31020	U.S. BANK - CARD SERVICES	0523-HART	JERRYS 7TH	05/25/23	10.06
31020	U.S. BANK - CARD SERVICES	0523-HART	PARA BEAVER	05/25/23	23.31
31020	U.S. BANK - CARD SERVICES	0523-HART	OPEN HOUSE	05/25/23	126.51
31020	U.S. BANK - CARD SERVICES	0523-HART	POSTAGE	05/25/23	96.50
31020	U.S. BANK - CARD SERVICES	0523-HART	OPEN HOUSE	05/25/23	10.86
31020	U.S. BANK - CARD SERVICES	0523-HEIDER	MUSEUM FLOORS	05/25/23	394.76
31020	U.S. BANK - CARD SERVICES	0523-JOHNSO	WATER FOR RANGE	05/25/23	8.97
31020	U.S. BANK - CARD SERVICES	0523-JOHNSO	CAR WASH	05/25/23	9.00
31020	U.S. BANK - CARD SERVICES	0523-KIMMEL	FBI LEEDA - JOHNSON & KIMME	05/25/23	478.87
31020	U.S. BANK - CARD SERVICES	0523-KIMMEL	CAR WASH	05/25/23	18.00
31020	U.S. BANK - CARD SERVICES	0523-LOJEC	PUBLIC BUILDING EVENT	05/25/23	19.73
31020	U.S. BANK - CARD SERVICES	0523-LOJEC	STAFF APPRECIATION IN PREP F	05/25/23	26.85
31020	U.S. BANK - CARD SERVICES	0523-MALVICH	SOLENOID VALVE FOR SIDE BR	05/25/23	302.14
31020	U.S. BANK - CARD SERVICES	0523-MALVICH	SURVEY MONKEY	05/25/23	81.78
31020	U.S. BANK - CARD SERVICES	0523-MCCOR	AIR FILTER, OIL FILTER	05/25/23	24.37
31020	U.S. BANK - CARD SERVICES	0523-MCPHER	FIREARMS - ALL STAFF	05/25/23	135.67
31020	U.S. BANK - CARD SERVICES	0523-MOHR	THE STAR NEWS	05/25/23	63.13
31020	U.S. BANK - CARD SERVICES	0523-MOHR	WORK PANT - RYSKA	05/25/23	106.38
31020	U.S. BANK - CARD SERVICES	0523-MOHR	PRINTER PAPER	05/25/23	39.99
31020	U.S. BANK - CARD SERVICES	0523-PALMER	MEALS - CRISIS COMMUNICATIO	05/25/23	51.99
31020	U.S. BANK - CARD SERVICES	0523-PALMER	GROUND POLE MOUNT	05/25/23	58.85
31020	U.S. BANK - CARD SERVICES	0523-PALMER	CAR WASH	05/25/23	9.00
31020	U.S. BANK - CARD SERVICES	0523-PALMER	CAR WASH	05/25/23	9.00
31020	U.S. BANK - CARD SERVICES	0523-PALMER	MOBILE - REGIONAL SUBSCRIPT	05/25/23	150.00
31020	U.S. BANK - CARD SERVICES	0523-PALMER	LATCH & STACK TOTE	05/25/23	52.98
31020	U.S. BANK - CARD SERVICES	0523-PALMER	MEALS - COMMAND STAFF RET	05/25/23	168.36
31020	U.S. BANK - CARD SERVICES	0523-PALMER	MEALS - COMMAND STAFF RET	05/25/23	97.82
31020	U.S. BANK - CARD SERVICES	0523-PALMER	CAR WASH	05/25/23	9.00
31020	U.S. BANK - CARD SERVICES	0523-PALMER	CREDIT - HOME DEPOT	05/25/23	52.98-
31020	U.S. BANK - CARD SERVICES	0523-PAPE	CAR WASH	05/25/23	18.00
31020	U.S. BANK - CARD SERVICES	0523-PAYNE	CREDIT - SALES TAX	05/25/23	19.11-
31020	U.S. BANK - CARD SERVICES	0523-PAYNE	DINNER - LOT COMMISSION ME	05/25/23	55.46
31020	U.S. BANK - CARD SERVICES	0523-PAYNE	DINNER - LOT COMMISSION ME	05/25/23	62.73
31020	U.S. BANK - CARD SERVICES	0523-RYSKA	IMPACT SPORT SHOOTING EAR	05/25/23	635.88
31020	U.S. BANK - CARD SERVICES	0523-RYSKA	COFFEE	05/25/23	79.49
31020	U.S. BANK - CARD SERVICES	0523-RYSKA	NOISE CANCELLING SPEAKER	05/25/23	593.03
31020	U.S. BANK - CARD SERVICES	0523-SIMS	POSTAGE	05/25/23	11.72
31020	U.S. BANK - CARD SERVICES	0523-SIMS	POSTAGE	05/25/23	27.66
31020	U.S. BANK - CARD SERVICES	0523-SIMS	POSTAGE	05/25/23	29.45
31020	U.S. BANK - CARD SERVICES	0523-SIMS	POSTAGE	05/25/23	27.88
31020	U.S. BANK - CARD SERVICES	0523-STEWAR	CREAMER	05/25/23	11.98

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount
31020	U.S. BANK - CARD SERVICES	0523-TATUM	CAR WASH	05/25/23	9.00
31020	U.S. BANK - CARD SERVICES	0523-TRAPP	PESTICIDE TRAINING CEU - TRA	05/23/23	45.00
31020	U.S. BANK - CARD SERVICES	0523-TRAPP	AERATION IN AQUATIC ENVIRON	05/23/23	30.00
31020	U.S. BANK - CARD SERVICES	0523-TRAPP	PESTICIDE TRAINING CEU - TRA	05/23/23	30.00
31020	U.S. BANK - CARD SERVICES	0523-TRAPP	PESTICIDE TRAINING CEU - TRA	05/23/23	52.98
31020	U.S. BANK - CARD SERVICES	0523-WAGNE	LUNCH - ADA TRAINING	05/23/23	131.05
31020	U.S. BANK - CARD SERVICES	0523-WAGNE	LUNCH - YOUTH COUNCIL RECR	05/23/23	95.41
31020	U.S. BANK - CARD SERVICES	0523-WAGNE	DINNER - LOT COMMISSION ME	05/23/23	72.58
31020	U.S. BANK - CARD SERVICES	0523-WANN	CAR WASH	05/25/23	9.00
31020	U.S. BANK - CARD SERVICES	0523-WEAVER	TEA, PRESENTATION BOOK	05/25/23	27.59
31020	U.S. BANK - CARD SERVICES	0523-WEAVER	POLY PORTFOLIO W/BRADS	05/25/23	65.40
31020	U.S. BANK - CARD SERVICES	0523-WEAVER	SPRING MOUNTAIN BLVD DEQ L	05/25/23	129.75
31020	U.S. BANK - CARD SERVICES	0523-WEAVER	DAVIS/THOMPSON DEQ NOI FILI	05/25/23	207.00
31020	U.S. BANK - CARD SERVICES	0523-WEAVER	ALARM KEYCHAINS, STICKY NO	05/25/23	71.36
31020	U.S. BANK - CARD SERVICES	0523-WEAVER	POWER WHEELS ADAPTER	05/25/23	21.94
31020	U.S. BANK - CARD SERVICES	0523-WILKINS	CREDIT - SALES TAX	05/25/23	19.11-
31020	U.S. BANK - CARD SERVICES	0523-WOLF	CREDIT - SALES TAX	05/25/23	26.72-
31020	U.S. BANK - CARD SERVICES	0523-WOLF	ASLA ANNUAL MEMBERSHIP - W	05/25/23	455.00
31020	U.S. BANK - CARD SERVICES	0523-WOLF	Hi-Visibility Jackets (7 total) and Lo	05/25/23	1,318.85
31020	U.S. BANK - CARD SERVICES	0523-WOLF	LABEL PRINTER KIT, HITCH	05/25/23	253.46
31020	U.S. BANK - CARD SERVICES	0523-WOLF	ATV SPREADER	05/25/23	369.99
31020	U.S. BANK - CARD SERVICES	0523-WOLF	STAFF LONG SLEEVE T-SHIRTS	05/25/23	25.05
31020	U.S. BANK - CARD SERVICES	202305-WOOD	AWARDS FOR GAMES/TOURNA	05/25/23	242.54
31020	U.S. BANK - CARD SERVICES	202305-WOOD	MEALS - WOODS - BIKE TRAININ	05/25/23	36.80
31020	U.S. BANK - CARD SERVICES	202305-WOOD	CAPS/TEE SHIRTS - KIDS TRIAT	05/25/23	149.84
31020	U.S. BANK - CARD SERVICES	202305-WOOD	SCOOPER FOR GOLD GLOVE FI	05/25/23	49.99
31020	U.S. BANK - CARD SERVICES	202305-WOOD	ANNUAL NRPA MEMBERSHIP - W	05/25/23	180.00
31020	U.S. BANK - CARD SERVICES	202305-WOOD	ANNUAL NRPA 2023 ANNUAL CO	05/25/23	322.50
31020	U.S. BANK - CARD SERVICES	202305-WOOD	ANNUAL MEMBERSHIP - SWIMO	05/25/23	5.34
Total U.S. BANK - CARD SERVICES:					12,214.00
UNIFORMS2GEAR INC.					
31175	UNIFORMS2GEAR INC.	INV/2023/05/06	UNIFORM NAMEPLATE - J. SPRA	05/18/23	17.59
Total UNIFORMS2GEAR INC.:					17.59
VISTA OUTDOOR SALES LLC					
8412	VISTA OUTDOOR SALES LLC	911229	2023 Bushnell spring order discoun	05/16/23	1,311.08
8412	VISTA OUTDOOR SALES LLC	919760	2023 Bushnell spring order discoun	05/21/23	610.42
Total VISTA OUTDOOR SALES LLC:					1,921.50
VITRUVIAN PLANNING LLC					
7392	VITRUVIAN PLANNING LLC	2023-38	ADA Transition Plan	06/01/23	7,469.41
Total VITRUVIAN PLANNING LLC:					7,469.41
WASHINGTON STATE SUPPORT REGISTRY					
1000	WASHINGTON STATE SUPPORT	20230602 - 1	CASE #2281417	06/02/23	187.37
Total WASHINGTON STATE SUPPORT REGISTRY:					187.37

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount
WESTERN STATES EQUIPMENT CO.					
32820	WESTERN STATES EQUIPMENT	IN002394057	TIRE	05/15/23	269.80
Total WESTERN STATES EQUIPMENT CO.:					269.80
WEX BANK					
8774	WEX BANK	89655401-PR	FUEL	05/31/23	807.58
8774	WEX BANK	89662734-PW	FUEL	05/31/23	4,016.47
8774	WEX BANK	89692257-PD	FUEL	05/31/23	2,508.54
8774	WEX BANK	89699103-W	FUEL	05/31/23	981.81
8774	WEX BANK	89709303-A	FUEL	05/31/23	145.09
Total WEX BANK:					8,459.49
Grand Totals:					127,136.08

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount
MSBT LAW CHTD.					
22100	MSBT LAW CHTD.	77624	PROSECUTING SERVICES-F2393	05/30/23	4,166.66
Total MSBT LAW CHTD.:					4,166.66
Grand Totals:					4,166.66

City of McCall
Housing Advisory Committee
Minutes
October 10, 2022, 4-5:30 pm
TEAMS/McCall Library – Idaho Room
218 E Park St
McCall, ID 83638

NO QUORUM, MEETING NOT CONDUCTED

CALL TO ORDER AND ROLL CALL

Toni Curtis, Robert Lyons, ~~Rick Fereday, Joseph Dalrymple,~~ **1 Vacancy**

HOUSEKEEPING

CONSENT AGENDA

- Approve June 13, 2022 HAC Minutes
- Approve August 8, 2022 HAC Minutes

BUSINESS

- Toaster Update (Brian) – (5-10 min)
- Formation of a Housing Organization (ACTION ITEM)
- Selection/Recommendation of new HAC Member (ACTION ITEM)
 - (to fill Pat Hill’s Vacant Seat)

NEXT MEETING

~~Next Regular Meeting – November 14, 2022 at 4:00pm~~

ADJOURN

American with Disabilities Act Notice: The McCall Library is accessible to persons with disabilities. If you need assistance, contact City Hall at 634-7142

McCALL AREA PLANNING AND ZONING COMMISSION

Minutes

February 1, 2023 – 4:00 p.m.

McCall City Hall – Lower Level & MStTeams Teleconference
216 East Park Street, McCall, ID 83638

COMMISSION MEETING – Began at 4:00 p.m.

CALL TO ORDER AND ROLL CALL – Commissioners Robert Lyons (Chair), Ryan Kinzer, Liz Rock, and Tony Moss were present. Christina Nemec and Tom Mihlfeith were absent. Bill Punkoney (City Attorney), Brian Parker (City Planner), Michelle Groenevelt (CED Director), Meredith Todd (Assistant Planner), Amanda Payne (LOT & STR Administrator), Nathan Stewart (Public Works Director), and Morgan Stroud (Staff Engineer) were also present.

1. Review of Due Process and Open Meeting Laws

Bill Punkoney reviewed the Due Process and Open Meeting Laws with the commission and spent the most time answering questions about quasi-judicial decision making, what constitutes an ex parte communication, and the role the Land Use Planning and Planning Commissions play in administering and balancing property rights with community values.

2. Review of Short Term Rental Code Standards

Amanda Payne (LOT & STR Administrator) and Michelle Groenevelt provided a summary of the active, new Short Term Rental regulations and the webpage resources offered to prospective vacation property owners. They reviewed the reduction in maximum occupancy from 4 persons per bedroom to 2 persons per bedroom plus 2 additional persons, as well as requiring every property to hold a business license. Staff mentioned it would still take time to see the impact of these code changes on reducing neighborhood impacts.

Commissioner Moss asked whether a timeline for adoption of this code amendment by the Board of County Commissioners so that residents of the Impact Area could benefit from increased protection was on the horizon. Ms. Groenevelt indicated the hope was to bring a batch of Code Amendments for work sessions with the BOCC throughout 2023.

3. Effective Reading of Meeting Packet Materials/Opportunities for Improvement

Brian Parker reviewed his best recommendations for reading the hundreds of pages long packets with the most efficiency and important detail, emphasizing the role of Staff Reports, Code Analysis, Plan Sets, and using your familiarity with size scale, and known objects in the community as reference points on size. Commissioners mentioned having sample motion starters within the staff report would be helpful to reduce the fumbling over motions. Commissioners also asked for future information regarding further questions and materials the Commission may be allowed to ask for that the applications do not require in order to be submitted such as Environmental Assessments, Traffic Impact Studies, or other relevant details to community impacts.

4. Discussion on Engineering Standards in Relation to Planning & Zoning Applications

Nathan Stewart and Morgan Stroud presented a short discussion of the importance of having an Engineering Review and Recommendation prior to approving Land Use Applications, as often times Engineering standards may require some re-designing of the site to occur for stormwater, drainage, and utility management to be effective. The Engineering staff mentioned that this is important in many cases to have reviewed in addition to being a condition of approval because the contents of engineering

reports and plans is not easy for the public or many other industry professionals to address in a Design context, so the need to take the time to get the engineering right is all the more valuable.

5. Adjournment

Commissioner Moss made a motion to adjourn. Commissioner Rock seconded. All commissioners voted aye and the meeting adjourned at 6:25pm.

Signed:

Attest:

DocuSigned by:
Robert Lyons
11F89FE13E9A402...

Robert Lyons, Chairman
McCall Area Planning and Zoning Commission

DocuSigned by:
Brian Parker
744987029FAE4A1...

Brian Parker
City Planner

May 9, 2023 | 3:07 PM MDT

May 9, 2023 | 1:33 PM PDT

McCALL AREA PLANNING AND ZONING COMMISSION

Minutes

March 7, 2023 – 4:30 p.m.

McCall City Hall – Lower Level & MStTeams Teleconference
216 E Park St, McCall, ID 83638

MEETING – Began at 4:30 p.m.

CALL TO ORDER AND ROLL CALL – Commissioners Robert Lyons (Chair), Christina Nemec, Ryan Kinzer, and Liz Rock were present; Commissioner Tom Mihlfeith arrived at 4:50pm; Commissioner Tony Moss was absent. Brian Parker (City Planner), Bill Nichols (City Attorney), Meredith Todd (Assistant Planner), Michelle Groenevelt (CED Director), and Morgan Stroud (Staff Engineer) were also present.

1. REVIEW & APPROVAL OF MINUTES

- February 7, 2023 Minutes

Commissioner Nemec moved to approve the February 7 2023 PZ Minutes, Commissioner Rock seconded. All commissioners voted aye and the motion carried.

2. PRELIMINARY DEVELOPMENT PLAN REVIEW MEETINGS

Pre-App: Conditional Use Permit –STR Occupancy > 10

1190 Majestic View Dr – Peter Mikkola

An Application for a Conditional Use Permit to utilize an existing Single-Family Home as a Short-Term Rental with an occupancy exceeding 11 people. The Property is Zoned R4 – Low Density Residential and is more particularly described as:

Lot 7 of Block 12 of Spring Mountain Ranch Subdivision No. 3, situate in the N ½ of Section 10, T18N, R3E, B.M., City of McCall, Valley County, Idaho.

Not A Public Hearing

Peter Mikkola of 2929 S Grebe Pl in Boise and owner of 1190 Majestic View Dr presented his pre-application for an STR with an occupancy of more than 10. The STR would be managed by Mr. Mikkola and a local property management company (Tyler Busby w/ North Fork Property Management) in McCall. The property is located in Spring Mountain Ranch Subdivision and been used as an STR in history and has not recorded any major issues or incidents with renters or the surrounding neighborhood.

3. CONSENT AGENDA

All matters which are listed within the consent section of the agenda have been distributed to each member of the McCall Area Planning and Zoning Commission for reading and study. Items listed are considered routine by the Commission and will be enacted with one motion unless a commissioner specifically requests it to be removed from the Consent Agenda to be considered separately. Staff recommends approval of the following ACTION ITEMS:

Findings of Fact & Conclusions of Law from February 7, 2023, P&Z Commission Agenda & Review

CUP-21-03, DR-21-33 (ACTION ITEM)

111 N Samson Trail – Design West Architects & Paragon Consulting for MDSD

An application for a Conditional Use Permit and Design Review to expand the existing use permitted to the school district by constructing an addition of approximately 12,000 sq. feet of classroom

space on the Payette Lakes Middle School, as well as level out the school campus playing field and update the traffic circulation between the Middle School and Barbara Morgan Elementary School. The property is zoned CV – Civic and is more particularly described as:

A parcel of land situated in the S ½ of the NW ¼ of Section 15, T18N, R3E, B.M., City of McCall, Valley County, Idaho.

SUB-22-06, CUP-22-06, DR-22-23, SR-22-15 (ACTION ITEM)

209-217 Simmons Street – Steve Callan of Synergy Structures

An Application for A Subdivision Preliminary Plat, Conditional Use Permit, Design Review, and Scenic Route Review to construct a 5-unit, mixed-use townhouse project including commercial workshop space on the ground floor and residential space on the upper floor. The Property is zoned I – Industrial, is within the Mission Street Scenic Route Overlay, and is more particularly described as:

Lots 5-9 of Block 2 of the Riverside Subdivision, situate in the W ½ of the NW ¼ of the SW ¼ of Section 16, T18N, R3E, B.M., City of McCall, Idaho.

DR-22-26 & SR-22-16 (ACTION ITEM)

300 N Mission St – Charlie Morgan for Idaho Regular Baptist Bible Camp dba Camp Pinewood

An Application for Design Review and Scenic Route Review to construct two (2) additions on an existing bunkhouse structure. The Existing structure totals ~ 2,500 square feet. The West Addition proposes an additional 864 square feet, and East Addition proposes 930 square feet. The proposed new total bunkhouse square footage would be ~4,300 square feet. The Property is zoned R8 – Medium Density Residential and is more particularly described as:

Tax #379 situate in the SE ¼ of the SE ¼ of Section 8; part of the NE Section of Section 17 within the Mission Subdivision, T18E, R3E, B.M., City of McCall, Valley County, Idaho.

DR-22-28 (ACTION ITEM)

2225 Payette Dr – Claire Remsberg for William and Julie Loomer

An application for Design Review to construct a new single family residence totaling 4512 square feet, including an attached garage and covered patio areas. The existing 'Shabbin' totaling 256 square feet will be partially removed, but remain as accessory to the new single family residence. The property is zoned R4 – Low Density Residential and is more particularly described as:

Lot 2 of Block 8 of the Amended Cedar Knoll Acres State Subdivision, situate in portions of Sections 32 and 33, T19N, R3E, B.M., Valley County, Idaho.

Commissioner Rock moved to approve the consent agenda, Commissioner Nemec seconded. All commissioners voted aye and the motion carried.

4. OLD BUSINESS

No Old Business was discussed

5. NEW BUSINESS

DR-22-27 & SH-22-05 (ACTION ITEM)

1410 Mill Rd – David Carey & Wayne Ruemmele – 'The Glass House'

An application for Design Review and Shoreline Review to entitle the renovation of an existing building, and landscaping improvements to support a variety of commercial uses. The property is

zoned CBD – Central Business District; is located within the Shoreline Zone of Payette Lake; is within the Railroad Avenue Urban Renewal District (Sunset in 2022) and is more particularly described as:
Lots 7-10 of Block 5 of McCall’s First Addition, situate in Section 9, T18N, R3E, B.M., City of McCall , Valley County, Idaho.

PUBLIC HEARING

Wayne Ruemmele of Epikos Design & Planning at 301 Colorado St and David Carey of 1389 Lang Ct in McCall presented their application for Shoreline & Design Review at “The Glass House.” Much of the earlier design/renovation work at the Glass House thus far was completed through the Administrative Approval process, and this final review is to include and put a wrap on the completion of the project’s stormwater/drainage design. Some of the work will be the responsibility of the Glass House and some will be the responsibility of the City. Mr. Carey mentioned that the most renovation work has entailed interior work, and a limited deck/retaining wall through Administrative Approval. The biggest challenge for Mr. Carey was ultimately defining the use to best conform with the Commercial Use Standards.

Brian Parker, City Planner, provided the Staff Report and described the chain of Administratively approved improvements that had occurred up to this point and that the final need is the Design Review approval of the Site/Landscaping/Stormwater Plan with a request for either the construction of sidewalks along the property perimeter. Michelle Groenevelt CED Director and Urban Renewal Liaison provided context on the history of the Lake St Street-Design that was paid for through the Railroad Urban Renewal District before the District closed out. Now that the District is closed out, construction of the sidewalks cannot be funded through Urban Renewal. Bill Nichols, City Attorney, described the legal process for exacting public improvements and that it isn’t an uncommon requirement for development in commercial contexts. [Commissioner Mihlfeith joined the meeting at 4:50pm]

Commissioner Kinzer asked staff to elaborate on the extent of ‘All Public improvements’ included in the Staff Report and Mr. Parker listed all surrounding sidewalks, parking spaces, curb ramps and striping.

Chairman Lyons opened and closed the Public Hearing with no additional comment from the public.

- Kim Johnson’s Email dated 3-7-2023 is included as an attachment to these minutes.

Mr. Carey provided a rebuttal of the Staff and Code requests relating to the requirement for public improvements and commented that with this project and the low level of renovation completed, he felt that requiring all public improvements on the full surrounding site with a large amount of parking without the investment from the Urban Renewal District would be large in comparison to the impact of the Glass House renovation.

Chairman Lyons asked Mr. Carey and Mr. Ruemmele to what extent they had been made aware of the sidewalk designs or the requirement/need for sidewalks as they were doing the Administrative Approval projects, the applicants indicated they had known a sidewalk of some kind was foreseen, but not that a design as elaborate as that paid for by the McCall Redevelopment Agency would be requested. He indicated a cost share with help from the City would be helpful. Ms. Groenevelt mentioned that while the Urban Renewal District had provided a vague master plan for this Waterfront area in 2005, the design was paid for in 2021 by the MRA with the intent of creating a shovel ready project for when private development should occur.

Commissioners discussed wanting to know more about the possible balance between asking the City and Applicant to look deeper into a more reasonable and proportional share of improvements instead of

all the improvements. Mr. Nichols described the best suggestion the Commission might be able to make to guide staff to work with the applicants on a proportional improvement requirement using a cost estimate for public improvements (from the applicant engineer), cost sheet for project expenses incurred to date, and exploring the impact of the change of use/landscaping excluding the construction cost of interior. Ms. Groenevelt provided some context about the public improvements in the area being a balance between the design that was paid for by the now Sunset Railroad Urban Renewal District and the responsibility of development to construct the improvements as specified along the frontage of properties, city wide. While if the Railroad District had been in operation longer, it may have been a possibility for the district to invest further in sidewalks, the new Urban Renewal District (Downtown West) cannot expend its funds outside of its boundary area.

Commissioner Nemec moved to continue DR-22-27 and SH-22-06 and the Public Hearing to April 4th and asked staff/applicant to further clarify proportional share of public improvements surrounding the site. Commissioner Rock seconded.

A roll call vote was held:

Robert Lyons - Yes

Christina Nemec - Yes

Liz Rock - Yes

Ryan Kinzer - Yes

Tom Mihlfeith - Yes

DR-23-02 & SR-23-01 (ACTION ITEM)

2078 Warren Wagon Rd – Courtney Bork for Gregg & Sallee Middlekauf

An application for Design Review to construct new single-family residence totaling 2,781 square feet with an attached garage to replace an old cabin on site. The property is zoned R4 – Low Density Residential; is located along the Warren Wagon Rd Scenic Route and is more particularly described as:

Lot 3 of Block 1 of the Amended Pinecrest State Subdivisions, Situate in Section 32, T19N, R3E, B.M., Valley County, Idaho.

PUBLIC HEARING

Courtney Snyder of McCall Design & Planning presented the application for a new single-family residence along the Scenic Route.

Mr. Parker provided the staff report and mentioned the plans as submitted meet city code and the McCall Design Guidelines. Ms. Stroud indicated the project had already received final engineering approval and met all Engineering standards applicable.

Chairman Lyons opened and closed the public hearing with no comments from the public.

Commissioner Nemec moved to approve DR-23-02 and SR-23-01 with conditions as written, Commissioner Rock seconded, all commissioners voted aye and the motion carried.

(continued on next page)

DR-23-01 & SH-23-01 (ACTION ITEM)

2255 Edgemere Lane – Eric Anderson for Colby Smith

An application for Design Review to construct a new single family home totaling 3,821 square feet along and new landscaping along the lakefront of Payette Lake. The property is zoned R4 – Low Density Residential; is within the Shoreline Environs Zone of Payette Lake and is more particularly described as:

Lot 12 of the Luck’s Point Subdivision less Tax No. 32, situate in Section 26, T19N, R3E, B.M., Valley County, Idaho.

PUBLIC HEARING

Commissioner Rock moved to continue the item to April 4, 2023, Commissioner Nemec seconded. All commissioners voted aye and the item was continued.

6. OTHER

• **ADA Transition Plan Presentation (INFORMATION ONLY)**

Don Kostelec of Vitruvian Planning

Don Kostelec of Vitruvian Planning presented the adopted Americans with Disabilities Act (ADA) Transition Plan called ‘Access McCall’ identifying the role of the Planning & Zoning Commission in guiding the City/Impact Area development code to promote accessible spaces into the future; he reflected that development improvements like sidewalk are a key tool existing in City Code to create a more inclusive and Accessible built environment for all McCall communities and abilities.

- Signs approved administratively

None

- Review Letters of Interest for Planning & Zoning Commission Members (2 Seats) (City & AOI) (ACTION ITEM)

Impact Area:

Dana Paugh of 335 S Samson Trail introduced herself and her background in Engineering and Environmental Management that carried her to ski towns in Colorado and into Tahoe to work at Heavenly until shortly before COVID. Prior to leaving Tahoe Ms. Paugh served on the Tahoe Sustainability and Women’s Empowerment committees. Dana and her husband moved to the McCall area in 2020 to a property in the Impact Area and now she works in the field of Economic Development for the St. Luke’s Foundation.

Commissioner Nemec recommended Dana Paugh of 335 S Samson Trail to the BOCC to represent the Impact Area on the McCall Planning & Zoning Commission. Commissioner Rock seconded. Chairman Lyons, Commissioner Muhlfeith, and Commissioner Kinzer concurred in the recommendation and look forward to Ms. Paugh serving with the Commission.

City Limits:

Michelle Rentzch of 1025 Kaitlyn Loop spoke about her history as a Planning Director and Master Gardener and excitement to serve the McCall Community further. Unfortunately she won’t meet the residency requirement for the Planning & Zoning Commission until August of 2023 (2 years of residency required).

Toni Curtis of 1661 Ginney Way moved to McCall in 2001 and has worked for McCall Fire/EMS, Construction Management, and Real Estate Pre-Development. She has served on the Housing Advisory

Committee and serves on the LOT Commission to allocate collected local sales taxes to initiatives that support the McCall Community. She is up to date and familiar with the local infrastructure challenges that face the McCall Community and wishes to continue serving the community, especially in implementing local housing projects.

Dave Petty and Mike Spilotros were unable to be at the meeting to speak with commission. Commissioners noted Mr. Petty has had a letter of interest in for a long while and would be worth hearing from.

Chairman Lyons requested that Staff hold an additional meeting with the remaining City Limits applicants and bring back recommendations at the April 4 Meeting.

- **Upcoming Meeting Agenda – April 4, 2023**

7. ADJOURNMENT

American with Disabilities Act Notice: The Planning and Zoning Commission meeting room is accessible to persons with disabilities. If you need assistance, contact City Hall at 634-7142. Please allow 48 hours.

Commissioner Rock made a motion to adjourn, Commissioner Nemec seconded. All commissioners voted aye and the meeting adjourned at 6:26pm

Signed:

Attest:

DocuSigned by:
Robert Lyons
11F89FE13E9A402...

Robert Lyons, Chairman
McCall Area Planning and Zoning Commission

May 9, 2023 | 1:33 PM PDT

DocuSigned by:
Brian Parker
744967029FAE4A1...

Brian Parker
City Planner

May 9, 2023 | 3:07 PM MDT

From: [Kim Johnson](#)
To: [Brian Parker](#)
Subject: Glass House Renovations
Date: Tuesday, March 7, 2023 11:03:29 AM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

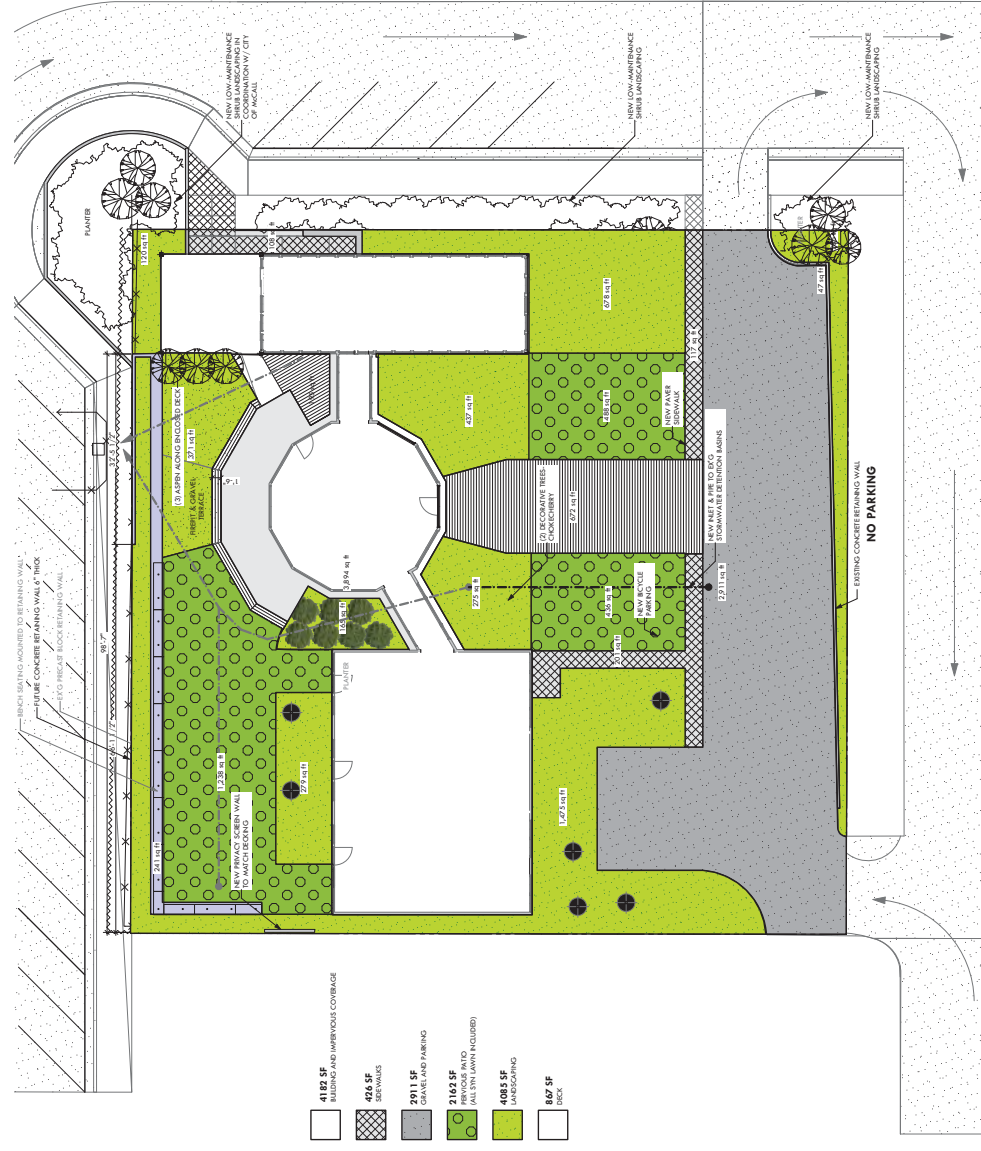
Brian,

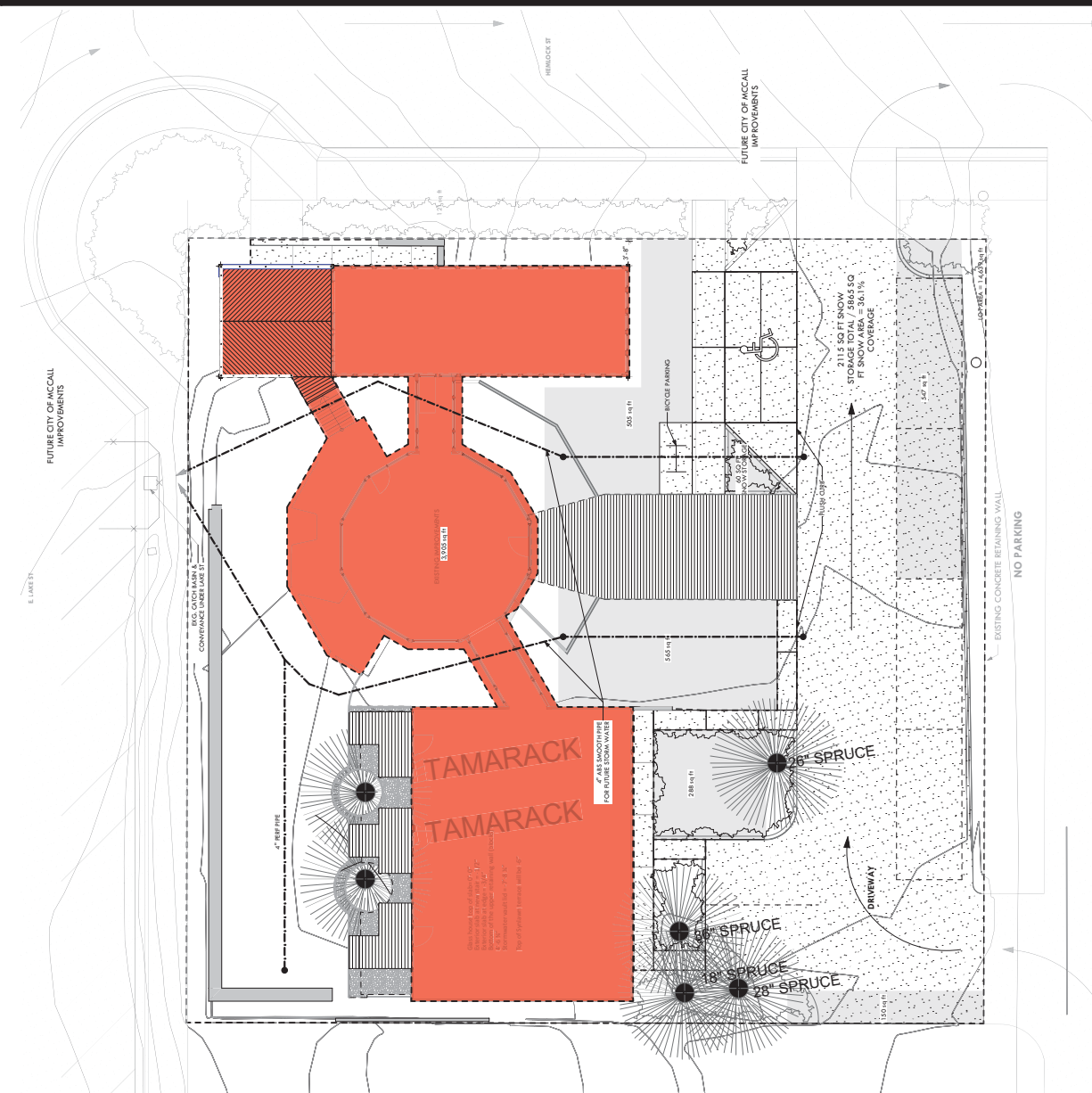
I am an owner at Mill Park Condos (1502 Mill Rd.) and received a Notice of Public Hearing. (March 7, 2023. As neighbors, who could be impacted by renovations and activities at The Glass House, we wish to comment that thus far, The Glass House has been a great neighbor, and these renovations appear to be a good addition. However, we remain concerned should future business or activities create excessive noise or traffic or parking congestion.

THANKS

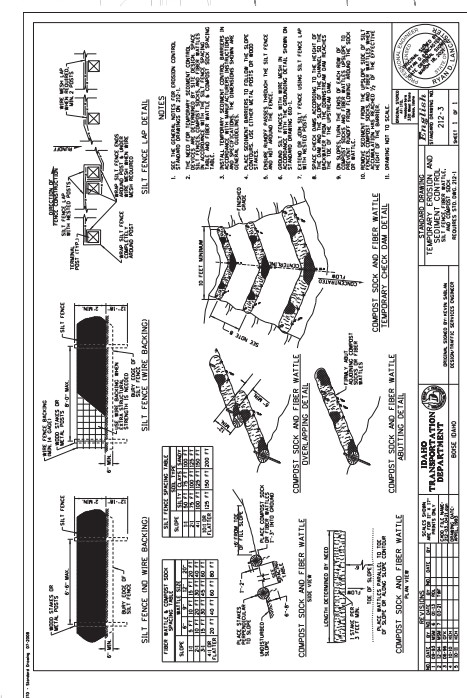
Kim Johnson
Payette 967 LLC
1502 Mill Rd, Unit #3
McCall, ID

Cell & WhatsApp +1 (858) 229 6827





1 PHASE 2A BMPs
SCALE: 1/8" = 1'-0"



2 TEMP. EROSION & SEDIMENT CONTROL
NOT TO SCALE





**WATER SUPPLY FIXTURE UNIT WORKSHEET
(RESIDENTIAL USE)
According to UPC-2017-Table 610.3**

Date: <u>03/07/2023</u>	Account Number: <u>Existing</u>
Property Owner: <u>David Carey</u>	Service Address: <u>1410 Mill Road</u>
Account Holder: <u>David Carey</u>	Email Address: <u>davidcarey@jugmountainranch.com</u>
Assessors Parcel Number(APN): _____	Phone Number (home/cell): <u>208-630-4818</u>
Land Use Application #: <u>DR 22-27</u>	(work): <u>NA</u>

Information about this worksheet:

- The following worksheet must be completed and contains information needed to estimate customer demand to establish the required meter size, and ERU's required.
- Capitalization fees are based on the current water rate fee structure dated 10/1/2022, and approved by City Council via latest Resolution 22-27. Please visit mccall.id.us/water for more information.
- This has been simplified, from UPC-2017-Table 610.3, to meet the requirements of a typical residential customer to facilitate ease of use.
- However, special cases may need to be analyzed in further detail by a Professional Engineer [e.g. larger lot, fire flow, multi-story, secondary units/structures].

How to use this sheet:

1. Fill out this sheet (section 2 below) while looking at your floorplans and irrigation plan (if you are planning on irrigation).
2. Review the information at the bottom of the sheet. This will identify the required meter size, service size, Equivalent Residential Units, and capitalization fees.
3. Submit this completed worksheet to Water Staff (water@mccall.id.us) for review and approval.

Appliances, Appurtenances or Fixtures	2 Number of Fixtures		3 Fixture Value		4 Total Fixture Unit Value
	Main Floor	Other Floors	x	Value	=
Appliances: Clothes Washer	(_____)	(_____)	x	2	= _____
Dishwasher	(<u>1</u>)	(_____)	x	1.5	= <u>1.5</u>
Drinking Fountain	(_____)	(_____)	x	0.5	= _____
Sinks: Bar	(_____)	(_____)	x	1	= _____
Kitchen	(<u>1</u>)	(_____)	x	1.5	= <u>1.5</u>
Laundry	(_____)	(_____)	x	1.5	= _____
Bathroom	(<u>2</u>)	(_____)	x	1	= <u>2</u>
Mop/Service	(_____)	(_____)	x	1.5	= _____
Tubs/showers: Bathtub or Tub/Shower	(_____)	(_____)	x	2	= _____
3/4" Bathtub Fill Valve-Soaker***	(_____)	(_____)	x	10	= _____
Shower, per head, no tub	(<u>2</u>)	(_____)	x	2	= <u>4</u>
**Toilets: *1.6 GPF Gravity Tank	(<u>2</u>)	(_____)	x	2.5	= <u>5</u>
>1.6 GPF Gravity Tank	(_____)	(_____)	x	3	= _____
1.6 GPF Flushometer Valve	(_____)	(_____)	x	5	= _____
>1.6 GPF Flushometer Valve	(_____)	(_____)	x	7	= _____
Other **Toilets: Urinal 1.0 GPF	(_____)	(_____)	x	2	= _____
Urinal, flush tank	(_____)	(_____)	x	1	= _____
Bidet	(_____)	(_____)	x	1	= _____
Landscape: Hose Bib, first	(<u>1</u>)	(_____)	x	2.5	= <u>2.5</u>
Hose Bib, each additional	(<u>1</u>)	(_____)	x	1	= <u>1</u>
Irrig., # Heads in Largest Zone	(_____)	(_____)	x	1	= _____
Total Fixture Units					= <u>17.5</u>
Required Meter Size					= <u>3/4"</u>
Required ERU's					= <u>1</u>
Required Capitalization Fees					= _____

* Commonly used

**Toilets are known as "Water Closets" in UPC-2017

*** Whirlpool, Hot tub, Swim Spa

Fixture Unit Count (column 4 total)	Required Meter Size	Required ERU's	Capitalization Fees (Fee Schedule - 10/22)
0 - 20	5/8 meter	1 ERU	\$ 7,132.00
20.5 - 39.5	3/4" meter	1 ERU	\$ 7,132.00
40 - 85	1" meter	2 ERU	\$ 14,264.00
85.5 - 370	1.5" meter	4 ERU	\$ 28,528.00
370.5 - 654	2" meter	6 ERU	\$ 42,792.00

For City Staff Use Only:

Approved by: _____

Date: _____

McCall Public Library Board of Trustees Meeting Minutes

March 13, 2023 - 10:00 AM

Two locations: Teams (Virtual) or Legion Hall. 216 E. Park Street

Attendance: (Legion Hall): Meg Lojek, David Gallipoli, Jacki Rubin, Matt Stebbins, Lola Elliot, and Meredith Todd. (Virtual): Amy Rush, Linda Stokes, Nathan Stewart.

Call to order: 10:00

Amendments to Agenda: None

Approval of Minutes: David moved to approve the February 13, 2023 minutes; Matt seconded the motion which passed unanimously.

Public Comment: None

Director's Report:

Payment Approval: 2/3/23 Action Item: Jacki moved to accept; Matt seconded and all in favor.

Monthly Budget and Stats: financials online; stats emailed to Trustees.

Volunteer Appreciation Invitation: The city event will be 4/12 at Banyans; RSVP by March 31st.

Update on tribe contributions to new library: Meg and Morgan Zedalis from the USFS continued dialogue as to how to incorporate native language, artifacts, and art pieces into our library. The two are working on a USFS grant this spring.

Staff Report:

Diane Penny (Indigenous), Deb McCoy (Early Literacy Programs), Casey (Teen Mental Health), and Meg (Sustainability the Library) have all started classes and are presenting programs in the area of study. The Star News has recognized the Ready for Kindergarten programs and the successful work being done by the amazing McCall Library staff!

Grants:

The solar grant will be again submitted with addition of matching fund opportunities. The Friends of the Library are considering support to the project by voting to match funding to \$10,000. Thank you to the Friends!

McCall Education Foundation grant in progress.

ICfL facilities grant Letter of Intent was submitted, waiting for the next steps at the state level.

LOT application was discussed, and Nathan suggested we apply for all needs. Each is a critical component of the construction. (Plumbing, shelves, furniture, etc).

Library 50th Anniversary celebration is quickly approaching April 28th.

Discovery Garden has two master gardening volunteers who will begin work on the space when time is appropriate. Thank you to volunteers! Meg will be in touch with Kurt Wolf.

Legislative Update: HB 139 failed but will be reintroduced. HB 227 failed on a technicality and was postponed. Both bills are worthy of your time. Write your representatives. state your opinion. The Board will draft a letter of support for the ICfL at the April meeting.

Library Expansion Update: Nathan and Meg have been working with RATIO for furniture, indoor projects. He has stressed to CM now is the time to start preparing for the outside construction phase. He is working with Parks and Rec for snow removal but his expectation is start work April 1st no matter

the snow situation...as it will be here for a long time this spring. Meg reported that CM says wood cost is down significantly from where it was last summer when we started. However, labor costs still are higher than expected and electrical/conduit/plumbing/HVAC are not going down yet.

Treasurer's Report: Not a lot happening. Audit goes to Council March 30th. Linda pointed out the line items would be most interesting for trustees: 25 is the library budget; 32 is the construction budget; and 40 is the GO Bond/debt service fund. If we have questions, she will be happy to answer. Give her a call. Jacki asked Linda about the department's unexpended fund balance from past budgets, and Linda said she would be able to confirm the amount soon.

Library Foundation Report: There have been no significant changes. Nathan asked Amy to prepare a review of the funding searching for ways to meet more of the construction needs. He offered to set up a meeting in April after she returns from vacation.

Climate initiatives for library: introduction (Meredith): This was an extremely important and informational program. She spoke at length to the sustainability plan for the city and how it affects the library. Meredith encouraged us to set goals that are measurable and that would promote efficiency and extend plans for climate mitigation for the library. The Board following the presentation reviewed the existing policy statements and pledged to expand the policy and promote proactive sustainability which will be added to the McCall Library Strategic Plan in May after the Policy review is complete. All were in favor of supporting the climate initiatives. Excellent program Meredith.

Library Policy review Sections 1E, 1F, 1G Jacki moved and Matt seconded to accept the policy review changes. It passed unanimously. Next section for review: H. Meg will send edits of the sections to the Board for review at our next meeting.

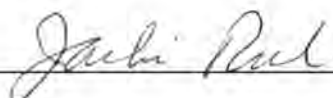
Friends Liaison report: Discussion of the matching funds for the solar panel grant was deferred as a meeting with the Friends was to begin at 2:00.

City Council Liaison report: none

Next Meetings: April 10th, May 8th and June 12th

Minutes prepared by Lola Elliot, substitute for Susie Reddick, Secretary

Respectfully submitted by Jacki Rubin, Chair



McCALL AREA PLANNING AND ZONING COMMISSION

Minutes

April 4, 2023 – 4:30 p.m.

McCall City Hall – Lower Level & MStTeams Teleconference
216 E Park St, McCall, ID 83638

MEETING – Began at 4:30 p.m.

CALL TO ORDER AND ROLL CALL – Commissioners Robert Lyons (Chair), Christina Nemec, Ryan Kinzer, Liz Rock, and Dana Paugh were present. Commissioners Tony Moss and Tom Mihalfeith were absent. Brian Parker (City Planner), Morgan Stroud (Staff Engineer), Meredith Todd (Assistant Planner), Bill Punkoney (City Land Use Attorney), and Michelle Groenevelt (CED Director) were also present.

1. REVIEW & APPROVAL OF MINUTES

- February 1, 2023 Minutes (Training)
- March 7, 2023 Minutes

Commissioner Nemec moved to approve the February 1 and March 7 P&Z Minutes. Commissioner Rock seconded. All commissioners voted aye and the motion carried.

2. PRELIMINARY DEVELOPMENT PLAN REVIEW MEETINGS

Pre-App: Conditional Use Permit – Agricultural Structure – IMPACT AREA

TBD Oakwood Rd – Martin Potucek

A pre-application for a Conditional Use Permit to construct and operate an agricultural shed structure as the primary structure and use on a Residential property. Shed will provide propagation space and storage for landscaping materials and will not require utilities. The Property is Zoned R4 – Low Density Residential and is more particularly described as:

Lot 13 of Group D of Payette Lakes Club Subdivision, situate in the SE ¼ of the SE ¼ of Section 6, T18N, R3E, B.M., Valley County, Idaho.

Not A Public Hearing

Martin Potucek of 2121 Overbluff Rd, Spokane, WA presented his preliminary development plan review for an Agricultural structure as a primary structure on his property in a residential zone in order to propagate plantings for local private landscaping purposes. Commissioners look forward to a future application.

3. CONSENT AGENDA

All matters which are listed within the consent section of the agenda have been distributed to each member of the McCall Area Planning and Zoning Commission for reading and study. Items listed are considered routine by the Commission and will be enacted with one motion unless a commissioner specifically requests it to be removed from the Consent Agenda to be considered separately. Staff recommends approval of the following ACTION ITEMS:

SR-23-02 ONLY (ACTION ITEM)

1013 Kaitlyn Loop – John Gonda for Vickie & Louie Fund

An application for Scenic Route Review of a new single-family dwelling along the Lick Creek Road Scenic Route, with Design Approval granted by the Architectural review committee of Lick Creek Meadows Subdivision. The structure is located within the R4 – Low Density Residential Zone, is located within Lick Creek Road Scenic Route and is more particularly described as:

Lot 28 of Block 2 of Phase 2 of the Lick Creek Meadows Subdivision, situate in the SE ¼ of Section 3, T18N, R3E, B.M., City of McCall, Valley County, Idaho

Not A Public Hearing

Findings of Fact & Conclusions of Law from March 7, 2023, P&Z Commission Agenda & Review

DR-23-02 & SR-23-01 (ACTION ITEM)

2078 Warren Wagon Rd – Courtney Bork for Gregg & Sallee Middlekauf

An application for Design Review to construct new single-family residence totaling 2,781 square feet with an attached garage to replace an old cabin on site. The property is zoned R4 – Low Density Residential; is located along the Warren Wagon Rd Scenic Route and is more particularly described as:

Lot 3 of Block 1 of the Amended Pinecrest State Subdivisions, Situate in Section 32, T19N, R3E, B.M., Valley County, Idaho.

Commissioner Nemec moved to approve the Consent Agenda, Commissioner Rock seconded. All commissioners voted aye and the motion carried.

4. OLD BUSINESS

DR-22-27 & SH-22-05 (ACTION ITEM)

1410 Mill Rd – David Carey & Wayne Ruemmele – ‘The Glass House’

An application for Design Review and Shoreline Review to entitle the renovation of an existing building, and landscaping improvements to support a variety of commercial uses. The property is zoned CBD – Central Business District; is located within the Shoreline Zone of Payette Lake; is within the Railroad Avenue Urban Renewal District (Sunset in 2022) and is more particularly described as:

Lots 7-10 of Block 5 of McCall’s First Addition, situate in Section 9, T18N, R3E, B.M., City of McCall, Valley County, Idaho.

PUBLIC HEARING

Chairman Lyons opened the public hearing.

Commissioner Rock moved to continue DR-22-27 and SH-22-05 and public hearing to May 2nd, 2023. Commissioner Nemec seconded. All commissioners voted aye and the motion carried.

DR-23-01 & SH-23-01 (ACTION ITEM)

2255 Edgemere Lane – Eric Anderson for Colby Smith

An application for Design Review to construct a new single family home totaling 3,821 square feet along and new landscaping along the lakefront of Payette Lake. The property is zoned R4 – Low Density Residential; is within the Shoreline Environs Zone of Payette Lake and is more particularly described as:

Lot 12 of the Luck’s Point Subdivision less Tax No. 32, situate in Section 26, T19N, R3E, B.M., Valley County, Idaho.

PUBLIC HEARING

Chairman Lyons opened the public hearing.

Rock moved to continue to DR-23-01 and SH-23-01 and public hearing to May 2nd, 2023. Commissioner Kinzer seconded. All commissioners voted aye and the motion carried.

5. NEW BUSINESS

DR-23-04 & SR-23-08 (ACTION ITEM)

TBD Stibnite St – Kerstin Dettrich for McCall Donnelly Joint School District

An application for Design Review to develop the school district staff housing site and review necessary site planning and entitle the construction of one (1) cottage and one (1) multifamily building with eight (8) units. The property is zoned R8 – Medium Density Residential; and is more particularly described as:

Part of Tax Parcel No. 80 in the NW $\frac{1}{4}$ of the N/W $\frac{1}{4}$ of Section 16, T18N, R3E, B.M., City of McCall, Idaho

PUBLIC HEARING

Kerstin Dettrich of the Land Group, Inc (Project Manager) and John King of Pivot North Architecture (Project Architect) presented the design review/scenic route review application on behalf of the McCall-Donnelly School District for the school district staff housing project that has previously completed a Record of Survey and Rezone before the Planning & Zoning Commission. Ms. Dettrich described the application for phase 1 of the development plan to include construction of an 8-unit multifamily structure as well as the site work to serve the remaining units that would follow in the next phase. The Phase 1 graphic (attached to the minutes) was described to commissioners noting that the original request to include a single-family cottage in addition to the multifamily structure had been cut or deferred due to cost constraints at this time. Mr. King presented the updated architectural renderings of the full buildout plan reflecting the site plan changes. In the multi-family design, there will be 4 units on each of the 2 floors as well as storage lockers for each unit to contain recreational equipment that is common to residents in McCall.

Ms. Dettrich then provided a summary of the *McCall Area Local Housing Program* and the Council Resolution regarding the project (*Res. 19-02*). Ms. Dettrich believes the project should qualify for the deed restriction incentives without being deed restricted, but through the contract between the school district and employees. She recommended offering the housing reimbursement with some rider attached to a Development Agreement modification. She also reviewed the Conditions of Approval for the project applicable at this stage and recommended within the staff report and mentioned that the requirement to underground the overhead power along Mission Street would create a major problem for the project. USFS, MDHS, Lutheran Church, Camp Pinewood, and others in proximity to the property do not have undergrounding completed yet. Ms. Dettrich estimated that the usual cost to understand how much the undergrounding of power would cost \$2,000-\$8,000 based on usual Design Fees through Idaho Power.

Mr. Parker provided the staff report mentioning that in general the application should meet city code but that questions remain on the actual cost of undergrounding utilities with no cost estimate acquired at this time, and that it is staff's understanding that while this project is an example of employer provided housing, it is not considered Local Housing that may qualify for the Incentive program unless local housing deed restrictions on units are provided, under the current proposal the deed restrictions

are not included. Ms. Stroud provided the Engineering Report and agreed this should meet the applicable engineering requirements and would have stormwater and drainage addressed by a professional engineer. She indicated the applicants are working diligently through the Engineering Review and are on track to meet code requirements.

Chairman Lyons opened the public hearing.

Ms. Todd read the late emailed comment from Kyle Maschek, Assistant Director of Camp Pinewood into the record and provided copies to commissioners and applicant team.

Ms. Dettrich mentioned regarding the stormwater comments from Mr. Maschek that she and the Engineering team at the Land Group would be walking the site with the Camp Pinewood Staff. She reiterated the hope for some flexibility or collaboration on the local housing Incentive Program, but that ultimately deed restrictions would not be pursued by the School District at this time.

Ms. Stroud addressed some of the comments within the comment letter from Mr. Maschek and confirmed there would likely be pooling of water seasonally and that Camp Pinewood, but not in a volume or direction from the natural drainage pattern.

Chairman Lyons felt that the Incentive Program for Local Housing should not be applied without the Deed Restrictions on this project because of the ability to sell the units for a profit later, losing those housing units to the general market. Commissioner Nemeč agreed. Commissioner Rock identified having concerns about the Stormwater information, and mentioned that she had some confusion about the City Code regarding undergrounding of utilities and would like clarification on whether the power lines themselves must be undergrounded. Ms. Groenevelt indicated that the code would still require undergrounding as has been required for other multi-family residential projects, but that there are options for cost sharing including Franchise Fees, and the Idaho Gem Grant should the Local Housing program be explored.

Commissioners asked for clarification on the meaning of MCC 3.8.24 G1/G2 and whether undergrounding can be required or not. Mr. Punkoney said he would interpret that section to require undergrounding for all utilities.

Commissioner Rock moved to continue DR-23-04 & SR-23-08 to May 2nd, 2023 and directed staff to further discuss undergrounding of utilities and the housing program, and draft findings & conclusions consistent with the commissioners discussion. Commissioner Kinzer seconded.

A Roll Call vote was held:

*Chairman Lyons – Yes
Commissioner Nemeč - Yes
Commissioner Paugh – Yes
Commissioner Kinzer – Yes
Commissioner Rock - Yes*

DR-23-03 (ACTION ITEM)

651 Stockton Dr – Leo Stoddard (IMPACT AREA)

An application for Design Review to construct a new single-family residence totaling 7,738 square feet with an attached garage and covered wrap-around porch.. The property is zoned R1 – Residential 1 Acre; and is more particularly described as:

Tax No. 43, Lot 15 of Block 1 of the West Place Subdivision, Situate in the NE ¼ of the SW ¼ of Section 15, T18N, R3E, B.M., Valley County, Idaho.

PUBLIC HEARING

Mr. Leo Stoddard of 57133 Hazen Rd in Warren, OR presented the application to construct a new single-family home/barndominium on Stockton Dr to be his future permanent residence. He mentioned that while the structure is large, the wrap-around porch and non-metal design make the home more residential than other steel structures in the neighborhood.

Mr. Parker provided the staff report and mentioned the application meets and maximizes most of the Impact Area dimensional standards. The location is a field with landscaping in only some places. While additional landscaping would be appreciated for screening, there isn't a requirement that can be placed. Ms. Stroud provided a brief staff report and indicated that there is only a small amount of engineering information required and that the application would meet code.

Chairman Lyons opened the public hearing.

Pat Allen of 650 Stockton Dr across the road spoke neutrally of the application and with concerns about whether the well would cause a drawdown of the well on their property, he also mentioned being concerned about the use of this property as a vacation rental as others in the neighborhood have become an issue.

Mr. Stoddard indicated IDWR had no issue or anticipated problems when testing the well, and that he plans to live in the home so a vacation rental should not be an issue. Commissioners asked that Mr. Stoddard consider some additional landscaping in collaboration with neighbors if possible.

Commissioner Nemec moved to approve DR-23-03 with conditions as stated. Commissioner Rock seconded. All commissioners voted aye and the motion carried.

CUP-23-01 (ACTION ITEM)

1755 Warren Wagon Rd – Clare Dreyer (IMPACT AREA)

An application for a Conditional Use Permit Application for a CUP to entitle a commercial business (Salon & Retail) in a residential zone. The property is zoned R4, is located along the Warren Wagon Rd Scenic Route, and is more particularly described as:

Tax No. 28 in Gov't Lot 2, situate in Section 5, T18N, R3E, B.M., Valley County, Idaho.

PUBLIC HEARING

Clare Dreyer of 334 Rio Vista Blvd presented her application to entitle a non-conforming Commercial Business in a Residential Zone at 1755 Warren Wagon Rd. She mentioned the business has been open for more than 8 years and that her 23 neighbors have expressed support for the project during neighborhood meetings. She already pays for a Commercial Sewer hookup and Commercial Property taxes and operates a salon inside the building. Ms. Dreyer mentioned many tourists pass through her

salon to ask for directions, and that most traffic on Warren Wagon is generated by recreationists headed to snowmobile, hike, or boat out of North Beach.

Mr. Parker presented the Staff Report and mentioned that bringing commercial businesses along scenic routes in the Impact Area was the goal of this application, and to ensure the business owner has the necessary permitting to continue operation. The application appears to meet the Conditional Use Permit Criteria of Approval, and with a CUP, the property would be allowed to install equivalent signage to that which would be allowed on a property of the same size in a commercial zone through a future sign design review.

Ms. Stroud mentioned a stormwater application had not been received but only a minor summary of Stormwater Planning would be necessary to understand where the stormwater currently drains and moved across the property..

Chairman Lyons opened the public hearing

Katie Ball of 941 Driftwood Lane spoke in support of the application and mentioned the Comprehensive Plan goal of promoting entrepreneurship/local businesses and year-round employment.

Commissioner Rock moved to recommend approval of CUP-23-01 to the Valley County Board of Commissioners modifying condition 1 to remove the building permit necessity. Commissioner Nemec seconded. All commissioners voted aye and the motion carried.

FP-23-01 & PUDF-23-01 (ACTION ITEM)

River Ranch Phase 2 – Devon Spickard for the River Ranch Company

An application for a final plat and final development plan for a 27 lot subdivision on a 126.67 acre parcel. 26 of the parcels are residential, and one (1) parcel is a non-buildable common lot. The property is zoned RE –Residential Estate; and is more particularly described as:

Located in the S ½ of Section 20 and the N ½ of Section 29, T18N, R3E, B.M., City of McCall, Valley County, Idaho.

Not A Public Hearing

Devon Spickard of 934 Chipmunk Lane presented the application on behalf of River Ranch Company for the Final Plat and General Plan of Phase 2 of River Ranch. Many conditions of approval included in the staff report have been completed leading up to the meeting.

Mr. Parker confirmed the applicants were already working on the conditions of approval and that all documents had been reviewed for their conformance to code and the original project entitlements.

Commissioner Paugh moved to recommend approval of FP-23-01 and PUDF-23-01 to the McCall City Council, Commissioner Kinzer seconded. All commissioners voted aye and the motion carried.

6. OTHER

- ~~Haze Noble – Senior Project: Analysis of the McCall Design Guidelines (INFO ONLY)~~
- Signs approved administratively
- ~~McCall Airport Sign Plan-**INCOMPLETE**~~

- Review Letters of Interest for Planning & Zoning Commission Seat and Recommend Appointment to McCall City Council (City) (ACTION ITEM)

Dave Petty of 912B Fairway Dr spoke to the commission about his desire to be on the Planning & Zoning commission, mentioning his background as an accountant, other volunteer experience with the City, perspective with an analytical mind, and passion for preserving the McCall Small Town Character.

Toni Curtis of 1661 Ginney Way summarized her background in McCall and having done work ranging from development to Fire and EMS while serving in many volunteer positions over the past 20 years and hopes for an opportunity to volunteer for Planning & Zoning to advocate for local housing wherever possible.

Mike Spilotros of 1405 Dragonfly Loop mentioned he would be interested in serving from his small builder perspective of constructing one house each year, but that he would recommend pursuing the other applicants if a choice is hard because his first love during summer months in Rafting Trips and he pulled some good dates for permits this summer.

- **Upcoming Meeting Agenda – May 2, 2023 - Tentative**
 - DR-23-05 & SR-23-03 – 120 E Lake St – Single Family Dwelling
 - DR-23-06, SR-23-05 & SH-23-05 – 149 E Lake St – Food Truck Court
 - DR-23-07 & SH-23-02 -1870 Warren Wagon Rd – Single Family Dwelling
 - DR-23-08 & SH-23-04 – 1844 Warren Wagon Rd – Single Family Dwelling
 - DR-23-09 & SR-23-06 – 997 Squirrel Lane – Single Family Dwelling
 - DR-2310 & SR-23-07 – 2212 Warren Wagon Rd – Single Family Dwelling
 - CUP-23-02 – 507 1st St – STR Occupancy > 10 Persons
 - SUB-23-01 – TBD Stockton Dr – Torres 2 Lot Subdivision
 - FP-23-02 & PUDF-23-02 – TBD Chad Dr – Coy Estates Final Plat & Plan

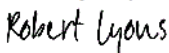
7. ADJOURNMENT

Commissioner Nemec moved to adjourn the meeting. Commissioner Rock seconded. All commissioners voted aye and the meeting adjourned.

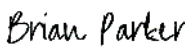
American with Disabilities Act Notice: The Planning and Zoning Commission meeting room is accessible to persons with disabilities. If you need assistance, contact City Hall at 634-7142. Please allow 48 hours.

Signed:

Attest:

DocuSigned by:

 11F89FE13E9A402...

Robert Lyons, Chairman
 McCall Area Planning and Zoning Commission

DocuSigned by:

 744987029FAE4A1...

Brian Parker
 City Planner

May 9, 2023 | 3:07 PM MDT

May 9, 2023 | 1:33 PM PDT

**PUBLIC HEARING
SIGN IN SHEET
McCall Area Planning & Zoning Commission
April 4, 2023**

NAME	Primary ADDRESS	Item Commenting On	In favor, Opposed, or Neutral
Eric Pingrey	MDSO	DR-23-04	applicant
Jason Clay	MDSO	DR-23-04	applicant
Martin Potucek	2121 E. Overbluff Spokane WA 99203	CUP - pre-applicant	
Clare Dwyer	PO Box 2081 Nesqueam ID 83638	CUP-23-01	applicant
Leo Stoddard	920 Wildhorse Drive McCall ID	DR-23-03	applicant
Kerstin Dettrich	4626 Shore Dr Eagle Land Group Inc	DR-23-04	Representative
Dave Petty	Letter of Interest	---	---
Devon Spickard		River Ranch PUD Representative	
John King (architect)	116 S. 6th St	DR-23-04	Representative
"BD (Guest)" online			
Mike Spilotros	Letter of Interest	---	---
Toni Curtis	Letter of Interest	---	---
"Mike (guest)" - (I don't think he is commenting, just listening)		---	---
208-634-6879			
Chad Gierhart	Pivot North Architecture	?	
Deona Florenca	Pivot North Architecture	?	
PAT allen	650 Stockton		

Pivot?
?

From: [Brian Parker](#)
To: [Meredith Todd](#)
Subject: FW: McCall Donnelly School District-Staff Housing Project
Date: Tuesday, April 4, 2023 3:02:03 PM
Attachments: [image001.png](#)

Brian Parker, AICP | City Planner
216 E. Park Street | McCall | Idaho 83638
Direct: 208.634.4256 | Fax: 208.634.3038



Web: mccall.id.us

From: kyle <kyle@campinewood.org>
Sent: Tuesday, April 4, 2023 3:01 PM
To: Brian Parker <bparker@mccall.id.us>; Morgan Stroud <mstroud@mccall.id.us>
Cc: randy@campinewood.org
Subject: McCall Donnelly School District-Staff Housing Project

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Brian and Morgan,

I am reaching out to you in regards to the McCall Donnelly School District-Staff Housing Project. First of all let me state (I believe I can speak for all at Camp Pinewood) we are in favor of this project. We support our School district and understand the staff housing needs. We believe this is needed to help our schools keep quality teachers on staff for the students of our community.

However, It was brought to my attention today that this project is going to substantially increase the drainage that will flow across our property to the river. This has the potential for significant environmental damage and usage issues for our property.

1. The drainage area is not piped across our property so this will most likely result in a swamp behind our dining hall for an extended duration throughout the summer
2. The erosion of the area due to increased water flow has the potential to impact our ability to complete our bunk house project that has been approved.
3. The potential to wash out the access road to our RV loop (also the secondary emergency services access road) is real
4. There has not been a cost analysis completed on a solution to the potential issues.

We have not had an opportunity to properly access the potential of these issues due to the short notification. We want to pursue a solution with the School district that would prove to be satisfactory for both parties in a timely matter. We are concerned that this project could prove

to have a significant financial burden placed on Camp Pinewood. We are asking for 30 days to review the project and potential impact.

Please consider these issues when reviewing this proposal.

Sincerely,

Kyle Maschek

Assistant Executive Director

Camp Pinewood

Sent from [Mail](#) for Windows

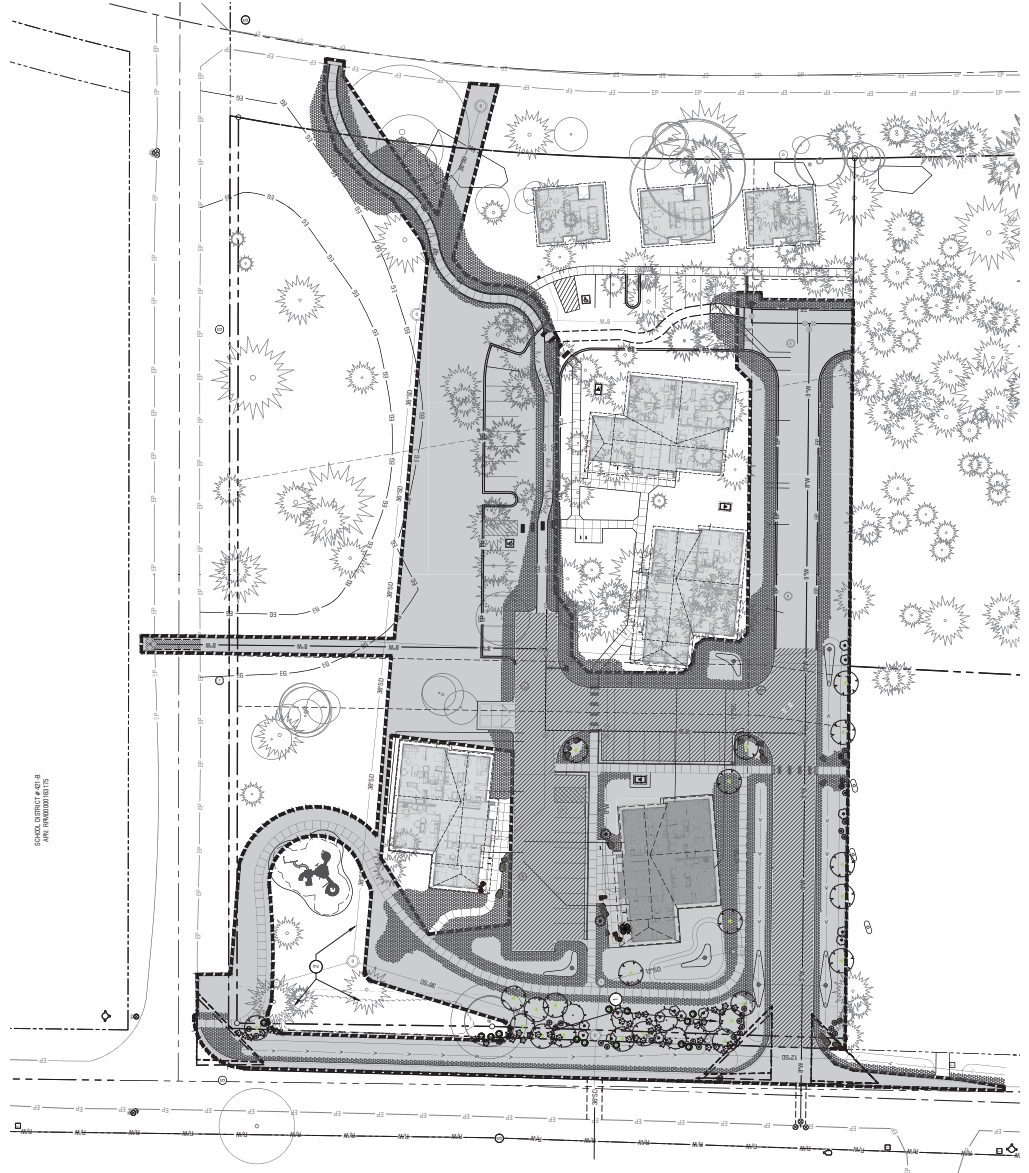
RECEIVED
By [Signature] at 10:12 am, Apr 03, 2023

1 2 3 4 5 6

- Keynotes:**
- 1. PHASE 1 CONSTRUCTION
 - 2. PHASE 2 CONSTRUCTION
 - 3. PHASE 3 CONSTRUCTION

Material Legend:

- PHASE 1 CONSTRUCTION
- PHASE 2 CONSTRUCTION
- PHASE 3 CONSTRUCTION
- EXISTING PAVING PATTS



Scale: 1" = 20'

Project Phasing Plan - For Reference Only



PIVOT NORTH ARCHITECTURE, PLLC
116 SOUTH 10TH STREET
BOISE, IDAHO 83725
WWW.PIVOTNORTHARCHITECTURE.COM



Project: MDSO STAFF HOUSING
MISSION STREET MC CALL, IDAHO 83635

REVISIONS

Project No:	22008
Date:	03/20/23
Checked By:	CMW
Drawn By:	AMW
Sheet Name:	Project Phasing Plan

Street No: C0.10

SCHEMATIC DESIGN (NOT FOR CONSTRUCTION)

**City of McCall – Airport Advisory Committee (AAC)
Legion Hall below City Hall
SPECIAL Meeting Minutes**

April 5, 2023

AAC Members present: Mike Weiss, Mark Thorien, Charles Jones, Scott Sterett USFS, Rick Fereday

Staff present: Emily Hart

Consultants present: none

Others present: Andrea Eldridge (AAC Applicant), Mike Anderson

Remote participants: Kevin Bissell (TO Engineering), Meghann w/ Jacobs, Christopher w/ Jacobs

Meeting called to order 12:00

Public Comment:

None, introduced Jacobs Engineers online

Approval of amended minutes from March 2, 2023 Regular Meeting (Action Item)

Rick Fereday moved to approve, Scott Sterett seconded, all aye

AAC membership – term expirations (Action Item)

Rick Fereday's and Mike Weiss' seats are both open. They both submitted letters of interest in re-appointment. Andrea Eldridge also submitted a letter of interest. Discussion ensued regarding having two seats open at once is odd. Should we have a closed ballot? Can we expand the board? Mike Weiss suggested opening the discussion to Chairman Jones and asked, have we ever had to break a tie? Chairman Jones stated he will stick to Roberts Rules. Who are the voting members? Scott Sterett with USFS is a voting member. All here, says Chairman Jones, this is an unusual situation with three interested parties. We need to make a confidence vote to City Council. Mike Weiss motioned to ask City to let us expand by two persons/a maximum of seven and recommend three applicants that are presently here. Rick Fereday seconded. All in favor. Aye. A movement and a second to re-appoint Mr. Fereday and Mr. Weiss was also made, and all voted in favor.

USFS/City of McCall Land Acquisition (Information Item)

FS wants 3-5 acres of land for additional helipad, wants City to buy and then lease back. Three acres at the current rate of .3127/sf would (one acre = 43,560 sf) would lease for \$40,864/year
3.06 - 3.71 acre for for sale in 360 Ranch for 249K

USFS says the only way acquire land is through Regional. DeBoer 44 acres. Amount of Type 1 in GA during summer, possibly acquire 3-5 acres, 44 acres = housing etc. Region said 50K max won't touch 44 acres. Current land lease with City 1.3ish acres, could expand helibase south, deal with ditch. If City is interested in asking DeBoer to sell 3-5 acres. USFS would do

improvements, with 20-year agreement, amend lease. Chairman Jones stated it does free up space, easier to have all heli ops on Forest Service side.

Rick Feredat asked does Mr. DeBoer wasn't to sell? Potentially on the table, yes. Terminal west side? Issue with moving terminal to west is Taxiway A, no crossing active per FAA. Bravo would have to be expanded for FS apron. Mike Weiss asked if there would be room for grass strip? Cross winds? Mr. Bissell stated there is possibly room, but FAA wouldn't fund. We have wind coverage with current runway. Scott Sterett stated – if acquire full 44, three pads, grass to south, could run helibase, sunflower flats, have our own space to run 5-7 helicopters at one time. City buy 44 acres, lease 3-5 to USFS. Spent time looking at the map. Kevin, can we extend taxiway B? We could. ALP does show Twy B covered. Emily needs to refine this proposal. Local level support yes, but needs more regional support. Need 3 average 3 type 1s.

Hangar 707 New Lease vs. Lease Extension (Information Item)

The lease audit revealed that many leases are in extension periods. In an effort to standardize leases to modern lease language, Airport Manager recommended new lease at .3127/sf.

Taxiway E/AIP 034 Reconstruction Update (Information Item)

Kevin Bissell – opened bids, got two, Granite \$617,582, Knife River \$1,129,298. The IFE was 663K. Good bid from granite, bid analysis complete and recommendation to award, Get FAA Conclusion, enter into agreement with Granite, start construction first full week after July 4. Emily confident we can work well with 200 hangar owners, Granite will do well, stated Mr. Bissell.

Valley County Developments Further Discussion (Information Item)

City attorney advised that letters can be construed as 'demands' and recommends that Ms. Hart continue having conversations with Cynda Herrick, going to meetings, etc.

Cynda Herrick states that "when the County adopts code changes in the future, we will update the checklist." Ms. Hart intends to stay engaged with the County and contribute to code changes as required. Goal is to remind the Commissioners that we can indeed balance private property rights with public investment in airports and the importance of quiet in our communities (Comp Plan 2001)

Chairman Jones stated – we had a motion from Mr. Fereday last month for Emily to take letter to Council to Commissioners, Emily struggled, CJ outside of charter, attorney agrees not your place. This thing needs to go away per EH job description, AAC charter. Why not if safety issue? Future intangible zoning issue. We shouldn't be making demands CJ. RF thought we were asking the City to do this since we are at risk liability wise. Appropriate to ask the county to start a conversation about developing critical. Emily MW we should send letter, come down to the airport, introduce us, be friendly, explain, risks, etc. base to final over house. Not confrontationally. Not joking? MW – if someone purchasing land, send letter, what we do,

USFS, jet, backcountry, MW happy. RF move to appoint MW as letter sender, SS mentioned notifications to homeowners in fire season, two complaints, scared horses.

Airport Open House – June 24, 2023 Update Information Item)

Mark Peterson wants to bring Warbird, P51, Husky, or... His friend Gary Peters has museum and can bring multiple aircraft (Beaver on floats won Oshkosh last year). We need to schedule first planning meeting soon, have been in contact with Tad.

Scott Sterett mentioned installing more security lights on ramp this summer in front of tanker base, night sky compliant, comply with FAA? Yes.

Items for Future AAC agenda:


Membership/Charter, AIP 034, USFS/City land, Open House

MT move MW second, all aye to adjourn

Next regular meeting scheduled for May 4, 2023, at Noon.

Motion to Adjourn

Date Signed:



Mike Weiss, Acting Chairperson

Attest:



Emily Hart, Airport Manager

CONNECT TO OUR HERITAGE



MCCALL HISTORIC PRESERVATION COMMISSION

**Meeting Minutes – Monday, April 10, 2023, 4:30 p.m.
216 E. Park Street, McCall
Legion Hall / Conference call**

1. Call to order/determine quorum: John Farmer, Don Bailey, Samantha Westendorf, Morgan Zedalis and Terri Smith were present. Also present was Delta James, City of McCall Economic Development Planner, Maria Rachal, SHPO Certified Local Government Coordinator, Jason Tippeconnic Fox, SHPO Architectural Historian SHPO, Dan Everhart, SHPO Outreach Historian, Phyllis Bulgin and Jim Vance, Long Valley Preservation Society, Brian Parker, City Planner and Michelle Groenevelt, City of McCall Community and Economic Development Director
2. Approve minutes of March 6, 2023 [ACTION ITEM] Don *moved to approve the minutes; Terri seconded, all members voted "aye" and the motion passed.*
3. Presentation by Idaho State Historic Preservation Office
 - 3.1. Overview of Idaho State Historic Preservation Office: archiving, advocacy, regulatory review responsibilities, maintain a database of approx. 100,000 historic properties, review of National Registry applications.
 - 3.2. Certified Local Government Program: \$100,000 per year in grant funding available statewide. McCall will be receiving \$4500 in CLG funding for windshield surveying. The state office will be purchasing NAPC membership for its CLG communities.
 - 3.3. Payette Lakes Inn: SHPO was also in town to review the site for the federal historic tax credit program (20% for historically appropriate renovation). Plans look good and will preserve the historic character of the building. A good example of how the partnership between City and SHPO can result in successful preservation projects.
 - 3.4. Local Landmarking: National Register listings can occur individually or as a district, a group of buildings linked by a common history, architectural style, and/or another link. This is primarily an honorific status; it does not allow for zoning control, restriction, prohibition, etc., but may include an extra regulatory step if federal funding is involved. In Idaho, local Cities/Counties can only do a specific menu of items that local government may use – designation of individual local landmarks and local historic districts, each of these is applied differently. Individual buildings local landmark authority only allows for a dialogue for a plan for that property, require a public hearing, and withholding of permit for up to 120 days. For local historic districts, Idaho state law says it must meet national registry designation eligibility requirements. If determined, now a City or County may review or approve exterior alterations and may allow or disallow any of those changes. Distinguishing between contributing and non-contributing properties is allowable within a historic district. No minimum benchmark for number of contributing properties within a district exists nor is there a size

requirement for the district size. Landscape features such as trees and other resources can be an eligibility aspect if surveyed. Districts must have "more cheese than holes." Cities can designate an overlay zone that establishes zoning criteria and/or development restrictions (i.e. prohibiting demolition for surface parking). Generally speaking, a moved property is not eligible for National Registry. Prioritizing of surveying could be themed, or by age or other criteria. Don't redocument properties already listed or surveyed or documented in last 5-8 years. Boise, Twin Falls, Pocatello, Caldwell, Wallace, Silver City, Ketchum are examples.

3.5. Property tax incentive: No use known of state property tax incentive for historic preservation to date.

3.6. Historic Preservation Easements: City could encourage property owners to donate historic preservation easements which can provide federal tax benefits.

4. Next meeting dates

4.1. Next regular meeting. May 8, 2023 at 4:30 pm

5. Adjourn: *Don moved; Terri seconded a motion to adjourn. Meeting adjourned at 6:18 pm*



John Farmer, Chair

Submitted by: Delta James



**Public Art Advisory Committee
Minutes**

Monday, April 24, 2023; 5:30 p.m.
Legion Hall - 216 E. Park Street, McCall ID

COMMITTEE MEETING – Began at 5:30 p.m.

• **CALL TO ORDER AND ROLL CALL**

Committee members Karla Eitel, Dawn Matus, Susan Farber, Dallas Young and Ken Deibert were present. Also in attendance were Delta James, Economic Development Planner, and future committee member Matt Stebbins.

• **MINUTES APPROVAL [ACTION ITEM]**

Ken moved; Dawn seconded a motion to approve the March 27, 2023, meeting minutes. All members voted "aye" and the motion passed.

• **PUBLIC ART PROJECTS**

- Library Integrated Public Art
 - Presentation by Joe Thurston, project artist: Joe shared examples of past work, provided an update on discussions with the Library design team and Morgan Zedalis who is working on integrating Indigenous Peoples cultural aspects into the project. Joe provided one initial concept idea that would utilize the stairway area in the new library expansion.
- Downtown Mural – update: Karla will help draft an application for student artists. Committee members discussed curriculum content to include topics on public art process, outreach and research, mural execution, and end-of-project evaluation.
- Railroad Avenue mural panels: No report.

• **COLLECTIONS MAINTENANCE**

- Annual spring collections assessment: Assignments will be allocated at next meeting for each member to do assessments on own schedule.
- Lardo Bridge "Seasons" – update: Staff reported that the "Seasons" artwork is being galvanized to reduce future paint failure and will likely not be reinstalled on the bridge until June or July.

• **NEXT MEETINGS**

- Annual report to City Council – May 11, 2023 at 5:30 pm
- Regular meeting - Monday, May 22, 2023, at 5:30 pm.

• **ADJOURNMENT** at 6:55 pm

Date: _____, 2023

A handwritten signature in black ink, appearing to read 'K. Eitel', is written over the date line.

**MCCALL CITY COUNCIL
AGENDA BILL**

216 East Park Street
McCall, Idaho 83638

**Number
Meeting Date**

**AB 23-122
June 8, 2023**

AGENDA ITEM INFORMATION				
SUBJECT:		<i>Department Approvals</i>	<i>Initials</i>	<i>Originator or Supporter</i>
<i>City Licenses Report to Council Per McCall City Code</i>		Mayor / Council		
		City Manager		
		Clerk	<i>JG</i>	Originator
		Treasurer		
		Community Development		
		Police Department		
		Public Works		
		Golf Course		
		COST IMPACT:	n/a	Parks and Recreation
FUNDING SOURCE:	n/a	Airport		
		Library		
TIMELINE:	n/a	Information Systems		
		Grant Coordinator		
SUMMARY STATEMENT:				
<p>Per McCall City Code Title 4 Chapter 9, the City Council has determined the City Clerk shall be delegated the authority to process and grant or deny all alcoholic beverage license applications, other than certain circumstances involving catering permits, which the City Clerk shall review the application for catering permit for completeness and forward said application to the Police Chief. The Police Chief upon receipt of the application shall make a recommendation to the City Clerk to approve or deny the application. Whenever the City Clerk shall determine that an application for alcoholic beverage license transfer or renewal is complete, the City Clerk shall approve or deny such application. All decisions of the City Clerk shall be reported to the City Council at the next regularly scheduled City Council meeting after such a decision. The City Clerk is also responsible for all processing of business, taxi, snow removal, pawnbroker, child daycare licenses, vendor and short-term rental permits, and public event applications.</p> <p>Please see the attached Clerk Report for the last three weeks. The report has been updated to reflect recent code updates to permits; including Short-Term Rental permits and Commercial Snow Removal permits.</p>				
RECOMMENDED ACTION:				
Council to review the License report.				
RECORD OF COUNCIL ACTION				
MEETING DATE	ACTION			

City Clerk's License Report

Council Meeting: June 8, 2023

Business License Activity

Business Name	Type of Business	Address	New	Close	BL#	Issued
Squatch Candy Company	Retail Candy Store	1012 N 3rd St Ste B	X		3174	5/26/2023
Lehrer Family Development Group Inc	General Contractor	410 Virginia St Unit B New Meadows, ID	X		3172	5/26/2023
J-U-B Engineers Inc	Civil Engineering, Surveying and Planning	502 N 3rd St Unit 9a	X		3171	5/26/2023
Blue Mtn. Native Handyman	Handy Man Services	225 Valley Springs Rd Unit E 102	X		3175	5/26/2023
Micael McKenzie Inc Creative	Marketing Agency	319 Thula St	X		3177	5/26/2023
Café 6 Three 4	Café	500 N 3rd St		X	1727	
Café 634	Café	500 N 3rd St	X		3179	5/31/2023

Short-Term Rental Permit Activity

Owner(s)	Rental Address	Local Contact	New	Renewal	Closed	# Bedrooms	Max Occupancy	Parking	Permit #	Issued
Elliot Holder	1119 Mo's Way	Hayden Owen		x		4	10	4	2720	5/25/2023
Patrick Murphy	304 McBride #308	Katie Woodrick		x		2	6	2	2577	5/25/2023
Ken Swink	323 RioVista	Ken Swink		x		4	10	4	1494	5/25/2023
David Brown	214 Lake St	David Brown		x		3	8	3	1458	5/25/2023
Conrad Johnston	1630 Davis #40	Vacasa	x			2	6	2	2919	5/25/2023
Robert Lusk	1039 Bitterroot dr	Vacasa	x			3	8	2	2975	5/25/2023
Julie Eisel	1102 Davis Ave	Vacasa	x			4	10	4	2982	5/25/2023
Mark Summers	1089 Graham Dr	Vacasa	x			4	10	4	2988	5/25/2023

City Clerk's License Report

Keith Dunn	1115 Majestic View	Vacasa	x			3	8	3	2998	5/25/2023
Valerie Tidwell	1607 Davis #32	Vacasa	x			3	8	2	3048	5/25/2023
Richard Smedsrud	616 N 3rd St. #10	Tom Saltarella	x			2	6	1	3161	5/25/2023
Carl Foster	142 Mountain Meadow dr	Steven Lee	x			4	10	4	3170	5/25/2023

Alcohol License Activity

Business Name	Physical Address	New	Renewal	Closed	BL#	Issued
No Activity						

Catering Permit Activity

Name of Licensee	Event	Location of Event	Day & Date of Event	Time of Event	Revenue
The Art Gallery McCall	Reception at Gallery Fifty Five	311 E Lake St	6/3/2023	4 pm to 8 pm	\$20
Bistro 45	2023 Super Sale - Wild Onion	805 N 3rd	5/25/2023	5 pm to 8 pm	\$20

Outdoor Public Events/Vendor Permit Activity

Applicant	Event	Location of Event	Date(s) of Event	Time of Event	Road Closure
McCall Rotary Club	Brewfest	1117 E Lake Street	Saturday, August 19, 2023	8 am to 10 pm	yes
Richard J. Sabala Foundation	Firework Display	125 E Lake St	Saturday, June 24, 2023	10:00 p.m.	no
McCall Youth Hockey	Firework Stand	411 Deinhard Ln	6/30/23 - 7/4/23	8am to 11:59pm	no
American Legion	Firework Stand	132 E Lake St	6/30/23 - 7/4/23	8am to 11:59pm	no
McCall Figure Skating Club	Firework Stand	616 N 3rd St	6/30/23 - 7/4/23	8am to 11:59pm	no
The Tower Grill	Wedding	401 N 3rd St	5/3/2023	3:30 p.m. - 10:30 p.m.	no

City Clerk's License Report

McCall Community Congregational Church	Plant Sale	901 N 1st St	6/3/2023	7:00 a.m. - 3:00 p.m.	no
Valley County Pickleball Club	Sale of T-shirts and packaged snacks	401 N Mission St	6/23/23- 6/25/23	8:00am- 5:00pm	no

Snow Removal Operator Permit Activity

Business Name	Owner	Type of Snow Removal	BL#	Decal Permit Numbers Issued	Denied	Date
No Activity						

Peddler Permit Activity

Applicant	Company Represented	Product Sold	Date(s) Permitted	Permit #	Fees Collected
No Activity					

Taxi & Commercial Transportation Driver License Activity

Business Name	Driver Name	Address	BL#	City Taxi License #	Denied	Date Approved	License Expires
No Activity							



McCall Area Chamber of Commerce & Visitors Bureau
Board Meeting Agenda
Thursday, May 11 , 2023 at 8am at Rupert's in Hotel McCall:

Join Zoom Meeting: <https://us02web.zoom.us/j/88945075112?pwd=WUE0QXY5RGFVb0Zsb1pvLzBqaXVIQT09>
Passcode: 83638

- **Attendance-** Dustin Ames, Colby Rampton, Angie Perkins, April Whitney, Amy Hickerson, Samantha Sais, Hayley Johnson, Shannon Berry, Tammy McCloud, Scott Bourne, Scotty Davenport
 - i. Staff: Julie Whitescarver, Rachel Morton, McKenzie Kraemer
- **Board Check In** – How is everyone doing? Everyone is very happy about the lack of snow and abundance of sunshine!
- **Approval of April Minutes** – Entertain motion: *April Moves to Approve, Hayley Seconds, Board Approves*
- **West Central Mountains Leadership Academy Report** – Julie and Rachel
 - i. May Recreation Day – The cohort met with gracious hosts from Tamarack, Little Ski Hill, Kelly's Whitewater Park, Jug Mountain Ranch, and McCall Golf Course.
 - ii. June TBD
- **WCMEDC Report** – Lindsey Harris – *Notes Presented:*
 - a. Regional Housing Needs Assessment: WCMEDC attended a Blaine County Tour in Teton Valley which has motivated an initiative to complete a housing assessment in our region. An RFP has been drafted and fundraising will begin to complete the assessment..
 - b. A Cyber Security Workshop in partnership with BSU will be held June 14th, from 11a-1p at the Payette National Forest Service.
 - c. McCall Donnelly School District is in the process of opening doors for their new child education facilities in anticipation for the next school year.
 - d. West Central Mountains Creative District will presenting their final strategic plan that will be available for public feedback in June. WCMCD will be hosting a launch party on July 25th. at 5pm at Bistro 45, sponsored by the Idaho Commission for the Arts.
 - e. State Department of Commerce Grant Applications are due at the end of the month.
- **Community Reports**
 - a. City of McCall – Anette Spickard
 - i. Council held a community conversation concerning town deer last week. Approx 60 people came to discuss questions from council. Council will continue discussions about an ordinance to mitigate wildlife feeding.
 - ii. The City plans to submit a grant application to Department of Transportation in support of EV chargers
 - iii. The Art Commission selected the side of McPaws Thrift Store as the site for the “Call to the Wall” public art mural campaign.
 - iv. The Farmers Market is coming back downtown. The market will held on 2nd street (previously held at the Activity Barn).
 - b. New Meadows- Kyla Gardner
 - i. New Meadows will be celebrating H.O.P.E week this week with schools and community members.
 - ii. A “Hello Spring Event” will be held on May 16th .A Local artist donated sculpture that will go in front of community center. In addition a bench created by a student for their senior project will also be placed at the location.
 - iii. On June 5th. New Meadows will hold a ribbon cutting ceremony for new transit program. The transit program will run on Mondays and Wednesdays. TVT will make 5 trips a day to New Meadows from McCall, with hopes for 5 days a week in the future.
 - c. Donnelly- Belinda Provancher – Not Present
 - d. Cascade- Belinda Provancher – Not Present, Scotty Reports
 - i. New owners of Tackle Toms
 - ii. The community is advocating for the Fire Department Vote to pass.
- **Governance Team:** Dustin Ames, Colby Rampton, Jenny Ruellemele, Angie Perkins
 - i. Request for Approval of Executive Board Member Nominations (seat effective July 1st) *April moves to elect entire slate, Amy Seconds, No Opposed, Board Approves.*
 - 1) President – Colby Rampton
 - 2) Vice President – Samantha Sais



- 3) Treasurer – Angie Perkins
- 4) Dustin Ames – Past President
- ii. June General Board Elections Voting Sent via email to Membership
 1. Sydney Carnes, Amerititle
 2. Jenny Cruz from Toby's Place is also interested.
- iii. Business After Hours ROOTS Follow-Up
 - 1) BAH was another success, despite the weather. ROOTS benefitted from community engagement and learn about the programs they offer.
- iv. Spring Membership Celebration 5/18
 - 1) Seeking Sponsorships
 - 2) Will make call about Venue today. The weather will decide if Ponderosa Center is still a good option.
- v. Request for Letter of Approval for Electric Vehicle Charging Stations: *Hayley Motions, Dustin Seconds, Board Approves*
- vi. Megan Davis transitions into 4 days/week beginning at the end of the month, and 5 days/week after Labor Day

- **Treasurer's Report:** *Finance/Grants:* Angie Perkins (Chair), Julie, McKenzie
 - i. Approval of April – *April Moves to approve April Financials, Tammy Seconds, Board Approves*
 - ii. Accounting Update
Colby – Still collecting quotes and plan of action.

- **Office Report:** - Julie
 - i. Visit McCall Summer/Fall Issues are HERE
 - ii. New Member Round-Up
 - 1) Eight new members joined in April
 - iii. CRM Demos Slated this May
 - 1) Megan has narrowed it down to two and demos will begin in late May/Early June
 - iv. University of Idaho MOSS Tour
 - 1) The UOI Field Campus has plans to for additions of a new cafeteria and new classroom. They look forward to having the public view the plans in September during Business After Hours

- **Team Reports:**

- a. *Membership Services:* Amy (Co-Chair), Shane (Co-Chair), Vonna, Shannon, Julie
 - i. Membership Benefit updates on the way, McKenzie has a sample drafted.

- b. *Marketing:* April (Chair), McKenzie, Sam, Vonna, Angie, Julie, Rachel
 - i. *McCall Life Magazine*

The cover of their magazine is a MACCVB photo, being used without permission or payment. MPH has drafted a cease and desist.

- ii. Website will launch on May 24th – Madden is currently working on updating the events calendar and business directory to make it more user friendly.

- c. *Events:* Hayley (Chair), McKenzie, Angie, Tammy, Rachel, Vonna, Shannon, Julie, Scott, Megan

- d. *Grant:* McKenzie, Angie, Julie, Rachel

- i. ITC Grant Presentations
McKenzie Presented Grant Last Week.

- ii. LOT Winter Carnival Mitigation Presentation

Two LOT Grants this year, one is for carnival logistics which have gone up due to needs for traffic control following McCall Police Department's withdrawal from parade.

- **UPCOMING DATES OF IMPORTANCE: Next Board Meeting– June 8, 2023 at Rupert's**



Memo

To: City Council
From: Anette Spickard, City Manager
Date: 06/01/2023
Re: Monthly Department Report – May 2023

1. Council Priorities:

Local Housing – implement housing action plan strategies and evaluate LOT for housing

- Applications to fund the start up of the Housing Authority and to continue funding for housing program in FY24 were submitted to the LOT Commission for their review and recommendation to Council. Council is scheduled to receive the recommendation June 30.

Growth Management Tools – impact fees, comprehensive plan review, development code standards, Area of Impact Memorandum of Understanding with County.

- Council held a work session on impact fees with the city attorney and CED director on April 28, 2023. Council directed staff to proceed with the project. The FY24 budget will include funding for the project.
- A planning workshop on code amendments in the Impact Area was held by the County with the CED Director presenting. The CED Director continues to work with the County Attorney to resolve questions.

Environmental Management as part of our operating culture- implement Climate resiliency actions per our Comprehensive Plan, natural resources preservation, appropriate management of wildlife in the city, watershed protection, water conservation, trees, and natural areas.

- Council hosted a Community Conversation meeting regarding Wildlife on May 4, 2023. Turnout was approximately 50 citizens. A recap of the meeting's conversations and the online survey results will be presented to Council on June 8 for further discussion and direction to staff.
- "Bring It Don't Burn It" is happening May 27th through June 8th with free drop off of woody debris at McCall Fire Department. The city contributes \$7k to pay for the roll off containers and disposal. City department head team met with USFS staff regarding the Granite Goose Fuels Reduction Project and the joint development of a Community Wildfire Protection Plan specific to McCall.

Preparation for Streets LOT renewal – begin public education on project successes and accountability for funds, develop a plan to look at conditions and needs of street system to inform next LOT ordinance including non-commercial areas of town. Current authorization ends in 2026.

Intergovernmental partnerships – continue work on issues impacting McCall with ITD, County, Sewer District, IDL, etc.

- I attended the sewer district board’s May meeting along with Councilors Nelson and Nielsen, the City Engineer, and the City Planner for the presentation of the sewer district’s “build out model” and draft plan for necessary improvements to reduce I&I, improve flows, and reduce potential manhole overflows. The total project cost estimate is \$16M. The district is moving forward with finalization of the plan at a future board meeting.

Creative community engagement efforts - make sure we are getting shared thoughts from the community, and they can participate with council. Use bi-weekly ads for upcoming council items.

- The plan for upcoming community engagement Focus Groups is:
 - Conserving Water in McCall – June 6th
Learn about why we need to conserve water in the city. Also, hear about the process the water goes through to become safe to use in your home. Then, tell us your thoughts about water, water usage, and water conservation in McCall.
 - Firewise in McCall – June 13th
Together we will explore and discuss ways to protect our community from the threat of fire.
- Staff Retention and support – Provide training and development opportunities, compensation & benefits, work/life balance, appreciation, and recognition.
 - Upcoming Team Building Tours for city staff include:
 - Airport: June 6th - 8th
 - Police Department: October 2nd, 3rd
 - See HR section below for more detail on our efforts to evaluate employee retention
- World Peace – do our part to promote peaceful conflict resolution, civility, understanding.
- Legislative advocacy through the Resort Cities Coalition. – no meetings were held in May. The next meeting will be during the AIC Conference the week of June 21. Mayor Giles will be the facilitator.
- Community Health and Well-Being - Promote opportunities to be healthy and active.

2. City Manager Update:

I will be on medical leave from June 2nd to approximately August 28th for back surgery and recovery. The Council has received a contact list for assistance during this time.

3. Communications Manager Update:

In May, Communications prepared and hosted the Wildlife Educational / Outreach Plan and Community Conversation event. A report back to Council on the event will occur June 8. Website updates and public outreach of “Know Before You Go” for summer season road closures/detours were completed. Communications is promoting an internal staff tour of the Airport in early June. We held focus group meetings on Recycling in May. Planning work continues for the Lakeside Liberty Fest. At the end of May Communications provided public messaging regarding the spill in Payette Lake, clean up efforts, beach closures, and water conservation while the city uses the Davis Beach intake station instead of the Legacy Beach intake station.

4. Human Resources Update:

Human Resources onboarded approximately 35 new seasonal employees for the golf course which opened the season May 27. Human Resources completed the compensation survey and analysis in preparation for the FY24 budget process along with new proposed employee wellness benefits to begin in FY 24.

Memo



To: City Council
From: Emily Hart, Airport Manager
CC: Anette Spickard, City Manager
Date: 06/01/2023
Re: Monthly Department Report – May 2023

1. AIP 034 Taxiway E Reconstruction

City Council approved the Notice of Award and Construction Agreement with Granite Excavation on May 25, 2023. Construction will begin on July 10 and all phases will be complete by the end of August.

2. Airport Engineering RFQ

A Request for Qualifications for Airport Engineering was published in the Star-News on May 4 and May 11. Submissions are due on June 1. The Airport Manager, Public Works Director, and the City Manager's designee will review submissions in June to determine the engineering firm most appropriate for McCall Airport's basic engineering and planning consulting services.

3. ITD Aero Leading-Edge Grant funds

Airport Staff solicited a proposal for airport webcams from Eye N Sky, LLC. Two cameras will be installed on Hangar 100, providing visibility looking south across the ramp. A third camera will be installed on the ASOS facing south. (The single existing camera is mounted on the ASOS tower facing north toward Brundage and Granite Mountain, so this additional south-facing camera will provide greater overall runway views.) These cameras will be linked to the McCall Airport website and should be installed within the next few months.

4. SUN Visit

On May 11, Jerry Bisom, Sr., flew the McCall Airport Manager and Airport Superintendent to Hailey for a tour of SUN/Friedman Memorial Airport. It was extremely informative.

5. Infield Infrastructure

The new sewer manhole lid was installed by Granite and passed testing by PLRWSD on May 18. Sewer line extension challenges persist, but the Airport Manager continues to collaborate with private hangar owners and PLRWSD.

6. Turf Strip Preparation

The Airport Superintendent and Airport Manager worked with two volunteers to remove rocks and tall dead mullen from the grass strip on May 31. Markers have been ordered and seeds and fertilizer will be placed as soon as drier conditions prevail.

7. USFS/McCall Aviation/McCall Airport Summer Planning Meeting

On May 19, Airport Staff met with representatives from the Forest Service and McCall Aviation to discuss fire season aircraft parking and temporary FAA tower strategies.

8. Airport Open House – June 24, 2023

The Airport Open House Banner was installed over Highway 55 by Public Works on May 25, in advance of Memorial Day Weekend, and signs have been hung on the airport fences. Discussions with the 80th Smokejumper Reunion planning staff and ‘Miss Montana’, a retired Smokejumper DC-3 continue, and we are hopeful fundraising will allow a noon arrival at the Open House.

9. May 2023 Airport Agenda Bills

May 25th – AB 23-110 Request to Approve Notice of Award and Construction Agreement with Granite Excavation, Inc., to Reconstruct Taxiway E



Memo

To: City Council
 From: BessieJo Wagner, City Clerk
 CC: Anette Spickard, City Manager
 Date: 5/30/2023
 Re: Monthly Department Report – May 2023

1. Local Option Tax (LOT):

The FY23 LOT revenue reports are attached. Receipts for FY23 are now starting to trend under budget and flat to last year’s numbers. It continues to look like the Lodging LOT may have hit its peak. The Streets LOT is starting to flatten out as well. With our payment processing software, businesses may now file and pay their taxes online. This service saves time and resources for the City and the businesses. 27% of businesses filed their taxes online in March.

2. Licenses and Permits:

Licenses for May 2023

Clerk staff have been working on license compliance within the City by visiting the plazas and business centers around town. This compliance effort goes hand in hand with this year’s goal of improving communication between the City and local businesses.

Business License Applications

New Applications	6
Pending Applications	0
Denied	0
Bed & Breakfast	0

Short-Term Rental Permit

New	12
Occupancy of more than 10	0

Alcohol License

Renewed	0
New	0
Pending	0
Closed	0

Licenses and Permits for Fiscal Year 2023

Business License Applications

New Applications	39
Pending Applications	0
Denied	0
Bed & Breakfast	0

Short Term Rental Permits

New	212
Occupancy of More than 10	5

Alcohol License

Renewed	0
New	1
Pending	0
Closed	0

Permits

Alcohol Catering	34
Vendor	33
Farmers Market	1
Firework Display	3
Firework Stand	3
Public Event	2
Peddler Permit	0
Animal Drawn Vehicle	0

Commercial Snow Removal

Issued	38
Pending	0

Short-Term Rentals Tracking as of 5/31/2023:

Including Declarations of Compliance for the Area of Impact as well as new, renewed or closed STR permits.

City Limits (STR Permits)	368
Impact Area (Declarations of Compliance)	49
Reported Closed	55

The STR numbers look as though they have decreased from last month. The reason for this is as we have had STRs registered that were previously only registered through a Property Management company, we have found that some STRs were registered under more than one property management company, therefore, inflating the number we had registered.

As a reminder, anytime alcohol is served to the public in any way including self-serve or wine/beer sampling, it must be served by a State licensed entity, or it is considered a violation of the City open container law and a misdemeanor charge can

be issued. An alcohol catering permit is required any time a business wants to serve alcohol to their clients or for an event. Under Idaho Statue 23, only restaurants and bars are allowed to serve with some exceptions. McCall City Code *Title 5 Subchapter A 5.5.030f prohibits open container alcoholic beverages in motor vehicles, public streets or alleys, or other public property, and in or on private property open to the public, and in possession without permission of the owner, and not in or on premises for which a liquor license for the sale of that beverage by the drink has been issued, such as in a parking lot.*

3. Records Retention:

Staff are continuing their work to make public records more accessible through the Laserfiche software as well as processing physical records for permanent retention or destruction.

4. Public Record Requests:

Idaho Statue 71-103(2) states that a public agency or custodian shall either grant or deny a person’s request to examine or copy public records within three (3) working days of the date of the receipt of the request for examination or copying. If it is determined by employees of the public agency that a longer period is needed to locate or retrieve the public records, the public agency shall so notify in writing the person requesting to examine or copy the records and shall provide the public records to the person no later than ten (10) working days following the person’s request. Clerk Staff have processed 115 public records requests since January 1, 2023. Of those requests, six (7) required an extension letter to be sent due to the time involved in processing the request.

Public Record Request Calendar Totals									
2019		2020		2021		2022		2023	
Qtr 1	27	Qtr 1	40	Qtr 1	64	Qtr 1	60	Qtr 1	60
Qtr 2	28	Qtr 2	35	Qtr 2	82	Qtr 2	68	Qtr 2	55
Qtr3	45	Qtr3	23	Qtr3	87	Qtr3	87	Qtr3	
Qtr4	30	Qtr4	27	Qtr4	83	Qtr4	61	Qtr4	
Total	130	Total	125	Total	316	Total	276	Total	115

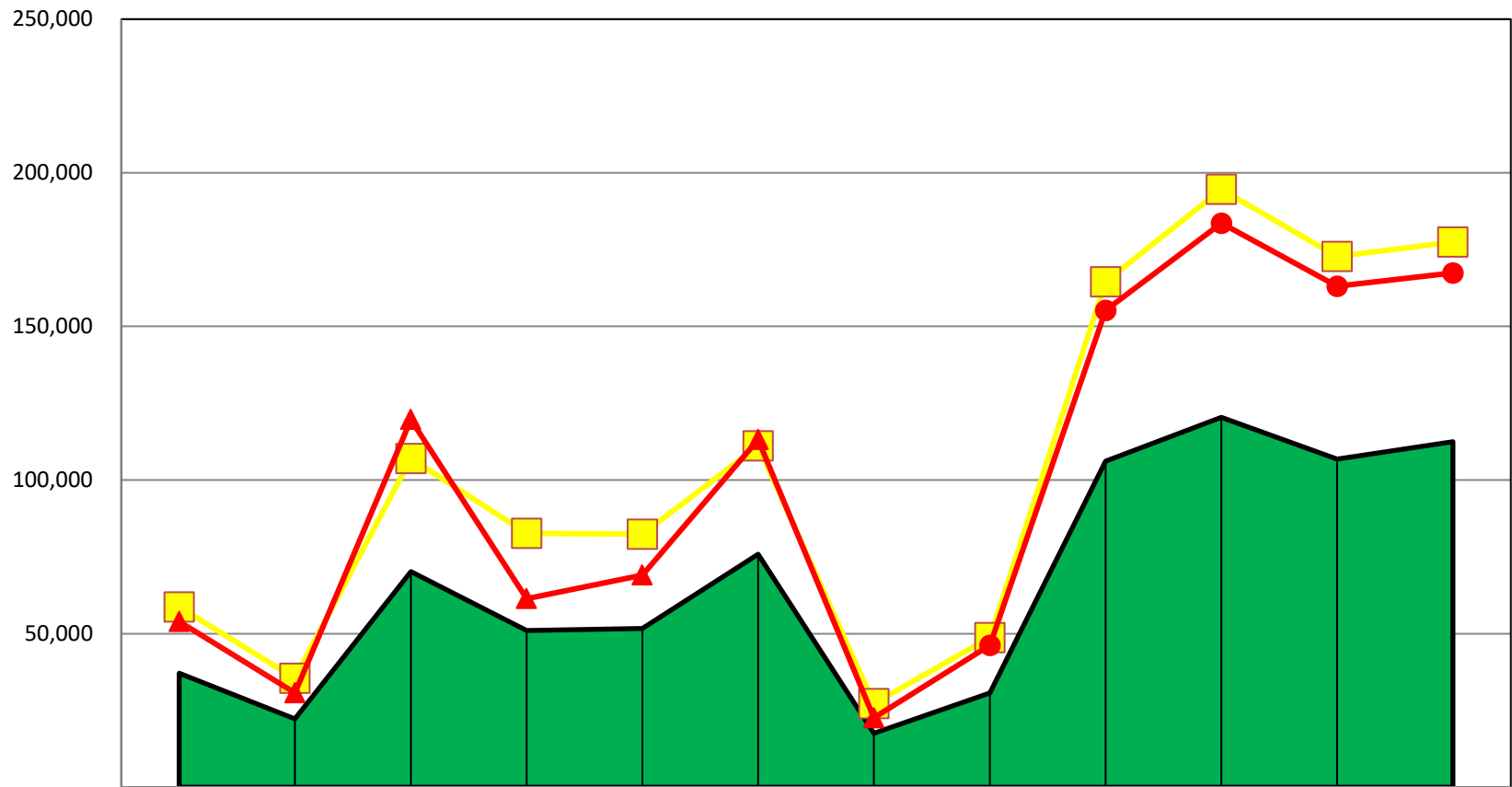
LODGING LOT ACTUAL PERCENTAGES AND FORECASTED DOLLARS

Month	FY18	FY19	FY20	FY21	FY22	Five year average	FY23 Budget dollars	FY23 Budget + Contingent dollars	FY23 actual and forecast based on trend	Percentage +/- based on budget	Actual total	Budget total	total +/- YTD	
October	4.84%	4.71%	4.41%	4.40%	5.14%	4.70%	58,664	75,585	53,920	-8.09%	53,920	58,664	-8.09%	
November	2.98%	2.77%	2.93%	2.66%	2.86%	2.84%	35,450	45,675	30,705	-13.38%	84,625	94,114	-10.08%	
December	5.89%	7.55%	9.37%	8.98%	11.07%	8.57%	107,004	137,868	119,687	11.85%	204,312	201,117	1.59%	
							1st Quarter Total	201,117	259,128	204,312	1.59%			
January	7.23%	7.14%	7.14%	5.93%	5.66%	6.62%	82,611	106,440	61,406	-25.67%	265,718	283,729	-6.35%	
February	6.86%	6.57%	6.98%	5.93%	6.66%	6.60%	82,355	106,110	69,067	-16.14%	334,785	366,084	-8.55%	
March	5.56%	9.16%	6.02%	11.73%	12.02%	8.90%	111,084	143,125	113,152	1.86%	447,937	477,168	-6.13%	
							2nd Quarter Total	276,050	355,675	243,625	-11.75%			
April	2.77%	2.46%	0.51%	2.65%	2.54%	2.19%	27,271	35,137	22,592	-17.16%	470,529	504,439	-6.72%	
May	4.49%	4.29%	2.72%	4.23%	3.79%	3.90%	48,707	62,756	45,957	-5.65%				
June	10.39%	13.37%	13.50%	14.43%	14.22%	13.18%	164,504	211,954	155,218	-5.65%				
							3rd Quarter Total	240,482	309,847	223,767	-6.95%			
July	18.19%	15.80%	15.37%	13.80%	14.80%	15.59%	194,585	250,712	183,601	-5.65%				
August	15.82%	13.77%	14.51%	12.14%	12.99%	13.85%	172,804	222,648	163,049	-5.65%				
September	14.97%	12.40%	16.55%	13.13%	14.02%	14.22%	177,422	228,598	167,406	-5.65%				
							4th Quarter Total	544,812	701,959	514,056	-5.65%			
Total	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	1,262,461	1,626,609	1,185,760	93.28%				
							1,262,461	1,626,609						

Year to date the actual revenues received for FY23 are 0.35% over the year to date revenues for FY22 and 44.51% over the 5 year average year to date.

30-May-23

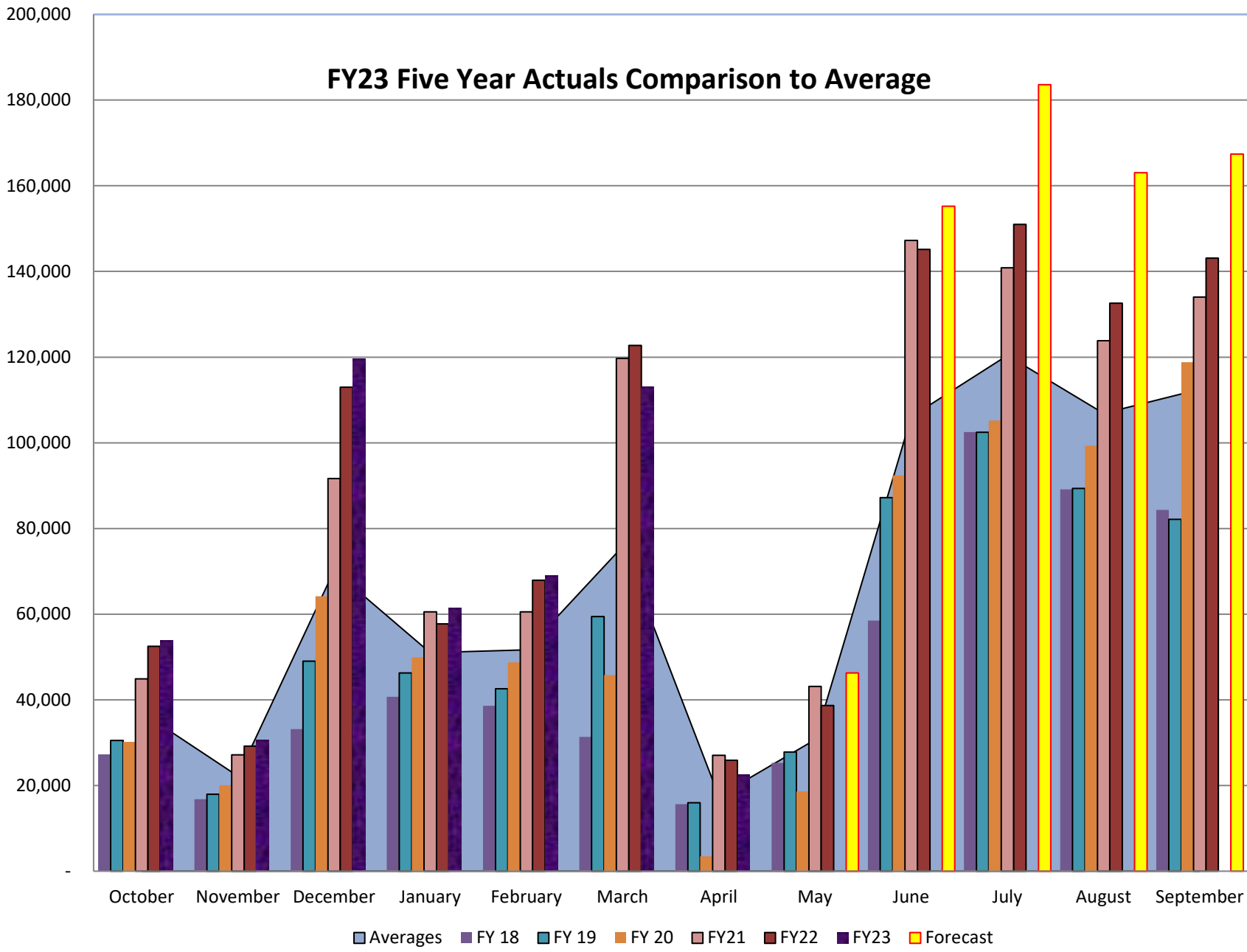
LOT FiveYear Average Compared to FY23 Actual



	October	November	December	January	February	March	April	May	June	July	August	September
■ Average	37,066	22,223	70,201	51,033	51,687	75,796	17,595	30,701	106,102	120,396	106,852	112,483
■ Budget	58,664	35,450	107,004	82,611	82,355	111,084	27,271	48,707	164,504	194,585	172,804	177,422
▲ FY23 Actual	53,920	30,705	119,687	61,406	69,067	113,152	22,592	-	-	-	-	-
● Forecast								46,248	155,218	183,601	163,049	167,406

■ Average
 ■ Budget
 ▲ FY23 Actual
 ● Forecast

FY23 Five Year Actuals Comparison to Average



LOT Actual Dollars per Month

Month	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	Totals
October	14,274	16,938	14,412	11,306	10,483	11,520	12,392	12,163	13,390	19,298	22,085	25,791	27,291	30,504	30,166	44,871	52,496	53,920	423,301
November	11,272	9,748	7,978	7,147	5,850	5,535	6,103	7,298	8,233	11,738	12,986	15,209	16,795	17,929	20,073	27,132	29,184	30,705	250,915
December	18,547	21,746	22,261	16,224	14,294	15,459	13,939	19,101	18,122	21,802	31,168	32,785	33,179	49,031	64,163	91,656	112,975	119,687	716,139
January	17,232	18,707	20,163	17,932	17,007	17,510	17,065	19,334	24,733	26,778	31,157	31,506	40,724	46,286	49,923	60,516	57,714	61,406	575,693
February	20,446	22,943	27,324	24,826	18,873	19,921	19,716	22,331	22,013	28,487	32,613	35,777	38,616	42,579	48,770	60,544	67,925	69,067	622,771
March	15,110	13,668	21,527	15,969	8,925	11,941	17,344	20,251	19,365	18,422	23,712	25,885	31,339	59,451	45,755	119,721	122,712	113,152	704,250
April	7,294	8,049	6,425	5,954	6,183	6,210	6,696	6,165	8,719	11,641	15,255	14,865	15,617	15,981	3,460	27,021	25,895	22,592	214,022
May	11,994	11,230	9,368	8,595	7,335	8,074	9,461	11,113	15,390	18,711	22,047	23,315	25,265	27,806	18,644	43,132	38,658		310,138
June	23,442	24,611	25,426	22,248	21,491	20,728	25,352	33,681	37,000	42,541	50,323	55,034	58,523	87,224	92,394	147,239	145,130		912,387
July	47,654	54,276	47,052	42,408	48,747	49,843	54,214	62,187	65,335	71,296	82,520	88,713	102,486	102,472	105,196	140,826	150,998		1,316,223
August	44,024	52,948	41,089	32,480	39,398	44,505	48,919	57,546	64,959	63,598	71,300	81,215	89,143	89,369	99,323	123,848	132,577		1,176,241
September	26,973	26,073	23,600	25,826	20,258	27,603	33,029	35,605	35,959	49,346	53,966	57,591	84,328	82,112	118,823	134,036	143,595		978,723
Total Dollars Received	258,263	280,937	266,627	230,991	218,844	238,849	260,743	306,775	333,218	383,658	449,132	487,686	563,306	650,744	696,690	1,020,542	1,079,859	470,529	8,197,392
Difference compared to prior year		22,674	(14,310)	(35,635)	(12,148)	20,005	21,894	46,032	26,443	50,440	65,474	38,554	75,620	87,438	45,946	323,852	59,317	(609,330)	212,266
Percent of change		9%	-5%	-13%	-5%	9%	9%	18%	9%	15%	17%	9%	16%	16%	7%	46%	6%	-56%	
Budgeted Dollars	237,858	255,550	309,125	300,000	225,000	175,000	227,500	240,440	255,859	279,620	349,520	400,710	509,131	515,000	712,249	650,866	766,000	1,200,000	7,609,428
Contingent Budgeted dollars						52,500	62,543	11,920	50,000	61,315	77,500	45,000	27,090	161,706	327,290	256,790	227,791	360,000	1,721,445
2nd Contingent Budgeted Dollars								38,600	43,000										81,600
Total Budgeted	237,858	255,550	309,125	300,000	225,000	227,500	290,043	290,960	348,859	340,935	427,020	445,710	536,221	676,706	1,039,539	907,656	993,791	1,262,461	9,114,934

**LOCAL OPTION TAX
DISBURSEMENT
For 5/11/2023 Warrant Register**

LOT #23-22

Parks & Recreation

Downtown Sidewalk Maintenance

\$181,150

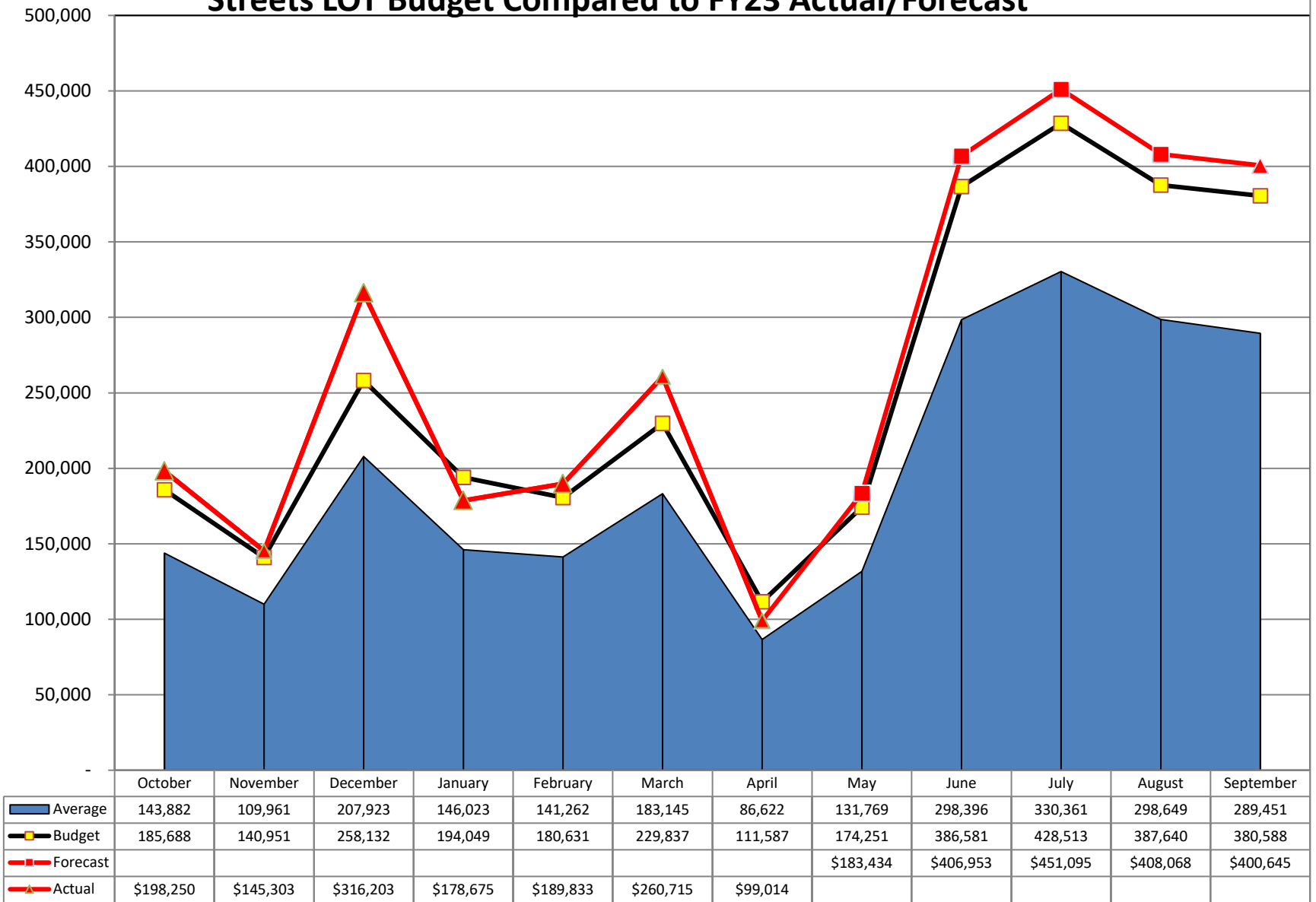
STREETS LOT BUDGETED, ACTUAL, AND FORECASTED DOLLARS

Month	FY18 percentages	FY19 percentages	FY20 percentages	FY21 percentages	FY22 percentages	5 Year Average percentage		FY23 Budget dollars	FY23 actual and forecast based on trend	Percentage +/- based on budget	Actual total	Budget total	total +/- YTD
October	6.17%	6.22%	5.99%	5.99%	6.01%	6.07%		185,688	198,250	6.76%	198,250	185,688	6.76%
November	4.75%	4.53%	4.85%	4.45%	4.64%	4.65%		140,951	145,303	3.09%	343,553	326,640	5.18%
December	7.24%	8.05%	9.74%	8.59%	9.61%	8.65%		258,132	316,203	22.50%	659,756	584,771	12.82%
							1st Quarter Total	584,771	659,756	12.82%			
January	6.45%	6.62%	6.75%	5.94%	5.43%	6.24%		194,049	178,675	-7.92%	838,431	778,821	7.65%
February	6.02%	5.87%	6.36%	5.63%	5.97%	5.97%		180,631	189,833	5.09%	1,028,264	959,452	7.17%
March	5.88%	7.60%	5.98%	9.11%	8.82%	7.48%		229,837	260,715	13.43%	1,288,979	1,189,289	8.38%
							2nd Quarter Total	604,517	629,223	4.09%			
April	3.90%	3.78%	2.38%	4.11%	3.88%	3.61%		111,587	99,014	-11.27%	1,387,993	1,300,876	6.70%
May	6.06%	5.87%	4.95%	5.81%	5.22%	5.58%		174,251	183,434	5.27%			
June	11.40%	12.55%	12.21%	13.55%	12.63%	12.47%		386,581	406,953	5.27%			
							3rd Quarter Total	672,419	689,400	2.53%			
July	15.48%	14.44%	13.75%	13.17%	13.45%	14.06%		428,513	451,095	5.27%			
August	13.87%	12.87%	13.07%	11.75%	12.04%	12.72%		387,640	408,068	5.27%			
September	12.77%	11.60%	13.97%	11.92%	12.29%	12.51%		380,588	400,645	5.27%			
							4th Quarter Total	1,196,741	1,259,808	5.27%			
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		3,058,449	3,238,187	106.70%			
								3,058,449					

Year to date the actual revenues received for FY23 are 3.17% under the year to date revenues for FY22 and 36.24% over the 5 year average year to date.

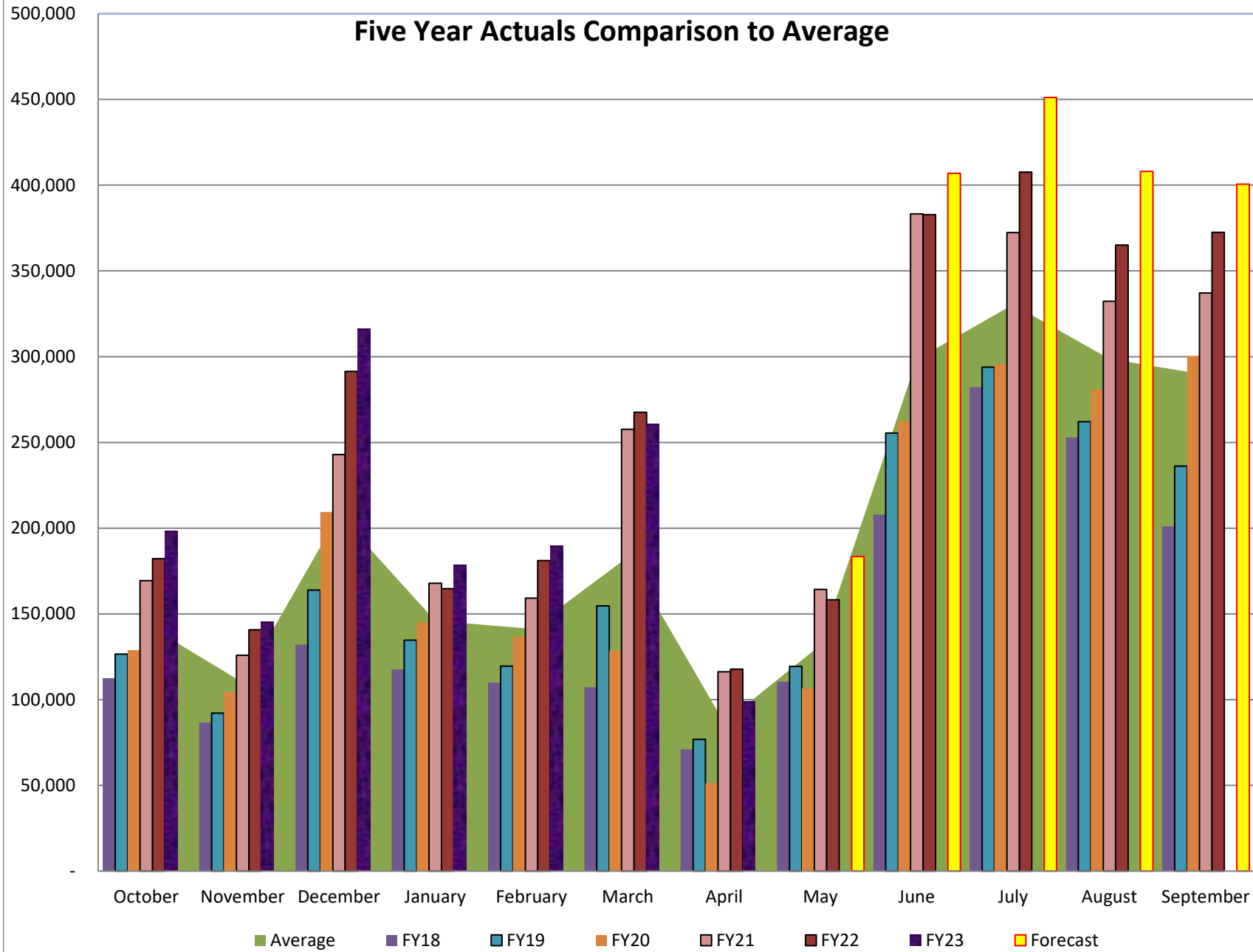
30-May-23

Streets LOT Budget Compared to FY23 Actual/Forecast



■ Average
 ■ Budget
 ■ Forecast
 ▲ Actual

Five Year Actuals Comparison to Average



Streets LOT Actual Dollars Earned per Month

Month	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	Totals
October	-	\$ 108,126	\$ 112,469	\$ 126,495	\$ 128,843	\$ 169,372	\$ 182,233	\$ 198,250	1,025,788
November	-	\$ 79,803	\$ 86,641	\$ 92,146	\$ 104,375	\$ 125,859	\$ 140,782	\$ 145,303	774,909
December	159	\$ 123,870	\$ 131,999	\$ 163,940	\$ 209,400	\$ 242,938	\$ 291,336	\$ 316,203	1,479,845
January	\$ 99,990	\$ 100,678	\$ 117,630	\$ 134,747	\$ 145,146	\$ 167,937	\$ 164,654	\$ 178,675	1,109,457
February	\$ 100,883	\$ 103,484	\$ 109,852	\$ 119,564	\$ 136,697	\$ 159,176	\$ 181,023	\$ 189,833	1,100,512
March	\$ 85,338	\$ 93,631	\$ 107,286	\$ 154,713	\$ 128,607	\$ 257,598	\$ 267,522	\$ 260,715	1,355,410
April	\$ 70,264	\$ 68,894	\$ 71,020	\$ 76,837	\$ 51,267	\$ 116,236	\$ 117,748	\$ 99,014	671,280
May	\$ 97,418	\$ 103,831	\$ 110,511	\$ 119,402	\$ 106,530	\$ 164,231	\$ 158,171		860,094
June	\$ 168,831	\$ 179,572	\$ 207,941	\$ 255,465	\$ 262,485	\$ 383,221	\$ 382,869		1,840,384
July	\$ 235,029	\$ 257,593	\$ 282,181	\$ 293,877	\$ 295,744	\$ 372,360	\$ 407,643		2,144,427
August	\$ 208,024	\$ 234,143	\$ 252,909	\$ 262,015	\$ 281,043	\$ 332,299	\$ 365,087		1,935,520
September	\$ 169,309	\$ 191,252	\$ 232,677	\$ 236,107	\$ 309,759	\$ 337,178	\$ 372,506		1,848,788
Total Dollars Received	\$1,235,245	\$1,644,877	\$1,823,116	\$2,035,308	\$2,159,896	\$2,828,405	\$3,031,574	\$1,387,993	16,146,414
Difference compared to prior year		\$409,632	\$178,239	\$212,192	\$124,588	\$668,509	\$203,169	-\$1,643,581	1,593,160
Percent of change		33%	11%	12%	6%	31%	7%	-54%	
Budgeted Dollars	\$700,000	\$1,500,000	\$1,500,000	\$1,933,772	\$2,100,000	\$2,100,000	\$2,254,000	\$3,100,000	

Memo



To: City Council
From: Delta James, AICP, Economic Development Planner for Michelle Groenevelt, AICP,
Community & Economic Development Director
CC: Anette Spickard, City Manager
Date: 5/31/2023
Re: Monthly Department Report –May2023

1. Housing:

The Toaster Remodel – Construction is underway. The current estimate for completion is the end of June.

The Housing Authority formation will occur in 2023. The annual audit for fourteen (14) deed-restricted units is underway. 10 of the 12 at Thompson Place audits are complete and compliant. The final 2 units staff is continuing to seek the correct address since mail is being returned. The MDSO Employee Housing will provide 8 deed restricted units – the project was approved May 2.

2. Long-range Planning:

Parks, Recreation, and Open Space Plan: Final draft of plan document is complete and will be presented to the Parks and Recreation Advisory Committee on June 14. A resolution to adopt the final plan will be presented to Council at the June 29 meeting.

3. Code Updates:

Staff is working on process-oriented code amendments which will be introduced in a work session over the summer. There are also some differences in code for the City vs. Impact Area that will be presented to the County for adoption on June 20th.

4. Urban Renewal:

There is one vacancy on the Board and the position has been advertised. The next meeting is July 18, 2023.

5. GIS:

The GIS Coordinator position is still vacant. Currently using GIS consultants from Horrocks to cover the work until the position is filled. Horrocks is assisting with GIS tasks with

6. Building:

See attached Building Permit report.

7. Current Planning:

In May, staff received:

- Two design review applications
- One shoreline application
- One conditional use permit application
- One minor plat amendment application
- One Floodplain Development appeal application

8. Grants

See attached Grants report.

9. Sustainability and Climate Action Planning

2018 & 2021 Greenhouse Gas Emissions Inventories – Staff is continuing with data collection of the 2021 Community-wide GHG Inventory update with ICLEI – Local Governments for Sustainability. An updated timeline upon completion of data collection will be provided, but the aim is for completion of the Inventory and comparative analysis by the end of June.

Inflation Reduction Act Funding – Staff continues to monitor information and guidance on the predicted opportunities to access IRA funding for Climate Action & Sustainability programs as it is made available.

The first grant staff is focusing on will be addressing Electric Vehicle Infrastructure Needs for McCall and the possibility of a City & Mountain Community Transit Vehicle Fleet Transition Plan. The second grant staff is pursuing will be to fund a subgrant for Energy Efficiency Upgrades to supplement our Local Housing Program Incentives.

10. Public Art

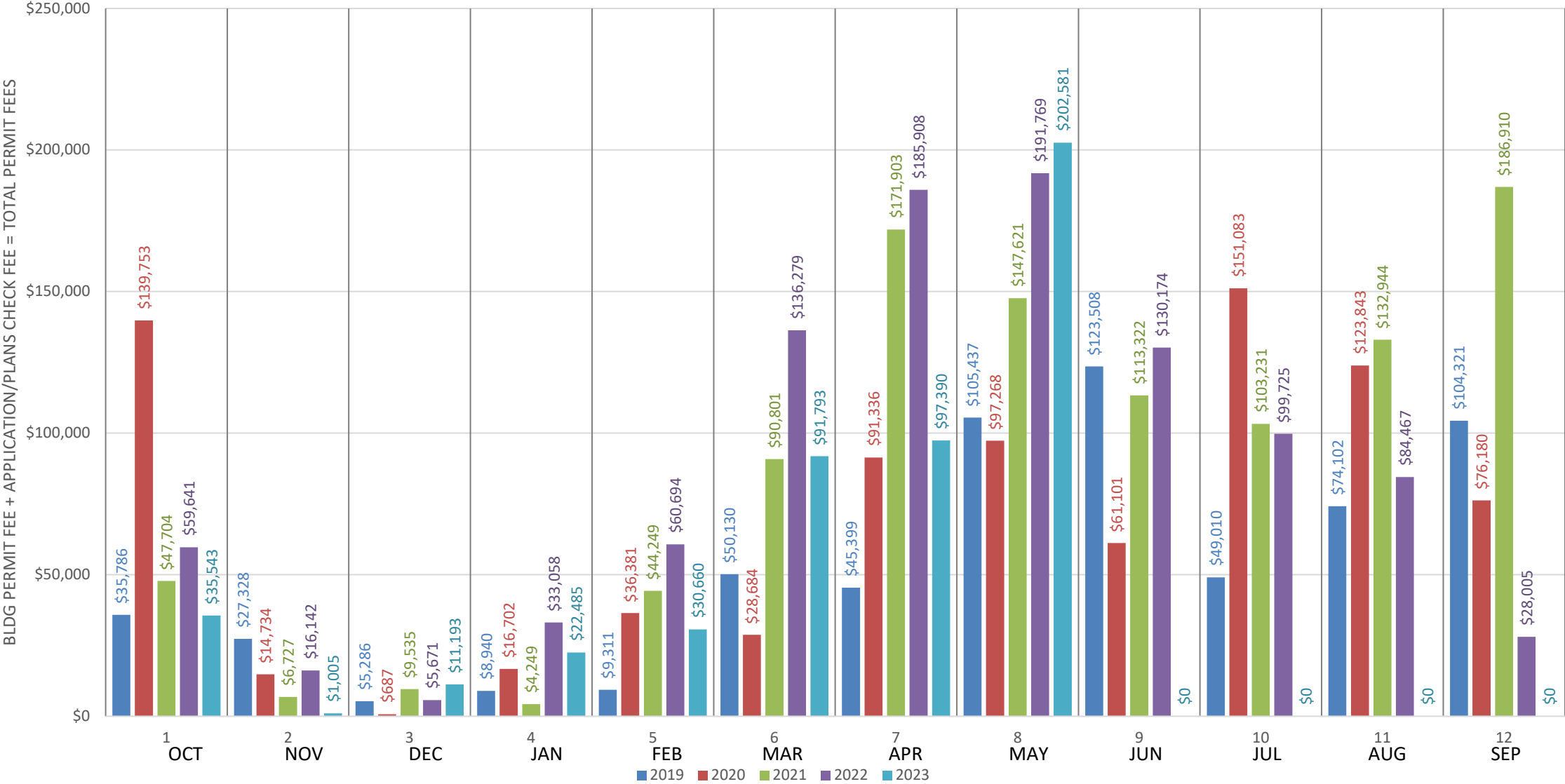
Downtown Mural – Artist Jay Rasgorshek has scheduled mural installation on the west facing McPaws Thrift Store wall beginning second week of August and will likely take 4-6 weeks to complete. An opportunity for local artists to apprentice on the project has been released and applications are being accepted until June 15.

Library Integrated Artwork – Artist Joe Thurston is actively conducting public outreach and will conduct a design workshop open house at the McCall Library on Wednesday, June 21, 2023 at 6pm.

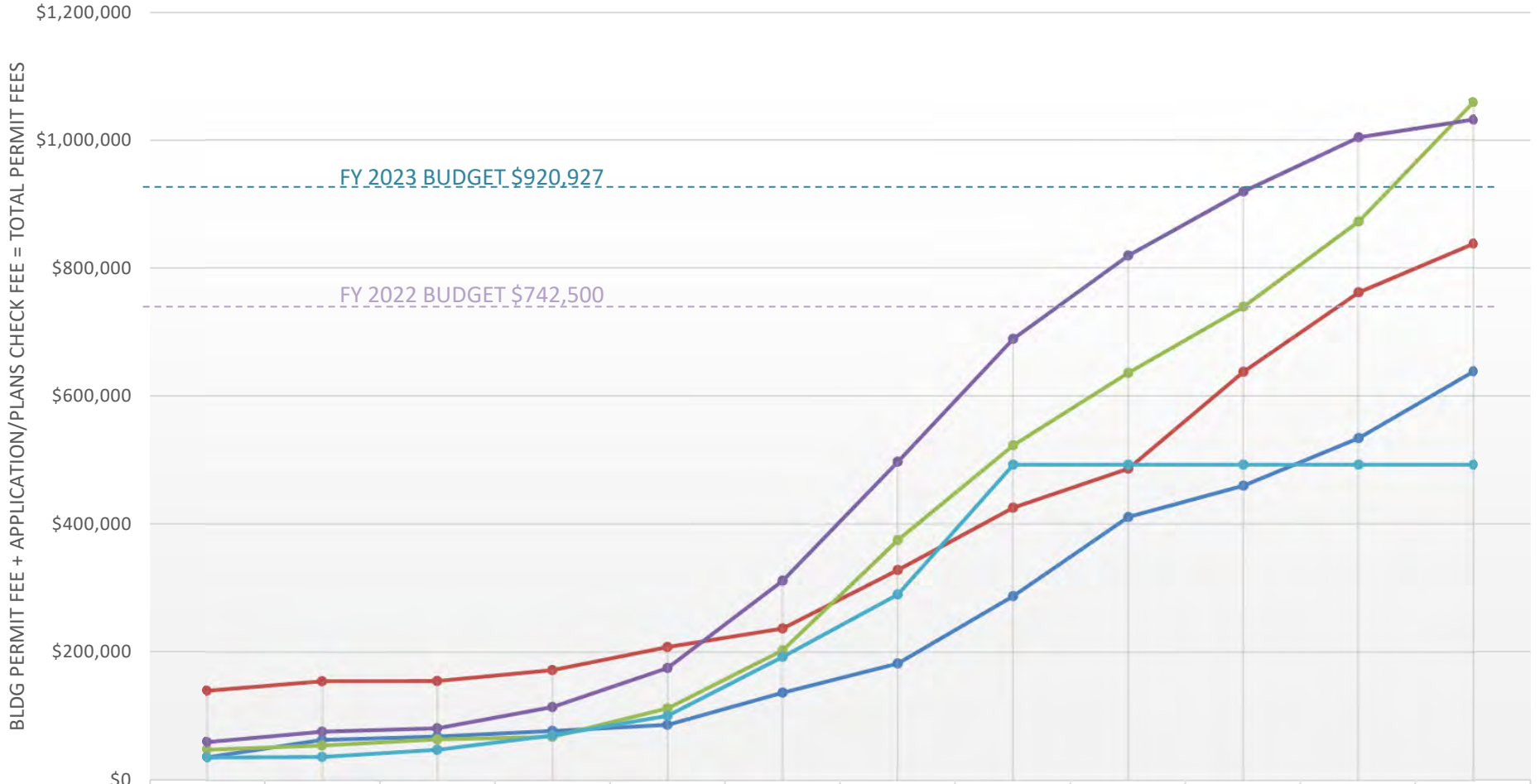
11. Historic Preservation Commission

The Historic Preservation Commission meets next on Monday, June 12. The committee will finalize an RFP for architectural historian consultant services to assess the local historical significance of buildings 50 years or older within the City of McCall funded by a grant from the Idaho State Historic Preservation Office.

TOTAL BLDG PERMIT FEES - PER MONTH - FISCAL YEAR



BLDG PERMIT FEES - RUNNING TOTAL - FISCAL YEAR



	1	2	3	4	5	6	7	8	9	10	11	12
2019	\$35,786	\$63,114	\$68,400	\$77,340	\$86,651	\$136,781	\$182,181	\$287,617	\$411,125	\$460,136	\$534,238	\$638,559
2020	\$139,753	\$154,487	\$155,175	\$171,877	\$208,257	\$236,942	\$328,278	\$425,546	\$486,647	\$637,730	\$761,573	\$837,753
2021	\$47,704	\$54,431	\$63,967	\$68,216	\$112,465	\$203,266	\$375,169	\$522,790	\$636,112	\$739,344	\$872,287	\$1,059,198
2022	\$59,641	\$75,784	\$81,454	\$114,512	\$175,206	\$311,485	\$497,393	\$689,162	\$819,335	\$919,061	\$1,003,528	\$1,031,533
2023	\$35,543	\$36,548	\$47,741	\$70,226	\$100,886	\$192,679	\$290,069	\$492,650	\$492,650	\$492,650	\$492,650	\$492,650

OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP

CEDD GRANT STATUS REPORT- June 2023

Department	Project Name	PM	Purpose	Funder*	Amount	Status
Public Works - Streets	Mission St. Reconstruction	Nathan Stewart	Reconstruct Mission St. from Deinhard Ln. to S. City Limits	STP Rural (F)	\$2.19M	Scheduled for construction in 2028.
Public Works - Streets	Downtown Revitalization	Nathan Stewart	Purchase of pedestrian lighting for downtown core	CDBG (F)	\$500,000	Final phase in FY24
Library	Library expansion	Meg Lojek	Capital Campaign request	STEM Action Center (S)	\$50,000	Construction in FY24
Public Works - Streets	1 st Street Pedestrian Safety	Nathan Stewart	Construction of sidewalk for downtown Phase 3B	Transportation Alternatives (F)	\$499,954	Construction in FY24.
Public Works – Streets	E. Deinhard Lane Reconstruction	Nathan Stewart	Rehabilitate E. Deinhard from SH-55 to Spring Mtn. Blvd.	LHTAC – LRHIP (S)	\$100,000	Construction underway.
Parks	Public Boat Dock Improvements	Kurt Wolf	Boat ramp repair and dock expansion	IDPR – Waterways Improvement Fund (S)	\$173,704	Construction underway.
Public Works – Streets	Phase 3B and 1 st Street Parking Lot	Nathan Stewart	Phase 3B downtown and 1 st St parking lot	Economic Development Administration (F)	\$1.65M	Monthly check in meetings being held.
Library	Library Expansion	Meg Lojek	Capital Campaign request	Laura Moore Cunningham Foundation (P)	\$100,000	Construction in FY24.
Public Works	Seismic Analysis	Nathan Stewart	Seismic Analysis of PW Facility	FEMA Hazard Mitigation (F)	\$41,202	Pending: Application submitted 3.31.22
Library	Library Expansion	Meg Lojek	Children’s Library construction	Progressive Club (P)	\$5000	Construction in FY24.
CEDD	Interpretive Signs	Delta James	Historical interpretive signs for Brown and Rotary Parks	Idaho State Historical Society (F)	\$2500	Project has been closed out.
Public Works – Streets	E. Deinhard Ln. Pathway	Nathan Stewart	Improvements and maintenance of E. Deinhard Ln Pathway	LHTAC – Children Pedestrian Safety (S)	\$250,000	Construction in FY23.
Public Streets – Water	Main Station Intake Safety Project	Sabrina Sims	Hydrocarbons Sensor and video camera for Legacy Park Intake	Idaho DEQ Source Water Protection Grant (S)	\$19,629	Grant Agreement has been executed.
Parks & Rec	Loaner Equipment	Tara Woods	Purchase of mountain bikes and ski equipment for free use	St. Luke’s Community Health Improve. Fund (P)	\$5500	Ordering via local business in progress.
CEDD	HPC Landmarking Inventory	Delta James	Architectural historian consultation services	Idaho State Historic Preservation Office	\$4500	RFQ for consultant services issued.
Public Works – Streets	Downtown Phase 3B	Nathan Stewart	Reconstruction of 1 st Street	LHTAC – LRHIP (S)	\$100,000	Construction in FY24.
Public Works – Streets	SH55 & Deinhard/Boydston Corridor Design	Nathan Stewart	Preliminary design of SH55 and alternate route	DOT RAISE (ITD lead applicant - F)	\$2,877,512	Pending: Application submitted 2.28.23
Parks & Rec	Youth scholarships	Tara Woods	Youth recreation scholarships	Rotary	\$1000	Pending: Application submitted 3.12.23

Public Works	Civic Center Park & Ride	Nathan Stewart	Paving and ADA improvement to City Campus parking lot	Federal Transit Administration (F)	\$1,255,768	Pending: Application submitted 3.17.23
CEDD	Toaster Phase II	Michelle Groenevelt	Kitchen remodel	Capital Matrix	\$15,000	Not funded.

*F=federal funding; S=State funding; P=Private funding

Memo



To: City Council
From: Eric McCormick, Golf Course Superintendent
CC: Anette Spickard, City Manager
Date: 5/31/2023
Re: Monthly Department Report –May 2023

1. Weather:

May was abnormally dry and warm. The snow melted rapidly.

2. Staff:

At the end of May, we were with 3 full-time staff plus 7 full-time seasonal and 5 part-time seasonal employees. Two of the part-time worked full-time until we get more staff in. Applications were coming in slowly, but we will have 4 more coming in the second week of June.

3. Greens:

Greens were mowed down to our normal mowing height by opening day. We still have 4 greens that have quite a bit of snow mold damage. We have re-seeded those areas and are giving them some additional care.

4. Birch Tee Rebuild

Landscapes Unlimited started cutting and removing sod from the existing tees on Birch on May 23rd. They had planned to start last fall but got snowed out then the first of May, but it was too wet and their machinery hadn't come in yet. They are tearing out the old rotten Railroad ties and will be softening the sides so it will take less maintenance. They are also making new forward tees that were shown to be needed on the golf master plan. We have Birch 9 closed while they work to help speed up the process.

5. Restaurant:

Banyans say that they have been busy. They are open every day now that the course is open.

6. Cart Paths

Cart paths smoothed out some from the frost heaving. We have contacted a company that has a grinder that would go on the front of a loader that will grind in one pass the width of the path.

We are going to demo it in July along with Public Works. We are considering grinding and adding more bases to the paths before paving or other options. Paths are now closed to walkers.

7. Machinery

Our Mechanic Ted finished building a new water cooler that stands out of the metal from the conduit reels that IT has been installing. He is making the roofs out of old filing cabinets that no one wanted. Our equipment is in its fifth year of the lease and is starting to show some wear but mostly holding up fine.

8. Golf Course Rezone

We have started the process of rezoning the golf course from residential to civic and combining all the lots. This will help us in the long run with conditional use permits going forward. We will be having a neighborhood meeting this summer and working through the rest of the application process.

Memo



To: City Council
From: Chris Curtin, Information Systems Manager
CC: Anette Spickard, City Manager
Date: 5/30/2023
Re: Monthly Department Report – May 2023

1. Projects

Infosys has been working to get the Golf Pro Shop up to Departmental standards. New software systems have been brought online and additional cameras have been installed. Next Infosys staff will address network wiring that has been found to be substandard. Additionally, new WAPs that offer connectivity to staff along with access to the City’s free wireless – “FreeWiFiByRAPID” that is available throughout the community has been added. Later this spring\summer it is anticipated that staff will add a webcam and wireless at the driving range.

2. Fiber - RAPID

Staff continues to work on a grant application for last-mile funding for fiber to the home (FTTH) for internet access. It is anticipated this application will request \$10-12 million. The targeted area is south of McCall between McCall and Lake Fork. The Broadband Equity, Access, and Deployment (BEAD) Program provides \$42.45 billion to expand high-speed internet access by funding planning, infrastructure deployment, and adoption programs in all 50 states. Staff are working in tandem with Valley County to secure grant funding. The application will go through Valley County. The State of Idaho has received \$125 million in the current round of funding and expects an additional \$100 million for broadband deployment. The application window was in May and the funds will need to be deployed by 2026.

Memo



To: City Council
From: Meg Lojek, Library Director
CC: Anette Spickard, City Manager
Date: 5/31/2023
Re: Monthly Department Report – May 2023

1. Classes, Workshops, Events:

High Noon Book Discussions: A continuing program for adults to discuss a nonfiction book in the Idaho Room. The next book will be *Being Mortal* by Atul Gawande, July 10th.

Ready for Kindergarten Workshop Series: The final of 3 workshops in partnership with BRMES and the Idaho AEYC will be June 1st. Dinner and childcare provided. Additional sponsors are the McCall Library Foundation and the BRMES PTA. Thank you!

Summer Reading Registration is now open, and programs start in June. Registration is filling up fast. Research shows that up to 2 months of academic skills are lost over summer! We hope all local children in grades 1-8 join us to get a free library card, read for prizes, and explore fun activities together. The grand prize is a new mountain bike, sponsored by McCall Fire Department.

McCall's First Repair Fair: Library staff and volunteers came together May 6th to host the first "Repair Fair" – a community event where you can bring troubled items and fix them instead of throwing them away. We had 3 stations: sewing, computers, and bicycle maintenance. (see photo)

English as a new language: the next free session starts up June 14th. For adults and teens of any background who want to learn English and improve their skills. Sponsored by the ICfL's ARP ESSER Summer Learning grant. Anyone is welcome—just come at 7:00 PM every Wednesday after June 14th.

2. Library Construction Update:

This month crews completed earthwork to backfill the foundation, finished concrete on the foundation walls, and did underground rough in for utilities, fire protection and plumbing.

3. Library Stats:

Complete statistics through May are included in this report.

4. **Internship:** please welcome Amy Ruiz, our teen intern for summer programs, sponsored by a grant through the Idaho Commission for Libraries. Amy is a recent graduate of MDHS. Amy will assist our very busy programs staff during all the extra summer events.

5. **Board of Trustees:**

The next regular meeting will be 10:00 AM June 12th at Legion Hall.

6. **Friends of the Library:** next meeting will be 1:00 PM June 20th at the library.

7. **Calendar:** June events calendar: <https://www.mccall.id.us/calendar/418/>





McCall PUBLIC LIBRARY

June 2023 Programs

Phone: 208-634-5522

Website: www.mccall.lili.org

Hours: Monday-Friday 10-6 pm; Saturday 10-2 pm; Sunday closed
Library **CLOSED June 19th**

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
29	30	31	Jun 1 10:30am Story Time 6:30pm Dungeons and Dragons	2 3:30pm After School Fridays - Lets Lego	3
5 12:00pm High Noon Book Talks - Life Reimagined	6 3:30pm Tech Tuesday	7 10:30am Story Stop!	8 10:30am Story Time	9	10
12 10:00am Summer Reading Logs BEGIN 10:00am Library Board of Trustees (Legion Hall at 216 East Park)	13 3:30pm Tech Tuesday	14 10:30am Story Stop! 11:00am Garfield Day 7:00pm ENGLISH CAFE / CAFE DE INGLÉS	15 10:30am Story Time 6:30pm Dungeons and Dragons	16	17
19 10:00am Library CLOSED	20 3:30pm Tech Tuesday 1:00 Friends Meeting	21 10:30am Story Stop! 7:00pm ENGLISH CAFE / CAFE DE INGLÉS	22 10:30am Story Time	23 12:00pm Summer Reading Program KICK-OFF Party	24 10:00am Kaleidoscope
26	27 3:30pm Tech Tuesday	28 10:30am Story Stop! 1:00pm Summer Reading Program 7:00pm ENGLISH CAFE / CAFE DE INGLÉS	29 10:30am Story Time 6:30pm Dungeons and Dragons	30 11:00am Elementary Summer Reading Program (morning) 1:00pm Elementary Summer Reading	Jul 1

Special Events

High Noon Book Talks

Monday, June 5th

We will discuss *Life Reimagined* by Barbara Hagerty June 5th. Then *Being Mortal* by Atul Gawande on July 10th. Check <https://www.mccall.id.us/HighNoonBookClub-1> for the full list of monthly reads.

Garfield Day

Wednesday, June 14th 11:00 – 5:00

Drop in anytime and celebrate McCall's favorite feline comic character with us. Snacks, crafts, trivia, and a reveal of the latest and greatest Garfield books!

English Cafe for Adults Free!

Café de Ingles para Adultos ¡Gratis!

Every Wednesday

June 14 to August 16, 7:00 - 8:00pm

For adults of all languages who want to learn English or improve their skills.

Todos los Miércoles

14 de Junio 16 de Agosto, de 7:00 - 8:00pm

Abierto a adultos de todos los idiomas que quieran aprender inglés o mejorar sus habilidades.

208-634-5522

Kaleidoscope

Saturday, June 24th at 10:00am

Central Idaho Historical Museum

Find us at Kaleidoscope, an annual free children's art festival which takes place in McCall every June.



McCall Library Summer Reading Program

Summer Reading Program KICK-OFF Party

Friday, June 23rd 12:00 – 1:30pm

Celebrate the beginning of our Summer Reading Program! Come register, get your FREE library card, reading log, and make some ice cream and play with us!

Register at the library or on our Eventbrite:

Go to <https://www.mccall.id.us/mccall-public-library-summer-reading-program>



Library Statistics -- FY2023

	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Totals
2 - 000-099	6	3	4	5	4	2	1	3					28
3 - 100-199	19	23	24	27	22	37	21	27					200
4 - 200-299	7	3	4	14	8	13	10	16					75
5 - 300-399	65	54	62	82	57	79	51	48					498
6 - 400-499	2	0	0	6	10	5	7	6					36
7 - 500-599	21	25	26	27	33	28	26	38					224
8 - 600-699	83	56	72	58	61	96	54	77					557
9 - 700-799	50	42	38	59	45	31	31	30					326
10 - 800-899	44	38	54	56	44	35	44	26					341
11 - 900-919.9	17	26	18	29	20	27	26	23					186
12 - 929-999	19	36	43	40	28	32	29	21					248
13 - Adult Fiction	615	590	589	609	531	552	513	524					4523
165 - Biography	28	30	27	27	24	18	12	18					184
16 - Board Books	101	91	110	80	93	122	65	84					746
17 - CD Fiction Books	40	27	7	19	11	23	23	21					171
18 - CD Junior Books	29	20	20	10	17	7	15	6					124
19 - CD Non-Fiction Books	12	16	1	3	9	8	7	4					60
20 - CD YA Books	3	1	1	1	3	8	7	2					26
21 - Chapter books	109	109	127	110	143	219	128	126					1071
22 - DVD Circ Set	84	37	44	15	17	18	8	13					236
23 - DVD Fiction	53	60	53	55	34	94	112	74					535
24 - DVD Kids	45	36	51	34	25	38	38	45					312
25 - DVD Non-Fiction	8	5	4	23	12	14	24	10					100
26 - E Non-Fiction	36	22	22	26	23	26	32	30					217
27 - Eames Collection	0	2	1	2	1	4	2	8					20
28 - Early Readers	156	73	128	80	128	193	92	85					935
29 - Equipment and Computers	11	13	19	8	21	30	15	28					145
30 - Idaho Room	21	18	24	49	12	45	70	26					265
31 - Idaho Room Archives	0	0	0	5	2	4	0	3					14
32 - Independent Films	5	3	2	4	6	8	5	1					34
33 - Junior Biography	4	12	6	5	8	12	7	1					55
34 - Junior Non-Fiction	315	246	220	259	242	296	279	309					2166
35 - Junior Readers	205	249	249	221	209	251	239	281					1904
36 - Junior Spanish	18	7	3	5	17	15	12	12					89
37 - Kit	7	6	18	5	8	5	5	16					70
38 - Kit Junior	18	26	22	22	17	28	20	25					178
39 - Large Print	53	56	54	51	42	36	36	64					392
40 - Magazine	15	17	33	17	21	32	4	23					162
41 - Map	0	0	0	0	0	0	0	0					0
42 - Professional	0	0	1	3	2	5	3	2					16
43 - Reference	0	0	2	0	3	0	0	0					5
44 - Spanish	4	4	8	10	10	11	4	7					58
45 - Story Books	770	666	756	645	763	919	828	797					6144
46 - Y A Non-Fiction	21	18	19	15	6	17	14	12					122
47 - Young Adult Fiction	91	79	91	64	57	66	32	74					554
Adult Circulation	1282	1184	1235	1311	1105	1275	1135	1141					
Young Adult Circulation	115	99	111	80	63	91	54	88					
Children's Circulation	1814	1563	1735	1505	1693	2131	1760	1817					
ILL's Received (Borrowing)	28	29	27	19	25	56	19	TBA					
ILL's Sent out (Lending)	16	21	19	24	26	23	18	TBA					
Circulation Totals (physical)	3255	2896	3127	2939	2912	3576	2986	TBA					
Circulation Totals (digital)	780	726	TBA	TBA	TBA	TBA	TBA	TBA					
TOTAL CIRCULATION	4035	3622	TBA	TBA	TBA	TBA	TBA	TBA					
Attendance	2075	1806	1687	2069	1895	2532	2206	1978					
Computer Usage	91	86	102	93	115	186	157	138					
Wireless Usage	52+	31+	32+	58+	41+	45+	31+	47+					
Reference Requests	685	509	545	645	635	730	606	629					
Test Proctoring	1	7	8	2	1	3	3	1					
Number of volunteers	14	18	12	6	5	4	12	10					
Total hours of volunteers	32	40	26	15	13	6.5	22	23					
Number of Synchronous Programs Offered													
Ages 0-5 Onsite	8	7	9	8	8	10	8	9					
Ages 0-5 Offsite	3	2	4	4	4	4	4	2					
Ages 0-5 Virtual	0	0	0	0	0	0	0	0					

Ages 6-11 Onsite	8	9	8	8	8	11	7	9						
Ages 6-11 Offsite	0	0	0	0	0	0	0	0						
Ages 6-11 Virtual	0	0	0	0	0	0	0	0						
Ages 12-18 Onsite	0	1	0	0	0	0	0	0						
Ages 12-18 Offsite	0	0	0	0	0	0	0	0						
Ages 12-18 Virtual	0	0	0	0	0	0	0	0						
Adults Onsite	9	11	11	12	9	15	13	17						
Adults Offsite	0	0	0	1	2	1	1	0						
Adults Virtual	0	0	0	0	0	0	0	0						
General Interest Onsite	2	0	2	1	1	1	0	0						
General Interest Offsite	2	1	0	0	0	0	0	0						
General Interest Virtual	0	0	0	0	0	0	0	0						
Total Attendees Synchronous Programs (10.6c)														
Attendance at Synchronous Programs														
Ages 0-5 Onsite	143	94	140	96	121	184	132	162						
Ages 0-5 Offsite	26	22	34	48	29	57	44	34						
Ages 0-5 Virtual	0	0	0	0	0	0	0	0						
Ages 6-11 Onsite	135	120	50	82	84	227	85	88						
Ages 6-11 Offsite	0	0	0	0	0	0	0	0						
Ages 6-11 Virtual	0	0	0	0	0	0	0	0						
Ages 12-18 Onsite	0	27	0	0	0	0	0	0						
Ages 12-18 Offsite	0	0	0	0	0	0	0	0						
Ages 12-18 Virtual	0	0	0	0	0	0	0	0						
Adults Onsite	70	77	96	142	135	160	280	154						
Adults Offsite	0	0	0	25	80	20	35	0						
Adults Virtual	0	0	0	0	0	0	0	0						
General Interest Onsite	32	0	53	0	66	17	0	0						
General Interest Offsite	58	45	0	0	0	0	0	0						
General Interest Virtual	0	0	0	0	0	0	0	0						
Total Attendance at Synchronous Progs (10.12c)														
Number of Asynchronous Program Presentations														
Ages 0-5	0	0	0	0	0	0	0	0						
Ages 6-11	0	0	0	0	0	0	0	0						
Ages 12-18	0	0	0	0	0	0	0	0						
Adults	0	0	0	0	0	0	0	0						
General Interest	0	0	0	0	0	0	0	0						
Total Number of Asynchronous Presentations (10.13e)														
7-day Views of Asynchronous Programs														
Ages 0-5	0	0	0	0	0	0	0	0						
Ages 6-11	0	0	0	0	0	0	0	0						
Ages 12-18	0	0	0	0	0	0	0	0						
Adults	0	0	0	0	0	0	0	0						
General Interest	0	0	0	0	0	0	0	0						
Total Number of 7-day Views of Asynch Presentations (10.14e)														
Number of Self-guided activities	1	0	2	0	0	0	1	1						
Participation in Self-guided activities	32	0	70	0	0	0	96	20						
Number of Community Outreach Events	1	1	0	0	0	0	2	0						
Participation- Community Outreach Events	52	32	0	0	0	0	90	0						

Memo



To: City Council
From: Kurt Wolf, Parks, and Recreation Director
CC: Anette Spickard, City Manager
Date: 5/26/2023
Re: Monthly Department Report –May 2023

Rec Program Updates & Registrations

Program descriptions, free events and local resource guide are available on www.mccallrec.com. Staff will continue to include a program waiver as it relates to the recognized risk associated with COVID-19 exposure while participating in our programs. This waiver is similar to what other municipalities are doing in our region.

Spring Programming:

- Field Trips hosted with PLCA4Kids- Have partnered to host rec days at Elk Creek Church, Rotary Park, and Brown Park.
- Girls Wellness Series- 12 youth have participated in this 5-weeks series focusing on self-care, healthy friendships, self-worth, breathing techniques, journaling and yoga. The group meets once a week for 1.5 hours. St. Luke's has partnered with us to provide the yoga studio space, certified instructor and wellness journals.
- Baseball & Softball Program- We are hosting 4 Coach Pitch teams (ages 6-8); 4 Modified Coach Pitch teams (ages 8-10); 2 Softball teams (ages 10-12) and 2 Baseball teams (ages 10-12). Practices began May 22, and games will begin the first week of June here in McCall, New Meadows, Cascade, and Council. As of April 30, all teams were full.
- Summer Activity Guide- First day to register for programs was May 1. Approximately 5% of the spaces available in each program will be saved for scholarship youth. If no one applies for scholarships, spaces will open to wait list folks. Majority of programming was on a waitlist by end of day.
- Partnership Development with PLCA: Staff have continued to work closely with the Payette Lake Community Association (PLCA) to build partnerships and pool resources as it relates to the after-school program. The association and program provide an incredible service to the community and staff will continue to explore opportunities to support the association and ensure long term sustainability of the programs. Staff are

working with legal to create a Memorandum of Agreement to continue to aid and bill 501c3 for services and staff time.

Parks Overview and Staffing

- Currently advertising the open position of Facilities and Maintenance Coordinator, Hannah Stewart resigned from the position and left the position May 12th. We are additionally advertising for summer seasonal staff positions.
- Cori Hatfield will return as the recreation aide for her third summer; she will work June to mid-August.
- Parks staff will begin opening restrooms that were winterized to prevent freezing and as snow melts and things dry out spring cleanups will be the priority.
- Vandalism has become a recent concern at Legacy Park and Art Roberts Park. Each facility recently suffered significant damage and has since been repaired. Parks staff are working with PD to mitigate, and we are re-visiting the use of security cameras as we enter the FY24 budget process and the busy summer season.

Winter sidewalk maintenance: Winter damage assessments are being made and repairs will be scheduled throughout the building season. We continue to see significant amounts of spalling from the use of salts on City streets and the State ITD ROW. Staff will continue to assess and work towards mitigation measures.

Recent Projects and Task Update:

- **New Shop:** Parks crew will begin site cleanup, tree work, and landscape improvements as time allows and public facilities are prepped and ready for summer traffic.
- **Rotary Park Restroom Renovation:** Parks crew finished remodeling one of the restrooms at Rotary Park. Improvements included ADA Accessibility retrofits outlined in the transition plan and significant insulation and ventilation mitigation. Because this work was done in house, we saw significant cost savings. The crew will begin work on the other restroom following the busy summer season.
- **Seasonal Employee Housing Opportunities:** Staff are continuing to work with both the Museum board and the State Timber Protective Association on making minor retrofits and renovations to the second floor of the bunk house at the museum to provide seasonal housing for SITPA and Parks staff throughout the year.
- **Employee Housing Unit Opportunity:** Kurt Wolf continues to work with the museum board on an opportunity to secure the assistant fire wardens house as a city employee housing unit. Parks staff are working closely with the museum board to make necessary repairs to the building and address general maintenance items common with a historic building.
- **Farmers Market:** The department is working closely with the Farmers Market Board of Directors and other City Departments to relocate the farmers market into the downtown core for the 2023 summer season.
- **Parks & Recreation & Open Space Plan:** Logan Simpson, staff, and parks and recreation committee completed phase three of public outreach which included release of the draft plan for comment, public meeting, focus groups, and a questionnaire.

- **Potential Projects:** Kurt Wolf continues to work with Mile High Marina on an expansion project of the breakwater and marina slips. This project would in turn create a public amenity in the form of a public boardwalk out and around the marina. The Marina is entering into the PUD process with the city. The Parks and Recreation Department will continue to work on partnership opportunities regarding the public amenity associated with this project. More to come as the project takes shape and moves forward throughout the winter months.
- **Public Boat Ramp Improvements:** Construction is underway and should be completed by mid June and well ahead of the 4th of July. Pier framing is 70% complete. New docks have been constructed and will be brought in and anchored in early June. The old ramp docks will be re-configured to replace the worn out plastic T-Dock to the south of ramp. The Beach Volleyball court will remained closed until all construction is complete to ensure public safety.
- **Working with CIMBA** to start constructing a Mtn. Bike Jump Park. CIMBA is working on getting 3D renderings done to convey the scope of work and market the project for additional funding. Conceptual plans are drafted to incorporate jump lines adjacent to the paved bike path between Stibnite and Deinhard Lane. The terrain between the pathway and the airport approach is perfect for creating something along these lines and is already used informally for biking, hiking , and running.. A project of this nature has the potential to be a fun and unique amenity for our community and visitors alike. It is also a great opportunity to utilize local resources through a grassroots approach to implementation.
- **Roosevelt Park:** Staff have been working with Kempthorne family and the use of escrow funds to make site improvements to Roosevelt Park. Plans for this site include the use of removable planters that can be used to establish nursery trees and shrubs for the department to implement in other facilities as they get established. During the summer months it will act as a small pocket park and nursery, and during the winter months it will function as snow storage.



Accessibility and Insulation Restroom Improvements: Work was done in-house, which saved significant costs associated with the project. Staff will make similar improvements to the other restroom at Rotary during the next shoulder season.

Memo



To: City Council
From: Dallas Palmer, Chief of Police
CC: Anette Spickard, City Manager
Date: 05/31/2023
Re: Monthly Department Report – May 2023

1. Personnel

Recruitment

MPD currently has one applicant moving through the background hiring process. If successful, we hope to bring this applicant on board with MPD by the end of June.

MPD recently attended the Law Enforcement Hiring Expo in Boise hosted by Reliant Hiring. This event is the region's largest law enforcement recruitment event. Lieutenant Seth Arrasmith and Corporal Nate Kimmel hosted a recruitment booth and facilitated conversations with potential applicants. MPD is hopeful to obtain qualified applicants from this event.

MPD continues to actively recruit applicants for two vacant police officer positions. MPD plans to continue our current online recruiting efforts through social media outlets, Idaho POST job postings, Police1 job postings, and Indeed. MPD will also be attending in-person recruiting events throughout the northwest at colleges or similar recruitment events as possible. MPD plans to hold another applicant testing in the coming months once qualified applicants are identified that can move forward within the hiring process.

2. Training

Joint Agency Training

MPD and the Valley County Sheriff's Office (VCSO) recently held a joint agency TACMED, active shooter, and building clearing training. This type of joint training is invaluable when preparing for major incident response within our region. MPD plans to hold these joint agency trainings with VCSO on a more regular basis to ensure appropriate team response to incidents.

Command Staff Retreat

MPD command staff (Chief, Lieutenant, and Sergeants) recently attended MPD's annual Command Staff Retreat. This retreat encompasses a focus on the following:

1. Review of MPD's past year
2. Review of MPD's vision and goals
3. Recruitment and retention strategies
4. Training and development
5. Organizational alignment
6. Team building

This year's retreat was again a great success. MPD command staff are excited to address upcoming challenges and look forward to achieving our goals for our community.

FBI-LEEDA Command Leadership Institute

Sergeant Josh Johnson and Corporal Nate Kimmel recently attended the FBI-LEEDA Command Leadership Institute. This training is part two of the FBI-LEEDA Leadership Trilogy and is a dynamic, intensive, and challenging 4.5-day program specifically and uniquely designed to prepare law enforcement leaders for command level positions. This training's focus is to provide real life contemporary, best-practice strategies and techniques for those aspiring to command level assignments.

3. Awards

Department Excellence Awards

Sergeant Josh Johnson and Corporal Chase McPherson were recently awarded the Department Excellence Award for demonstrating intelligence, integrity and creative problem solving while assisting VCSO on the scene of a burglary incident. Both Sgt. Johnson and Cpl. McPherson performed in a selfless manner that not only led to the capture of the suspects, but clearly demonstrated the values and principles of the City of McCall and MPD.

4. Community Events

Unwanted Drugs and Sharps Collection

The McCall Police Department continues to accept unwanted or expired prescriptions, over-the-counter medications, and sharps. These items are accepted Monday – Friday, 8:00 a.m. – 5:00 p.m. excluding holidays.

5. Grants

Idaho Transportation Traffic Enforcement Grant

MPD continues to participate in the Idaho Transportation Department's Traffic Enforcement Grants as they are announced. Each grant period focuses on different driving behaviors or issues such as aggressive driving, seatbelt use, and DUIs. The periods and focus areas are designed to make our roads safer and save lives.

6. Calls for service – May 1 – May 30, 2023

Reported	Nature
00:25:17 05/01/23	EXTRA PATROL
01:46:01 05/01/23	EXTRA PATROL
02:20:04 05/01/23	EXTRA PATROL
03:27:55 05/01/23	EXTRA PATROL
04:24:30 05/01/23	ALARM
09:56:31 05/01/23	PROPERTY FOUND
10:11:16 05/01/23	FOOT PATROL
10:20:43 05/01/23	FOOT PATROL
10:30:14 05/01/23	PROPERTY LOST
11:09:17 05/01/23	FOOT PATROL
12:17:50 05/01/23	ACCIDENT HR
14:05:24 05/01/23	REPOSSESSION
15:41:12 05/01/23	HARASSMENT
15:42:59 05/01/23	TRAFFIC STOP
15:54:16 05/01/23	TRAFFIC STOP
16:36:35 05/01/23	TRAFFIC STOP
16:38:27 05/01/23	PROPERTY LOST
17:01:40 05/01/23	TRAFFIC STOP
19:39:25 05/01/23	OPEN DOOR
06:46:45 05/02/23	PUBLIC ASSIST
08:19:03 05/02/23	TRAFFIC STOP
09:56:28 05/02/23	FOOT PATROL
10:00:04 05/02/23	INSPECTION VIN
10:15:06 05/02/23	TRAFFIC STOP
13:08:33 05/02/23	FOOT PATROL
13:21:21 05/02/23	FOOT PATROL
14:04:28 05/02/23	911 DISCONNECT
14:37:35 05/02/23	911 DISCONNECT
15:04:31 05/02/23	PROPERTY FOUND
15:51:09 05/02/23	TRAFFIC STOP
15:52:01 05/02/23	PROPERTY DAMAGE
16:09:41 05/02/23	TRAFFIC STOP
16:15:17 05/02/23	TRAFFIC STOP
17:31:43 05/02/23	TRAFFIC STOP
18:15:16 05/02/23	ANIMAL
18:17:21 05/02/23	911 DISCONNECT
18:38:39 05/02/23	SLIDE OFF
20:18:39 05/02/23	PUBLIC ASSIST
20:38:19 05/02/23	ALARM
23:09:45 05/02/23	SUSPICIOUS SUBJ
00:13:15 05/03/23	EXTRA PATROL
01:15:13 05/03/23	EXTRA PATROL
09:57:03 05/03/23	TRAFFIC STOP

09:56:49 05/03/23	911 DISCONNECT
10:23:19 05/03/23	FOOT PATROL
10:40:40 05/03/23	FOOT PATROL
10:54:19 05/03/23	INSPECTION VIN
11:59:11 05/03/23	TRAFFIC STOP
11:59:43 05/03/23	TRAFFIC STOP
12:24:38 05/03/23	911 DISCONNECT
13:55:14 05/03/23	TRAFFIC STOP
14:09:31 05/03/23	FOOT PATROL
14:16:39 05/03/23	PARKING COMPLNT
15:01:14 05/03/23	ACCIDENT PI
15:15:19 05/03/23	911 DISCONNECT
16:15:57 05/03/23	ASSIST FIRE/EMS
19:43:53 05/03/23	PROPERTY FOUND
20:36:30 05/03/23	JUVE DISTURBNCE
04:45:18 05/04/23	EXTRA PATROL
07:41:17 05/04/23	EXTRA PATROL
07:59:59 05/04/23	TRAFFIC STOP
09:09:02 05/04/23	FOOT PATROL
09:07:13 05/04/23	ABANDONED VEH
09:59:51 05/04/23	TRAFFIC STOP
10:31:53 05/04/23	911 DISCONNECT
10:40:05 05/04/23	FOOT PATROL
12:37:52 05/04/23	911 DISCONNECT
12:40:48 05/04/23	PARKING COMPLNT
13:44:34 05/04/23	PROPERTY FOUND
13:45:45 05/04/23	911 DISCONNECT
13:49:26 05/04/23	911 DISCONNECT
14:29:46 05/04/23	TRAFFIC STOP
15:05:38 05/04/23	ACCIDENT PD
15:41:41 05/04/23	ORDINANCE MPD
16:04:07 05/04/23	MOTORIST ASSIST
16:51:23 05/04/23	MOTORIST ASSIST
16:54:14 05/04/23	EXTRA PATROL
18:02:17 05/04/23	AGENCY ASSIST
19:58:07 05/04/23	EXTRA PATROL
20:44:19 05/04/23	EXTRA PATROL
22:31:38 05/04/23	EXTRA PATROL
22:39:09 05/04/23	911 DISCONNECT
23:38:57 05/04/23	EXTRA PATROL
04:18:15 05/05/23	EXTRA PATROL
04:38:15 05/05/23	FOOT PATROL
07:27:12 05/05/23	911 DISCONNECT
07:49:44 05/05/23	EXTRA PATROL
07:52:06 05/05/23	TRAFFIC STOP
09:49:11 05/05/23	FOOT PATROL

10:30:20 05/05/23	EXTRA PATROL
10:34:02 05/05/23	CHILD ABUSE
12:55:57 05/05/23	FOOT PATROL
13:28:35 05/05/23	DOMESTIC
18:27:22 05/05/23	EXTRA PATROL
22:35:55 05/05/23	TRAFFIC COMPLNT
23:20:22 05/05/23	EXTRA PATROL
19:46:13 05/05/23	SUICIDAL SUBJ
01:48:25 05/06/23	EXTRA PATROL
03:29:44 05/06/23	EXTRA PATROL
10:54:30 05/06/23	911 DISCONNECT
11:44:18 05/06/23	MISSING PERSON
15:15:00 05/06/23	TRAFFIC COMPLNT
16:26:38 05/06/23	911 DISCONNECT
18:24:11 05/06/23	TRAFFIC STOP
19:32:33 05/06/23	FOOT PATROL
20:52:20 05/06/23	TRAFFIC STOP
21:01:05 05/06/23	TRAFFIC STOP
21:15:25 05/06/23	TRAFFIC STOP
21:39:28 05/06/23	ACCIDENT PI
22:34:32 05/06/23	TRAFFIC COMPLNT
01:12:54 05/07/23	TRAFFIC STOP
14:11:01 05/07/23	PROPERTY LOST
19:19:30 05/07/23	TRAFFIC COMPLNT
19:50:50 05/07/23	TRAFFIC STOP
20:30:19 05/07/23	EXTRA PATROL
21:50:43 05/07/23	EXTRA PATROL
22:12:39 05/07/23	TRAFFIC STOP
23:21:40 05/07/23	EXTRA PATROL
04:37:34 05/08/23	EXTRA PATROL
09:48:07 05/08/23	FOOT PATROL
13:09:16 05/08/23	FOOT PATROL
13:40:37 05/08/23	FOOT PATROL
14:35:09 05/08/23	FOOT PATROL
15:24:27 05/08/23	TRAFFIC STOP
15:41:30 05/08/23	TRAFFIC STOP
16:37:51 05/08/23	TRAFFIC STOP
17:01:31 05/08/23	TRESPASSING
18:52:58 05/08/23	TRAFFIC STOP
18:36:04 05/08/23	TRAFFIC COMPLNT
20:18:35 05/08/23	FOOT PATROL
21:44:40 05/08/23	EXTRA PATROL
22:55:30 05/08/23	EXTRA PATROL
23:20:29 05/08/23	EXTRA PATROL
23:38:47 05/08/23	EXTRA PATROL
00:00:57 05/09/23	EXTRA PATROL

01:52:21 05/09/23	EXTRA PATROL
02:06:48 05/09/23	ALARM
02:59:04 05/09/23	EXTRA PATROL
08:27:52 05/10/23	TRAFFIC COMPLNT
01:47:58 05/10/23	FOOT PATROL
01:27:59 05/10/23	EXTRA PATROL
23:45:02 05/09/23	TRAFFIC STOP
23:26:25 05/09/23	EXTRA PATROL
22:56:05 05/09/23	FOOT PATROL
22:06:41 05/09/23	UNWANTED SUBJ
21:43:42 05/09/23	DISABLED VEH
21:08:00 05/09/23	911 DISCONNECT
20:49:34 05/09/23	TRAFFIC STOP
20:32:00 05/09/23	WELFARE CHECK
20:30:56 05/09/23	FOOT PATROL
19:35:47 05/09/23	EXTRA PATROL
17:22:54 05/09/23	TRAFFIC STOP
13:57:52 05/09/23	HARASSMENT
11:07:59 05/09/23	FOOT PATROL
08:17:26 05/09/23	ORDINANCE MPD
11:02:46 05/10/23	ASSIST FIRE/EMS
11:07:42 05/10/23	ALARM
13:09:40 05/10/23	ORDINANCE MPD
13:31:28 05/10/23	FOOT PATROL
13:36:33 05/10/23	TRAINING EVENT
14:25:00 05/10/23	FOOT PATROL
14:37:32 05/10/23	INSPECTION VIN
14:57:07 05/10/23	SUSPICIOUS VEH
15:23:38 05/10/23	TRAFFIC COMPLNT
15:33:21 05/10/23	EXTRA PATROL
16:07:46 05/10/23	FIELD CONTACT
18:05:51 05/10/23	911 DISCONNECT
19:01:02 05/10/23	EXTRA PATROL
19:06:24 05/10/23	TRAFFIC STOP
20:06:47 05/10/23	TRAFFIC STOP
21:25:08 05/10/23	TRAFFIC STOP
21:33:56 05/10/23	EXTRA PATROL
21:56:02 05/10/23	EXTRA PATROL
00:26:52 05/11/23	EXTRA PATROL
01:31:20 05/11/23	EXTRA PATROL
04:23:11 05/11/23	EXTRA PATROL
08:53:56 05/11/23	911 DISCONNECT
09:42:39 05/11/23	WELFARE CHECK
10:27:35 05/11/23	911 DISCONNECT
11:05:37 05/11/23	PUBLIC RELATION
11:43:28 05/11/23	WELFARE CHECK

13:02:25 05/11/23	TRESPASSING
13:16:28 05/11/23	TRAFFIC STOP
13:28:05 05/11/23	TRAFFIC HAZARD
14:20:24 05/11/23	INSPECTION VIN
15:52:45 05/11/23	ACCIDENT PD
15:54:08 05/11/23	ALARM
15:38:54 05/11/23	PROPERTY DAMAGE
18:01:36 05/11/23	WELFARE CHECK
00:51:55 05/12/23	EXTRA PATROL
02:55:18 05/12/23	EXTRA PATROL
06:00:14 05/12/23	COUNTERFEITING
08:27:19 05/12/23	THEFT PETIT
09:08:17 05/12/23	PUBLIC RELATION
09:56:36 05/12/23	FOOT PATROL
09:56:56 05/12/23	ORDINANCE MPD
14:28:58 05/12/23	FOOT PATROL
15:24:23 05/12/23	SUSPICIOUS CIRC
16:31:42 05/12/23	TRAFFIC STOP
17:00:27 05/12/23	PUBLIC ASSIST
18:00:50 05/12/23	911 DISCONNECT
18:24:34 05/12/23	HARASSMENT
18:52:59 05/12/23	HARASSMENT
19:58:54 05/12/23	SUSPICIOUS CIRC
20:26:36 05/12/23	EXTRA PATROL
20:36:31 05/12/23	EXTRA PATROL
21:02:00 05/12/23	EXTRA PATROL
21:34:18 05/12/23	TRAFFIC STOP
21:41:38 05/12/23	TRAFFIC STOP
21:44:03 05/12/23	TRAFFIC STOP
22:00:31 05/12/23	TRAFFIC STOP
23:36:22 05/12/23	WARRANT ARREST
00:25:17 05/13/23	DISTURB PEACE
03:11:52 05/13/23	TRAFFIC HAZARD
10:21:43 05/13/23	TRAFFIC STOP
10:44:17 05/13/23	TRAFFIC STOP
13:10:03 05/13/23	PARKING COMPLNT
13:39:04 05/13/23	FOOT PATROL
13:52:06 05/13/23	FOOT PATROL
15:11:18 05/13/23	INSPECTION VIN
15:51:48 05/13/23	TRAFFIC STOP
16:05:55 05/13/23	CIVIL MATTER
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23:38:01 05/17/23	EXTRA PATROL
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22:25:43 05/24/23	FOOT PATROL
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TRAFFIC STOPS	127
CALLS FOR SERVICE	445
TOTAL CALLS FOR SERVICE	572

Memo



To: City Council
From: Nathan Stewart, Public Works Director
CC: Anette Spickard, City Manager
Date: 5/31/2023
Re: Monthly Department Report – May 2023

1. Administration & Engineering

Development Engineering Reviews:

Engineering approval of six land-use applications in May. Engineering review and comments were provided on nine new land-use applications in May.

Sign Inventory:

Engineering and Streets staff are working together to inventory street signs around town. This will help future calls to the Police Department regarding speed limits and to show compliance with MUTCD standards.

Mission Street Reconstruction Project:

The updated final design by Forsgren Engineers has been submitted to LHTAC and the City for review. Conversations are continuing with LHTAC on progressing the project for a construction year earlier than 2027, as currently listed by LHTAC. Construction timing is contingent on federal appropriations.

Southeast McCall Buildout Transportation Recommendations:

Work session with Council was conducted on 4/28. Council advised staff to finalize report and present it for formal adoption (via resolution) as a supporting planning document to the 2018 Transportation Master Plan at a future meeting.

Lead and Copper Documentation:

Engineering is collaborating with the Water Department to evaluate and document the water distribution system and compliance with EPA's lead and copper rules.

PW Facility Plan Implementation:

All hardware has been installed. YMC is still working through control issues and a final completion inspection is planned for May.

Library Reconstruction Project Management:

April construction activities were delayed due to onsite snow conditions. CM spent most of the month removing snow from the foundation trenches and ensuring a safe work zone given the saturated soil conditions. Foundation work commenced during the last week of April. City approved a change order to add in plumbing stub-outs to first floor meeting room and “Makers” space. Staff worked with Ratio on furniture, fixtures and equipment phasing, budgets, and utilization of existing equipment.

City ADA Transition Plan:

Engineering staff met with Vitruvian and other staff for a formal ADA training and workshop.

Downtown Core PH-3A:

In May a pre-construction meeting was held and the proposed start time for construction potholing is June 5th with construction activities starting shortly after.

Downtown Core PH-3B Final Design:

Engineering staff met with Horrocks Engineers to review/evaluate (60%) preliminary design plans. Final design plans will be submitted to the city later in early June. Project will be constructed in 2024.

2. Streets**Davis Street, Thompson, Spring Mountain Blvd. Road Reconstruction and Water Main Replacement Project:**

All projects have started construction. Spring Mtn Blvd is set to be finished sometime in June.

LHTAC Classes:

Employees have finished their required classes for the season.

Pothole Repair:

This will continue throughout the season.

Gravel Repair: Weather permitting (no rain or snow) crews have been out repairing potholes on the gravel shoulders and the gravel roads.

Sweeping: Road sweeping has started while the temps stay above freezing. This will continue into the month of June. Please remember this involves training all the new employees.

Sign Repair: Crews are repairing street signs & posts that were damaged during winter.

Annual Painting Project: Due to cooperation with the weather, staff was able to get a head start on the painting project. As well as training all new employees. This will continue into the month of June. Main line striping contractor is tentatively scheduled for the 2nd or 3rd week of June.

Gravel Road/Dust Abatement: Dust abatement was delivered the last week of May. This project will start sometime in June, weather permitting.

3. Water Distribution

Employee Recruitment:

The Water Department is seeking to hire 2 new water operators and a new Water Distribution Superintendent. The current staff total is 4 Water Operators and 1 Water Systems Manager.

Meter Change Out:

Residential meter and continued large meter change out has begun with a goal of all large meters changed out in 2023 and at least 300 residential meters. During the month of May staff were able to replace 46 residential and large meters.

Normal Callouts:

181 Dig lines, 10 New Meter Install, 39 Turn on/off's, 1 High Usage Check, 1 Water Pressure Check, 2 Leak Checks, 7 MXU Replaced.

East Deinhard Watermain:

Staff is putting together a change order request to City Council (6/8) to approve the upsizing of the undersized 8" main in E Deinhard while the roadway is under construction. This main is one of the main water distribution facilities to the West side of town. Water Modeling Consultants have recommended upsizing to a 16" water main.

4. Water Treatment

Petroleum Spill Response:

In response to the petroleum spill in Payette Lake and elevated conductivity readings in the raw water from Legacy Intake Station, pumping operations have been moved to Davis Beach. Samples have been taken from the raw water line and water treatment plant effluent as well as from the lake at Bear Park and Legacy Beach.

Employee Recruitment:

The Department is recruiting for the Water Treatment Plant Manager. Advertising for that position will occur this, Summer. All WTP operations are currently being managed by the Water System's Manager.

Davis Beach Intake Station Improvements:

City Council awarded construction contract to Dalrymple Construction Services. Project will install energy saving and performance enhancing variable frequency drives (VFDs), replace the roof, and install new siding on this intake station.

Organizational Restructuring:

Water Systems Manager, in collaboration with PW Director and Human Resources is reevaluating the organizational structure for the Water Department to ensure appropriate distribution and treatment staffing, as well as technical staff (i.e., instrumentation) are in place in advance of recruiting for the Water Treatment lead operator/Manager position. Impacts to overall departmental budget will also be considered.

Water Treatment Plant Operations Consulting:

Del DeBoer with AE2S Engineering spent a week getting familiar with the plant calibrating the chemical feed systems and writing up the initial Standard Operating Procedures. Continuing with the optimization already started by the WSM working with the chemical feed equipment and SCADA to dial in accurate dosing. Also working through the backwash procedure to identify Unit Filter Run times as another indicator of backwashing. He worked with the WSM to identify possible ways to run the plant less like a booster pump station and more like a traditional water treatment facility.

**McCALL CITY COUNCIL
AGENDA BILL**

216 East Park Street
McCall, Idaho 83638

**Number AB 23-116
Meeting Date June 8, 2023**

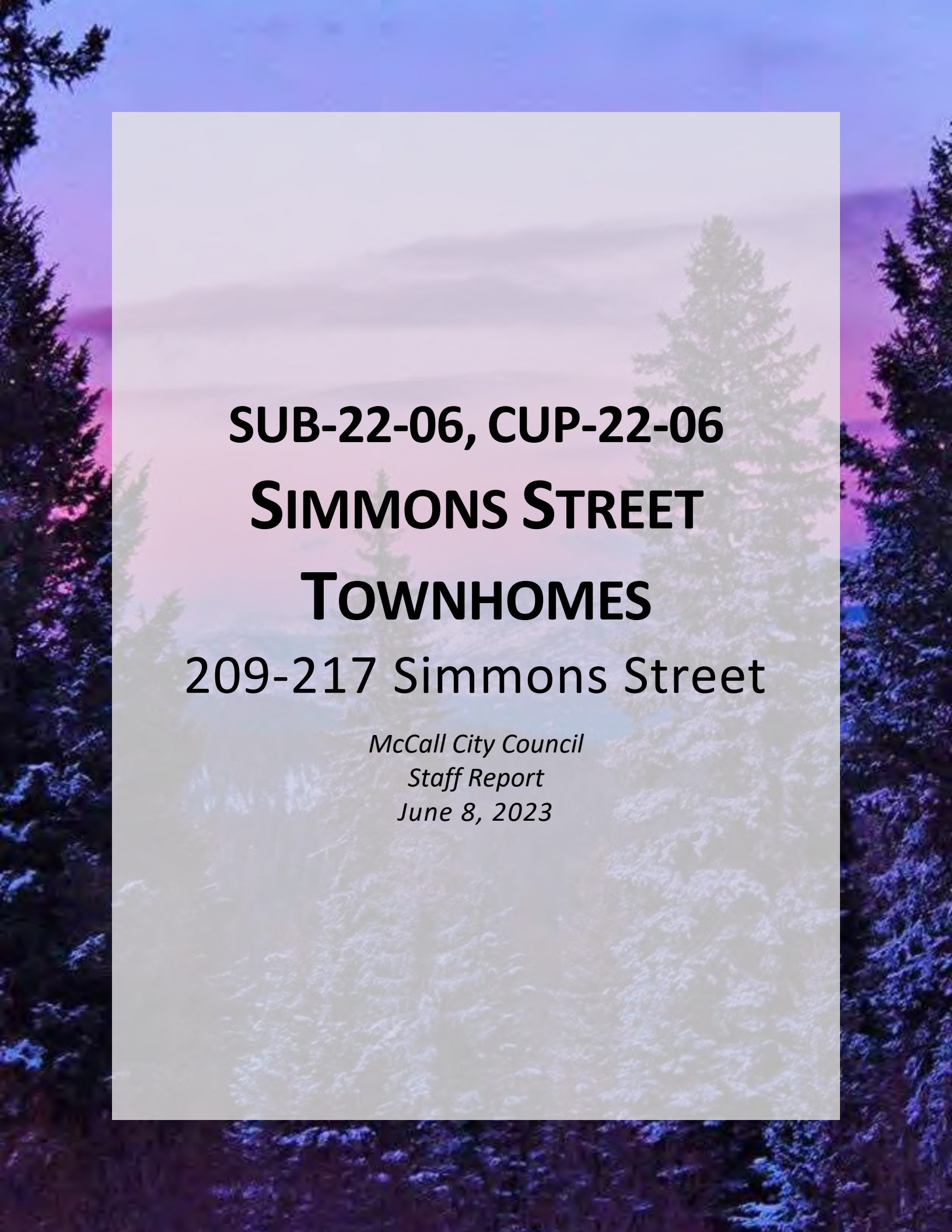
AGENDA ITEM INFORMATION				
SUBJECT:		<i>Department Approvals</i>	<i>Initials</i>	<i>Originator or Supporter</i>
<i>Environmental Protection Agency Presentation and Discussion on the Cinnabar Mine Site</i>		Mayor / Council		
		City Manager		
		Clerk	<i>HW</i>	Originator
		Treasurer		
		Community Development		
		Police Department		
		Public Works		
		Golf Course		
COST IMPACT:		Parks and Recreation		
FUNDING SOURCE:		Airport		
		Library		
TIMELINE:		Information Systems		
		Grant Coordinator		
SUMMARY STATEMENT:				
<p>The Cinnabar Mine, located approximately 15 miles from Yellow Pine in the Payette National Forest, is a former mercury mine that is a significant source of mercury contamination in the area. Elevated concentrations of mercury have been found in surface water, sediment, and fish in the effected watershed, which includes popular fishing destinations for tribal members and non-tribal recreational fishers. The Environmental Protection Agency (EPA) conducted a site assessment in 2017 to understand how mercury is migrating throughout the environment, and the agency has completed three partial cleanup actions at the site (in 1996, 1998, and 2004). However, to address site contamination comprehensively, a more complex, large-scale resource intensive investigation and analysis of cleanup options that preserve the natural environment while removing or mitigating the migration of contaminations is required. Due to the scale of such an effort, EPA is considering placing the Site on the National Priorities List (NPL), using the Comprehensive Environmental Compensation and Liability Act (also known as Superfund) to obtain the necessary funding and authority to address sources of contamination.</p>				
RECOMMENDED ACTION:				
None – Presentation only				
RECORD OF COUNCIL ACTION				
MEETING DATE	ACTION			

**McCALL CITY COUNCIL
AGENDA BILL**

216 East Park Street
McCall, Idaho 83638

**Number AB 23-121
Meeting Date June 8, 2023**

AGENDA ITEM INFORMATION				
<p>SUBJECT: <i>Request to Approve Subdivision Preliminary Plat (SUB-22-06) and Conditional Use Permit (CUP-22-06) – Simmons Street Townhomes for Steve Callan at 209-217 Simmons Street</i></p> <p>PUBLIC HEARING Cont'd</p>		<i>Department Approvals</i>	<i>Initials</i>	<i>Originator or Supporter</i>
		Mayor / Council		
		City Manager		
		Clerk	<i>SCW</i>	
		Treasurer		
		Community Development	BP	Originator
		Police Department		
		Public Works		
		Golf Course		
		Parks and Recreation		
COST IMPACT:	N/A	Airport		
FUNDING SOURCE:	N/A	Library		
TIMELINE:	N/A	Information Systems		
		Grant Coordinator		
<p>SUMMARY STATEMENT:</p> <p>An Application for a Subdivision Preliminary Plat, Conditional Use Permit, Design Review, and Scenic Route Review to construct a 5-unit, mixed-use townhouse project including commercial workshop space on the ground floor and residential space on the upper floor.</p> <p>During their regularly scheduled February 7, 2023 meeting, the McCall Area Planning & Zoning Commission unanimously recommended approval of the Subdivision Preliminary Plat and Conditional Use Permit to the McCall City Council and approved the associated Design Review and Scenic Route Review applications.</p> <p>The Staff Report, Draft Findings of Fact, Conclusions of Law, and Decision, and application materials are attached.</p>				
<p>RECOMMENDED ACTION:</p> <ol style="list-style-type: none"> Continue the public hearing. Approve SUB-22-06 and CUP-22-06 for Steve Callan, adopt the Findings of Fact, Conclusions of Law, and Decision, and authorize the Mayor to sign all necessary documents. 				
RECORD OF COUNCIL ACTION				
MEETING DATE	ACTION			
May 25, 2023	Continue public hearing to June 8, 2023			



SUB-22-06, CUP-22-06
SIMMONS STREET
TOWNHOMES
209-217 Simmons Street

*McCall City Council
Staff Report
June 8, 2023*

Executive Summary

Description

An Application for A Subdivision Preliminary Plat, Conditional Use Permit, Design Review, and Scenic Route Review to construct a 5-unit, mixed-use townhouse project including commercial workshop space on the ground floor and residential space on the upper floor.

Discussion

- The applicant is proposing to create a five (5) unit mixed use townhouse development. The ground floor is intended to be industrial warehouse space, with connected residential dwelling units above. Pursuant to McCall City Code Section 3.5.02, multi-family dwelling units are conditionally permitted in the I - Industrial zoning district so long as they are part of a mixed use development.
- The application is for a re-platting of a portion of Riverside Subdivision. Riverside Subdivision was platted in 1951 and includes parcels below the minimum lot size and public rights-of-way less than the minimum width for their roadway classification based current McCall City Code Requirements. The subject property is Lots 5-9, Block 2 of Riverside Subdivision, which are only accessible by either a fourteen foot (14') wide alley or Simmons Street, which has a right-of-way width of 25 feet. As the minimum right-of-way width for a local public or private street is sixty feet (60'), the site cannot be adequately served by a permissible street. On it's own, the proposed development would be eligible to be served by a private driveway as it is creating five (5) lots of 10,000 square feet or less. However, the property to the north of the subject property is also likely to utilize Simmons Street for access, should it redevelop in the future. It is very unlikely that Simmons Street would be extended beyond the subject property as there is currently a very substantial grade change just to the south of the site. As such, the appropriate designation for Simmons Street should be a private street. Prior to the submittal of a final plat and final development plan application, the applicant should vacate the existing Simmons Street right-of-way, and replat a sixty-foot (60') private right-of-way to provide vehicular access to the subject property.
- The draft CC&Rs state "The Association does not allow short term rentals of any type."

McCall Area Planning and Zoning Commission Recommendation:

During their regularly scheduled February 7, 2023 meeting, the McCall Area Planning & Zoning Commission unanimously recommended approval of the Subdivision Preliminary Plat and Conditional Use Permit to the McCall City Council and approved the associated Design Review and Scenic Route Review applications.

Conditions of Approval

	Prior to	Condition	Recommended Contact
1.	Any site work or disturbance	The applicant shall receive final engineering approval	Staff Engineer
2.	The issuance of a building permit for any lot	Proof of sewer permit shall be required	Payette Lakes Recreational Water and Sewer District
3.		The final plat shall be recorded	City Planner

4.	The submittal of a final plat application	The applicant shall vacate the existing Simmons Street right-of-way	City Planner
5.	Execution and Recordation of the Subdivision Final Plat	The applicant shall construct all required street improvements and underground the overhead utility lines and shall obtain final approval of these aspects from the City of McCall. Alternatively, the applicant shall obtain approval of an Escrow Agreement with the City and shall provide financial assurances for any deferred improvements.	City Planner
6.		The applicant shall provide digital files of the plat in accordance with the McCall Digital Data Submission Standards.	Staff Engineer
7.		All easements shall be indicated on the final plat and shall be formally documented with signed declarations and recorded with the plat.	Staff Engineer

Expirations

1. Pursuant to McCall City Code (MCC 9.2.06.H), preliminary subdivision plat approval shall lapse and become void whenever the applicant has not applied for final plat approval within eighteen (18) months from the date of preliminary plat approval by McCall City Council. Alternatively, the applicant shall obtain approval of a Development Agreement with the City that details a phasing plan and completion timeline.

Other

1. A full set of as built (record) drawings of all improvements intended for public use and maintenance, including, but not limited to, water and sewer lines, and including also private and public streets, shall be furnished to the city for the permanent records of the city within sixty (60) days of completion of the construction.
2. The approval of the subdivision preliminary plat is conditioned upon the approval and execution of a subsequent vacation application. The approval of the vacation application is a discretionary action of the McCall City Council and is to be evaluated separately from this application.

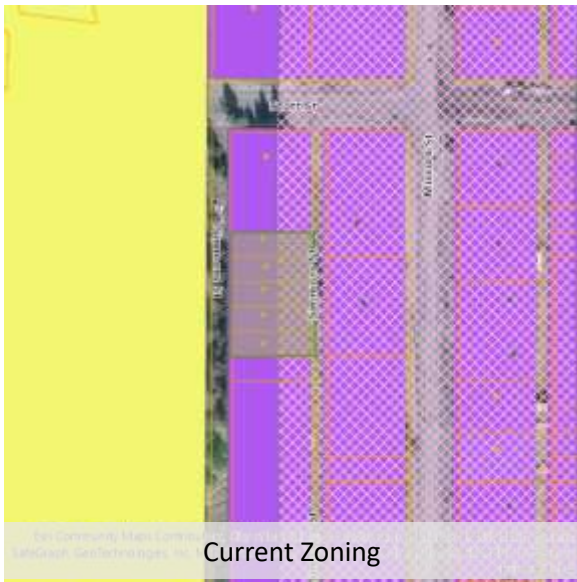
Project Location



Subject Property



Transportation



Current Zoning



Future Land Use

Project Analysis

Description

An Application for A Subdivision Preliminary Plat, Conditional Use Permit, Design Review, and Scenic Route Review to construct a 5-unit, mixed-use townhouse project including commercial workshop space on the ground floor and residential space on the upper floor.

Zoning District:	I Industrial
Comprehensive Plan Designation:	Industrial
Project Acreage:	15,133 square-feet
Proposed Use:	Ground level workshop space with residential above

Legal Description

Lots 5-9 of Block 2 of the Riverside Subdivision, situate in the W ½ of the NW ¼ of the SW ¼ of Section 16, T18N, R3E, B.M., City of McCall, Idaho.

Associated Documents

Application	Most Recent Revised Submittal Date
Planning & Zoning Commission Findings of Fact, Conclusions of Law, and Decision	March 7, 2023
Land Use Application	August 23, 2022
Application Narrative	August 23, 2022
Conditional Use Permit Criteria of Approval Responses	August 23, 2022
Building Plans	August 23, 2022
Topographic Survey	August 23, 2022
Landscaping Plan	August 23, 2022
Neighborhood Meeting Notes	August 23, 2022
Site Photos	August 23, 2022
Stormwater Application and Report	August 23, 2022
Building Elevations	April 14, 2023
Revised First Floor Plan	April 14, 2023
General Civil Plans	April 26, 2023
Snow Storage Plan	May 17, 2023
Draft HOA Bylaws	May 30, 2023
Draft CC&Rs	May 30, 2023
Proof of Ownership	May 30, 2023
Preliminary Plat	May 30, 2023

Public Noticing

Notice Type	Notice Date
Publication in the <i>Star News</i>	May 11, 2023
Mailing to property owners within 300 feet	May 8, 2023
Posting of the subject property	May 8, 2023

Prior Hearings

Hearing	Date	Action	URL
Pre Application	July 12, 2022	N/A	https://youtu.be/ZtxyFAH7sS0?t=1210
McCall Area Planning & Zoning Commission Meeting	February 7, 2023	Recommended Approval with Staff Recommended Conditions of Approval	https://youtu.be/rnytjLLjaB8?t=6067
McCall City Council	May 25, 2023	Continue to June 8, 2023 Meeting	https://youtu.be/UyeMF3hGyXE?t=755

Dimensional Standards

	Proposed	Required
Front Setback	32 feet, 10 inches	Greater than 10 feet
Rear Setback	12 feet	Greater than 10 feet
Side Yard Setback 1	10 feet	Greater than 10 feet
Side Yard Setback 2	10 feet	Greater than 10 feet
Lot Coverage (square-feet)	6,500 square feet	Less than 13,500
Lot Coverage (percent)	43%	Less than 90%
Snow Storage	4,520 square feet	Greater than 4,164 square feet
Building Height	33 feet	Less than 35 feet

Code Sections of Interest

- McCall Code Section 3.5.02: Industrial Zone Use Regulations:

Table 3.5.02 identifies “Dwelling, multi-family” as a conditional use in the I – Industrial zone, provided that it is a component of a mixed use project.

- McCall Code Section 3.8.061: Parking And Internal Circulation:

- (A) Purpose: To minimize the visual impacts of off-street parking and loading areas, to discourage large expanses of pavement, and to reduce the conflicts between different circulation needs, especially pedestrians.
- (B) Location:
1. On-site parking shall be located so that it does not dominate the streetscape and views from surrounding properties.
 2. When parking lots occur on sloping terrain, the parking lots shall be stepped to follow the terrain rather than allowing the lot surface to extend above natural grade.
 3. In the CC, CBD, NC, BP and CV Zones, multi-family residential uses in any zone, and conditional use permits for new uses in residential zones, all on-site parking shall be located on the side or behind the structure facing the primary street.
- (C) Landscaping And Screening:
1. Parking lot landscaping shall meet the objectives of reducing the visual and noise impacts from vehicles, softening the expanse of hard surface areas, reinforcing circulation, and providing stormwater benefits.
 2. For parking lots over fifty thousand square feet (50,000 sf) in size, a minimum of ten percent (10%) of the site shall be in interior parking lot landscaping. Public art, decorative paving, kiosks, green infrastructure or parking lot configurations that break-up the expanse of pavement may be substituted for interior landscaping.
 3. Landscaped areas shall be consolidated to enhance tree and plant material growing conditions that reflect the natural growing patterns of the native landscape, and to provide locations for snow storage, natural drainage, light fixtures and other utilities.
 4. Landscape materials shall consist of native trees, vegetation, including grasses, hardy shrubs, or evergreen ground cover, and maintained in good condition. (See City of McCall publication, "Native and Suitable Plants".)
 5. Where parking areas adjoin or face any residential property, the parking lot shall be effectively screened by an acceptably designed wall, fence, hedge berm or planting screen.
 - a. Fence or wall screens shall be not less than four feet (4') or more than six feet (6') in height except in street setback areas where it shall not exceed four feet (4').
 - b. Planting screens shall not be less than four feet (4') in height.
 - c. In the event that terrain or other natural features are such that the erection of such fence, wall or planting screen will not serve the intended purpose, then with the approval of the Administrator, in writing, no such fence, wall or planting screen and landscaping shall be required.
 - d. The use of chain link fencing in any residential zone, CBD and CC zones is prohibited. In all other zones, approval by the Administrator is required.
- (D) Parking Access:
1. Access driveways for parking areas or loading spaces shall be located in such a way that any vehicle entering or leaving such area shall be clearly visible by a pedestrian or motorist approaching the access or driveway from a public or private street.
 2. Any parking area (except approved residential driveways) shall be designed in such a manner that any vehicle leaving or entering the parking area from or onto a public or private street shall be traveling in a forward motion.
 3. Parking design that uses the street frontage as the access for an individual parking stall is prohibited.
- (E) Surfacing:

1. In the CC, CBD, NC, BP, I, AP and CV Zones, parking and loading spaces and driveways shall have an improved surface including asphalt, concrete, paving stones, grasscrete pavers bricks, or in the I Zone, other material that does not generate significant dust or other particulate matter in the air during ordinary use by wheeled equipment/vehicles.
 2. Any parking or loading area that is found to generate significant dust shall be required to mitigate by resurfacing and/or implementing a dust abatement program that is approved by the City Engineer.
 3. All parking or loading spaces or driveways accessing a public/private roadway shall include a formal approach apron consisting of asphalt, concrete, paving stones, or bricks. The apron shall extend entirely from the property/right-of-way line and connect to the adjoining roadway and shall not be less than fifteen feet (15') in length.
 4. In the AF, RR, RE, R1, R4, R8, and R16 Zones, and residential uses in any zone, parking and loading spaces may use other materials (such as gravel) that provide a stable driving surface under all weather and moisture conditions and during ordinary use by wheeled vehicles which prevents the raising of road dust or other like particulate matter into the air.
- (F) Internal Circulation: The design of internal circulation shall be integrated with the overall site design and adjacent properties, including the location of structures, pedestrian walkways and landscaping.
1. Pedestrian circulation shall be clearly identifiable using continuous sidewalks, separated walkways within parking areas and well-designed pedestrian crossings.
 2. Driveways, aisles and turnaround areas shall meet the standards for fire and refuse access.
 3. Bus pullouts may be required when a development is adjacent to an existing or planned bus stop.
- (G) Drainage: All parking and loading areas shall provide for proper drainage of surface water so as to prevent the drainage of such water onto adjacent properties or walkways.
- (H) Lighting: Any lights used to illuminate a parking lot shall be so arranged as to reflect the light away from the adjoining property. See chapter 14, "Outdoor Lighting", of this title.
- McCall Code Section 3.8.064: Driveways:
 - (A) Purpose:
 1. To set standards for driveway design that are safe, and accessible for fire safety equipment.
 2. To establish the minimum driveway width and setbacks necessary to reduce the impact on sidewalk crossings and protect the public right of ways.
 - (B) Driveway Width Standards: Unless authorized by the Public Works Director due to safety and traffic conditions, driveways widths shall be as follows:
 1. For a single-family dwelling unit and development in the CBD, driveways shall provide a minimum unobstructed width of twelve feet (12'), and a maximum width of twenty feet (20').
 2. For multi-family dwelling units and in the CC, NC, I, BP, AP, and CV zones, driveways shall provide a minimum unobstructed width of fourteen feet (14'), and a maximum width of thirty feet (30').
 - (C) Driveway Design:
 1. The maximum grade permitted shall be ten percent (10%) where a private driveway abuts a public or private street but must include a five foot (5') wide landing to the street

with a maximum grade of six percent (6%). Upon an administrative approval and in consultation with the McCall Fire Protection District, exceptions may be granted based on topographic constraints.

2. Residential driveways may provide access to more than one residential lot with adherence to these standards:
 - a. For lots of ten thousand (10,000) square feet or greater: two (2) residential lots.
 - b. For lots less than ten thousand (10,000) square feet in area: five (5) residential lots.
 - c. Driveways serving more than one residential lot shall be limited to a maximum length of one hundred feet (100').
 3. Driveways shall be setback five feet (5') from the property line and ten feet (10') between driveways or a distance determined by the Public Works Director to accommodate city snowplow operations.
 4. Only one (1) driveway access shall be allowed for each residential lot or parcel, unless approved by the Administrator.
- (D) Fire Safety Requirements:
1. Driveways longer than one hundred fifty feet (150') shall have a turnaround area and adhere to any other requirements determined by McCall Fire Protection District for fire safety.
 2. No part of the required fire lane width of any driveway in a multi-family development may be utilized for parking.
- (E) Shared Driveways:
1. Shared driveways between adjoining uses or lots are encouraged to reduce the number of driveway intersections with streets, minimize pavement and surface water runoff, and protect the natural terrain.
 2. The use of shared driveways shall be in accordance with the following standards:
 - a. Driveways accessing more than one residential dwelling unit shall be maintained by an owners' association or in accordance with a plat note.
 - b. Shared driveways or frontage streets may be required to consolidate access onto a collector or arterial street.
 - c. Access easements (for the benefit of affected properties) shall be a condition of land use or development approval and shall be recorded for all shared driveways. Digital data for easements shall be provided according to the digital data submittal standards policy.
 - d. Shared driveways are encouraged where the use would minimize grading and disruption on natural features. Shared driveways are not required when existing development patterns or physical constraints (e.g., topography, parcel configuration, or similar conditions) prevent extending the driveway with reciprocal access in the future.
- (F) Drive-up and drive-through uses and their queuing areas shall be oriented away from street rights of way and away from residential districts.

- McCall Code Section 3.8.15: Snow Storage And Drainage:

- (A) Where snow removal and storage may pose a problem to traffic circulation or reduce the amount of adequate parking for winter business, the developer of the property shall designate a snow storage area and remove snow as necessary.
- (B) Required Area: Snow storage areas not less than thirty-three percent (33%) of the parking, sidewalk and driveway areas shall be incorporated into the site design.

(C) Location:

1. Snow storage may only use landscape areas that are planted with salt tolerant and resilient plant materials that can tolerate the weight of stacked snow.
2. Snow storage may use up to thirty-three percent (33%) of the required parking areas.
3. Snow storage areas shall be located to avoid piling of snow against existing significant trees.

(D) See also the requirements of sections 3.3.041 and 9.3.08 of this code.

- McCall Code Section 9.2.092: Agreements:

The applicant for a townhouse development shall submit with the preliminary plat application and all other information required herein a copy of the proposed party wall agreement and the proposed document(s) creating an association of owners of the proposed townhouse sublots, which shall adequately provide for the control (including billing where applicable) and maintenance of all common utilities, commonly held facilities, garages, parking and/or open spaces. Prior to final plat approval, the applicant shall submit to the city a final copy of said party wall agreement and any other such documents and shall record said documents prior to recordation of the plat, which plat shall reflect the recording instrument numbers thereupon.

- McCall Code Section 9.3.04: Streets:

(A) The arrangement, character, extent, width, grade, profile, location, and other specifications of all streets shall conform to adopted standards and policies, and shall be considered in their relation to existing and planned streets, topographic conditions, to public convenience or safety, and in their appropriate relation to the proposed uses of the land to be served by such streets 1 . The minimum street right of way width in the city shall be sixty feet (60') for minor streets, seventy feet (70') for collector streets, and eighty feet (80') for arterial streets, whether public or private. A lesser width for some private streets may be permitted. However, street right of way widths within the impact area shall not be less than seventy feet (70') or as specified by the county. The commission will decide which streets will become arterial or collector after considering adopted master plans, the comprehensive plan, and applicable provisions of this title and title III of this code. The right of way for collector and arterial streets shall not be private property, but must be dedicated; where the actual collector or arterial use of the right of way is in the judgment of the commission not a near-term use, the commission may authorize interim construction as a private roadway without public maintenance for a term not to exceed three (3) years.

(B) All streets and alleys within any subdivision shall be dedicated for public use.

(C) The arrangement of streets in a subdivision shall either:

1. Provide for the continuation or appropriate projection of existing principal streets in surrounding areas; or
2. Conform to a plan for the neighborhood approved or adopted by the council to meet a particular situation where topographic or other conditions make continuance of or conformance to existing streets impracticable.

(D) Where a subdivision abuts or contains an existing or proposed arterial street, the city may require marginal access streets, frontage streets, shared driveways, reverse frontage streets, or similar treatment necessary for adequate protection of residential properties.

- (E) Where a subdivision borders on or contains a railroad right of way or limited access highway right of way, the city may require a street approximately parallel to and on each side of such right of way, at a distance suitable for the appropriate use of the intervening land.
- (F) Reserve strips controlling access to streets shall be prohibited except where their control is placed in the city under conditions approved by the council.
- (G) Street layout shall conform to the most advantageous development of adjoining areas and the entire neighborhood, and shall provide for the following:
 - 1. Adequate access to adjoining lands to facilitate future subdivisions of such land.
 - 2. Appropriate contribution to the incremental creation of a connected network of streets and circulation within the city and impact area.
 - 3. Implementation of the comprehensive plan.
 - 4. Streets intersecting at right angles, or as nearly as possible. Where possible, four-way intersections shall be used.
 - 5. Half streets shall be prohibited, except where essential to the reasonable development of the subdivision in conformity with the other requirements of these regulations and where the council finds it will be practicable to require the dedication of the other half when the adjoining property is subdivided. In all other instances where a half street is adjacent to an undeveloped tract, the other half of the street shall be platted within such tract.
 - 6. No street names shall be used which will duplicate or be confused with the names of existing streets in any town or county area. Street names shall be subject to the approval of the administrator. Street names, where the street continues across an intersection, shall normally be continuous.
 - 7. If street trees are required by the commission to be installed, the minimum standard shall be of two inch (2") caliper, forty feet (40') to sixty feet (60') apart. Trees or shrubs placed within twenty five feet (25') of a street corner shall not obstruct clear vision of and across the corner between three feet (3') and eight feet (8') above the ground level of the traveled way. Tree species are subject to the approval of the city arborist.
 - 8. Cul-de-sacs and other discontinuous streets shall generally be avoided in favor of a connected network.
 - 9. Cul-de-sac streets, designed to be permanent, shall not be longer than nine hundred feet (900') when measured from the intersection line of the cross street to the center of the cul-de-sac, and shall be provided with a turnaround with a right of way diameter of at least one hundred twenty feet (120') and a paved roadway of at least ninety feet (90'). Cul-de-sac streets shall be private streets, to be maintained by the owners of the subdivision. The city may require pedestrian accessways connecting cul-de-sac streets to adjacent streets, rights of way, or open space. (See section 9.6.05 of this title.)
 - 10. Emergency access streets, which are designed to alleviate excessively long cul-de-sac streets (or other conditions), require the approval of the commission and shall be private streets. The minimum right of way shall be forty feet (40').
- (H) Property lines at street intersections shall be rounded with a radius of twenty feet (20') or a greater radius where the city may deem it necessary.
- (I) Street jogs with centerline offsets of less than one hundred twenty five feet (125') shall be avoided.
- (J) A tangent of at least one hundred feet (100') shall be introduced between reverse curves on arterial and collector streets.
- (K) Subdivisions or planned unit developments in excess of five (5) acres or twenty five (25) residential units must have at least two (2) points of access to public roads outside the

subdivision, if possible, for purposes of public safety and access by emergency vehicles. Where through roads are not possible, the developer shall provide stubbed out roads to the boundary of the subdivision or development at points established by the city. Preferably, the two (2) points of access will be located on opposite, or different, sides of the subdivision.

- (L) In the event an existing subdivision has only one point of access to an outside public street, then any future contiguous subdivision, whether by the same developer or a different developer, must provide for at least one additional point of access.

- McCall Code Section 9.3.08: Snow Storage And Drainage Easements:

- (A) Drainage Management Guidelines: The city has adopted drainage management guidelines to protect water quality in both Payette Lake, the North Fork of the Payette River, and other permanent streams. Those guidelines, as amended periodically, prescribe design criteria that shall govern the sizing and configuration of drainage structures, the location of easements, and design flows.
- (B) Snow Storage Areas: Wherever public parking, public or private streets, or other uses requiring the removal of snow are identified, the developer shall provide specific site locations protected for the storage of snow and the consequences of meltwater. If an off site location is identified, developer shall provide evidence of perpetual commitment, to be so designated on the plat, to allow the storage of snow. Snow storage areas shall be not less than thirty three percent (33%) of parking, sidewalk, and driveway areas. This area shall not be designated between any property line and setback line.
- (C) Owner Responsibility: It shall be the duty of the owner, or the representative of the owner or owners, of each parcel or real property within the city to clear off snow, and maintain free from snow, sufficient space on such real property as is necessary to meet the off street parking requirements, pedestrian and bike paths and transit facilities, for such parcel and structures thereon, as provided in section 3.8.06 of this code.
- (D) Parked Vehicles Impeding Snow Removal: Vehicles which are parked on any public street which impede the removal of snow from the driving surface by city crews are subject to removal and impoundment by the city.
- (E) Construction Plan: Developers shall provide a copy of a construction plan which is prepared in accordance with EPA's NPCES general permit for stormwater discharge from construction activity for all construction activity affecting more than one acre.
- (F) Disposal Of Snow On City Streets:
 1. It is unlawful for any person, firm or entity to dispose of snow on any city street. It is also unlawful to push snow across or onto any street for the purpose of disposing of the snow on other properties unless owned by the same.
 2. The phrase "dispose of snow" includes blowing, pushing, ramping, shoving or otherwise depositing snow on city streets.

- McCall Code Section 9.6.02: Improvement Requirements:

- (A) Streets: All streets in the subdivision must be platted and developed with a width, alignment, and improvements such that the street is adequate to accommodate existing and anticipated vehicular and pedestrian traffic and meets city standards for the appropriate functional classification. Streets shall be aligned in such a manner as to provide through and efficient access from and to adjacent developments and properties and shall provide for the

integration of the proposed streets with the existing pattern. Streets shall be aligned consistent with the comprehensive plan and applicable master plans.

1. Installation: Street, utility and requisite on site and off site improvements, as hereinafter listed, shall be installed in each new subdivision at the subdivider's expense, or their later installation at subdivider's expense as provided for in the development agreement.
 2. City Acceptance: The city shall not accept the dedication of any public rights of way, any easements shown on the plat, or any appurtenant facilities lying therein which are not improved, or construction thereof guaranteed in accordance with the provisions of this title, or with policies, standards, designs and specifications set forth in the road and street specifications adopted by the city, county, or state.
 3. Paving And Dedication: The subdivider shall construct paved streets in residential, commercial, business park or industrial subdivisions. All streets and alleys within any subdivision shall be dedicated for public use. (Ord. 885, 3-24-2011)
 4. Design Plans: Design plans for street construction and subdivision drainage shall be submitted to and approved by the city prior to construction. Subgrade construction must be approved before placing subbase course and subbase course approved before placing base course 1 . Digital data shall be provided according to the digital data submittal standards policy. (Ord. 899, 5-24-2012)
 5. Clearing Rights Of Way: The right of way beyond the limits of fill and back slopes shall be cleared to the extent and not beyond the extent required by the city upon request of the subdivider for direction, having regard for the safety of the traveling public and the appearance of the city.
 6. Materials Standards And Construction: The latest edition of "Idaho Standards For Public Works Construction" shall govern materials used in the streets and their placement.
 7. Street Design: Street design shall be in accordance with the most current version of the applicable American Association Of State Highway And Transportation Officials (AASHTO), the federal highways administration (FHWA), and the transportation research board (TRB) guidelines. Designers are specifically directed to the following manuals: a "Policy On Geometric Design Of Highways And Streets" (AASHTO), the "Manual On Uniform Traffic Control Devices" (FHWA), and the "Highway Capacity Manual" (TRB).
 8. Street Grade: The maximum permitted grade is six percent (6%). Grade may exceed six percent (6%), where necessary, by one percent (1%) (total 7 percent) for no more than three hundred feet (300') or two percent (2%) (total 8 percent) for no more than one hundred fifty feet (150'). Grades of up to ten percent (10%) may be permitted where the city and the fire chief are satisfied by reason of site topography and soils that a reasonable lesser grade alternative does not exist. No street may be artificially elevated over an underpass location merely to permit a private underpass.
 9. Snow Storage Easement: A snow storage easement of ten feet (10') shall be provided on both sides of any street with a right of way less than standard.
- (B) Street Name Signs: The developer shall provide and install all street name signs at all intersections per city standards. (Ord. 822, 2-23-2006, eff. 3-16-2006)
- (C) Street Lighting: Street lighting shall be placed at all intersections with arterial streets and within industrial, business park and commercial zones. Streetlights in residential areas are required at intersections with collector or arterial streets. All street lighting is to be in accordance with title III, chapter 14, "Outdoor Lighting", of this code. (Ord. 885, 3-24-2011)
- (D) Sidewalks: Sidewalks shall be provided with all new development or major exterior remodeling in the commercial zones, the CV zone and the residential R16 zone, and constructed to city standards. Where sidewalks or curb and gutter are constructed, a

- corresponding stormwater conveyance and treatment plan shall be required. The city has the authority to require sidewalks in any zone in which the subject property is along a route that leads to a pedestrian oriented destination (e.g., schools, parks, community centers, corner stores, etc.). All sidewalks shall accommodate anticipated pedestrian traffic, include street trees where required by the commission, be constructed per city standards and allow for impaired access. See the "City Of McCall Design Guidelines".
- (E) Drainage Facilities: Appropriate natural, storm, and melt water drainage and treatment facilities shall be provided, to include provisions for natural, storm and melt water drainage and treatment within street rights of way and other drainages on and through the property. Drainage facilities shall be constructed in accordance with best management practices under state and federal storm and melt water regulatory programs to which the city is subject, with the McCall drainage management guidelines and with other city plans in these regards. Off site improvements necessary for interconnection may be required of the developer as a condition of plat approval, or platting and development may be postponed until others provide such improvements.
 - (F) Water Supply: Connection to city water system is required for all developments within the city. The extension of water lines shall be at the developer's expense and shall have the capacity and placement necessary to serve property beyond the development. If the city requires a larger water main to accommodate future development than the size of the line required for the subdivision or development, the developer shall install the larger line size required by the city. Four inch (4") blowoffs for water lines shall be required at the terminus of all dead end water lines unless a standard fire hydrant is available, in which case a tee and valve shall terminate the line 2 . Water systems shall be designed in accordance with the "Ten State Standards" 3 .
 - (G) Area Of City Impact; Domestic Water Source: Developments within the area of city impact must provide for a domestic water source approved by Central district health.
 - (H) Sanitary Sewer: Connection to the city sewer system is required for all developments within the city. Connection to the Payette Lakes recreational water and sewer district sewer system is allowed for developments in the area of city impact or beyond or by special permission of the city. The extension of sewer lines shall be at the developer's expense and shall have the capacity and placement necessary to serve property beyond the development. If the city requires a larger sewer main or increased lift station capacity to accommodate future development than the size of the line required for the subdivision or development, the developer shall install the larger line and/or lift station required by the city 4 . Sanitary sewer systems shall be designed in accordance with the "Ten State Standards" 5 .
 - (I) Individual Septic Systems: Where lot size and soil conditions are appropriate, and where connection to an existing sanitary sewer system is deemed unreasonable by the commission, a development may install individual septic systems with the approval of Central district health. However, the development must anticipate future conditions and recognize a possible need for connecting to either the city or the Payette Lakes recreational water and sewer district facilities.
 - (J) Underground Dry Lines: The city may require the installation of dry water or sewer lines when the land being subdivided is in whole or pertinent part within that area identified as to be annexed to the city by the then current comprehensive plan, and is shown as to be provided with water or sewer, as the case may be, in adopted water or sewer master plans either within the city or the area of city impact. (Ord. 822, 2-23-2006, eff. 3-16-2006)
 - (K) Paved Pathways: Paved pathways shall be required where shown on an approved park or path plan (see the McCall area pathways master plan) or where deemed necessary by the

- administrator or commission to provide for safe and convenient access for students and the general public. Pathways shall be designed in accordance with the most current AASHTO guide for the development of bicycle facilities. Bicycle paths shall be a minimum of ten feet (10') of paved surface over six inches (6") of three-fourths inch (3/4") minus compacted gravel, separated from an adjacent street by a minimum of six feet (6'). Reduced width surface and separation will be considered if terrain or other conditions exist which could preclude the standard. Signs and bollards to prevent vehicular access shall be installed at path intersection with all streets. (Ord. 898, 5-10-2012)
- (L) Underground Power And Telephone: All power and telephone lines within the development must be buried, except transmission lines of such voltage as to make burial impractical in the opinion of the city based upon competent advice.
- (M) Underground Cable Requirement; Exception: Underground cable television service is required except where waived by the administrator because the property is too remote from existing service or planned expansions of service.
- (N) Landscaping: A landscaping plan is required which depicts ground cover, trees, shrubs, and other landscaping, and which provides for permanent irrigation. The plan shall be required for common areas, street dedications, and other dedications where natural vegetation was excavated, covered or otherwise disturbed during construction. Landscaped areas shall include fill and cut slopes. Homeowners' associations, where formed, shall be responsible for maintenance of vegetation and irrigation systems within common areas, street dedications, and other dedications. Vegetation within drainageways shall be designed to improve appearance, hold down dust, and to cleanse, but not obstruct, drainage, consistent with best management practices outlined in state and federal storm and meltwater programs to which the city is subject, and consistent with the McCall drainage management guidelines, and other city programs in these regards, all as established to the satisfaction of the city. See appendix B, on file in the office of the city clerk, for a plant listing.
- (O) Buffers: In order to enhance the rural and natural environment, buffers a minimum of five feet (5') in width shall be incorporated in the landscaping plan for all developments in all residential zones at the boundaries of subdivisions. These buffers will use natural features, including vegetation and terrain elements, which are common in the area. The buffers can also be designed to provide for area for the storage of snow or rain runoff. The intended purpose, however, is to provide some natural screening of the developed properties so as to soften the sightlines of residents and visitors when viewing the natural surroundings. The buffers shall be designed so that at plant maturity the total buffering width will be five (5) to ten feet (10') with a height of at least ten feet (10').
- (P) Irrigation Wells: Irrigation wells are allowed if the irrigation system meets the requirements for cross connection control established by the state of Idaho, where any occupied structure on the irrigated property is connected to city water, and the city receives payment for water connection.
- (Q) Drainage: Drainage must be provided.
1. Surface drainage shall be provided where a storm sewer is not present, according to the following standards and consistent with the best management practices described in the McCall drainage management guidelines. If flowing water is generally present, then standards shall be as directed by the city with an eye to both high water and risks of winter glaciations.
 2. Street side ditches shall drain to cross drains; the size of both is subject to approval by the city.

3. Cross drains at intersections shall be set back ten feet (10') from the property line or located as approved by the city.
 4. Driveway approach culverts shall be not less than fifteen inches (15") in diameter.
 5. A storm sewer may be employed where connection is possible to a properly sized storm sewer facility with appropriate treatment capability within three hundred feet (300'). If an existing facility is not available or is not capable of adequate treatment, stormwater shall be retained and treated on site before discharging at rates not to exceed predevelopment flows.
- (R) Building Numbers Required: All principal dwelling units or buildings shall have house or building numbers not less than four inches (4") tall, of a color contrasting with the color of the background and visible by day and night from the street at the point of driveway or other access from the street, or directly in front of the building.
- (S) Perimeter Walls, Gates And Berms: The city of McCall shall not approve any residential subdivision application that includes any type of perimeter wall or gate that restricts pedestrian or native animal or vehicular access to the subdivision, when traveling on approved rights of way. This regulation does not prohibit fences on or around individual residential lots. The city also does not permit any perimeter landscaped berm more than three feet (3') higher than the previously existing (original) grade. (Ord. 822, 2-23-2006, eff. 3-16-2006)
- (T) Perimeter Fencing: Perimeter fencing is fencing which encloses a property with more than two (2) residential units. Perimeter fencing which surrounds, or substantially surrounds, a residential subdivision shall be primarily constructed of natural materials, such as log poles or split rails. Perimeter fencing for residential developments shall have periodic openings to allow for the movement of larger wild animals, such as deer and elk, and shall be constructed so that the height of the top rail is no more than forty two inches (42") above grade and the minimum gap between the bottom rail and grade is fifteen inches (15"). Perimeter fencing proposed for a residential development is subject to the approval of the commission either as a part of the proposed subdivision or requested via a conditional use permit. Fencing, including gates, enclosing industrial, business park and commercial developments, or units within industrial and business park zones, shall require a conditional use permit. Perimeter fencing in zones CC, CBD, BP and I is not permitted except as a screen abutting residential properties and when conditionally approved to provide security for hazardous materials or operations.
- McCall Code Section 9.6.05: Private Streets:
 - (A) Private Streets Discouraged: Private streets are discouraged, and cause must be shown for their approval. The commission and council will decide in every case which streets, if any, are to be private. Normally, these will only be emergency access streets, cul-de-sac streets and streets to serve a maximum of ten (10) residential dwelling units, in which case the street is essentially an extended two-way driveway.
 - (B) Cul-De-Sac Streets: Cul-de-sac streets shall be allowed only if connectivity is not possible due to surrounding topography or existing platted development. A street right of way extended into unplatted areas shall not be considered a dead end or cul-de-sac street.
 - (C) Dedication: Private streets shall be dedicated to the public, devoted to public use, but the question of opening it as a public street or for public maintenance rests in the sound discretion of the council with respect to lands at the time inside the city limits, and the board with respect to lands at the time in the impact area.

(D) Construction:

1. Private streets shall be built to city standards or better with respect to structural material and section.
2. Private streets shall be built with an all weather and all season surface not less than twenty feet (20') wide.
3. Private streets shall be built in accordance with the international fire code, and along alignment and grades approved to handle the largest and heaviest equipment available to the city and McCall rural fire district.
4. Private streets shall have adequate and unencumbered ten foot (10') wide snow storage easements on both sides of the street, or an accessible dedicated snow storage easement representing not less than twenty five percent (25%) of the improved area of the private street.
5. Private streets, wherever possible, shall provide interconnection with other streets, subdivisions or other developments. (Ord. 822, 2-23-2006, eff. 3-16-2006)
6. In no case shall a gate be placed across private or public streets, except in:
7. Those cases where the street serves no more than two (2) residential units, or where, under the current zoning designation for the property, it could be developed or subdivided for no more than two (2) residential units; or
8. Those cases where a perimeter fence is approved for an industrial, business park or commercial development (see subsection 9.6.02(T) of this chapter). (Ord. 885, 3-24-2011)

(E) Responsibility, Enforcement, Penalty: Development documentation, including at least both a plat and covenants, shall make plain that:

1. Police, fire, ambulance, and other emergency services and public or private utilities have full access to private streets exactly as if they were public.
2. The owners' association shall maintain a full roadway width free of accumulation of snow and free of parked vehicles.
3. In the event of the failure of the association to comply in a timely manner with subsection (E)2 of this section, the city may clear snow and tow parked vehicles either with its own crews and equipment, or with specially hired crews and equipment.
4. In the event of either or both such city actions, the association shall be liable to the city in the amount of the cost to the city of doing the work, plus a civil penalty of the greater of:
5. One thousand dollars (\$1,000.00); or
6. Twenty percent (20%) of the total cost for doing the work.
7. The area designated for private streets shall be platted as a separate, unbuildable, parcel or as a dedicated access easement. When a private street is platted as an easement, a building envelope may be required in order to provide for adequate building setback.

(F) Access And Maintenance Requirements: Provisions shall be made for the future maintenance of and access to private streets as follows:

1. A plan and schedule for the future repair and maintenance of the private street and drainage facilities for the period of the expected lifetime thereof and a cost estimate therefor prepared by a licensed engineer in the state, together with a proposed method for funding the same, including, but not limited to, the creation and maintenance of a reserve fund for that purpose, shall be submitted to the city for review and approval prior to execution of the final plat by the city. The reserve fund is to be held and

disbursed by the owners' association for the express purpose of street maintenance within the subdivision.

2. The location of the private street shall be clearly depicted on the face of the plat which shall:
3. Act to convey to each lot owner within the subdivision to be served by the private street the perpetual right of ingress and egress over the described private street;
4. Provide that such perpetual easement shall run with the land; and
5. Provide that the restrictive covenant for maintenance of the private street cannot be modified and the owners' association or other entity cannot be dissolved without the express consent of the city.
6. Private street names shall not end with the word "Road", "Boulevard", "Avenue" or "Street".
7. Subdivisions with private streets shall provide three (3) additional parking spaces per dwelling unit for guest and/or overflow parking. These spaces may be located:
 - (G) Within the residential lot;
 - (H) Parallel spaces within the street parcel or easement adjacent to the travel lanes;
 - (I) In a designated guest parking area; or
 - (J) A combination thereof.
 - (K) Guest/overflow parking spaces are in addition to the minimum number of parking spaces required pursuant to section 3.8.06 of this code. No part of any guest/overflow parking spaces shall be utilized for snow storage.
 - (L) Council Order To Repair And Maintain Roads: The council may, in the reasonable exercise of its discretion, order the owners or the entity responsible for the maintenance of any private street approved in accordance with the provisions of this section to undertake such repair and maintenance activities as it may determine is necessary to protect the public health, safety, or welfare and make such expenditures from the funds reserved therefor. In the event that such owners or entities have exhausted a reserve fund for maintenance and the city determines that repairs are required, then the city may proceed with such repairs and debit the owners or entities for the entire costs involved. The owners or responsible entities shall, as a condition of approval of any such private street, be deemed to have agreed to comply with any such order and to reimburse the city all of its costs, including attorney fees, incurred in obtaining or enforcing any such order. Any order entered by the council pursuant to this subsection may be enforced by a court of competent jurisdiction, and the city shall be entitled to recover its costs and attorney fees incurred in connection herewith.

Required Findings Code Sections:

- McCall Code Section 3.13.03(B) Conditional Use Permit Standards:
Findings For Granting Permit: A conditional use permit shall be granted only if the commission finds that the use, as applied for, in fact will:
 1. Constitute a conditional use authorized in the zone involved.
 2. Be harmonious with and in accord with the general objectives and with any specific objectives of the comprehensive plan and/or this title.
 3. Be designed, constructed, operated and maintained to be harmonious and appropriate in appearance with the existing or likely character of the neighborhood, and that such use will not change the essential character of the surrounding area.
 4. Not be detrimental to the health, safety and general welfare of persons residing or working in the neighborhood of such proposed use.

5. Not cause any substantially harmful environmental consequences to any land or waters within the planning jurisdiction.
 6. Not create excessive additional public cost for public facilities and services, and will not be detrimental to the economic welfare of the community.
 7. Be served adequately by essential public facilities and services including highways, streets, police and fire protection, drainage structures, refuse disposal, water and sewer, and schools. The applicant may be required, as a condition of approval, to mitigate any deficient public service.
 8. Not involve uses, activities, processes, materials, equipment or conditions of operation that will cause unreasonable production of traffic, noise, smoke, fumes, glare, odors or other forms of pollution.
 9. Have vehicular approaches to the property so designed as not to create a detrimental interference with traffic on surrounding public or private thoroughfares, or adversely affect the pedestrian environment.
 10. Not result in the destruction, loss or damage of an important natural, scenic or historic feature.
 11. Be on a site of sufficient size to accommodate the proposed use, including the yards, open spaces, snow storage, walls, fences, parking areas, loading zones and design standards applicable.
 12. Have a minimal negative economic impact on the neighborhood or surrounding community.
- McCall Code Section 9.2.06(E): Review and Action, Preliminary Plat:

Commission Action: The commission shall review and approve, approve conditionally, recommend approval to the city council (or board), recommend approval to the city council (or board) with conditions, disapprove or table the preliminary plat for additional information. An application for preliminary plat which is accompanied by an application for annexation, rezoning, and/or planned unit development of the same property or a portion thereof shall be subject to recommendation for approval to city council (or board), recommendation for approval to the city council (or board) with conditions, disapproval, or tabling. All other preliminary plat applications shall be reviewed and approved, approved conditionally, disapproved or tabled. Approval or conditional approval of the preliminary plat by the commission shall be approval by the city (or county). If tabled, the application shall come before the commission at a date set in the motion to table the application. The action to table may not be appealed. In approving, recommending approval, conditionally approving, or recommending conditional approval of the tentative map, the commission shall find that the proposed subdivision, together with provisions for its design and improvements, is consistent with applicable general or specific plans as specified in title III of this code, this title, and the comprehensive plan. Upon the commission's recommendation for approval or disapproval, the application and plat, together with a complete copy of the commission's findings and report of action, shall be delivered to the council (or board). The commission shall deny approval of the preliminary plat if it makes any of the following findings:

1. The proposed plat is not consistent with applicable general and specific plans as specified in title III of this code, or this title, or the comprehensive plan.
2. The design or improvement of the proposed subdivision is not consistent with applicable general and specific plans.
3. The site is not physically suitable for the type of development.
4. The site is not physically suitable for the proposed density of development.

5. The design of the subdivision or the proposed improvements is likely to cause substantial environmental damage or substantially and avoidably injure wildlife or their habitat.
6. The design of the subdivision or the type of improvement is likely to cause serious public health problems.
7. The design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision. In this connection, the city (or county) may approve a plat if it finds that alternate easements for access or for use will be provided, and that these will be substantially equivalent to ones previously acquired by the public. This subsection shall apply only to easements of record or to easements established by judgment of a court of competent jurisdiction, and no authority is hereby granted to a legislative body to determine that the public at large has acquired easements for access through or use of property within the proposed subdivision.
8. The proposed subdivision is not in compliance with all other ordinances or laws of the city and/or county.

Comprehensive Plan Sections of Interest

- Vision in Motion – Our Vision:

McCall is a diverse, small town united to maintain a safe, clean, healthy, and attractive environment. It is a friendly, progressive community that is affordable and sustainable.

- Deep Dive – Future Land Use Designations – Industrial:

The Industrial land use designation is intended to provide for general industrial uses that will support a growing economy and yet are not detrimental to any abutting uses. Furthermore, industrial activities shall not interfere with the operation of the airport or any transportation facility. Industrial is an existing zone. *Implementing Zoning Districts: I*

Discussion

- The applicant is proposing to create a five (5) unit mixed use townhouse development. The ground floor is intended to be industrial warehouse space, with connected residential dwelling units above. Pursuant to McCall City Code Section 3.5.02, multi-family dwelling units are conditionally permitted in the I - Industrial zoning district so long as they are part of a mixed use development.
- The application is for a re-platting of a portion of Riverside Subdivision. Riverside Subdivision was platted in 1951 and includes parcels below the minimum lot size and public rights-of-way less than the minimum width for their roadway classification based current McCall City Code Requirements. The subject property is Lots 5-9, Block 2 of Riverside Subdivision, which are only accessible by either a fourteen foot (14') wide alley or Simmons Street, which has a right-of-way width of 25 feet. As the minimum right-of-way width for a local public or private street is sixty feet (60'), the site cannot be adequately served by a permissible street. On it's own, the proposed development would be eligible to be served by a private driveway as it is creating five (5) lots of 10,000 square feet or less. However, the property to the north of the subject property is also likely to utilize Simmons Street for access, should it redevelop in the future. It is very unlikely that Simmons Street would be extended beyond the subject property as there is

currently a very substantial grade change just to the south of the site. As such, the appropriate designation for Simmons Street should be a private street. Prior to the submittal of a final plat and final development plan application, the applicant should vacate the existing Simmons Street right-of-way, and replat a sixty-foot (60') private right-of-way to provide vehicular access to the subject property.

Comments

Agency

- City of McCall Public Works:

See attached letter dated January 13, 2023.

- Valley County Cartography Department:

In an email dated September 22, 2022, the Valley County Cadastral Specialist had the following comment:

“We look forward to reviewing a final plat prior to recording, if requested.”

- Central District Health:

See attached letter dated September 14, 2022.

- McCall Fire & EMS:

In an email dated September 19, 2022, the McCall Fire Chief provided the following comment:

“Mr. Callan has been working with me on this project. A fire hydrant will need to be added along Scott Street so that the building is within 400'. The building will need to have an automatic sprinkler system installed in accordance with the 2018 International Building Code, as determined by the City of McCall Building Official.”

- McCall Airport:

In an email dated September 14, 2022, the City of McCall Airport Manager requested that the applicant complete a FAA Notice of Criteria Approval Form and enter into an aviation easement.

Public

No public comments have been received to date.

Actions

McCall Area Planning and Zoning Commission Recommendation:

During their regularly scheduled February 7, 2023 meeting, the McCall Area Planning & Zoning Commission unanimously recommended approval of the Subdivision Preliminary Plat and Conditional

Use Permit to the McCall City Council and approved the associated Design Review and Scenic Route Review applications.

Conditions of Approval

	Prior to	Condition	Recommended Contact
1.	Any site work or disturbance	The applicant shall receive final engineering approval	Staff Engineer
2.	The issuance of a building permit for any lot	Proof of sewer permit shall be required	Payette Lakes Recreational Water and Sewer District
3.		The final plat shall be recorded	City Planner
4.	The submittal of a final plat application	The applicant shall vacate the existing Simmons Street right-of-way	City Planner
5.	Execution and Recordation of the Subdivision Final Plat	The applicant shall construct all required street improvements and underground the overhead utility lines and shall obtain final approval of these aspects from the City of McCall. Alternatively, the applicant shall obtain approval of an Escrow Agreement with the City and shall provide financial assurances for any deferred improvements.	City Planner
6.		The applicant shall provide digital files of the plat in accordance with the McCall Digital Data Submission Standards.	Staff Engineer
7.		All easements shall be indicated on the final plat and shall be formally documented with signed declarations and recorded with the plat.	Staff Engineer

Expirations

1. Pursuant to McCall City Code (MCC 9.2.06.H), preliminary subdivision plat approval shall lapse and become void whenever the applicant has not applied for final plat approval within eighteen (18) months from the date of preliminary plat approval by McCall City Council. Alternatively, the applicant shall obtain approval of a Development Agreement with the City that details a phasing plan and completion timeline.

Other

1. A full set of as built (record) drawings of all improvements intended for public use and maintenance, including, but not limited to, water and sewer lines, and including also private and public streets, shall be furnished to the city for the permanent records of the city within sixty (60) days of completion of the construction.
2. The approval of the subdivision preliminary plat is conditioned upon the approval and execution of a subsequent vacation application. The approval of the vacation application is a discretionary action of the McCall City Council and is to be evaluated separately from this application.

IN RE:)
)
SIMMONS STREET)
TOWNHOMES)
)
Subdivision Preliminary)
Plat,)
Conditional Use Permit,)
Scenic Route Review, and)
Design Review)
)
Application Number:)
SUB-22-06, CUP-22-06,)

**FINDINGS OF FACT, CONCLUSIONS OF LAW,
AND DECISION**

FINDINGS OF FACTS

Applicant: Steve Callan

Representative(s): Richard Wilmot, Chrysalis Architecture

Application: An Application for A Subdivision Preliminary Plat and Conditional Use Permit, to construct a 5-unit, mixed-use townhouse project including commercial workshop space on the ground floor and residential space on the upper floor.

Location: Lots 5-9 of Block 2 of the Riverside Subdivision, situate in the W ½ of the NW ¼ of the SW ¼ of Section 16, T18N, R3E, B.M., City of McCall, Idaho.

Property Address: 209-217 Simmons Street

Public Notices: Newspaper: The Notice of Hearing was published in the *Star News* on May 11, 2023

Mailing: The Notice of Hearing was mailed by the applicant to property owners within 300 feet on May 8, 2023.

Posting: The Notice of Hearing was posted by the applicant on the subject property on May 8, 2023.

Procedural History:

A neighborhood meeting was held on August 16, 2022. A preliminary development plan review was conducted by the Planning and Zoning Commission on July 12, 2022. A public hearing before the Planning and Zoning Commission was held on October 4, 2022, which was continued to November 1, 2022, December 6, 2022, January 10, 2023, and February 7, 2023 at which point the Commission approved the Design Review and Scenic Route Review applications recommended approval of the Subdivision Preliminary Plat and Conditional Use Permit applications. A public hearing before the McCall City Council was held on May 25, 2023, which was continued to June 8, 2023, at which point the Council made their decision.

Zoning:

I - Industrial

Property Size:

0.35-acres

Dimensional Standards:

	Proposed	Required
Front Setback	32 feet, 10 inches	Greater than 10 feet
Rear Setback	12 feet	Greater than 10 feet

	Proposed	Required
Side Yard Setback 1	10 feet	Greater than 10 feet
Side Yard Setback 2	10 feet	Greater than 10 feet
Lot Coverage (square-feet)	6,500 square feet	Less than 13,500
Lot Coverage (percent)	43%	Less than 90%
Snow Storage	4,520 square feet	Greater than 4,164 square feet
Building Height	33 feet	Less than 35 feet

APPROVAL STANDARDS

Title III, Chapter 13

Conditional Use Permit

A Conditional Use permit shall be granted only if the Commission finds that the use, as applied for, will:

1. Constitute a conditional use authorized in the zone involved.

“Dwelling, multi-family” is identified in the Table of Permitted and Conditionally Permitted Uses within the Industrial included within McCall City Code Section 3.5.02 as a Conditional Use in the I - Industrial zone.

2. Be harmonious with and in accord with the general objectives and with any specific objectives of the comprehensive plan and/or this title.

The proposed use is in accord with the general objectives of McCall City Code Title III and the McCall Comprehensive Plan. Conditions of approval may be placed on the development to ensure compatibility with the specific objectives of the comprehensive plan and McCall City Code Title III.

3. Be designed, constructed, operated and maintained to be harmonious and appropriate in appearance with the existing or likely character of the neighborhood, and that such use will not change the essential character of the surrounding area.

The mixed use nature of the development is consistent with surrounding uses.

4. Not be detrimental to the health, safety and general welfare of persons residing or working in the neighborhood of such proposed use.

The proposed development is not anticipated to have significant health, safety, or general welfare impacts on the existing neighborhood.

- 5. Not cause any substantially harmful environmental consequences to any land or waters within the planning jurisdiction.**

The proposed development is not anticipated to cause undue harm to any land or waters within the planning jurisdiction.

- 6. Not create excessive additional public cost for public facilities and services, and will not be detrimental to the economic welfare of the community.**

The proposed expansion is not likely to create excessive public costs or be detrimental to the economic welfare of the community.

- 7. Be served adequately by essential public facilities and services including highways, streets, police and fire protection, drainage structures, refuse disposal, water and sewer, and schools. The applicant may be required, as a condition of approval, to mitigate any deficient public service.**

By constructing a new private street to City standards, the proposed development is likely to be adequately served by essential public facilities.

- 8. Not involve uses, activities, processes, materials, equipment, or conditions of operation that will cause unreasonable production of traffic, noise, smoke, fumes, glare, odors or other forms of pollution.**

No use involving unreasonable noise, smoke, fumes, glare, or odors is proposed.

- 9. Have vehicular approaches to the property so designed as not to create a detrimental interference with traffic on surrounding public or private thoroughfares, or adversely affect the pedestrian environment.**

The applicant is proposing to construct a private street to City standards to serve the subject property. The applicant is required to apply for a vacation of public right of way to construct the private street.

10. Not result in the destruction, loss or damage of an important natural, scenic or historic feature.

No impacts on natural, scenic, or historic features are anticipated to occur from this development.

11. Be on a site of sufficient size to accommodate the proposed use, including the yards, open spaces, snow storage, walls, fences, parking areas, loading zones and design standards applicable.

Adequate space exists on the property to accommodate the proposed use.

12. Have a minimal negative economic impact on the neighborhood or surrounding community.

No substantial negative impact on the neighborhood or surrounding community is anticipated.

Title IX, Chapter 2.06(E)

Subdivision Preliminary Plat Criteria

The commission shall deny approval of the preliminary plat if it makes any of the following findings:

1. The proposed plat is not consistent with applicable general and specific plans as specified in title III of this code, or this title, or the comprehensive plan.

The proposed plat and uses are consistent with the McCall Area Comprehensive Plan and McCall City Code.

- 2. The design or improvement of the proposed subdivision is not consistent with applicable general and specific plans.**

With the conditions of approval herein, the proposed improvements are consistent with the McCall Area Comprehensive Plan.

- 3. The site is not physically suitable for the type of development.**

The site is generally flat and well suited for development.

- 4. The site is not physically suitable for the proposed density of development.**

The site is generally flat and well suited for development.

- 5. The design of the subdivision or the proposed improvements is likely to cause substantial environmental damage or substantially and avoidably injure wildlife or their habitat.**

No substantial environmental damage or harm to wildlife is anticipated with this development.

- 6. The design of the subdivision or the type of improvement is likely to cause serious public health problems.**

No public health problems are likely to be caused by the proposed development.

- 7. The design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision. In this connection, the city (or county) may approve a plat if it finds that alternate easements for access or for use will be provided, and that these will be substantially equivalent to ones previously acquired by the public. This subsection shall apply only to easements of record or to easements established by judgment of a court of competent jurisdiction, and no authority is hereby granted**

to a legislative body to determine that the public at large has acquired easements for access through or use of property within the proposed subdivision.

The applicant is required to apply for a vacation of the public right of way for the currently undeveloped Simmons Street and re-plat a private street built to City standards.

8. The proposed subdivision is not in compliance with all other ordinances or laws of the city and/or county.

With the conditions of approval herein, the subdivision is generally in compliance with all City laws.

DEPARTMENT/AGENCY/PUBLIC COMMENTS

Agency –

- **City of McCall Public Works:**

See attached letter dated January 13, 2023.

- **Valley County Cartography Department:**

In an email dated September 22, 2022, the Valley County Cadastral Specialist had the following comment:

“We look forward to reviewing a final plat prior to recording, if requested.”

- **Central District Health:**

See attached letter dated September 14, 2022.

- **McCall Fire & EMS:**

In an email dated September 19, 2022, the McCall Fire Chief provided the following comment:

“Mr. Callan has been working with me on this project. A fire hydrant will need to be added along Scott Street so that the building is within 400’. The building will need to have an automatic sprinkler system installed in accordance with the 2018 International Building Code, as determined by the City of McCall Building Official.”

- **McCall Airport:**

In an email dated September 14, 2022, the City of McCall Airport Manager requested that the applicant complete a FAA Notice of Criteria Approval Form and enter into an aviation easement.

Public Comments:

No public comments received to date.

CONCLUSIONS OF LAW

1. The City of McCall has provided for the processing of Conditional Use Permits, authorized by Section 67-6512, Idaho Code, pursuant to Title III, Chapter 13 of McCall City Code.
2. The City of McCall has provided for the processing of Subdivision Preliminary Plat applications, authorized by Section 67-6513, Idaho Code, pursuant to Title IX, Chapter 2 of McCall City Code.

3. Adequate notice of the May 25, 2023 public hearing was provided, pursuant to Section 67-6512, Idaho Code and Title III, Chapter 15 of McCall City Code.
4. Upon compliance with the conditions noted below, the application meets the Conditional Use Permit Standards set forth in Title III, Chapter 13 of McCall City Code, Design Review Standards set forth in Title III, Chapter 16 of McCall City Code, and Subdivision Standards set forth in Title IX of McCall City Code.

DECISION

THEREFORE, the McCall City Council hereby **approves** these Conditional Use Permit and Subdivision Preliminary Plat applications, provided that the following conditions are met:

	Prior to	Condition
1.	Any site work or disturbance	The applicant shall receive final engineering approval
2.	The issuance of a building	Proof of sewer permit shall be required
3.	permit for any lot	The final plat shall be recorded
4.	The submittal of a final plat application	The applicant shall vacate the existing Simmons Street right-of-way
5.	Execution and Recordation of the Subdivision Final Plat	The applicant shall construct all required street improvements and underground the overhead utility lines and shall obtain final approval of these aspects from the City of McCall. Alternatively, the applicant shall obtain approval of an Escrow Agreement with the City and shall provide financial assurances for any deferred improvements.

6.		The applicant shall provide digital files of the plat in accordance with the McCall Digital Data Submission Standards.
7.		All easements shall be indicated on the final plat and shall be formally documented with signed declarations and recorded with the plat.

Expirations

1. Pursuant to McCall City Code (MCC 9.2.06.H), preliminary subdivision plat approval shall lapse and become void whenever the applicant has not applied for final plat approval within eighteen (18) months from the date of preliminary plat approval by McCall City Council. Alternatively, the applicant shall obtain approval of a Development Agreement with the City that details a phasing plan and completion timeline.

Other Requirements

1. A full set of as built (record) drawings of all improvements intended for public use and maintenance, including, but not limited to, water and sewer lines, and including also private and public streets, shall be furnished to the city for the permanent records of the city within sixty (60) days of completion of the construction.
2. The approval of the subdivision preliminary plat is conditioned upon the approval and execution of a subsequent vacation application. The approval of the vacation application is a discretionary action of the McCall City Council and is to be evaluated separately from this application.

Findings of Fact **adopted** this 8th Day of JUNE, 2023.

Robert S. Giles, Mayor

Attest:

BessieJo Wagner, City Clerk

STATE OF IDAHO,)
) : ss:
County of Valley)

On this _____ day of _____, 2023, before me, a Notary Public, appeared ROBERT S. GILES and BESSIEJO WAGNER, known, or identified to me to be the MAYOR and CITY CLERK, respectively, of CITY OF MCCALL that executed the said instrument, and acknowledged to me that they executed the same on behalf of THE CITY OF MCCALL.

(SEAL)

Notary Public for Idaho

McCall

IN RE:)
)
SIMMONS STREET)
TOWNHOMES)
)
Subdivision Preliminary Plat,)
Conditional Use Permit,)
Scenic Route Review, and)
Design Review)
)
Application Number:)
SUB-22-06, CUP-22-06,)
Dr-22-23, SR-22-15)

**FINDINGS OF FACT, CONCLUSIONS OF LAW,
AND DECISION**

FINDINGS OF FACTS

Applicant: Steve Callan

Representative(s): Richard Wilmot, Chrysalis Architecture

Application: An Application for A Subdivision Preliminary Plat, Conditional Use Permit, Design Review, and Scenic Route Review to construct a 5-unit, mixed-use townhouse project including commercial workshop space on the ground floor and residential space on the upper floor.

Location: Lots 5-9 of Block 2 of the Riverside Subdivision, situate in the W ½ of the NW ¼ of the SW ¼ of Section 16, T18N, R3E, B.M., City of McCall, Idaho.

Property Address: 209-217 Simmons Street

Public Notices: Newspaper: The Notice of Hearing was published in the *Star News* on September 15, 2022

Mailing: The Notice of Hearing was mailed by the applicant to property owners within 300 feet on September 19, 2022.

Posting: The Notice of Hearing was posted by the applicant on the subject property on September 19, 2022.

Procedural History: A neighborhood meeting was held on August 16, 2022. A preliminary development plan review was conducted by the Planning and Zoning Commission on July 12, 2022. A public hearing before the Planning and Zoning Commission was held on October 4, 2022, which was continued to November 1, 2022, December 6, 2022, January 10, 2023, and February 7, 2023.

Zoning: I - Industrial

Property Size: 0.35-acres

Dimensional Standards:

	Proposed	Required
Front Setback	32 feet, 10 inches	Greater than 10 feet
Rear Setback	12 feet	Greater than 10 feet
Side Yard Setback 1	10 feet	Greater than 10 feet
Side Yard Setback 2	10 feet	Greater than 10 feet
Lot Coverage (square-feet)	6,500 square feet	Less than 13,500
Lot Coverage (percent)	43%	Less than 90%
Snow Storage (Simmons Street)	Not Identified	Greater than 1,979 square feet
Snow Storage (Internal)	Not Identified	Greater than 2,142 square feet
Building Height	33 feet	Less than 35 feet

APPROVAL STANDARDS

Title III, Chapter 13

Conditional Use Permit

A Conditional Use permit shall be granted only if the Commission finds that the use, as applied for, will:

1. **Constitute a conditional use authorized in the zone involved.**

“Dwelling, multi-family” is identified in the Table of Permitted and Conditionally Permitted Uses within the Industrial included within McCall City Code Section 3.5.02 as a Conditional Use in the I - Industrial zone.

2. **Be harmonious with and in accord with the general objectives and with any specific objectives of the comprehensive plan and/or this title.**

The proposed use is in accord with the general objectives of McCall City Code Title III and the McCall Comprehensive Plan. Conditions of approval may be placed on the development to ensure compatibility with the specific objectives of the comprehensive plan and McCall City Code Title III.

3. **Be designed, constructed, operated and maintained to be harmonious and appropriate in appearance with the existing or likely character of the neighborhood, and that such use will not change the essential character of the surrounding area.**

The mixed use nature of the development is consistent with surrounding uses.

4. **Not be detrimental to the health, safety and general welfare of persons residing or working in the neighborhood of such proposed use.**

The proposed development is not anticipated to have significant health, safety, or general welfare impacts on the existing neighborhood.

5. Not cause any substantially harmful environmental consequences to any land or waters within the planning jurisdiction.

The proposed development is not anticipated to cause undue harm to any land or waters within the planning jurisdiction.

6. Not create excessive additional public cost for public facilities and services, and will not be detrimental to the economic welfare of the community.

The proposed expansion is not likely to create excessive public costs or be detrimental to the economic welfare of the community.

7. Be served adequately by essential public facilities and services including highways, streets, police and fire protection, drainage structures, refuse disposal, water and sewer, and schools. The applicant may be required, as a condition of approval, to mitigate any deficient public service.

By constructing a new private street to City standards, the proposed development is likely to be adequately served by essential public facilities.

8. Not involve uses, activities, processes, materials, equipment, or conditions of operation that will cause unreasonable production of traffic, noise, smoke, fumes, glare, odors or other forms of pollution.

No use involving unreasonable noise, smoke, fumes, glare, or odors is proposed.

9. Have vehicular approaches to the property so designed as not to create a detrimental interference with traffic on surrounding public or private thoroughfares, or adversely affect the pedestrian environment.

The applicant is proposing to construct a private street to City standards to serve the subject property. The applicant is required to apply for a vacation of public right of way to construct the private street.

10. Not result in the destruction, loss or damage of an important natural, scenic or historic feature.

No impacts on natural, scenic, or historic features are anticipated to occur from this development.

11. Be on a site of sufficient size to accommodate the proposed use, including the yards, open spaces, snow storage, walls, fences, parking areas, loading zones and design standards applicable.

Adequate space exists on the property to accommodate the proposed use.

12. Have a minimal negative economic impact on the neighborhood or surrounding community.

No substantial negative impact on the neighborhood or surrounding community is anticipated.

Title III, Chapter 16.07

Design Review Criteria

The commission shall determine the following before approval is given:

(A) The project is in general conformance with the comprehensive plan.

The project is in general conformance with the McCall Comprehensive Plan. Conditions of approval may be placed on the development to ensure compatibility with the specific objectives of the comprehensive plan.

(B) The project does not jeopardize the health, safety or welfare of the public.

The proposed development is not anticipated to have significant health, safety, or general welfare impacts on the existing neighborhood.

(C) The project conforms to the applicable requirements of the zoning ordinance and subdivision ordinance as enumerated in section [3.16.01](#) of this chapter.

The proposed use is in accord with the general objectives of McCall City Code Title III and the McCall Comprehensive Plan. Conditions of approval may be placed on the development to

ensure compatibility with the specific objectives of the comprehensive plan and McCall City Code Title III.

(D) The project will have no substantial impact on adjacent properties or on the community at large.

No substantial negative impact on adjacent properties or the community at large is anticipated with this development.

(E) If applicable, a subdivision design review document has been reviewed and approved by the commission in lieu of the design guidelines.

As the structure within the subdivision is a single townhouse structure, no additional subdivision design review documentation is required.

(F) For projects in the shoreline and river environs zone, the project will not have an unreasonable and adverse impact on the visual quality of its setting or the water quality.

N/A

(G) For projects in the scenic route zone, the project will preserve and enhance the scenic quality of the street or highway.

The project is located partially within the scenic route overlay zone, but is screened by existing structures.

Title IX, Chapter 2.06(E)

Subdivision Preliminary Plat Criteria

The commission shall deny approval of the preliminary plat if it makes any of the following findings:

- 1. The proposed plat is not consistent with applicable general and specific plans as specified in title III of this code, or this title, or the comprehensive plan.**

The proposed plat and uses are consistent with the McCall Area Comprehensive Plan and McCall City Code.

2. The design or improvement of the proposed subdivision is not consistent with applicable general and specific plans.

With the conditions of approval herein, the proposed improvements are consistent with the McCall Area Comprehensive Plan.

3. The site is not physically suitable for the type of development.

The site is generally flat and well suited for development.

4. The site is not physically suitable for the proposed density of development.

The site is generally flat and well suited for development.

5. The design of the subdivision or the proposed improvements is likely to cause substantial environmental damage or substantially and avoidably injure wildlife or their habitat.

No substantial environmental damage or harm to wildlife is anticipated with this development.

6. The design of the subdivision or the type of improvement is likely to cause serious public health problems.

No public health problems are likely to be caused by the proposed development.

7. The design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision. In this connection, the city (or county) may approve a plat if it finds that alternate easements for access or for use will be provided, and that these will be substantially equivalent to ones previously acquired by the public. This subsection shall apply only to easements of record or to easements established by judgment of a court of competent jurisdiction, and no authority is hereby granted to a legislative body to determine that the public at large has acquired easements for access through or use of property within the proposed subdivision.

The applicant is required to apply for a vacation of the public right of way for the currently undeveloped Simmons Street and re-plat a private street built to City standards.

8. The proposed subdivision is not in compliance with all other ordinances or laws of the city and/or county.

With the conditions of approval herein, the subdivision is generally in compliance with all City laws.

COMMISSION DELIBERATIONS

During deliberation, the Commission discussed and deliberated on the following:

1. The proposal meets all conditional use permit criteria.
2. As the applicant has indicated that short term rentals will not be permitted, they should be addressed through the subdivision CC&Rs.

DEPARTMENT/AGENCY/PUBLIC COMMENTS

Agency –

- **City of McCall Public Works:**

See attached letter dated January 13, 2023.

- **Payette Lakes Recreational Water and Sewer District (PLRWSD):**

See attached letter, dated September 26, 2022.

- **Valley County Cartography Department:**

In an email dated September 22, 2022, the Valley County Cadastral Specialist had the following comment:

“We look forward to reviewing a final plat prior to recording, if requested.”

- **Central District Health:**

See attached letter dated September 14, 2022.

- **McCall Fire & EMS:**

In an email dated September 19, 2022, the McCall Fire Chief provided the following comment:

“Mr. Callan has been working with me on this project. A fire hydrant will need to be added along Scott Street so that the building is within 400’. The building will need to have an automatic sprinkler system installed in accordance with the 2018 International Building Code, as determined by the City of McCall Building Official.”

- **McCall Airport:**

In an email dated September 14, 2022, the City of McCall Airport Manager requested that the applicant complete a FAA Notice of Criteria Approval Form and enter into an aviation easement.

Public Comments:

No public comments received to date.

CONCLUSIONS OF LAW

1. The City of McCall has provided for the processing of Conditional Use Permits, authorized by Section 67-6512, Idaho Code, pursuant to Title III, Chapter 13 of McCall City Code.
2. The City of McCall has provided for the processing of Design Review applications, pursuant to Title III, Chapter 16 of McCall City Code.
3. The City of McCall has provided for the processing of Subdivision Preliminary Plat applications, authorized by Section 67-6513, Idaho Code, pursuant to Title IX, Chapter 2 of McCall City Code.
4. Adequate notice of the October 4, 2022 public hearing was provided, pursuant to Section 67-6512, Idaho Code and Title III, Chapter 15 of McCall City Code.

5. Upon compliance with the conditions noted below, the application meets the Conditional Use Permit Standards set forth in Title III, Chapter 13 of McCall City Code, Design Review Standards set forth in Title III, Chapter 16 of McCall City Code, and Subdivision Standards set forth in Title IX of McCall City Code.

DECISION

THEREFORE, the McCall Area Planning and Zoning Commission hereby **approves** these Design Review and Scenic Route Review applications, and **recommends** these Conditional Use Permit and Subdivision Preliminary Plat applications for **approval** to the McCall City Council, provided that the following conditions are met:

1. Prior to any site work or disturbance, the applicant shall receive final engineering approval.
2. Prior to issuance of a building permit for any lot, proof of sewer permit shall be required.
3. Prior to scheduling a hearing with the McCall City Council, the applicant shall apply for a vacation application to vacate the existing public right-of-way for Simmons Street, and replat a sixty-foot (60') private right-of-way to provide vehicular access to the subject property.
4. Prior to scheduling a hearing with the McCall City Council, the applicant shall provide either a revised set of plans showing a minimum of one (1) square foot of snow storage area for every three (3) square feet of driveway and parking area, or a non-revocable agreement to store an equivalent amount of snow off site.
5. Prior to scheduling a hearing with the McCall City Council, the applicant shall provide a revised set of building plans either with the east garage doors removed, or with permanent curb stops or similar devices shown to prevent vehicles from driving out of the east garage doors.
6. Prior to scheduling a hearing with the McCall City Council, the applicant shall provide a revised preliminary plat identifying a private street right-of-way.

7. Prior to scheduling a hearing with the McCall City Council, the applicant shall provide authorization from all property owners impacted by the subject application. The form of the authorization is to be determined by the McCall City Attorney.
8. Prior to execution and recordation of the Subdivision Final Plat, the applicant shall construct all required street improvements and underground the overhead utility lines and shall obtain final approval of these aspects from the City of McCall. Alternatively, the applicant shall obtain approval of a Development Agreement with the City and shall provide financial assurances for any deferred improvements.
9. Pursuant to McCall City Code (MCC 9.2.06.H), preliminary subdivision plat approval shall lapse and become void whenever the applicant has not applied for final plat approval within eighteen (18) months from the date of preliminary plat approval by McCall City Council. Alternatively, the applicant shall obtain approval of a Development Agreement with the City that details a phasing plan and completion timeline.
10. Prior to execution and recordation of the Subdivision Final Plat, the applicant shall provide digital files of the plat in accordance with the McCall Digital Data Submission Standards.
11. Prior to execution and recordation of the Subdivision Final Plat, all easements shall be indicated on the final plat and shall be formally documented with signed declarations and recorded with the plat.
12. A full set of as built (record) drawings of all improvements intended for public use and maintenance, including, but not limited to, water and sewer lines, and including also private and public streets, shall be furnished to the city for the permanent records of the city within sixty (60) days of completion of the construction.


Findings of Fact **adopted** this 7th Day of MARCH, 2023.

DocuSigned by:

11F89FE13E9A402...

March 21, 2023 | 12:58 PM PDT

Robert Lyons, Chair
McCall Area Planning and Zoning Commission

Attest: DocuSigned by:

744967029FAE4A1...

March 21, 2023 | 1:58 PM MDT

Brian Parker, City Planner
City of McCall



City of McCall

Subdivision - Preliminary Plat Application

Date: 08/23/2022

Applicant / Owner

Applicant Name: Chrysalis Architecture +
Planning

Address:
City, State, Zip:
Phone:
Email:

Owner of Record Name: Steve Callan
Address: 385 Rio Vista Boulevard
City: McCall
State: Idaho
Zip: 83638
Phone: 208.941.7515
Email: steve.callan@hotmail.com
Invoice Email:

Owner of Record 2:
Address:
City:
State:
Zip:
Phone:
Email:
Invoice Email:

Property

Site Address: 209-217 Simmons Street
Legal Desc.: Lot 5 - 9 Block 2 of Riverside
Subdivision
Zoning District: I

Area: City Limits
Sewer: Payette Lakes Recreational
Water and Sewer
Square Footage: 15067

Contractor

Contact Name: Richard Wilmot
Business Name:
McCall License #:
Mailing Address:

Email: rw@chrysalis-
architecture.com
Phone: 208.596.1565
Idaho #:

Annexation Information

Annex Request:
Adjoining Land Use:
Parcel Split:
Parcel Adjoin:

Valley County:
Conditional Use:
Project Type: Other Mixed Use -
Townhouses and Commercial
Water: City Water
Neighbor Meeting: 2022-08-16

Description: (5) Single Family Attached, Townhouses with Commercial Business Space

Companion Applications

- | | | | |
|--------------------------------------|-------------------------------------|-----------------------------------|--------------------------|
| Record of Survey: | <input type="checkbox"/> | Subdivision (Final Plat): | <input type="checkbox"/> |
| Design Review: | <input checked="" type="checkbox"/> | Subdivision Minor Plat Amendment: | <input type="checkbox"/> |
| Scenic Route View: | <input type="checkbox"/> | Variance: | <input type="checkbox"/> |
| Shoreline and River Environs Review: | <input type="checkbox"/> | Rezone/Future Land/Comprehensive: | <input type="checkbox"/> |
| Conditional Use: | <input checked="" type="checkbox"/> | Zoning Code Amendment: | <input type="checkbox"/> |
| Development Agreement: | <input type="checkbox"/> | Annexation: | <input type="checkbox"/> |
| Planned Unit Develop (Prelim Plat): | <input type="checkbox"/> | Vacation: | <input type="checkbox"/> |
| Planned Unit Develop (Final Plat): | <input type="checkbox"/> | Land Use: | <input type="checkbox"/> |
| Subdivision (Prelim Plat): | <input checked="" type="checkbox"/> | | |

Details

- | | | | |
|-------------------------|--|---------------------|--|
| Existing Cover: | 15067 | Res Parcels: | 5 |
| Proposed Cover: | 15067 | Comm Parcels: | 5 |
| Open Space Sq.Ft.: | 3392 | Engineer Name: | Crestline Engineering - Gregg Tankersley |
| # of Parking: | 10 | Engineer Email: | gtankersley@crestline-eng.com |
| Max Grade %: | 1 | Engineer Phone: | 208.634.4140 |
| Average Grade %: | 1 | Pre-App Date: | 08/16/2022 |
| Total Acreage: | 0 | Condominiums: | No |
| Zoned Density: | 25 | Townhomes: | Yes |
| Proposed Density: | 14 | PUD Name: | |
| Total Exist Lot: | | Architect Name: | |
| Total Proposed Lot: | | Architect Email: | |
| Min Lot Frontage: | 26 | Architect Phone: | |
| Min Lot Size: | 2613 | Proposed Uses: | |
| Surveyor Name: | Crestline Engineering - Gregg Tankersley | Scenic Frontage: | |
| Surveyor Email: | gtankersley@crestline-eng.com | # of New Trees: | |
| Surveyor Phone: | | # of New Shrubs: | |
| Subdivision Name: | Riverside | Floodplain: | |
| Existing Parcels: | 5 | Shoreline Frontage: | |
| Proposed Parcels: | 5 | High Water Mark: | |
| New Construction Sq Ft: | 12695 | | |

Sign

- Proposed color palette:
 Total signage area existing:
 Total signage area proposed:
 Length of street facing wall in linear feet:
 Length of property frontage in linear feet:
 If multiple frontages, please add lengths from street 2:
 Sign Company:
 Proposed Lighting:

I do hereby certify that the information contained herein is true and correct.

Richard Wilmot

08/23/2022

Name

Date



August 20, 2022

City of McCall –
Community Development
216 East Park Street
McCall, Idaho 83638

Re: Conditional Use / Townhouse-Mixed use Subdivision Plat – **Project Description – Simmons Street Mixed Use - Townhouses / Commercial Space**

Dear Planner :

Thank you, for the opportunity to present our Conditional Use Application for (5) Mixed Use - Single Family Attached Townhouses on lots 5 through 9 on block 2 of Riverside Subdivision in the Lakefork Commercial Area. Our intention is to maintain a single-family residence above a commercially operated business below. Business types to be compatible with those uses allowed within the 'I' zone. The area is zoned 'I' – Industrial and currently, the lots are undeveloped grassland with a variety of small caliper evergreens and wild native grasses. The property to the North is owned by Scott Anderson who maintains the property and currently stores a World War II era display airplane along with a variety of other miscellaneous vehicles and equipment, we would consider this lot undeveloped. To our East and across the subdivision alley at 212 Mission Street is a utility commercial building, with metal wall cladding and standing seam metal roofing. The Southern property is an undeveloped cliff bank mostly favored for the benefit of City of McCall snow storage yard located at significant grade difference below our general property grade. The property to our West and across Simmons Street is commonly known as McCall RV Resort and is owned by Grapevine 7 Inc. The portion of the McCall RV Resort that is most adjacent to our proposed development appears to be under-going some grading improvements by way of installing compacted gravel and leveling of the area, likely for the ability to park additional guest trailers. The only significant development adjacent to our project is located at 212 Mission Street and from the provided photos has no direct building visual or access to the shared alley between our properties. The building located at 212 Mission Street accesses from Mission Street not from the shared alley. It further appears that utility improvements are being made along Scott Street (to the North), we also believe at some point those improvements will be extended towards the South along and through the alley, however the timeframe of this improvement is unclear and does not adversely effect our ability to complete the project.

The Lakefork Commercial Area is accommodative of a variety of unique uses such as a brewery, single family residential, utility commercial and leisure / recreational uses. All uses that are supportive of our proposed project creating a unique mixed-use district within the city of McCall. Via Mission Street, the district is connected to pathways for walking and biking providing good connectivity to McCall city center and nearby commercial / retail uses. The project is technically located along the Scenic Route based on the adjacent exhibit, however we believe the intent of this portion of the Scenic Route is to enhance the portion of the route directly along Mission Street not the periphery properties and therefore we request consideration to not comply with the Scenic Route requirements. Additionally, the project is located within the Airport Transitional Overlay and does not conflict with the airport approach and is currently designed to be less than the maximum allowed height. There are a number of other structures closer to the airport boundary that are taller than our proposal.

Each of the (5) single family attached townhouses will be provided with commercial work space at grade level with a shared grade level entry door accessing both the residential unit and the commercial space. We are assessing the viability of incorporating a rear (adjacent to the alley) garage door and will determine feasibility as the structural design develops. The townhouses will be 2-story, designed as an “upstairs” living concept to take advantage of the mountain views above the adjacent tree-lines and the ground level will be designed to accommodate most commercial uses allowed within the 'I' Industrial zone. Currently our model is designed around a 2 to 3 bedroom residence, however the arrangement will be dependent upon the individual purchaser. Each unit will be provided with a commercial workspace to use for business operations. The business operation is accommodated with large overhead doors for each unit giving the ability for enclosed commercial workspace

as well as (2) un-enclosed surface parking spaces for total of (2) parking spaces per townhouse. The parking area will have adequate space for on-site snow storage at the 33% coverage requirement. We have identified the snow storage zones on the provided site plan.


In terms of construction, we intend to build 2 of the units (the northernmost and southernmost) as the building is constructed, and will outfit the remaining units as the individual lots are purchased. The property is un-developed native grass-land without any significant landscape features, other than a variety of small caliper evergreen trees. We will improve the landscaped areas of the property as close to natural conditions as possible and accentuate with similar and native evergreen tree species. The building and site paving covers most of the property at about 77.4% lot coverage. All site and building lighting will be provided with cut-off deflectors to ensure light pollution is not shared to adjacent properties. Each entry door will be provided with a light above the entry door and soffit lighting above the exterior decks.

Our exterior design is meant to be representative of a “mountain modern” character by adorning the building with large scale deck support brackets, wood accents over sliding deck doors and a variety of pre-finished metal panel wall cladding. Most buildings constructed within the district area a combination of metal wall cladding and wood accent details. Our design proposal will be compatible with all surrounding developments.

Thank you for the consideration and we look forward to the review and approval of our Conditional Use Application for the Simmons Street Townhouses. Please contact our office if you have any further questions.

Sincerely,

CHRYSALIS ARCHITECTURE + PLANNING


Richard Wainnet - Principal Architect



August 20, 2022

City of McCall –
Community Development
216 East Park Street
McCall, Idaho 83638

Re: Criteria of Approval – **Responses – Simmons Street Mixed Use – Townhouses / Commercial**

Dear Planner :

Thank you, for the opportunity to present our responses to the Criteria of Approval, below you will find our responses.

1. Is the use a conditional use in the zone?

The Mixed Use Single Family Attached (townhouse) and Commercial use is a conditional use in the Industrial Zone.

2. Explain the relationship of the proposed used to the [Comprehensive Plan](#).

Housing is a critical goal and policy within the McCall Comprehensive plan. Goal 1, desires to Promote a variety of quality types for current and future residents. This proposal is unique due to its location and proximity to the Scenic route and contributing to the variety of mixed uses within the Industrial District.

Housing - Policy 1.2 allow for a distribution of variety of housing types throughout the City to expand the choices available. McCall is a recreational city and treasured for its access to the best of our natural environment. These unit are design to accommodate residential living, but also allow the residents to park and maintain their recreational vehicles within their attached garages. The units are accommodative of larger bay overhead doors to allow interior and enclosed parking within the building envelope. Housing – Policy 1.3 the neighborhood currently does not contain unique or historical homes or historical neighborhood features. This area of McCall is transitional and supportive of a project of this type with the possibility of encouraging similar future housing projects.

3. Explain how the application meets the general and specific [objectives of Title 3](#).

Section 3.1.02(B) Our proposal is contributing to the overall mixed use variety of the Industrial District.

We are encouraging use of the scenic route pathway systems, by expanding the reach at which residents access and utilize the scenic pathway.

Section 3.5.12 – All landscaping will be repaired and replaced with native grass and vegetation to match the existing character of the adjacent developments.

Section 3.5.14 – All outdoor lights will be down-lights with glare cut-off hoods/lens to reduce glare and night sky pollution.

Section 3.5.15 – We are master planning (5) lots to be a townhouse and commercial subdivision.

4. How is the proposed use harmonious with the character of the existing neighborhood?

The existing neighborhood is already starting to become a mixed use district, with offering a variety of commercial, brewery, leisure and residential uses. Our proposed single-family attached and commercial mixed use project further reinforces the effectiveness of mixed use districts along primary scenic pathways and transitional areas. The architectural characteristics are also compatible with the existing neighborhood via similar building structures, similar exterior cladding systems and overall coverage of the property.

- 5. How is the proposed use harmonious with the appearance of the existing neighborhood?**
The appearance of the building will be harmonious through the use of similar building materials such as metal wall cladding, weathered wood accents and standing seam roof systems. The building will also be provided with overhead doors for use by the ground level commercial spaces.
- 6. How will the proposed use NOT be detrimental to the general welfare, health, and safety of the neighborhood?**
The general well-being of the neighborhood will be enhanced with the residents ability to use adjacent pathways reducing vehicular roadway traffic. The use reinforces the desire for mixed-use neighborhoods and encourages of connectivity throughout the city.
- 7. How will the proposed use NOT harm the land or water of the subject property and adjacent properties?**
All stormwater and snow will be managed on-site, additionally all perimeter landscaping will be native and blend with adjacent developments to maintain existing character and feeling.
- 8. What public services and facilities will serve the proposed use? Police? School? Streets? Fire? Water? Sewer? Other?**
The property in question is located within the approved Riverside Subdivision. There is an approved roadway access to West and a 14' wide utility and access Alley to the east. Sewer is currently provided to the boundary of the Northern lot and will be extended to provide individual services to each of the 5 lots. Domestic Water Service is also currently provided to the boundary of the Northern Lot, we intend to extend this service to and through the alley to provide each lot with a dedicated service. The new road would be of required width and turn-around radius to accommodate the needs of fire truck access. The area is also located within incorporated McCall and would be served by the existing emergency and educational services.
- a. **Explain how the proposed project will NOT add incremental costs to each of these services or facilities? If additional cost will be incurred, how will that cost be mitigated?** Residential uses are understood to be of general lesser impact to all utility services than commercial uses, thereby mixing the uses, we are reducing the potential impact of a full commercial development. These lots were planned for commercial uses and by incorporating residential uses the impact will reduce the impact on all services and systems.
 - b. **Explain how the proposed project will be served by the above services and facilities.** All services will be provided via the local utility and city systems.
- 9. How will the proposed use NOT cause unreasonable traffic, noise, glare, and other forms of pollution?**
Residential uses are less impactful than commercial and industrial uses, and further by combining residential and commercial uses the property is utilizing its highest and best use potential. The site is adjacent to parkways and pathways giving all residents the ability to use alternative transportation thereby reducing noise, vehicular traffic and pollution. Each of the units are of compatible exterior material construction and therefore do not increase glare issues. Additionally, all exterior illumination fixtures are provided with cut-off deflectors and lenses.
- 10. How will the proposed use NOT adversely affect the pedestrian environment?**
The proposed development enhances and provides better utilization of the planned and existing pathway infrastructure, by allowing residents better and well distributed access along the pathway route.
- 11. How will the proposed use NOT be a detriment to traffic on surrounding streets?**
Similar to enhancing the pedestrian environment, the scenic route pathway is very nearby which allows connectivity to the city center and other recreational elements throughout the neighborhood / district. Allowing for walkability and alternative (non-vehicular) transportation reduces traffic and congestion throughout the city.
- 12. How will the proposed use NOT affect scenic features?**
The property is surrounded by developable properties on 3 boundaries, 2 of which are currently developed. The 4th boundary is part of the city of McCall snow storage area.

13. How will the proposed use NOT affect historic features?

It does not appear that any historical buildings, landscapes or amenities exist around the property.

14. Explain how the subject property is of sufficient size to accommodate the proposed use in relation to snow storage, open space requirements, parking areas, landscaping, etc.

The site is designed to accommodate all dimensional standards for the Industrial zone. Snow storage and storm drainage is accommodate on site. All parking required is enclosed all parking over and above the code requirements is un-enclosed.


15. Explain how the proposed use will NOT have a negative economic impact on the surrounding neighborhood or community?

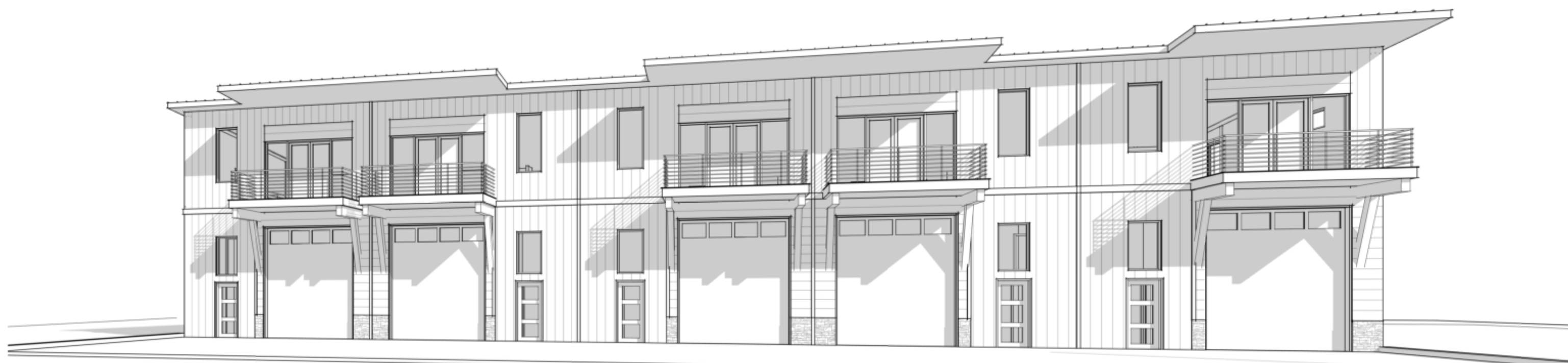
The increase of residential units in the neighborhood will provide a positive economic impact given the access to adjacent commercial and brewery uses.

Thank you for the consideration and we look forward to the review and approval of our Conditional Use Application for the Simmons Street Townhouses. Please contact our office if you have any further questions.

Sincerely,

CHRYSALIS ARCHITECTURE + PLANNING

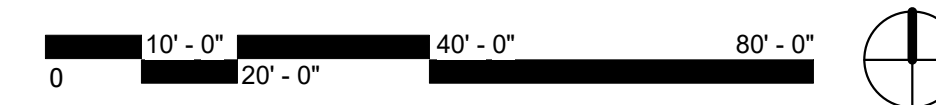

Richard Wainat - Principal Architect



KEYNOTES - SITE PLAN	
MARK	DESCRIPTION
1	4" WIDE PAVEMENT STRIPING
2	UNIT DECK OVERHANG, ABOVE
3	4" CONCRETE SLAB WITH CONTROL JOINTS, MAXIMUM 10'-0" ON CENTER
4	ROOF DRAIN LEADER
5	ASPHALT CONCRETE PAVING
6	CONCRETE CURB
7	LANDSCAPE TO MATCH EXISTING AND NATIVE GRASSES / PLANTINGS
8	EXISTING FENCE TO REMAIN
9	EXISTING OVERHEAD POWER
10	EXISTING POWER POLE
11	EXISTING END OF SEWER LINE
12	SNOW STORAGE AREA
13	EXISTING TOP OF BANK

CONCEPTUAL SITE PLAN

1" = 20'-0"



SITE ANALYSIS

ADDRESS :	209 - 217 SIMMONS STREET MCCALL, IDAHO 83638
ASSESSORS PARCEL NUMBER :	RPM02170020050 RPM02170020060 RPM02170020070 RPM02170020080 RPM02170020090
SUBDIVISION :	RIVERSIDE SUBDIVISION
LEGAL DESCRIPTION :	LOTS 5 THROUGH 9 BLOCK 2
JURISDICTION :	CITY OF MCCALL
ZONING :	I - INDUSTRIAL
LAND USE :	SINGLE-FAMILY, ATTACHED (TOWNHOUSE) & COMMERCIAL SPACE
SITE AREA :	0.343 ACRES
ACERAGE - SQUARE FOOTAGE -	15,067 SQUARE FEET
UNIT AREA :	211 SQUARE FEET
LEVEL 1 -	1,236 SQUARE FEET
LEVEL 2 -	89 SQUARE FEET
COVERED DECK -	
TOTAL -	1,447 SQUARE FEET
COMMERCIAL -	1,092 SQUARE FEET
BUILDING AREA :	1,055 SQUARE FEET
LEVEL 1 -	6,180 SQUARE FEET
LEVEL 2 -	445 SQUARE FEET
COVERED DECK -	
TOTAL -	7,235 SQUARE FEET
COMMERCIAL -	5,460 SQUARE FEET
LOT COVERAGE :	43.1% 6,494 SQUARE FEET
BUILDING -	22.5% 3,392 SQUARE FEET
LANDSCAPE AREA :	34.3% 5,182 SQUARE FEET
PAVING/PARKING/SIDEWALK AREA :	
SNOW STORAGE AREA (33% OF PAVING/PARKING/SIDEWALK)	1,710 SQUARE FEET
SQUARE FOOTAGE -	
ALLOWED	PROVIDED
DENSITY :	25 U/ACRE 14.4 U/ACRE
UNIT TYPES :	UPPER (5) 2-BEDROOMS LOWER (5) COMMERCIAL UNITS
HEIGHT :	MAXIMUM - 35'-0" ACTUAL - 30'-0"
SETBACKS :	REQUIRED PROVIDED
BUILDING	10'-0" 37'-11"
FRONT	10'-0" 20'-0"
SIDE (NON-RES.) -	10'-0" 10'-07'11"-0"
REAR -	10'-0" 12'-0"
PARKING	20'-0" 20'-0"
FRONT	10'-0" 10'-07'11"-0"
STREET	
SIDE	
PARKING :	2 SPACES / UNIT 10 SPACES (SURFACE) 10 SPACES (GARAGE) 20 SPACES (TOTAL)

SHEET INDEX

A4.01	RENDERED PERSPECTIVES
A4.02	RENDERED PERSPECTIVES
A4.03	RENDERED PERSPECTIVES
G0.00	COVER SHEET
A0.50	FOUNDATION PLAN
A1.00	FLOOR PLAN
A1.02	FLOOR PLAN
A3.00	ROOF PLAN
A4.00	EXTERIOR ELEVATIONS
A5.00	BUILDING SECTIONS

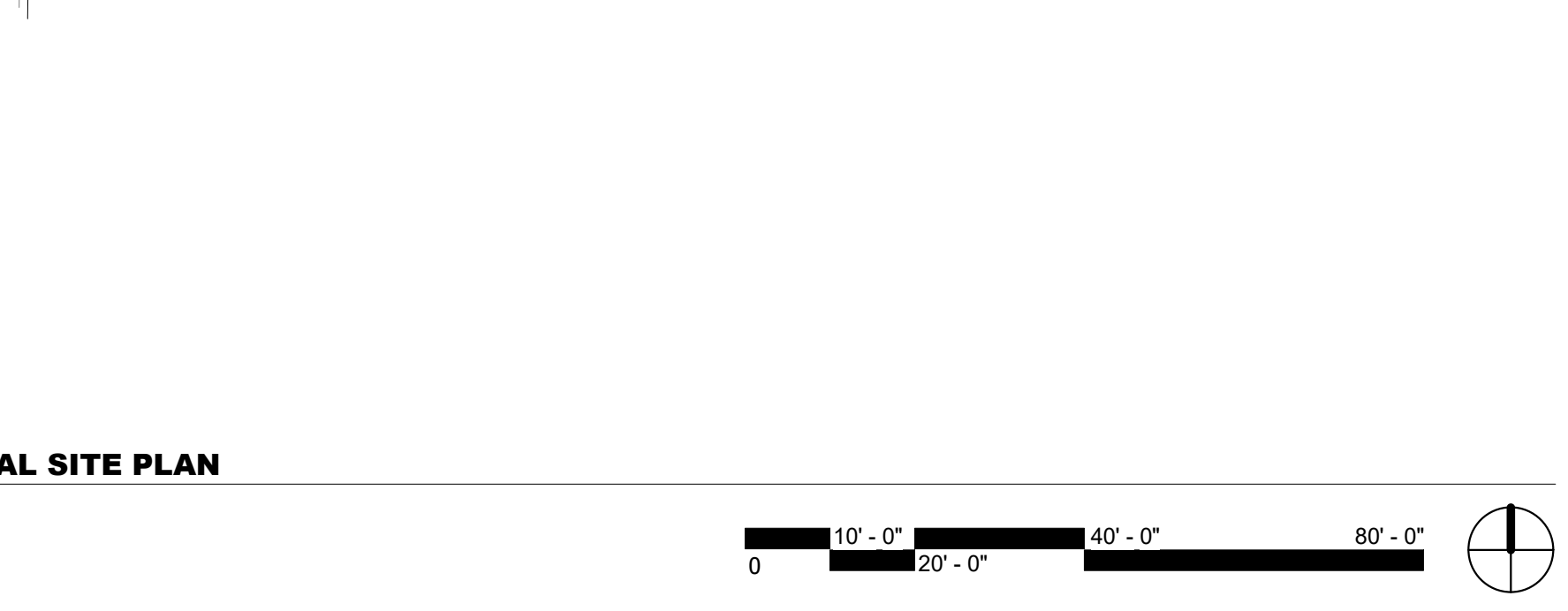
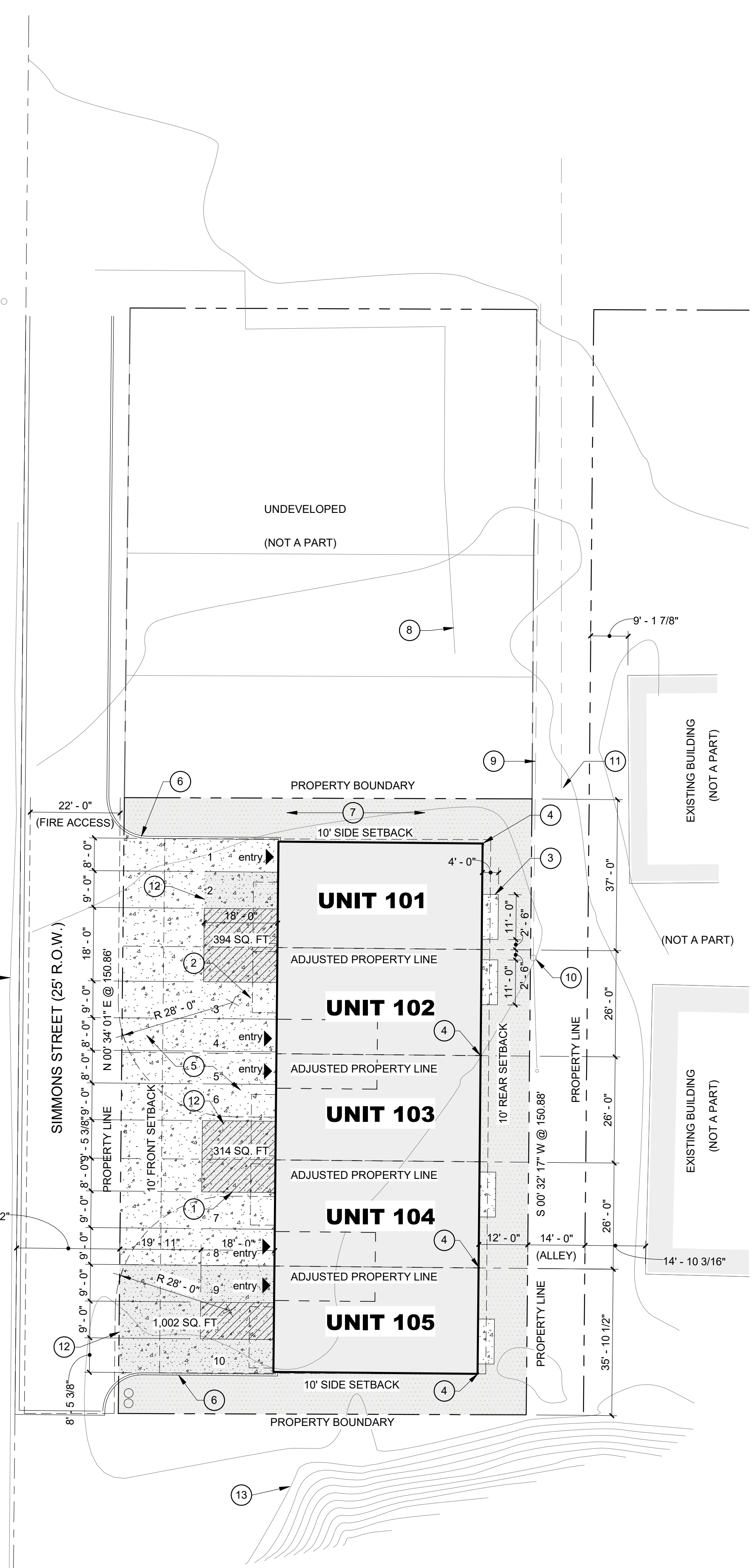
GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL PERMITS THAT ARE REQUIRED BEFORE AND DURING THE CONSTRUCTION PROCESS PRIOR TO THE COMMENCEMENT OF ANY WORK, AND SHALL BE REQUIRED TO CONTACT THE PROPER AUTHORITIES HAVING JURISDICTION.
2. THE CONTRACTOR SHALL CAREFULLY READ, STUDY, AND UNDERSTAND ALL PLANS AND SPECIFICATIONS FOR TRADES. COORDINATION BETWEEN TRADES WILL BE NECESSARY AND THE RESPONSIBILITY OF THE CONTRACTOR. ANY QUESTIONS THAT ARISE SHALL BE CLARIFIED BY THE ARCHITECT PRIOR TO CONSTRUCTION.
3. CONTRACTOR WILL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS, ETC., AT THE SITE AND WILL COORDINATE WORK PERFORMED BY ALL TRADES.
4. DRAWINGS ARE NOT TO BE SCALED. DIMENSIONAL DISCREPANCIES ARE TO BE CLARIFIED WITH THE ARCHITECT BEFORE PROCEEDING WITH CONSTRUCTION.
5. CONTRACTOR WILL NOTIFY ARCHITECT / ENGINEER OF ANY DISCREPANCIES, OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS BEFORE PROCEEDING WITH ANY WORK INVOLVED. IN ALL CASES, UNLESS OTHERWISE DIRECTED, THE MOST STRINGENT REQUIREMENTS WILL GOVERN.
6. THE ARCHITECT'S APPROVAL MUST BE OBTAINED FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS, INCLUDING BUT NOT LIMITED TO CHANGES IN DIMENSIONS, DESIGN, MATERIALS, PRODUCTS, AND FINISHES. IN NO CASE MAY THE CONTRACTOR MAKE THESE CHANGES WITHOUT THE APPROVAL OF THE ARCHITECT.
7. ALL CONSTRUCTION SHALL CONFORM TO AND STRICTLY COMPLY WITH ALL APPLICABLE CODES INCLUDING BUT NOT LIMITED TO THE LATEST APPLICABLE VERSION OF THE INTERNATIONAL RESIDENTIAL CODE, AND ALL AMENDMENTS ENFORCED BY THE AUTHORITIES HAVING JURISDICTION.
8. PROVIDE A CONTINUOUS BEAD OF ELASTOMERIC SEALANT OR APPROPRIATE CAULKING MATERIAL AT ALL BETWEEN SIMILAR AND DISSIMILAR MATERIALS.
9. ALL DIMENSIONS ARE TO FACE OF STUD (FOS) OR TO FACE OF FOUNDATION WALL (FFDN) OR TO FACE OF FINISH (FOF), UNLESS NOTED OTHERWISE.
10. ALL WOOD IN CONTACT WITH CONCRETE, SHALL BE TREATED. ALL WOOD AT GRADE OR BELOW GRADE SHALL BE TREATED.
11. VISITS TO THE JOB SITE BY THE ARCHITECT OR HIS CONSULTANTS DO NOT CONSTITUTE APPROVAL OF THE WORK PERFORMED BY THE GENERAL CONTRACTOR OR HIS SUBCONTRACTORS. ANY SUCH VISITS ARE SOLELY FOR THE PURPOSE OF OBSERVING THE WORK BEING PERFORMED.
12. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR THE COORDINATION OF WORK AND FOR THE WORK PERFORMED BY THE SUBCONTRACTORS.
13. THE CONTRACTOR SHALL VERIFY THAT DRAWINGS ARE THE LATEST ISSUE PRIOR TO COMMENCING CONSTRUCTION.
14. ALL MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
15. ASSUME MINIMUM SOLID BEARING VALUE OF 1,500 PSF, SANDY LOAM AND CLAY. OTHER CONDITIONS MAY REQUIRE SPECIAL PROVISIONS IN FOUNDATION DESIGN AND CONSTRUCTION. CONTRACTOR TO VERIFY AS REQUIRED PRIOR TO CONSTRUCTION.
16. ALL CONCRETE STRENGTH TO BE MINIMUM 3,000 P.S.I.
17. FOUNDATION PERIMETER TO BE INSULATED WITH MINIMUM R-19 INSULATION TO TOP OF FOOTING.
18. MINIMUM CLEARANCE FROM FLOOR JOISTS TO EARTH BELOW TO BE 1'-6".
19. ALL CONTRACTORS ARE TO CLEAN AND INSPECT THEIR WORK PRIOR TO LEAVING PROJECT.

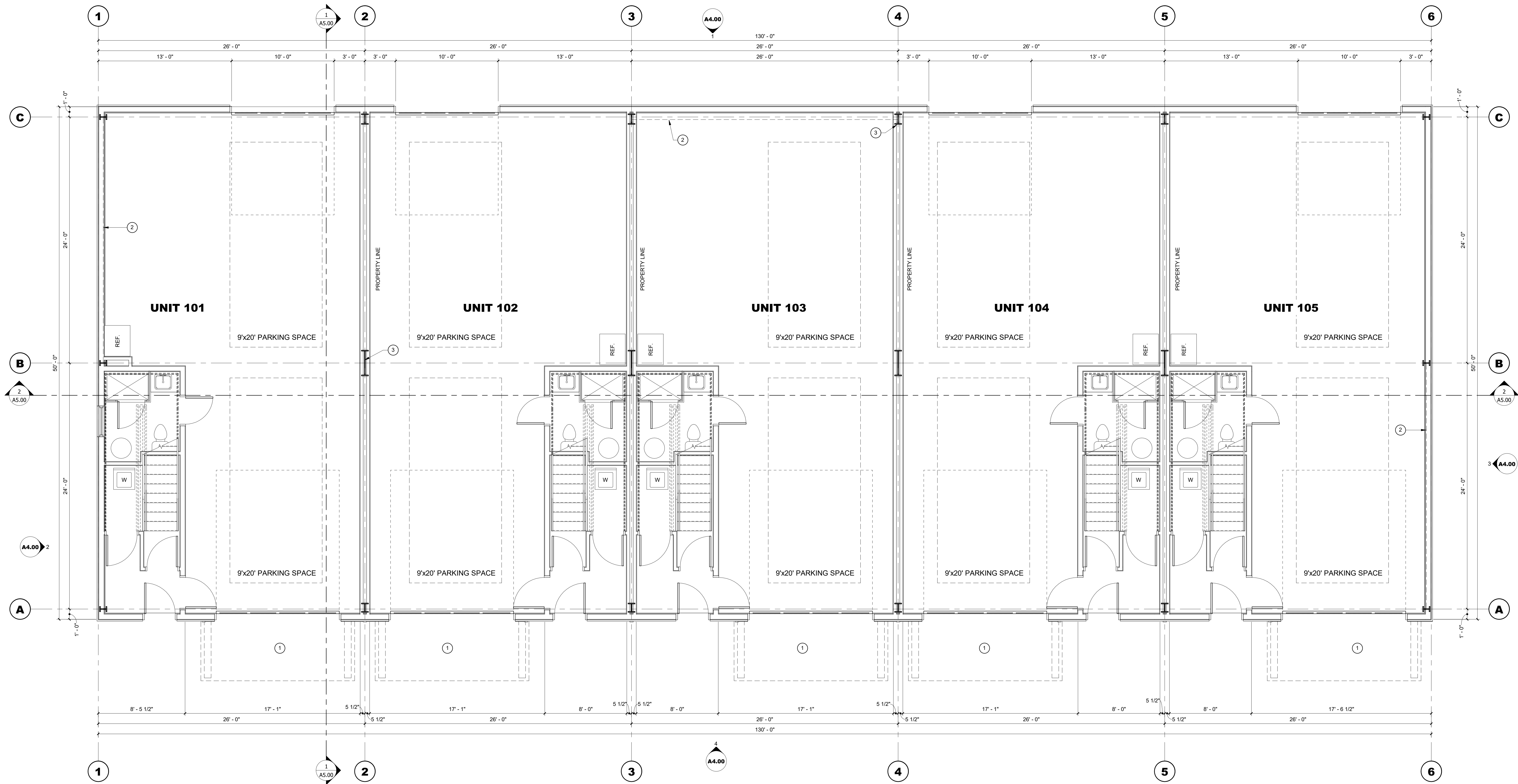
SITE PLAN NOTES

1. DRAWINGS & SPECIFICATIONS ARE COMPLEMENTARY COMPONENTS OF THE CONTRACT DOCUMENTS. REVIEW ALL DRAWINGS AND SPECIFICATIONS FOR THE COMPLETE SCOPE OF WORK. NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION IF INCONSISTENCIES, CONTRADICTIONS OR OMISSIONS ARE DISCOVERED.
2. DO NOT SCALE DRAWINGS. IF DIMENSIONAL INFORMATION IS REQUIRED & NOT FOUND, NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION.
3. UNLESS NOTED OTHERWISE SLOPE GRADE MAXIMUM 2% WITHIN 10' OF BUILDING, THEN 5% TO MATCH EXISTING GRADE ELEVATIONS. SLOPE ALL WALKING SURFACES MAXIMUM 5% IN THE DIRECTION OF TRAVEL AND MAXIMUM 2% AT LANDING, CHANGE OF DIRECTION, AND PERPENDICULAR TO DIRECTION OF TRAVEL.
4. UNLESS NOTED OTHERWISE FOR ALL EXTERIOR CONCRETE PAVEMENT PROVIDE MINIMUM 6" TYPE II, COMPACTED 95%.
5. REFER TO GEO-TECHNICAL REPORT FOR RECOMMENDATIONS OF FILL WITHIN THE EXISTING 100 YEAR FLOOD PLAIN.
6. FINISHED FLOOR ELEVATION IS TO BE AT MINIMUM 1'-6" ABOVE THE HIGHEST ADJACENT CROWN OF ALL ADJACENT STREETS.
7. PROVIDE DRAINAGE SWALES WITH BANKS THAT DO NOT EXCEED 33%.
8. PROVIDE LANDSCAPING AND IRRIGATION THAT MEETS OR EXCEEDS ALL APPLICABLE STANDARDS.
9. VERIFY ALL EXISTING EASEMENT, SETBACKS, DRAINAGE AND UTILITIES FOR CONFORMANCE TO DESIGN PRIOR TO CONSTRUCTION.

VICINITY MAP



SIMMONS STREET - MIXED USE - TOWNHOUSES / COMMERCIAL



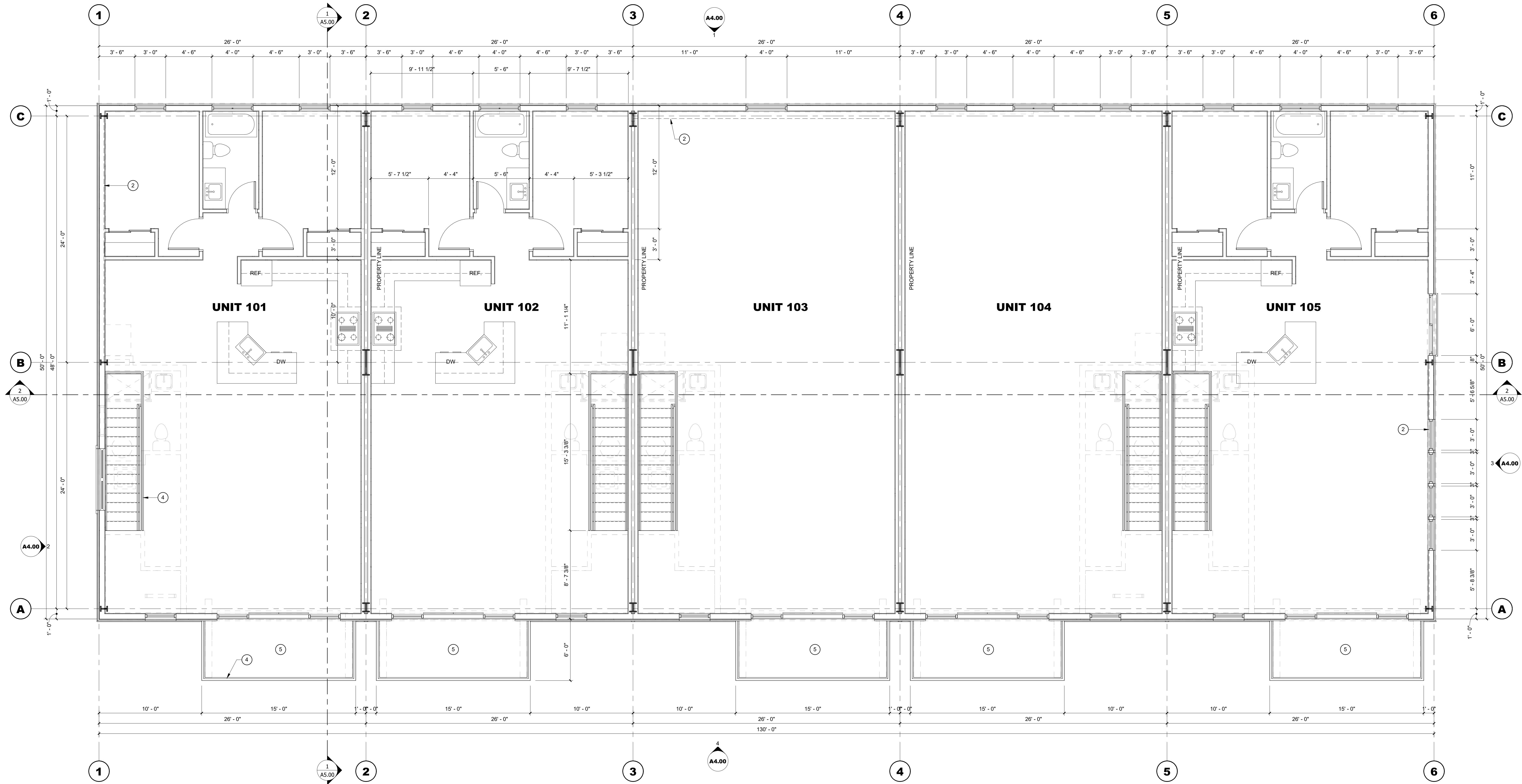
FLOOR PLAN - LEVEL 1
1/4" = 1'-0"

KEYNOTES - FLOOR PLAN	
MARK	DESCRIPTION
1	PRE-FABRICATED METAL DECKING, ABOVE
2	'X' BRACE - SEE PRE-ENGINEERED METAL BUILDING DRAWINGS
3	PRE-ENGINEERED METAL BUILDING FRAME - SEE PRE-ENGINEERED DRAWINGS
4	3'-6" STEEL GUARDRAIL, BLACKENED
5	PRE-FABRICATED METAL DECK

FLOOR PLAN GENERAL NOTES

- DRAWINGS & SPECIFICATIONS ARE COMPLEMENTARY COMPONENTS OF THE CONTRACT DOCUMENTS. REVIEW ALL DRAWINGS AND SPECIFICATIONS FOR THE COMPLETE SCOPE OF WORK. NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION IF INCONSISTENCIES, CONTRADICTIONS OR OMISSIONS ARE DISCOVERED.
- DO NOT SCALE DRAWINGS, IF DIMENSIONAL INFORMATION IS REQUIRED & NOT FOUND, NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION.
- UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE TO CENTERLINES OR TO FACE OF FRAMING, CLEAR DIMENSIONS INDICATE DIMENSION BETWEEN FINISHES.
- UNLESS NOTED OTHERWISE, ALL DOOR JAMBS ARE TO BE SET 4" FROM ADJACENT WALL.
- UNLESS NOTED OTHERWISE, BRACE ALL CEILINGS AND NON-LOAD BEARING WALLS.
- UNLESS NOTED OTHERWISE, ALL WINDOW HEADS ARE TO BE SET AT 6'-0" ABOVE FINISHED FLOOR, VERIFY PLAN AND REPORT DISCREPANCIES TO ARCHITECT.





FLOOR PLAN - LEVEL 2
1/4" = 1'-0"

KEYNOTES - FLOOR PLAN	
MARK	DESCRIPTION
1	PRE-FABRICATED METAL DECKING, ABOVE
2	'X' BRACE - SEE PRE-ENGINEERED METAL BUILDING DRAWINGS
3	PRE-ENGINEERED METAL BUILDING FRAME - SEE PRE-ENGINEERED DRAWINGS
4	3'-6" STEEL GUARDRAIL, BLACKENED
5	PRE-FABRICATED METAL DECK

FLOOR PLAN GENERAL NOTES

- DRAWINGS & SPECIFICATIONS ARE COMPLEMENTARY COMPONENTS OF THE CONTRACT DOCUMENTS. REVIEW ALL DRAWINGS AND SPECIFICATIONS FOR THE COMPLETE SCOPE OF WORK. NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION IF INCONSISTENCIES, CONTRADICTIONS OR OMISSIONS ARE DISCOVERED.
- DO NOT SCALE DRAWINGS. IF DIMENSIONAL INFORMATION IS REQUIRED & NOT FOUND, NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION.
- UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE TO CENTERLINES OR TO FACE OF FRAMING. CLEAR DIMENSIONS INDICATE DIMENSION BETWEEN FINISHES.
- UNLESS NOTED OTHERWISE, ALL DOOR JAMBS ARE TO BE SET 4" FROM ADJACENT WALL.
- UNLESS NOTED OTHERWISE, BRACE ALL CEILINGS AND NON-LOAD BEARING WALLS.
- UNLESS NOTED OTHERWISE, ALL WINDOW HEADS ARE TO BE SET AT 6'-0" ABOVE FINISHED FLOOR. VERIFY PLAN AND REPORT DISCREPANCIES TO ARCHITECT.



SIMMONS STREET - MIXED USE - TOWNHOUSES / COMMERCIAL



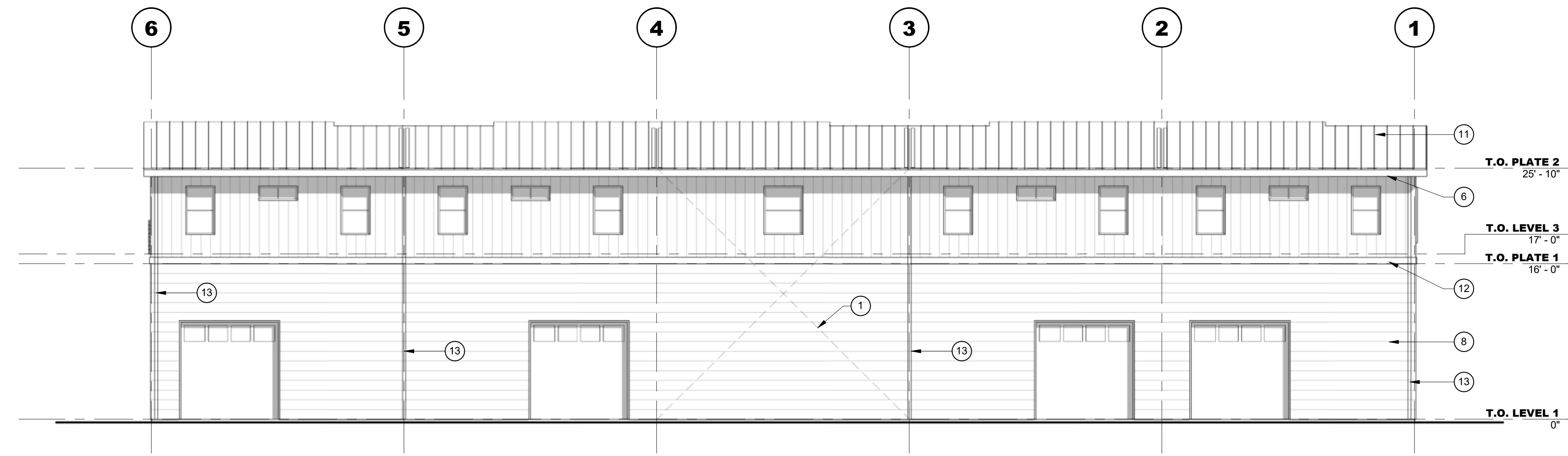
WOOD STAIN - SHERWIN WILLIAMS; SW 3511 - CEDAR BARK



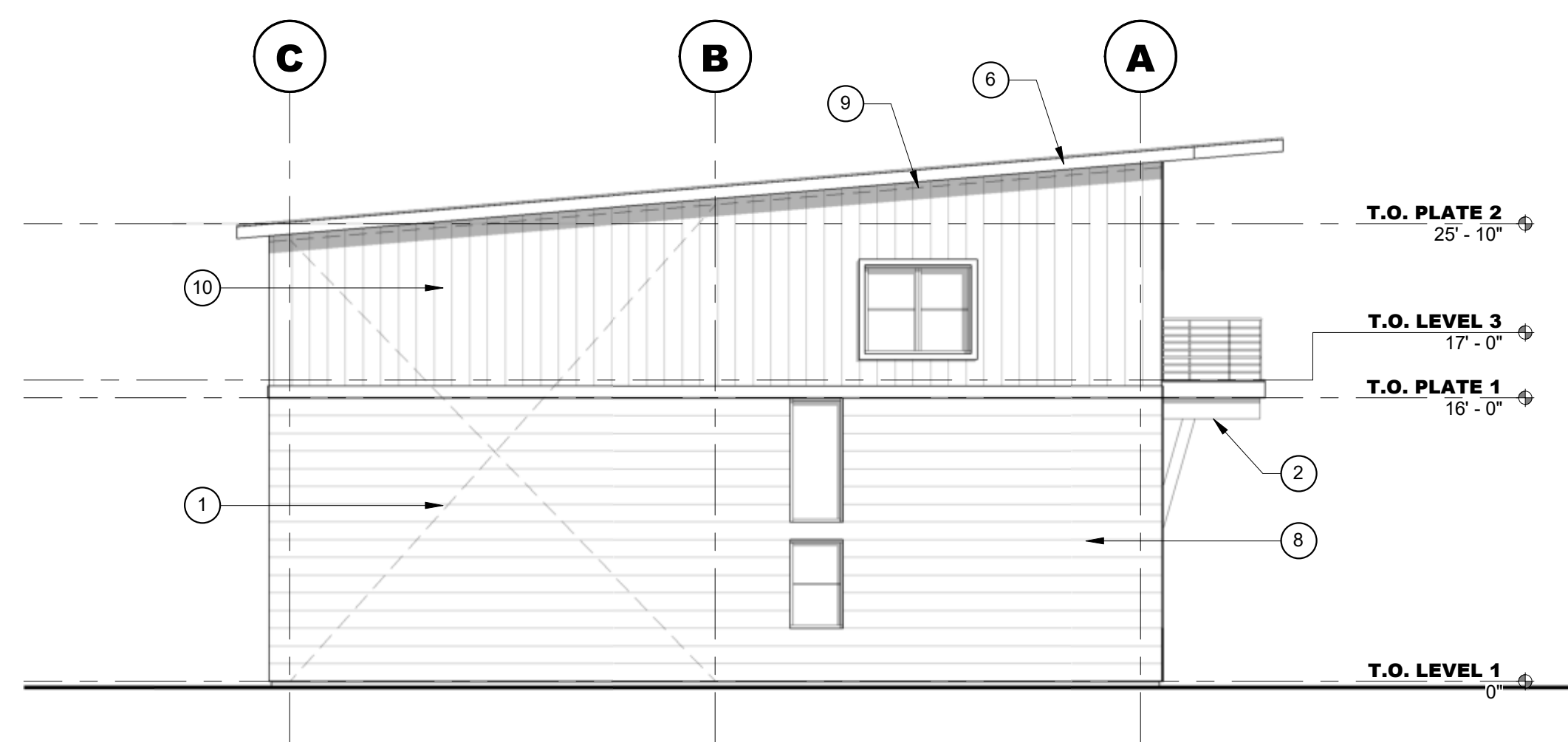
SIDING (UPPER) - SHERWIN WILLIAMS; SW 2739 - CHARCOAL BLUE



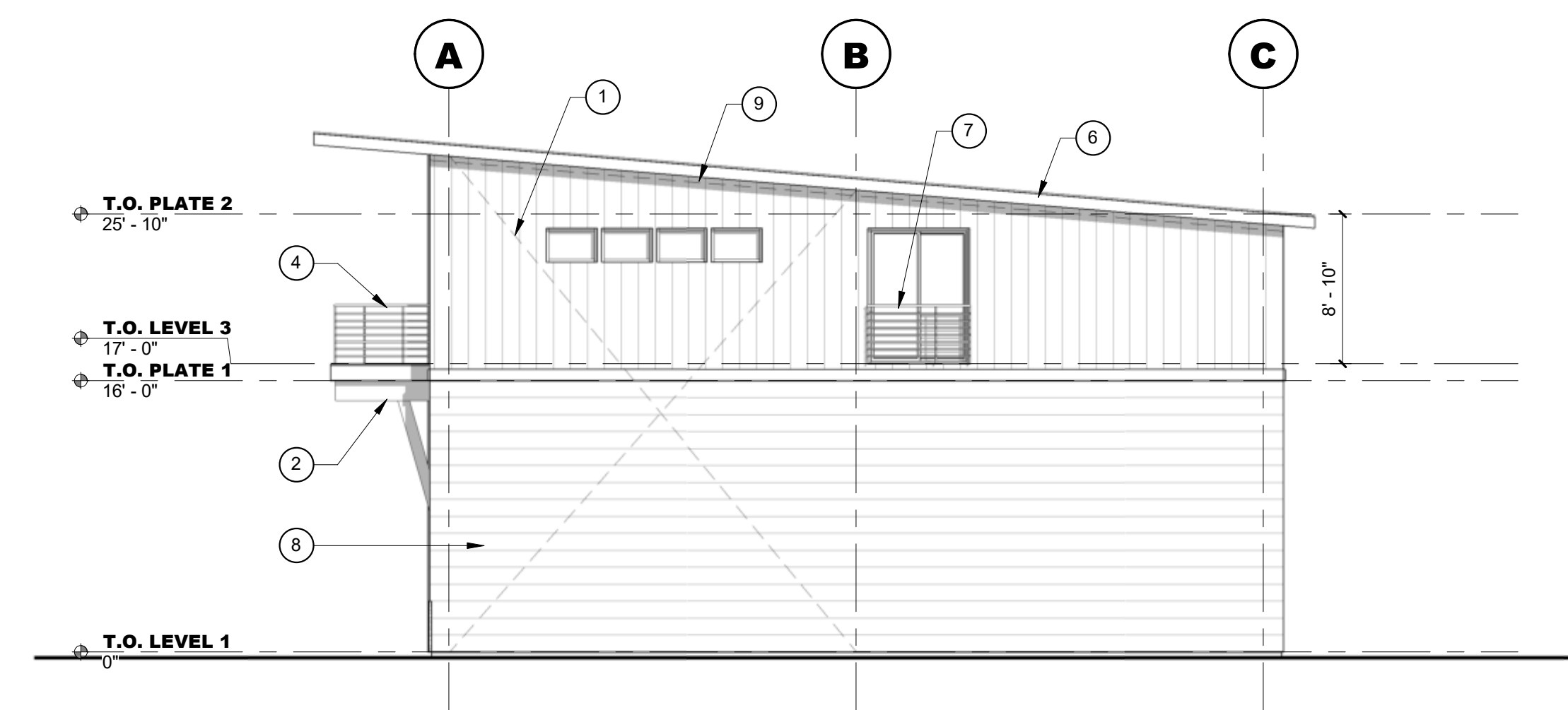
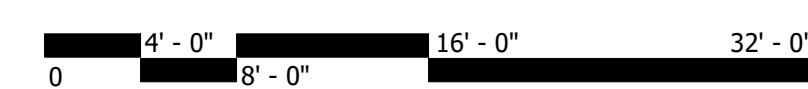
DOORS, METAL PANEL - SHERWIN WILLIAMS; SW 6257 - GIBRALTER



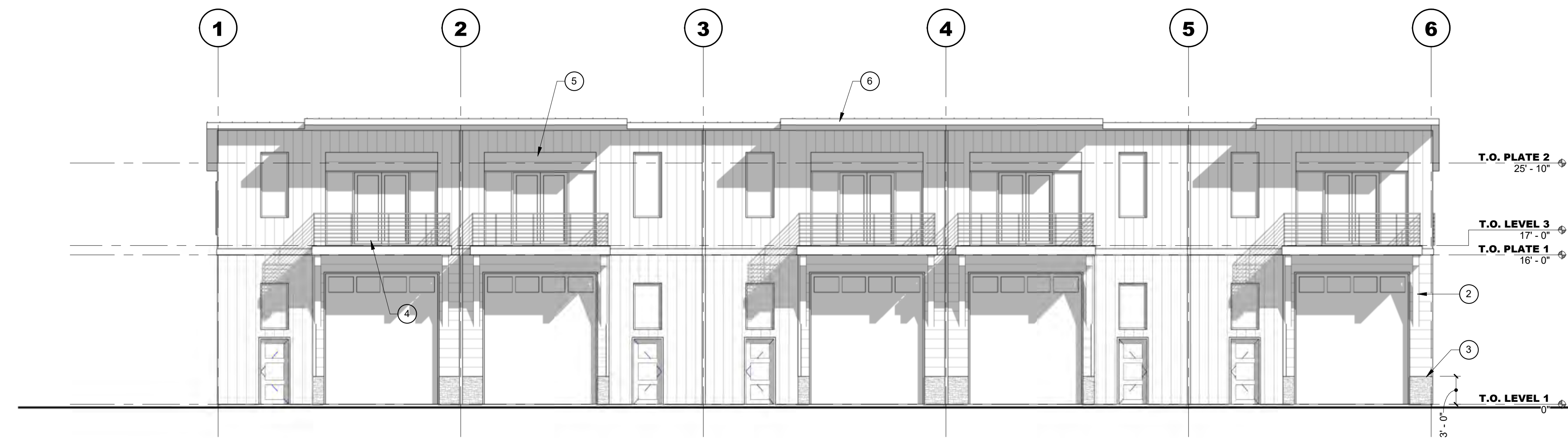
1 EAST ELEVATION



2 NORTH ELEVATION



3 SOUTH ELEVATION



4 WEST ELEVATION



EXTERIOR ELEVATION GENERAL NOTES

- DRAWINGS & SPECIFICATIONS ARE COMPLEMENTARY COMPONENTS OF THE CONTRACT DOCUMENTS. REVIEW ALL DRAWINGS AND SPECIFICATIONS FOR THE COMPLETE SCOPE OF WORK. NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION IF INCONSISTENCIES, CONTRADICTIONS OR OMISSIONS ARE DISCOVERED.
- DO NOT SCALE DRAWINGS. IF DIMENSIONAL INFORMATION IS REQUIRED & NOT FOUND, NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION.
- ALL DIMENSIONS ARE TO COLUMN CENTERLINES OR TO FACE OF FRAMING, UNLESS CLEAR DIMENSIONS INDICATE DIMENSION BETWEEN FINISHES.
- ALL EXPOSED FOUNDATIONS AND FOOTINGS ARE TO BE PAINTED TO MATCH ADJACENT WALL FINISH OR COLOR AS SELECTED BY OWNER. PROVIDE NECESSARY SURFACE FILLER AS RECOMMENDED BY MANUFACTURER FOR PARTICULAR APPLICATION.
- ALL EXPOSED CONDUIT TO BE PAINTED TO MATCH ADJACENT WALL COLOR.
- PROVIDE 24 GAUGE PRE-FINISHED METAL FLASHING, DRIP EDGE, AND TRIM TO MATCH ROOFING COLOR, AS SELECTED BY OWNER.
- PROVIDE CONTINUOUS PRE-FINISHED 22 GAUGE METAL GUTTER TO MATCH FLASHING OR TRIM AT ALL ROOF EAVES. PROVIDE CHAIN LEADER TO 12"x12"x12" CONCRETE BALLAST WITH EMBED EYELET OF SAME TYPE AS CHAIN LEADER. BALLAST TO BE COVERED WITH 0'-8" TOPSOIL/LANDSCAPE.
- PROVIDE WEEP HOLES AT 2'-0" ON CENTER AT BASE OF STONE / MASONRY LOCATIONS.
- ALL EXTERIOR EXPOSED, SEMI-EXPOSED / CONCEALED AND CONCEALED UN-TREATED WOOD IS TO BE STAINED AND SEALED.

KEYNOTES - ELEVATIONS

MARK	DESCRIPTION
1	X BRACE - SEE PRE-ENGINEERED METAL BUILDING DRAWINGS
2	6x ROUGH-SAWN, DECORATIVE BRACKETS, STAINED
3	STONE WAINSCOT
4	3'-6" STEEL GUARDRAIL, BLACKENED
5	DECORATIVE WEATHERED WOOD PLANK, SEALED
6	PRE-FINISHED METAL FASCIA
7	3'-6" STEEL GUARDRAIL, BLACKENED, FLUSH MOUNTED
8	PRE-FINISHED METAL CLADDING, HORIZONTAL
9	LINE OF CEILING
10	PRE-FINISHED METAL CLADDING, VERTICAL
11	PRE-FINISHED STANDING METAL ROOFING WITH WATER-PROOF MEMBRANE
12	PRE-FINISHED 8" METAL TRIM
13	PRE-FINISHED ROOF DRAIN LEADER



SIMMONS STREET - MIXED USE - TOWNHOUSES / COMMERCIAL



SIMMONS STREET - MIXED USE - TOWNHOUSES / COMMERCIAL

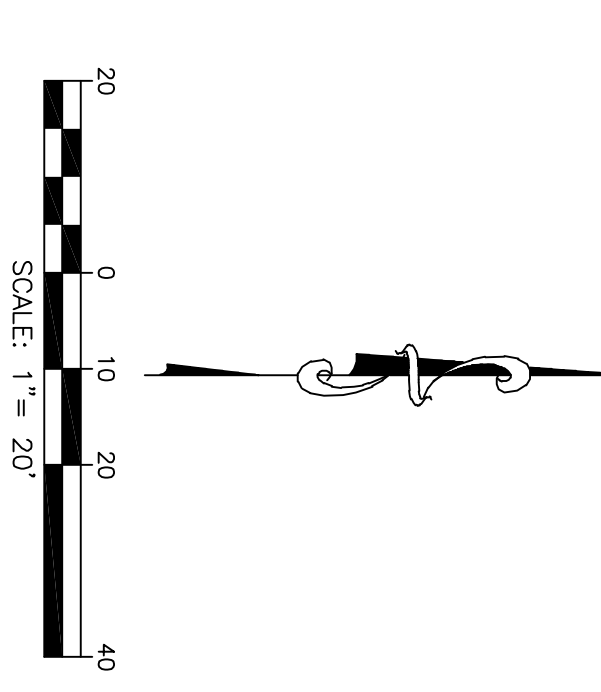
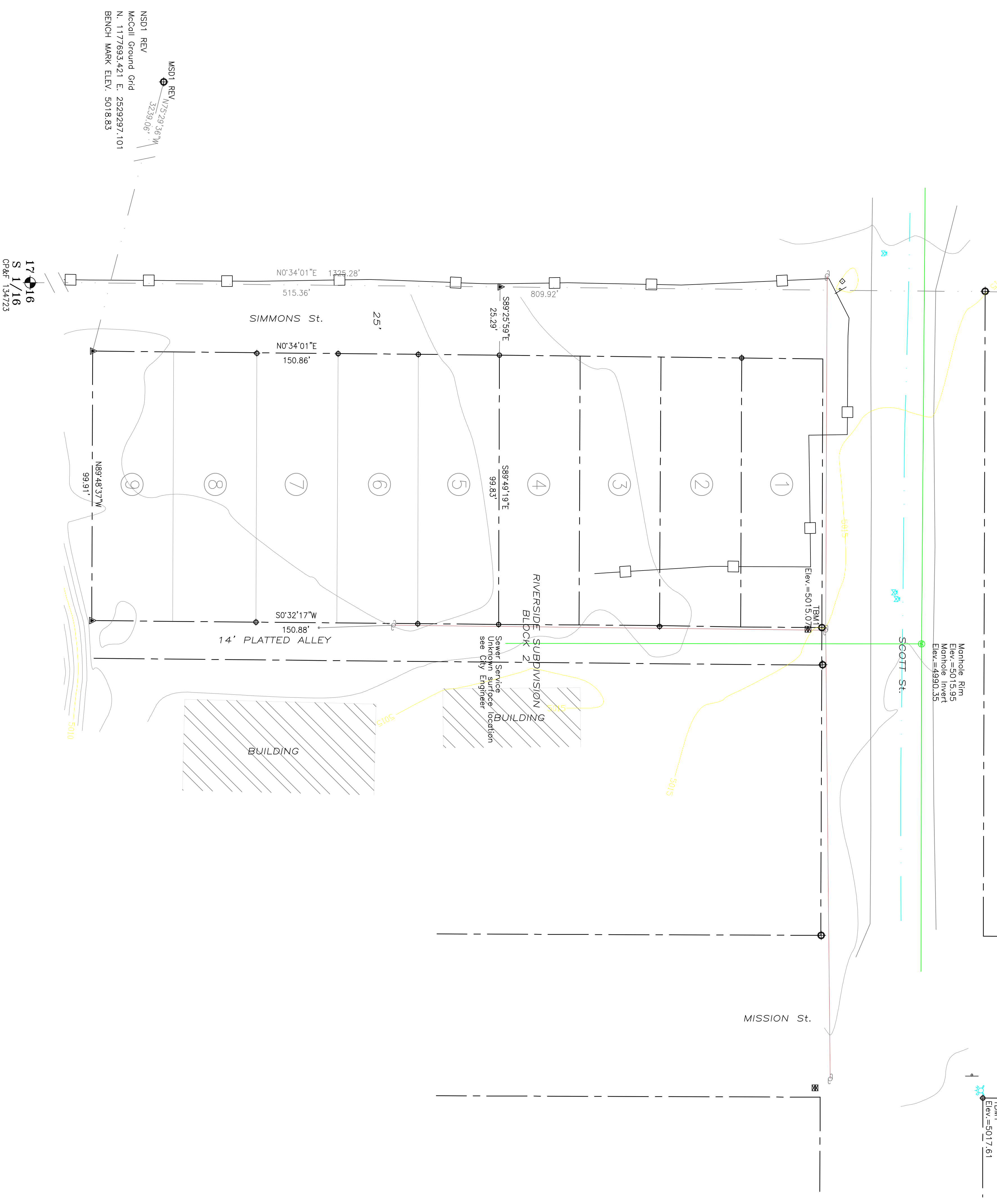


SIMMONS STREET - MIXED USE - TOWNHOUSES / COMMERCIAL

McCall
 McCall Ground Grid
 N. 1177843.037 E. 2532417.104
 17° 16' 1/4
 BENCH MARK ELEV. 5018.42
 CPr#F 214913

Manhole Rim
 Elev.=5015.95
 Manhole Invert
 Elev.=4990.35

BM1
 Elev.=5017.61



LEGEND

- ▲ CALCULATED POINT
- 1/2" REBAR MONUMENT
- 5/8" REBAR MONUMENT
- BRASS CAP MONUMENT
- ROAD SIGN
- POWER POLE
- FIRE HYDRANT
- WATER VALVE
- POWER GUY ANCHOR
- COMMUNICATION PEDISTAL
- TELEPHONE PEDISTAL
- BOUNDARY LINE OF RECORD
- EDGE OF PAVEMENT
- SEWER
- CROWN OF ROAD
- COMMUNICATION
- FENCE LINE
- OVERHEAD POWER
- WALLS
- TIE LINES

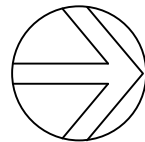
Topographic Survey
 for
Synergy Structures LLC
 LOTS 5-9 BLOCK 2 RIVERSIDE SUBDIVISION
 LOCATED IN
 A PORTION OF THE NW1/4 OF THE SW1/4 OF
 SECTION 16, TOWNSHIP 18 NORTH, RANGE 3 EAST,
 B.M., VALLEY COUNTY, IDAHO
 -2022-

Drawing Name: PROJECTS/2022/9 McCall Townhome Simmons st/9 Simmons St TOPO T18N R3E S16.dwg

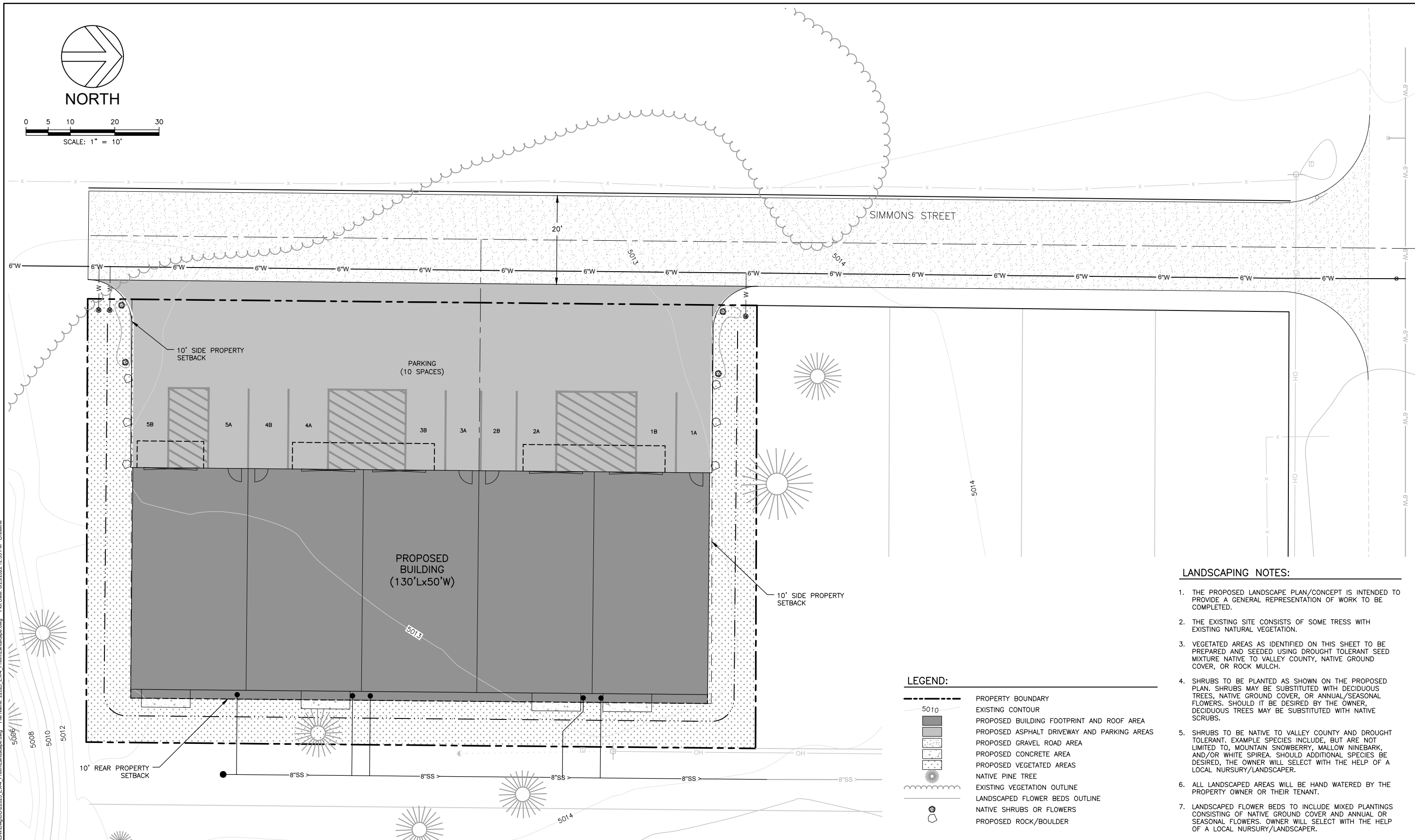
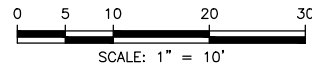
NARRATIVE:
 This survey was made at the request of Synergy Structures to perform a topographic survey as shown hereon. The utilities were not marked on the ground by Dig Line services. The actual location of the underground utilities are unknown. The contractor is responsible to call Dig Line services to mark on the ground. This site consists of Lots 5 through 9 of Block 2 of Riverside Subdivision as shown in Book 2 at Page 4.

No.	REVISION DESCRIPTION	CHECKED BY	DATE
0	FOR ISSUE	CM	5 MAY 22





NORTH



LANDSCAPING NOTES:

1. THE PROPOSED LANDSCAPE PLAN/CONCEPT IS INTENDED TO PROVIDE A GENERAL REPRESENTATION OF WORK TO BE COMPLETED.
2. THE EXISTING SITE CONSISTS OF SOME TRESS WITH EXISTING NATURAL VEGETATION.
3. VEGETATED AREAS AS IDENTIFIED ON THIS SHEET TO BE PREPARED AND SEEDED USING DROUGHT TOLERANT SEED MIXTURE NATIVE TO VALLEY COUNTY, NATIVE GROUND COVER, OR ROCK MULCH.
4. SHRUBS TO BE PLANTED AS SHOWN ON THE PROPOSED PLAN. SHRUBS MAY BE SUBSTITUTED WITH DECIDUOUS TREES, NATIVE GROUND COVER, OR ANNUAL/SEASONAL FLOWERS. SHOULD IT BE DESIRED BY THE OWNER, DECIDUOUS TREES MAY BE SUBSTITUTED WITH NATIVE SCRUBS.
5. SHRUBS TO BE NATIVE TO VALLEY COUNTY AND DROUGHT TOLERANT. EXAMPLE SPECIES INCLUDE, BUT ARE NOT LIMITED TO, MOUNTAIN SNOWBERRY, MALLOW NINEBARK, AND/OR WHITE SPIREA. SHOULD ADDITIONAL SPECIES BE DESIRED, THE OWNER WILL SELECT WITH THE HELP OF A LOCAL NURSURY/LANDSCAPER.
6. ALL LANDSCAPED AREAS WILL BE HAND WATERED BY THE PROPERTY OWNER OR THEIR TENANT.
7. LANDSCAPED FLOWER BEDS TO INCLUDE MIXED PLANTINGS CONSISTING OF NATIVE GROUND COVER AND ANNUAL OR SEASONAL FLOWERS. OWNER WILL SELECT WITH THE HELP OF A LOCAL NURSURY/LANDSCAPER.

LEGEND:

- 5010 - PROPERTY BOUNDARY
- - - - - EXISTING CONTOUR
- PROPOSED BUILDING FOOTPRINT AND ROOF AREA
- ▨ PROPOSED ASPHALT DRIVEWAY AND PARKING AREAS
- ▩ PROPOSED GRAVEL ROAD AREA
- ▧ PROPOSED CONCRETE AREA
- ▦ PROPOSED VEGETATED AREAS
- ☀ NATIVE PINE TREE
- ☀ (wavy) EXISTING VEGETATION OUTLINE
- ☀ (dotted) LANDSCAPED FLOWER BEDS OUTLINE
- ☀ (circle) NATIVE SHRUBS OR FLOWERS
- ☀ (square) PROPOSED ROCK/BOULDER

NO.	REVISION	BY	DATE	DESIGN
				DRAWN
				CHECKED
				APPROVED

CRESTLINE ENGINEERS
 323 DEINHARD LANE, SUITE C · PO BOX 2330
 McCALL, IDAHO 83638
 208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
 McCALL, IDAHO
 PRELIMINARY LANDSCAPING PLAN

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	8/23/2022
DRAWING NO.	SHEET NO.
EX-4	4 OF 4

Path: \\101015\Symbio\Structures\22025\Civil\DWG\DD\22025_EX-4_Prelim_Landscape.dwg File Name: 22025_EX-4_Prelim_Landscape.dwg Plot Date: 8/23/2022 12:35 PM Crestline

August 20, 2022

City of McCall –
Community Development
216 East Park Street
McCall, Idaho 83638



Re: **Photos – Narrated – Simmons Street Townhouses**



West Property Line, looking North along McCall RV Resort.



Southern Property line, looking West along City of McCall snow storage area.



East property line, looking North, along alley, adjacent existing buildings.



East property line, looking South, along alley, adjacent buildings.



North property line, looking West.



West property line, looking South.



North property looking East




Southwest corner, looking Northeast

STORMWATER APPLICATION
City of McCall

Fill in all information. Submit one copy of signed application and three copies of Stormwater Management Plan/Report to the City Engineer.

1. Project Name: Simmons Street Townhouses
Location: 209, 211, 213, 215, and 217 Simmons Street, McCall, ID 83638
2. Owner's Name: Synergy Structures, LLC
Street: PO Box 1006 City: McCall
State: ID Zip Code: 83638 Phone: (208) 941-7515
3. Project Description: Construction of Simmons Street to gravel roadway standards and a 5-unit townhome style residential/commercial building. The building will have a paved driveway/parking area up to Simmons Street.

 - a. Total property area, in acres. 0.35 acres
 - b. Proposed impervious surface (asphalt, rooftop, concrete, sidewalk, etc.) in square feet. There are currently no impervious surfaces within the project area. Upon completion there will be 11,690.0 S.F. (0.27 acres) of impervious asphalt and rooftop.
 - c. Describe existing vegetation present on site. The site consists of pine trees with some existing native grass vegetation, and weeds.
 - d. Start date of construction. Fall 2022
 - e. Estimated length of time to complete improvements. 6-12 months
4. Stormwater Management Plan/Report attached? Yes No
5. Circle the section of the Stormwater Management Plan/Report Checklist which are applicable to project.
A X B X C X D X E F X
6. Party responsible for operation and maintenance of project, including maintenance of temporary and permanent Best Management Practices:

<u>Synergy Structures, LLC</u>	<u>Owner</u>		<u>8-23-22</u>
Name	Title	Signature	Date
<u>PO Box 1006, McCall, ID 83638</u>		<u>(208) 941-7515</u>	<u>(208) 941-7515</u>
Address		Daytime Phone	After Hours Phone

Do not write below this line.

This Stormwater Management Plan/Report is:

Approved: _____

Not Approved: _____

Approved, with conditions: _____

By The City of McCall

Representative	Title	Signature	Date
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CRESTLINE ENGINEERS, INC.
 CIVIL ENGINEERING CONSULTANTS
 323 DEINHARD LANE, SUITE C
 PO BOX 2330
 McCALL, IDAHO 83638
 208.634.4140 · 208.634-4146 FAX

PROJECT: Simmons Street Townhouses

CLIENT: Synergy Structures, LLC

JOB NO.: 22025 **DATE:** August 23, 2022

BY: AMD

REVISION DATE: _____

RE: Simmons Street Townhouses - Stormwater Calculations

Drainage Area Calculations

Drainage Areas	(ft²)	(Acres)
Total Property Area/Boundary	15,067.3	0.35
Development Area	15,067.3	0.35

Pre-Development: Development Area Surfaces	(ft²)	(Acres)	(%)
Wood - Grass Combination (CN = 76)	15,067.3	0.35	100.00%
	15,067.3	0.35	100.00%
Total Impervious Surface Area =	0.0	0.00	0.00%

Post Development: Development Area Surfaces (At Build-out)	(ft²)	(Acres)	(%)
Building Roofs (CN = 98)	7,234.0	0.17	48.01%
Asphalt Road/Parking (CN = 98)	4,456.0	0.10	29.57%
Open Space (CN = 79)	3,377.3	0.08	22.41%
	15,067.3	0.35	100.00%
Total Impervious Surface Area =	11,690.0	0.27	77.59%

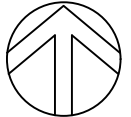
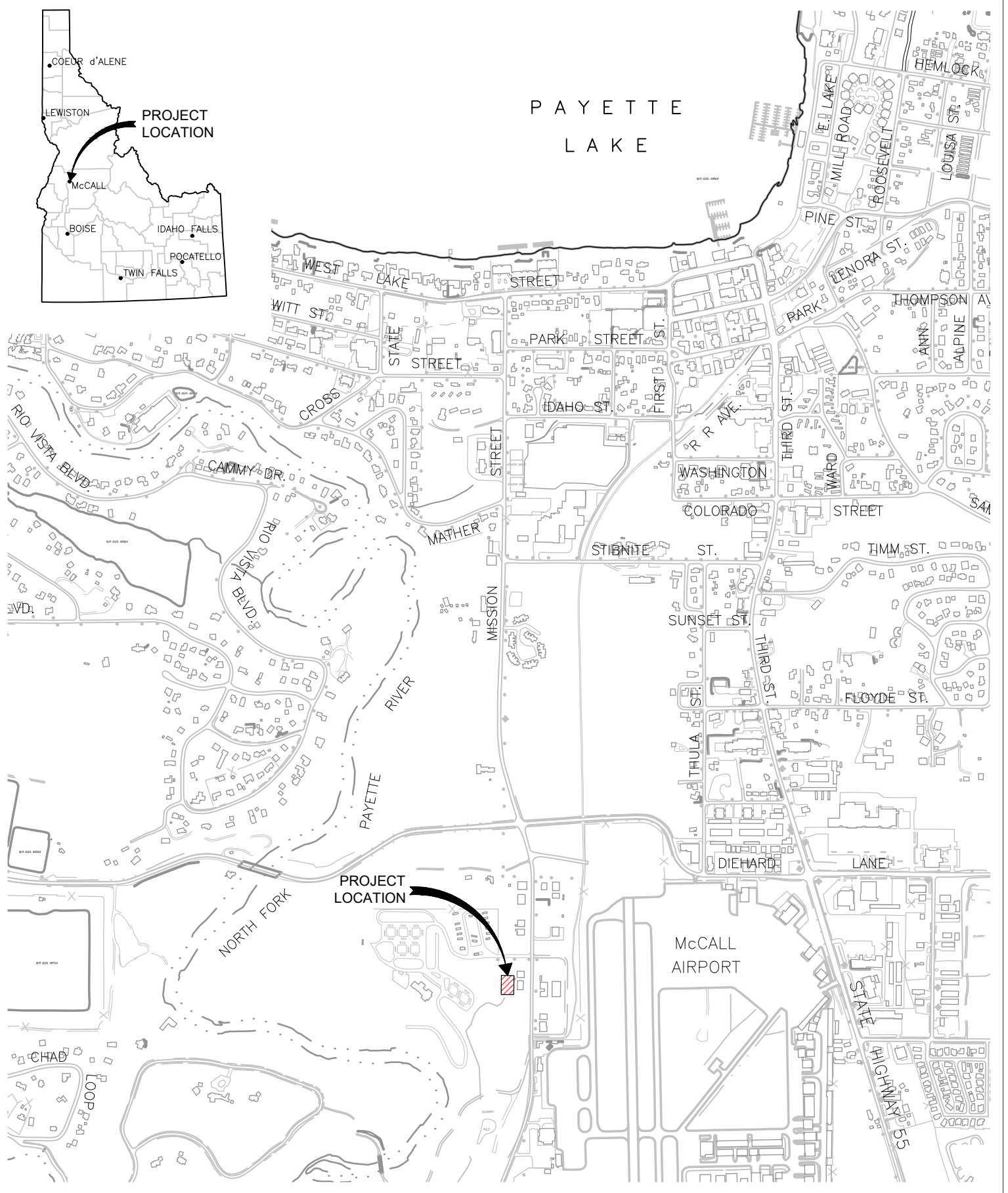
Drainage Area Flow Paths

	Length	Elevation Change	Slope
Pre-Development Flow Path:	(ft)	(ft)	(%)
1. Sheet Flow (n = 0.40, Woods - Light Underbrush)	157.01	0.19	0.12%
Total Length/Average Slope =	157.01	0.19	0.12%

	Length	Elevation Change	Slope
Post Development Flow Path:	(ft)	(ft)	(%)
1. Sheet Flow (n = 0.011, Smooth Surface - Asphalt)	76.77	0.77	1.00%
2. Sheet Flow (n = 0.24, Grass - Dense Grass)	7.20	0.15	2.08%
3. Channel Flow (n = 0.24, Grass - Dense Grass)	84.22	0.50	0.59%
Total Length/Average Slope =	168.19	1.42	0.84%



PAYETTE
LAKE



NORTH
SCALE: 1" = 1000'

CRESTLINE
ENGINEERS

323 DEINHARD LANE, SUITE C · PO BOX 2330
McCALL, IDAHO 83638
208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
VICINITY MAP

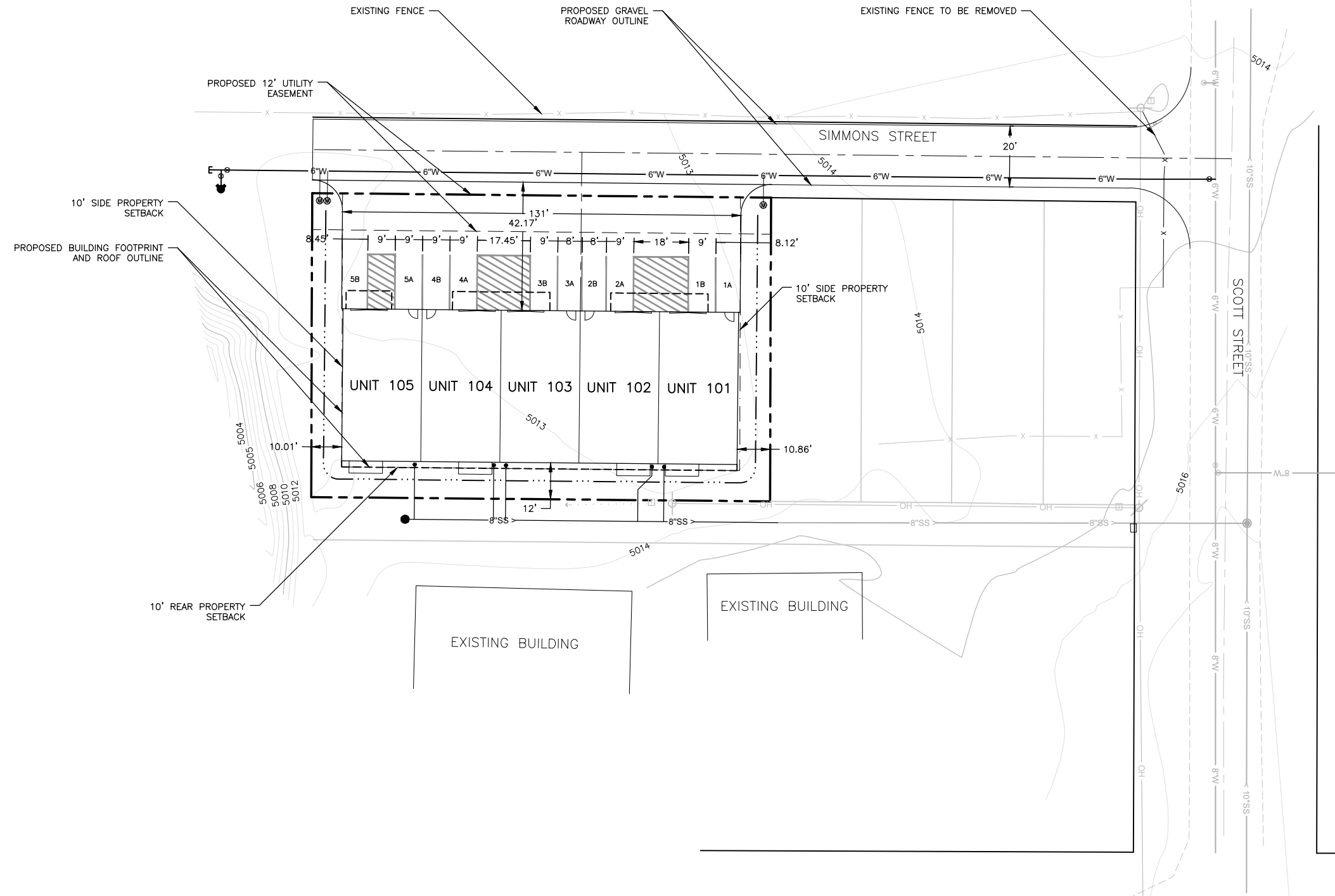
PROJECT	22025	DRAWN	FIGURE NO.
DATE	8/23/2022	AMD	1 OF 1

NOTES:

- EXISTING TOPOGRAPHY AND PROPERTY BOUNDARIES AS SHOWN ON THIS PLAN ARE BASED UPON SURVEY DATA PROVIDED BY 4 RIVERS SURVEYING, INC. PROPOSED IMPROVEMENTS AS SHOWN ON THE PLAN ARE BASED UPON DRAWINGS PROVIDED BY CHRYSALIS ARCHITECTURE.
- THE EXISTING SITE INFORMATION IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR'S CONSTRUCTION SURVEY PRIOR TO THE START OF ANY PROJECT CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE EXISTENCE OF OBJECTS OR UTILITIES ENCOUNTERED, BUT WHICH ARE NOT SHOWN ON THESE DRAWINGS.

LEGEND:

- DEVELOPMENT BOUNDARY
- EXISTING RIGHT-OF-WAY
- ADJACENT PROPERTY BOUNDARY
- EXISTING CONTOUR
- EXISTING ROAD CENTERLINE
- EXISTING EDGE OF ASPHALT
-
- EXISTING GATE VALVE
-
-
- EXISTING TELECOMMUNICATION DEVICE
- EXISTING GUY WIRE
- PROPOSED ROAD CENTERLINE
- PROPOSED EDGE OF GRAVEL
- PROPOSED EDGE OF ASPHALT
-
- PROPOSED GATE VALVE
-
-
-
-



Path: \\10115\Synergy\Structures\2205\Civil\Drawings\DD2205-EX2-OverallLayout.dwg File Name: 2205-EX2-OverallLayout.dwg Plot Date: 8/23/2022 12:35 PM Crestline

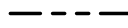
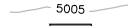





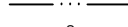
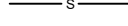
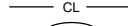

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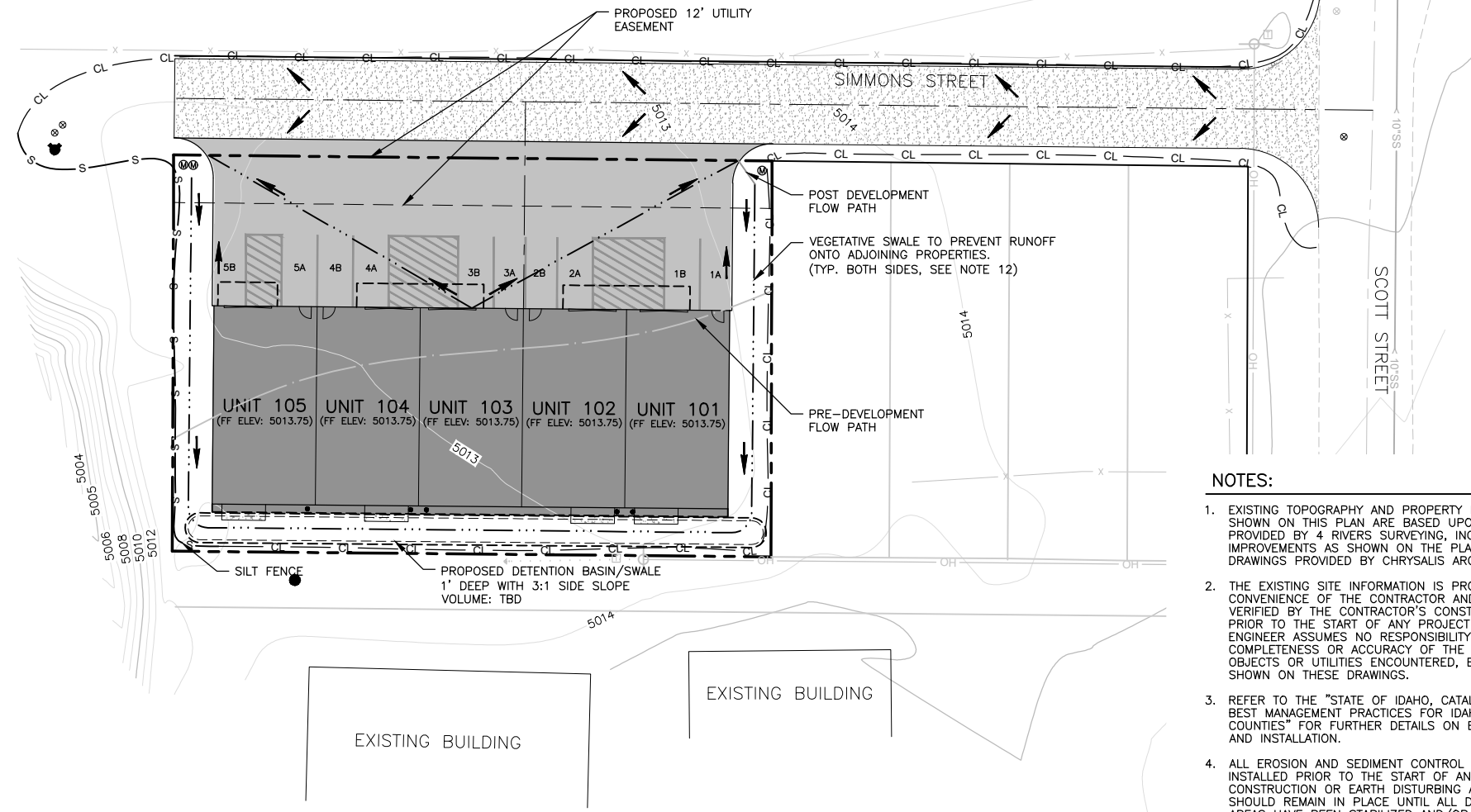
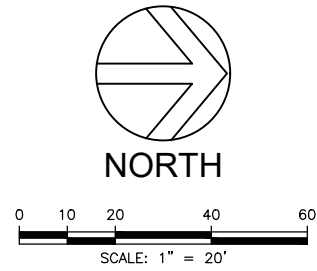
CRESTLINE
ENGINEERS
 323 DEINHARD LANE, SUITE C · PO BOX 2330
 McCALL, IDAHO 83638
 208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
 McCALL, IDAHO
 EXISTING LAYOUT WITH PRELIMINARY SITE PLAN

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
0 10 20 40 60	
SCALE: 1" = 20'	
PROJECT	22025
DATE	8/23/2022
DRAWING NO.	SHEET NO.
EX-2	2 OF 4

LEGEND:

-  DEVELOPMENT BOUNDARY
-  5005 EXISTING CONTOUR
-  PROPOSED ROOF AREA
-  PROPOSED GRAVEL ROAD
-  PROPOSED ASPHALT PARKING LOT
-  PROPOSED DRAINAGE FLOW DIRECTION ARROW
-  PROPOSED DRAINAGE SWALE
-  SILT FENCE
-  CONSTRUCTION/CLEARING LIMITS
-  PRESERVE EXISTING VEGETATION
-  PROPOSE DETENTION BASIN/SWALE



NOTES:

1. EXISTING TOPOGRAPHY AND PROPERTY BOUNDARIES AS SHOWN ON THIS PLAN ARE BASED UPON SURVEY DATA PROVIDED BY 4 RIVERS SURVEYING, INC. PROPOSED IMPROVEMENTS AS SHOWN ON THE PLAN ARE BASED UPON DRAWINGS PROVIDED BY CHRYSALIS ARCHITECTURE.
2. THE EXISTING SITE INFORMATION IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR'S CONSTRUCTION SURVEY PRIOR TO THE START OF ANY PROJECT CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE EXISTENCE OF OBJECTS OR UTILITIES ENCOUNTERED, BUT WHICH ARE NOT SHOWN ON THESE DRAWINGS.
3. REFER TO THE "STATE OF IDAHO, CATALOG OF STORMWATER BEST MANAGEMENT PRACTICES FOR IDAHO CITIES AND COUNTIES" FOR FURTHER DETAILS ON BMP IMPLEMENTATION AND INSTALLATION.
4. ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL BE INSTALLED PRIOR TO THE START OF ANY PROJECT CONSTRUCTION OR EARTH DISTURBING ACTIVITIES AND SHOULD REMAIN IN PLACE UNTIL ALL DISTURBED/EXPOSED AREAS HAVE BEEN STABILIZED AND/OR REVEGETATED.
5. THE OWNER AND/OR THEIR SELECTED CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL BMP'S IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
6. THE IMPLEMENTATION OF THESE EROSION AND SEDIMENT CONTROL MEASURES INCLUDING INSTALLATION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THIS PLAN IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL PROJECT CONSTRUCTION IS COMPLETED AND APPROVED BY THE OWNER. THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AFTER THE PROJECT IS APPROVED.
7. WATTLES MAY BE USED IN PLACE OF SILT FENCE WHERE DETERMINED APPROPRIATE. SILT FENCE HAS BEEN SHOWN ON THE PROPERTY LINES IN SOME AREAS TO PREVENT ENCROACHMENT ONTO NEIGHBORING PROPERTIES.
8. WORK ACTIVITIES SHALL TAKE PLACE WITHIN THE CLEARING LIMITS AS SHOWN ON THIS PLAN. CONTRACTOR SHALL PRESERVE NATURAL VEGETATION OUTSIDE OF CLEARING LIMITS.
9. STAGING AREA(S) TO BE LOCATED BY CONTRACTOR ALONG WITH PORTABLE TOILETS, GARBAGE RECEPTACLES, CONCRETE WASHOUT, AND ALL OTHER CONTRACTOR FACILITIES.
10. ALL SITE GRADING ADJACENT TO THE NEW BUILDING SHALL BE SLOPED TO DRAIN AWAY FROM THE BUILDING AT A MINIMUM OF 1.5% IN HARDSCAPE AREAS AND 4% IN LANDSCAPE AREAS.
11. DRIVEWAY GRADES SHALL BE SLOPED AWAY FROM THE BUILDING AT A MINIMUM SLOPE OF 2% AND A MAXIMUM SLOPE OF 6% FOR A DISTANCE OF NO LESS THAN TEN (10) FEET. GRADING OF THE DRIVEWAY SHALL BE IN ACCORDANCE WITH THE DIRECTION OF THE DRAINAGE FLOW DIRECTION ARROWS AS SPECIFIED IN THE STORMWATER MANAGEMENT PLAN.
12. AREAS BETWEEN NEW BUILDING AND PROPERTY BOUNDARIES SHALL BE SLOPED TO INSURE RUNOFF IS KEPT ON-SITE. SWALES SHALL BE CONSTRUCTED ADJACENT TO/NEAR SIDE PROPERTY LINES TO PREVENT RUNOFF FROM FLOWING ONTO ADJOINING PROPERTIES. THESE SWALES ARE INTENDED TO BE FIELD FIT AND MEANDERED AROUND EXISTING VEGETATION AND SITE FEATURES AS NECESSARY.
13. REVEGETATION AND STABILIZATION OF ALL DISTURBED PROJECT AREAS SHALL BE IN ACCORDANCE WITH THE PROJECTS LANDSCAPE DESIGN. IF A LANDSCAPE DESING/PLAN IS NOT AVAILABLE, DISTURBED AREAS SHALL BE REVEGETATED WITH A GRASS MIXTURE NATIVE TO THAT AREA.

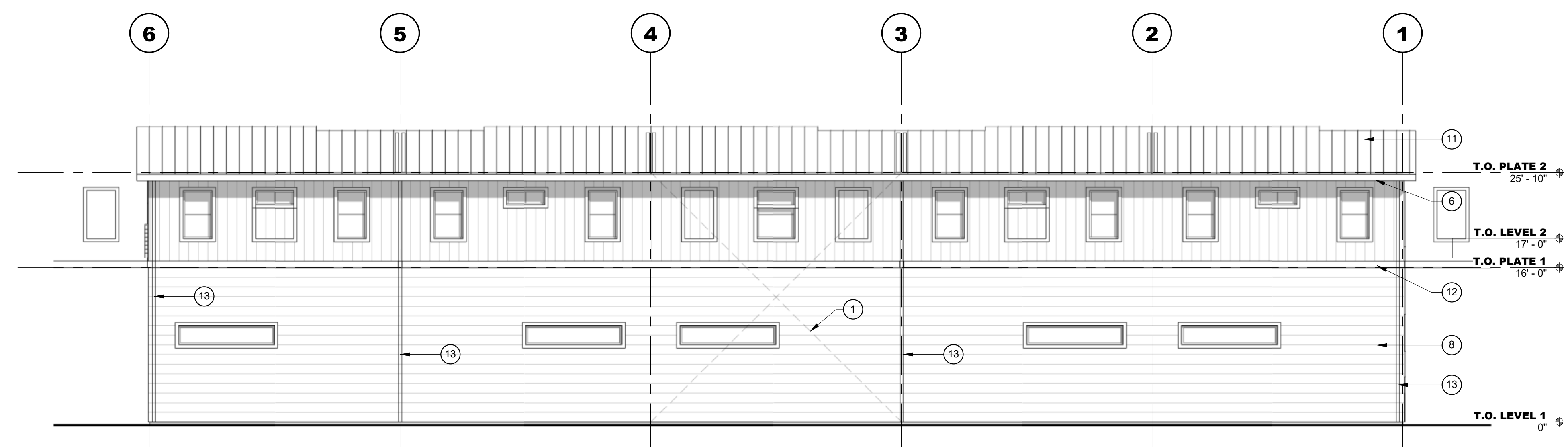
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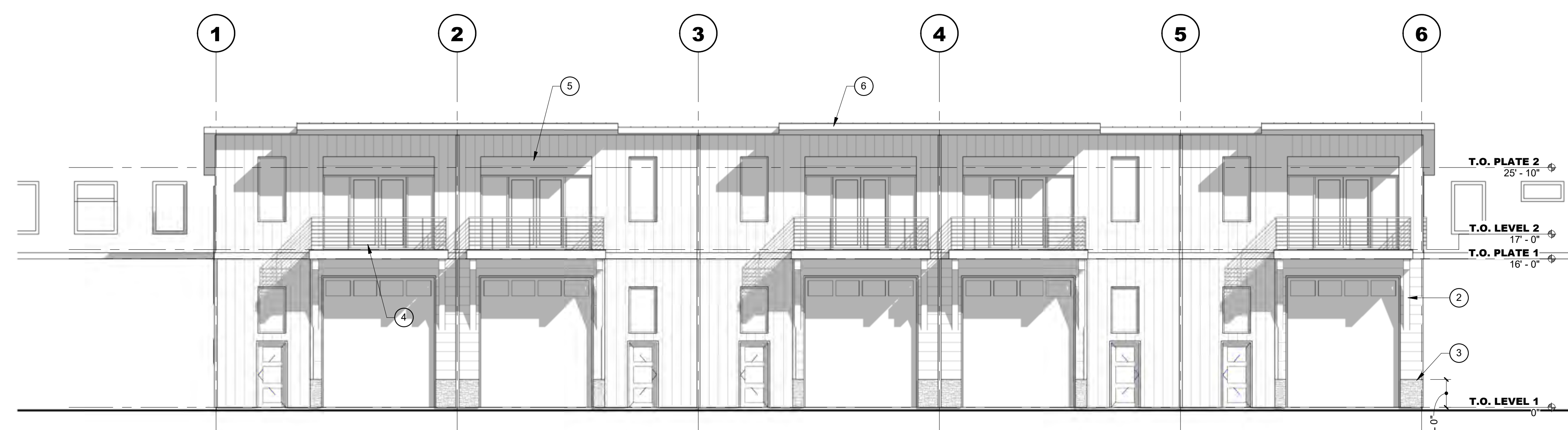
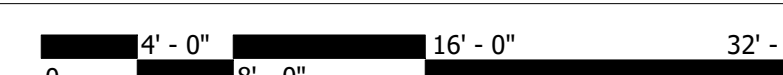

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SIMMONS STREET TOWNHOUSES
 McCALL, IDAHO
 PRELIMINARY GRADING, DRAINAGE AND
 STORMWATER MANAGEMENT PLAN

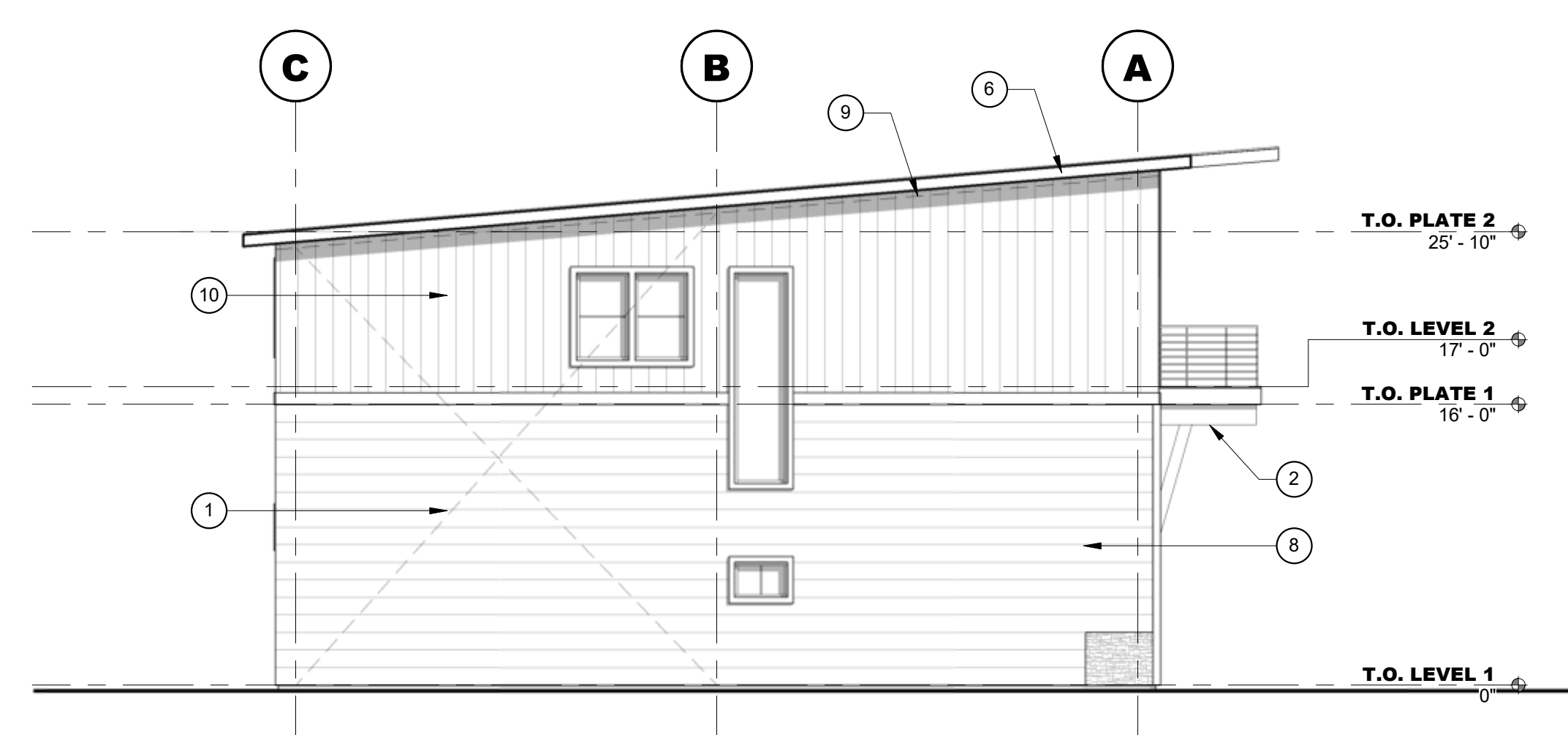
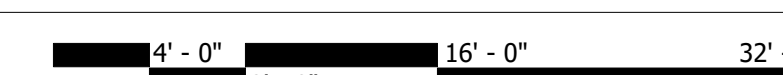
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PROJECT	22025
DATE	8/23/2022
DRAWING NO.	SHEET NO.
EX-3	3 OF 4



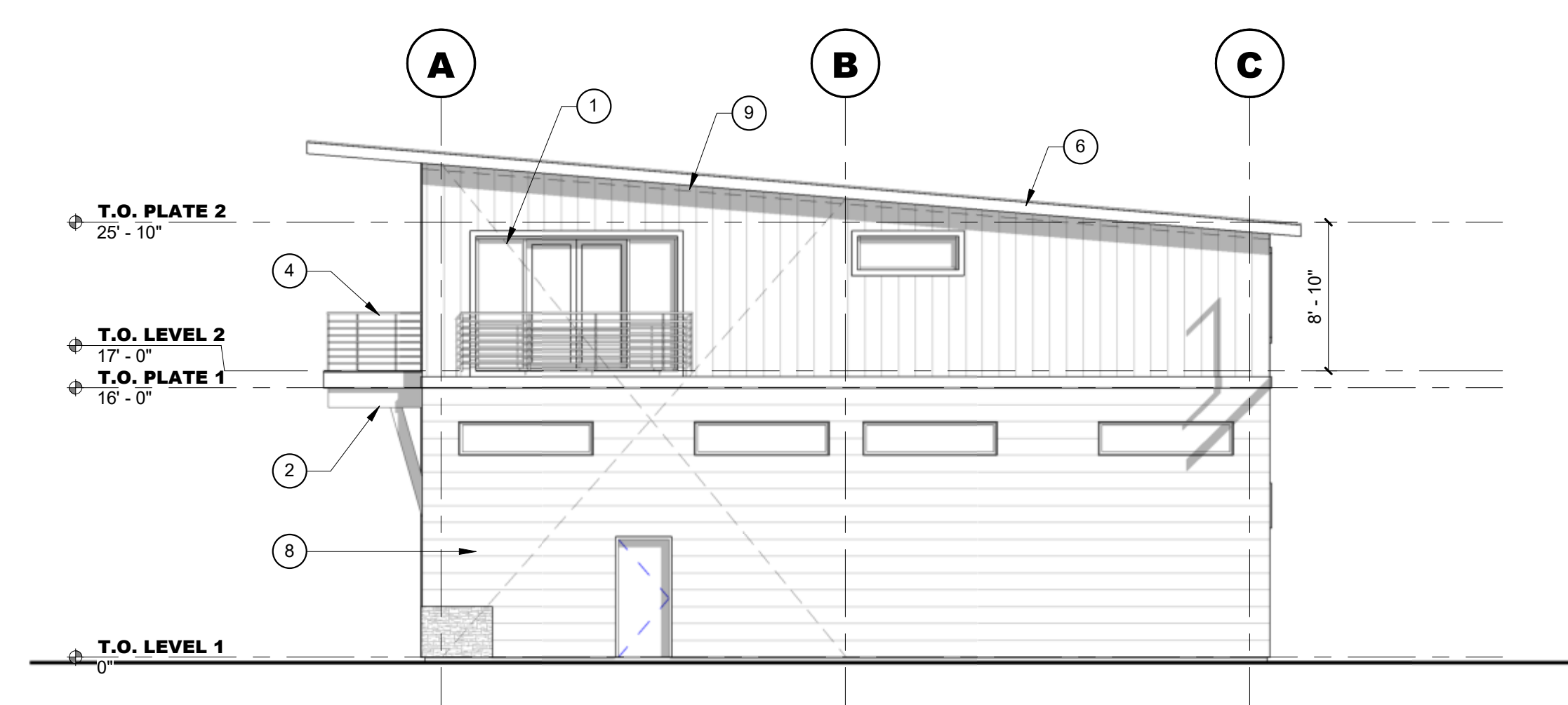
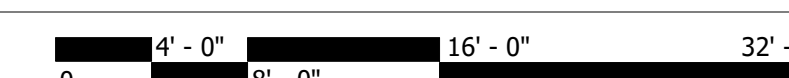
EAST ELEVATION
1/8" = 1'-0"



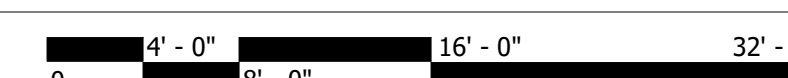
WEST ELEVATION
1/8" = 1'-0"



NORTH ELEVATION
1/8" = 1'-0"



SOUTH ELEVATION
1/8" = 1'-0"



EXTERIOR ELEVATION GENERAL NOTES

- DRAWINGS & SPECIFICATIONS ARE COMPLEMENTARY COMPONENTS OF THE CONTRACT DOCUMENTS. REVIEW ALL DRAWINGS AND SPECIFICATIONS FOR THE COMPLETE SCOPE OF WORK. NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION IF INCONSISTENCIES, CONTRADICTIONS OR OMISSIONS ARE DISCOVERED.
- DO NOT SCALE DRAWINGS. IF DIMENSIONAL INFORMATION IS REQUIRED & NOT FOUND, NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION.
- ALL DIMENSIONS ARE TO COLUMN CENTERLINES OR TO FACE OF FRAMING, UNLESS OTHERWISE INDICATED.
- ALL EXPOSED FOUNDATIONS AND FOOTINGS ARE TO BE PAINTED TO MATCH ADJACENT WALL FINISH OR COLOR AS SELECTED BY OWNER. PROVIDE NECESSARY SURFACE FILLER AS RECOMMENDED BY MANUFACTURER FOR PARTICULAR APPLICATION.
- ALL EXPOSED CONDUIT TO BE PAINTED TO MATCH ADJACENT WALL COLOR.
- PROVIDE 24 GAUGE PRE-FINISHED METAL FLASHING, DRIP EDGE, AND TRIM TO MATCH ROOFING COLOR, AS SELECTED BY OWNER.
- PROVIDE CONTINUOUS PRE-FINISHED 22 GAUGE METAL GUTTER TO MATCH FLASHING OR TRIM AT ALL ROOF EAVES. PROVIDE CHAIN LEADER TO 12"x12" CONCRETE BALLAST WITH EMBED EYELET OF SAME TYPE AS CHAIN LEADER. BALLAST TO BE COVERED WITH 0'-8" TOPSOIL/LANDSCAPE.
- PROVIDE WEEP HOLES AT 2'-0" ON CENTER AT BASE OF STONE / MASONRY LOCATIONS.
- ALL EXTERIOR EXPOSED, SEMI-EXPOSED / CONCEALED AND CONCEALED UN-TREATED WOOD IS TO BE STAINED AND SEALED.

KEYNOTES - ELEVATIONS

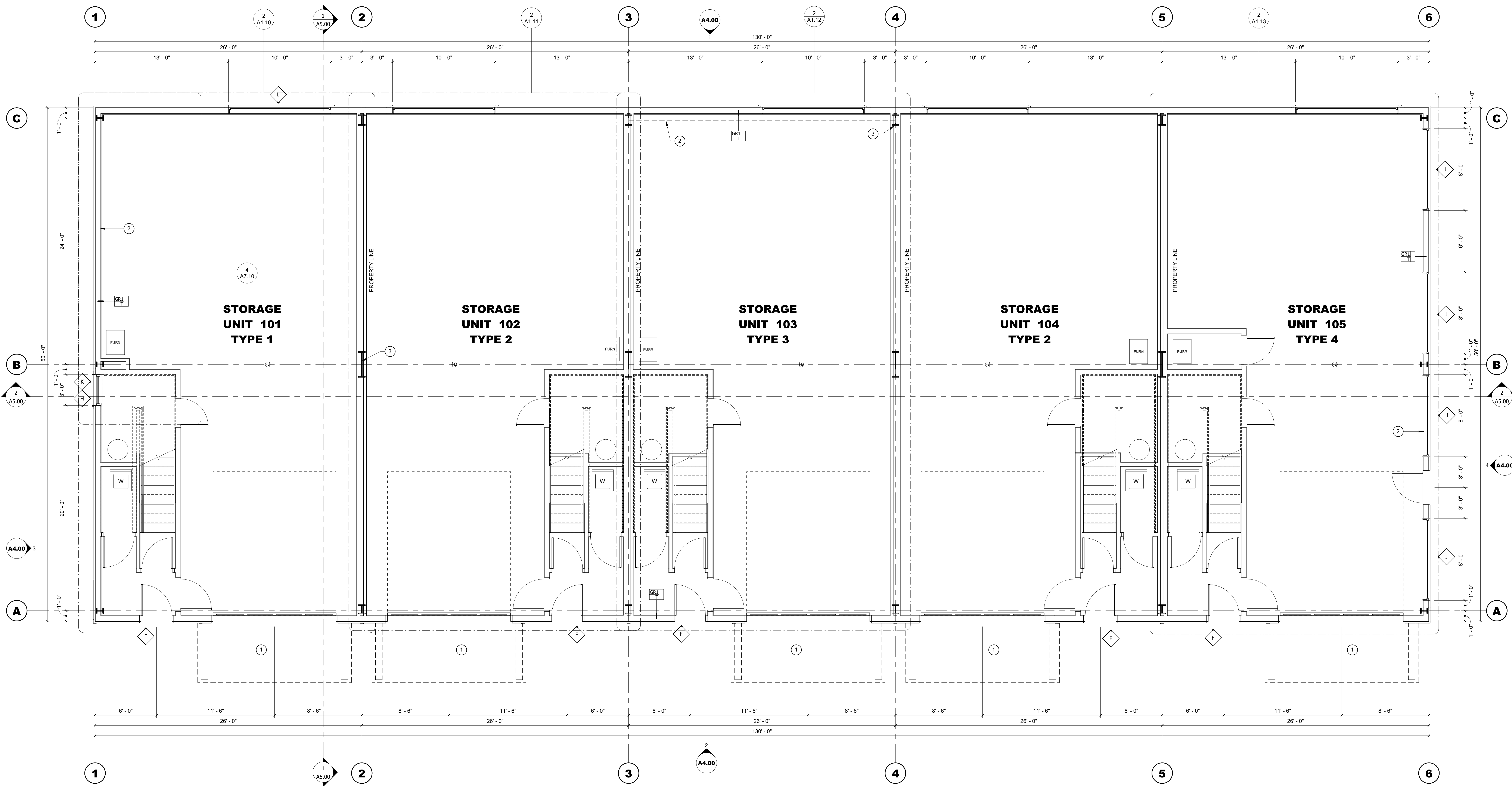
MARK	DESCRIPTION
1	X BRACE - SEE PRE-ENGINEERED METAL BUILDING DRAWINGS
2	6x ROUGH SAWN DECORATIVE BRACKETS, STAINED
3	STONE WAINSCOT
4	3'-6" STEEL GUARDRAIL, BLACKENED
5	DECORATIVE WEATHERED WOOD PLANK, SEALED
6	PRE-FINISHED METAL FASCIA
7	3'-6" STEEL GUARDRAIL, BLACKENED, FLUSH MOUNTED
8	PRE-FINISHED METAL CLADDING, HORIZONTAL
9	LINE OF CEILING
10	PRE-FINISHED METAL CLADDING, VERTICAL
11	PRE-FINISHED STANDING METAL ROOFING WITH WATER-PROOF MEMBRANE
12	PRE-FINISHED 8" METAL TRIM
13	PRE-FINISHED ROOF DRAIN LEADER

SIMMONS STREET - MIXED USE - TOWNHOUSES / STORAGE
 209 - 211 SIMMONS STREET, MCALL, IDAHO 83638
 EXTERIOR ELEVATIONS
 CONSTRUCTION DRAWINGS
 SHEET NUMBER: **A4.00**

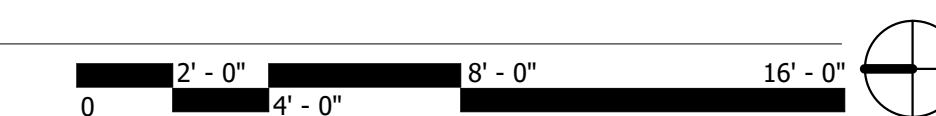
REVISION	DATE	DESCRIPTION

DRAWN: JAB
 CHECKED: JAB
 DATE: 04/10/23
 PROJECT NUMBER: 2241

I hereby certify that the work shown on these drawings was prepared by me or under my direct supervision and that I am a duly Licensed Professional Architect in the State of Idaho.
 JAB
 REGISTERED PROFESSIONAL ARCHITECT
 IDAHO ARCHITECTS BOARD # 2241



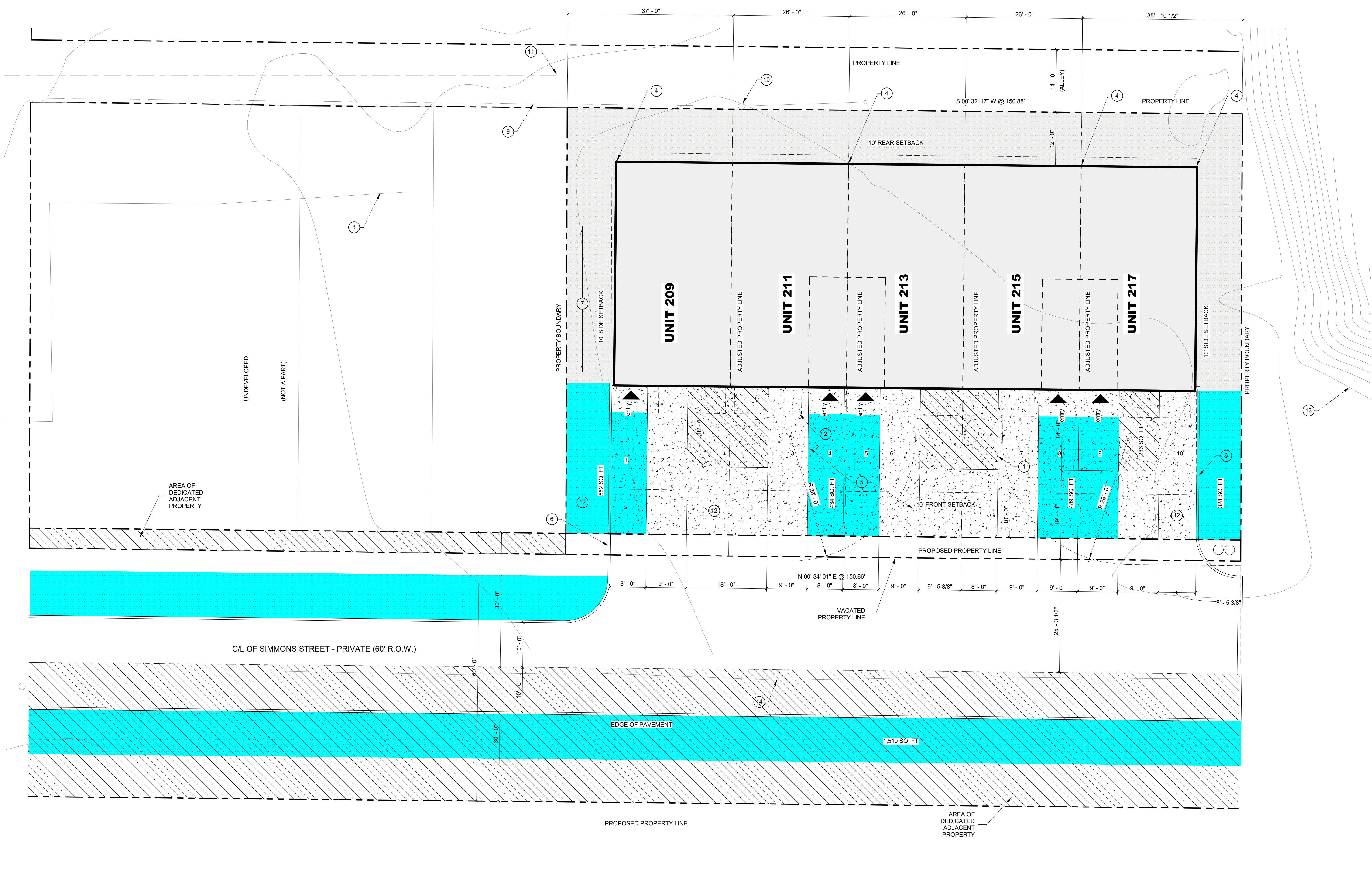
FLOOR PLAN - LEVEL 1
1/4" = 1'-0"



KEYNOTES - FLOOR PLAN	
MARK	DESCRIPTION
1	PRE-FABRICATED METAL DECKING, ABOVE
2	'X' BRACE - SEE PRE-ENGINEERED METAL BUILDING DRAWINGS
3	PRE-ENGINEERED METAL BUILDING FRAME - SEE PRE-ENGINEERED DRAWINGS
4	3'-0" STEEL GUARDRAIL, BLACKENED
5	PRE-FABRICATED METAL DECK

- FLOOR PLAN GENERAL NOTES**
- DRAWINGS & SPECIFICATIONS ARE COMPLEMENTARY COMPONENTS OF THE CONTRACT DOCUMENTS. REVIEW ALL DRAWINGS AND SPECIFICATIONS FOR THE COMPLETE SCOPE OF WORK. NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION IF INCONSISTENCIES, CONTRADICTIONS OR OMISSIONS ARE DISCOVERED.
 - DO NOT SCALE DRAWINGS. IF DIMENSIONAL INFORMATION IS REQUIRED & NOT FOUND, NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION.
 - UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE TO CENTERLINES OR TO FACE OF FRAMING. CLEAR DIMENSIONS INDICATE DIMENSION BETWEEN FINISHES.
 - UNLESS NOTED OTHERWISE, ALL DOOR JAMBS ARE TO BE SET 4" FROM ADJACENT WALL.
 - UNLESS NOTED OTHERWISE, BRACE ALL CEILINGS AND NON-LOAD BEARING WALLS.
 - UNLESS NOTED OTHERWISE, ALL WINDOW HEADS ARE TO BE SET AT 8'-0" ABOVE FINISHED FLOOR. VERIFY PLAN AND REPORT DISCREPANCIES TO ARCHITECT.

SIMMONS STREET - MIXED USE - TOWNHOUSES / STORAGE													
209 - 271 SIMMONS STREET, MICALL, IDAHO 83638													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">#</th> <th style="width: 70%;">REVISION</th> <th style="width: 20%;">DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	#	REVISION	DATE										<p style="font-size: 0.8em;">DRAWN BY: AB CHECKED BY: 04/10/23 DATE: 04/10/23 PROJECT NUMBER: 2241</p> <p style="font-size: 0.8em;">SHEET NUMBER:</p>
#	REVISION	DATE											
FLOOR PLAN OVERALL - LEVEL 1													
CONSTRUCTION DRAWINGS													



SITE PLAN
1" = 10'-0"

SITE PLAN NOTES

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- DO NOT SCALE DRAWINGS. IF DIMENSIONAL INFORMATION IS REQUIRED & NOT FOUND, NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION.
- UNLESS NOTED OTHERWISE SLOPE GRADE MAXIMUM 2% WITHIN 10' OF BUILDING, THEN 5% TO MATCH EXISTING GRADE ELEVATIONS. SLOPE ALL WALKING SURFACES MAXIMUM 5% IN THE DIRECTION OF TRAVEL AND MAXIMUM 2% AT LANDING, CHANGE OF DIRECTION, AND PERPENDICULAR TO DIRECTION OF TRAVEL.
- UNLESS NOTED OTHERWISE FOR ALL EXTERIOR CONCRETE PAVEMENT PROVIDE MINIMUM 6" TYPE II, COMPACTED 95%.
- REFER TO GEO-TECHNICAL REPORT FOR RECOMMENDATIONS OF FILL WITHIN THE EXISTING 100 YEAR FLOOD PLAIN.
- FINISHED FLOOR ELEVATION IS TO BE AT MINIMUM 1'-6" ABOVE THE HIGHEST ADJACENT CROWN OF ALL ADJACENT STREETS.
- PROVIDE DRAINAGE SWALES WITH BANKS THAT DO NOT EXCEED 33%.
- PROVIDE LANDSCAPING AND IRRIGATION THAT MEETS OR EXCEEDS ALL APPLICABLE STANDARDS.
- VERIFY ALL EXISTING EASEMENT, SETBACKS, DRAINAGE AND UTILITIES FOR CONFORMANCE TO DESIGN PRIOR TO CONSTRUCTION.

KEYNOTES - SITE PLAN

MARK	DESCRIPTION
1	4" WIDE PAVEMENT STRIPING
2	UNIT DECK OVERHANG, ABOVE
3	4" CONCRETE SLAB WITH CONTROL JOINTS, MAXIMUM 10'-0" ON CENTER
4	ROOF DRAIN LEADER
5	ASPHALT CONCRETE PAVING
6	CONCRETE CURB
7	LANDSCAPE TO MATCH EXISTING AND NATIVE GRASSES / PLANTINGS
8	EXISTING FENCE TO REMAIN
9	EXISTING OVERHEAD POWER
10	EXISTING POWER POLE
11	EXISTING END OF SEWER LINE
12	SNOW STORAGE AREA
13	EXISTING TOP OF BANK
14	REMOVE EXISTING FENCE

SITE ANALYSIS

ADDRESS :	209 - 217 SIMMONS STREET MCCALL, IDAHO 83638
ASSESSORS PARCEL NUMBER :	RPM0217002050 RPM0217002060 RPM0217002070 RPM0217002080 RPM0217002090
SUBDIVISION:	RIVERSIDE SUBDIVISION
LEGAL DESCRIPTION:	LOTS 5 THROUGH 9 BLOCK 2
JURISDICTION:	CITY OF MCCALL
ZONING :	I - INDUSTRIAL
LAND USE :	SINGLE-FAMILY, ATTACHED (TOWNHOUSE) & COMMERCIAL SPACE
SITE AREA :	0.345 ACRES
SQUARE FOOTAGE -	15,067 SQUARE FEET
UNIT AREA :	
LEVEL 1 -	211 SQUARE FEET
LEVEL 2 -	1,236 SQUARE FEET
COVERED DECK -	89 SQUARE FEET
TOTAL -	1,447 SQUARE FEET
COMMERCIAL -	1,092 SQUARE FEET
BUILDING AREA :	
LEVEL 1 -	1,055 SQUARE FEET
LEVEL 2 -	6,180 SQUARE FEET
COVERED DECK -	445 SQUARE FEET
TOTAL -	7,235 SQUARE FEET
COMMERCIAL -	5,460 SQUARE FEET
LOT COVERAGE	
BUILDING	43.1% 6,494 SQUARE FEET
LANDSCAPE AREA :	22.5% 3,392 SQUARE FEET
PAVING/PARKING/SIDEWALK AREA :	34.3% 5,182 SQUARE FEET
SNOW STORAGE AREA (33% OF PAVING/PARKING/SIDEWALK)	1,810 SQUARE FEET
SQUARE FOOTAGE -	
ALLOWED	PROVIDED
DENSITY :	25 U/ACRE 14.4 U/ACRE
UNIT TYPES :	UPPER (5) 2-BEDROOMS LOWER (5) COMMERCIAL UNITS
HEIGHT:	
MAXIMUM -	35'-0"
ACTUAL -	30'-0"
SETBACKS :	REQUIRED PROVIDED
BUILDING	
FRONT -	10'-0" 37'-11"
SIDE (NON-RES) -	10'-0" 10'-0"/11'-0"
REAR -	10'-0" 12'-0"
PARKING	
FRONT	20'-0" 20'-0"
STREET	20'-0" 20'-0"
SIDE	10'-0" 10'-0"/11'-0"
PARKING :	2 SPACES / UNIT 10 SPACES (SURFACE) 10 SPACES (GARAGE) 20 SPACES (TOTAL)

REVISION	DATE	DESCRIPTION

SIMMONS STREET - MIXED USE - TOWNHOUSES / STORAGE

209 - 217 SIMMONS STREET, MCCALL, IDAHO 83638

SITE PLAN

CONSTRUCTION DRAWINGS

SHEET NUMBER :

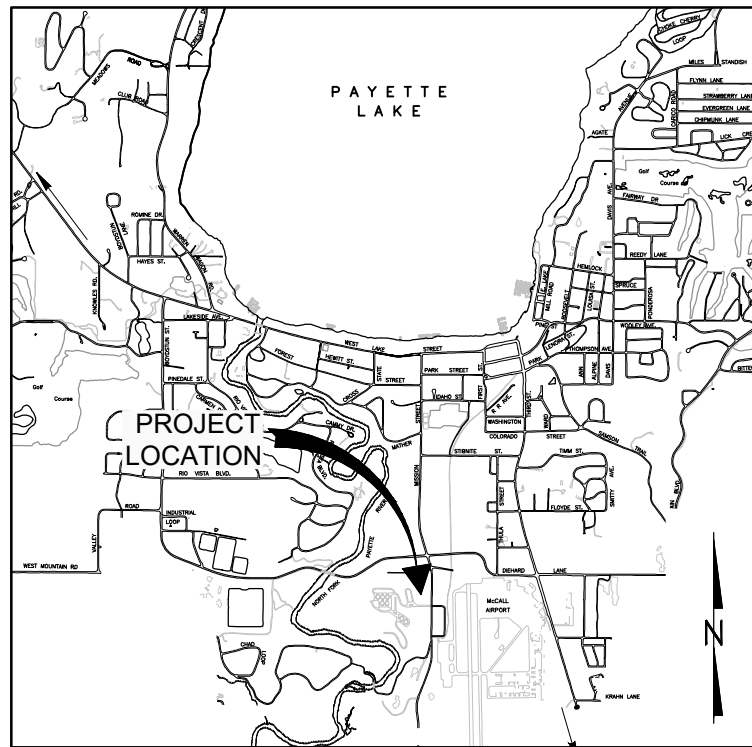
SIMMONS STREET TOWNHOUSES

McCALL, IDAHO

ROADWAY, DOMESTIC WATER, SANITARY SEWER AND GRADING IMPROVEMENTS SPRING/SUMMER 2023

DRAWING INDEX

1	G-1	COVER SHEET
2	G-2	GENERAL INFORMATION AND NOTES
3	C-1	OVERALL LAYOUT WITH HORIZONTAL CONTROL AND STRIPING PLAN
4	C-2	ROADWAY PLAN AND PROFILE
5	C-3	SANITARY SEWER PLAN AND PROFILE
6	C-4	DOMESTIC WATER PLAN AND PROFILE
7	C-5	GRADING, DRAINAGE AND STORMWATER MANAGEMENT PLAN
8	GC-1	CIVIL TYPICAL DETAILS - 1
9	GC-2	CIVIL TYPICAL DETAILS - 2
10	GC-3	CIVIL TYPICAL DETAILS - 3
11	GC-4	CIVIL TYPICAL DETAILS - 4



LOCATION MAP
SCALE 1" = 2000'



VICINITY MAP
SCALE 1" = 250'

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NO.	REVISION	BY	DATE	DESIGN
1.	CITY OF McCall AND PLRWSO ENGINEERING SUBMITTAL	AMD	4/26/2023	AMD
				DRAWN
				AMD
				CHECKED
				GTT
				APPROVED
				GTT



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ENGINEERS
323 DEINHARD LANE, SUITE C · PO BOX 2330
McCALL, IDAHO 83638
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SIMMONS STREET TOWNHOUSES
McCALL, IDAHO
ROADWAY, DOMESTIC WATER, SANITARY SEWER
AND GRADING IMPROVEMENTS PROJECT
COVER SHEET

VERIFY SCALE BAR IS ONE INCH ON FULL SIZE DRAWING 0 1"	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	SHEET NO.
G-1	1 OF 11

GENERAL NOTES:

- ALL WORK SHALL CONFORM TO THE PROJECT NOTES, DETAILS, SPECIFICATIONS, PAYETTE LAKES RECREATIONAL WATER AND SEWER DISTRICT (PLRWSD), AND THE CITY OF McCALL STANDARDS. WHERE NOT SPECIFIED, ALL WORK SHALL CONFORM TO THE 2020, OR MOST CURRENT, EDITION OF THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPPWC). IN THE EVENT THAT ANY OF THESE STANDARDS CONFLICT, THE MORE STRINGENT SHALL BE THE CONTROLLING STANDARDS OR SPECIFICATIONS.
- ONLY PLAN SETS STAMPED "APPROVED FOR CONSTRUCTION" AND SIGNED BY THE CITY ENGINEER OR HIS AUTHORIZED REPRESENTATIVE SHALL BE USED BY THE PROJECT CONTRACTOR(S). USE OF ANY PLANS ON THE JOB WITHOUT THE "APPROVED FOR CONSTRUCTION" STAMP SHALL BE GROUNDS FOR THE ISSUANCE OF A STOP WORK ORDER.
- THE CONTRACTOR SHALL KEEP ON-SITE AT ALL TIMES A COPY OF THE APPROVED CONSTRUCTION PLANS. THESE PLANS SHALL BE USED TO RECORD THE ACTUAL LOCATIONS OF THE CONSTRUCTED PIPELINE(S) AND ANY OTHER UTILITIES ENCOUNTERED. THE CONTRACTOR SHALL PROVIDE THESE RECORDED LOCATIONS TO THE PROJECT ENGINEER FOR USE IN THE PRODUCTION OF RECORD DRAWINGS PRIOR TO FINAL APPROVAL/ACCEPTANCE OF THE PROJECT.
- EXISTING SITE INFORMATION INCLUDING THE LOCATION OF EXISTING SITE CONDITIONS AND SURFACE TOPOGRAPHY AS SHOWN ON THESE PLANS HAS BEEN PROVIDED BY 4 RIVERS SURVEYING, INC. AS A RESULT OF FIELD WORK COMPLETED IN 2022. THE EXISTING SITE INFORMATION IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR'S CONSTRUCTION SURVEY PRIOR TO THE START OF ANY PROJECT CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL CONSTRUCTION STAKING.
- THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. THE PROJECT ENGINEER ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE DELINEATION OF SUCH UNDERGROUND UTILITIES, OR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH MAY BE ENCOUNTERED, BUT WHICH ARE NOT SHOWN ON THESE DRAWINGS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY EXACT LOCATIONS OF EXISTING UTILITIES PRIOR TO THE START OF ANY PROJECT CONSTRUCTION. ANY LOCATION WHICH MAY POSE A CONFLICT WITH THE PROPOSED CONSTRUCTION MUST BE REPORTED TO THE PROJECT ENGINEER PRIOR TO THE START OF ANY PROJECT CONSTRUCTION.
- THE CONTRACTOR SHALL SUBMIT A PROJECT SCHEDULE AND SEQUENCING PLAN TO THE OWNER AND THE PROJECT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO STARTING CONSTRUCTION.
- THE CONTRACTOR SHALL CALL DIG LINE (800-342-1585) TO LOCATE ALL EXISTING UTILITIES AT LEAST THREE (3) DAYS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF McCALL A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO THE START OF PROJECT CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN A PERMIT TO EXCAVATE IN PUBLIC RIGHT-OF-WAY, FROM THE CITY OF McCALL AND PROVIDE A COPY TO THE OWNER AND THE PROJECT ENGINEER PRIOR TO THE START OF PROJECT CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL ASSOCIATED WITH THE PROJECT AND SHALL DEVELOP/SUBMIT A PLAN TO THE CITY OF McCALL AND THE PROJECT ENGINEER FOR APPROVAL PRIOR TO THE START OR PROJECT CONSTRUCTION. PLAN TO BE IN ACCORDANCE WITH MUTCD AND PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL MAINTAIN TRAFFIC ACCESS AT THE END OF EACH DAY AND PROVIDE DETOURS OR ONE-WAY TRAFFIC DURING CONSTRUCTION. WHEN CONSTRUCTION TECHNIQUES ALLOW, CONTRACTOR SHALL PROVIDE ACCESS THROUGH THE CONSTRUCTION ZONE TO PRIVATE PROPERTIES.
- CONTRACTOR SHALL SECURE A SHORT TERM ACTIVITY EXEMPTION FROM THE IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY (IDEQ) PRIOR TO THE START OF PROJECT CONSTRUCTION IF WORK IN GROUND WATER IS ANTICIPATED. IN ADDITION TO THE EXEMPTION, CONTRACTOR SHALL SUBMIT A DEWATERING PLAN TO THE PROJECT ENGINEER PRIOR TO COMMENCEMENT OF DEWATERING OPERATIONS.
- DURING PIPELINE INSTALLATION AND SERVICE CONNECTIONS, GROUNDWATER LEVELS SHALL BE MAINTAINED ONE (1') FOOT OR MORE BELOW PIPE INVERTS PER ISPPWC. ONCE DEWATERING OPERATIONS CEASE, CONTRACTOR SHALL CLEAN AND RESTORE TO THEIR ORIGINAL STATE ANY DITCHES OR STORMDRAIN FACILITIES THAT ARE SILTED DUE TO THEIR DEWATERING EFFORTS.

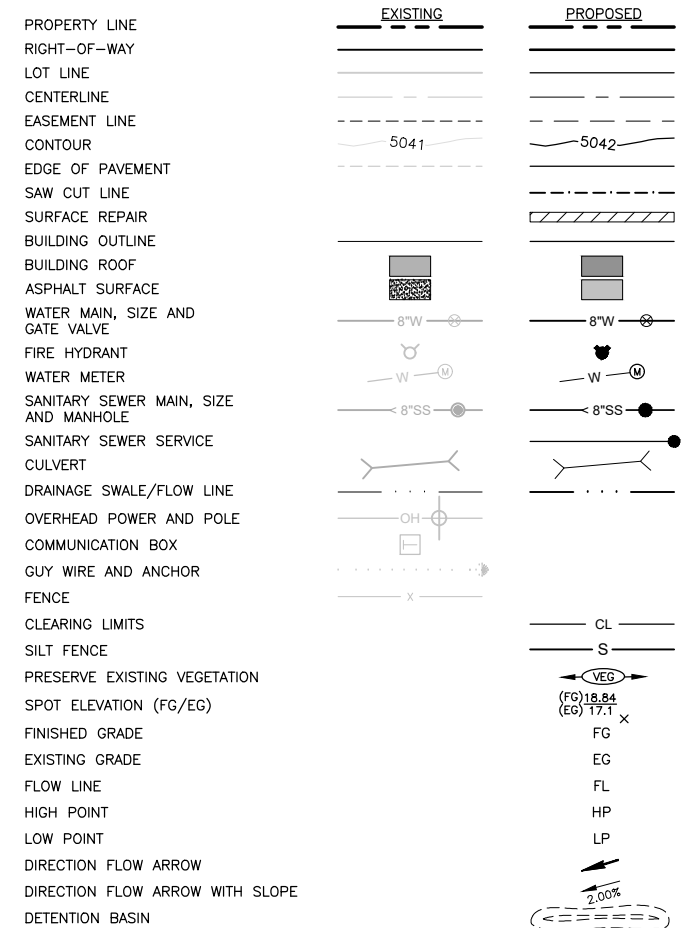
TREE PROTECTION NOTES:

- CONTRACTOR TO TAKE EXTRA PRECAUTION WHEN WORKING NEAR TREES WITHIN THE PROJECT AREA.
- INSTALL CONSTRUCTION FENCING AROUND THE DRIP LINES OF ALL SIGNIFICANT (12" OR LARGER TRUNK DIAMETER) TREES TO PREVENT VEHICLE/CONSTRUCTION EQUIPMENT TRAFFIC AND COMPACT SOIL ABOVE TREES ROOT SYSTEM.
- WHEN DIGGING IN CLOSE PROXIMITY/UNDER DRIPLEINES OF TREES, CONTRACTOR TO POT HOLE/HAND DIG AROUND TREE ROOTS TO PREVENT PULLING IMPACTS AND/OR TENSION ON THE ROOT SYSTEM.
- IF IMPACTS ARE UNAVOIDABLE, CONTRACTOR TO COORDINATE IMPACTS WITH THE CITY ARBORIST AND PROJECT ENGINEER TO TRY AND MINIMIZE IMPACTS TO THE GREATEST EXTENT POSSIBLE.
- IN THE EVENT THAT THERE IS A CONFLICT WITH TREE ROOTS, CONTRACTOR TO GENTLY EXPOSE AND CUT THE ROOT CLEANLY WITH A SAW TO HELP MITIGATE IMPACTS. DO NOT TREAT THE ENDS OF CUT ROOTS.
- ONCE TREE ROOTS ARE CUT AND/OR IMPACTED, THERE IS NO GUARANTEE OF THEIR SURVIVAL.
- ANY ROOT IMPACTS SHOULD BE APPROVED BY THE CITY ARBORIST AND KEPT TO ONE SIDE OF THE TREE WHERE AT ALL POSSIBLE.

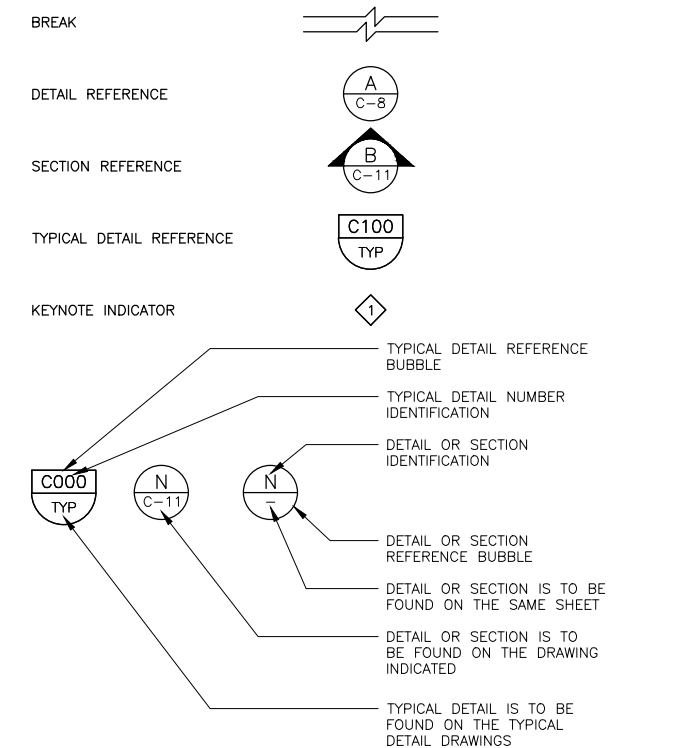
SEWER CONSTRUCTION NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE PLRWSD STANDARD SPECIFICATIONS AND DRAWINGS AND THE 2020 ISPPWC.
- APPROVAL AND ACCEPTANCE OF ALL SEWER CONSTRUCTION WILL BE BY THE PLRWSD AND THEIR DECISION SHALL BE FINAL. SUCH INSPECTIONS SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF PERFORMING THE WORK IN AN ACCEPTABLE MANNER IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLANS AND STANDARD SPECIFICATIONS AND DRAWINGS. NO SEWER PERMITS WILL BE ISSUED TO CUSTOMERS PRIOR TO SEWER LINE ACCEPTANCE.
- SEWER LINES SHALL BE LOCATED IN ROADS. MANHOLES SHALL BE IN THE ROADWAY CENTERLINE, OR IN THE CENTER OF THE DRIVING LANE. ALTERNATIVELY, PROVIDE A THIRTY (30') FOOT WIDE UTILITY EASEMENT FOR ALL SEWER MAINS NEEDED TO SERVE THE DEVELOPMENT (ON OR OFF-SITE) OUTSIDE OF THE PUBLIC RIGHT-OF-WAY. THE SEWER MUST BE CENTERED IN THE EASEMENT. A TWELVE-FOOT WIDE ISPPWC TYPE 1, TYPE 2 OR TYPE 3 GRAVEL ACCESS ROAD IS REQUIRED WITH TWELVE (12") INCH MINIMUM PIT RUN GRAVEL SECTION FOR ACCESS TO ALL SEWER MAINS. THE REMAINDER OF THE EASEMENT CAN BE RESTORED WITH NATIVE GRASSES. NO TREES OR PERMANENT STRUCTURES (OTHER THAN SEWER RELATED INFRASTRUCTURE) WILL BE ALLOWED IN THE EASEMENT.
- ALL GRAVITY SEWER PIPE SHALL BE BELL AND SPIGOT, POLYVINYL CHLORIDE (PVC), SDR 35, ASTM D-3034, UNLESS OTHERWISE APPROVED BY PLRWSD.
- LOCATE SERVICE LINES TO THE POINTS SHOWN ON THE STANDARD DRAWINGS.
- THE PLRWSD RESERVES THE RIGHT TO COMPLETE SPOT OBSERVATION. THE CONTRACTOR WILL NOTIFY THE PLRWSD FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION AND AGAIN TWENTY-FOUR (24) HOURS PRIOR TO POURING CONCRETE COLLARS.
- MAINTAIN GROUNDWATER LEVELS ONE (1') FOOT OR MORE BELOW THE PIPE INVERT, PER ISPPWC, DURING PIPE LAYING AND PIPE JOINING OPERATIONS AND WHILE MAKING SEWER TAPS. CLEAN AND RESTORE TO THEIR ORIGINAL STATE ANY DITCHES AND STORMDRAIN FACILITIES THAT ARE SILTED DUE TO THE CONTRACTOR'S DEWATERING EFFORTS. OBTAIN ALL NECESSARY PERMITS FOR DEWATERING DISCHARGES. BEDDING AND PIPE ZONE MATERIAL SHALL BE TYPE 1 AGGREGATE PIPE BEDDING MATERIAL.
- INSTALL SEWER SERVICE LINES PRIOR TO STREET IMPROVEMENTS.
- CONSTRUCT SANITARY SEWER MANHOLES IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND DRAWINGS.
- THE CONTRACTOR SHALL TEST ALL SEWER LINES IN ACCORDANCE WITH ISPPWC AND SHALL BE OBSERVED BY THE PLRWSD. THE CONTRACTOR SHALL BE PREPARED FOR THE PLRWSD INSPECTION AND SHALL REMOVE ALL MANHOLE COVERS PRIOR TO INSPECTION. ALL CONSTRUCTION INSPECTIONS SHALL BE COMPLETED BEFORE NOVEMBER 1 OF THE YEAR WHEN INITIAL CONSTRUCTION COMMENCED UNLESS OTHERWISE APPROVED BY THE DISTRICT. THE WARRANTY PERIOD COMMENCES AS DATED UPON THE LETTER OF FINAL ACCEPTANCE.
- PLACE SEWER SERVICE LINES IN A SIX (6") INCH DIAMETER WATER CLASS PIPE WHEREVER THE SERVICE LINE CROSSES A STORMWATER DISPOSAL FACILITY (I.E., SEEPAGE BEDS, DRAINAGE SWALES).
- ALL PARALLEL OR CROSSING INSTALLATIONS OF POTABLE AND NON-POTABLE PIPELINES MUST BE IN ACCORDANCE WITH IDAPA 58.01.08.542.07.
- WHEN THE COVER OVER A SEWER PIPE IS LESS THAN THREE (3') FEET FROM THE TOP OF PIPE TO THE SUBGRADE OR TOP OF PIPE TO NATURAL GROUND, USE "CLASS 200 WATER PRESSURE PIPE", ASTM D-2241, SDR 21, INCLUDING SERVICE LINES AND FITTINGS. DESIGN ENGINEER SHALL MAKE MORE STRINGENT REQUIREMENTS AS NEEDED.
- ALL SEWER LINES SHALL BE CLEANED WITH A HYDRO-CLEANER, OR OTHER ENGINEER APPROVED CLEANING EQUIPMENT PRIOR TO TELEVISION INSPECTION AND FINAL ACCEPTANCE OF THE SEWER. CLEAN TWO (2) LINE SEGMENTS (MANHOLE TO MANHOLE) UPSTREAM AND DOWNSTREAM OF ANY TIE IN OR ADJUSTMENT WORK.
- A TELEVISION INSPECTION SHALL BE CONDUCTED BY A QUALIFIED, PROPERLY EQUIPPED INDEPENDENT CONTRACTOR UPON COMPLETION OF THE SEWER LINES AND PROVIDE A VIDEOTAPE/DVD OF THE INSPECTION PRIOR TO FINAL ACCEPTANCE OF THE SEWER, AS SPECIFIED IN THESE STANDARDS.
- PRIOR TO SEWER MAIN LINE CONSTRUCTION, CONTRACTOR SHALL POT HOLE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF THE EXISTING/PROPOSED INVERTS TO MANHOLES AND INVERTS OF THE EXISTING WATER MAINS. ANY DISCREPANCIES IN/OR FROM THE INFORMATION SHOWN ON THE PLANS, OR ADDITIONAL INFORMATION THAT MAY CREATE A CONFLICT, SHALL BE REPORTED TO THE PROJECT ENGINEER PRIOR TO PROCEEDING.
- IN THE EVENT OF A WATER SYSTEM CONFLICT, CONTACT THE PROJECT ENGINEER IMMEDIATELY.
- ALL SEWER SERVICE LATERALS SHALL BE PVC SDR 35, ASTM D-3034. SERVICE CONNECTIONS TO THE MAIN SHALL BE COMPLETED USING 8"x4" PVC SDR 35, ASTM D-3034 TEE OR ROMAC "CB SEWER SADDLE" WHERE APPROVED IN ADVANCE.
- ALL PROFILE VIEW PIPE LENGTHS ARE FROM THE CENTER OF MANHOLE TO THE CENTER OF MANHOLE.
- ALL SEWER MANHOLES TO BE TYPE "A" PER ISPPWC STANDARD DRAWING SD-501, C501/GC-3, AND THE PLRWSD STANDARD REVISIONS. THE MORE STRINGENT REQUIREMENT WILL GOVERN. ALL MANHOLE JOINTS TO INCLUDE CON-SEAL "CS-102 BUTYL RUBBER SEALANT," "VULKEM 116" HIGH-PERFORMANCE POLYURETHANE SEALANT, AND BE GROUTED (INSIDE & OUT) USING DAYTON 1107 ADVANTAGE, SPECICHEM SC MULTIPURPOSE GROUT, OR EQUAL APPROVED BY PLRWSD. EXTERIOR MANHOLE JOINTS TO BE COVERED WITH NINE (9") INCH WIDE INF1-SHIELD GATOR WRAP AFTER GROUTING.
- CONTRACTOR TO USE "WHIRLYGIG" COLLARING SYSTEM UP TO MAXIMUM HEIGHT OF THIRTEEN (13") INCHES ON ALL MANHOLES IN PLACE OF CONCRETE GRADE RINGS (18" TOTAL MAXIMUM HEIGHT FROM TOP OF CONE TO FINISHED GRADE). JOINT BETWEEN WHIRLYGIG COLLARING SYSTEM (BOTTOM OF PLASTIC FLANGE) AND TOP OF MANHOLE CONE SHALL BE SEALED WITH "VULKEM 116" HIGH-PERFORMANCE POLYURETHANE SEALANT. CONCRETE COLLAR TO EXTEND A MINIMUM OF SIX (6") INCHES BELOW TOP OF CONE.
- MANHOLE FRAMES AND COVERS SHALL BE PER PLRWSD STANDARDS AND INSTALLED IN ACCORDANCE ISPPWC STANDARD DRAWING SD-501 AND C501/GC-3. ALL MANHOLES TO HAVE CAST-IRON DUST PANS CONSTRUCTED WITH INTEGRAL MACHINED FLANGES CAST INTO THE FRAME. DUST PANS TO HAVE A RAISED DRAIN HOLE, VENTING PROVISIONS AND WIRE LIFTING STRAP. MANHOLE COVER TO BE STAMPED "PLRWSD SEWER". FRAMES, COVERS, AND DUSTPANS TO BE MANUFACTURED BY KITS FOUNDRY & MACHINE, INC. (208) 357-7773.
- INSTALL NEW SEWER SERVICE LATERALS AS INDICATED ON PLANS OR FROM CONNECTION TO SEWER MAIN TO THE RIGHT-OF-WAY AND INSIDE PRIVATE PROPERTY TWELVE (12') FEET, OR AS OTHERWISE INDICATED ON THE PLANS. NEW SEWER SERVICE STUB-OUTS TO HAVE A MAXIMUM INVERT DEPTH OF FIVE (5) FEET AT CAP/MARKER OR AS OTHERWISE INDICATED ON THE PLANS.
- THE INSTALLATION OF NEW SERVICE LATERALS INTO MANHOLES IS NOT ALLOWED.
- THE CONTRACTOR SHALL PROVIDE INVERT ELEVATIONS AT SEWER SERVICE MARKERS AND MARK ALL SEWER SERVICE LATERALS WITH DISTANCES FROM THE NEAREST MANHOLE ON THE AS-BUILT DRAWINGS TO BE PROVIDED TO THE PROJECT ENGINEER.
- ALL SEWER MAIN LINES, SERVICE LATERALS, AND MANHOLES SHALL BE AIR/VACUUM TESTED IN ACCORDANCE WITH ISPPWC. TESTING SHALL BE COMPLETED PRIOR TO CONNECTING EXISTING SERVICE LATERALS INTO THE NEW SYSTEM.
- ALL SEWER MAIN LINES SHALL BE HYDROCLEANED AND CCTV'ED UPON COMPLETION OF ALL UNDERGROUND UTILITY WORK IN ACCORDANCE WITH ISPPWC. THE CONTRACTOR SHALL SUBMIT TWO (2) COPIES OF ALL REPORTS TO THE DESIGN ENGINEER FOR REVIEW PRIOR TO ACCEPTANCE BY THE PLRWSD.
- ALL GRAVEL SURFACE REPAIRS SHALL BE IN ACCORDANCE WITH CITY OF McCALL STANDARDS AND CIVIL TYPICAL DETAIL C306A/GC-1.
- THE CONTRACTOR IS REQUIRED TO PAY FOR ALL PROJECT TESTING AND ASSOCIATED COSTS AS PART OF THE SEWER MAIN INSTALLATION. ALL TESTING TO BE COMPLETED IN ACCORDANCE WITH THE PROVISIONS SET FORTH HEREIN AND SHALL BE CONDUCTED IN THE PRESENCE OF THE PROJECT ENGINEER.

LEGEND:

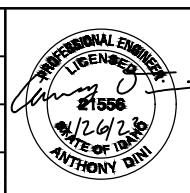


GENERAL SYMBOLS:



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1.	CITY OF McCALL AND PLRWSD ENGINEERING SUBMITTAL	AMD	4/26/2023	AMD
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SIMMONS STREET TOWNHOUSES
 McCALL, IDAHO
 ROADWAY, DOMESTIC WATER, SANITARY SEWER
 AND GRADING IMPROVEMENTS PROJECT
 GENERAL INFORMATION AND NOTES

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	220205
DATE	4/26/2023
DRAWING NO.	G-2
SHEET NO.	2 OF 11

NOTES:

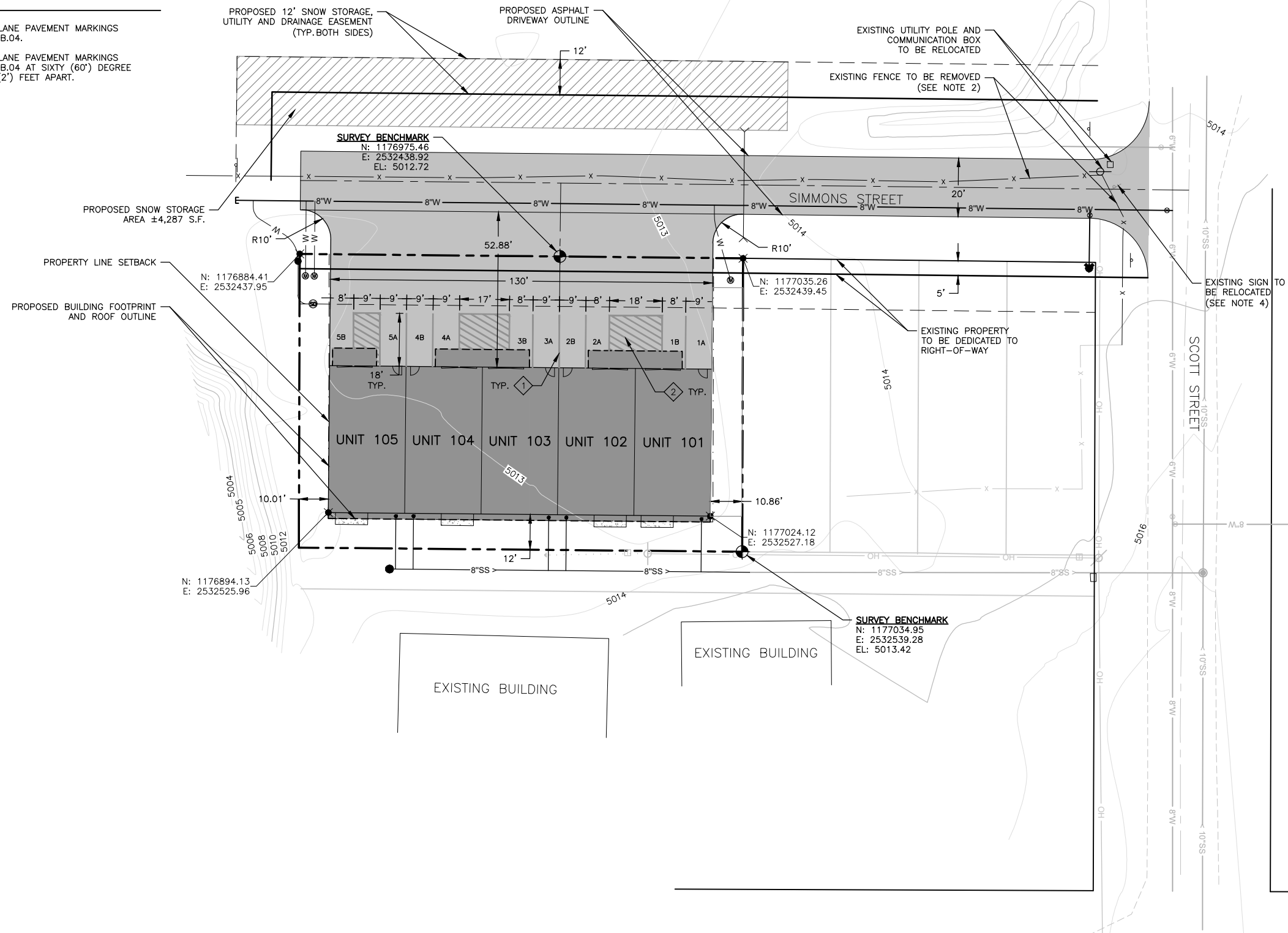
- REFER TO DRAWING NO. G-2, SHEET 2 FOR PROJECT NOTES, LEGEND AND SYMBOLS.
- CONTRACTOR TO COORDINATE THE REMOVAL OF THE EXISTING FENCE WITH THE OWNER.
- ALL SIGNS AND STRIPING TO BE IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- CONTRACTOR TO COORDINATE WITH ADJOINING PROPERTY OWNER TO RELOCATE THE EXISTING SIGN.

KEY NOTES:

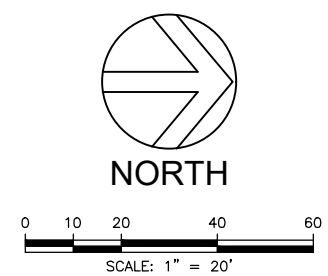
- ① 4" WIDE SOLID WHITE LANE PAVEMENT MARKINGS PER MUTCD SECTION 3B.04.
- ② 4" WIDE SOLID WHITE LANE PAVEMENT MARKINGS PER MUTCD SECTION 3B.04 AT SIXTY (60°) DEGREE ANGLES SPACED TWO (2') FEET APART.

EROSION AND SEDIMENT CONTROL NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROLS (ESC)/STORMWATER BEST MANAGEMENT PRACTICES (BMP'S) IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
- IF DETERMINED NECESSARY, THE CONTRACTOR SHALL PREPARE AND SUBMIT A PROPOSED ESC PLAN TO THE PROJECT ENGINEER FOR APPROVAL PRIOR TO STARTING CONSTRUCTION.
- THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF THE ENVIRONMENTAL PROTECTION AGENCY'S (EPA) NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) 2022 GENERAL PERMIT FOR DISCHARGES FROM CONSTRUCTION ACTIVITIES (CGP). THE CGP REQUIRES THAT PROJECTS WHICH INTEND TO DISTURB MORE THAN ONE (1) ACRE PREPARE/PROVIDE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP). AT THIS TIME, THE OWNER DOES NOT ANTICIPATE THAT A SWPPP IS REQUIRED AS THE AREA OF GROUND DISTURBANCE IS LESS THAN ONE (1) ACRE. IF THE CONTRACTORS MEANS AND METHODS DISTURB MORE THAN ONE (1) ACRE, THE CONTRACTOR SHALL PREPARE A SWPPP AND OBTAIN COVERAGE UNDER THE EPA'S 2022 CGP.
- ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL BE INSTALLED PRIOR TO THE START OF ANY PROJECT CONSTRUCTION OR EARTH DISTURBING ACTIVITIES AND SHOULD REMAIN IN PLACE UNTIL ALL DISTURBED/EXPOSED AREAS HAVE BEEN STABILIZED AND/OR REVEGETATED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL ESC MEASURES/STORMWATER BMP'S IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. THIS INCLUDES REGULAR INSPECTION, REPLACEMENT, AND UPGRADING IF NECESSARY UNTIL ALL PROJECT CONSTRUCTION IS COMPLETED AND STABILIZATION IS ACHIEVED PER THE CGP OR AS DEFINED BY THE PROJECT ENGINEER.
- REFER TO THE "STATE OF IDAHO, CATALOG OF STORMWATER BEST MANAGEMENT PRACTICES FOR IDAHO CITIES AND COUNTIES" FOR FURTHER DETAILS ON BMP IMPLEMENTATION AND INSTALLATION.
- CONTRACTOR SHALL CONTROL SURFACE DRAINAGE FROM EXCAVATION, BORROW AND WASTE DISPOSAL AREAS AS WELL AS PROVIDE CONTROL STRUCTURES AS NECESSARY TO PREVENT CONTAMINATED RUNOFF FROM LEAVING THE PROJECT SITE.
- CONTRACTOR SHALL MINIMIZE THE AMOUNT OF BARE SOIL EXPOSED AT ONE TIME.
- STABILIZED CONTRACTION ENTRANCES SHALL BE PROVIDED AT ALL ENTRANCES/EXITS TO THE SITE AND CONSTRUCTION STAGING AREAS.
- CONTRACTOR TO PROVIDE TEMPORARY MEASURES SUCH AS BERMS, DIKES, AND DRAINS AS NECESSARY, TO PREVENT RUNOFF FROM FLOWING INTO PIPE TRENCHES DURING CONSTRUCTION.
- DURING CONSTRUCTION, CONTRACTOR SHALL WATER ALL DISTURBED AREAS AS NECESSARY FOR DUST ABATEMENT.
- REVEGETATION AND STABILIZATION OF ALL DISTURBED PROJECT AREAS SHALL BE IN ACCORDANCE WITH THE PROJECTS LANDSCAPE DESIGN. IF A LANDSCAPE DESIGN/PLAN IS NOT AVAILABLE, DISTURBED AREAS SHALL BE REVEGETATED WITH A GRASS SEED MIXTURE NATIVE TO THAT AREA.



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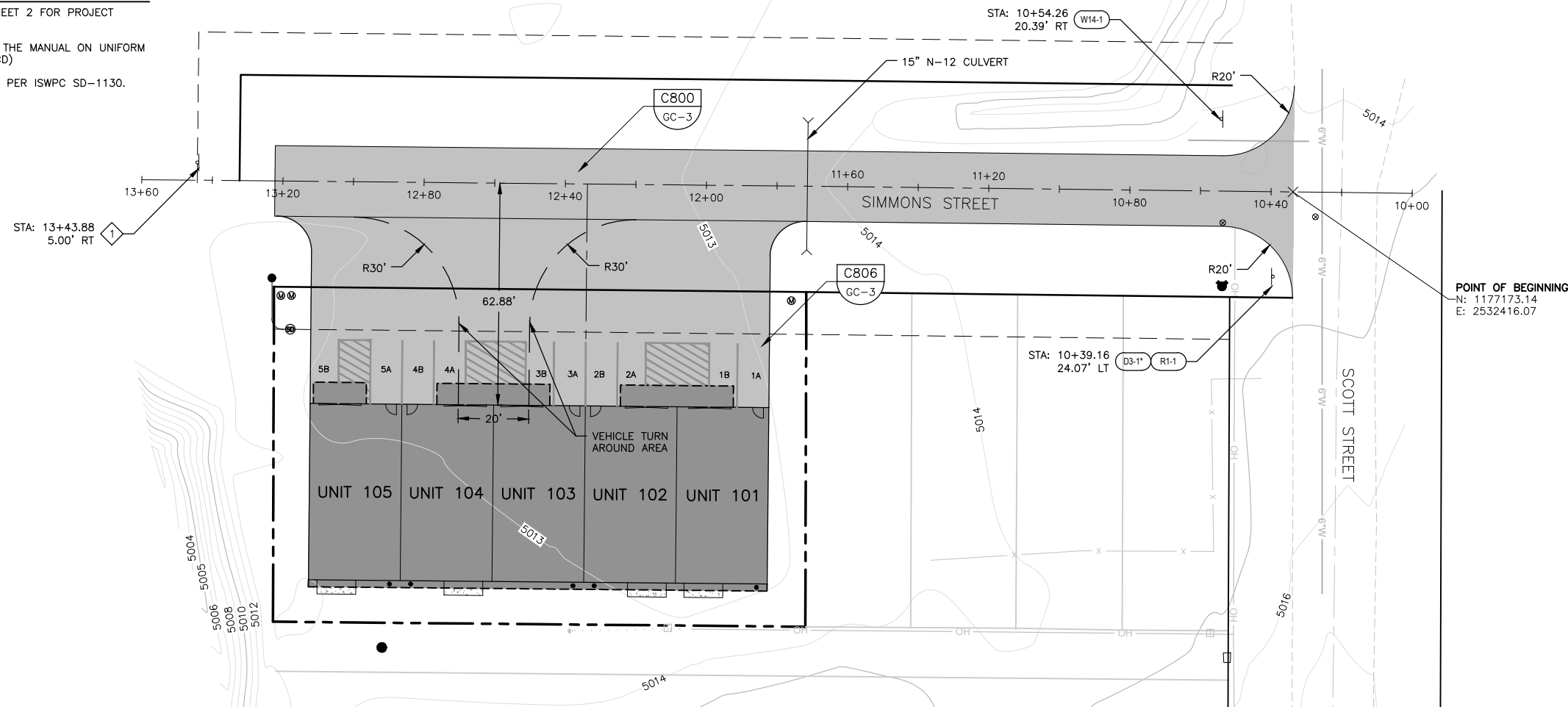
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C-1	3 OF 11

NOTES:

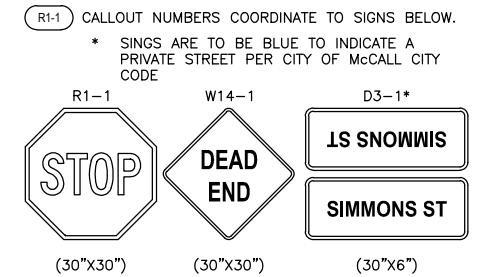
- REFER TO DRAWING NO. G-2, SHEET 2 FOR PROJECT NOTES, LEGEND AND SYMBOLS.
- ALL SIGNS ARE TO CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
- ALL SIGNS ARE TO BE INSTALLED PER ISWPC SD-1130.

STRUCTURAL/IMPORTED FILL PLACEMENT NOTES:

- ALL STRUCTURAL FILL MATERIAL AND EMBANKMENT SHALL BE IN ACCORDANCE WITH ISWPC SECTION 202.
- STRUCTURAL FILL PLACEMENT SHALL BE COMPLETED IN ACCORDANCE WITH DIVISIONS 200 AND 800 OF THE ISWPC, THE PROJECT PLANS, AND CITY OF McCALL STANDARDS WHERE APPROPRIATE.
- CONTRACTOR TO CONTACT THE PROJECT ENGINEER IMMEDIATELY IN THE EVENT OF ANY UTILITY CONFLICT.
- ALL BASE AND SUBBASE COURSE USED FOR STRUCTURAL/IMPORTED FILL SHALL MEET THE REQUIREMENTS OF ISWPC SECTION 802, CRUSHED AGGREGATES. CONTRACTOR SHALL PROVIDE PROJECT ENGINEER WITH RECENT TESTING DATA ON SIEVE ANALYSIS, PROCTOR COMPACTION RESULTS, LIQUID LIMITS, AND PLASTICITY INDEX FROM SOURCE LOCATIONS PRIOR TO PLACEMENT.
- COMPACTION FOR ALL AGGREGATE BASE/SUBBASE MATERIAL SHALL BE IN ACCORDANCE WITH ISWPC SECTION 802.
- ALL STRUCTURAL/IMPORTED FILL BASE/SUBBASE PLACEMENT TESTING SHALL BE THIRD PARTY PROVIDED BY THE CONTRACTOR. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND THE PROJECT ENGINEER TO ACCOMMODATE ALL REQUIRED TESTING DURING PLACEMENT OF FILL MATERIALS IN ACCORDANCE WITH ISWPC.



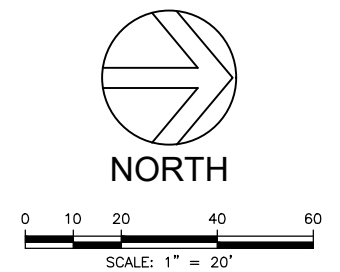
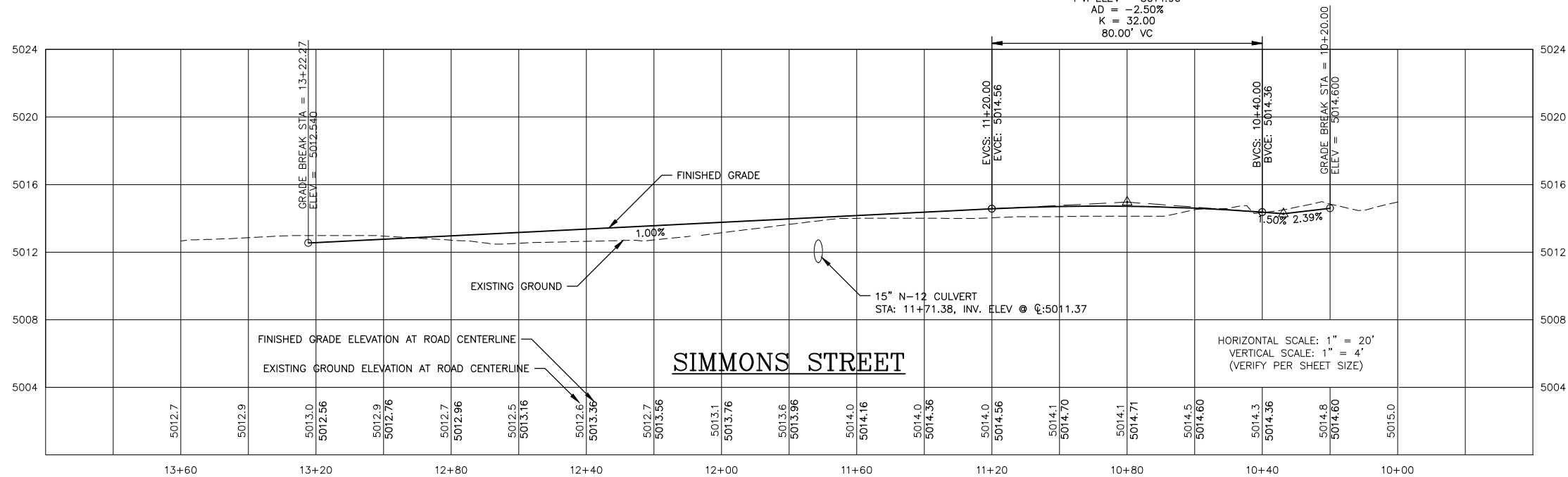
SIGN LEGEND:



KEY NOTES:

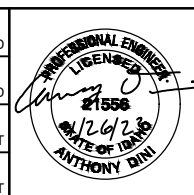
- INSTALL TERMINUS BARRICADE PER ISWPC STANDARD DRAWING SD-1132. REPLACE BARRICADE POSTS WITH TELSPAR BREAKAWAY STYLE POSTS.

HIGH PT STA = 10+88.00
 HIGH PT ELEV = 5014.72
 PVI STA = 10+80.00
 PVI ELEV = 5014.96
 AD = -2.50%
 K = 32.00
 80.00' VC



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NO.	REVISION	BY	DATE	DESIGN
1.	CITY OF McCALL AND PLRWSO ENGINEERING SUBMITTAL	AMD	4/26/2023	AMD
				DRAWN
				AMD
				CHECKED
				GTT
				APPROVED
				GTT

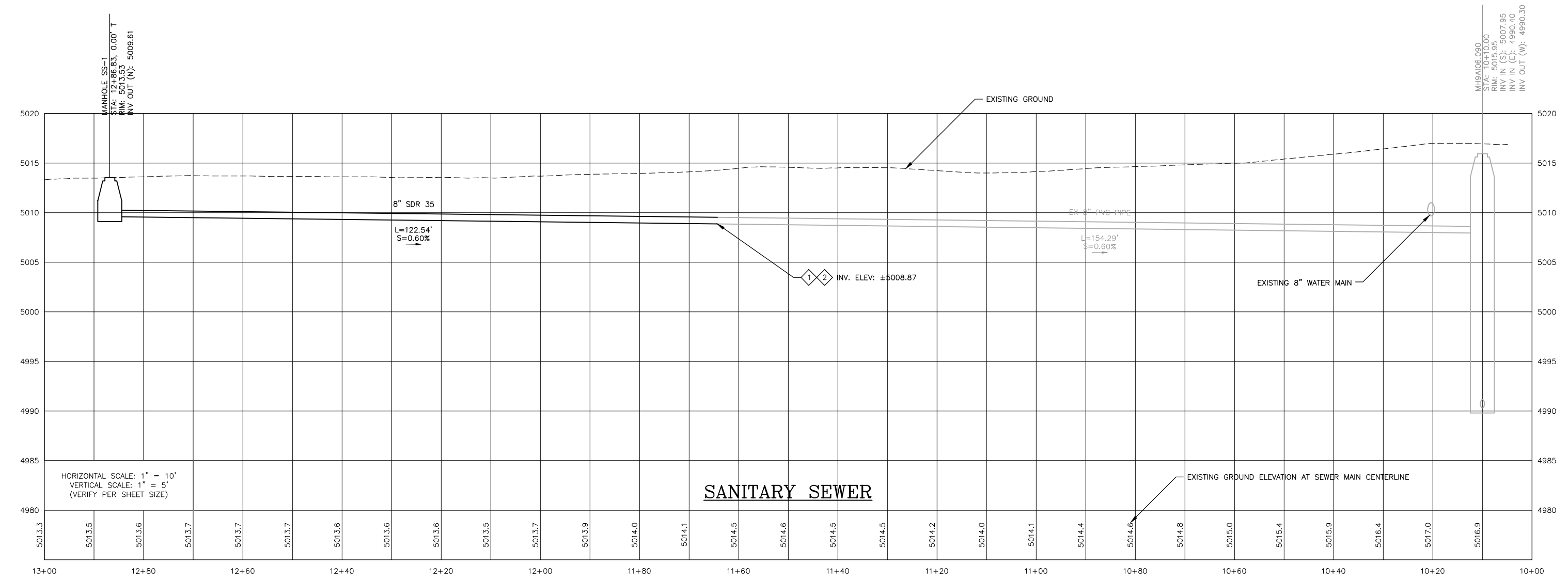
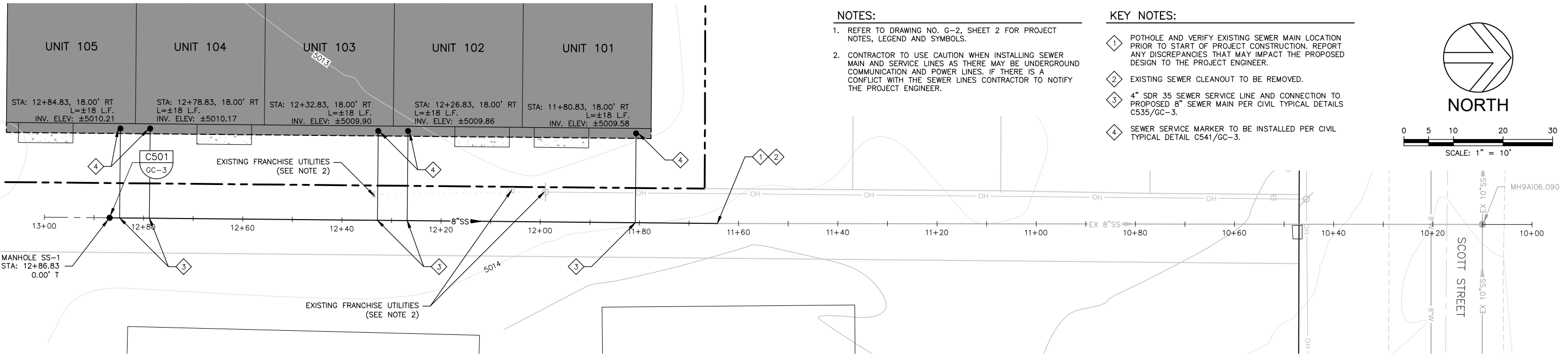


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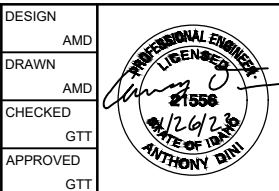
SIMMONS STREET TOWNHOUSES
 McCALL, IDAHO
 ROADWAY, DOMESTIC WATER, SANITARY SEWER
 AND GRADING IMPROVEMENTS PROJECT
 ROADWAY PLAN AND PROFILE

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	SHEET NO.
C-2	4 OF 11



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NO.	REVISION	BY	DATE	DESIGN
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				AMD
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 ROADWAY, DOMESTIC WATER, SANITARY SEWER
 AND GRADING IMPROVEMENTS PROJECT
 SANITARY SEWER PLAN AND PROFILE

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	1"
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	C-3
SHEET NO.	5 OF 11

NOTES:

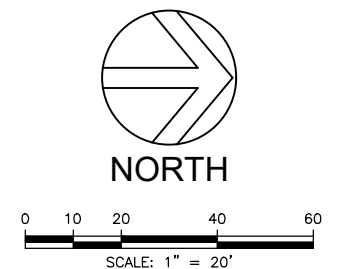
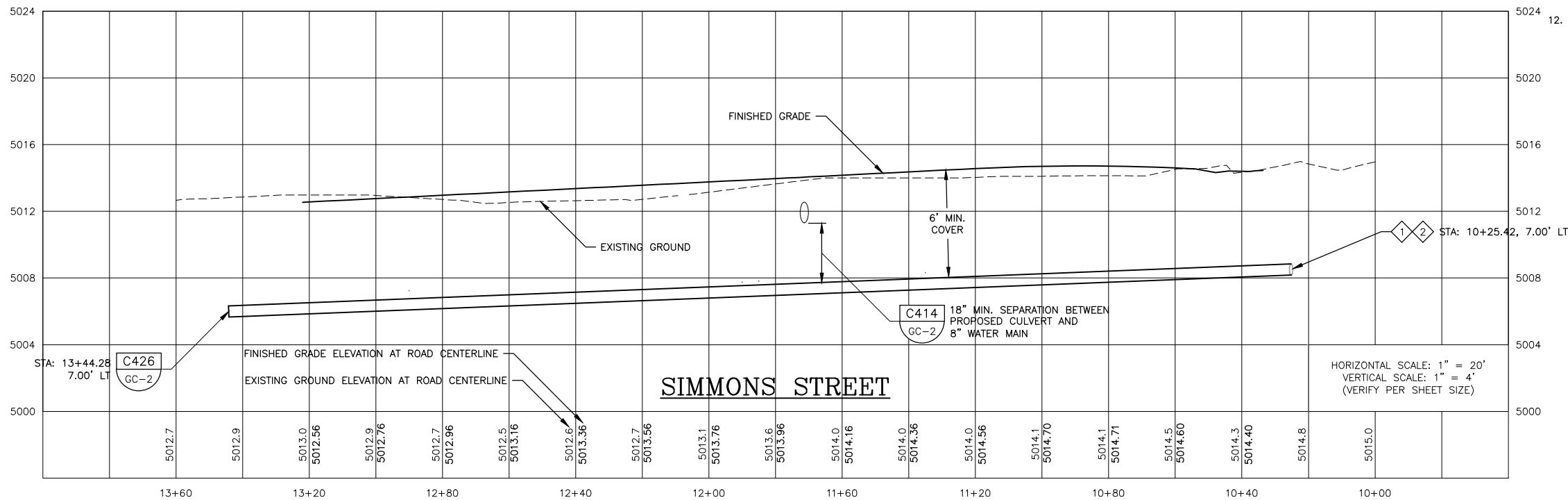
- REFER TO DRAWING NO. G-2, SHEET 2 FOR PROJECT NOTES, LEGEND AND SYMBOLS.

WATER CONSTRUCTION NOTES:

- ALL WATER MAINS SHALL BE BELL AND SPIGOT, POLYVINYL CHLORIDE (PVC), DR 18, AWWA C900 OR C905 WITH GASKETS MEETING ASTM F477 AND JOINTS IN COMPLIANCE. ALL GATE VALVES SHALL BE RESILIENT SEAT GATE VALVES MEETING AWWA C509-994 SPECIFICATIONS. ALL FITTINGS SHALL BE DUCTILE IRON, ANSI/NSF APPROVED.
- ALL GATE VALVES TO BE INSTALLED IN ACCORDANCE WITH ISPPC SECTION 402, STANDARD DRAWING SD-403 (VALVE ANCHOR DETAIL), STANDARD DRAWING SD-406 (VALVE BOX AND LID DETAIL) AND CIVIL TYPICAL DETAIL C412/GC-2. FIRE VALVES BOX LIDS TO BE STAMPED "FIRE".
- THRUST BLOCKS SHALL BE INSTALLED AT ALL FITTINGS IN ACCORDANCE WITH ISPPC SD-403 AND CIVIL TYPICAL DETAIL C406/GC-2 AND VISUALLY INSPECTED BY THE PROJECT ENGINEER PRIOR TO BACKFILL.
- ALL WATER SERVICE PIPE SHALL BE CLASS 200, SIDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- WATER MAINS AND SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6') FEET AND SHALL HAVE TYPE III BEDDING REFER TO ISPPC SD-301 AND CIVIL TYPICAL DETAIL C302A/GC-1 FOR STANDARD UTILITY TRENCH DETAILS.
- THE CONTRACTOR SHALL INSTALL NO. 12 COPPER LOCATOR WIRE IN THE TRENCH WITH ALL WATER MAIN AND SERVICE LINES. LOCATOR WIRE SHALL BE TAPED TO THE TOP CENTER OF THE PIPE AND BROUGHT UP TO THE TOP OF ALL VALVE BOXES, FIRE HYDRANTS AND SERVICES. BLUE TAPE MARKED "WATER" SHALL BE INSTALLED APPROXIMATELY TWO (2') FEET ABOVE ALL WATER MAIN LINES.
- ALL NEW TRACE WIRE INSTALLATIONS SHALL BE LOCATED USING TYPICAL LOW FREQUENCY (512HZ) LINE TRACING EQUIPMENT, WITNESSED BY THE CONTRACTOR, ENGINEER AND THE CITY OF McCALL WHEN APPLICABLE, PRIOR TO FINAL ACCEPTANCE. THIS VERIFICATION SHALL BE PERFORMED UPON COMPLETION OF ROUGH GRADING AND AGAIN PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. CONTINUITY TESTING IN LIEU OF ACTUAL LINE TRACING SHALL NOT BE ACCEPTED.
- ALL WATER MAINS AND SERVICE LINES SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH ISPPC SECTION 401 PRIOR TO PROJECT ACCEPTANCE.
- ALL WATER MAINS AND SERVICE LINES SHALL BE VISUALLY INSPECTED BY THE PROJECT ENGINEER AND THE CITY OF McCALL UNDER WORKING SYSTEM PRESSURE PRIOR TO BACKFILLING IF HYDROSTATIC TESTING IS NOT POSSIBLE WHEN CONNECTING TO EXISTING WATER MAIN LINES IN SERVICE.
- ALL WATER PIPE AND FITTINGS THAT ARE UNABLE TO BE TESTED AND DISINFECTED SHALL BE WASHED/SANITIZED USING A CHLORINE/LIQUID BLEACH SOLUTION UNDER THE PRESENCE OF THE PROJECT ENGINEER PRIOR TO INSTALLATION. LINES ARE TO BE FLUSHED UNDER THE SUPERVISION OF CITY OF McCALL AFTER THE COMPLETION OF PROJECT CONSTRUCTION, PRIOR TO BEING RETURNED TO SERVICE.
- DISPOSAL OF SUPER-CHLORINATED DISINFECTION WATER TO BE IN ACCORDANCE WITH THE IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY'S (IDEQ), DRINKING WATER PROGRAMS GUIDANCE FOR PUBLIC WATER SYSTEM DISPOSAL OF WATER FROM CONSTRUCTION, MAINTENANCE, AND OPERATIONS (APRIL, 2014). CONTRACTOR SHALL SUBMIT A FLUSHING PLAN IN ACCORDANCE WITH THE GUIDANCE TO THE PROJECT ENGINEER PRIOR TO THE START OF ANY FLUSHING TO ENSURE COMPLIANCE WITH PROPER DISPOSAL REQUIREMENTS.
- ALL SURFACE REPAIRS SHALL BE IN ACCORDANCE WITH CITY OF McCALL STANDARDS AND CIVIL TYPICAL DETAIL C306A/GC-1.

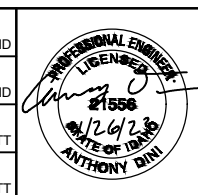
KEY NOTES:

- HOT TAP CONNECTION TO EXISTING 6" WATER MAIN. POTHOLE AND VERIFY LOCATION/DEPTH OF EXISTING WATER MAIN PRIOR TO THE START OF PROJECT CONSTRUCTION. REPORT ANY DISCREPANCIES THAT MAY IMPACT THE PROPOSED DESIGN TO THE PROJECT ENGINEER.
- CONNECTION TO EXISTING WATER MAIN
1-6"x6"x6" SST TAPPING SLEEVE
1-8"x6" FLXFL REDUCER
1-8" FLXMJ GATE VALVE
- ASPHALT SURFACE REPAIR PER CIVIL TYPICAL DETAIL C306A/GC-1 (±82 S.F.).



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NO.	REVISION	BY	DATE	DESIGN
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 AND GRADING IMPROVEMENTS PROJECT
 DOMESTIC WATER PLAN AND PROFILE

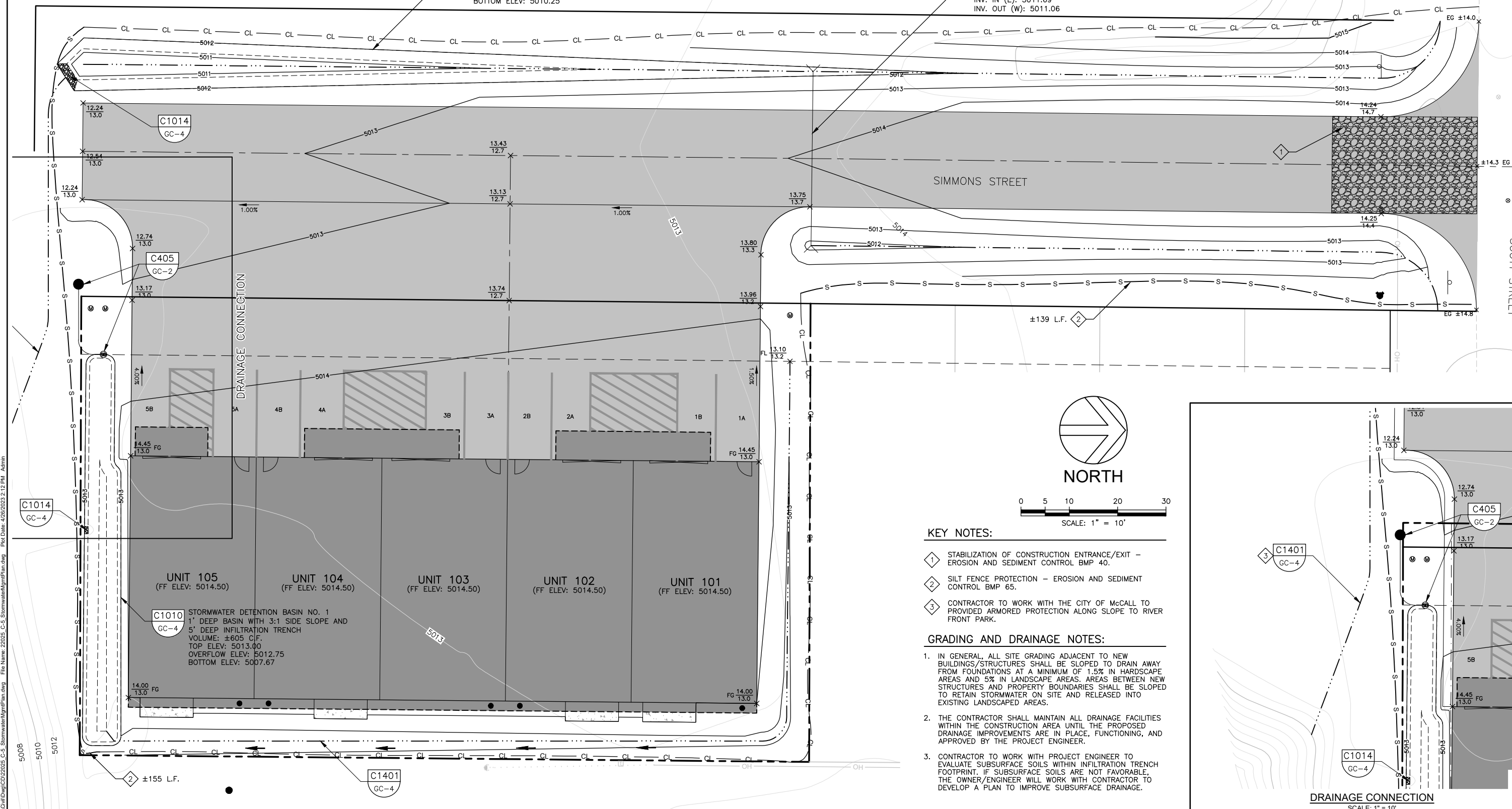
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BAR IS ONE INCH ON FULL SIZE DRAWING	1"
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	C-4
SHEET NO.	6 OF 11

NOTES:

1. REFER TO DRAWING NO. G-2, SHEET 2 FOR PROJECT NOTES, LEGEND, AND SYMBOLS.
2. REFER TO DRAWING NO. C-1, SHEET 3 FOR EROSION AND SEDIMENT CONTROL NOTES.

STORMWATER DETENTION BASIN NO. 2
 1.75' DEEP WITH 3:1 SIDE SLOPES
 VOLUME: ±179 C.F.
 TOP ELEV: 5012.00
 OVERFLOW ELEV: 5011.25
 BOTTOM ELEV: 5010.25

15" N-12 CULVERT
 L=±36 L.F. @ 1.75% SLOPE
 INV. IN (E): 5011.69
 INV. OUT (W): 5011.06

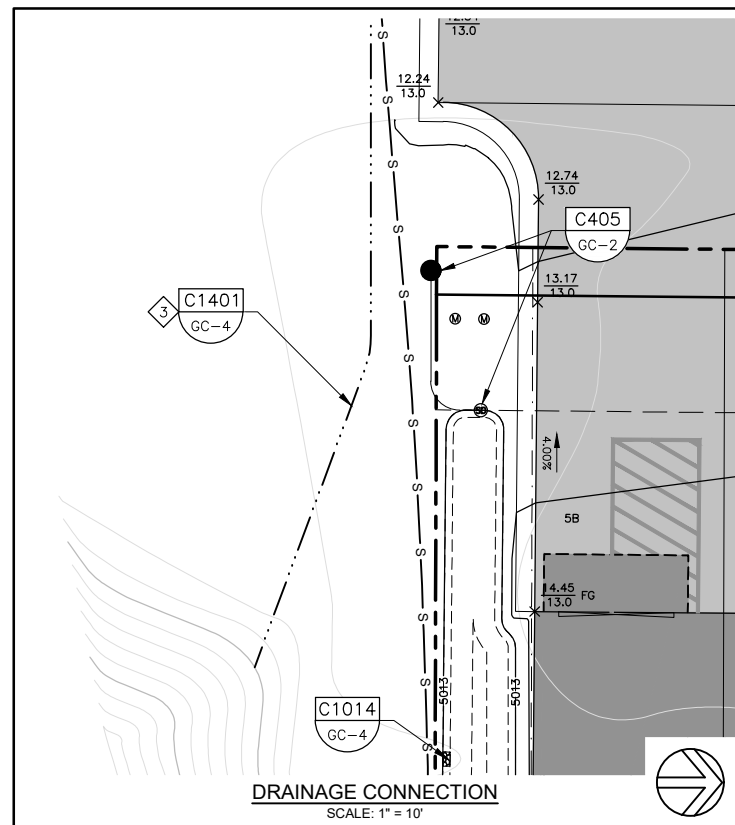


KEY NOTES:

1. STABILIZATION OF CONSTRUCTION ENTRANCE/EXIT - EROSION AND SEDIMENT CONTROL BMP 40.
2. SILT FENCE PROTECTION - EROSION AND SEDIMENT CONTROL BMP 65.
3. CONTRACTOR TO WORK WITH THE CITY OF McCALL TO PROVIDED ARMORED PROTECTION ALONG SLOPE TO RIVER FRONT PARK.

GRADING AND DRAINAGE NOTES:

1. IN GENERAL, ALL SITE GRADING ADJACENT TO NEW BUILDINGS/STRUCTURES SHALL BE SLOPED TO DRAIN AWAY FROM FOUNDATIONS AT A MINIMUM OF 1.5% IN HARDSCAPE AREAS AND 5% IN LANDSCAPE AREAS. AREAS BETWEEN NEW STRUCTURES AND PROPERTY BOUNDARIES SHALL BE SLOPED TO RETAIN STORMWATER ON SITE AND RELEASED INTO EXISTING LANDSCAPED AREAS.
2. THE CONTRACTOR SHALL MAINTAIN ALL DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL THE PROPOSED DRAINAGE IMPROVEMENTS ARE IN PLACE, FUNCTIONING, AND APPROVED BY THE PROJECT ENGINEER.
3. CONTRACTOR TO WORK WITH PROJECT ENGINEER TO EVALUATE SUBSURFACE SOILS WITHIN INFILTRATION TRENCH FOOTPRINT. IF SUBSURFACE SOILS ARE NOT FAVORABLE, THE OWNER/ENGINEER WILL WORK WITH CONTRACTOR TO DEVELOP A PLAN TO IMPROVE SUBSURFACE DRAINAGE.



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NO.	REVISION	BY	DATE	DESIGN
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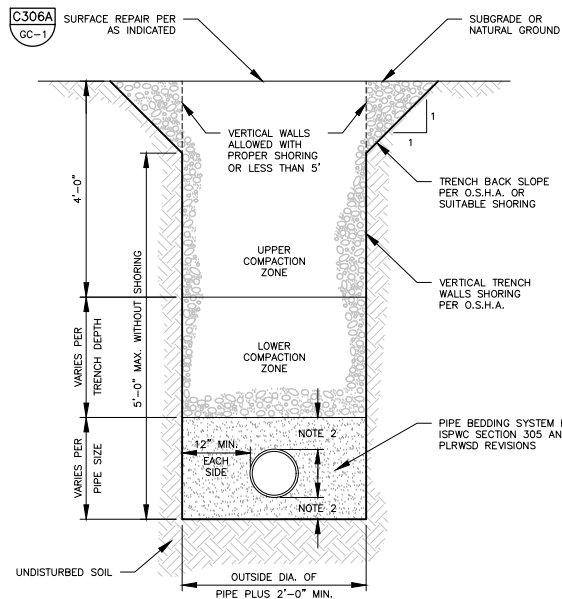


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 AND GRADING IMPROVEMENTS PROJECT
 GRADING, DRAINAGE AND STORMWATER MANAGEMENT PLAN

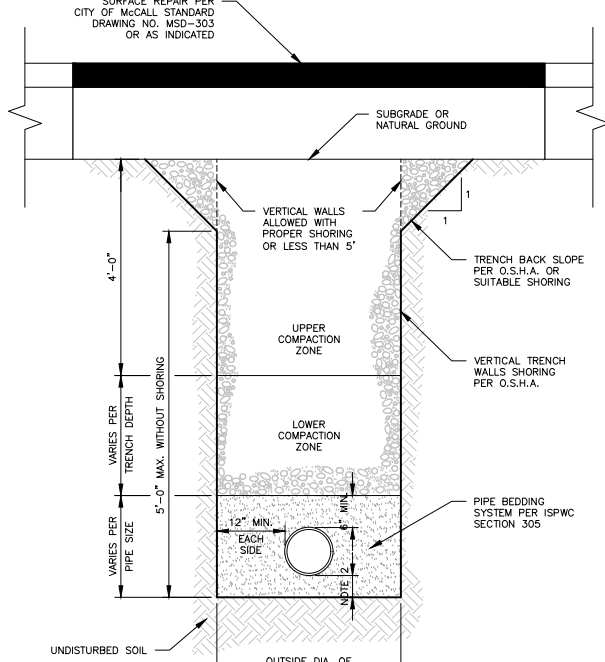
VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	C-5
SHEET NO.	7 OF 11



NOTES:

- TRENCH EXCAVATION PER ISPCW SECTION 301.
- PIPE BEDDING PER ISPCW SECTION 305 AND PLRWS D REVISIONS. FOR SEWER MAIN LINES AND SERVICES USE CLASS A-1 BEDDING SYSTEM AMENDED TO REQUIRE BEDDING EIGHT (8) INCHES BELOW THE BOTTOM AND ABOVE THE TOP PIPE PER PLRWS D REQUIREMENT. FOR WATER MAIN LINES AND SERVICES USE CLASS B-2 BEDDING SYSTEM DURING NORMAL CONDITIONS AND CLASS A-1 BEDDING SYSTEM WHEN GROUNDWATER IS OBSERVED IN THE TRENCH DURING EXCAVATION.
- BACKFILL AND COMPACTION PER ISPCW SECTION 306.
- REFER TO ISPCW SECTION 304 FOR ADDITIONAL INFORMATION ON TRENCH FOUNDATION STABILIZATION IF NECESSARY FOR PROJECT CONSTRUCTION.
- SURFACE REPAIR AND BASE PER ISPCW SECTION 307 AND CIVIL TYPICAL DETAIL C306.

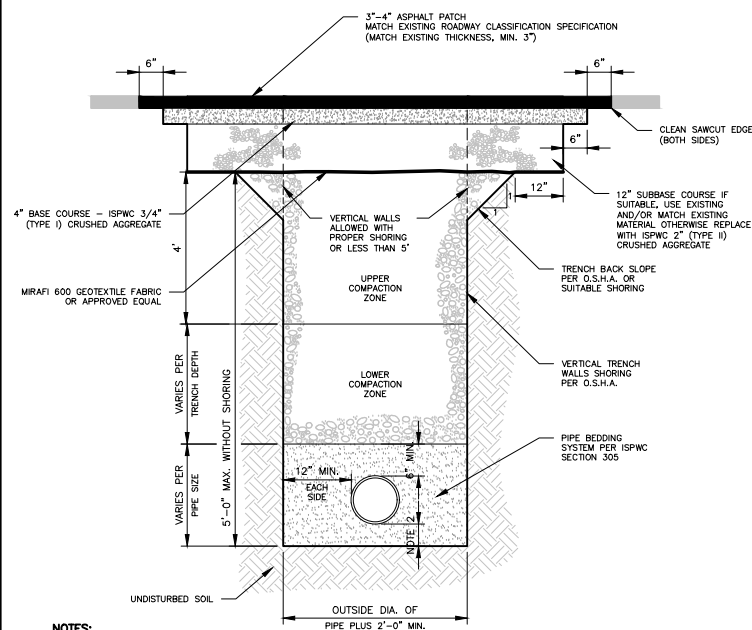
C302 TYPICAL TRENCH
TYP NOT TO SCALE



NOTES:

- TRENCH EXCAVATION PER ISPCW SECTION 301.
- PIPE BEDDING PER ISPCW SECTION 305.
- BACKFILL AND COMPACTION PER ISPCW SECTION 306.
- REFER TO ISPCW SECTION 304 FOR ADDITIONAL INFORMATION ON TRENCH FOUNDATION STABILIZATION IF NECESSARY FOR PROJECT CONSTRUCTION.
- SURFACE REPAIR PER CITY OF McCALL UTILITY TRENCH AND ISPCW SECTION 307.

C302A CITY OF McCALL - STANDARD UTILITY TRENCH
TYP NOT TO SCALE



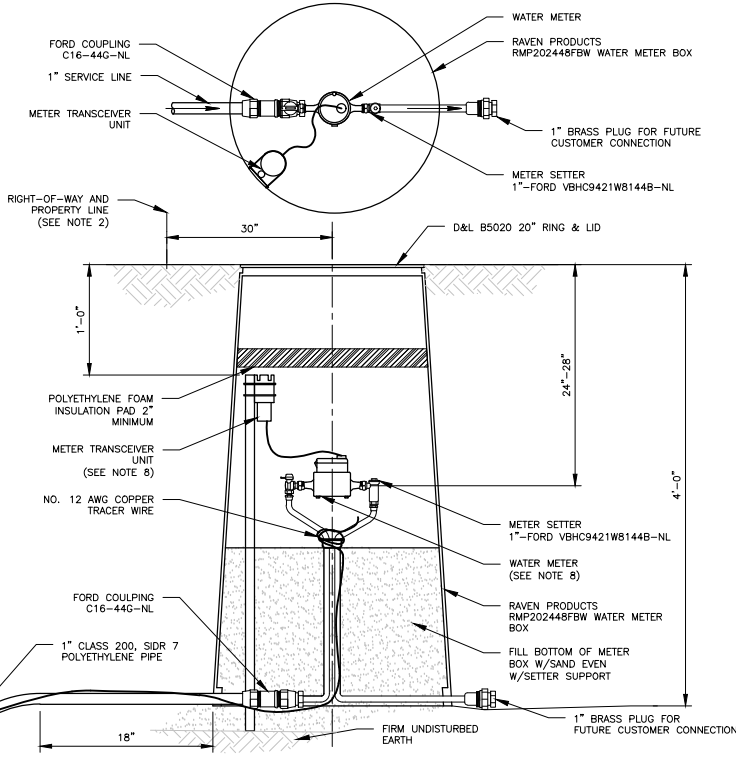
NOTES:

- TRENCH EXCAVATION PER ISPCW SECTION 301.
- PIPE BEDDING PER ISPCW SECTION 305.
- BACKFILL AND COMPACTION PER ISPCW SECTION 306.
- REFER TO ISPCW SECTION 304 FOR ADDITIONAL INFORMATION ON TRENCH FOUNDATION STABILIZATION IF NECESSARY FOR PROJECT CONSTRUCTION.
- STREET CUTS AND SURFACE REPAIRS PER ISPCW SECTION 307 UNLESS OTHERWISE SHOWN IN THIS DETAIL.
- ASPHALT CUTS AND PATCHES WILL NOT BE ALLOWED WITHIN THE WHEEL PATHS WITHOUT PRIOR WRITTEN APPROVAL FROM THE CITY OF McCALL PUBLIC WORKS DEPARTMENT.
- ALL WORKMANSHIP LOCATED WITHIN A CITY OF McCALL RIGHT-OF-WAY TO CARRY A 2-YEAR WARRANTY.

C306A CITY OF McCALL ASPHALT SURFACE REPAIR
TYP NOT TO SCALE

NOTES:

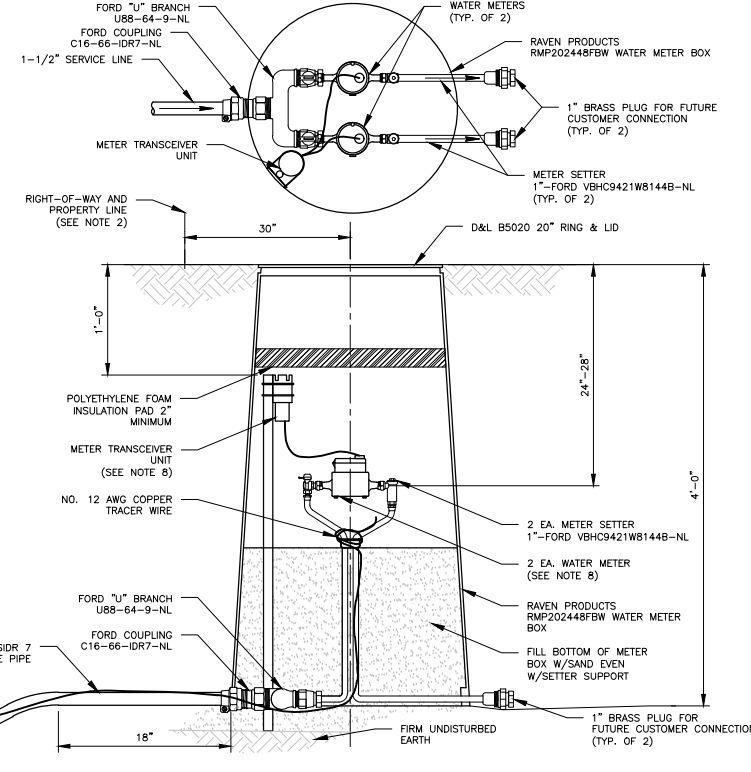
- ALL WATER SERVICE COMPONENTS SHALL BE IRON PIPE SIZE. NO GALVANIZED PIPE OR FITTINGS SHALL BE USED. WATER SERVICE SADDLE, CORPORATION STOP, AND PIPE SHALL BE SIZED AS FOLLOWS:
A. SINGLE SERVICE: 1".
- METER BOX LOCATIONS SHALL BE SHOWN ON WATER SYSTEM PLANS AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS. METER BOX LOCATION GENERALLY WILL BE LOCATED ON THE HOMEOWNER PROPERTY AS FOLLOWS:
A. SINGLE SERVICE: THIRTY (30") FROM R.O.W. CENTERED ON COMMON PROPERTY LINE.
- SERVICE PIPE SHALL BE CLASS 200, SDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- FORD STAINLESS STEEL INSERT (STIFFENER) TO BE USED WITH POLYETHYLENE PRESSURE PIPE AT FITTINGS PER MANUFACTURERS RECOMMENDATIONS.
- SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6) FEET AND SHALL RISE TO FOUR (4) FEET, WITHIN A MAXIMUM DISTANCE OF EIGHTEEN (18") INCHES OF METER BOX.
- SERVICE CONNECTIONS SHALL BE THIRTY-SIX (36") INCHES FROM FITTINGS OR WATER MAIN PIPE ENDS. MULTIPLE SERVICE CONNECTIONS IN THE SAME JOINT OF PIPE SHALL BE SEPARATED BY TWENTY-FOUR (24") INCHES AND NOT IN THE SAME HORIZONTAL LEVEL. -ABSOLUTE-
- SERVICE PIPE SHALL BE FLUSHED IMMEDIATELY PRIOR TO METER INSTALLATION.
- WATER METERS AND TRANSCOVER UNITS TO BE SUPPLIED AND INSTALLED BY THE CITY OF McCALL.
- MAINTAIN SEPARATION DISTANCES IN ACCORDANCE WITH IDAPA 58.01.08.
- REFER TO CITY OF McCALL STANDARD REVISIONS TO ISPCW AND CONDITIONS SECTION 404 FOR REQUIREMENTS ON CONNECTIONS TO THE PRIVATE SIDE OF THE WATER METER.



C402B 1" WATER SERVICE CONNECTION
TYP NOT TO SCALE

NOTES:

- ALL WATER SERVICE COMPONENTS SHALL BE IRON PIPE SIZE. NO GALVANIZED PIPE OR FITTINGS SHALL BE USED. WATER SERVICE SADDLE, CORPORATION STOP, AND PIPE SHALL BE SIZED AS FOLLOWS:
A. DOUBLE SERVICE: 1-1/2".
- METER BOX LOCATIONS SHALL BE SHOWN ON WATER SYSTEM PLANS AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS. METER BOX LOCATION GENERALLY WILL BE LOCATED ON THE HOMEOWNER PROPERTY AS FOLLOWS:
A. DOUBLE SERVICE: THIRTY (30") FROM R.O.W. CENTERED ON COMMON PROPERTY LINE.
- SERVICE PIPE SHALL BE CLASS 200, SDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- FORD STAINLESS STEEL INSERT (STIFFENER) TO BE USED WITH POLYETHYLENE PRESSURE PIPE AT FITTINGS PER MANUFACTURERS RECOMMENDATIONS.
- SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6) FEET AND SHALL RISE TO FOUR (4) FEET, WITHIN A MAXIMUM DISTANCE OF EIGHTEEN (18") INCHES OF METER BOX.
- SERVICE CONNECTIONS SHALL BE THIRTY-SIX (36") INCHES FROM FITTINGS OR WATER MAIN PIPE ENDS. MULTIPLE SERVICE CONNECTIONS IN THE SAME JOINT OF PIPE SHALL BE SEPARATED BY TWENTY-FOUR (24") INCHES AND NOT IN THE SAME HORIZONTAL LEVEL. -ABSOLUTE-
- SERVICE PIPE SHALL BE FLUSHED IMMEDIATELY PRIOR TO METER INSTALLATION.
- WATER METERS AND TRANSCOVER UNITS SHALL BE SUPPLIED AND INSTALLED BY THE CITY OF McCALL.
- MAINTAIN SEPARATION DISTANCES IN ACCORDANCE WITH IDAPA 58.01.08.
- REFER TO CITY OF McCALL STANDARD REVISIONS TO ISPCW AND CONDITIONS SECTION 404 FOR REQUIREMENTS ON CONNECTIONS TO THE PRIVATE SIDE OF THE WATER METER.



C404 DOUBLE WATER SERVICE CONNECTION
TYP NOT TO SCALE

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1.	CITY OF McCALL AND PLRWS ENGINEERING SUBMITTAL	AMD	4/26/2023	AMD
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				AMD
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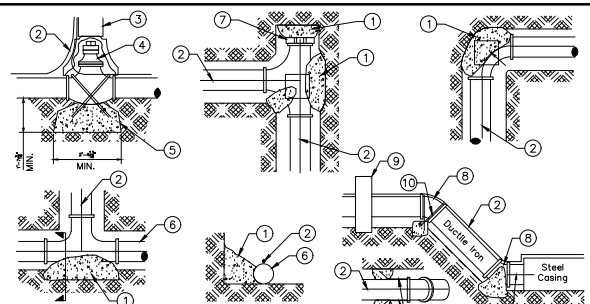
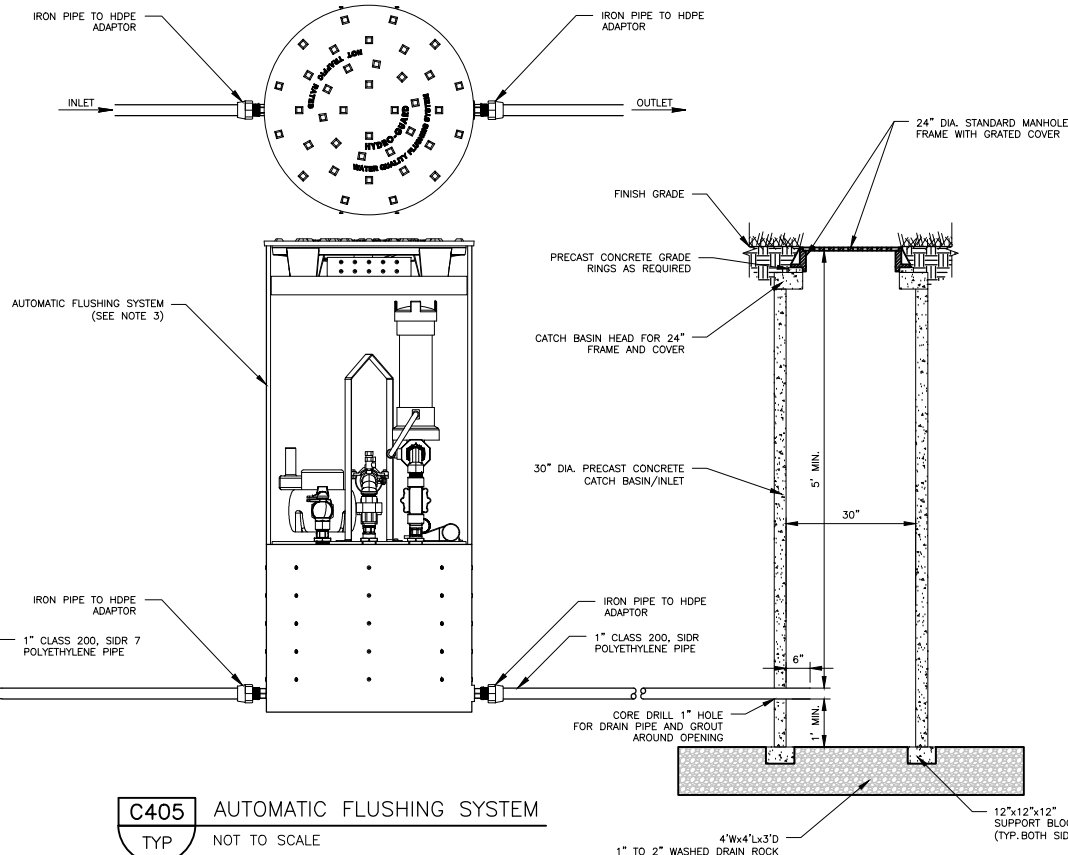
SIMMONS STREET TOWNHOUSES
McCALL, IDAHO
ROADWAY, DOMESTIC WATER, SANITARY SEWER
AND GRADING IMPROVEMENTS PROJECT
CIVIL TYPICAL DETAIL - 1

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	GC-1
SHEET NO.	8 OF 11

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NOTES:

- ALL WATER SERVICE COMPONENTS SHALL BE IRON PIPE SIZE. NO GALVANIZED PIPE OR FITTINGS SHALL BE USED. WATER SERVICE SADDLE, CORPORATION STOP, AND PIPE SHALL BE SIZED AS FOLLOWS:
 - A. SINGLE SERVICE: 1".
- AUTOMATIC FLUSHING SYSTEM LOCATIONS SHALL BE SHOWN ON WATER SYSTEM PLANS AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS.
- AUTOMATIC FLUSHING SYSTEM TO BE MUELLER HYDRO-GUARD 300 SERIES COLD CLIMATE FLUSHING SYSTEM WITH 60" BURY DEPTH. SEE INSTALLATION MANUAL FOR INFORMATION ON INSTALLATION OF AUTOMATIC FLUSHING SYSTEM.
- SERVICE PIPE SHALL BE CLASS 200, SIDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- FORD STAINLESS STEEL INSERT (STIFFENER) TO BE USED WITH POLYETHYLENE PRESSURE PIPE AT FITTINGS PER MANUFACTURERS RECOMMENDATIONS.
- SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6) FEET AND SHALL RISE TO FIVE (5) FEET, WITHIN A MAXIMUM DISTANCE OF EIGHTEEN (18) INCHES OF FLUSHING SYSTEM.
- SERVICE CONNECTIONS SHALL BE THIRTY-SIX (36) INCHES FROM FITTINGS OR WATER MAIN PIPE ENDS. MULTIPLE SERVICE CONNECTIONS IN THE SAME JOINT OF PIPE SHALL BE SEPARATED BY TWENTY-FOUR (24) INCHES AND NOT IN THE SAME HORIZONTAL LEVEL. -ABSOLUTE-
- MAINTAIN SEPARATION DISTANCES IN ACCORDANCE WITH IDAPA 58.01.08.
- ALL CATCH BASIN JOINTS TO INCLUDE CON-SEAL "CS-320 MASTIC" AND BE GROUTED (INSIDE & OUT) USING QUIKRETE "NON-SHRINK GENERAL PURPOSE GROUT." EXTERIOR MANHOLE JOINTS TO BE COVER WITH PRESS SEAL "EZ-WRAP" BUTYL ADHESIVE TAPE AFTER GROUTING. PRIME JOINT SURFACE USING A SPRAY ADHESIVE PRIOR TO EZ-WRAP APPLICATION.
- CATCH BASIN/INLET MANHOLE TO BE LOCATED PER PLANS.



LEGEND

- FOR HORIZONTAL PIPE BENDS, BEARING THRUST BLOCKS MUST PROVIDE 2500 PSI CONCRETE, POURED AGAINST UNDISTURBED EARTH PER TABLE 1.
- NO. 12 COPPER FINDER WIRE.
- C.I. VALVE BOX WITH COVER
- C.I. GATE VALVE
- PRECAST BLOCK FOR CUT IN TEE AND VALVE OR CAST IN PLACE WITH (2) 1/2" MIN. REBAR.
- PIPE
- PLUG
- RESTRAINED JOINTS
- HAMMERHEAD THRUST BLOCKING
- ANCHOR TIE (1/2" MIN.)

GENERAL NOTES:

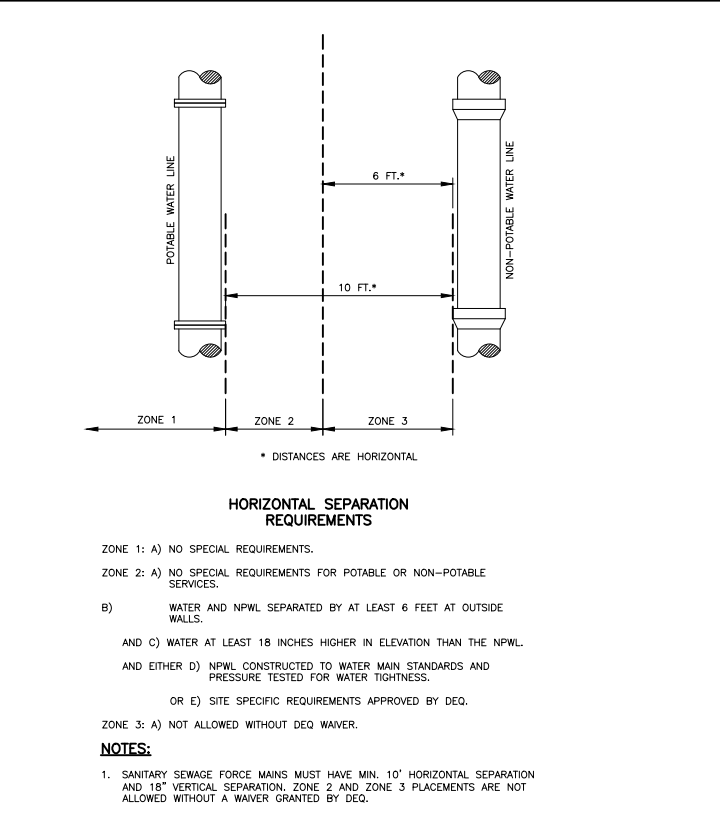
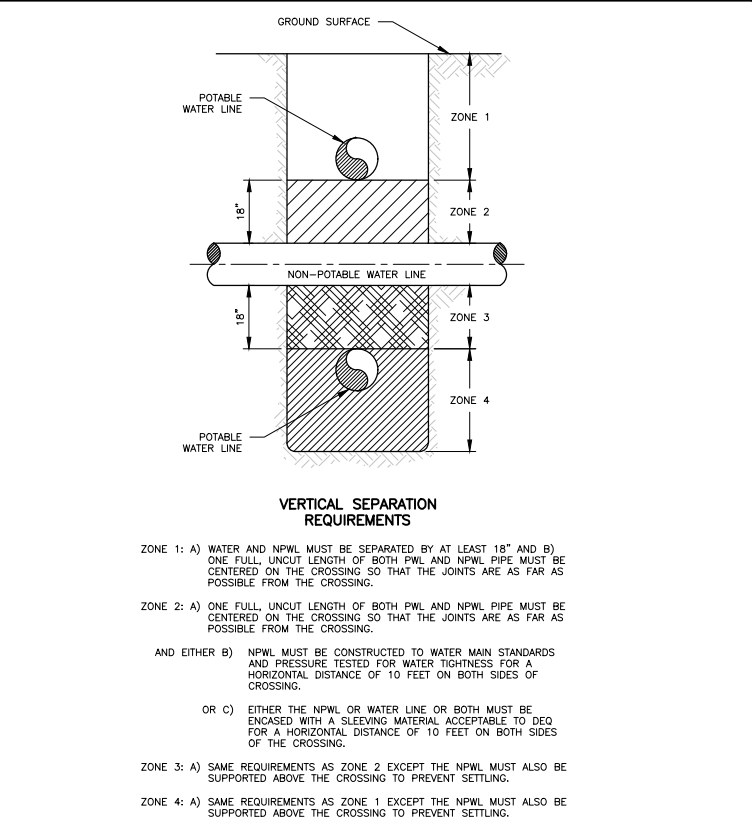
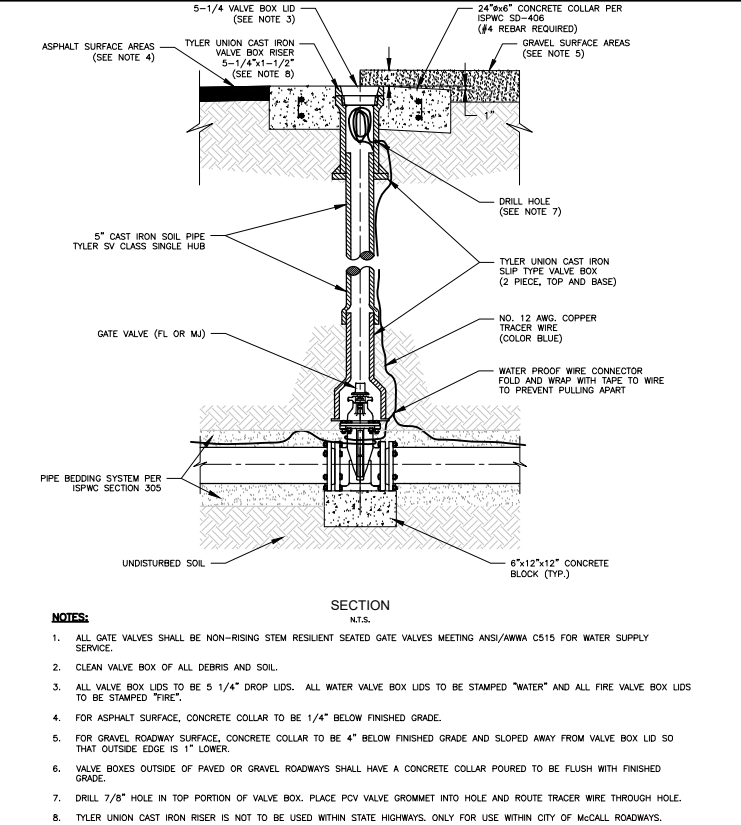
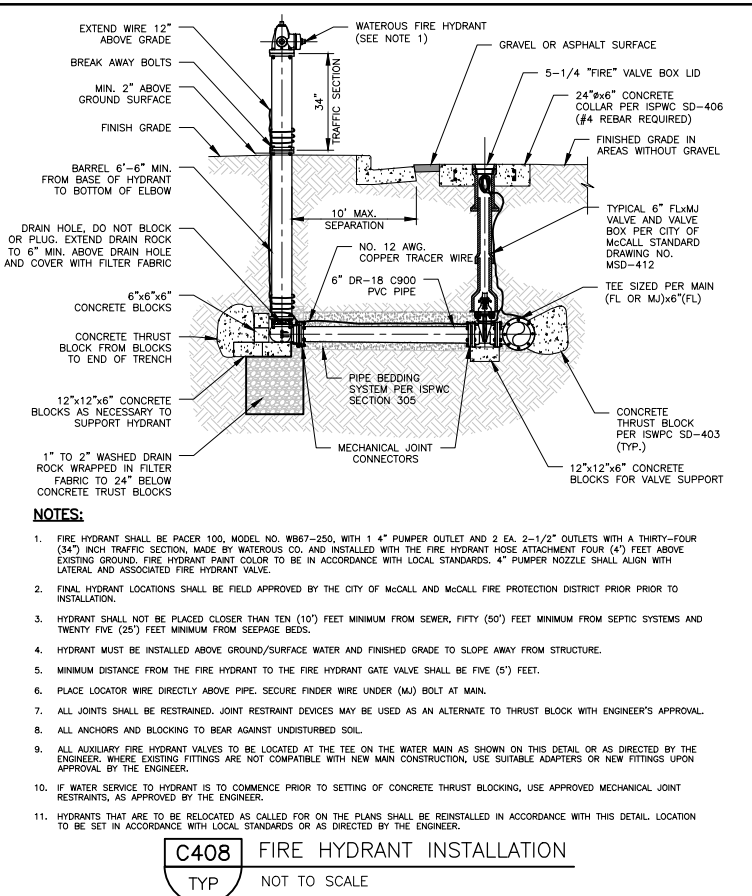
- ANCHOR ALL BURIED VALVES AS SHOWN.
- WRAP BOLTS AND FLANGES WITH 6 MIL. POLYPROPYLENE TO PROTECT FROM CONCRETE ADHERENCE DURING CONSTRUCTION OF THRUST BLOCKS.
- SEE CHART FOR MINIMUM THRUST BLOCKS BEARING AREAS.
- ALL CONCRETE SHALL BE MIN. OF 6 CU. FT. AND HAVE A MIN. TWENTY-EIGHT(28) DAY COMPRESSIVE STRENGTH OF NOT LESS THAN 2500 PSI POURED AGAINST UNDISTURBED EARTH.
- THRUST BLOCKING SHALL BE PLACED BETWEEN UNDISTURBED EARTH AND THE FITTING TO BE ANCHORED.
- THRUST BLOCKING SHALL BE PLACED SO THAT THE PIPE AND FITTING JOINTS WILL BE ACCESSIBLE TO REPAIRS.
- ALL FITTINGS SHALL HAVE A 12"x12"x4" CONCRETE SUPPORT BLOCK.
- ALL THRUST BLOCKS CAST IN PLACE UNLESS OTHERWISE NOTED.
- PROVIDE 6 MIL. POLYPROPYLENE BETWEEN FITTINGS AND CONCRETE.
- NOTIFY ENGINEER FOR ANY CONDITION OR PIPE SIZE NOT INDICATED.
- ISWPC SD-403 APPLIES WHERE MORE STRINGENT.

PIPE SIZE	TEE OR END	BENDS 45°	BENDS 90°	TEE OR END	BENDS 45°	BENDS 90°
3"	0.8	1.1	0.6	0.3	0.3	0.3
4"	1.4	2.0	1.1	0.6	0.6	0.6
6"	3.2	4.5	2.4	1.2	1.2	1.2
8"	5.7	8.0	4.3	2.2	2.2	2.2
10"	8.8	12.5	6.8	3.4	3.4	3.4
12"	12.7	18.0	9.7	5.0	5.0	5.0
14"	17.3	24.5	13.3	6.8	6.8	6.8
16"	22.6	32.0	17.3	8.8	8.8	8.8
18"	28.6	40.5	21.9	11.2	11.2	11.2

SOIL BEARING PRESSURE = 2,000 PSF
WORKING PRESSURE RATING = 150 PSI
SAFETY FACTOR = 1.5

MINIMUM SQUARE FEET OR THRUST BLOCK AREA ONTO UNDISTURBED EARTH*

* MUST BE INCREASED BASED ON DIFFERENT CONDITIONS (HIGHER WORKING PRESSURE OR LOWER SOIL BEARING STRENGTH)
 ** OR TEE ACTING AS A 90° BEND
 *** THRUST BLOCK DEPTH TO BE A MINIMUM OF 12" FOR PIPE SIZES 3"-8" AND 18" FOR PIPE SIZES 10"-18" OR THE SQUARE ROUTE OF THE REQUIRED BEARING AREA, WHICHEVER IS GREATER.



NO.	REVISION	BY	DATE	DESIGN
1.	CITY OF McCALL AND PLRWSD ENGINEERING SUBMITTAL	AMD	4/26/2023	AMD
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				AMD
				CHECKED
				GTT
				APPROVED
				GTT

C414 POTABLE/NOT-POTABLE WATER LINE (NPWL) SEPARATION TYP NOT TO SCALE

C412 STANDARD VALVE BOX INSTALLATION TYP NOT TO SCALE

C426 CAP AND PLUG DETAIL TYP NOT TO SCALE

C406 THRUST BLOCKS TYP NOT TO SCALE

C408 FIRE HYDRANT INSTALLATION TYP NOT TO SCALE

C405 AUTOMATIC FLUSHING SYSTEM TYP NOT TO SCALE

C414 POTABLE/NOT-POTABLE WATER LINE (NPWL) SEPARATION TYP NOT TO SCALE

C412 STANDARD VALVE BOX INSTALLATION TYP NOT TO SCALE

C426 CAP AND PLUG DETAIL TYP NOT TO SCALE

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C426 CAP AND PLUG DETAIL TYP NOT TO SCALE

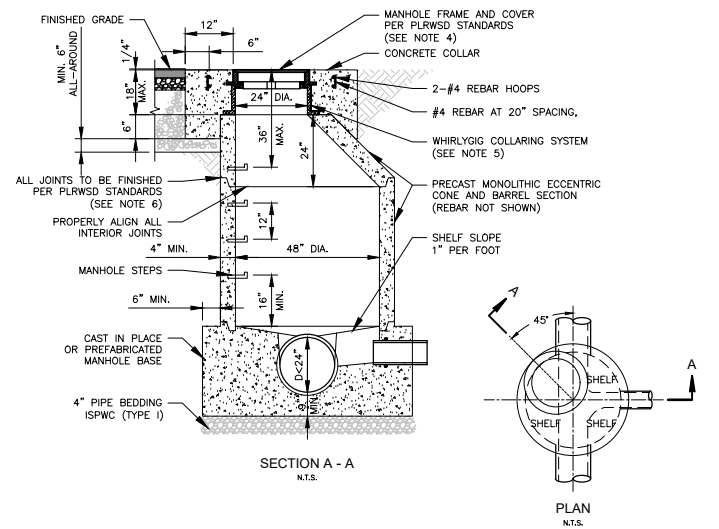
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PROFESSIONAL ENGINEER LICENSED 21556 DATE OF ISSUANCE 12/6/20 ANTHONY DINI

CRESTLINE ENGINEERS
 323 DEINHARD LANE, SUITE C · PO BOX 2330
 McCALL, IDAHO 83638
 208.634.4140 · 208.634.4146 FAX

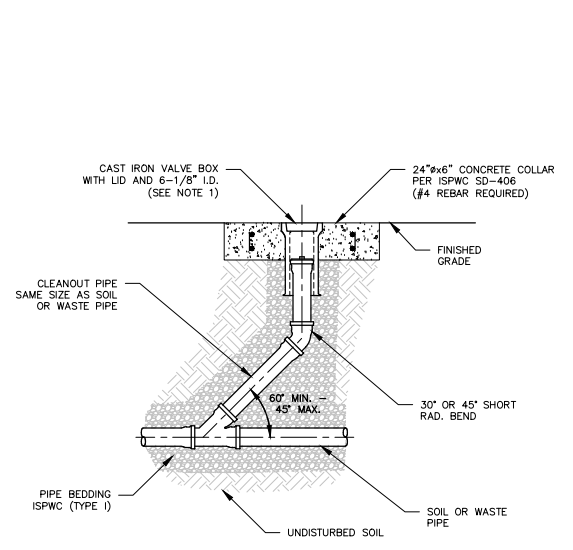
SIMMONS STREET TOWNHOUSES
 McCALL, IDAHO
 ROADWAY, DOMESTIC WATER, SANITARY SEWER AND GRADING IMPROVEMENTS PROJECT
 CIVIL TYPICAL DETAILS - 2

VERIFY SCALE
 BAR IS ONE INCH ON FULL SIZE DRAWING
 PROJECT 22025
 DATE 4/26/2023
 DRAWING NO. SHEET NO.
 GC-2 9 OF 11



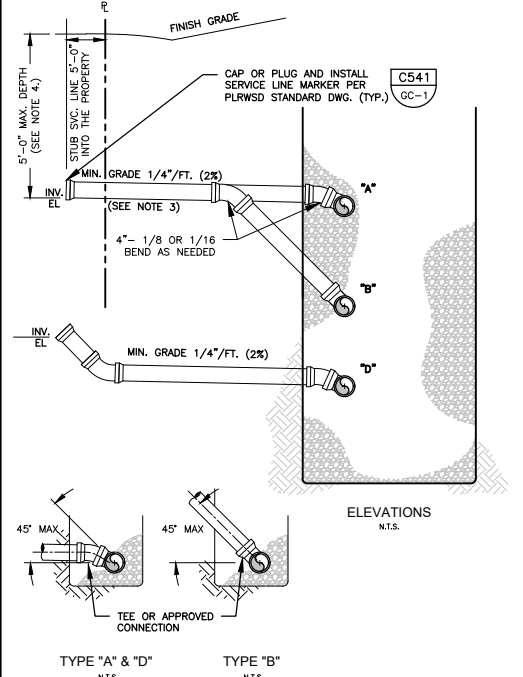
- NOTES:**
- OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEERS APPROVAL.
 - PLACE VERTICAL WALL ON UPSTREAM SIDE OF MANHOLE, ROTATED 45 DEGREES.
 - WHERE PVC PIPE IS UTILIZED, INSTALL A RUBBER RING OR GASKET COLLAR WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL.
 - ALL MANHOLES TO HAVE CAST-IRON DUST PANS CONSTRUCTED WITH INTEGRAL MACHINED FLANGES CAST INTO THE FRAME. DUST PANS TO HAVE A RAISED DRAIN HOLE AND WIRE LIFTING STRAP. MANHOLE COVER TO BE STAMPED "PLWSD SEWER". FRAMES, COVERS, AND DUSTPANS TO BE MANUFACTURED BY KITS FOUNDRY & MACHINE, INC. (208) 357-7773.
 - "WHIRLYGIG" COLLARING SYSTEM REQUIRED ON ALL MANHOLES IN PLACE OF CONCRETE GRADE RINGS. JOINT BETWEEN WHIRLYGIG COLLARING SYSTEM (BOTTOM OF PLASTIC FLANGE) AND TOP OF MANHOLE CONE SHALL BE SEALED WITH "VULKEM 116" HIGH-PERFORMANCE POLYURETHANE SEALANT.
 - ALL MANHOLE JOINTS TO INCLUDE CON-SEAL "CS-102 BUTYL RUBBER SEALANT," "VULKEM 116" HIGH-PERFORMANCE POLYURETHANE SEALANT, AND BE GROUTED (INSIDE & OUT) USING DAYTON 1107 ADVANTAGE, SPECHEM SC MULTIPURPOSE GROUT, OR EQUAL APPROVED BY PLWSD. EXTERIOR MANHOLE JOINTS TO BE COVERED WITH NINE (9) INCH WIDE INF-SHIELD GATER WRAP AFTER GROUTING.
 - PROVIDE MANHOLE CONCRETE REINFORCING TO ACCOMMODATE TRAFFIC LOADS.

C501 PLWSD - STANDARD MANHOLE
TYP NOT TO SCALE



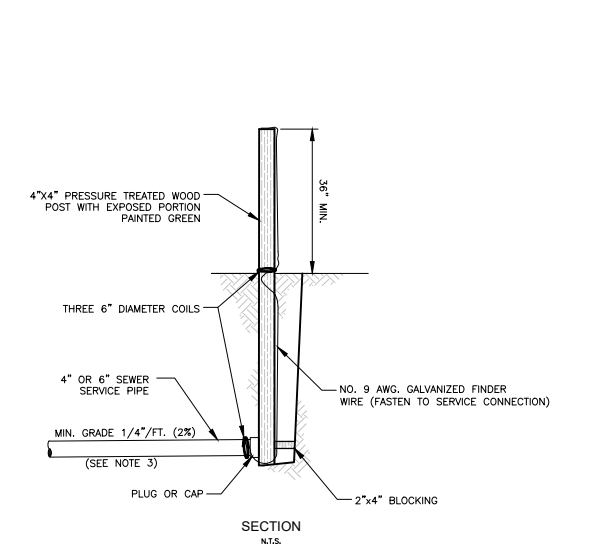
- NOTES:**
- CLEANOUT VALVE BOX LIDS TO BE A 5 1/4" DROP LID MARKED "SEWER" WHEN ASSOCIATED WITH GRAVITY SEWER PIPING AND HAVE NO MARKINGS (BLANK) WHEN ASSOCIATED WITH ALL OTHER PIPING.

C520 STANDARD SEWER CLEANOUT
TYP NOT TO SCALE



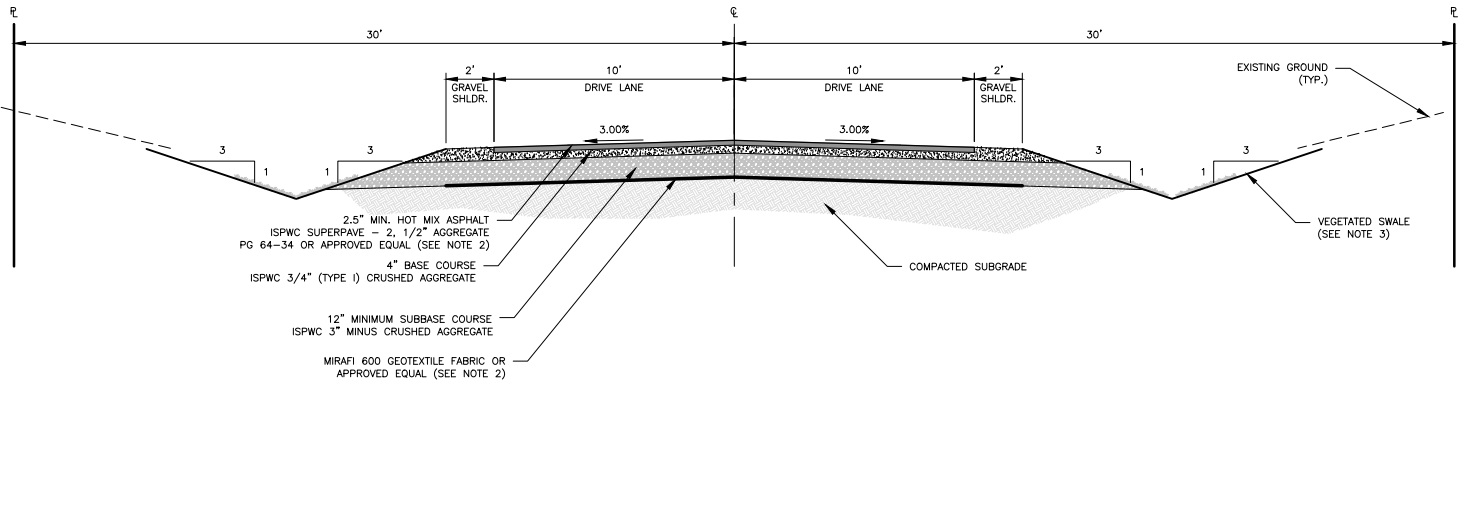
- NOTES:**
- ALL SERVICE LINES TO BE FOUR (4) INCHES INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - SERVICE LINE TO BE STUBBED A MINIMUM OF 5'-0" INTO PRIVATE PROPERTY OR AS INDICATED ON THE CONSTRUCTION PLANS.
 - MINIMUM SLOPE OF SEWER LATERALS SHALL BE 2% UNLESS OTHERWISE AUTHORIZED BY THE APPROVING AUTHORITY OR SPECIFICALLY CALLED OUT ON THE CONSTRUCTION DRAWINGS. IN NO CASE SHALL THE SLOPE BE LESS THAN 1%.
 - A MINIMUM OF THREE (3) FEET COVER DEPTH MAY BE ALLOWABLE WITH PRIOR APPROVAL FROM THE PLWSD.

C535 STANDARD SEWER SERVICE LINES
TYP NOT TO SCALE



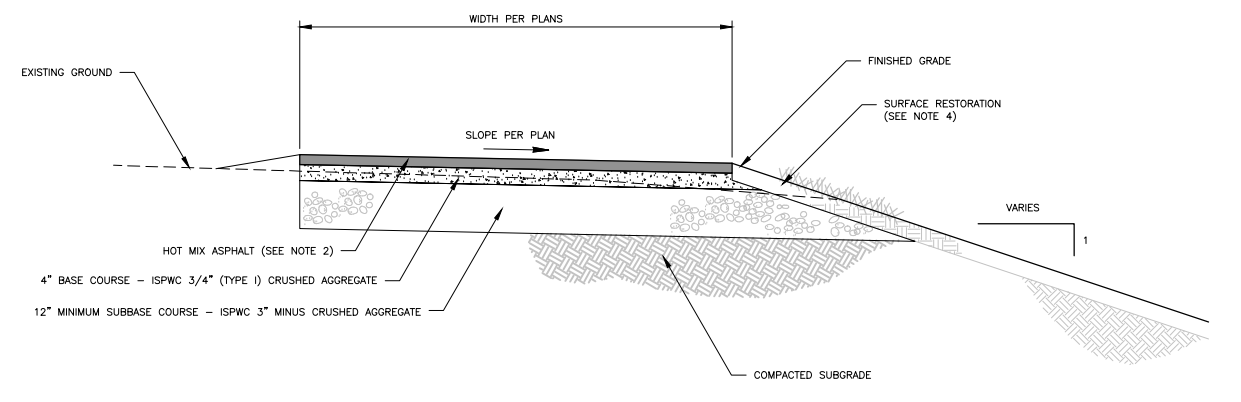
- NOTES:**
- ALL SERVICE LINES TO BE FOUR (4) INCHES INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - SERVICE LINE TO BE STUBBED A MINIMUM OF 5'-0" INTO PRIVATE PROPERTY OR AS INDICATED ON THE CONSTRUCTION PLANS.
 - MINIMUM SLOPE OF SEWER LATERALS SHALL BE 2% UNLESS OTHERWISE AUTHORIZED BY THE APPROVING AUTHORITY OR SPECIFICALLY CALLED OUT ON THE CONSTRUCTION DRAWINGS. IN NO CASE SHALL THE SLOPE BE LESS THAN 1%.

C541 STANDARD SEWER SERVICE MARKER
TYP NOT TO SCALE



- NOTES:**
- COMPACTION AND TESTING FOR ALL AGGREGATE BASE/SUBBASE MATERIAL SHALL BE IN ACCORDANCE WITH ISWPC 802.
 - ASPHALT FOUR (4) INCHES IN THICKNESS SHALL BE PLACED IN TWO (2) INCH LIFTS. ASPHALT THREE (3) INCHES OR LESS SHALL BE PLACED IN A SINGLE LIFT.
 - GEOTEXTILE FABRIC TO EXTEND 1' MIN. BEYOND THE EDGE OF ASPHALT. ALL SEAMS TO OVERLAP 2' MIN.
 - COMPACTION AND TESTING FOR ALL HOT MIX ASPHALT SHALL BE IN ACCORDANCE WITH ISWPC SECTION 810 AND PROJECT PLANS AND SPECIFICATIONS.
 - REVEGETATE ALL DISTURBED AREAS WITH A CITY APPROVED GRASS MIXTURE OVER FOUR (4) INCHES OF TOPSOIL, PER APPROVED LANDSCAPING PLAN, OR AS INDICATED WITHIN THE PLANS.

C800 ROADWAY TYPICAL SECTION - DRIVEWAY
TYP SCALE: 1" = 4'



- NOTES:**
- COMPACTION AND TESTING FOR ALL AGGREGATE BASE/SUBBASE MATERIAL SHALL BE IN ACCORDANCE WITH ISWPC SECTION 802.
 - HOT MIX ASPHALT THICKNESS/DEPTH TO BE PER THE PROJECTS GEOTECHNICAL EVALUATION. USE ISWPC 1/2" SP3, PG64-34 FOR ALL ROADS/MAIN DRIVEWAY SURFACES AND ISWPC 1/2" SP2, PG58-28 FOR INDIVIDUAL DRIVEWAY APPROACHES TO RESIDENCES.
 - COMPACTION AND TESTING FOR ALL HOT MIX ASPHALT SHALL BE IN ACCORDANCE WITH ISWPC SECTION 810.
 - SURFACE RESTORATION TO BE PER THE PROJECTS LANDSCAPING PLANS. IF LANDSCAPE PLANS HAVE NOT BEEN PROVIDED BY THE OWNER, SURFACE RESTORATION SHALL INCLUDE 2"-3" OF GRAVEL OR PLACED TOPSOIL REVEGETATED WITH A NATIVE SEED MIXTURE PER AS INDICATED.

C806 TYPICAL PAVING SECTION
TYP NOT TO SCALE

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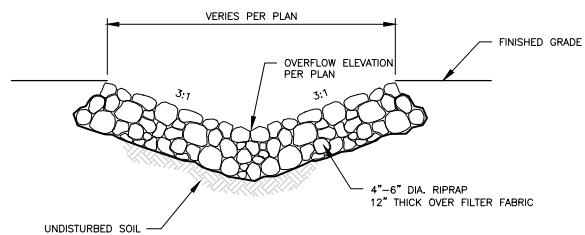


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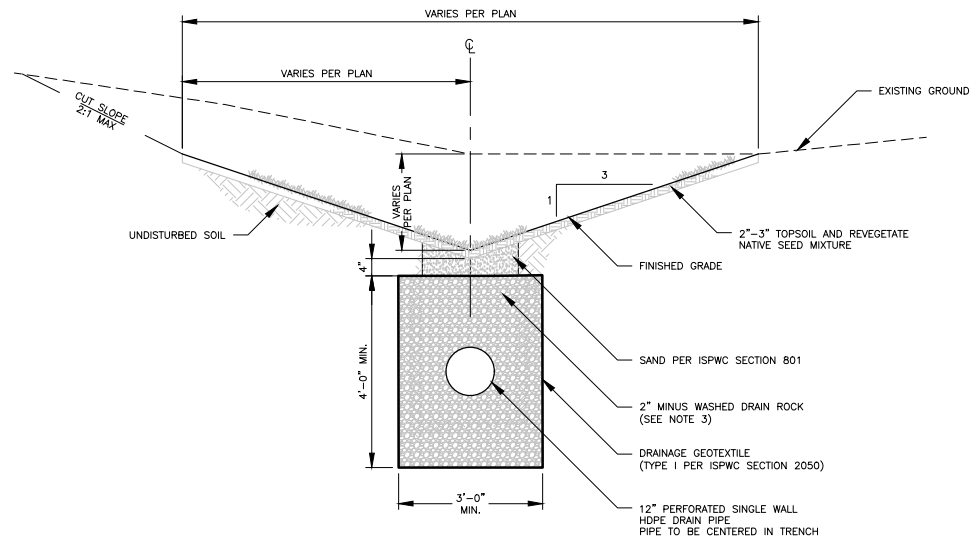
CRESTLINE ENGINEERS
323 DEINHARD LANE, SUITE C · PO BOX 2330
McCALL, IDAHO 83638
208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
McCALL, IDAHO
ROADWAY, DOMESTIC WATER, SANITARY SEWER
AND GRADING IMPROVEMENTS PROJECT
CIVIL TYPICAL DETAILS - 3

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	SHEET NO.
GC-3	10 OF 11



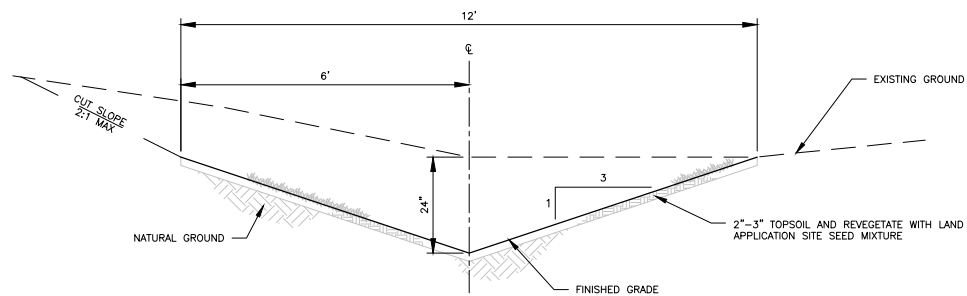
C1014 WEIR OVERFLOW DETAIL
TYP NOT TO SCALE



NOTES:

1. REFER TO IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY'S CATALOG OF STORMWATER BEST MANAGEMENT PRACTICES, VOLUME 4, SECTION 3, BMP 17 AT WWW.DEQ.IDAHO.GOV/MEDIA/622263--STORMWATER.PDF FOR ADDITIONAL INFORMATION.
2. TYPICAL TRENCH CONSTRUCTION AS PER TRENCH DETAIL STANDARD DRAWING OR ISPWC SD-301.
3. DRAIN ROCK BACKFILL TO BE 2" MINUS DIAMETER AND RELATIVELY CLEAN OF FINES. IF DRAIN ROCK IS FOUND TO BE UNSUITABLY DIRTY WHEN IT ARRIVES AT THE SITE, IT SHOULD BE CLEANED BEFORE PLACEMENT.
4. PERFORATED PIPE TO HAVE CAP ATTACHED TO BOTH ENDS TO PREVENT DRAIN ROCK FROM ENTERING THE PIPE.
5. BACKFILL AND COMPACTION PER ISPWC SECTION 306.

C1010 DRAINAGE SWALE/DETENTION DETAIL
TYP NOT TO SCALE



NOTES:

1. REFER TO IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY'S CATALOG OF STORMWATER BEST MANAGEMENT PRACTICES, VOLUME 4, SECTION 3, BMP 9 AT WWW.DEQ.IDAHO.GOV/MEDIA/622263--STORMWATER.PDF FOR ADDITIONAL INFORMATION.

C1401 BIOFILTRATION SWALE (VEGETATED SWALE)
TYP NOT TO SCALE

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				AMD
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CIVIL TYPICAL DETAILS - 4

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	SHEET NO.
GC-4	11 OF 11

RECEIVED

By Brian Parker at 10:59 am, May 31, 2023

**BYLAWS OF
SIMMONS STREET TOWNHOMES
HOMEOWNERS ASSOCIATION, INC.**

Article I

Name and Office

Section 1. Name of Association. The name of this corporation shall be SIMMONS STREET HOMEOWNERS ASSOCIATION, INC.

Section 2. Address of Association. The initial principal office of the corporation shall be located at number 385 Rio Vista Blvd, McCall, ID 83638, but may be changed from time to time by action of the Board of Directors without the amendment of these Bylaws. The corporation may also have offices at such other places as the Board of Directors may from time to time determine.

Article II

Purpose

The purpose of this Association shall be to provide for the ownership, care, maintenance, preservation, and control of the common areas within SIMMONS STREET TOWNHOMES SUBDIVISION, and to promote the recreation, health, safety, and welfare of the members thereof, to provide for the architectural control of improvements constructed within SIMMONS STREET TOWNHOMES SUBDIVISION, and to perform any and all other functions delegated to it by the Declaration of Covenants, Conditions, and Restrictions for SIMMONS STREET TOWNHOMES SUBDIVISION, recorded as Instrument No. in the records of Valley County, Idaho and any amendments thereto.

Article III

Membership

Section 1. Members. Every owner of a lot located in SIMMONS STREET TOWNHOMES SUBDIVISION, which lot is not common property, shall be a member of the Association. The plat of said subdivision is recorded in Valley County, Idaho as Instrument No. 1 cf. The term "owner" shall mean and refer to the record owner, whether one or more persons or entities, of fee

simple title to the lot, excluding those having an interest in the lot merely as security for the performance of an obligation. There shall be two classes of membership as specified in Section 6, below.

Section 2. Property Rights and Delegation. The property rights of each member are defined in the Declaration of Covenants, Conditions, and Restrictions of SIMMONS STREET TOWNHOMES SUBDIVISION, and any amendments thereto. Any member may delegate his or her right to the enjoyment of the common areas and facilities to the members of his or her family, or to his or her tenants or contract purchasers who reside on the property, by delivering written notice of such delegation to the secretary of the association. Such delegation may be cancelled at anytime by the member by delivery of written notice of cancellation to the secretary.

Section 3. Certificates of Membership. If the Board so decides, certificates representing membership in the association may be issued in such form as may be determined by the Board of Directors. Such certificates shall be signed by the President or a Vice President of the Association and by the secretary. The name and address of the person to whom the membership represented thereby is issued shall be entered on the books of the association. In the alternative, the Association may conduct its business without the issuance of certificates. The Board of Directors shall determine the manner of, and documentation necessary to effect, transfers of membership.

Section 4. Annual Meeting. The annual meeting of the members shall be held during the month of December in each year beginning with the year 2024, as set by the Board of Directors, for the purpose of electing the directors and for the transaction of such other business as may come before the meeting.

Section 5. Special Meetings. Special meetings of the members for any purpose or purposes may be called by the Board of Directors. Special meetings of the members must be called anytime such is requested by one-third (1/3) of the members of the Association.

Section 6. Voting Rights. Voting rights are defined in Article V of the Articles of Incorporation of SIMMONS STREET TOWNHOMES HOMEOWNERS ASSOCIATION, INC. Any member who is more than thirty (30) days in arrears on the payment of any dues or assessments of the Association shall be ineligible to vote on any Association matter. For voting purposes, membership and delinquencies shall be determined five (5) days prior to any meeting of members. Voting at any membership meeting may be either in person or by written proxy.

Section 7. Place of Meeting. The Board of Directors may designate any place within the State of Idaho as the place of meeting for any annual meeting or for any special meeting called by the Board of Directors.

Section 8. Notice of Meeting. Except as is specified in Section 10, below, written or printed notice stating the place, day, and hour of any special or annual of the members of the Association shall be delivered not less than ten (10), nor more than fifty (50), days before the date of any such meeting. Said notice may be given either personally or by first-class mail. Formal notice may be waived by the members in writing at the commencement of any meeting.

Section 9. Quorum. One-third (1/3) of the members of the Association entitled to vote, represented in person or by proxy, shall constitute a quorum at any meeting of the members.

Section 10. Informal Action by Members. Any action required to be taken at a meeting of the members may be taken without a meeting if a consent in writing setting forth the action so taken, shall be signed by a majority of the members.

Article IV

Board of Directors

Section 1. General Powers. The business and affairs of the Association shall be managed by its Board of Directors.

Section 2. Election. The number of directors shall be three (3) At the first annual meeting the members shall elect directors in the manner prescribed in Article VI of the Articles of Incorporation. At any meeting in which more than one director is to be elected, voting shall be on a cumulative basis with each lot owner to have one vote for each director to be elected. Under all circumstances, voting of members for the selection of Directors may be in person or by written proxy.

Section 3. Regular Meetings. A regular meeting of the Board of Directors shall be held without other notice than this Bylaw immediately after, and at the same place and date as the annual meeting of members. The Board of Directors may, by resolution, provide the time and place within the State of Idaho for the holding of additional regular meetings without other notice than such resolution.

Section 4. Special Meeting. Special meetings of the Board of Directors may be called either by or at the request of the president or by the request of any two directors.

Section 5. Notice. Notice of any special meeting shall be given at least five (5) days prior thereto by written notice delivered personally or mailed by certified mail to each director. Any director may waive notice of a meeting in writing. Attendance by a director shall automatically constitute a waiver of such notice. Formal notice of any meeting may be waived in writing at any meeting.

Section 6. Quorum. A majority of the directors present in person or by proxy shall constitute a quorum for the act of the Board of Directors. Directors may, for voting purposes, grant a proxy to any other current member of the Board.

Section 7. Voting. The act of the majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors. Directors may, for voting purposes, grant a proxy to any other current member of the Board.

Section 8. Vacancies. Vacancies during the term shall be filled by the remaining directors by majority vote. If the remaining Directors are unable to agree on a member to fill such a vacancy, the members of the Association shall fill the vacancy at a special meeting called for such purpose.

Section 9. Appointment and Removal of Officers. The Board, by majority vote, may appoint or remove any officer of this Association.

Section 10. Removal of Directors. Directors may be removed from office, with or without cause, at any time by the affirmative vote of two-thirds (2/3) of the members.

Article V

Officers

Section 1. Designation. The officers of the Association shall be a President, one or more Vice Presidents, a Secretary, and a Treasurer, each of whom shall be elected by the Board of Directors. Any two offices may be held by the same person except the offices of President and Secretary. All offices shall be filled by members of the Association after the Class B memberships convert to Class A memberships. Directors of the Association may also be elected as officers.

Section 2. Election and Term of Office. The officers of the Association to be elected by the Board of Directors shall be elected annually at the first meeting of the Board of Directors held after each annual meeting of the members or as soon thereafter as is convenient. Each officer shall hold office until his or her

successor has been duly elected, until his or her death, or until he or she shall resign or shall have been removed.

Section 3. Removal. Any officer or agent elected or appointed by the Board of Directors may be removed by the vote of a majority of the Board of Directors whenever, in its judgment, the best interests of the Association would be served thereby.

Section 4. Vacancies. A vacancy in any office because of death, resignation, removal, disqualification, or otherwise may be filled by the Board of Directors for the unexpired portion of the term.

Section 5. President. The President shall be the principal executive officer of the Association and, subject to the control of the Board of Directors, shall in general supervise and control all of the business and affairs of the Association. He or she shall, when present, preside at all meetings of the members and of the Board of Directors. He or she may sign, with the Secretary or any other proper officer of the corporation thereunto authorized by the Board of Directors, certificates of membership of the corporation, any deeds, mortgages, bonds, contracts or other instruments which the Board of Directors have authorized to be executed, except in cases where the signing and execution thereof shall be expressly delegated by the Board of Directors or by the Bylaws to some other officer or agent of the Corporation, or shall be required by law to be otherwise signed or executed and in general shall perform all duties instant to the office of President and such other duties as may be prescribed by the Board of Directors from time to time.

Section 6. Vice President. In the absence of the President or in the event of his or her death, inability, or refusal to act, the Vice President shall perform the duties of the President and when so acting shall have all the powers of and be subject to all the restrictions upon the President. Any Vice President may sign, with the Secretary or an Assistance Secretary, certificates of membership of the Association. The Vice President shall also perform such other duties as from time to time may be assigned him or her by the President or by the Board of Directors.

Section 7. Secretary. The Secretary shall keep the minutes of the members and of the Board of Directors meetings in one or more books provided for that purpose; see that all the notices are duly given in accordance with the provisions of these Bylaws or as required by law; be custodian of the corporate records and of the seal of the corporation and see that the seal of the corporation is affixed to all documents, the execution of which on behalf of the corporation under its seal is duly authorized; keep a register of post office addresses of each member and delegatee, which shall be furnished to the Secretary by such member; sign with

the President or Vice-President certificates for membership of the corporation, the issuance of which have been authorized by resolution of the Board of Directors; have general charge of the membership books of the corporation; and in general perform all duties incident to the office of Secretary and such other duties as from time to time may be assigned to him or her by the President or by the Board of Directors.

Section 8. Treasurer. If required by the Board of Directors, the Treasurer shall give a bond for the faithful discharge of his or her duties in such sum with such surety or sureties as the Board of Directors shall determine. He or she shall have charge and custody of and be responsible for all funds and securities of the Association; receive and give receipts for monies due and payable to the corporation from any source whatsoever, and deposit all such monies in the name of the corporation in such banks, trust accounts or other depositories as shall be selected in accordance with these Bylaws; prepare and present to the members of the corporation at the members annual meetings a report as to the financial status of the corporation and a report of the receipts and expenses of the corporation during the preceding year; and in general perform all duties incident to the office of Treasurer and such other duties as from time to time may be assigned to him or her by the President or by the Board of Directors.

Article VI

Corporate Records, Contracts, Loans, Checks, and Deposits

Section 1. Contract. The Board of Directors may by written resolution authorize any officer, officers, agent, or agents of the corporation, to enter into any contract or execute or deliver any instrument in the name of, and on behalf of, the corporation. Such authority may be general or confined to specific instances.

Section 2. Loans. No loans shall be contracted on behalf of the corporation and no evidence of indebtedness shall be issued in its name unless authorized by written resolution of the Board of Directors. Such authority may be general or confined to specific instances.

Section 3. Checks and Drafts. All checks, drafts, or other orders for the payment of money, notes, or other evidences of indebtedness issued in the name of the corporation shall be signed by such officer, officers, agent, or agents of the corporation in such manner as shall from time to time be determined by written resolution of the Board of Directors.

Section 4. Deposit. All funds of the corporation not otherwise employed shall be deposited from time to time to the credit of the corporation in such banks, savings and loan associations, trust companies, or other depositories as the Board of Directors may select.

Section 5. Corporate Records. The secretary of the corporation shall maintain the corporate record books which shall contain the originals of the Articles of Incorporation, these Bylaws, and the Minutes of all members' and Board of Directors' meetings, together with copies of the Notice given or the Waivers of Notice received by the corporation. In addition, the secretary shall hold the corporate seal and the unissued membership certificates if authorized by the Board of Directors.

Section 6. Corporate Seal. The corporation shall have a seal consisting of a circle, the center containing the words "CORPORATE SEAL," and around the circumference the name of the corporation and the words "NONPROFIT CORPORATION."

Section 7. Inspection Rights. The members shall have the right, either in person or by agent, to inspect the corporate books at any reasonable time upon the giving of 24 hours written notice.

Section 8. Annual Financial Report. Within 60 days after the end of the corporation's fiscal year, which shall also be the calendar year, the Treasurer of the corporation shall prepare and mail to the members an annual financial report which report shall list in summary form all receipts and expenses of the corporation for the prior year. Said report shall also include a then-current list of all corporate assets and liabilities.

Article VII

Assessment

Subject to the Declaration of Covenants, Conditions, and Restrictions for SIMMONS STREET TOWNHOMES SUBDIVISION, the Board of Directors shall fix the annual assessment period, determine a reasonable operating budget for the forthcoming assessment period, and fix the annual and/or monthly assessment. The Board of Directors shall maintain records of all assessments made, all assessment payments received, and all delinquent assessments in accordance with generally accepted accounting principles.

Article VIII

Insurance

The Board of Directors may obtain such insurance coverage as may be required by the Declaration of Covenants, Conditions, and Restrictions, or as may from time to time seem prudent to the Board.

Article IX

Amendments

These Bylaws may be altered, amended or repealed and new Bylaws may be adopted by the affirmative vote of two-thirds (2/3) of the members of the Association.

Adoption

The foregoing Bylaws are hereby ratified and approved by the Directors of the Association.

Dated _____ day of _____, 20____.

**COVENANTS, CONDITIONS, AND
RESTRICTIONS
FOR
SIMMONS STREET TOWNHOMES SUBDIVISION**

THIS DECLARATION is made on the date hereinafter set forth by Synergy Structures LLC., an Idaho limited liability company, hereinafter referred to as the "Declarant";

R E C I T A L S

WHEREAS, the Declarant is the Owner of certain real property situate in the City of McCall, County of Valley, State of Idaho, which property is more particularly described as:

Lots 1 through 6 of SIMMONS STREET TOWNHOMES SUBDIVISION as the same is reflected on the Official Plat thereof in the records of Valley County, Idaho.

and which real property is hereinafter referred to as the "Property. "

NOW, THEREFORE, Declarant hereby declares that the Property shall hereafter be held, sold, and conveyed subject to the following easements, restrictions, covenants, and conditions which are for the purpose of protecting the value and desirability of, and which shall run with and bind, the Property and each and every part, parcel, and Lot thereof. These easements, restrictions, covenants, and conditions shall be binding upon all parties hereafter having any right, title, or interest in the Property or any part, parcel, or Lot thereof, and upon their heirs, successors, and assigns. These easements, restrictions, covenants, and conditions shall also inure to the benefit of each present and future Owner of the Property and/or the Owner of any part, parcel or Lot thereof.

ARTICLE .I

DEFINITIONS

Section 1. "Association" shall mean and refer to SIMMONS STREET TOWNHOMES SUBDIVISION HOMEOWNERS ASSOCIATION, INC.,
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**DECLARATION OF COVENANTS,
CONDITIONS, AND RESTRICTIONS - 1.**

nonprofit corporation organized under the laws of the State of Idaho, or any successor or assign of the Association.

Section f. "Owner" shall mean and refer to the record owner, whether one (1) or more persons or entities, of a fee simple title to any Lot which is a part of the Property, including contract purchasers, but excluding those parties having an interest merely as security for the performance of an obligation.

Section - "Property" shall mean and refer to the real property constituting SIMMONS STREET TOWNHOMES SUBDIVISION according to the official recorded plat thereof, and every part, parcel, and Lot thereof, and shall further mean and refer to such additional real property as may hereafter be made subject to this Declaration of Covenants, Conditions, and Restrictions by any Supplemental Declaration pursuant to the provisions hereof for the annexation of additional parcels of real property.

Section 1. "Common Area" shall mean and refer to any area of SIMMONS STREET TOWNHOMES SUBDIVISION which has been, or hereafter is, designated as Common Area on the final plat of the subdivision, to any property owned by the Association, and to any Lot or parcel designated as Common Area in any Supplemental Declaration filed by Declarant or the Association subjecting additional real property to this Declaration. Subject to the provisions hereof, said areas are intended to be devoted to the common benefit, use, and enjoyment of the Owners and are not dedicated to the public.

Section 2. "Common Facilities" shall mean and refer to those physical improvements constructed by Declarant or the Association upon the Common Area or upon the utility easements over each Lot, including the sidewalks, curbs and gutters, street lights, the domestic water system, and/or the irrigation water system placed thereon.

Section - "Lot" shall mean and refer to all lots within and shown upon the official recorded plat of SIMMONS STREET TOWNHOMES SUBDIVISION, except for the Common Areas, and except for streets dedicated to the public, as shown upon the recorded plat.

Section]_. "Declarant" shall mean and refer to CCC, LLC., an Idaho limited liability company, its successors and assigns, provided that, such successors or assigns have acquired more than two (2) Lots and that such Lots constitute the entire remainder of unconveyed Lots owned by Declarant.

Section - "Project" shall mean and refer to the Property and all contemplated improvements thereto.

Section - "Short-term rental". A dwelling, including a single-family or a multi-family unit, which is rented for the purpose of overnight lodging for compensation, money, rent or other bargained for consideration for a period of one or more days and not more than thirty (30) consecutive days. Short term rentals are also commonly referred to as tourist or vacation rentals.

Section ..2. "Annexed Property" shall mean and refer to any real property which may hereafter be made subject to this Declaration by Supplemental Declaration pursuant to the provisions hereof for the annexation of additional parcels of real property.

Section 1.0. Whenever the context so requires, the use of the singular shall include the plural, the plural the singular, and the use of any gender shall include all genders.

ARTICLE 1.1

SIMMONS STREET TOWNHOMES HOMEOWNERS ASSOCIATION

Section - It is contemplated that simultaneously with the execution and recordation of this Declaration of Covenants, Conditions, and Restrictions (the "Declaration"), the Association will be incorporated and the Association will adopt ByLaws (the "ByLaws") for its governance.

Section - To the extent the Articles of Incorporation or ByLaws of the Association may conflict with the provisions of this Declaration, the provisions of this Declaration shall control.

ARTICLE III

PROPERTY RIGHTS

Section - Owners' Easements of Enlovment. Every Owner shall have a right and easement of enjoyment in and to the Common Areas and Common Facilities, subject to such reasonable rules and regulations covering the use and access to such areas and facilities as may be adopted by the Association. Said rights and easements shall be appurtenant to and shall pass with the title to every Lot, subject to the following provisions:

- (a) The Association shall have the right to charge reasonable admission and/or other fees for the use of any Common Facility;
- (b) The Association shall have the right to suspend the voting rights and the right to use the Common Areas of any Owner for any period during which any assessment against the Owner's Lot remains unpaid and for a period not to exceed sixty (60) days for any infraction of the Association's published rules

and regulations; and

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- (c) The Association shall have the right to dedicate or transfer all or any part of the Common Areas or Common Facilities to any public agency, authority, or utility for such purposes and subject to such conditions as may be agreed to by the members of the Association. No such dedication or transfer shall be effective unless an instrument agreeing to such dedication or transfer signed by two-thirds (2/3) of each class of members of the Association has been recorded.

Section - Declaration of Use. Any owner may delegate his right to the enjoyment of the Common Areas and Common Facilities to the members of his or her family, to his or her tenants, or to the contract purchasers of his or her Lot, provided such designees reside on the Property and agree to be bound by the rules and regulations of the Association.

Section l- Parking Rights. Subject to the provisions of Article V, Section 10, of this Declaration, any automobile or other vehicle used by any Owner shall be parked in the driveway or garage which is part of the Owner's home. Owners' vehicles may not be continuously parked in the street adjacent to the Owner's Lot for any period in excess of twelve (12) hours. All parking spaces at or in the Common Areas are reserved for guests and are not intended for the use of Owners themselves.

Section i- Responsibility for Maintenance. The Association shall provide maintenance to the Common Areas and the improvements thereon including any drainage improvements. In the event the need for maintenance or repair is caused through the willful or negligent act of an Owner, or his or her family, guests, or invitees, the costs of such maintenance or repairs shall be added to and become part of the assessment to which such Owner's Lot is subject. Each Owner shall be responsible for maintaining and keeping in good order and repair the exterior of his or her Unit and any private decks, fences, and courtyards contiguous to his or her Unit. Lawns and landscaping shall be adequately watered, fertilized, and weeded by the Association and lawns shall not be allowed to exceed five inches (5") in height at any time. In the event of damage to, or the destruction of, a Dwelling Unit by fire or other casualty, the Owner must complete repair and/or replacement the Dwelling Unit within ninety (90) days of said damage or destruction. The Association shall also be responsible for snow removal on roads, driveways, and walkways within the project.

Section 2. Insurance. The Association shall at all times carry insurance covering the Project against loss by fire or other natural cause. Any amount paid under said policy shall be

used for the repair or reconstruction of the damaged portion of the Project. Said insurance shall cover only the structures on the Project. Each Owner shall be responsible for the purchase of additional insurance on their personal property.

Section .§. Roadway Use and Maintenance. The Association shall maintain all roads, and/or driveways within the Project and shall keep each driveway snow-free and vehicle free to a width of twenty feet (20'). Police, fire, ambulance, and other emergency services vehicles and personnel shall have full access to the Project and the driveways within the Project.

Section: Short Term Rentals. The Association does not allow short term rentals of any type.

ARTICLE IV

RIGHTS RESERVED BY DECLARANT

Section 1.- Notwithstanding anything to the contrary contained in this Declaration, the Declarant expressly reserves unto:

- (a) Itself, its employees, successors and assigns, its agents, representatives, contractors and their employees, all necessary or convenient easements and rights-of-way on, over, and across all or any part of the streets of the Subdivision for vehicular and pedestrian ingress and egress to and from any part of the Property, or to and from any adjacent real property owned by Declarant, or its successors or assigns;
- (b) Itself, its successors and assigns (including any district, company or other entity providing water, sewer, gas, oil, electricity, telephone, cable television, or other similar services), all necessary or convenient easements on, over, under, and across all or part of the Common Areas, together with the utility easements as provided on the recorded subdivision plat of SIMMONS STREET TOWNHOMES SUBDIVISION and any subsequent subdivision plat of Annexed Property, for the installation, use, maintenance, and repair of all lines, wires, pipes, and all other things necessary for all such services, provided that any such lines, wires, or pipes shall be underground and further provided that all work done in connection therewith shall be performed with reasonable care and that the surface of said easement areas shall, within thirty (30) days following the completion of

such work, be restored to the level and condition that existed prior to the doing of such work; and

- (c) Itself, its employees, successors, assigns, agents, representatives, contractors, and their employees the right to use the Common Areas, where applicable, to facilitate and complete the development of the Property and any Annexed Property, including without limitation the use of the Common Areas, where applicable for:
- (1) Construction, excavation, grading, landscaping, parking, and/or storage;
 - (2) The maintenance and operation of a sales office and model units for sales purposes;
 - (3) The showing to potential purchasers of any unsold Lot, unit, or improvements within the Project; and/or
 - (4) The display of signs to aid in the sale of any unsold Lots and units or all or part of the Project.

ARTICLE Y.

USE AND BUILDING RESTRICTIONS

Section 1. Building Restrictions. Each Lot shall be restricted to one single family dwelling together with usual and appropriate out-buildings. The exterior of any unit may only be modified by the Association or with the written approval of the Architectural Control Committee. The interior of any unit may only be modified with the approval of the Architectural Control Committee under Article IX, below.

Section 2. Unsightly Structures or Practices. No unsightliness shall be permitted on any Lot. Without limiting the generality of the foregoing, all unsightly facilities, equipment, or structures shall be enclosed within approved structures or appropriately screened from view. All refuse, garbage, and trash shall be kept at all times in covered, reasonably noiseless containers, which containers shall be kept and maintained within an enclosed structure or in an area appropriately screened from view except when necessarily placed for pickup by garbage removal services. Storage piles, compost piles, and facilities for hanging, drying, or airing clothing or household fabrics shall be appropriately screened from view. No lumber, grass, shrubs or tree

clippings or scrap, refuse, or trash shall be kept, stored, or allowed to accumulate on any Lot.

Section .l. Vehicle and Equipment Parking. Campers, recreational vehicles, trailers, boats, motorcycles, snowmobiles, snow removal equipment, golf carts, or similar equipment or vehicles, may only be parked within the garage of the units or within any parking or storage structure(s) constructed on the common area by the Association. Such vehicles or equipment shall not be parked on any street, nor shall they be parked or stored in the area between the front plane of the dwelling unit on any Lot and the Street. Such vehicles or equipment as are permitted hereunder shall be appropriately screened from view. No working or commercial vehicles larger than three-quarter ton, and no junk cars, shall be parked upon a Lot.

Section - Material Storage. No building material of any kind shall be placed or stored upon a building site until the Lot Owner or his builder is ready and able to commence construction and then such material shall be placed within the property setback lines of the building site upon which the structure is to be erected or upon the concrete apron immediately adjacent to the front of the Lot. The Architectural Control Committee and/or the Association (through its agents) shall have the right to enter upon any vacant building site for the purpose of burning or removing weeds, brush, growth, or refuse.

Section 2. Fences; Hedges. No fence, hedge, or boundary wall situated anywhere upon any Lot shall have a height greater than six (6) feet, or such other lesser heights as the Architectural Control Committee may specify, above the finished graded surface of the ground upon which such fence, hedge, or wall is situated. No fence shall be constructed of any material other than wood or finished in other than a natural finish, except as may be specifically approved by the Architectural Control Committee.

Section§. Noxious Use of Property. No portion of the Common Areas, or of any Lot or any structure thereon shall be used for the conduct of any trade or business or professional activities unless such activities can be carried on without any externally visible indication (including, but not limited to, signage and/or the parking of vehicles of customers or clients on or adjacent to such Lot) of such activity. The prohibition of the use of any Lot or any structure thereon for the conduct of any trade or business or professional activities includes and prohibits the use of any Lot or any structure thereon for a "half-way house," treatment center, shelter home, school, day-care center, or other similar use, including use for the care or the residence of unrelated physically or mentally handicapped persons (notwithstanding the provisions of Section 67-6530 and 67-6531, *Idaho Code*). The

occupancy of a dwelling structure on a Lot shall be limited to one or more persons related by blood, adoption, or marriage living together as a single housekeeping unit, or to not more than two persons, though not related by blood, adoption, or marriage living together as a single housekeeping unit. Noxious or undesirable acts or the undesirable use of any portion of the Property including (but not limited to) acts or uses causing loud noise which interferes with the peaceable enjoyment of neighboring properties is prohibited and shall not be permitted or maintained; provided, however, that an office or model home for the purpose of the development, construction, and sale of the Lots and homes in the Project may be maintained by Declarant.

Section 2- Billboards; Signs. No sign of any kind shall be displayed to the public view on any Lot except one (1) sign of not more than five (5) square feet advertising the Lot for sale or rent, or a sign of the same size used by a builder to advertise the property during the construction and sales period. The Association may maintain one (1) or more subdivision identification signs and appropriate informational signs upon the Common Areas, such signs to be of a size and design approved by the Architectural Control Committee. No other signs shall be placed or maintained upon the Common Areas. Notwithstanding the provisions of this Section 14, Declarant shall be entitled to place such signs, of such size, as Declarant may deem appropriate, to identify the Project, to relate information with regard thereto, and to advertise Lots for sale.

Section - Animals. No animals, livestock, or poultry of any kind shall be raised, bred, or kept on any Lot except that dogs, cats, or other normal household pets may be kept, provided that such animals are not kept, bred, or maintained for any commercial purpose. Any such animals shall be properly restrained and controlled at any time that they are within the Project whether or not outside the boundaries of the Owner's Lot. It shall be the obligation of each Owner to control his or her animals in accordance with the rules and regulations of the Association.

Section - Exterior Antennas. No outside television antennas, radio aerials, or similar devices or structures shall be installed on any Lot or on the exterior of any structure located thereon. Satellite dishes shall be permitted only if approved by the Architectural Control Committee and if located behind the front plane of the dwelling structure (toward the rear of the Lot) outside of any building site setbacks, and if appropriately screened from view from any direction.

Section 10. Control of Exterior Walls, Roofs, Etc. The visual harmony and aesthetic appeal of the Project being of mutual concern to all Owners and having a direct bearing on the value of Lots and the improvements thereon, the Architectural Control

Committee shall have the right to control the texture, design and color scheme of the outside walls, fences, roofs and patio roof of all structures erected upon any Lot and to require basic landscaping on all Lots which have homes or other structures thereon. The Owner shall not repaint the outside walls or fences without first obtaining approval of the Architectural Control Committee as to color.

Section 11. Landscaping. All landscaping installation and maintenance shall initially be the responsibility of Declarant. Once control of the Association has been relinquished by Declarant, maintenance of all landscaping shall be the responsibility of the Association.

Section 12. Exterior Lighting. No exterior lighting shall be installed or maintained on any Lot (or structure thereon) which interferes with the use and enjoyment of adjacent Lots or without the prior approval by the Architectural Control Committee of the proposed installation.

Section 13. Sanitary Facilities. Prior to the occupancy of any structure thereon, each Lot shall either be connected to public or community sewer services or be improved with a waste disposal facility for sewage and waste water disposal, which facility shall be of a design and construction approved by the District Health Department and the Architectural Control Committee.

Section 14. Entry-Way Light. Each building site shall be improved by the Owner thereof, prior to the occupancy of any structure thereon, by the installation of an entry-way light at the juncture of the site's driveway and the street, of a style and design approved by the Architectural Control Committee. Such light mechanism shall include a photo-cell device which causes the light to automatically illuminate during the period from sunset to sunrise.

Section 15. Easement for Maintenance. The Association shall have a permanent easement to go upon the privately owned property of Owners in this subdivision to perform maintenance upon said property or upon any Common Areas, including, but not limited to, snow removal, lawn maintenance, utility service and drainage system maintenance, subterranean irrigation water system maintenance and perimeter fence maintenance, together with all rights of ingress and egress necessary for the full and complete use, occupation, and enjoyment of the easements hereby reserved and all rights and privileges incident thereto, including the right from time to time to cut, trim, and remove tress, brush, overhanging branches and other obstructions which may injure or interfere with the use, occupation or enjoyment of the reserved easement and the operation, maintenance, and repair of utility

service connections and drainage systems whether or not such conditions violate any of the foregoing sections.

Section 16. Subdivision of Lots. Lots shall not be further subdivided, and no portion of any Lot may be sold separately from the rest of that Lot. Two or more Lots may be combined to create one (1) Lot for use as a single residential parcel; provided, however, that upon such combining, each original Lot in the enlarged parcel shall continue to be considered a separate Lot for all purposes of this Declaration, including, without limitation, assessments, membership, and voting rights in the Association.

ARTICLE VI

PARTY WALLS

All party walls within SIMMONS STREET TOWNHOMES SUBDIVISION shall be subject to the following rules and regulations:

Section 1- General Rules of Law to Apply. Those walls which are built as part of the original construction of the above-described properties and placed on or immediately adjacent to the dividing line between the Lots owned by the parties shall constitute party walls. To the extent not inconsistent with the provisions of these Covenants, the general rules of law regarding party walls and liability for property damage due to negligent or willful acts or omissions shall apply thereto.

Section - Sharing of Repair and Maintenance. Unless otherwise specified herein, the costs of reasonable repair and maintenance of any party wall shall be shared equally by the Owners of the Lots adjacent to each party wall.

Section d. Destruction .QY Fire or Other Casualty. If a party wall is destroyed or damaged by fire or other casualty, any Owner may restore it. If the damage or casualty was caused by the negligence or misconduct of one Owner, that Owner shall be responsible for all restoration costs. If the damage or casualty was not the result of the negligence or misconduct of either Owner, the parties shall share all restoration costs evenly.

Section - Weatherproofing. Notwithstanding any other provision of this Article, an Owner who, by his or her negligent or willful act, causes the party wall to be exposed to the elements shall bear the whole cost of furnishing the necessary protection against such elements.

Section 2. Right of Contribution Runs with Land. The right of any Owner to contribution from any other Owner under this Agreement shall be appurtenant to the land and shall pass to each such Owner's successors in title.

Section 3. Encroachments. If any portion of the party wall encroaches upon any part of the Lot or Lots used or designated for use by another Lot Owner, an easement for the enjoyment and for the maintenance of the same is granted and shall exist, and be binding upon the parties and all present and future Owners of such encroaching building or structure for the purpose of occupying and maintaining the same. The easements for encroachment herein granted and reserved shall run with the land.

ARTICLE VII

ASSOCIATION MEMBERSHIP AND VOTING RIGHTS

Section 1- Membership. Every Owner of a Lot shall be member of the Association. Membership shall be appurtenant to and may not be separated from Ownership of any Lot.

Section - Classes of Membership. The Association shall have two (2) classes of voting membership:

Class A: The Class A members shall be all Owners, with the exception of the Declarant, during the period when the Declarant is a Class B member. After the Class B membership converts to Class A memberships, each Class A member shall be entitled to one (1) vote for each Lot owned. When more than one (1) person holds an interest in any Lot, all such persons shall be members. The vote for such Lot shall be exercised by the vote of the majority in interests of those holding interests in such jointly owned Lot, but in no event shall more than one (1) vote be cast with respect to any Lot.

Class B: The sole Class B member shall be the Declarant or the Declarant's successor or assign. The Class B membership shall cease and be automatically converted to an appropriate number of Class A memberships (one Class A membership for each Lot owned) three years after the sale of the first Lot or when the Declarant owns only one (1) Lot which is part of the Property. Until that time, all Association matters shall be governed by the vote of the Class B member except as to matters noted in Article III, Section 1.0 hereof.

ARTICLE VIII

COVENANTS FOR ASSESSMENTS

Section i. Creation of Lien and Personal Obligation of Assessments. The Declarant, for each Lot owned within the Property, and each Owner of any Lot by acceptance hereafter of a deed therefor, hereby covenants, and agrees to pay to the Association:

- (a) Annual assessments or charges (in such monthly or other installments as may be decided by the Directors of the Association;
- (b) Special assessments for capital improvements; and
- (c) Such assessments shall be established and collected as hereinafter provided.

The annual and special assessments, together with interest, costs of collection, and reasonable attorneys' fees incurred in collection shall be a charge on the land and shall be a continuing lien upon the Lot against which each such assessment is made. Each such assessment, together with interest, costs, and reasonable attorneys' fees, shall also be the personal obligation of the person who was the Owner of such Lot at the time when the assessment fell due. Although the personal obligation for delinquent assessments shall not pass to an Owner's successors in title, all unpaid assessments shall constitute a continuing lien against the Lot until paid regardless of when the lien was created unless the new Owner obtained a certificate pursuant to Section 7 of this Article VIII prior to taking title to said Lot.

Section - Purpose of Assessments. The assessments levied by the Association shall be used exclusively to promote the recreation, health, safety, welfare, and economic well-being of the residents of the Project and for the improvement, operation, and maintenance of the Common Areas and Common Facilities.

Section - Maximum Annual Assessment. Until the first of January of the year immediately following the year in which the conveyance of the first Lot to an Owner occurs, the maximum annual assessment shall be \$2,100.00 per Lot. The annual assessments shall be made payable on a monthly basis unless the Board of Directors of the Association elects to cause such assessments to payable on some other basis. Increases in the amount of the annual assessment shall be limited as follows:

- (a) Each year, beginning with the calendar year beginning on the first day of January of the year

immediately following the year in which the conveyance of the first Lot to an Owner occurs, the maximum annual assessment may be increased by action of the Board of Directors of the Association without a vote of the membership, by an amount of not more than the greater of fifteen percent (15%) or an amount equal to the percentage of any increase in the Consumers Price Index for All Urban Areas during the prior year;

- (b) For the calendar year beginning January 1 immediately following the year in which the conveyance of the first Lot to an Owner occurs, or any subsequent year, the maximum annual assessment may be increased more than the above-described amount only by an affirmative vote of two-thirds (2/3) of the votes of that class of members who are voting in person or by proxy at a meeting duly called for this purpose.

Section - Special Assessments for Capital Improvements.

In addition to the annual assessments authorized above, the Association may levy in any calendar year a special assessment applicable to that year only, for the purpose of defraying, in whole or in part, the cost of any construction, reconstruction, repair, or replacement of a capital improvement upon the Common Areas, including fixtures and personal property related thereto, provided that any such assessment shall have the assent of two-thirds (2/3) of the votes of the class of members who are voting in person or by proxy at a meeting duly called for such purpose.

Section . Notice and Quorum for Authorized Action.

Written notice of any meeting called for the purpose of taxing any action authorized under Sections 3(b) or 4 of this Article VIII shall be sent to all members not less than ten (10) days, nor more than fifty (50) days, in advance of the meeting. At such meeting the presence of members in person or by written proxy entitled to cast fifty-one percent (51%) of all the votes of the voting class of membership shall constitute a quorum. If the required quorum is not present, the meeting shall be adjourned and rescheduled for a time and place not less than five (5) days nor more than thirty (30) days subsequent. Written notice of the rescheduled meeting shall be mailed to all members not less than five (5) days in advance of the rescheduled meeting date. The required quorum at the subsequent meeting shall be satisfied by the presence in person or by written proxy of twenty-five percent (25%) of the voting class of membership.

Section 6. Uniform Rate of Assessment. Both annual and special assessments must be fixed a uniform rate for all Lots;

provided, however, that assessments for Lots which have not been occupied or sold shall be assessed at one-half (1/2) of the assessment for Lots which have been occupied or sold.

Section 2- Date of Commencement of Annual Assessments; Due Dates. The annual assessments provided for herein shall commence as to each Lot on the first day of the month following the initial conveyance of that Lot by Declarant to a purchaser. The first annual assessment shall be adjusted (pro rata) according to the number of months remaining in the calendar year. The Board of Directors shall fix the amount of the annual assessment at least thirty (30) days in advance of each annual assessment period; provided, however, that in the event of an assessment proposed in excess of the authority of the Board of Directors, the amount of such assessment in excess of the Board's authority shall not be effective until membership approval. Written notice of the annual assessment shall be sent to every Owner subject thereto. The due dates shall be established by the Board of Director. The Association shall, upon demand and for a reasonable charge, furnish a certificate signed by an officer of the Association setting forth whether the assessments on a specified Lot have been paid. A properly executed certificate of the Association as to the status of assessments on a Lot is binding upon the Association as of the date of its issuance.

Section .§. Effect of Nonpayment of Assessments; Remedies of the Association. Any assessment not paid within thirty (30) days after the due date shall bear interest from the due date at the rate of eighteen percent (18%) per annum or at such other interest rate as may be established annually by the Board of Directors. Each assessment, when levied, shall automatically constitute a lien on and against the Lot to which the assessment pertains without any requirement of filing any documentation of such lien. Nonetheless, the Association may file an Affidavit of Lien evidencing such lien thirty (30) days after the due date of the assessment. The priority of such lien shall relate back to the date the assessment was first due. The recordation of this Declaration shall constitute constructive notice of such priority date. The Association may bring an action at law against the Owner personally obligated to pay the same, or it may foreclose the assessment lien against the Property in the same manner as provided by law as to statutory mechanics and materialmen' s liens. No Owner may waive or otherwise escape liability for the assessments provided for herein by non-use of the Common Areas or by the abandonment of his or her Lot.

Section i- Subordination of the Lien to Deed of Trusts or Mortgages. The lien of the assessments provided for herein shall be subordinate to the lien of any prior deed of trust or mortgage against the Lot. The sale or transfer of any Lot shall not affect the assessment lien.

Section 1.Q. Setup and Transfer Fees. The Association shall charge and collect from each new Owner, other than the Declarant, a setup or transfer fee of \$100. DO which shall be payable within ten (10) days after title to any Lot shall be transferred. Said fee shall be utilized to offset any expenses incurred in revising and maintaining Association records.

ARTICLE IX

ARCHITECTURAL CONTROL

Section L. Architectural Control Committee. In order to protect the quality and value of all homes built in the Project and for the continued protection of the Owners thereof, an Architectural Control Committee, consisting of two (2) or more members to be appointed by the Declarant is hereby established. At such time as the number of Lots owned by Declarant is one (1) or less of the total number of platted Lots, then the membership of the Architectural Control Committee shall be appointed by the Board of Directors of the Association, to succeed the prior committee membership upon such appointment.

Section - Approval !2y Committee. No building, fence, wall, patio cover, window awning, or other structure shall be commenced, erected, or maintained upon any Lot, the Common Areas, or other properties within the Project, nor shall any exterior addition to, or change or alteration therein be made, until the plans and specifications showing the nature, kind, shape, height, materials, location of the same, and such other details as the Architectural Control Committee may require (including but not limited to any electrical, heating, cooling, sewage, or waste disposal systems) shall have been submitted to and approved in writing by the Architectural Control Committee. In the event said Committee fails to approve or disapprove in writing such plans, specifications, and location within thirty (30) days after said plans and specifications have been submitted to it in such form as may be required by the Committee, approval will not be required, and this Article will be deemed to have been fully complied with.

Section .l. Rules and Regulations. The Architectural Control Committee is hereby empowered to adopt rules to govern its procedures, including such rules as the Committee may deem appropriate and in keeping with the spirit of due process of law

with regard to the right of concerned parties to be heard on any matter before the Committee. The Architectural Control Committee is further empowered to adopt such regulations with regard to matters subject to the Committee's approval, including matters of design, materials, and aesthetic interest, as *it* shall deem appropriate and consistent with this Declaration. Such rules, after adoption, shall be of the same force and effect as if set forth in full herein. Notwithstanding the foregoing, the Committee shall have no authority to grant a variance from the express requirements of these Covenants unless the Owners of all Lots adjacent to the Lot for which a variance is requested shall consent in writing to the granting of such a variance.

Section 1- Fees. The Architectural Control Committee may establish, by its adopted rules, a fee schedule for an Architectural review fee to be paid by each Owner submitting plans and specifications to the Committee for approval. No submission for approval shall be considered complete until such fee has been paid. Such fee shall not exceed such reasonable amount as may be required to reimburse the Committee for the costs of professional review of submittals, and in any event shall not exceed the sum of \$500.00 per submittal.

Section 2. Certification by Secretary. The records of the Secretary of the Association shall be conclusive evidence as to all matters shown by such records and the issuance of a certificate of approval, completion, or compliance by the Secretary of the Association showing that the plans and specifications for the improvement or other matters therein provided for have been approved and/or that said improvements have been made in accordance therewith shall be inclusive evidence that shall fully justify and protect any title company certifying, guaranteeing, or insuring title to said property, or any portion thereof or any lien thereon and/or any interest therein as to any matters referred to in said certificate, and shall fully protect any purchaser or encumbrancer from any related action or suit under this Declaration.

ARTICLE X

ENFORCEMENT

Section - Persons Entitled to Enforce. The provisions of this Declaration may be enforced by any of the following persons or entities in accordance with the procedures outlined herein:

- (a) The Association;
- (b) The Declarant;

- (c) The Owner or Owners of any Lot adversely affected, but only after demand made upon the Association and its failure to act, except that no such Owner shall have the right to enforce independently of the Association any unpaid assessment or lien herein.

Section J. Methods of Enforcement. Subject to the provisions of Section 3 of this Article, the following methods of enforcement may be utilized:

- (a) Legal or equitable action for damages, injunction, abatement, specific performance, foreclosure, rescission, or cancellation of any contracts of an executory nature; and/or
- (b) Monetary penalties and temporary suspension from Association membership rights and privileges, in accordance with the Bylaws of the Association, provided that, except for late charges, interest, and other penalties for failure to pay as due the assessments levied by the Association as provided in this Declaration, no discipline or sanction shall be effective against a member unless:
- (i) The member is given fifteen (15) days written notice of the proposed disciplinary action and a timely opportunity to be heard on the matter. The opportunity to be heard may, at the election of such member, be oral or in writing. The notice shall be given personally to such member or sent by first-class or registered mail to the last address of such member as shown on the records of the Association, and shall state the place, date, and time of the hearing, which shall not be less than fifteen (15) days before the effective date of the proposed penalty, termination, or suspension;
- (ii) The hearing shall be conducted by a committee composed of not less than three (3) persons, appointed by the President of the Association, which shall conduct the hearing in good faith and in a fair and reasonable manner and shall not reach a decision regarding discipline until the conclusion of the meeting; and
- (iii) Any member challenging the disciplinary measures taken by the Board, including any claim alleging defective notice, must commence

Court action within one (1) year after the date of the contested disciplinary measure taken by the Board.

Section 1- Limitation on Enforcement. All methods of enforcement and discipline authorized by this Declaration are limited as follows:

- (a) The Association may not cause a forfeiture or abridgement of an Owner's right to the full use and enjoyment of his or her Lot on account of the failure of the Owner to comply with the provisions of this Declaration except by judgment of a Court or a decision arising out of arbitration or on account of a foreclosure for failure of the Owner to pay annual or special assessments duly levied by the Association; and
- (b) A monetary penalty imposed by the Association as a disciplinary measure for failure of a member to comply with the provisions of this Declaration or as a means of reimbursing the Association for costs incurred by the Association in the repair of damage to the Common Areas for which the member was allegedly responsible, or in bringing the member and his or her Lot into compliance with this Declaration, may be treated as an assessment which may become a lien against the members' Lot, enforceable by a sale of the interest. This provision applies to charges imposed against an Owner consisting of reasonable late payment penalties for delinquent assessments and for charges to reimburse the Association for the loss of interest and for costs reasonably incurred (including attorneys' fees) in its efforts to collect delinquent assessments.

Section - Fees and Costs. The Association, or any person entitled to enforce any of the terms hereof by any of the means contained herein, who obtains a decree from any Court or arbitrator enforcing any of the provisions hereof, shall be entitled to reasonable attorneys' fees and all costs incurred or anticipated to be incurred in remedying or abating the offensive condition as a part of his, her, or its judgment or decree against the party in violation hereof.

Section 2. Non-Liability for Enforcement or for Non-Enforcement. Neither the Architectural Control Committee nor the Association shall be liable to any person under any of these covenants for failure to enforce any of them, for personal injury,

loss of life, damage to property, economic detriment, or for any other loss caused either by their enforcement or non-enforcement. Failure to enforce any of the covenants contained herein shall in no event be deemed a waiver of the right to do so thereafter.

ARTICLE XI

CONDEMNATION OF COMMON AREAS

Section i. Consequences of Condemnation. If at any time or times, all or any part of the Common Areas shall be taken or condemned by any public authority or sold or otherwise disposed of in lieu of or in avoidance thereof, the following provisions shall apply.

Section . Proceeds. All compensation, damages, or other proceeds therefrom, the sum of which is hereinafter called the "Condemnation Award," shall be payable to the Association.

Section - Apportionment. The Condemnation Award shall be apportioned among the Owners equally on a per-lot basis. The Association shall, as soon as practicable, determine the share of the Condemnation Award to which each Owner is entitled. Such shares shall be accounted for in separate shares, one share for each Lot. Each such share shall remain in the name of the Association, and shall be further identified by Lot number and the name of the Owner thereof. From each separate share, the Association, as attorney-in-fact, shall use and disburse the total amount of such share, without contribution from one share to any other, first to Mortgagees and other lienors (including the Association) in the order of priority of their Mortgages and other liens, and the balance remaining to each respective Owner. The Association may hold said shares either in separate accounts or in a single account as the Board of Directors may determine.

ARTICLE XII

GENERAL PROVISIONS

Section i. Severability. The invalidation of any one of these covenants or restrictions by judgment or court order shall not affect any other provisions hereof, which shall remain in full force and effect to the maximum extent possible.

Section - Term; Extension. The covenants and restrictions of this Declaration shall run with and bind the land for a term of twenty (20) years from the date this Declaration is recorded, after which time they shall be automatically extended for

successive periods of ten (10) years unless a document terminating the covenants and restrictions of this Declaration, signed by seventy-five percent (75%) of all Owners, duly acknowledged as to each executing Owner, is recorded in the official records of Ada County, Idaho.

Section - Amendment. This Declaration may be amended during the first twenty (20) year period by an instrument signed and acknowledged by the Owners of not less than six-sevenths (6/7) of the Lots subject to this Declaration and thereafter by an instrument signed and acknowledged by the Owners of not less than five-sevenths (5/7) of the Lots subject to this Declaration.

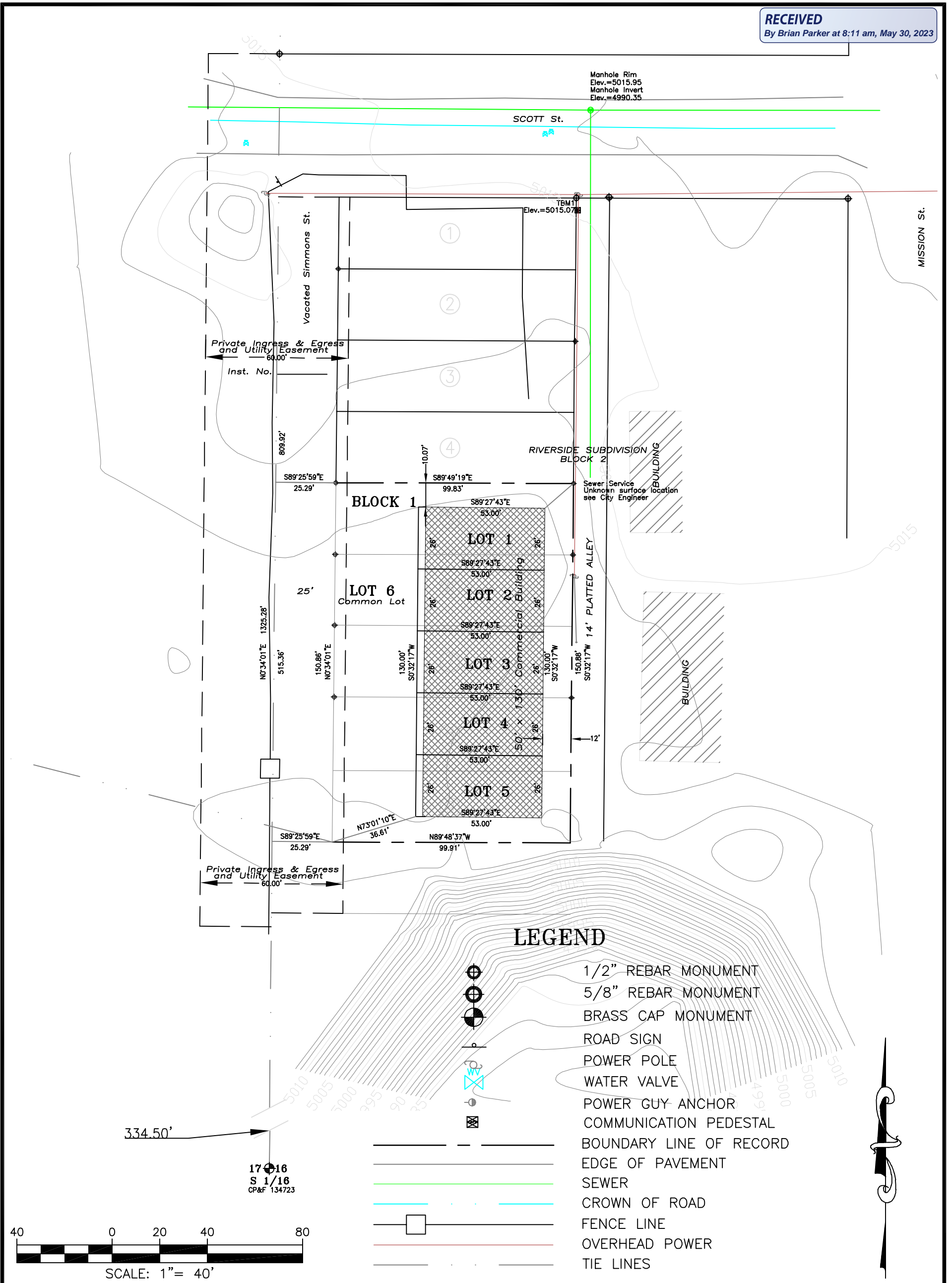
Section i. Conveyance of Common Areas. The Common Areas shall be conveyed by Declarant to the Association on or before the tenth (10th) day after conveyance of the first Lot in the Project. Until the Common Areas have been conveyed to the Association, Declarant shall be solely responsible for the maintenance and management thereof and for all costs and expenses arising therefrom.

IN WITNESS WHEREOF, the undersigned, being the Declarant herein, has hereunto set their hand and seal this ____ day of _____, 20__.

Simmons Street Townhomes

By: _____

DRAFT



Drawing Name: 9 Simmons St 2nd PRELIMPLAT T18N R3E S16.dwg	No.	REVISION DESCRIPTION	CHECKED BY	DATE
	0	REVISED	CM	18 May 23

Preliminary Plat
for
Synergy Structures LLC
LOTS 5-9 BLOCK 2 RIVERSIDE SUBDIVISION
LOCATED IN
A PORTION OF THE NW1/4 OF THE SW1/4 OF
SECTION 16, TOWNSHIP 18 NORTH, RANGE 3 EAST,
B.M., VALLEY COUNTY, IDAHO
-2022-





ORT Form 4694 6/06 Rev. 8-1-16

RECEIVED
By Brian Parker at 8:07 am, May 30, 2023

ALTA COMMITMENT FOR TITLE INSURANCE

Issued By

OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
NOTICE

IMPORTANT – READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACTIONAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY’S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I – Requirements; Schedule B, Part II – Exceptions; and the Commitment Conditions, Old Republic National Title Insurance Company, a Florida Corporation (the “Company”), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I – Requirements have not been met within six months after the Commitment Date, this Commitment terminates and the Company’s liability and obligation end.

OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
A Stock Company
400 Second Avenue South, Minneapolis, Minnesota 55401
(612) 371-1111

Issued through the office of:
Flying S Title and Escrow of Idaho,
Inc.
616 North 3rd Street Suite 101
McCall, ID 83638
(208)634-4705

By  *C. Monroe* President
Attest  *David Wald* Secretary



Authorized Signature

If this jacket was created electronically, it constitutes an original document.

This page is only a part of a 2016 ALTA © Commitment for Title Insurance issued by Old Republic National Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I - Requirements; Schedule B, Part II - Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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COMMITMENT CONDITIONS

1. DEFINITIONS

- (a) **"Knowledge" or "Known":** Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
- (b) **"Land":** The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
- (c) **"Mortgage":** A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
- (d) **"Policy":** Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
- (e) **"Proposed Insured":** Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
- (f) **"Proposed Policy Amount":** Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
- (g) **"Public Records":** Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
- (h) **"Title":** The estate or interest described in Schedule A.

2. If all of the Schedule B, Part I – Requirements have not been met within the time period specified in the Commitment to Issue Policy, this **Commitment terminates and the Company's liability and obligation end.**

3. **The Company's liability and obligation is limited by and this** Commitment is not valid without:

- (a) the Notice;
- (b) the Commitment to Issue Policy;
- (c) the Commitment Conditions;
- (d) Schedule A;
- (e) Schedule B, Part I-Requirements;
- (f) Schedule B, Part II-Exceptions; and
- (g) a counter-signature by the Company or its issuing agent that may be in electronic form.

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

- (a) **The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:**
 - i. comply with the Schedule B, Part I – Requirements;
 - ii. **eliminate, with the Company's written consent, any Schedule B, Part II – Exceptions;** or
 - iii. acquire the Title or create the Mortgage covered by this Commitment.
- (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
- (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
- (d) **The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.**
- (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.
- (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I - Requirements have been met to the satisfaction of the Company.

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(g) In any event, the **Company's liability is limited by the terms and provisions of the Policy.**

6. **LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT**

- (a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
- (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- (d) The deletion or modification of any Schedule B, Part II – Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- (e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- (f) **When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.**

7. **IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT**

The issuing agent is the **Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.**

8. **PRO-FORMA POLICY**

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. **ARBITRATION**

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is \$2,000,000 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at <http://www.alta.org/arbitration>.

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ALTA Commitment for Title Insurance

Issued By

Old Republic National Title Insurance Company

Transaction Identification Data for reference only:

Issuing Agent and Office: Flying S Title and Escrow of Idaho, Inc., 616 North 3rd Street Suite 101, McCall, ID 83638 (208)634-4705

Issuing Office's ALTA ® Registry ID: 0046117

Loan ID No.:

Issuing Office Commitment/File No.: 1096174-MC

Property Address: 209-217 Simmons Street, McCall, ID 83638

Revision No.:

SCHEDULE A

1. Commitment Date: May 18, 2023 at 7:30 A.M.

2. Policy to be issued: Premium Amount reflects applicable rate

(a) 2006 ALTA ® Standard Owner's Policy

Proposed Insured: To be determined Buyer in a Purchase Transaction

Proposed Policy Amount: \$717,472.00

Premium Amount \$ 2,353.00

Endorsements:

\$

(b) 2006 ALTA ® Loan Policy

Proposed Insured:

Proposed Policy Amount: \$0.00

Premium Amount \$

Endorsements: 9-06, 22-06, 8.1-06

\$

(c) ALTA ® Policy

Proposed Insured:

Proposed Policy Amount: \$

Premium Amount \$

Endorsements:

\$

3. The estate or interest in the Land described or referred to in this Commitment is fee simple.

4. The Title is, at the Commitment Date, vested in:

Synergy Structures, LLC, an Idaho limited liability company

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5. The Land is described as follows:

Lots 5, 6, 7, 8, and 9, Block 2, Riverside Subdivision, Valley County, Idaho, as shown on the plat recorded April 9, 1951, as Instrument No. 42255, Book 2 of Plats, Page 4.



By:

Authorized Countersignature

(This Schedule A valid only when Schedule B is attached.)

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ALTA Commitment for Title Insurance

Issued By

Old Republic National Title Insurance Company

SCHEDULE B, PART I
Requirements

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.
2. Pay the agreed amount for the estate or interest to be insured.
3. Pay the premiums, fees, and charges for the Policy to the Company.
4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.
5. If any document in the completion of this transaction is to be executed by an attorney-in-fact, the Power of Attorney must be submitted for review prior to closing.
6. With respect to Synergy Structures, LLC an L.L.C. we require:
 - a. A copy of its operating agreement and any amendments,
 - b. A certificate of good standing of recent date issued by the secretary of state of the L.L.C.'s state of domicile,
 - c. That the forthcoming conveyance, encumbrance or other instrument executed by the L.L.C. upon which the Company is asked to rely, be executed in accordance with its operating agreement.
 - d. Other requirements which the Company may impose following its review of the material required herein and other information which the Company may require.
7. Payment of delinquent taxes.

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ALTA Commitment for Title Insurance

Issued By

Old Republic National Title Insurance Company

SCHEDULE B, PART II
Exceptions

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

The Policy will not insure against loss or damage resulting from the terms and provisions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records.
2. Any facts, rights, interests, or claims which are not shown by the Public Records but which could be ascertained by an inspection of said Land or by making inquiry of persons in possession thereof.
3. Easements, claims of easement or encumbrances which are not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the title including discrepancies, conflicts in boundary lines, shortage in area, or any other facts that would be disclosed by an accurate and complete land survey of the Land, and that are not shown in the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any liens, or rights to a lien, for services, labor or material theretofore or hereafter furnished, imposed by law and not shown by the Public Records.
7. Any right, title, or interest of the Public, County, or Highway District to roads or highways on the premises whether or not shown by the public records.
8. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I - Requirements are met.

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9. 2023 taxes are an accruing lien, not yet due and payable until the fourth Monday in November of the current year. The first one-half is not delinquent until after December 20 of the current year, the second one-half is not delinquent until after June 20 of the following year.

Taxes which may be assessed and entered on the property roll for 2022 with respect to new improvements and first occupancy, which may be included on the regular property, which are an accruing lien, not yet due and payable.

General taxes as set forth below. Any amounts not paid when due will accrue penalties and interest in addition to the amount stated herein:

Year	Original Amount	Amount Paid	Parcel Number	Covers
2022	\$653.30	\$326.68	RPM02170020050	Lot 5
2022	\$653.10	\$326.58	RPM02170020060	Lot 6
2022	\$653.10	\$326.58	RPM02170020070	Lot 7
2022	\$653.10	\$326.58	RPM02170020080	Lot 8
2022	\$653.10	\$326.43	RPM02170020090	Lot 9

Homeowners Exemption is not in effect for 2022.
Circuit breaker is not in effect for 2022.

10. All matters, covenants, conditions, restrictions, easements and any rights, interests or claims which may exist by reason thereof, disclosed by the recorded plat of said subdivision, but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status, or national origin to the extent such covenants, conditions or restrictions violate 42 USC 3604(c).

This page is only a part of a 2016 ALTA ® Commitment for Title Insurance issued by Old Republic National Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I - Requirements; Schedule B, Part II - Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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- A. As an accommodation and not part of this commitment, no liability is assumed by noting the following conveyances describing all or a part of the subject Land, which have been recorded within the last 24 months: .

Grant Deed executed by Royal Fork Restaurant Corporation, an Idaho corporation, to Muriel J. Caven and Jay R. Caven, in their capacities as co-trustees of Survivor's Trust established under The Jerry and Muriel Caven Trust Agreement dated March 15, 1982, as last reformed and restated on March 19, 2020, as amended, recorded August 4, 2021, as Instrument No. 442929.

Trustee's Deed executed by Muriel J. Caven and Jay R. Caven, in their capacities as co-trustees of Survivor's Trust established under The Jerry and Muriel Caven Trust Agreement dated March 15, 1982, as last reformed and restated on March 19, 2020, as amended, to Jay R. Caven, recorded April 4, 2022, as Instrument No. 449182.

Warranty Deed executed by Jay R. Caven, an unmarried man, to Steve Callan and Cami Callan, husband and wife, recorded April 6, 2022, as Instrument No. 449236.

Quitclaim Deed executed by Steve Callan and Cami Callan, husband and wife, to Steve Callan and Shane Newton, as Members of Synergy Structures LLC, recorded July 5, 2022, as Instrument No. 451236.

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RECEIVED

By Brian Parker at 8:08 am, May 30, 2023



Flying S Title and Escrow of Idaho, Inc.

616 North 3rd Street Suite 101

McCall, ID 83638

Phone: (208)634-4705 / Fax: (208)634-4405

PR: AFFGRP

Ofc: 18 (4137)

Final Invoice

To: Synergy Structures, LLC
385 Rio Vista Blvd
McCall, ID 83638

Invoice No.: 4137 - 181009618

Date: 05/24/2023

Our File No.: 1096174-MC

Title Officer: Crissy Hogg

Escrow Officer:

Customer ID:

Liability Amounts

Attention:

Your Ref.:

RE: Property:
209-217 Simmons Street, McCall, ID 83638

Buyers: To be determined Buyer in a Purchase Transaction

Sellers: Synergy Structures, LLC

Description of Charge	Invoice Amount
Work Charge	\$200.00
INVOICE TOTAL	\$200.00

Comments:

Thank you for your business!

To assure proper credit, please send a copy of this Invoice and Payment to:

Attention: Accounts Receivable Department

NOTE NEW REMITTANCE ADDRESS, LB# 1083, Flying S Title and Escrow, PO Box 35146

Seattle, WA 98124-5146

RECEIVED
By Brian Parker at 8:08 am, May 30, 2023

DEDICATION

Know all men by these presents, that Tony J. Beaver is the owner of the following described real estate situated in the Village of McCall, Valley County, State of Idaho, in the W 1/2 NW 1/4 SW 1/4 Section 16, Township 18 North, Range 3 East of the Boise Meridian, and more particularly described as follows: Beginning at the stone marking the 1/4 Section Corner on the Section line common to Sections 16 & 17, Township 18 North, Range 3 East of the Boise Meridian; thence S 89°18' E 573.0 feet; thence S 0°42' W 1320.0 feet; thence N 89°18' W 573.0 feet; thence N 0°42' E 1320.0 feet to the place of beginning.

And the said Tony J. Beaver does hereby certify and plat into lots as the Riverside Subdivision of the Village of McCall, Valley County, State of Idaho, as shown by this plat, including and covering said described piece, parcel, or tract of land, and he does hereby dedicate to the use of the public forever, all the streets and alleys shown and designated on said plat.

IN WITNESS WHEREOF, said Tony J. Beaver has hereunto subscribed his name on this 31 day of March, 1951

Tony J. Beaver

STATE OF IDAHO } ss.
County of Valley }

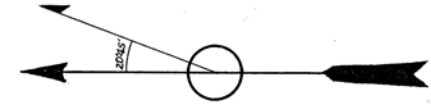
On this 21st day of March in the year 1951, before me, Hyman X. Zachary a Notary Public in and for the State of Idaho, personally appeared Tony J. Beaver, and acknowledged the foregoing instrument, who is known to me to be the person executing the same.

Hyman X. Zachary
Notary Public for the State of Idaho
Residing at McCall, IDAHO.

ENGINEERS CERTIFICATE

I, George R. Russell, do hereby certify this plat of the Riverside Subdivision of the Village of McCall, Valley County, State of Idaho, in the W 1/2 NW 1/4 SW 1/4 Section 16, Township 18 North, Range 3 East of the Boise Meridian, located and situated as follows: to wit: Beginning at the stone marking the 1/4 Section Corner on the Section line common to Sections 16 & 17, Township 18 North, Range 3 East of the Boise Meridian; thence S 89°18' E 573.0 feet; thence S 0°42' W 1320.0 feet; thence N 89°18' W 573.0 feet; thence N 0°42' E 1320.0 feet to the place of beginning. I further certify that this plat has been carefully prepared from actual surveys made or caused to be made by me on the ground, that all corners have been marked in the manner prescribed by law, and that said survey and this plat thereof are true and correct.

GEORGE R. RUSSELL
REGISTERED PROFESSIONAL ENGINEER
March 1951
No. 696
STATE OF IDAHO
Chairman, Board of Trustees



This plat is hereby accepted and approved as "Riverside Subdivision" of the Village of McCall, Valley County, State of Idaho, by order of the Village Trustees on this 23 day of March, 1951.

Chairman, Board of Trustees

Attest:
Village Clerk



RIVERSIDE SUBDIVISION
VILLAGE OF MCCALL VALLEY CO.
STATE OF IDAHO

Scale 1 inch = 80 feet

42255

I hereby certify that this instrument was filed for record at the request of Tony J. Beaver at 30 minutes past 3 o'clock P.M. this 9 day of April, 1951 in my office and duly recorded in Book 8 of Miscellaneous at Page 625. J. Ernest E. Robb, Ex-Officio Recorder. By Rose Meyer, Deputy. Fees, \$ 5.50

COMPARED INDEXED-DIRECT INDEXED-INDIRECT

Section Line 1/4
County Road R.O.W.

RECEIVED

By Brian Parker at 10:15 am, May 30, 2023

LIMITED LIABILITY COMPANY OPERATING AGREEMENT

OF

SYNERGY STRUCTURES, LLC

This Operating Agreement is executed this 12 day of April, 2022, by **Shane Newton**, ("Newton"), and **Steven J. Callan** and **Cami Callan**, husband and wife, ("Callan"), hereinafter referred to as the "Members".



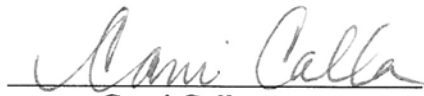
1. The name of this LLC is "**Synergy Structures LLC**".
2. The Certificate of Organization was filed on April 12, 2022, with the Secretary of State of Idaho.
3. The mailing address for the LLC is 385 Rio Vista Blvd., McCall, Idaho 83638.
4. The LLC's principal place of business and registered office is located at 385 Rio Vista Blvd., McCall, Idaho 83638.
5. The purpose of the LLC is to engage in any lawful activities for which an LLC may be organized under the Idaho law, and this entity may exercise all powers available to LLC's pursuant to the laws of the State of Idaho.
6. The LLC's registered agent is **Cami Callan**.
7. The initial Members of the LLC are **Shane Newton**, who owns 50% of the ownership interests, and **Steven J. Callan** and **Cami Callan**, husband and wife, who collectively own 50% of the ownership interests in this LLC. The capital accounts of the parties are the same as the ownership interests.
8. Additional persons or entities may be admitted to the LLC as Members, and LLC Interests may be issued to those additional Members, if the current Members consent to the admission of the additional Members on such terms and conditions as may be determined by the Members at that time.
9. All management decisions shall require a majority vote of the ownership interests.
10. If and when additional members are added to the LLC, this agreement will be amended to reflect appropriate provisions relating to management of capital accounts, profits and losses, tax matters, distributions, and other financial issues, which shall be in accordance with generally accepted accounting principles.

11. No Member shall be liable for the debts, obligations or liabilities of the LLC to a third party unless the Member agrees in writing to be liable.
12. The LLC's fiscal year and tax accounting year shall end on December 31.
13. The LLC shall indemnify and hold harmless any Member or agent who was or is a party, or is threatened to be made a party, to any proceeding brought against or defended by the LLC by reason of the fact that such person is or was a Member or agent of the LLC, against expenses, judgments, fines, settlements and other amounts actually and reasonably incurred in connection with such proceeding, if that person acted in good faith and in a manner that person reasonably believed to be in the best interests of this LLC, and, in the case of a criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful.
14. Except as otherwise provided in this Agreement, no Member may transfer and/or assign, in whole or in part, his or her LLC Interest at any time, without the consent of all members. For purposes of this Agreement transfer shall mean sale, exchange, assignment, alienation, disposition, gift, pledge, hypothecation, encumbrance, or grant of security interest in the LLC Interest.
15. Meetings of Members shall be held at any place within the United States designated by the Members and stated in the notice of the meeting. If no place is so specified, Members' meetings shall be held at the LLC's principal office.
16. An annual meeting of Members shall be held on or about the first day of April each year. At the annual meeting, any proper business may be transacted.
17. The LLC shall be dissolved upon the occurrence of any of the events providing cause for dissolution under Idaho law, unless the business of the LLC is continued by the consent of all of the remaining LLC Interests within ninety (90) days of the happening of that event.
18. Upon dissolution one or more of the Members shall act as liquidator and wind up all LLC business and affairs. However, the LLC shall continue to exist until Articles of Dissolution have been filed or until a decree dissolving the LLC has been entered by a court of competent jurisdiction.
19. Upon dissolution and the completion of the winding up of all LLC business and affairs, the assets of the LLC shall be promptly liquidated and distributed as provided by Idaho law.
20. The LLC shall be terminated upon the distribution of all assets. The Members shall cause the LLC to file Articles of Dissolution, if required, or take any other actions necessary to terminate the LLC.

21. This agreement may be amended or repealed by the vote or written consent of a majority of the LLC Interests at a meeting of the Members at which a quorum is present.

22. This agreement shall be binding upon and inure to the benefit of the parties and their respective successors, legal representatives, and assigns. This agreement may not be assigned by any party without the express written consent of the other parties.

23. This agreement shall be governed by, and interpreted in accordance with, the laws of the State of Idaho.

 _____ Shane Newton	<u>4/12/22</u> Date
 _____ Stephen J. Callan	<u>4-12-22</u> Date
 _____ Cami Callan	<u>4-12-22</u> Date

RECORDATION REQUESTED BY:

Evan M.E. Barrett
C.K. Quade Law, PLLC
600 E. Riverpark Ln., Ste. 215
Boise, ID 83706
Telephone 208-367-0723
Facsimile 208-639-6400

RECEIVED

By Brian Parker at 8:09 am, May 30, 2023

QUITCLAIM DEED

FOR VALUE RECEIVED, **Steve Callan and Cami Callan, husband and wife**, whose current address is **385 Rio Vista Blvd, McCall, Idaho 83638**, GRANTORS, do by these presents remise, release, and forever quit claim unto **Steve Callan and Shane Newton, as Members of Synergy Structures LLC, GRANTEES**, whose current address is **385 Rio Vista Blvd, McCall, Idaho 83638**, and/or their successors and substitutes as Members thereunder, all of the right, title and interest of the GRANTORS, in the following described real property to-wit:

Lots 5, 6, 7, 8, and 9, Block 2, Riverside Subdivision, Valley County, Idaho, as shown on the plat recorded April 9, 1951, as Instrument No. 42255, Book 2 of Plats, Page 4.

TOGETHER with all and singular the tenements, hereditaments, and appurtenances thereunto belonging or in anywise pertaining thereto, the reversion and reversions, remainder and remainders, rents, issues, and profits thereof, unto GRANTEES forever.

DATED this 1 day of July, 2022.



Steve Callan

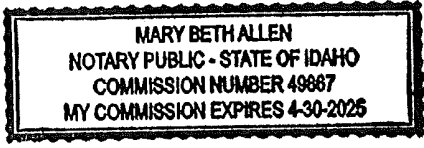


Cami Callan

STATE OF IDAHO)
 : ss.
County of Valley)

On this 1st day of July, 2022, before me, the undersigned notary public in and for the State of Idaho, personally appeared Steve Callan and Cami Callan, known or identified to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF I have hereunto set my hand and seal the day and year first above written.



Mary Beth Allen

Notary Public for Idaho
Residing at: *McCall, Valley Co.*
Commission expires: *4-30-25*

VALLEY COUNTY TAX STATEMENT

JOHANNA DEFOORT
VALLEY COUNTY TAX COLLECTOR

P.O. Box 1350
 Cascade, ID 83611
 208-382-7110

Tax Year:	2022	Bill Number:	157908
AIN:		Billing Date:	05/23/2023
PIN:	RPM02170020050	Balance good until:	05/23/2023
Code-Area:	003-0004	Last Payment:	12/21/2022

Bond Information: www.co.valley.id.us

Parcel Description: RIVERSIDE SUBDIVISION LOT 5 BLOCK 2

RECEIVED
 By Brian Parker at 8:09 am, May 30, 2023

Location: 209 SIMMONS ST MCCALL
Acres: 0.0690
Mortgage:

PAYMENTS RECEIVED WITH A DELINQUENCY WILL BE APPLIED TO THE OLDEST DELINQUENT TAX YEAR. TO AVOID LATE CHARGES, PAYMENTS MUST BE RECEIVED OR POSTMARKED BY THE DUE DATE.

Values	Amount	Exemptions and Credits	Amount	Exemptions and Credits	Amount
Land Value	143,528				
			Total Taxable		143,528

Taxing District	Phone	Rate	Total	Spec. Assessments	Phone	Rate	Total
Valley County	208-382-7100	0.0008838440	\$126.86				
City of McCall	208-634-7142	0.0022862130	\$328.14				
City of McCall GO Bond HB470	208-634-7142	0.0000798940	\$11.47				
School #421	208-634-2161	0.0006419510	\$92.14				
School #421 Bond	208-634-2161	0.0002648810	\$38.02				
School #421 Tort	208-634-2161	0.0000036920	\$0.53				
McCall Cemetery	208-634-2779	0	\$0.00				
Payette Lake Water/Sewer	208-634-4111	0.0001011790	\$14.52				
McCall Memorial Hospital	208-271-6678	0.0001676250	\$24.06				
Valley County EMS District	208-382-7100	0.0001223140	\$17.56				
				Urban Renewal	Phone	Rate	Total

Bill Summary	Prior Year	Current	Delinquent	Interest	Late Fee	Fees	Paid	Total Due
	\$158.70	\$653.30	\$0.00	\$0.31	\$6.53	\$0.00	\$326.68	\$333.46

The mortgage companies have received a copy of the Valley County Tax File. If your mortgage company pays your taxes this notice is for information only. Electronic payments are accepted through our website www.co.valley.id.us. All payments require your PIN (parcel identification number). E-check payments are subject to a \$1.00 fee or credit and debit card payments are subject to a 2.50% convenience fee.

Make Check Payable to: VALLEY COUNTY TAX COLLECTOR **Keep top portion for your records**

**FOR PROPER CREDIT RETURN THIS STUB WITH PAYMENT
 PERSONAL CHECKS ARE SUBJECT TO BANK CLEARANCE**

SYNERGY STRUCTURES, LLC
 385 RIO VISTA BLVD
 MCCALL ID 83638

**FOR PROPER CREDIT RETURN THIS STUB WITH PAYMENT
 PERSONAL CHECKS ARE SUBJECT TO BANK CLEARANCE**

SYNERGY STRUCTURES, LLC
 385 RIO VISTA BLVD
 MCCALL ID 83638

Bill Number: 2022 - 157908 **1ST HALF**

PIN: RPM02170020050 \$6.81

AIN:

VALLEY COUNTY **FULL AMOUNT**

\$333.46

Bill Number: 2022 - 157908 **2ND HALF**

PIN: RPM02170020050 \$326.65

AIN:

VALLEY COUNTY

December 20, 2022

June 20, 2023



VALLEY COUNTY TAX STATEMENT

JOHANNA DEFOORT
VALLEY COUNTY TAX COLLECTOR

P.O. Box 1350
 Cascade, ID 83611
 208-382-7110

Tax Year:	2022	Bill Number:	158175
AIN:		Billing Date:	05/23/2023
PIN:	RPM02170020060	Balance good until:	05/23/2023
Code-Area:	003-0004	Last Payment:	12/21/2022

Bond Information: www.co.valley.id.us

Parcel Description: RIVERSIDE SUBDIVISION LOT 6 BLOCK 2

RECEIVED
 By Brian Parker at 8:09 am, May 30, 2023

Location: 211 SIMMONS ST MCCALL

Acres: 0.0689

Mortgage:

PAYMENTS RECEIVED WITH A DELINQUENCY WILL BE APPLIED TO THE OLDEST DELINQUENT TAX YEAR. TO AVOID LATE CHARGES, PAYMENTS MUST BE RECEIVED OR POSTMARKED BY THE DUE DATE.

Values	Amount	Exemptions and Credits	Amount	Exemptions and Credits	Amount
Land Value	143,486				
				Total Taxable	143,486

Taxing District	Phone	Rate	Total	Spec. Assessments	Phone	Rate	Total
Valley County	208-382-7100	0.0008838440	\$126.83				
City of McCall	208-634-7142	0.0022862130	\$328.04				
City of McCall GO Bond HB470	208-634-7142	0.0000798940	\$11.46				
School #421	208-634-2161	0.0006419510	\$92.11				
School #421 Bond	208-634-2161	0.0002648810	\$38.01				
School #421 Tort	208-634-2161	0.0000036920	\$0.53				
McCall Cemetery	208-634-2779	0	\$0.00				
Payette Lake Water/Sewer	208-634-4111	0.0001011790	\$14.52				
McCall Memorial Hospital	208-271-6678	0.0001676250	\$24.05				
Valley County EMS District	208-382-7100	0.0001223140	\$17.55				
				Urban Renewal	Phone	Rate	Total

Bill Summary	Prior Year	Current	Delinquent	Interest	Late Fee	Fees	Paid	Total Due
	\$158.64	\$653.10	\$0.00	\$0.31	\$6.53	\$0.00	\$326.58	\$333.36

The mortgage companies have received a copy of the Valley County Tax File. If your mortgage company pays your taxes this notice is for information only. Electronic payments are accepted through our website www.co.valley.id.us. All payments require your PIN (parcel identification number). E-check payments are subject to a \$1.00 fee or credit and debit card payments are subject to a 2.50% convenience fee.

Make Check Payable to: VALLEY COUNTY TAX COLLECTOR **Keep top portion for your records**

**FOR PROPER CREDIT RETURN THIS STUB WITH PAYMENT
 PERSONAL CHECKS ARE SUBJECT TO BANK CLEARANCE**

SYNERGY STRUCTURES, LLC
 385 RIO VISTA BLVD
 MCCALL ID 83638

**FOR PROPER CREDIT RETURN THIS STUB WITH PAYMENT
 PERSONAL CHECKS ARE SUBJECT TO BANK CLEARANCE**

SYNERGY STRUCTURES, LLC
 385 RIO VISTA BLVD
 MCCALL ID 83638

Bill Number: 2022 - 158175 **1ST HALF**

PIN: RPM02170020060 \$6.81

AIN:

VALLEY COUNTY **FULL AMOUNT**

\$333.36

Bill Number: 2022 - 158175 **2ND HALF**

PIN: RPM02170020060 \$326.55

AIN:

VALLEY COUNTY

December 20, 2022

June 20, 2023



VALLEY COUNTY TAX STATEMENT

JOHANNA DEFOORT
VALLEY COUNTY TAX COLLECTOR

P.O. Box 1350
 Cascade, ID 83611
 208-382-7110

Tax Year:	2022	Bill Number:	158395
AIN:		Billing Date:	05/23/2023
PIN:	RPM02170020070	Balance good until:	05/23/2023
Code-Area:	003-0004	Last Payment:	12/21/2022

Bond Information: www.co.valley.id.us

Parcel Description: RIVERSIDE SUBDIVISION LOT 7 BLOCK 2

RECEIVED
 By Brian Parker at 8:09 am, May 30, 2023

Location: 213 SIMMONS ST MCCALL

Acres: 0.0689

Mortgage:

PAYMENTS RECEIVED WITH A DELINQUENCY WILL BE APPLIED TO THE
 OLDEST DELINQUENT TAX YEAR. TO AVOID LATE CHARGES, PAYMENTS
 MUST BE RECEIVED OR POSTMARKED BY THE DUE DATE.

Values	Amount	Exemptions and Credits	Amount	Exemptions and Credits	Amount
Land Value	143,486				
				Total Taxable	143,486

Taxing District	Phone	Rate	Total	Spec. Assessments	Phone	Rate	Total
Valley County	208-382-7100	0.0008838440	\$126.83				
City of McCall	208-634-7142	0.0022862130	\$328.04				
City of McCall GO Bond HB470	208-634-7142	0.0000798940	\$11.46				
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School #421 Bond	208-634-2161	0.0002648810	\$38.01				
School #421 Tort	208-634-2161	0.0000036920	\$0.53				
McCall Cemetery	208-634-2779	0	\$0.00				
Payette Lake Water/Sewer	208-634-4111	0.0001011790	\$14.52				
McCall Memorial Hospital	208-271-6678	0.0001676250	\$24.05				
Valley County EMS District	208-382-7100	0.0001223140	\$17.55				
				Urban Renewal	Phone	Rate	Total

Bill Summary	Prior Year	Current	Delinquent	Interest	Late Fee	Fees	Paid	Total Due
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Make Check Payable to: VALLEY COUNTY TAX COLLECTOR **Keep top portion for your records**

**FOR PROPER CREDIT RETURN THIS STUB WITH PAYMENT
 PERSONAL CHECKS ARE SUBJECT TO BANK CLEARANCE**

SYNERGY STRUCTURES, LLC
 385 RIO VISTA BLVD
 MCCALL ID 83638

**FOR PROPER CREDIT RETURN THIS STUB WITH PAYMENT
 PERSONAL CHECKS ARE SUBJECT TO BANK CLEARANCE**

SYNERGY STRUCTURES, LLC
 385 RIO VISTA BLVD
 MCCALL ID 83638

Bill Number: 2022 - 158395 **1ST HALF**

PIN: RPM02170020070 \$6.81

AIN:

VALLEY COUNTY **FULL AMOUNT**

\$333.36

Bill Number: 2022 - 158395 **2ND HALF**

PIN: RPM02170020070 \$326.55

AIN:

VALLEY COUNTY

December 20, 2022

June 20, 2023



VALLEY COUNTY TAX STATEMENT

JOHANNA DEFOORT
VALLEY COUNTY TAX COLLECTOR

P.O. Box 1350
 Cascade, ID 83611
 208-382-7110

Tax Year:	2022	Bill Number:	157741
AIN:		Billing Date:	05/23/2023
PIN:	RPM02170020080	Balance good until:	05/23/2023
Code-Area:	003-0004	Last Payment:	12/21/2022

Bond Information: www.co.valley.id.us

Parcel Description: RIVERSIDE SUBDIVISION LOT 8 BLOCK 2

RECEIVED
 By Brian Parker at 8:10 am, May 30, 2023

Location: 215 SIMMONS ST MCCALL

Acres: 0.0689

Mortgage:

PAYMENTS RECEIVED WITH A DELINQUENCY WILL BE APPLIED TO THE
 OLDEST DELINQUENT TAX YEAR. TO AVOID LATE CHARGES, PAYMENTS
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School #421 Bond	208-634-2161	0.0002648810	\$38.01				
School #421 Tort	208-634-2161	0.0000036920	\$0.53				
McCall Cemetery	208-634-2779	0	\$0.00				
Payette Lake Water/Sewer	208-634-4111	0.0001011790	\$14.52				
McCall Memorial Hospital	208-271-6678	0.0001676250	\$24.05				
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				Urban Renewal	Phone	Rate	Total

Bill Summary	Prior Year	Current	Delinquent	Interest	Late Fee	Fees	Paid	Total Due
	\$158.64	\$653.10	\$0.00	\$0.31	\$6.53	\$0.00	\$326.58	\$333.36

The mortgage companies have received a copy of the Valley County Tax File. If your mortgage company pays your taxes this notice is for information only. Electronic payments are accepted through our website www.co.valley.id.us. All payments require your PIN (parcel identification number). E-check payments are subject to a \$1.00 fee or credit and debit card payments are subject to a 2.50% convenience fee.

Make Check Payable to: VALLEY COUNTY TAX COLLECTOR **Keep top portion for your records**

**FOR PROPER CREDIT RETURN THIS STUB WITH PAYMENT
 PERSONAL CHECKS ARE SUBJECT TO BANK CLEARANCE**

SYNERGY STRUCTURES, LLC
 385 RIO VISTA BLVD
 MCCALL ID 83638

**FOR PROPER CREDIT RETURN THIS STUB WITH PAYMENT
 PERSONAL CHECKS ARE SUBJECT TO BANK CLEARANCE**

SYNERGY STRUCTURES, LLC
 385 RIO VISTA BLVD
 MCCALL ID 83638

Bill Number: 2022 - 157741 **1ST HALF**

PIN: RPM02170020080 \$6.81

AIN:

VALLEY COUNTY **FULL AMOUNT**

\$333.36

Bill Number: 2022 - 157741 **2ND HALF**

PIN: RPM02170020080 \$326.55

AIN:

VALLEY COUNTY

December 20, 2022

June 20, 2023



VALLEY COUNTY TAX STATEMENT

JOHANNA DEFOORT
VALLEY COUNTY TAX COLLECTOR

P.O. Box 1350
 Cascade, ID 83611
 208-382-7110

Tax Year:	2022	Bill Number:	158219
AIN:		Billing Date:	05/23/2023
PIN:	RPM02170020090	Balance good until:	05/23/2023
Code-Area:	003-0004	Last Payment:	12/21/2022

Bond Information: www.co.valley.id.us

Parcel Description: RIVERSIDE SUBDIVISION LOT 9 BLOCK 2

RECEIVED
 By Brian Parker at 8:10 am, May 30, 2023

Location: 217 SIMMONS ST MCCALL
Acres: 0.0689
Mortgage:

PAYMENTS RECEIVED WITH A DELINQUENCY WILL BE APPLIED TO THE OLDEST DELINQUENT TAX YEAR. TO AVOID LATE CHARGES, PAYMENTS MUST BE RECEIVED OR POSTMARKED BY THE DUE DATE.

Values	Amount	Exemptions and Credits	Amount	Exemptions and Credits	Amount
Land Value	143,486				
			Total Taxable		143,486

Taxing District	Phone	Rate	Total	Spec. Assessments	Phone	Rate	Total
Valley County	208-382-7100	0.0008838440	\$126.83				
City of McCall	208-634-7142	0.0022862130	\$328.04				
City of McCall GO Bond HB470	208-634-7142	0.0000798940	\$11.46				
School #421	208-634-2161	0.0006419510	\$92.11				
School #421 Bond	208-634-2161	0.0002648810	\$38.01				
School #421 Tort	208-634-2161	0.0000036920	\$0.53				
McCall Cemetery	208-634-2779	0	\$0.00				
Payette Lake Water/Sewer	208-634-4111	0.0001011790	\$14.52				
McCall Memorial Hospital	208-271-6678	0.0001676250	\$24.05				
Valley County EMS District	208-382-7100	0.0001223140	\$17.55				
				Urban Renewal	Phone	Rate	Total

Bill Summary	Prior Year	Current	Delinquent	Interest	Late Fee	Fees	Paid	Total Due
	\$158.64	\$653.10	\$0.00	\$0.31	\$6.53	\$0.00	\$326.43	\$333.51

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SYNERGY STRUCTURES, LLC
 385 RIO VISTA BLVD
 MCCALL ID 83638

Bill Number: 2022 - 158219 **1ST HALF**

PIN: RPM02170020090 \$6.96

AIN:

VALLEY COUNTY **FULL AMOUNT**

\$333.51

Bill Number: 2022 - 158219 **2ND HALF**

PIN: RPM02170020090 \$326.55

AIN:

VALLEY COUNTY

December 20, 2022

June 20, 2023





City of McCall

PUBLIC WORKS

www.mccall.id.us

216 East Park Street
McCall, Idaho 83638

Phone 208-634-5580

Main 208-634-7142

Fax 208-634-4170

January 13, 2023

Steve Callan
385 Rio Vista Boulevard
McCall, ID 83638

Re: SUB 22-06: 209, 211, 213, 215, 217 Simmons St: Engineering Review Letter No. 1

Dear Steve,

This letter provides the City's engineering review of the submitted civil design documents received for the above-mentioned application. Based on our understanding of the project we have assembled the comments below.

Subdivision Plat:

1. It is the City's understanding currently, that the applicant is proposing to vacate the Simmons Street right-of-way and convert it into a private road. This vacation should be shown on the proposed subdivision plat.
2. Simmons Street shall be labeled "Private" when the vacation of the right-of-way is complete.
3. The entire right-of-way width needs to be shown for Simmons Street and Scott Street.
4. The proposed 12-foot utility easements should be for utilities, drainage, and snow storage.
5. The plat boundary shall include two separate control ties to city of McCall control points. The ties must be tied to two different control points and those control points must tie to separate corners within the drawing.
6. The preliminary plat document that was submitted appears to be missing many of the elements required of a plat. Please refer to our Digital Data Submittal standards on what should be included on your plat. The complete DDSS guidance document can be found here: <https://evogov.s3.amazonaws.com/141/media/115532.pdf>
7. Once the final plat draft is complete, two digital CAD files, prepared in accordance with the City's digital data submission standards (DDSS) shall be provided.

ROW Issues, Access, and Street Improvements (Simmons St):

1. The project is proposing to improve Simmons St to a gravel standard. The City does not have a current standard that is gravel. The new roadway will need to be paved with a minimum of 4" Hot mix Asphalt, ISPWC Superpave -3 with ½" aggregate.
2. A turn-around for the public is not identified on these plans. Please clarify how public will turn around.
3. Signage needs to be included on one of the plan sheets for Simmons Street. The signage should include:

- a. A dead-end sign near the intersection of Simmons and Scott St,
 - b. Stop sign at the intersection of Scott and Simmons St,
 - c. Street naming signage, blue for a private roadway,
 - d. MUTCD approved signage to delineate and notify drivers that the road ends.
4. Identify where the private roadway snow will be stored.
5. A profile of Simmons Street needs to be provided for review and approval.
6. The current driveway on Simmons Street is identified as being around 130 feet in width. The driveway standards still apply for a private roadway, and the maximum allowable driveway for a property in the Industrial zoning, and multi-family units is 30 feet in width. Is there a way to break up this driveway? It may provide for snow storage and utility placement.
7. Looking at the elevations submitted, it appears that there are garage doors proposed to the unimproved alleyway. If this is the case, further discussions need to be had regarding stormwater, utilities, and potential improvements.

Grading, Drainage, Stormwater Management and Landscaping:

1. The contours on the preliminary grading and drainage plan do not detail how the roadside swales drain. Please detail where the runoff is expected to go.
2. Is there a purpose behind the culvert under Simmons Street not being perpendicular to the roadway?
3. It appears that it would be logical for the western roadside swale to outfall into Riverfront Park. However, this will require coordination with the City and some erosion control for the slope down into the park.
4. Identify on the civil plans where snow storage for the property is going to be located.
5. Please identify where the overflow for the stormwater facilities goes.
6. Reviewing the draft stormwater drainage report that was submitted, there are many pieces missing from the report. This report is preliminary, the final report should include:
 - a. Stormwater drainage report that covers sections A, B, C, D, and F of the Stormwater Management Checklist,
 - b. A site/grading plan showing temporary and permanent BMP's,
 - c. Detention area and design calculations verifying adequate are for the 1st flush storm (2yr-design storm).

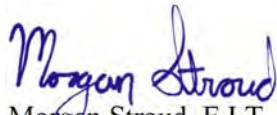
Water and other Utilities:

1. An 8" minimum waterline is required for new watermains and that will be used for fire suppression. Please update your plans accordingly.
2. The hydraulic model report for this project identifies that a fire flow of 2,016 gpm which would meet requirements of 1,500 gpm from the fire department with a sprinkled building.
3. Without a more detailed grading plan, it is not clear if the proposed water meters are located within the drainage path of the runoff from the property.
4. The placement of the fire hydrant at the end of the proposed watermain needs to be relocated towards the southwestern corner of the property. The fire hydrant should also be an automatic flushing unit because of the creation of a new dead-end main.
5. The final water civil plan shall comply with IDEQ standards and include a vertical profile that identifies the crossings of potable and non-potable water lines. The proposed water main and all service lines shall always maintain a minimum of six (6') feet of cover.

6. For proper sizing of the water meters, please submit a fixture unit worksheet for each unique floor plan.
7. Will there be an irrigation meter for the proposed landscaping? If so, please provide sizing information and show where that will be located on the civil plan set.
8. All utilities serving the project shall be located underground. As part of the final civil design package, additional utility plans (separate from the water and sewer plans) shall identify the location of:
 - a. Proposed street lighting and electrical control box/meter locations
 - b. Idaho Power electrical service lines and locations of transformers and j-boxes
 - c. Sparklight and/or Ziplay Fiber telecommunications lines, j-boxes and transformers
9. The City has initiated a municipal broadband utility known as RAPID (<https://mccall.maps.arcgis.com/apps/MapSeries/index.html?appid=0ffb912a1bec4ca0868c46d34d09340a>). Please contact the City's RAPID project manager, Chris Curtin (208,634-3576, [ccurtin@mccall.id.us](mailto:c curtin@mccall.id.us)) for further direction on this infrastructure design.

There are design challenges that need to be addressed prior to the Public Works Department determining if local and state standards can be met for this project. The comments provided herein need to be addressed as we work through the design of the project. Please feel free to contact me if you have any questions or need further clarification as you prepare additional documents and work towards finalizing your construction documents.

Sincerely,


Morgan Stroud, E.I.T
McCall Staff Engineer

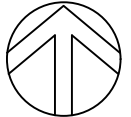
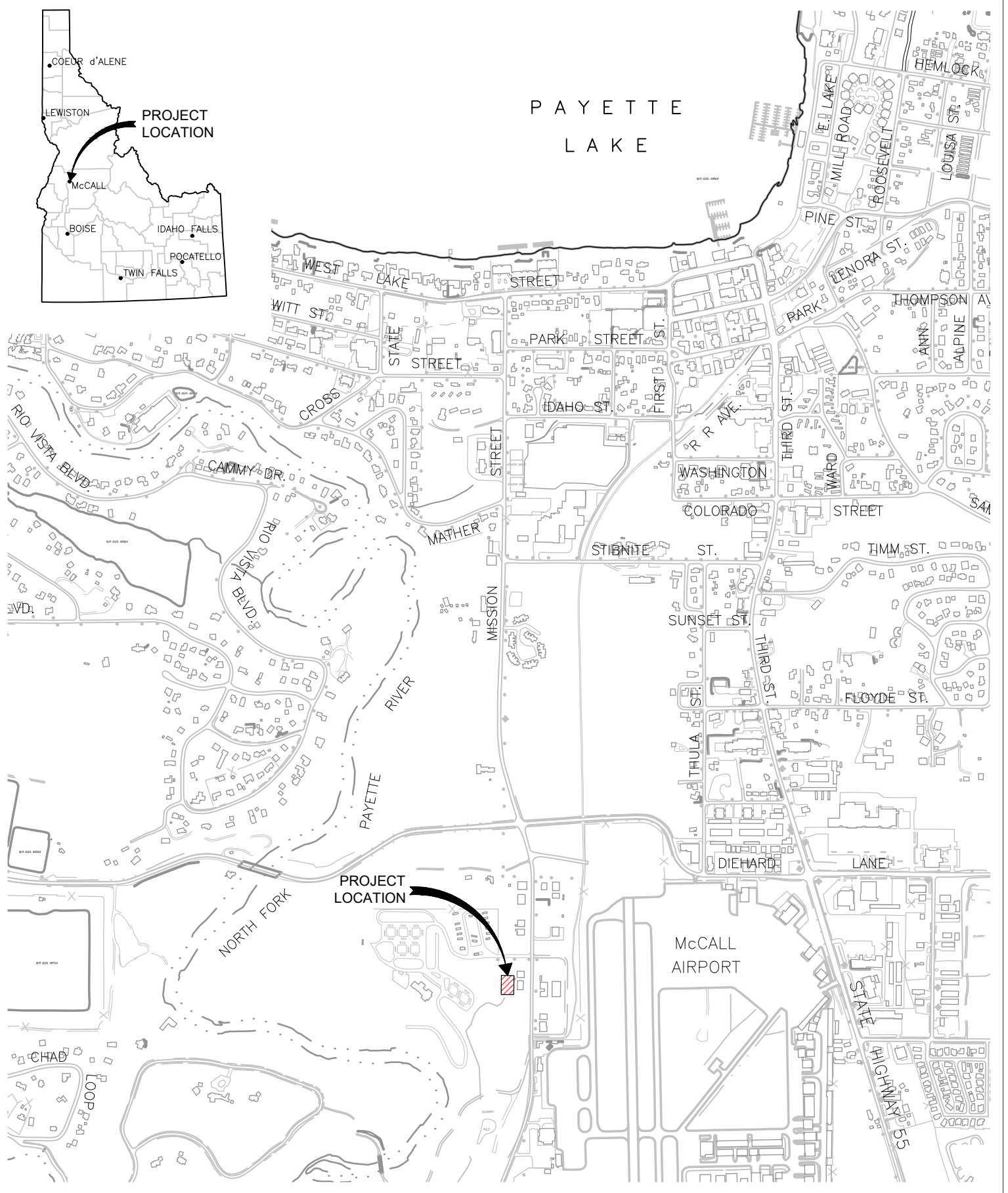
Attachments:

Redlined Civil Plans (dated 12/30/2022)
Hydraulic Analysis Report (dated 1/10/2023)

Cc: Project file – SUB22-06
Brian Parker – City Planner
Meredith Todd – Assistant City Planner



PAYETTE
LAKE



NORTH
SCALE: 1" = 1000'

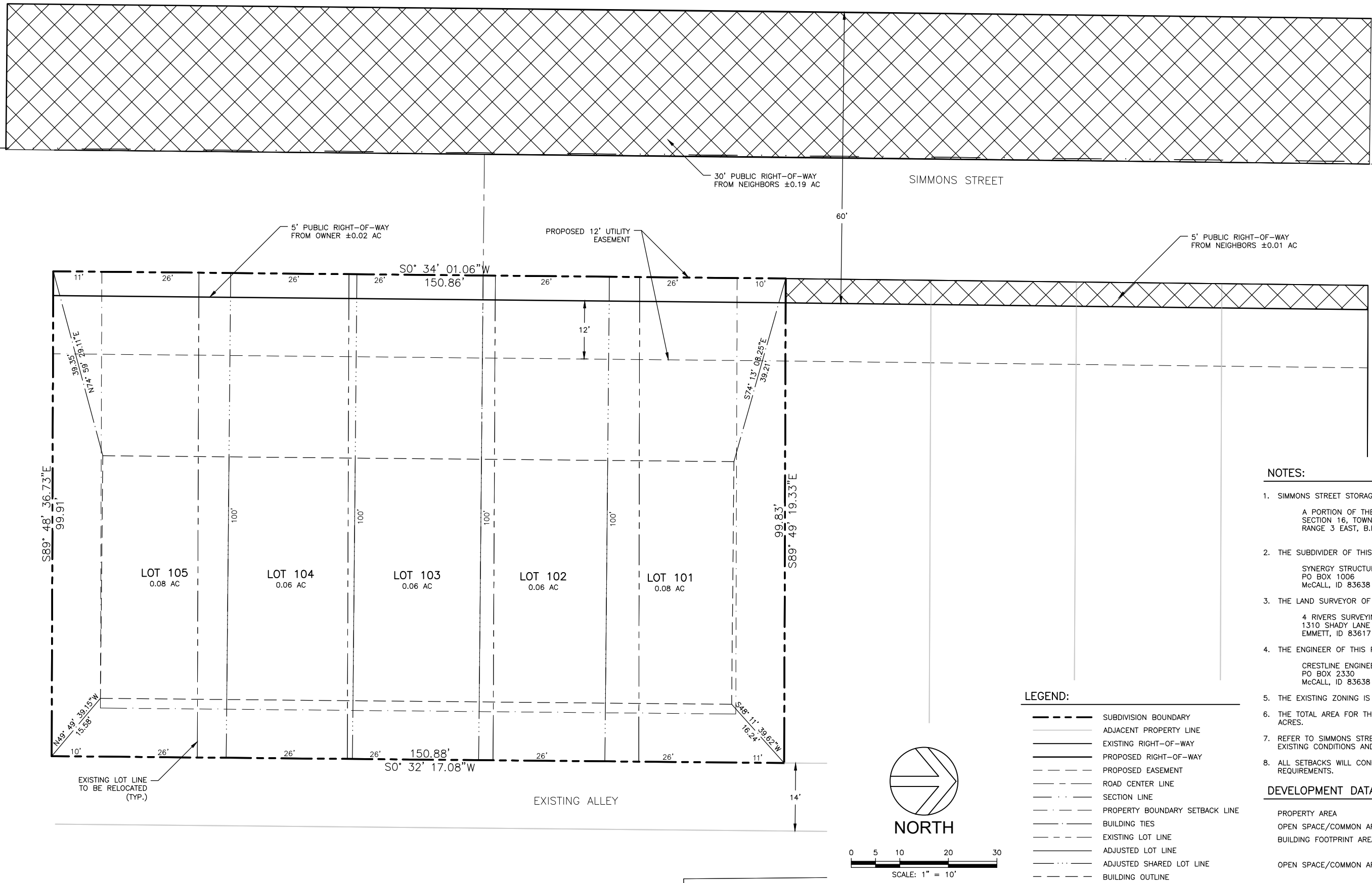
CRESTLINE
ENGINEERS

323 DEINHARD LANE, SUITE C · PO BOX 2330
McCALL, IDAHO 83638
208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
VICINITY MAP

PROJECT	22025	DRAWN	FIGURE NO.
DATE	8/23/2022	AMD	1 OF 1

Path: \\M:\01\18\Synergy\Structures\22025\Civil\DWG\DD22025 EX-1 PrelimPlat.dwg File Name: 22025_EX-1 PrelimPlat.dwg Plot Date: 12/23/2022 9:20 AM Crestline

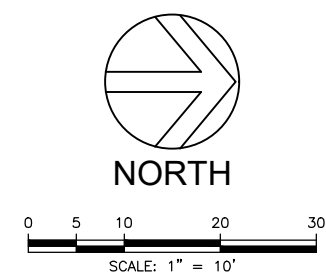


- NOTES:**
- SIMMONS STREET STORAGE CONDOS IS LOCATED IN:
A PORTION OF THE NW 1/4 OF THE SW 1/4 OF SECTION 16, TOWNSHIP 18 NORTH RANGE 3 EAST, B.M., VALLEY COUNTY, IDAHO 2022
 - THE SUBDIVIDER OF THIS PROPOSED DEVELOPMENT IS:
SYNERGY STRUCTURES, LLC
PO BOX 1006
McCALL, ID 83638
 - THE LAND SURVEYOR OF THIS PROPOSED DEVELOPMENT IS:
4 RIVERS SURVEYING, INC.
1310 SHADY LANE
EMMETT, ID 83617
 - THE ENGINEER OF THIS PROPOSED DEVELOPMENT IS:
CRESTLINE ENGINEERS, INC.
PO BOX 2330
McCALL, ID 83638
 - THE EXISTING ZONING IS I (INDUSTRIAL).
 - THE TOTAL AREA FOR THE SITE IS APPROXIMATELY ±0.35 ACRES.
 - REFER TO SIMMONS STREET TOWNHOMES EX-2 FOR EXISTING CONDITIONS AND TOPOGRAPHY.
 - ALL SETBACKS WILL CONFORM TO THE CITY OF McCALL REQUIREMENTS.

- LEGEND:**
- SUBDIVISION BOUNDARY
 - ADJACENT PROPERTY LINE
 - EXISTING RIGHT-OF-WAY
 - PROPOSED RIGHT-OF-WAY
 - PROPOSED EASEMENT
 - ROAD CENTER LINE
 - SECTION LINE
 - PROPERTY BOUNDARY SETBACK LINE
 - BUILDING TIES
 - EXISTING LOT LINE
 - ADJUSTED LOT LINE
 - ADJUSTED SHARED LOT LINE
 - BUILDING OUTLINE

DEVELOPMENT DATA:

PROPERTY AREA	0.35 ACRES
OPEN SPACE/COMMON AREA	0.08 ACRES
BUILDING FOOTPRINT AREA	6,500 S.F.
OPEN SPACE/COMMON AREA PERCENTAGE	23%



NO.	REVISION	BY	DATE	DESIGN
				AMD
				DRAWN
				AMD
				CHECKED
				GTT
				APPROVED
				GTT

CRESTLINE
ENGINEERS
 323 DEINHARD LANE, SUITE C · PO BOX 2330
 McCALL, IDAHO 83638
 208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
 McCALL, IDAHO
 PRELIMINARY PLAT

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	12/30/2022
DRAWING NO.	SHEET NO.
EX-1	1 OF 4

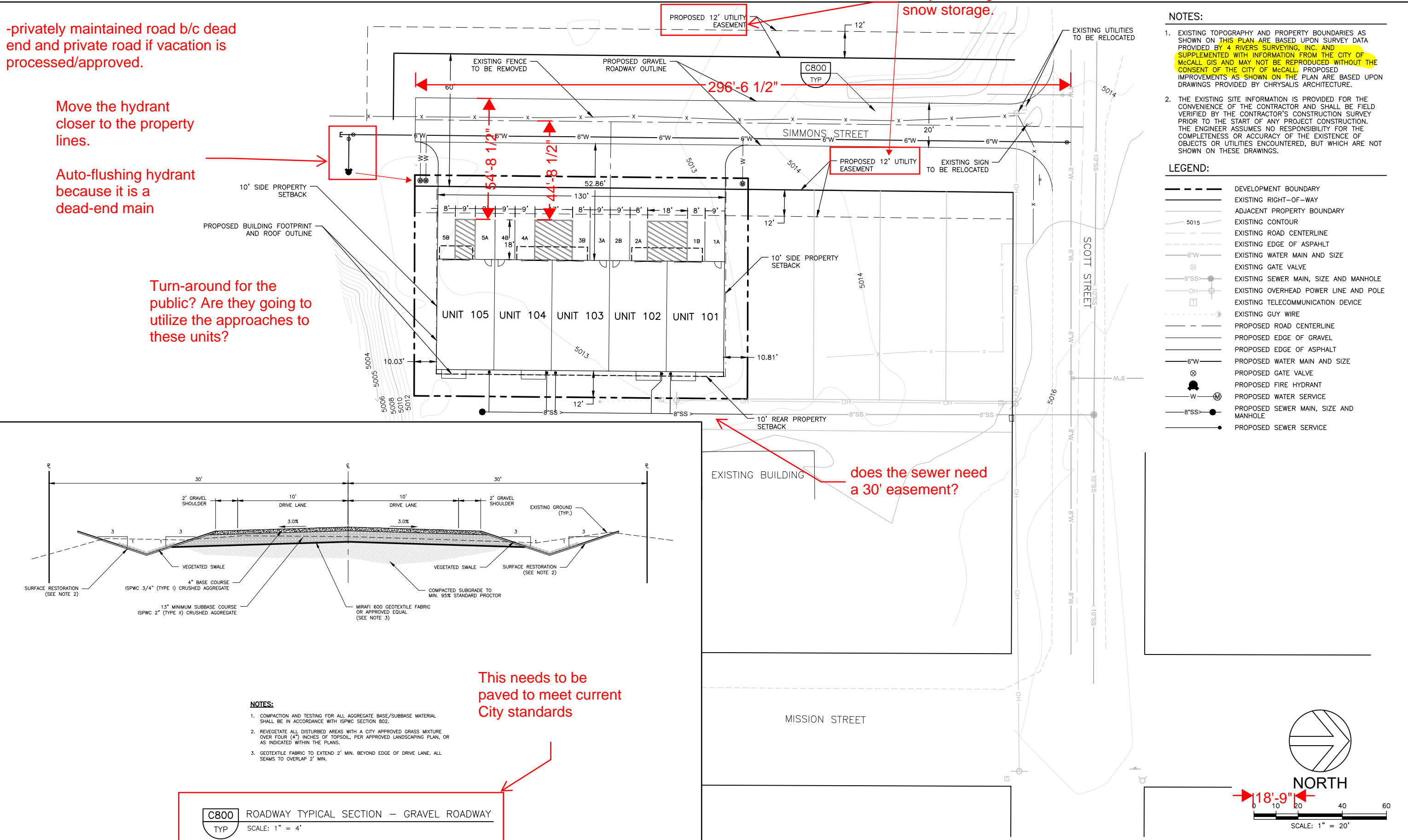
-privately maintained road b/c dead end and private road if vacation is processed/approved.

Move the hydrant closer to the property lines.

Auto-flushing hydrant because it is a dead-end main

Turn-around for the public? Are they going to utilize the approaches to these units?

utility, drainage and snow storage.



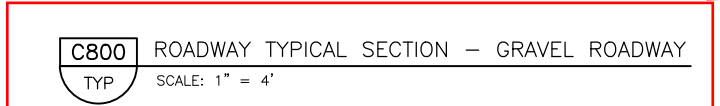
- NOTES:**
- EXISTING TOPOGRAPHY AND PROPERTY BOUNDARIES AS SHOWN ON THIS PLAN ARE BASED UPON SURVEY DATA PROVIDED BY 4 RIVERS SURVEYING, INC. AND SUPPLEMENTED WITH INFORMATION FROM THE CITY OF McCALL GIS AND MAY NOT BE REPRODUCED WITHOUT THE CONSENT OF THE CITY OF McCALL. PROPOSED IMPROVEMENTS AS SHOWN ON THE PLAN ARE BASED UPON DRAWINGS PROVIDED BY CHRYSALIS ARCHITECTURE.
 - THE EXISTING SITE INFORMATION IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR'S CONSTRUCTION SURVEY PRIOR TO THE START OF ANY PROJECT CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE EXISTENCE OF OBJECTS OR UTILITIES ENCOUNTERED, BUT WHICH ARE NOT SHOWN ON THESE DRAWINGS.

- LEGEND:**
- DEVELOPMENT BOUNDARY
 - EXISTING RIGHT-OF-WAY
 - ADJACENT PROPERTY BOUNDARY
 - EXISTING CONTOUR
 - EXISTING ROAD CENTERLINE
 - EXISTING EDGE OF ASPHALT
 - EXISTING WATER MAIN AND SIZE
 - ⊗ EXISTING GATE VALVE
 - ⊙ EXISTING SEWER MAIN, SIZE AND MANHOLE
 - ⊙ EXISTING OVERHEAD POWER LINE AND POLE
 - ⊙ EXISTING TELECOMMUNICATION DEVICE
 - ⋯ EXISTING GUY WIRE
 - PROPOSED ROAD CENTERLINE
 - PROPOSED EDGE OF GRAVEL
 - PROPOSED EDGE OF ASPHALT
 - PROPOSED WATER MAIN AND SIZE
 - ⊗ PROPOSED GATE VALVE
 - ⊙ PROPOSED FIRE HYDRANT
 - ⊙ PROPOSED WATER SERVICE
 - ⊙ PROPOSED SEWER MAIN, SIZE AND MANHOLE
 - ⊙ PROPOSED SEWER SERVICE

does the sewer need a 30' easement?

This needs to be paved to meet current City standards

- NOTES:**
- COMPACTION AND TESTING FOR ALL AGGREGATE BASE/SUBBASE MATERIAL SHALL BE IN ACCORDANCE WITH ISPC SECTION 802.
 - REVEGETATE ALL DISTURBED AREAS WITH A CITY APPROVED GRASS MIXTURE OVER FOUR (4") INCHES OF TOPSOIL, PER APPROVED LANDSCAPING PLAN, OR AS INDICATED WITHIN THE PLANS.
 - GEOTEXTILE FABRIC TO EXTEND 2' MIN. BEYOND EDGE OF DRIVE LANE. ALL SEAMS TO OVERLAP 2' MIN.



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NO.	REVISION	BY	DATE	DESIGN
				AMD
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				AMD
				CHECKED
				GTT
				APPROVED
				GTT

CRESTLINE ENGINEERS
 323 DEINHARD LANE, SUITE C · PO BOX 2330
 McCALL, IDAHO 83638
 208.634.4140 · 208.634.4146 FAX

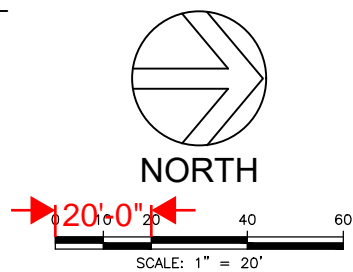
SIMMONS STREET TOWNHOUSES
 McCALL, IDAHO
 EXISTING LAYOUT WITH PRELIMINARY SITE PLAN

VERIFY SCALE
 BAR IS ONE INCH ON FULL SIZE DRAWING
 1"

PROJECT	22025
DATE	12/30/2022
DRAWING NO.	SHEET NO.
EX-2	2 OF 4

LEGEND:

- DEVELOPMENT BOUNDARY
- 5005 EXISTING CONTOUR
- PROPOSED ROOF AREA
- ▨ PROPOSED GRAVEL ROAD
- ▩ PROPOSED ASPHALT PARKING LOT
- PROPOSED DRAINAGE FLOW DIRECTION ARROW
- - - PROPOSED DRAINAGE SWALE
- S SILT FENCE
- CL CONSTRUCTION/CLEARING LIMITS
- VEG PRESERVE EXISTING VEGETATION
- PROPOSE DETENTION BASIN/SWALE



Driveway standards? This approach is larger than 30'. Its about 130' wide.

cross-culvert for drainage on N of Scott St. Property across the street will ultimately have a swale that will drain to the west.

Signage
 -Need a dead end sign
 -Need a barrier or some end of roadway signage. (snow removal may impact what this signage looks like)
 -Street Name sign, blue if private
 -Stop Sign for Simmons St

stormwater south to the park, erosion mitigation for the slope into the park.

Should this be perpendicular to the road?

How does this swale drain? Does it flow north? or is it split?

culvert for crossing at intersection?

need to show limits of asphalt cuts in Scott St to tie into water system.

This might not be the best location for these meters, to be in the path of the stormwater runoff.

PROPOSED DETENTION BASIN/SWALE
 1' DEEP WITH 3:1 SIDE SLOPE
 VOLUME: TBD

129' 7 3/4"

runoff from the roof?

What is the drainage pattern in this area?

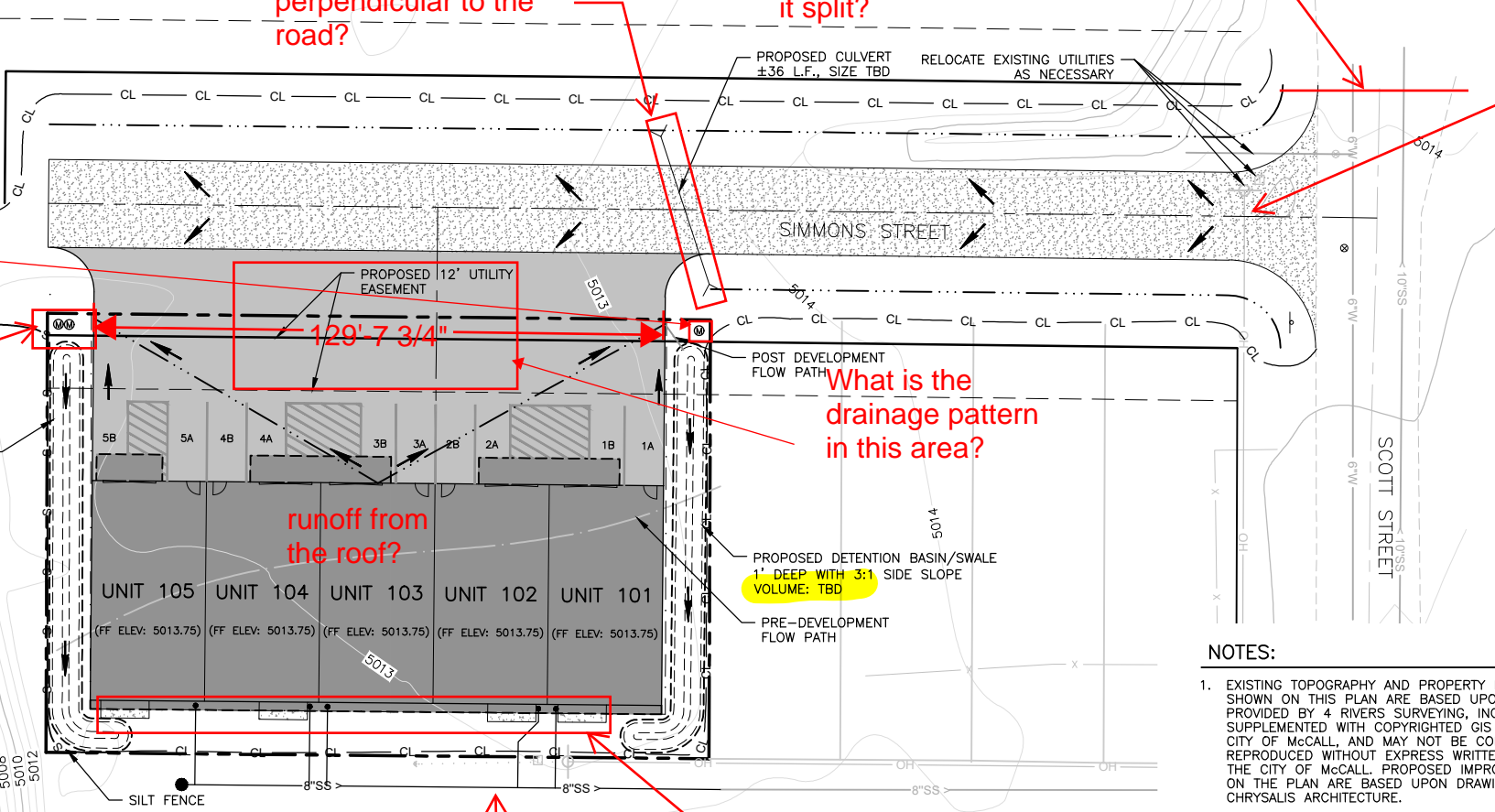
PROPOSED DETENTION BASIN/SWALE
 1' DEEP WITH 3:1 SIDE SLOPE
 VOLUME: TBD

PRE-DEVELOPMENT FLOW PATH

Where do these detention swales overflow? Will they cause issues for these existing buildings east of this property?

are these garage doors? More thought into the use and condition of the alleyway need to be discussed.

Show limits of disturbance for installation of the sanitary sewer.



NOTES:

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3. REFER TO THE "STATE OF IDAHO, CATALOG OF STORMWATER BEST MANAGEMENT PRACTICES FOR IDAHO CITIES AND COUNTIES" FOR FURTHER DETAILS ON BMP IMPLEMENTATION AND INSTALLATION.
4. ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL BE INSTALLED PRIOR TO THE START OF ANY PROJECT CONSTRUCTION OR EARTH DISTURBING ACTIVITIES AND SHOULD REMAIN IN PLACE UNTIL ALL DISTURBED/EXPOSED AREAS HAVE BEEN STABILIZED AND/OR REVEGETATED.
5. THE OWNER AND/OR THEIR SELECTED CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL BMP'S IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
6. THE IMPLEMENTATION OF THESE EROSION AND SEDIMENT CONTROL MEASURES INCLUDING INSTALLATION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THIS PLAN IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL PROJECT CONSTRUCTION IS COMPLETED AND APPROVED BY THE OWNER. THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AFTER THE PROJECT IS APPROVED.
7. WATTLES MAY BE USED IN PLACE OF SILT FENCE WHERE DETERMINED APPROPRIATE. SILT FENCE HAS BEEN SHOWN ON THE PROPERTY LINES IN SOME AREAS TO PREVENT ENCROACHMENT ONTO NEIGHBORING PROPERTIES.
8. WORK ACTIVITIES SHALL TAKE PLACE WITHIN THE CLEARING LIMITS AS SHOWN ON THIS PLAN. CONTRACTOR SHALL PRESERVE NATURAL VEGETATION OUTSIDE OF CLEARING LIMITS.
9. STAGING AREA(S) TO BE LOCATED BY CONTRACTOR ALONG WITH PORTABLE TOILETS, GARBAGE RECEPTACLES, CONCRETE WASHOUT, AND ALL OTHER CONTRACTOR FACILITIES.
10. ALL SITE GRADING ADJACENT TO THE NEW BUILDING SHALL BE SLOPED TO DRAIN AWAY FROM THE BUILDING AT A MINIMUM OF 1.5% IN HARDSCAPE AREAS AND 4% IN LANDSCAPE AREAS.
11. DRIVEWAY GRADES SHALL BE SLOPED AWAY FROM THE BUILDING AT A MINIMUM SLOPE OF 2% AND A MAXIMUM SLOPE OF 6% FOR A DISTANCE OF NO LESS THAN TEN (10) FEET. GRADING OF THE DRIVEWAY SHALL BE IN ACCORDANCE WITH THE DIRECTION OF THE DRAINAGE FLOW DIRECTION ARROWS AS SPECIFIED IN THE STORMWATER MANAGEMENT PLAN.
12. AREAS BETWEEN NEW BUILDING AND PROPERTY BOUNDARIES SHALL BE SLOPED TO INSURE RUNOFF IS KEPT ON-SITE. SWALES SHALL BE CONSTRUCTED ADJACENT TO/NEAR SIDE PROPERTY LINES TO PREVENT RUNOFF FROM FLOWING ONTO ADJOINING PROPERTIES. THESE SWALES ARE INTENDED TO BE FIELD FIT AND MEANDERED AROUND EXISTING VEGETATION AND SITE FEATURES AS NECESSARY.
13. REVEGETATION AND STABILIZATION OF ALL DISTURBED PROJECT AREAS SHALL BE IN ACCORDANCE WITH THE PROJECTS LANDSCAPE DESIGN. IF A LANDSCAPE DESIGN/PLAN IS NOT AVAILABLE, DISTURBED AREAS SHALL BE REVEGETATED WITH A GRASS MIXTURE NATIVE TO THAT AREA.

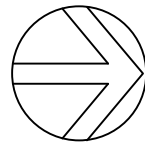
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				AMD
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				AMD
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				GTT
				APPROVED
				GTT

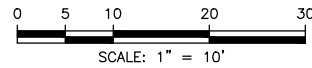
CRESTLINE
ENGINEERS
 323 DEINHARD LANE, SUITE C · PO BOX 2330
 McCALL, IDAHO 83638
 208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
 McCALL, IDAHO
 PRELIMINARY GRADING, DRAINAGE AND
 STORMWATER MANAGEMENT PLAN

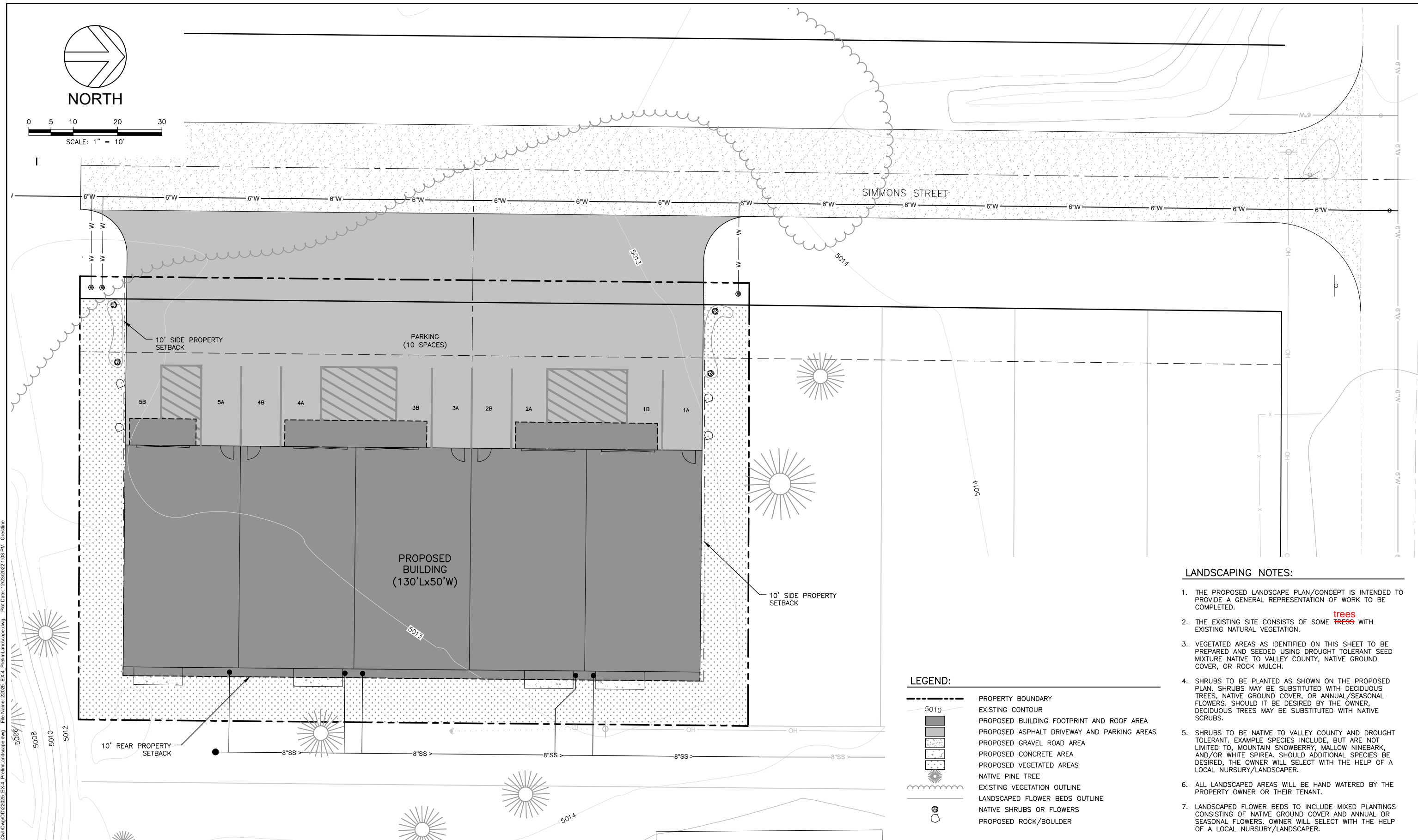
VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
0 1"	
PROJECT	22025
DATE	12/30/2022
DRAWING NO.	SHEET NO.
EX-3	3 OF 4



NORTH



Path: M:\010\SS\Symantec\Structures\22025\Civil\DWG\DD22025 EX-4 - Prelim.Landscape.dwg File Name: 22025_EX-4 - Prelim.Landscape.dwg Plot Date: 12/30/2022 1:08 PM Crestline



LANDSCAPING NOTES:

1. THE PROPOSED LANDSCAPE PLAN/CONCEPT IS INTENDED TO PROVIDE A GENERAL REPRESENTATION OF WORK TO BE COMPLETED.
2. THE EXISTING SITE CONSISTS OF SOME **trees** WITH EXISTING NATURAL VEGETATION.
3. VEGETATED AREAS AS IDENTIFIED ON THIS SHEET TO BE PREPARED AND SEEDED USING DROUGHT TOLERANT SEED MIXTURE NATIVE TO VALLEY COUNTY, NATIVE GROUND COVER, OR ROCK MULCH.
4. SHRUBS TO BE PLANTED AS SHOWN ON THE PROPOSED PLAN. SHRUBS MAY BE SUBSTITUTED WITH DECIDUOUS TREES, NATIVE GROUND COVER, OR ANNUAL/SEASONAL FLOWERS. SHOULD IT BE DESIRED BY THE OWNER, DECIDUOUS TREES MAY BE SUBSTITUTED WITH NATIVE SCRUBS.
5. SHRUBS TO BE NATIVE TO VALLEY COUNTY AND DROUGHT TOLERANT. EXAMPLE SPECIES INCLUDE, BUT ARE NOT LIMITED TO, MOUNTAIN SNOWBERRY, MALLOW NINEBARK, AND/OR WHITE SPIREA. SHOULD ADDITIONAL SPECIES BE DESIRED, THE OWNER WILL SELECT WITH THE HELP OF A LOCAL NURSURY/LANDSCAPER.
6. ALL LANDSCAPED AREAS WILL BE HAND WATERED BY THE PROPERTY OWNER OR THEIR TENANT.
7. LANDSCAPED FLOWER BEDS TO INCLUDE MIXED PLANTINGS CONSISTING OF NATIVE GROUND COVER AND ANNUAL OR SEASONAL FLOWERS. OWNER WILL SELECT WITH THE HELP OF A LOCAL NURSURY/LANDSCAPER.

LEGEND:

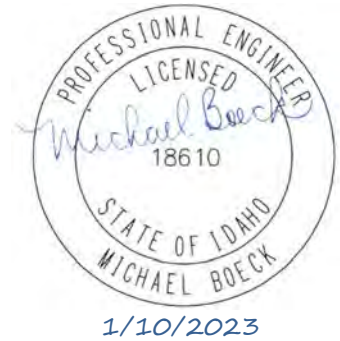
- 5010 PROPERTY BOUNDARY
- EXISTING CONTOUR
- PROPOSED BUILDING FOOTPRINT AND ROOF AREA
- PROPOSED ASPHALT DRIVEWAY AND PARKING AREAS
- PROPOSED GRAVEL ROAD AREA
- PROPOSED CONCRETE AREA
- PROPOSED VEGETATED AREAS
- NATIVE PINE TREE
- EXISTING VEGETATION OUTLINE
- LANDSCAPED FLOWER BEDS OUTLINE
- NATIVE SHRUBS OR FLOWERS
- PROPOSED ROCK/BOULDER

NO.	REVISION	BY	DATE	DESIGN
				DRAWN
				CHECKED
				APPROVED

CRESTLINE
ENGINEERS
323 DEINHARD LANE, SUITE C · PO BOX 2330
McCALL, IDAHO 83638
208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
McCALL, IDAHO
PRELIMINARY LANDSCAPING PLAN

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	12/30/2022
DRAWING NO.	SHEET NO.
EX-4	4 OF 4



TECHNICAL MEMORANDUM

DATE: January 10, 2023

TO: Morgan Stroud, E.I.T. – City of McCall

CC: Sabrina Sims – City of McCall

FROM: Michael Boeck, P.E. – HDR|SPF

RE: City of McCall Hydraulic Analysis – Simmons Street Townhomes

Executive Summary

The City of McCall has requested a hydraulic analysis for the proposed 5-unit mixed-use townhouse project (Project). The proposed Project is located on Simmons Street near Scott Street as shown in Figure 1. This memorandum documents the hydraulic modeling results using the City of McCall's 2021 water system hydraulic model. Scenarios presented in this analysis were prepared based on simulated future demands projected for 2025.

The criteria evaluated as part of this analysis included the following:

1. Static Pressures
2. Pressures During Peak Hour Demand
3. Fire Flows During Maximum Day Demand

HDR|SPF understands the proposed Project plans to connect into the existing water system at the existing 6-inch diameter pipeline on Scott Street based upon the preliminary plat map prepared by Crestline Engineers dated August 23, 2022.

Results in this analysis are based on numerical modeling of simulated conditions, which while intended to approximate field conditions, may differ from field conditions. Proposed modifications to the City's public drinking water system have been reviewed with respect to IDAPA 58.01.08 (Idaho Rules for Public Drinking Water Systems), which requires static pressures be limited to less than 100 psi. The International Plumbing Code (Section 604.8, 2015 Edition) specifies other maximum pressure criteria which may be appropriate (80 psi).

This analysis included demands associated with the proposed 5 lots incorporating lots 101 through 105 of the preliminary plant. It is anticipated that each unit will include 2 to 3 bedrooms on the second floor with business space on the first floor. Demand-use factors for a typical single-family residence was used as a conservative approach. Multi-family units typically use less water than single family homes where the excess demand could be attributed to the business portion of the building on the first floor. Demand use factors of 0.17, 0.43, and 0.81 gpm/equivalent residential unit were applied for the Average Day Demands (ADD), Maximum Day Demands (MDD), and Peak Hour Demands (PHD), respectively. These factors were taken from the City's Water Master Plan.



Figure 1 – Project Location and Vicinity Map

City staff directed the analysis to meet the 1,500-gpm fire flow minimum for residential use. It was unclear as to the type of use that the first floor would entertain for business purposes. The City asked that alternative pipe diameters be explored to understand the maximum fire flow that could be achieved for the Project.

Idaho Department of Environmental Quality Requirements

The following regulations were consulted as part of this analysis:

IDAPA 58.01.08, Section 552.01.b.i. Maximum Day Demand + Fire Flow

“Any public water system shall be capable of providing sufficient water during maximum day demand conditions, including fire flow where provided, to maintain a minimum pressure of twenty (20) psi throughout the distribution system, at ground level, as measured at the service connection or along the property line adjacent to the consumer’s premises.”

IDAPA 58.01.08, Section 501.18.a Redundant Fire Flow Capacity

“Public water systems that provide fire flow shall be designed to provide maximum day demand plus fire flow. Pumping systems supporting fire flow capacity must be designed so that fire flow may be provided with any pump out of service.

IDAPA 58.01.08, Section 552.01.b.v.) Pressure during Peak Hour Demand

“The following public water systems or service areas of public water systems shall maintain a minimum pressure of forty (40) psi throughout the distribution system, during peak hour demand conditions, excluding fire flow, measured at the service connection or along the property line adjacent to the consumer’s premises.”

Static Pressure

Static pressure is represented by the hydraulic grade line (HGL) minus ground elevation with zero system demand. The elevations within the Project area ranged from 5012 to 5014. Results from the hydraulic model indicate a static pressure for the Project at 80 psi as shown in Figure 2. The model used the proposed connection and pipeline diameter as shown in the preliminary plat. This analysis uses the diameters of the existing system and a proposed 6-inch waterline along Simmons Street that feeds the Project. Pipe diameters will not affect the static pressure in the system.

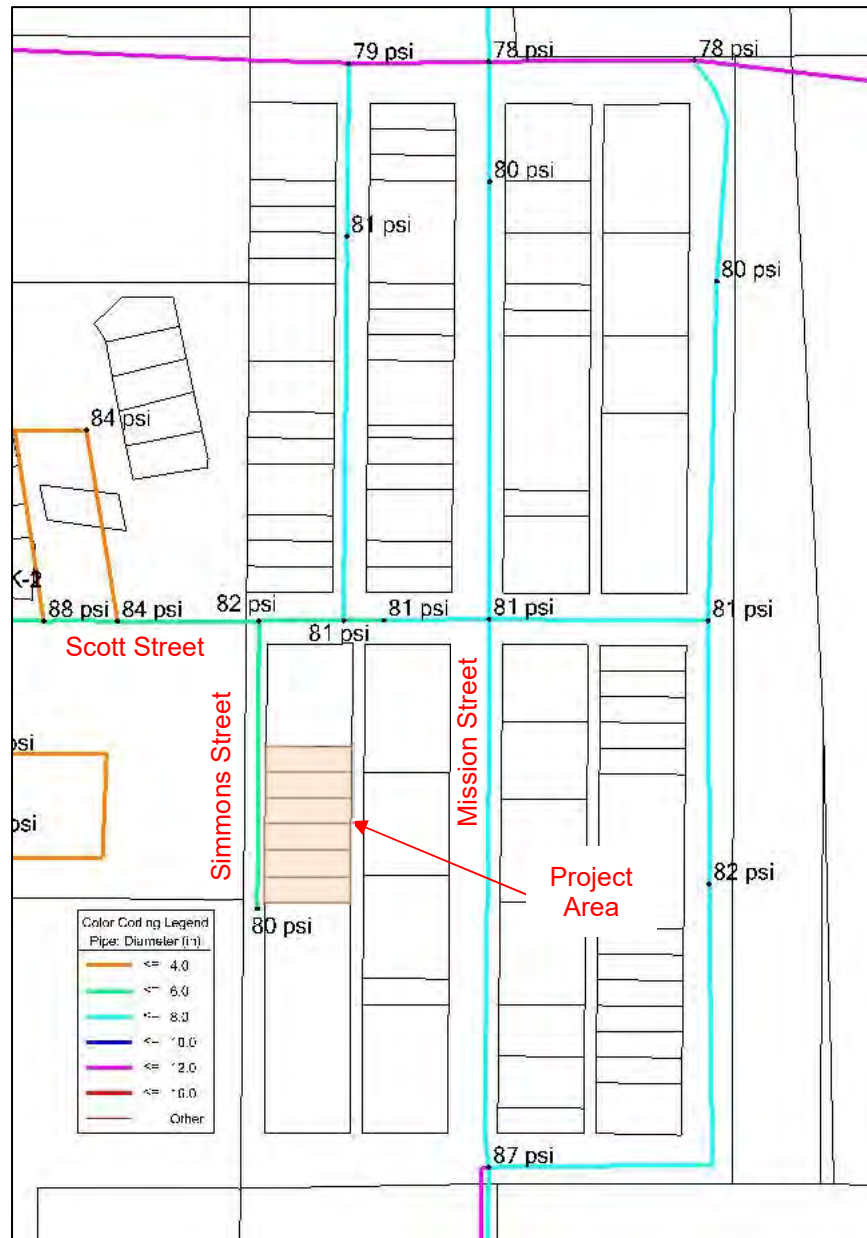


Figure 2 - Model Results: Static Pressures

Pressure During Peak Hour Demand

The Peak Hour Demand scenario used the preliminary plat site plan layout and pipe size for the water main along Simmons Street. The proposed water main for this scenario used a 6-inch diameter main that connected to the existing 6-inch diameter main along Scott Street. The pressure at the main at the terminus end of the pipeline near the Project was approximately 78 psi. Pressures meet the 40-psi minimum for this demand. Pressures for the surrounding area are displayed in Figure 3. Because the Peak Hour Demand scenario is met with this configuration, additional analysis to upsized diameters was not re-run as larger diameter pipelines will either maintain or slightly improve the pressures shown.

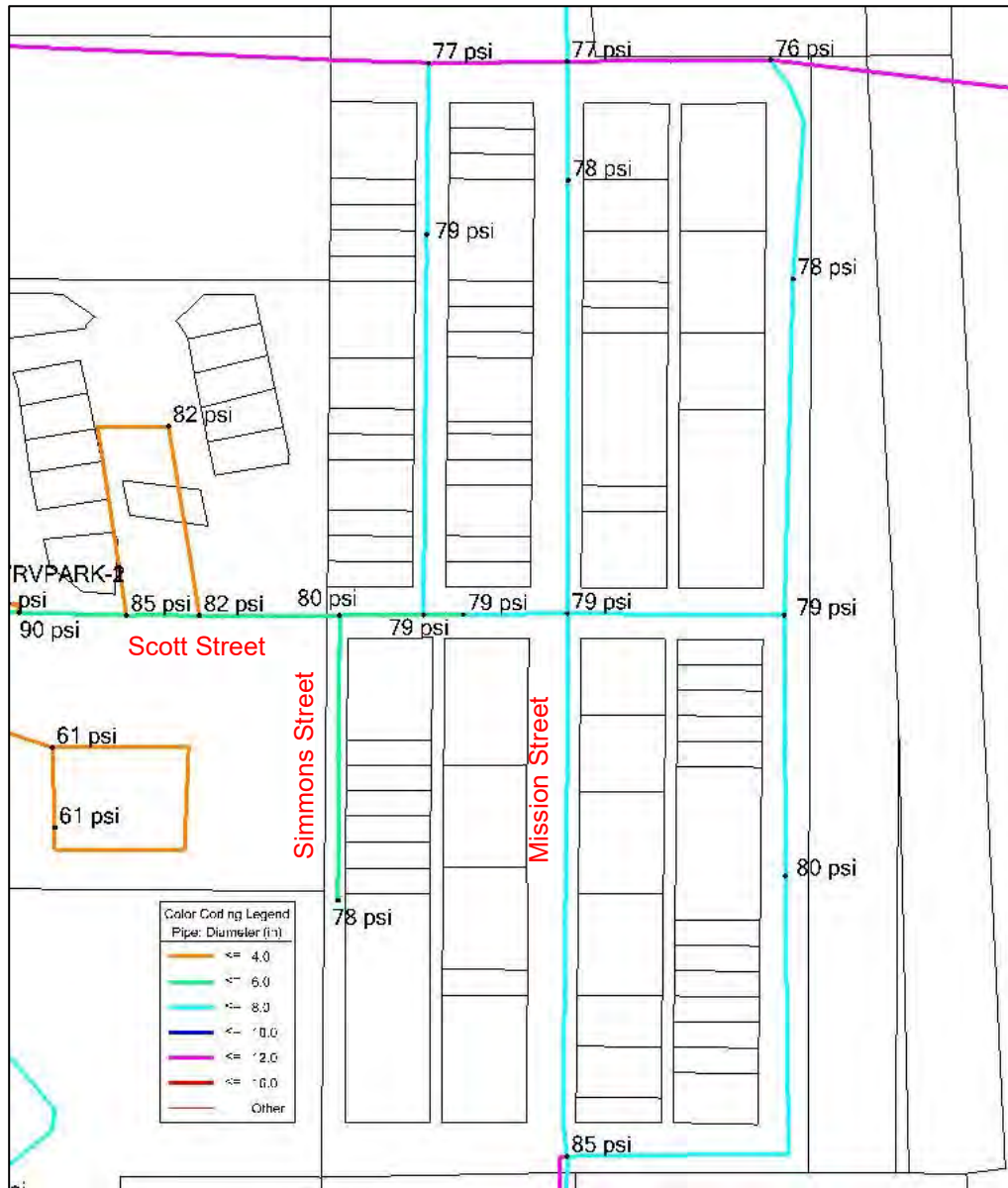


Figure 3 - Model Results: Pressures During 2025 Peak Hour Demand

Maximum Day Demand + Fire Flow (6-inch)

The hydraulic model was run under simulated maximum day demand (MDD) conditions to determine the available fire flow. The fire flow scenario used MDD associated with 2025 growth projections.

Figure 4 shows the fire flow availability based upon the current proposed pipeline diameter and connection as shown in the preliminary plat map. Fire flow availability is shown to be 1,681-gpm at the Project area meeting the 1,500-gpm minimum set by the City for residential use. The surrounding fire flows in the area shows a flow range upward of 2,300-gpm is available. Additional piping diameters and layouts were performed to meet this maximum flow availability.

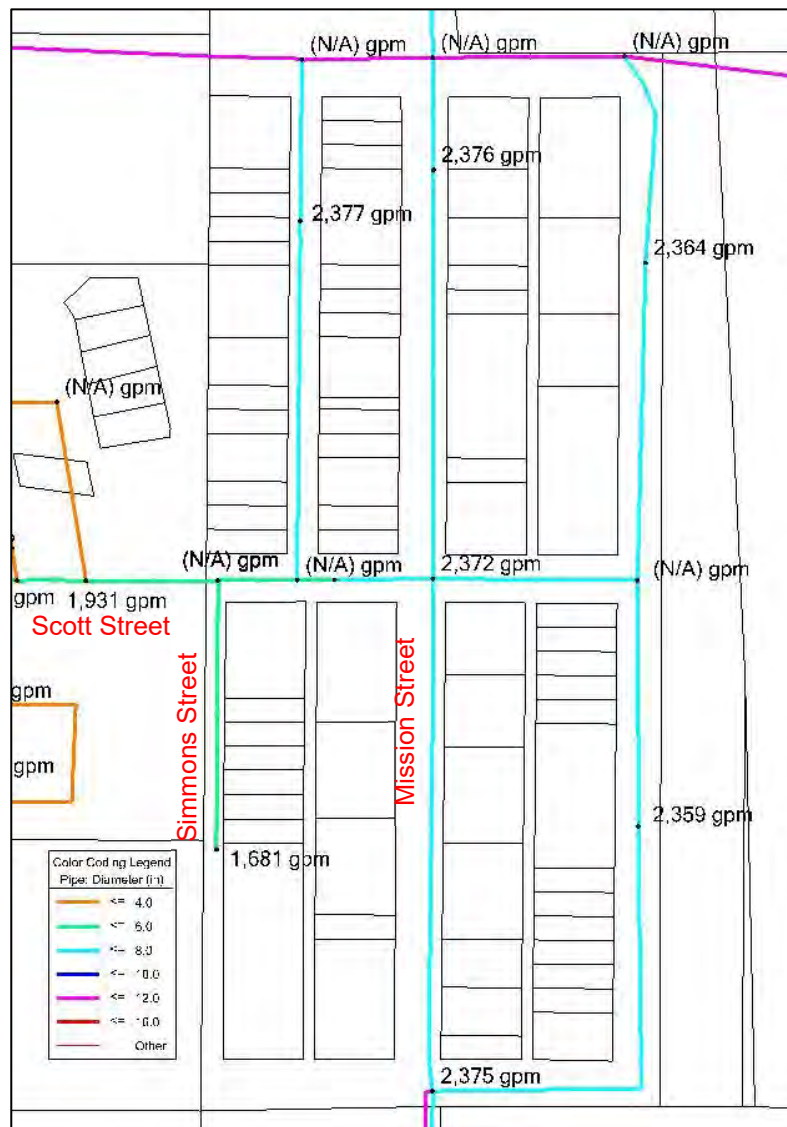


Figure 4 - Model Results: Available Fire Flow (6-inch)

Maximum Day Demand + Fire Flow (8-inch on Simmons Street)

The MDD plus fire flow scenario was re-run using an 8-inch diameter pipeline with the same connection to the 6-inch in Scott Street. Figure 5 shows the fire flow availability increasing to 2,016-gpm at the Project area.

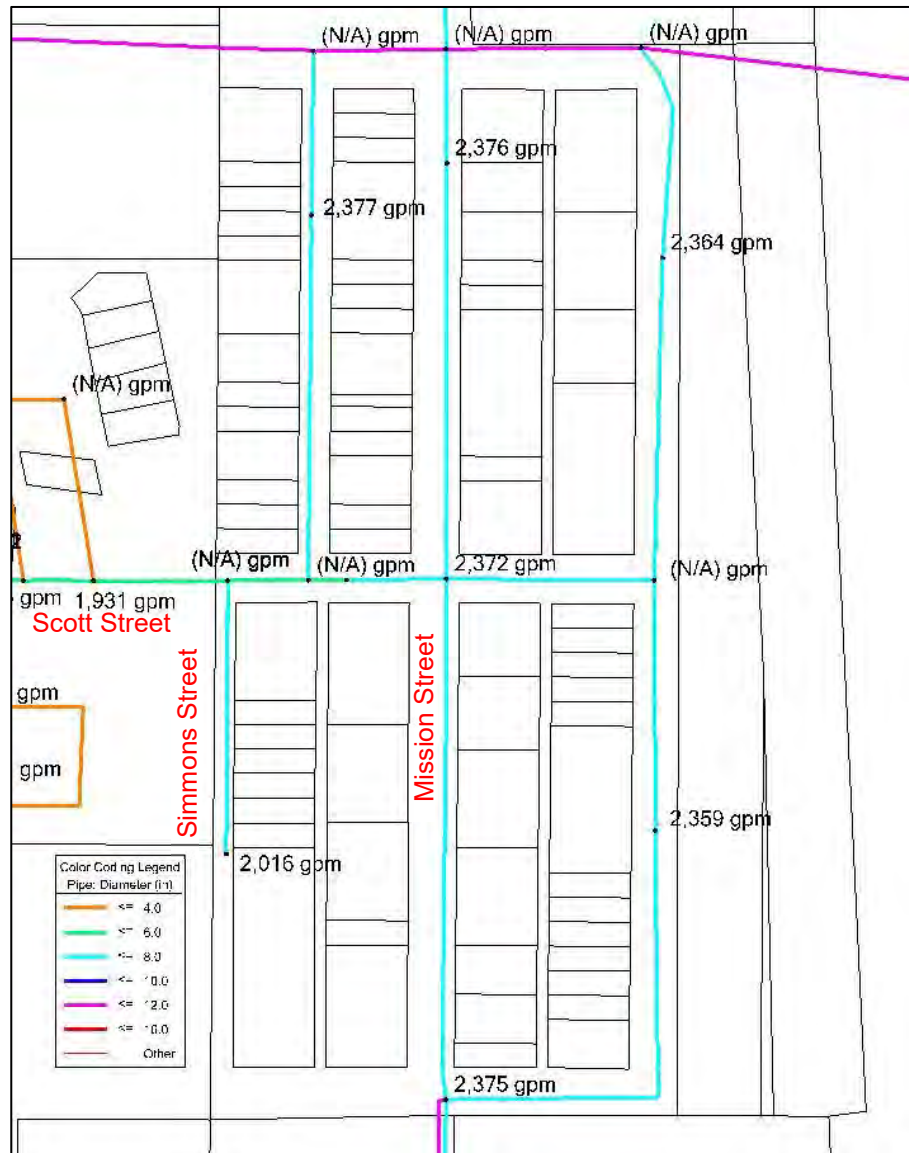


Figure 5 - Model Results: Available Fire Flow (8-inch on Simmons Street)

Maximum Day Demand + Fire Flow (10-inch on Simmons Street)

The MDD plus fire flow scenario was re-run using a 10-inch diameter pipeline with the same connection to the 6-inch in Scott Street. Figure 6 shows the fire flow availability of 2,016-gpm at the Project area. The increased diameter size after 8-inch with this configuration did little to improve available fire flow above 2,016-gpm as connecting a larger diameter pipeline to a smaller one would not improve head loss through the smaller diameter pipeline. This configuration could be considered should a larger diameter pipeline continue from the Project area to the existing 12-inch diameter pipeline on Mission Street. Different configurations with connections were then tried.

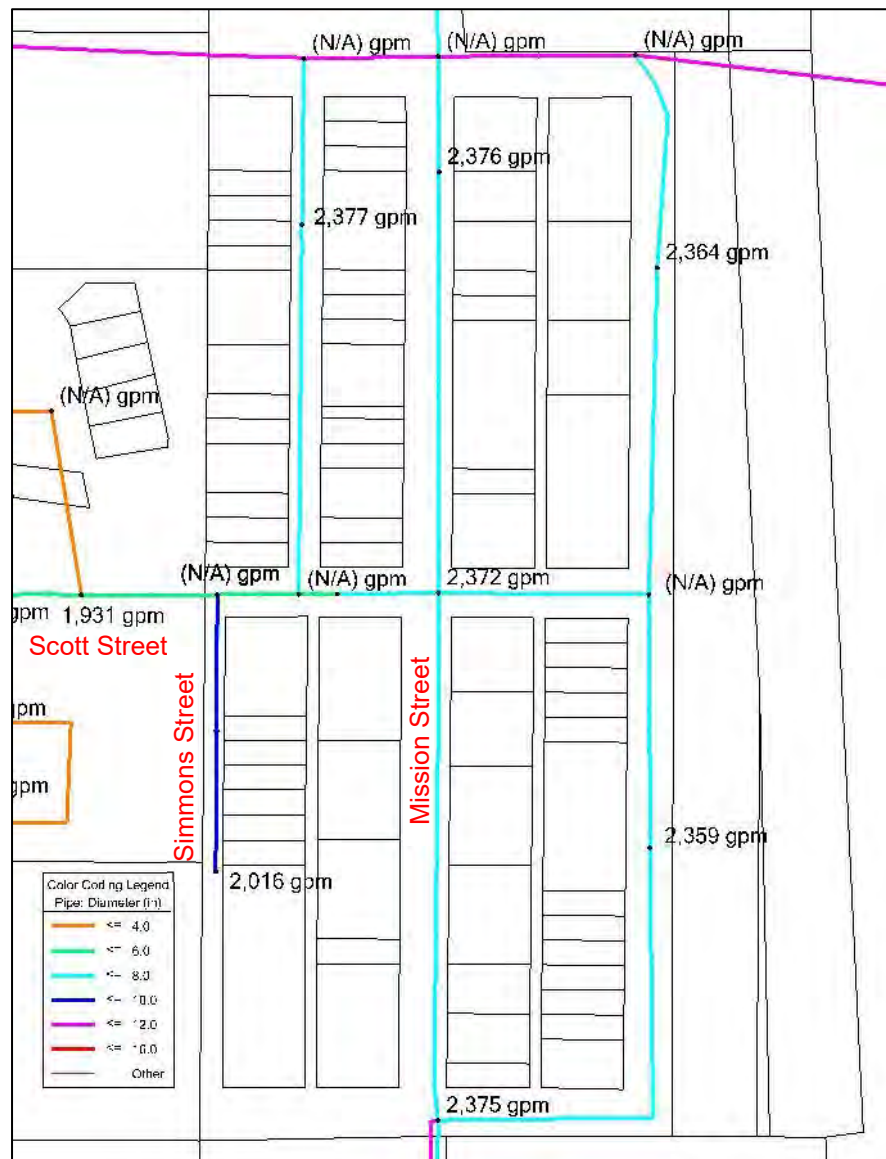


Figure 6 - Model Results: Available Fire Flow (10-inch on Simmons Street)

Maximum Day Demand + Fire Flow (8-inch Upsized in Scott Street)

The MDD plus fire flow scenario was re-run using an 8-inch diameter pipeline along Simmons Street, and the existing 6-inch main was replaced with an 8-inch diameter pipeline. Figure 7 shows that this option will provide a similar maximum fire flow availability around 2,300-gpm at the Project area similar to the surrounding area.

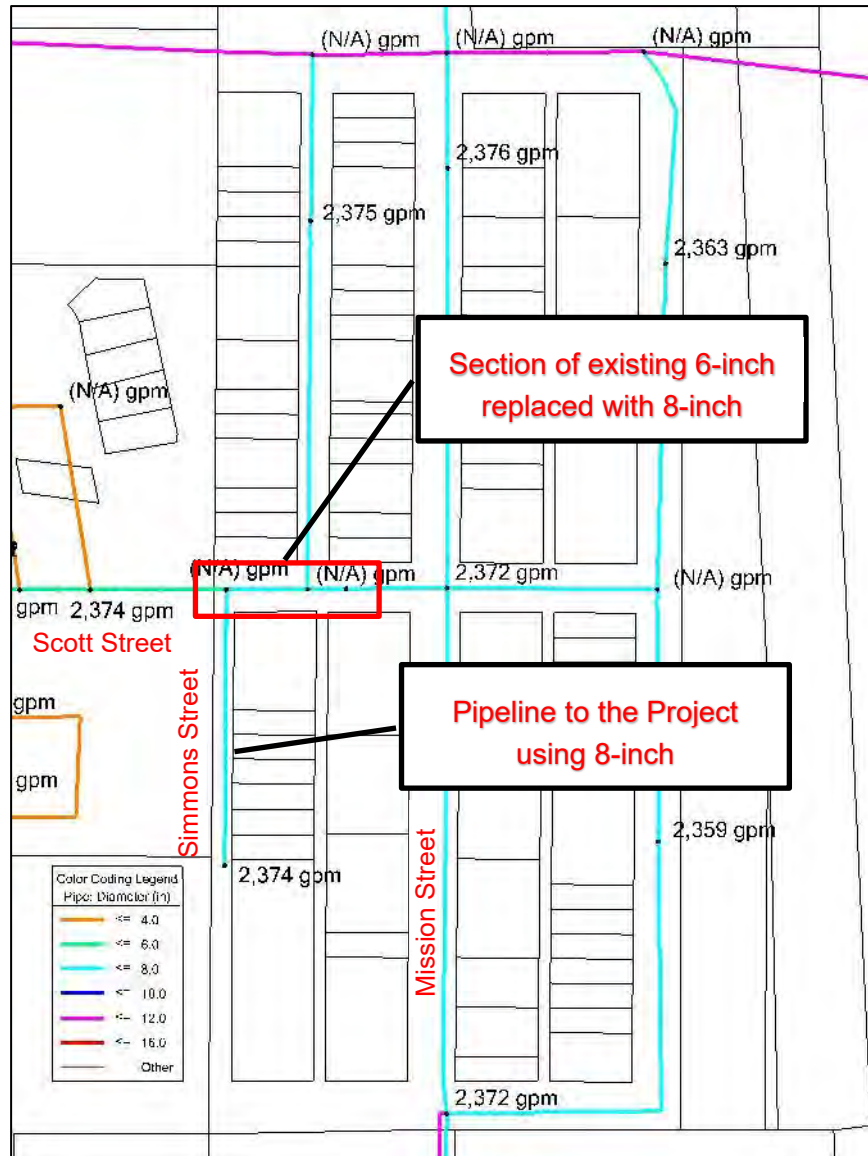


Figure 7 - Model Results: Available Fire Flow (8-inch Upsized in Scott Street)

An additional option reviewed continuation of the 8-inch in Simmons Street and looping it to the existing 12-inch along Mission Street. Fire flows did not improve above what was shown in Figure 7. Figure 7 shows the minimum improvements needed to maximize the fire flow availability to the Project.

From: [Emily Hart](#)
To: [Brian Parker](#)
Cc: [Meredith Todd](#)
Subject: RE: City of McCall Request for Comment
Date: Wednesday, September 14, 2022 1:48:00 PM
Attachments: [image001.png](#)
[image002.png](#)
[Avigation Easement 08.31.2022.doc](#)
[ID_McCall_1973_geo MYL.pdf](#)

Good afternoon!

See Airport comments below. Attached is the Avigation Easement that Council recently approved, as well as the _geo map they'll likely need to attach with their Form 7460-1 submission.

Best,
Emily

From: Brian Parker <barker@mccall.id.us>
Sent: Tuesday, September 13, 2022 4:19 PM
To: Chip Bowers <chip@bowerslandsurveys.com>; Chris Curtin <ccurtin@mccall.id.us>; Cynda Herrick <cherrick@co.valley.id.us>; Dale Caza <dcaza@plrwsd.org>; Dallas Palmer <palmerd@mccall.id.us>; Dave Bingaman <dbingaman@co.valley.id.us>; David Simmonds <dsimmonds50@gmail.com>; Delta James <djames@mccall.id.us>; Emily Hart <ehart@mccall.id.us>; Garrett de Jong (garrett@mccallfire.com) <garrett@mccallfire.com>; IDL Jurisdictional Inbox <IDL_jurisdictional@idl.idaho.gov>; ITD Development Services <D3Development.Services@itd.idaho.gov>; ITD District 3 Permits <ITDD3Permits@itd.idaho.gov>; Jasen King, IDL <jking@idl.idaho.gov>; Jeff Bateman <jbateman@plrwsd.org>; Jeff Mcfadden (jmcfadden@co.valley.id.us) <jmcfadden@co.valley.id.us>; jennifer.schildgen@itd.idaho.gov; John Powell <jpowell@mccall.id.us>; Jordan Messner <jordan.messner@idfg.idaho.gov>; Krystal Giessen <giessenk@mccall.id.us>; Kurt Wolf <kwolf@mccall.id.us>; Lance Holloway, DEQ <lance.holloway@deq.idaho.gov>; Laura Shealy BPLWQAC <idchik5@gmail.com>; Laurie Frederick, Valley Co Cartographer <lfr frederick@co.valley.id.us>; Levi Brinkley <lbrinkley@mccall.id.us>; Linda Stokes <lstokes@mccall.id.us>; Lori Hunter (lhunter@co.valley.id.us) <lhunter@co.valley.id.us>; Lorraine Brush <lbrush@plrwsd.org>; Mark Wasdahl, ITD <mark.wasdahl@itd.idaho.gov>; Meredith Todd <mtodd@mccall.id.us>; Michelle Groenevelt <mgroenevelt@mccall.id.us>; Mike Reno <mreno@cdh.idaho.gov>; Morgan Stroud <mstroud@mccall.id.us>; Nathan Stewart <nstewart@mccall.id.us>; Rachel Santiago-Govier <rsantiago-govier@mccall.id.us>; Regan Berkley <regan.berkley@idfg.idaho.gov>; Sabrina Sims <ssims@mccall.id.us>; Sarah Arjona <Sarah.Arjona@itd.idaho.gov>; Scott Corkill, IDL <scorkill@idl.idaho.gov>; Sheri Staley - Idaho Power <sstaley@idahopower.com>; Steve Moser, Idaho Power <smoser@idahopower.com>; Valley County Road Dept <roaddept@co.valley.id.us>
Subject: City of McCall Request for Comment

All,

Please provide comment on the following applications prior to the date indicated on the cover

memos:

[ROS-22-13 – 1040 & 1046 Crescent Rim Dr – Williams – IMPACT AREA](#) NO REQUIREMENTS FROM AIRPORT

[ROS-22-14 – 1095 Ridge Rd – Allen – IMPACT AREA](#) NO REQUIREMENTS FROM AIRPORT

[ROS-22-15 – 208 Thula St – McLean – City of McCall](#) NO REQUIREMENTS FROM AIRPORT – check math on lot size/number, fyi

[SR-22-12 – 1685 Ginney Way – Howard – City of McCall](#) IN CONICAL SURFACE, within three miles of MYL. Complete <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm>. Avigation Easement signatures required.

[SR-22-13 – 1408 & 1412 Mountain Meadow Dr – Red Fish Homes, LLC- City of McCall](#) IN CONICAL SURFACE, within three miles of MYL. Complete <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm>. Avigation Easement signatures required.

[DR-22-22/SR-22-14 – 2079 Warren Wagon Rd – Dennis Geis for Kevin Wade – IMPACT AREA](#) NO REQUIREMENTS FROM AIRPORT

[SUB-22-06/CUP-22-06/DR-22-23/SR-22-15 – 209-217 Simmons St – Steve Callan](#) IN TRANSITIONAL SURFACE, within .5 mile of MYL. Complete <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm> Avigation Easement signatures required.

[VAR-22-01 – 300 Krahn Lane – Leslie & Terri Roberts – IMPACT AREA](#) IN HORIZONTAL SURFACE, within one mile of MYL . Complete <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm> Avigation Easement signatures required.

Thank you,

Brian Parker, AICP | City Planner
216 E. Park Street | McCall | Idaho 83638
Direct: 208.634.4256 | Fax: 208.634.3038



Web: mccall.id.us
Blog: mccallcitysource.com
Social: [Facebook.com/cityofmccall](https://www.facebook.com/cityofmccall)



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Valley County Transmittal
Division of Community and Environmental Health

- Return to:
- Cascade
 - Donnelly
 - McCall
 - McCall Impact
 - Valley County

Rezone # _____

Conditional Use # CUP-22-06 DR-22-23

Preliminary / Final / Short Plat SUB-22-06 SR-22-15

Simmons STREET Townhouses Sub

- 1. We have No Objections to this Proposal.
- 2. We recommend Denial of this Proposal.
- 3. Specific knowledge as to the exact type of use must be provided before we can comment on this Proposal.
- 4. We will require more data concerning soil conditions on this Proposal before we can comment.
- 5. Before we can comment concerning individual sewage disposal, we will require more data concerning the depth of:
 - high seasonal ground water
 - bedrock from original grade
 - waste flow characteristics
 - other _____
- 6. This office may require a study to assess the impact of nutrients and pathogens to receiving ground waters and surface waters.
- 7. This project shall be reviewed by the Idaho Department of Water Resources concerning well construction and water availability.
- 8. After written approvals from appropriate entities are submitted, we can approve this proposal for:
 - central sewage
 - interim sewage
 - individual sewage
 - community sewage system
 - central water
 - individual water
 - community water well
- 9. The following plan(s) must be submitted to and approved by the Idaho Department of Environmental Quality:
 - central sewage
 - sewage dry lines
 - community sewage system
 - central water
 - community water
- 10. Run-off is not to create a mosquito breeding problem
- 11. This Department would recommend deferral until high seasonal ground water can be determined if other considerations indicate approval.
- 12. If restroom facilities are to be installed, then a sewage system MUST be installed to meet Idaho State Sewage Regulations.
- 13. We will require plans be submitted for a plan review for any:
 - food establishment
 - beverage establishment
 - swimming pools or spas
 - grocery store
 - child care center

14. Application & Engineering Report Required

Reviewed By: [Signature]
Date: 9/14/22

May 17, 2023

Brian,

Thank you for taking the time to meet with me today. I do understand that you want the final plat to reflect a typical townhouse plat that includes a common area. I have spoken to the surveyor, and he assures me that the townhouse plat will have all common area platted as a single lot. In addition, each unit will have its property extend from the footprint of each unit an additional 3 feet to the front of the building in the final plat.

We kindly request that you add this to our packet for next week's City Council meeting.

Sincerely,

Steve Callan

Steve Callan

Synergy Structures LLC

SUB-22-06, CUP-22-06, DR-22-23, SR-22-15
209-217 Simmons Street – Steve Callan of Synergy Structures



City of McCall

PUBLIC WORKS

www.mccall.id.us

216 East Park Street
McCall, Idaho 83638

Phone 208-634-5580

Main 208-634-7142

Fax 208-634-4170

June 7, 2023

Steve Callan
385 Rio Vista Boulevard
McCall, ID 83638

Re: SUB 22-06: 209, 211, 213, 215, 217 Simmons St: Engineering Review Letter No. 2 - Updated

Dear Steve,

This letter provides the City's engineering review of the submitted civil design documents received for the above-mentioned application. Based on our understanding of the project we have assembled the comments below.

Subdivision Plat:

1. Simmons Street shall be labeled "Private" when the vacation of the right-of-way is complete.
2. The entire right-of-way width needs to be shown for Simmons Street and Scott Street.
3. The 12-foot utility, drainage, and snow storage easement should be behind the private right-of-way.
4. The plat labels the proposed building as commercial, but the building could also be residential on the second floor. Please adjust your labeling.
5. The plat includes a signature block for the City of McCall Public Works Director, please remove that signature block, there is only a need for the City of McCall City Engineer signature block.
6. The plat document does not appear to fill the entire page.
7. The plat boundary shall include two separate control ties to city of McCall control points. The ties must be tied to two different control points and those control points must tie to separate corners within the drawing.
8. Once the final plat draft is complete, two digital CAD files, prepared in accordance with the City's digital data submission standards (DDSS) shall be provided. The complete DDSS guidance document can be found here: <https://evogov.s3.amazonaws.com/141/media/115532.pdf>

ROW Issues, Access, and Street Improvements (Simmons St):

- ~~1. The updated Civil Plans still call out Simmons Street to be a gravel surface, but the cross-section of the roadway calls out agreed upon 2.5" asphalt surface. Please update your Civil Drawings to depict the paving of the roadway. The Civil Drawings were updated to reflect the paved surface. Please change the label that says "Proposed Asphalt Driveway Outline" to "Proposed Asphalt Roadway Outline". Simmons Street will be a Private Roadway and not just a driveway.~~

2. The updated civil plans do not detail the required signage that was requested in Engineering Review #1. Signage needs to be included on one of the plan sheets for Simmons Street. The signage should include:
 - a. ~~A dead-end sign near the intersection of Simmons and Scott St,~~
 - b. ~~Stop sign at the intersection of Scott and Simmons St,~~
 - c. ~~Street naming signage, blue for a private roadway,~~ Simmons Street signage is shown but a Scott Street sign will be needed for the intersection as well.
 - d. ~~MUTCD approved signage to delineate and notify drivers that the road ends.~~
3. Please ~~identify~~ clarify where the private roadway snow will be stored.

Grading, Drainage, Stormwater Management and Landscaping:

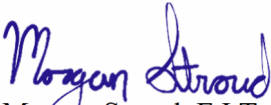
1. ~~There is an inconsistency in the civil drawings that were submitted regarding where the stormwater detention basins are located. Please clarify which set of plans is correct.~~
2. The contours on the preliminary grading and drainage plan do not detail how the western roadside swales drain. Please detail where the runoff is expected to go. It appears that it would be logical for the western roadside swale to outfall into Riverfront Park. However, this will require coordination with the City and some erosion control for the slope down into the park.
3. Identify on the civil plans where snow storage for the property is going to be located.
4. Reviewing the most current version of the stormwater drainage report that was submitted, there are a few comments that need to be addressed prior to approval:
 - a. Within the drainage area calculations, on page 18, there are three drainage areas provided, but the report only details the two areas. There is some confusion regarding what this third area is.
 - b. There are a few minor comments within my redlines of the stormwater drainage report.

Water and other Utilities:

1. For proper sizing of the water meters, please submit a fixture unit worksheet for each unique floor plan. Our fixture unit worksheet can be found at the following link: https://www.mccall.id.us/media/PWORKS/Water%20Rate/10.05.22_Water%20Infrastructure%20Sizing_Residential.xlsx
2. Will there be an irrigation meter for the proposed landscaping? If so, please provide sizing information and show where that will be located on the civil plan set. It looks like an irrigation meter could be easily placed as one of the meters in a dual meter pit.
3. In the updated Civil Plan set I did not see the location of power and telecommunication services. As part of the final civil design package, additional utility plans (separate from the water and sewer plans) shall identify the location of:
 - a. Proposed street lighting and electrical control box/meter locations
 - b. Idaho Power electrical service lines and locations of transformers and j-boxes
 - c. Sparklight and/or Ziple Fiber telecommunications lines, j-boxes and transformers
 - d. The City has initiated a municipal broadband utility known as RAPID (<https://mccall.maps.arcgis.com/apps/MapSeries/index.html?appid=0ffb912a1bec4ca0868c46d34d09340a>). Please contact the City's RAPID project manager, Chris Curtin (208,634-3576, ccurtin@mccall.id.us) for further direction on this infrastructure design.

The comments provided herein need to be addressed as we work through the design of the project. Please feel free to contact me if you have any questions or need further clarification as you prepare additional documents and work towards finalizing your construction documents.

Sincerely,



Morgan Stroud, E.I.T
McCall Staff Engineer

Attachments:

Redlined Civil Plans (dated 04/26/2023) - Updated
Redlined Stormwater Management Plan (dated 04/26/2023)

Cc: Project file – SUB22-06
Brian Parker – City Planner
Meredith Todd – Assistant City Planner

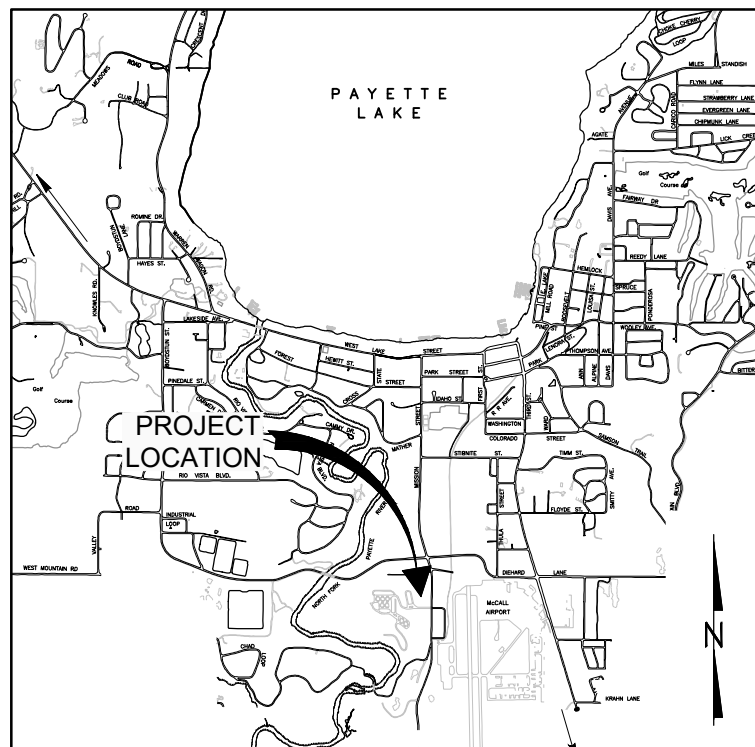
SIMMONS STREET TOWNHOUSES

McCALL, IDAHO

ROADWAY, DOMESTIC WATER, SANITARY SEWER AND GRADING IMPROVEMENTS SPRING/SUMMER 2023

DRAWING INDEX

1	G-1	COVER SHEET
2	G-2	GENERAL INFORMATION AND NOTES
3	C-1	OVERALL LAYOUT WITH HORIZONTAL CONTROL AND STRIPING PLAN
4	C-2	ROADWAY PLAN AND PROFILE
5	C-3	SANITARY SEWER PLAN AND PROFILE
6	C-4	DOMESTIC WATER PLAN AND PROFILE
7	C-5	GRADING, DRAINAGE AND STORMWATER MANAGEMENT PLAN
8	GC-1	CIVIL TYPICAL DETAILS - 1
9	GC-2	CIVIL TYPICAL DETAILS - 2
10	GC-3	CIVIL TYPICAL DETAILS - 3
11	GC-4	CIVIL TYPICAL DETAILS - 4



LOCATION MAP
SCALE 1" = 2000'



VICINITY MAP
SCALE 1" = 250'

Path: \\M:\01\GIS\Symetry\Structures\22025\Civil\DWG\CDD\22025_G-1_CoverSheet.dwg File Name: 22025_G-1_CoverSheet.dwg Plot Date: 4/26/2023 11:31 AM Admin

NO.	REVISION	BY	DATE	DESIGN
1.	CITY OF McCall AND PLRWSO ENGINEERING SUBMITTAL	AMD	4/26/2023	AMD
				DRAWN
				AMD
				CHECKED
				GTT
				APPROVED
				GTT



CRESTLINE
ENGINEERS
323 DEINHARD LANE, SUITE C · PO BOX 2330
McCALL, IDAHO 83638
208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
McCALL, IDAHO
ROADWAY, DOMESTIC WATER, SANITARY SEWER
AND GRADING IMPROVEMENTS PROJECT
COVER SHEET

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	SHEET NO.
G-1	1 OF 11

GENERAL NOTES:

- ALL WORK SHALL CONFORM TO THE PROJECT NOTES, DETAILS, SPECIFICATIONS, PAYETTE LAKES RECREATIONAL WATER AND SEWER DISTRICT (PLRWSD), AND THE CITY OF McCALL STANDARDS. WHERE NOT SPECIFIED, ALL WORK SHALL CONFORM TO THE 2020, OR MOST CURRENT, EDITION OF THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPPWC). IN THE EVENT THAT ANY OF THESE STANDARDS CONFLICT, THE MORE STRINGENT SHALL BE THE CONTROLLING STANDARDS OR SPECIFICATIONS.
- ONLY PLAN SETS STAMPED "APPROVED FOR CONSTRUCTION" AND SIGNED BY THE CITY ENGINEER OR HIS AUTHORIZED REPRESENTATIVE SHALL BE USED BY THE PROJECT CONTRACTOR(S). USE OF ANY PLANS ON THE JOB WITHOUT THE "APPROVED FOR CONSTRUCTION" STAMP SHALL BE GROUNDS FOR THE ISSUANCE OF A STOP WORK ORDER.
- THE CONTRACTOR SHALL KEEP ON-SITE AT ALL TIMES A COPY OF THE APPROVED CONSTRUCTION PLANS. THESE PLANS SHALL BE USED TO RECORD THE ACTUAL LOCATIONS OF THE CONSTRUCTED PIPELINE(S) AND ANY OTHER UTILITIES ENCOUNTERED. THE CONTRACTOR SHALL PROVIDE THESE RECORDED LOCATIONS TO THE PROJECT ENGINEER FOR USE IN THE PRODUCTION OF RECORD DRAWINGS PRIOR TO FINAL APPROVAL/ACCEPTANCE OF THE PROJECT.
- EXISTING SITE INFORMATION INCLUDING THE LOCATION OF EXISTING SITE CONDITIONS AND SURFACE TOPOGRAPHY AS SHOWN ON THESE PLANS HAS BEEN PROVIDED BY 4 RIVERS SURVEYING, INC. AS A RESULT OF FIELD WORK COMPLETED IN 2022. THE EXISTING SITE INFORMATION IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR'S CONSTRUCTION SURVEY PRIOR TO THE START OF ANY PROJECT CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL CONSTRUCTION STAKING.
- THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. THE PROJECT ENGINEER ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE DELINEATION OF SUCH UNDERGROUND UTILITIES, OR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH MAY BE ENCOUNTERED, BUT WHICH ARE NOT SHOWN ON THESE DRAWINGS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY EXACT LOCATIONS OF EXISTING UTILITIES PRIOR TO THE START OF ANY PROJECT CONSTRUCTION. ANY LOCATION WHICH MAY POSE A CONFLICT WITH THE PROPOSED CONSTRUCTION MUST BE REPORTED TO THE PROJECT ENGINEER PRIOR TO THE START OF ANY PROJECT CONSTRUCTION.
- THE CONTRACTOR SHALL SUBMIT A PROJECT SCHEDULE AND SEQUENCING PLAN TO THE OWNER AND THE PROJECT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO STARTING CONSTRUCTION.
- THE CONTRACTOR SHALL CALL DIG LINE (800-342-1585) TO LOCATE ALL EXISTING UTILITIES AT LEAST THREE (3) DAYS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF McCALL A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO THE START OF PROJECT CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN A PERMIT TO EXCAVATE IN PUBLIC RIGHT-OF-WAY, FROM THE CITY OF McCALL AND PROVIDE A COPY TO THE OWNER AND THE PROJECT ENGINEER PRIOR TO THE START OF PROJECT CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL ASSOCIATED WITH THE PROJECT AND SHALL DEVELOP/SUBMIT A PLAN TO THE CITY OF McCALL AND THE PROJECT ENGINEER FOR APPROVAL PRIOR TO THE START OR PROJECT CONSTRUCTION. PLAN TO BE IN ACCORDANCE WITH MUTCD AND PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL MAINTAIN TRAFFIC ACCESS AT THE END OF EACH DAY AND PROVIDE DETOURS OR ONE-WAY TRAFFIC DURING CONSTRUCTION. WHEN CONSTRUCTION TECHNIQUES ALLOW, CONTRACTOR SHALL PROVIDE ACCESS THROUGH THE CONSTRUCTION ZONE TO PRIVATE PROPERTIES.
- CONTRACTOR SHALL SECURE A SHORT TERM ACTIVITY EXEMPTION FROM THE IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY (IDEQ) PRIOR TO THE START OF PROJECT CONSTRUCTION IF WORK IN GROUND WATER IS ANTICIPATED. IN ADDITION TO THE EXEMPTION, CONTRACTOR SHALL SUBMIT A DEWATERING PLAN TO THE PROJECT ENGINEER PRIOR TO COMMENCEMENT OF DEWATERING OPERATIONS.
- DURING PIPELINE INSTALLATION AND SERVICE CONNECTIONS, GROUNDWATER LEVELS SHALL BE MAINTAINED ONE (1') FOOT OR MORE BELOW PIPE INVERTS PER ISPPWC. ONCE DEWATERING OPERATIONS CEASE, CONTRACTOR SHALL CLEAN AND RESTORE TO THEIR ORIGINAL STATE ANY DITCHES OR STORMDRAIN FACILITIES THAT ARE SILTED DUE TO THEIR DEWATERING EFFORTS.

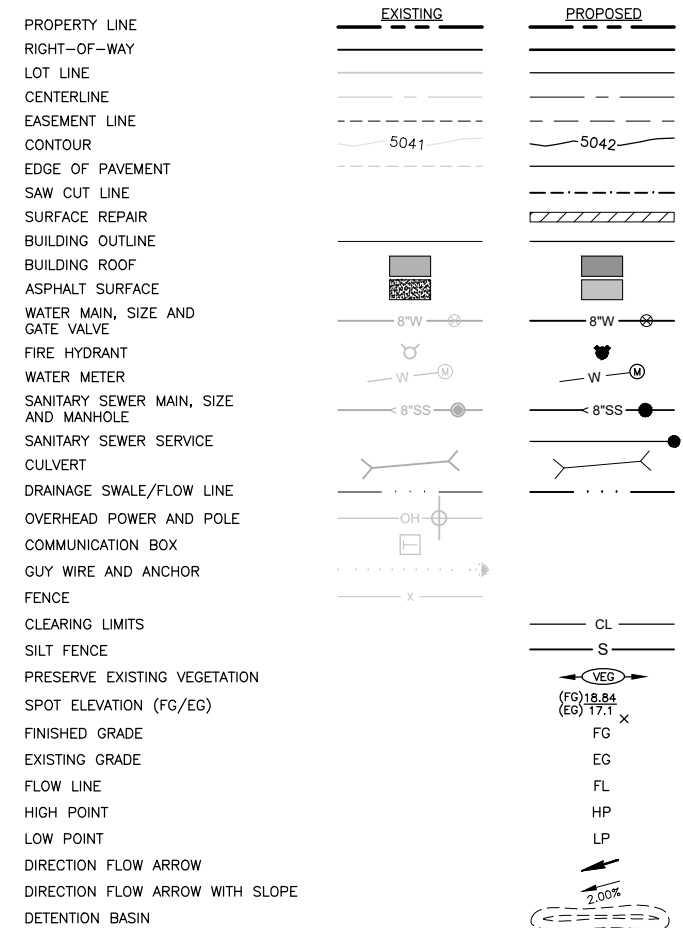
TREE PROTECTION NOTES:

- CONTRACTOR TO TAKE EXTRA PRECAUTION WHEN WORKING NEAR TREES WITHIN THE PROJECT AREA.
- INSTALL CONSTRUCTION FENCING AROUND THE DRIP LINES OF ALL SIGNIFICANT (12" OR LARGER TRUNK DIAMETER) TREES TO PREVENT VEHICLE/CONSTRUCTION EQUIPMENT TRAFFIC AND COMPACT SOIL ABOVE TREES ROOT SYSTEM.
- WHEN DIGGING IN CLOSE PROXIMITY/UNDER DRIP LINES OF TREES, CONTRACTOR TO POT HOLE/HAND DIG AROUND TREE ROOTS TO PREVENT PULLING IMPACTS AND/OR TENSION ON THE ROOT SYSTEM.
- IF IMPACTS ARE UNAVOIDABLE, CONTRACTOR TO COORDINATE IMPACTS WITH THE CITY ARBORIST AND PROJECT ENGINEER TO TRY AND MINIMIZE IMPACTS TO THE GREATEST EXTENT POSSIBLE.
- IN THE EVENT THAT THERE IS A CONFLICT WITH TREE ROOTS, CONTRACTOR TO GENTLY EXPOSE AND CUT THE ROOT CLEANLY WITH A SAW TO HELP MITIGATE IMPACTS. DO NOT TREAT THE ENDS OF CUT ROOTS.
- ONCE TREE ROOTS ARE CUT AND/OR IMPACTED, THERE IS NO GUARANTEE OF THEIR SURVIVAL.
- ANY ROOT IMPACTS SHOULD BE APPROVED BY THE CITY ARBORIST AND KEPT TO ONE SIDE OF THE TREE WHERE AT ALL POSSIBLE.

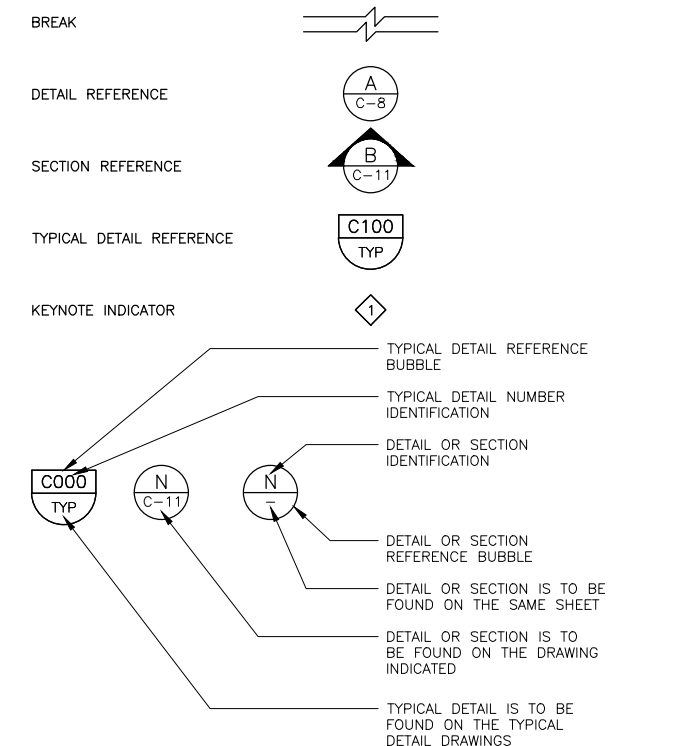
SEWER CONSTRUCTION NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE PLRWSD STANDARD SPECIFICATIONS AND DRAWINGS AND THE 2020 ISPPWC.
- APPROVAL AND ACCEPTANCE OF ALL SEWER CONSTRUCTION WILL BE BY THE PLRWSD AND THEIR DECISION SHALL BE FINAL. SUCH INSPECTIONS SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF PERFORMING THE WORK IN AN ACCEPTABLE MANNER IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLANS AND STANDARD SPECIFICATIONS AND DRAWINGS. NO SEWER PERMITS WILL BE ISSUED TO CUSTOMERS PRIOR TO SEWER LINE ACCEPTANCE.
- SEWER LINES SHALL BE LOCATED IN ROADS. MANHOLES SHALL BE IN THE ROADWAY CENTERLINE, OR IN THE CENTER OF THE DRIVING LANE. ALTERNATIVELY, PROVIDE A THIRTY (30') FOOT WIDE UTILITY EASEMENT FOR ALL SEWER MAINS NEEDED TO SERVE THE DEVELOPMENT (ON OR OFF-SITE) OUTSIDE OF THE PUBLIC RIGHT-OF-WAY. THE SEWER MUST BE CENTERED IN THE EASEMENT. A TWELVE-FOOT WIDE ISPPWC TYPE 1, TYPE 2 OR TYPE 3 GRAVEL ACCESS ROAD IS REQUIRED WITH TWELVE (12") INCH MINIMUM PIT RUN GRAVEL SECTION FOR ACCESS TO ALL SEWER MAINS. THE REMAINDER OF THE EASEMENT CAN BE RESTORED WITH NATIVE GRASSES. NO TREES OR PERMANENT STRUCTURES (OTHER THAN SEWER RELATED INFRASTRUCTURE) WILL BE ALLOWED IN THE EASEMENT.
- ALL GRAVITY SEWER PIPE SHALL BE BELL AND SPIGOT, POLYVINYL CHLORIDE (PVC), SDR 35, ASTM D-3034, UNLESS OTHERWISE APPROVED BY PLRWSD.
- LOCATE SERVICE LINES TO THE POINTS SHOWN ON THE STANDARD DRAWINGS.
- THE PLRWSD RESERVES THE RIGHT TO COMPLETE SPOT OBSERVATION. THE CONTRACTOR WILL NOTIFY THE PLRWSD FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION AND AGAIN TWENTY-FOUR (24) HOURS PRIOR TO POURING CONCRETE COLLARS.
- MAINTAIN GROUNDWATER LEVELS ONE (1') FOOT OR MORE BELOW THE PIPE INVERT, PER ISPPWC, DURING PIPE LAYING AND PIPE JOINING OPERATIONS AND WHILE MAKING SEWER TAPS. CLEAN AND RESTORE TO THEIR ORIGINAL STATE ANY DITCHES AND STORMDRAIN FACILITIES THAT ARE SILTED DUE TO THE CONTRACTOR'S DEWATERING EFFORTS. OBTAIN ALL NECESSARY PERMITS FOR DEWATERING DISCHARGES. BEDDING AND PIPE ZONE MATERIAL SHALL BE TYPE 1 AGGREGATE PIPE BEDDING MATERIAL.
- INSTALL SEWER SERVICE LINES PRIOR TO STREET IMPROVEMENTS.
- CONSTRUCT SANITARY SEWER MANHOLES IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND DRAWINGS.
- THE CONTRACTOR SHALL TEST ALL SEWER LINES IN ACCORDANCE WITH ISPPWC AND SHALL BE OBSERVED BY THE PLRWSD. THE CONTRACTOR SHALL BE PREPARED FOR THE PLRWSD INSPECTION AND SHALL REMOVE ALL MANHOLE COVERS PRIOR TO INSPECTION. ALL CONSTRUCTION INSPECTIONS SHALL BE COMPLETED BEFORE NOVEMBER 1 OF THE YEAR WHEN INITIAL CONSTRUCTION COMMENCED UNLESS OTHERWISE APPROVED BY THE DISTRICT. THE WARRANTY PERIOD COMMENCES AS DATED UPON THE LETTER OF FINAL ACCEPTANCE.
- PLACE SEWER SERVICE LINES IN A SIX (6") INCH DIAMETER WATER CLASS PIPE WHEREVER THE SERVICE LINE CROSSES A STORMWATER DISPOSAL FACILITY (I.E., SEEPAGE BEDS, DRAINAGE SWALES).
- ALL PARALLEL OR CROSSING INSTALLATIONS OF POTABLE AND NON-POTABLE PIPELINES MUST BE IN ACCORDANCE WITH IDAPA 58.01.08.542.07.
- WHEN THE COVER OVER A SEWER PIPE IS LESS THAN THREE (3') FEET FROM THE TOP OF PIPE TO THE SUBGRADE OR TOP OF PIPE TO NATURAL GROUND, USE "CLASS 200 WATER PRESSURE PIPE", ASTM D-2241, SDR 21, INCLUDING SERVICE LINES AND FITTINGS. DESIGN ENGINEER SHALL MAKE MORE STRINGENT REQUIREMENTS AS NEEDED.
- A TELEVISION INSPECTION SHALL BE CONDUCTED BY A QUALIFIED, PROPERLY EQUIPPED INDEPENDENT CONTRACTOR UPON COMPLETION OF THE SEWER LINES AND PROVIDE A VIDEOTAPE/DVD OF THE INSPECTION PRIOR TO FINAL ACCEPTANCE OF THE SEWER, AS SPECIFIED IN THESE STANDARDS.
- PRIOR TO SEWER MAIN LINE CONSTRUCTION, CONTRACTOR SHALL POT HOLE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF THE EXISTING/PROPOSED INVERTS TO MANHOLES AND INVERTS OF THE EXISTING WATER MAINS. ANY DISCREPANCIES IN/OR FROM THE INFORMATION SHOWN ON THE PLANS, OR ADDITIONAL INFORMATION THAT MAY CREATE A CONFLICT, SHALL BE REPORTED TO THE PROJECT ENGINEER PRIOR TO PROCEEDING.
- IN THE EVENT OF A WATER SYSTEM CONFLICT, CONTACT THE PROJECT ENGINEER IMMEDIATELY.
- ALL SEWER SERVICE LATERALS SHALL BE PVC SDR 35, ASTM D-3034. SERVICE CONNECTIONS TO THE MAIN SHALL BE COMPLETED USING 8"x4" PVC SDR 35, ASTM D-3034 TEE OR ROMAC "CB SEWER SADDLE" WHERE APPROVED IN ADVANCE.
- ALL PROFILE VIEW PIPE LENGTHS ARE FROM THE CENTER OF MANHOLE TO THE CENTER OF MANHOLE.
- ALL SEWER MANHOLES TO BE TYPE "A" PER ISPPWC STANDARD DRAWING SD-501, C501/GC-3, AND THE PLRWSD STANDARD REVISIONS. THE MORE STRINGENT REQUIREMENT WILL GOVERN. ALL MANHOLE JOINTS TO INCLUDE CON-SEAL "CS-102 BUTYL RUBBER SEALANT," "VULKEM 116" HIGH-PERFORMANCE POLYURETHANE SEALANT, AND BE GROUTED (INSIDE & OUT) USING DAYTON 1107 ADVANTAGE, SPECICHEM SC MULTIPURPOSE GROUT, OR EQUAL APPROVED BY PLRWSD. EXTERIOR MANHOLE JOINTS TO BE COVERED WITH NINE (9") INCH WIDE INF1-SHIELD GATOR WRAP AFTER GROUTING.
- CONTRACTOR TO USE "WHIRLYGIG" COLLARING SYSTEM UP TO MAXIMUM HEIGHT OF THIRTEEN (13") INCHES ON ALL MANHOLES IN PLACE OF CONCRETE GRADE RINGS (18" TOTAL MAXIMUM HEIGHT FROM TOP OF CONE TO FINISHED GRADE). JOINT BETWEEN WHIRLYGIG COLLARING SYSTEM (BOTTOM OF PLASTIC FLANGE) AND TOP OF MANHOLE CONE SHALL BE SEALED WITH "VULKEM 116" HIGH-PERFORMANCE POLYURETHANE SEALANT. CONCRETE COLLAR TO EXTEND A MINIMUM OF SIX (6") INCHES BELOW TOP OF CONE.
- MANHOLE FRAMES AND COVERS SHALL BE PER PLRWSD STANDARDS AND INSTALLED IN ACCORDANCE ISPPWC STANDARD DRAWING SD-501 AND C501/GC-3. ALL MANHOLES TO HAVE CAST-IRON DUST PANS CONSTRUCTED WITH INTEGRAL MACHINED FLANGES CAST INTO THE FRAME. DUST PANS TO HAVE A RAISED DRAIN HOLE, VENTING PROVISIONS AND WIRE LIFTING STRAP. MANHOLE COVER TO BE STAMPED "PLRWSD SEWER". FRAMES, COVERS, AND DUSTPANS TO BE MANUFACTURED BY KITS FOUNDRY & MACHINE, INC. (208) 357-7773.
- INSTALL NEW SEWER SERVICE LATERALS AS INDICATED ON PLANS OR FROM CONNECTION TO SEWER MAIN TO THE RIGHT-OF-WAY AND INSIDE PRIVATE PROPERTY TWELVE (12') FEET, OR AS OTHERWISE INDICATED ON THE PLANS. NEW SEWER SERVICE STUB-OUTS TO HAVE A MAXIMUM INVERT DEPTH OF FIVE (5) FEET AT CAP/MARKER OR AS OTHERWISE INDICATED ON THE PLANS.
- THE INSTALLATION OF NEW SERVICE LATERALS INTO MANHOLES IS NOT ALLOWED.
- THE CONTRACTOR SHALL PROVIDE INVERT ELEVATIONS AT SEWER SERVICE MARKERS AND MARK ALL SEWER SERVICE LATERALS WITH DISTANCES FROM THE NEAREST MANHOLE ON THE AS-BUILT DRAWINGS TO BE PROVIDED TO THE PROJECT ENGINEER.
- ALL SEWER MAIN LINES, SERVICE LATERALS, AND MANHOLES SHALL BE AIR/VACUUM TESTED IN ACCORDANCE WITH ISPPWC. TESTING SHALL BE COMPLETED PRIOR TO CONNECTING EXISTING SERVICE LATERALS INTO THE NEW SYSTEM.
- ALL SEWER MAIN LINES SHALL BE HYDROCLEANED AND CCTV'ED UPON COMPLETION OF ALL UNDERGROUND UTILITY WORK IN ACCORDANCE WITH ISPPWC. THE CONTRACTOR SHALL SUBMIT TWO (2) COPIES OF ALL REPORTS TO THE DESIGN ENGINEER FOR REVIEW PRIOR TO ACCEPTANCE BY THE PLRWSD.
- ALL GRAVEL SURFACE REPAIRS SHALL BE IN ACCORDANCE WITH CITY OF McCALL STANDARDS AND CIVIL TYPICAL DETAIL C306A/GC-1.
- THE CONTRACTOR IS REQUIRED TO PAY FOR ALL PROJECT TESTING AND ASSOCIATED COSTS AS PART OF THE SEWER MAIN INSTALLATION. ALL TESTING TO BE COMPLETED IN ACCORDANCE WITH THE PROVISIONS SET FORTH HEREIN AND SHALL BE CONDUCTED IN THE PRESENCE OF THE PROJECT ENGINEER.

LEGEND:

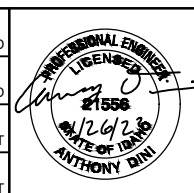


GENERAL SYMBOLS:



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NO.	REVISION	BY	DATE	DESIGN
1.	CITY OF McCALL AND PLRWSD ENGINEERING SUBMITTAL	AMD	4/26/2023	AMD
				DRAWN
				AMD
				CHECKED
				GTT
				APPROVED
				GTT



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 323 DEINHARD LANE, SUITE C · PO BOX 2330
 McCALL, IDAHO 83638
 208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
 McCALL, IDAHO
 ROADWAY, DOMESTIC WATER, SANITARY SEWER
 AND GRADING IMPROVEMENTS PROJECT
 GENERAL INFORMATION AND NOTES

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	220205
DATE	4/26/2023
DRAWING NO.	G-2
SHEET NO.	2 OF 11

NOTES:

- REFER TO DRAWING NO. G-2, SHEET 2 FOR PROJECT NOTES, LEGEND AND SYMBOLS.
- CONTRACTOR TO COORDINATE THE REMOVAL OF THE EXISTING FENCE WITH THE OWNER.
- ALL SIGNS AND STRIPING TO BE IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- CONTRACTOR TO COORDINATE WITH ADJOINING PROPERTY OWNER TO RELOCATE THE EXISTING SIGN.

KEY NOTES:

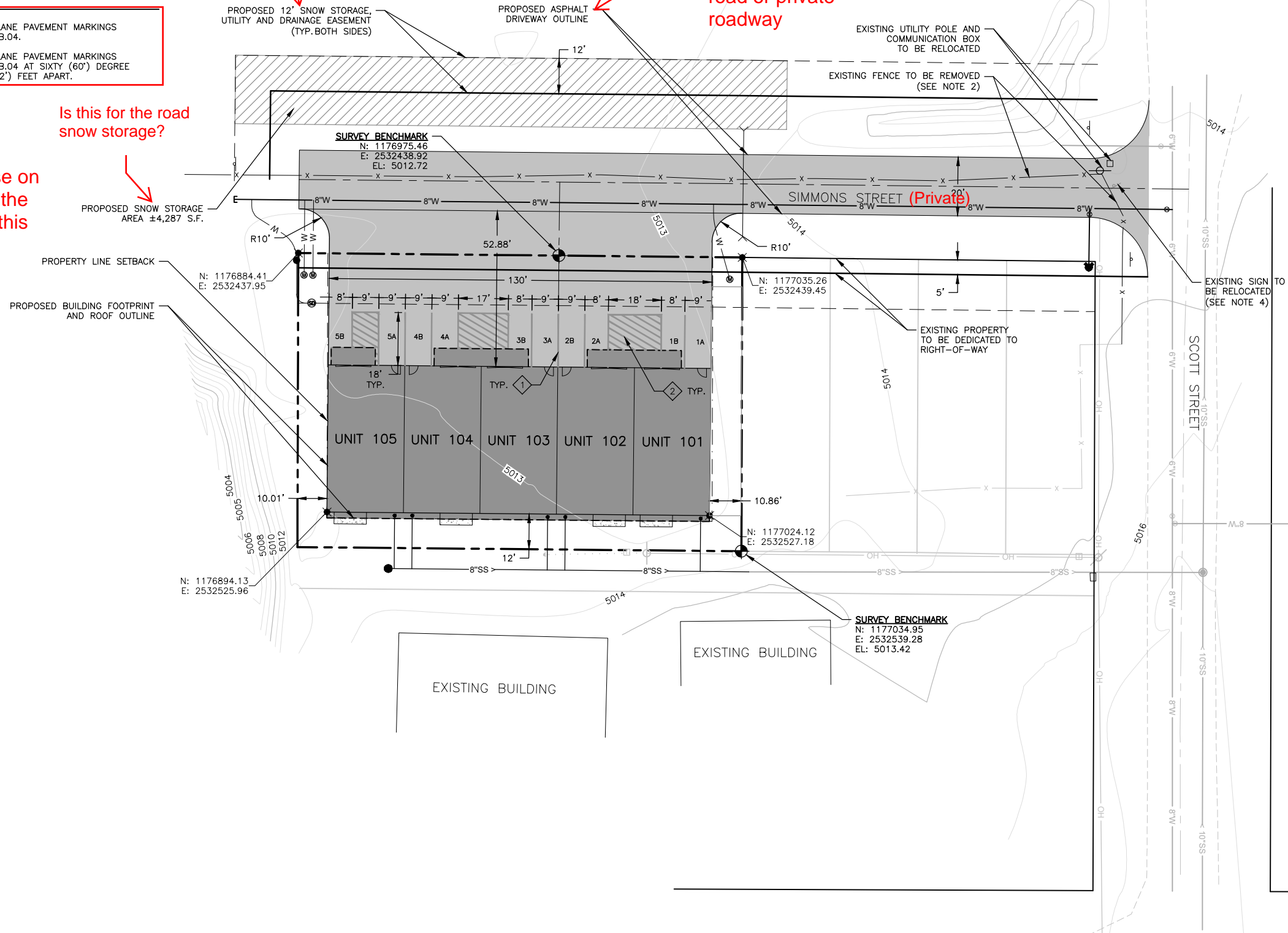
- 4" WIDE SOLID WHITE LANE PAVEMENT MARKINGS PER MUTCD SECTION 3B.04.
- 4" WIDE SOLID WHITE LANE PAVEMENT MARKINGS PER MUTCD SECTION 3B.04 AT SIXTY (60°) DEGREE ANGLES SPACED TWO (2') FEET APART.

this is in addition to the 60' ROW typically.

Simmons St will still exist but it will be a private roadway, please label it as a road or private roadway

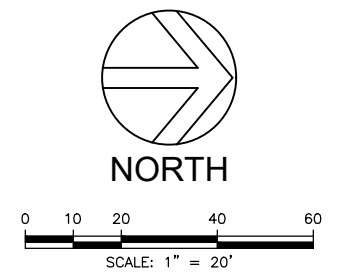
I don't see these on this sheet. Will the signage be on this sheet also?

Is this for the road snow storage?



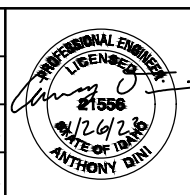
EROSION AND SEDIMENT CONTROL NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROLS (ESC)/STORMWATER BEST MANAGEMENT PRACTICES (BMP'S) IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
- IF DETERMINED NECESSARY, THE CONTRACTOR SHALL PREPARE AND SUBMIT A PROPOSED ESC PLAN TO THE PROJECT ENGINEER FOR APPROVAL PRIOR TO STARTING CONSTRUCTION.
- THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF THE ENVIRONMENTAL PROTECTION AGENCY'S (EPA) NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) 2022 GENERAL PERMIT FOR DISCHARGES FROM CONSTRUCTION ACTIVITIES (CGP). THE CGP REQUIRES THAT PROJECTS WHICH INTEND TO DISTURB MORE THAN ONE (1) ACRE PREPARE/PROVIDE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP). AT THIS TIME, THE OWNER DOES NOT ANTICIPATE THAT A SWPPP IS REQUIRED AS THE AREA OF GROUND DISTURBANCE IS LESS THAN ONE (1) ACRE. IF THE CONTRACTORS MEANS AND METHODS DISTURB MORE THAN ONE (1) ACRE, THE CONTRACTOR SHALL PREPARE A SWPPP AND OBTAIN COVERAGE UNDER THE EPA'S 2022 CGP.
- ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL BE INSTALLED PRIOR TO THE START OF ANY PROJECT CONSTRUCTION OR EARTH DISTURBING ACTIVITIES AND SHOULD REMAIN IN PLACE UNTIL ALL DISTURBED/EXPOSED AREAS HAVE BEEN STABILIZED AND/OR REVEGETATED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL ESC MEASURES/STORMWATER BMP'S IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. THIS INCLUDES REGULAR INSPECTION, REPLACEMENT, AND UPGRADING IF NECESSARY UNTIL ALL PROJECT CONSTRUCTION IS COMPLETED AND STABILIZATION IS ACHIEVED PER THE CGP OR AS DEFINED BY THE PROJECT ENGINEER.
- REFER TO THE "STATE OF IDAHO, CATALOG OF STORMWATER BEST MANAGEMENT PRACTICES FOR IDAHO CITIES AND COUNTIES" FOR FURTHER DETAILS ON BMP IMPLEMENTATION AND INSTALLATION.
- CONTRACTOR SHALL CONTROL SURFACE DRAINAGE FROM EXCAVATION, BORROW AND WASTE DISPOSAL AREAS AS WELL AS PROVIDE CONTROL STRUCTURES AS NECESSARY TO PREVENT CONTAMINATED RUNOFF FROM LEAVING THE PROJECT SITE.
- CONTRACTOR SHALL MINIMIZE THE AMOUNT OF BARE SOIL EXPOSED AT ONE TIME.
- STABILIZED CONTRACTION ENTRANCES SHALL BE PROVIDED AT ALL ENTRANCES/EXITS TO THE SITE AND CONSTRUCTION STAGING AREAS.
- CONTRACTOR TO PROVIDE TEMPORARY MEASURES SUCH AS BERMS, DIKES, AND DRAINS AS NECESSARY, TO PREVENT RUNOFF FROM FLOWING INTO PIPE TRENCHES DURING CONSTRUCTION.
- DURING CONSTRUCTION, CONTRACTOR SHALL WATER ALL DISTURBED AREAS AS NECESSARY FOR DUST ABATEMENT.
- REVEGETATION AND STABILIZATION OF ALL DISTURBED PROJECT AREAS SHALL BE IN ACCORDANCE WITH THE PROJECTS LANDSCAPE DESIGN. IF A LANDSCAPE DESIGN/PLAN IS NOT AVAILABLE, DISTURBED AREAS SHALL BE REVEGETATED WITH A GRASS SEED MIXTURE NATIVE TO THAT AREA.



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NO.	REVISION	BY	DATE	DESIGN
1.	CITY OF McCall AND PLRWSO ENGINEERING SUBMITTAL	AMD	4/26/2023	AMD
				DRAWN
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				CHECKED
				GTT
				APPROVED
				GTT



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SIMMONS STREET TOWNHOUSES
McCall, IDAHO
ROADWAY, DOMESTIC WATER, SANITARY SEWER
AND GRADING IMPROVEMENTS PROJECT
OVERALL LAYOUT WITH HORIZONTAL CONTROL AND STRIPING PLAN

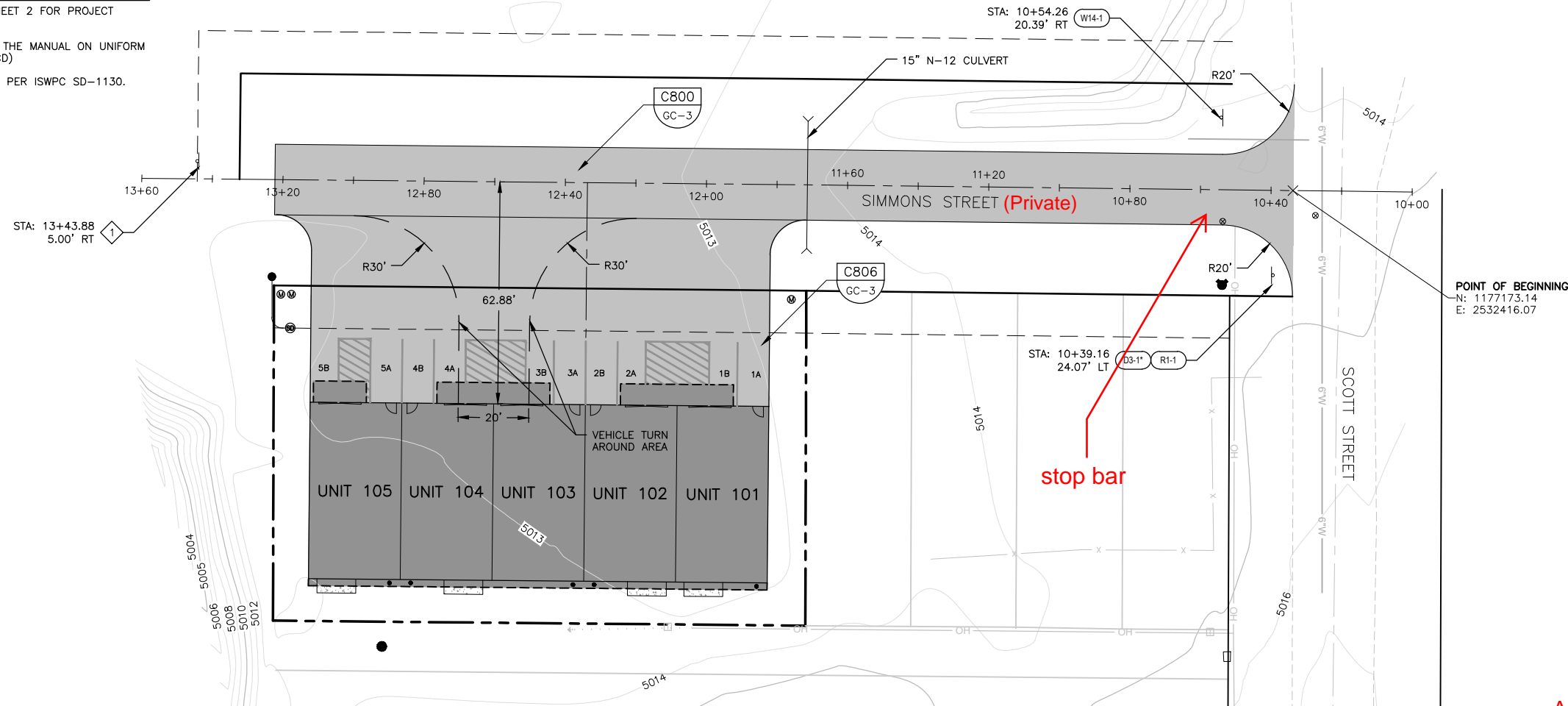
VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	SHEET NO.
C-1	3 OF 11

NOTES:

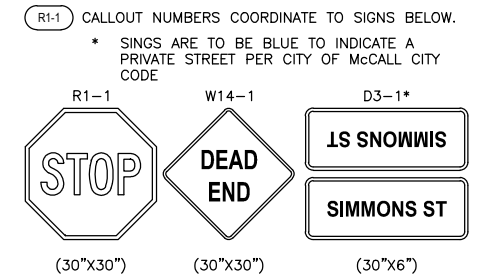
- REFER TO DRAWING NO. G-2, SHEET 2 FOR PROJECT NOTES, LEGEND AND SYMBOLS.
- ALL SIGNS ARE TO CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
- ALL SIGNS ARE TO BE INSTALLED PER ISWPC SD-1130.

STRUCTURAL/IMPORTED FILL PLACEMENT NOTES:

- ALL STRUCTURAL FILL MATERIAL AND EMBANKMENT SHALL BE IN ACCORDANCE WITH ISWPC SECTION 202.
- STRUCTURAL FILL PLACEMENT SHALL BE COMPLETED IN ACCORDANCE WITH DIVISIONS 200 AND 800 OF THE ISWPC, THE PROJECT PLANS, AND CITY OF McCall STANDARDS WHERE APPROPRIATE.
- CONTRACTOR TO CONTACT THE PROJECT ENGINEER IMMEDIATELY IN THE EVENT OF ANY UTILITY CONFLICT.
- ALL BASE AND SUBBASE COURSE USED FOR STRUCTURAL/IMPORTED FILL SHALL MEET THE REQUIREMENTS OF ISWPC SECTION 802, CRUSHED AGGREGATES. CONTRACTOR SHALL PROVIDE PROJECT ENGINEER WITH RECENT TESTING DATA ON SIEVE ANALYSIS, PROCTOR COMPACTION RESULTS, LIQUID LIMITS, AND PLASTICITY INDEX FROM SOURCE LOCATIONS PRIOR TO PLACEMENT.
- COMPACTION FOR ALL AGGREGATE BASE/SUBBASE MATERIAL SHALL BE IN ACCORDANCE WITH ISWPC SECTION 802.
- ALL STRUCTURAL/IMPORTED FILL BASE/SUBBASE PLACEMENT TESTING SHALL BE THIRD PARTY PROVIDED BY THE CONTRACTOR. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND THE PROJECT ENGINEER TO ACCOMMODATE ALL REQUIRED TESTING DURING PLACEMENT OF FILL MATERIALS IN ACCORDANCE WITH ISWPC.



SIGN LEGEND:

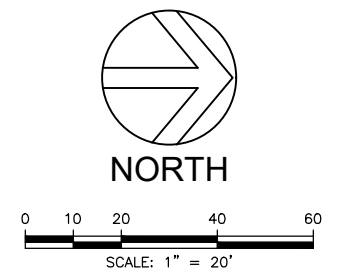
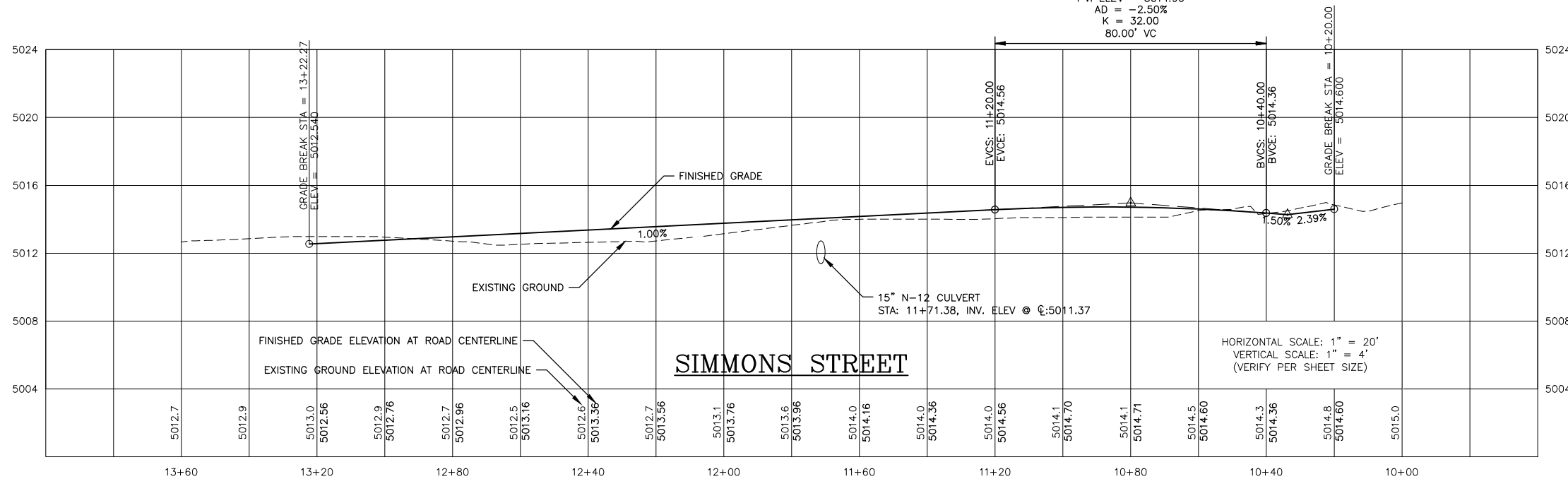


KEY NOTES:

- INSTALL TERMINUS BARRICADE PER ISWPC STANDARD DRAWING SD-1132. REPLACE BARRICADE POSTS WITH TELSPAR BREAKAWAY STYLE POSTS.

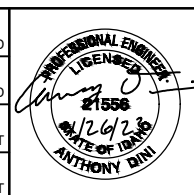
A Scott Street roadway sign will be needed as well for the intersection.

HIGH PT STA = 10+88.00
 HIGH PT ELEV = 5014.72
 PVI STA = 10+80.00
 PVI ELEV = 5014.96
 AD = -2.50%
 K = 32.00
 80.00' VC



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NO.	REVISION	BY	DATE	DESIGN
1.	CITY OF McCall AND PLRWSO ENGINEERING SUBMITTAL	AMD	4/26/2023	AMD
				DRAWN
				AMD
				CHECKED
				GTT
				APPROVED
				GTT

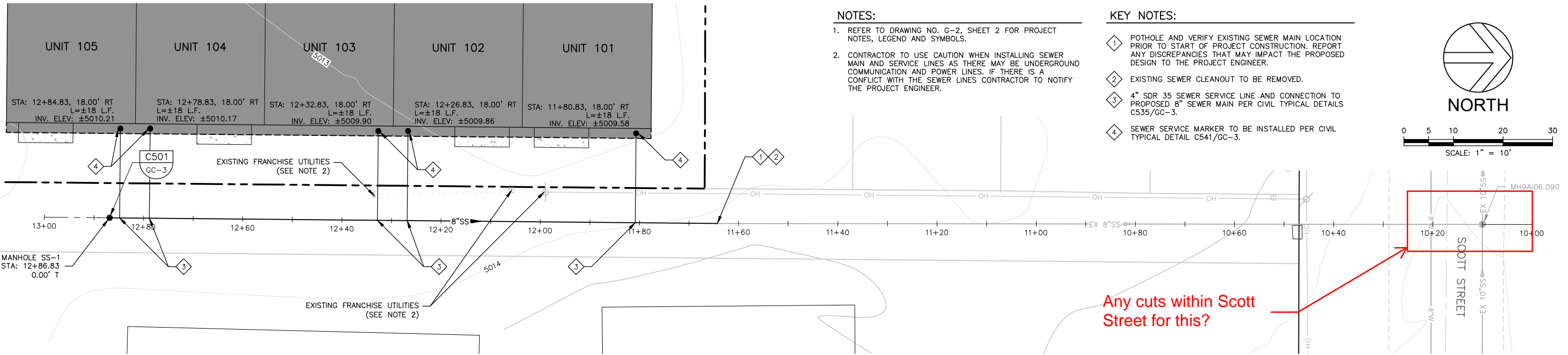


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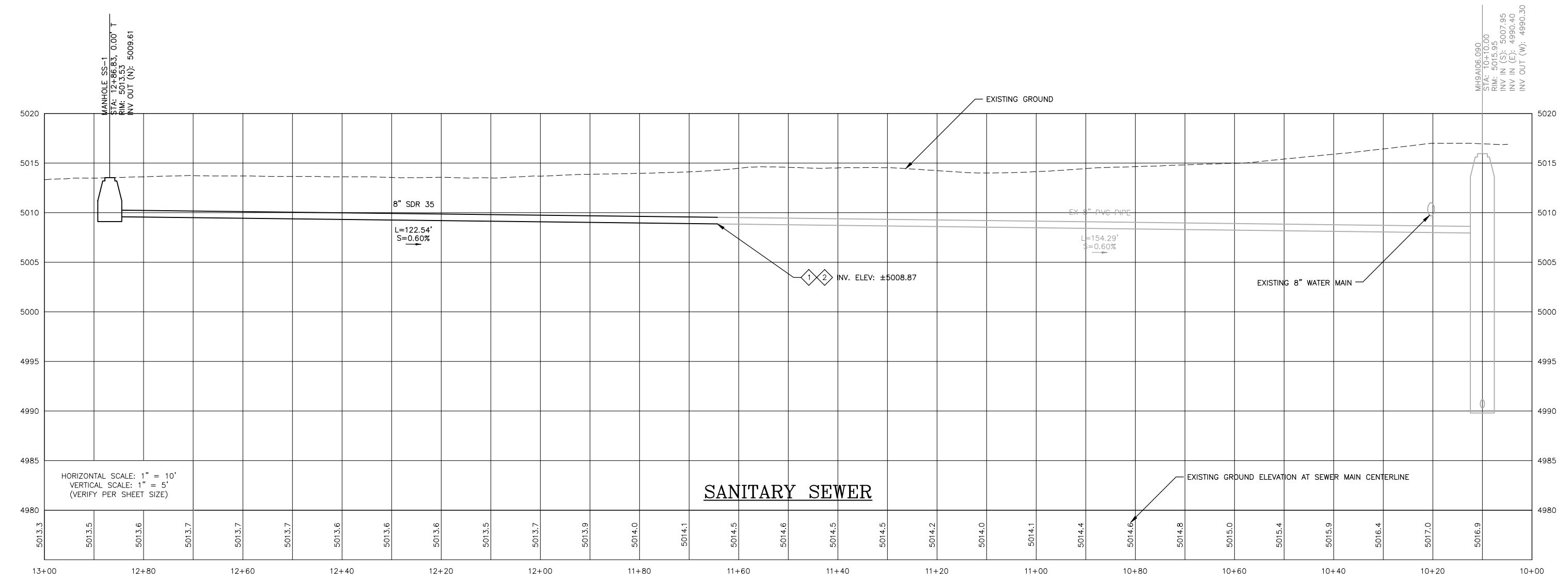
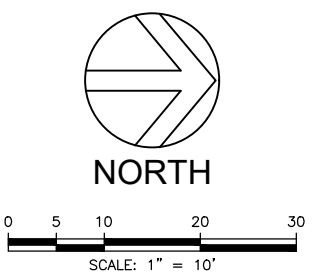
SIMMONS STREET TOWNHOUSES
 McCall, IDAHO
 ROADWAY, DOMESTIC WATER, SANITARY SEWER
 AND GRADING IMPROVEMENTS PROJECT
 ROADWAY PLAN AND PROFILE

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	C-2
SHEET NO.	4 OF 11



- NOTES:**
- REFER TO DRAWING NO. G-2, SHEET 2 FOR PROJECT NOTES, LEGEND AND SYMBOLS.
 - CONTRACTOR TO USE CAUTION WHEN INSTALLING SEWER MAIN AND SERVICE LINES AS THERE MAY BE UNDERGROUND COMMUNICATION AND POWER LINES. IF THERE IS A CONFLICT WITH THE SEWER LINES CONTRACTOR TO NOTIFY THE PROJECT ENGINEER.

- KEY NOTES:**
- POTHOLE AND VERIFY EXISTING SEWER MAIN LOCATION PRIOR TO START OF PROJECT CONSTRUCTION. REPORT ANY DISCREPANCIES THAT MAY IMPACT THE PROPOSED DESIGN TO THE PROJECT ENGINEER.
 - EXISTING SEWER CLEANOUT TO BE REMOVED.
 - 4" SDR 35 SEWER SERVICE LINE AND CONNECTION TO PROPOSED 8" SEWER MAIN PER CIVIL TYPICAL DETAILS C535/GC-3.
 - SEWER SERVICE MARKER TO BE INSTALLED PER CIVIL TYPICAL DETAIL C541/GC-3.



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NO.	REVISION	BY	DATE	DESIGN
1.	CITY OF McCALL AND PLRWSO ENGINEERING SUBMITTAL	AMD	4/26/2023	AMD
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				AMD
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SIMMONS STREET TOWNHOUSES
McCALL, IDAHO

ROADWAY, DOMESTIC WATER, SANITARY SEWER
AND GRADING IMPROVEMENTS PROJECT
SANITARY SEWER PLAN AND PROFILE

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	1"
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	C-3
SHEET NO.	5 OF 11

NOTES:

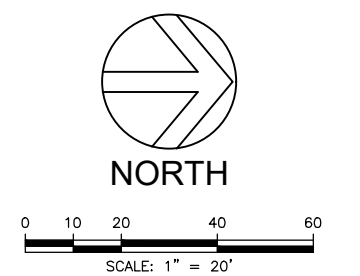
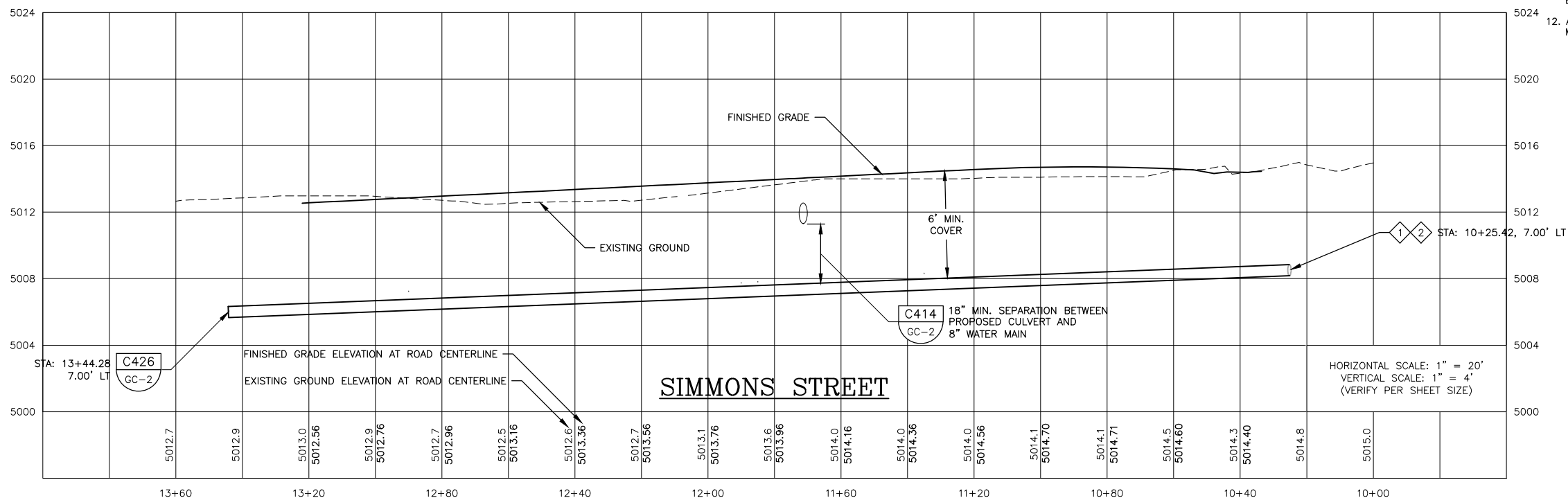
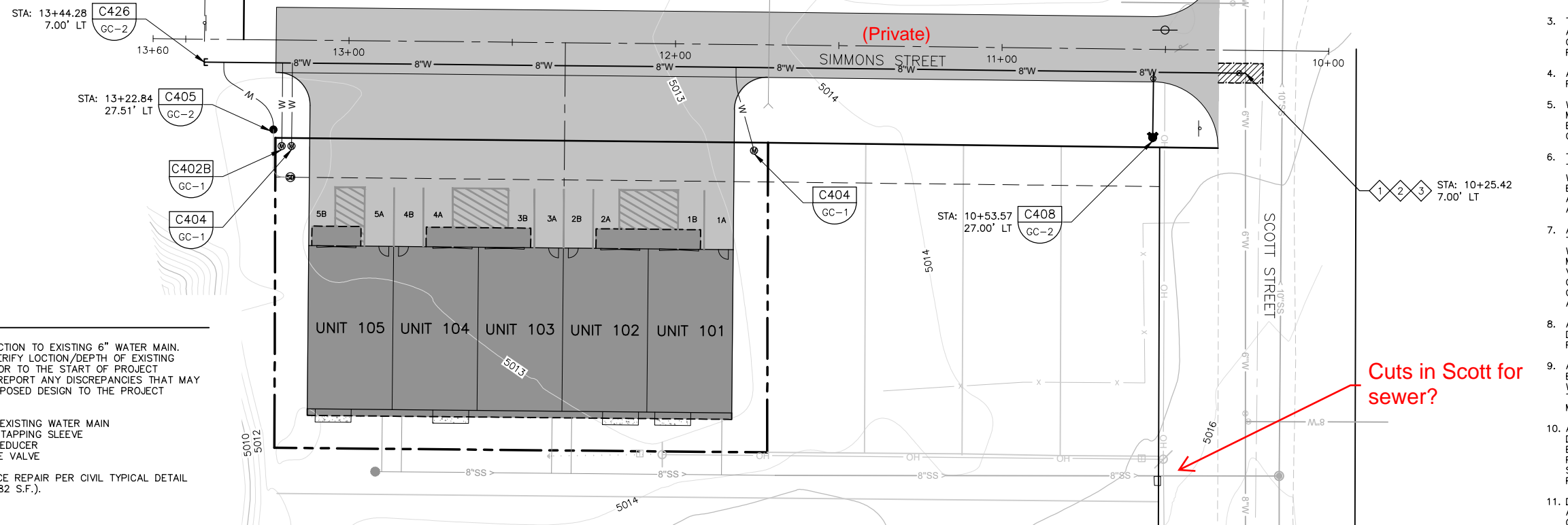
- REFER TO DRAWING NO. G-2, SHEET 2 FOR PROJECT NOTES, LEGEND AND SYMBOLS.

KEY NOTES:

- HOT TAP CONNECTION TO EXISTING 6" WATER MAIN. POT HOLE AND VERIFY LOCATION/DEPTH OF EXISTING WATER MAIN PRIOR TO THE START OF PROJECT CONSTRUCTION. REPORT ANY DISCREPANCIES THAT MAY IMPACT THE PROPOSED DESIGN TO THE PROJECT ENGINEER.
- CONNECTION TO EXISTING WATER MAIN
1-6"x6"x6" SST TAPPING SLEEVE
1-8"x6" FLXFL REDUCER
1-8" FLXMJ GATE VALVE
- ASPHALT SURFACE REPAIR PER CIVIL TYPICAL DETAIL C306A/GC-1 (±82 S.F.).

WATER CONSTRUCTION NOTES:

- ALL WATER MAINS SHALL BE BELL AND SPIGOT, POLYVINYL CHLORIDE (PVC), DR 18, AWWA C900 OR C905 WITH GASKETS MEETING ASTM F477 AND JOINTS IN COMPLIANCE. ALL GATE VALVES SHALL BE RESILIENT SEAT GATE VALVES MEETING AWWA C509-994 SPECIFICATIONS. ALL FITTINGS SHALL BE DUCTILE IRON, ANSI/NSF APPROVED.
- ALL GATE VALVES TO BE INSTALLED IN ACCORDANCE WITH ISPPWC SECTION 402, STANDARD DRAWING SD-403 (VALVE ANCHOR DETAIL), STANDARD DRAWING SD-406 (VALVE BOX AND LID DETAIL) AND CIVIL TYPICAL DETAIL C412/GC-2. FIRE VALVES BOX LIDS TO BE STAMPED "FIRE".
- THRUST BLOCKS SHALL BE INSTALLED AT ALL FITTINGS IN ACCORDANCE WITH ISPPWC SD-403 AND CIVIL TYPICAL DETAIL C406/GC-2 AND VISUALLY INSPECTED BY THE PROJECT ENGINEER PRIOR TO BACKFILL.
- ALL WATER SERVICE PIPE SHALL BE CLASS 200, SDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- WATER MAINS AND SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6') FEET AND SHALL HAVE TYPE III BEDDING REFER TO ISPPWC SD-301 AND CIVIL TYPICAL DETAIL C302A/GC-1 FOR STANDARD UTILITY TRENCH DETAILS.
- THE CONTRACTOR SHALL INSTALL NO. 12 COPPER LOCATOR WIRE IN THE TRENCH WITH ALL WATER MAIN AND SERVICE LINES. LOCATOR WIRE SHALL BE TAPED TO THE TOP CENTER OF THE PIPE AND BROUGHT UP TO THE TOP OF ALL VALVE BOXES, FIRE HYDRANTS AND SERVICES. BLUE TAPE MARKED "WATER" SHALL BE INSTALLED APPROXIMATELY TWO (2') FEET ABOVE ALL WATER MAIN LINES.
- ALL NEW TRACE WIRE INSTALLATIONS SHALL BE LOCATED USING TYPICAL LOW FREQUENCY (512HZ) LINE TRACING EQUIPMENT, WITNESSED BY THE CONTRACTOR, ENGINEER AND THE CITY OF McCALL WHEN APPLICABLE, PRIOR TO FINAL ACCEPTANCE. THIS VERIFICATION SHALL BE PERFORMED UPON COMPLETION OF ROUGH GRADING AND AGAIN PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. CONTINUITY TESTING IN LIEU OF ACTUAL LINE TRACING SHALL NOT BE ACCEPTED.
- ALL WATER MAINS AND SERVICE LINES SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH ISPPWC SECTION 401 PRIOR TO PROJECT ACCEPTANCE.
- ALL WATER MAINS AND SERVICE LINES SHALL BE VISUALLY INSPECTED BY THE PROJECT ENGINEER AND THE CITY OF McCALL UNDER WORKING SYSTEM PRESSURE PRIOR TO BACKFILLING IF HYDROSTATIC TESTING IS NOT POSSIBLE WHEN CONNECTING TO EXISTING WATER MAIN LINES IN SERVICE.
- ALL WATER PIPE AND FITTINGS THAT ARE UNABLE TO BE TESTED AND DISINFECTED SHALL BE WASHED/SANITIZED USING A CHLORINE/LIQUID BLEACH SOLUTION UNDER THE PRESENCE OF THE PROJECT ENGINEER PRIOR TO INSTALLATION. LINES ARE TO BE FLUSHED UNDER THE SUPERVISION OF CITY OF McCALL AFTER THE COMPLETION OF PROJECT CONSTRUCTION, PRIOR TO BEING RETURNED TO SERVICE.
- DISPOSAL OF SUPER-CHLORINATED DISINFECTION WATER TO BE IN ACCORDANCE WITH THE IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY'S (IDEQ), DRINKING WATER PROGRAMS GUIDANCE FOR PUBLIC WATER SYSTEM DISPOSAL OF WATER FROM CONSTRUCTION, MAINTENANCE, AND OPERATIONS (APRIL, 2014). CONTRACTOR SHALL SUBMIT A FLUSHING PLAN IN ACCORDANCE WITH THE GUIDANCE TO THE PROJECT ENGINEER PRIOR TO THE START OF ANY FLUSHING TO ENSURE COMPLIANCE WITH PROPER DISPOSAL REQUIREMENTS.
- ALL SURFACE REPAIRS SHALL BE IN ACCORDANCE WITH CITY OF McCALL STANDARDS AND CIVIL TYPICAL DETAIL C306A/GC-1.



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NO.	REVISION	BY	DATE	DESIGN
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 AND GRADING IMPROVEMENTS PROJECT
 DOMESTIC WATER PLAN AND PROFILE

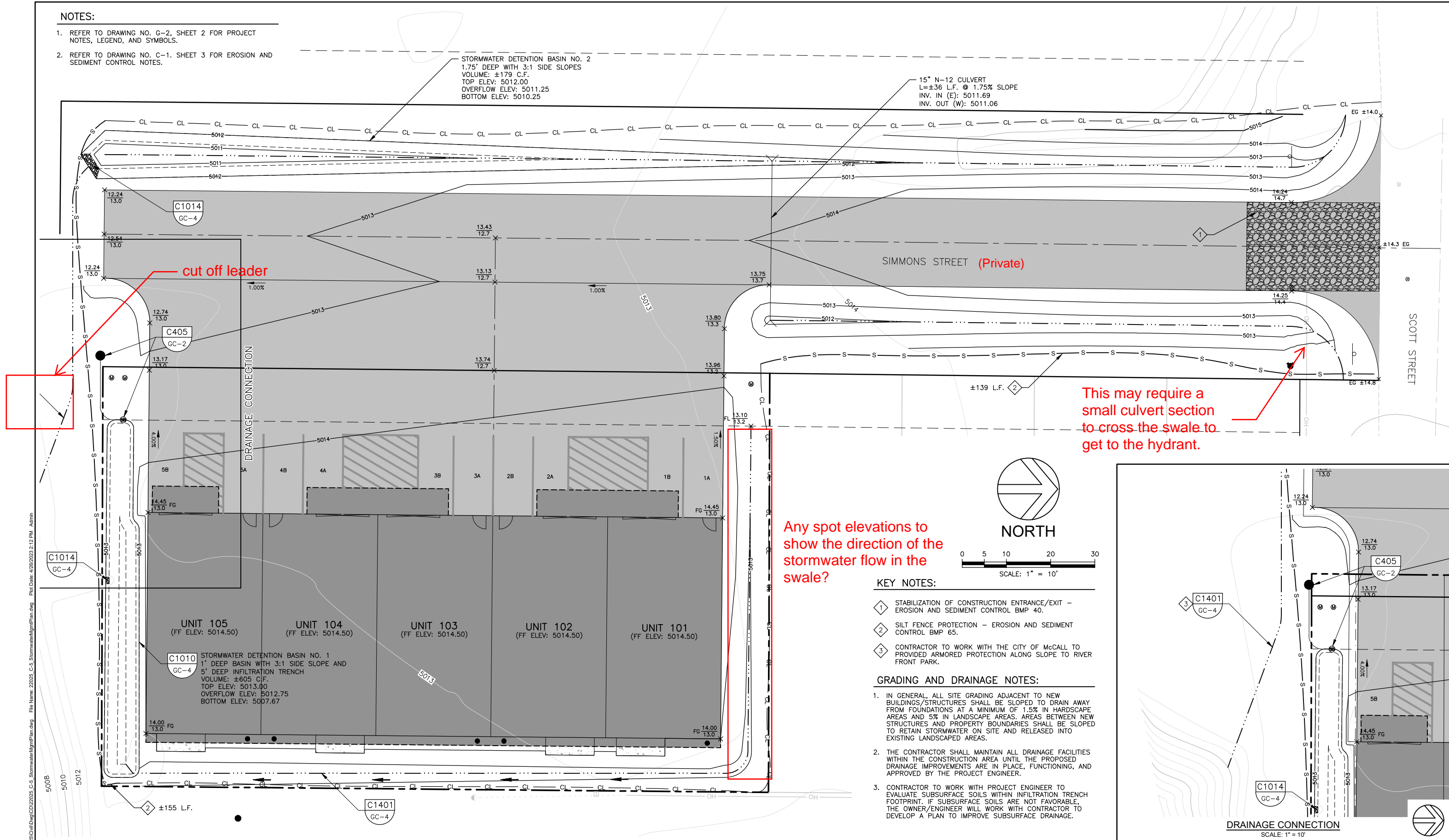
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BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	SHEET NO.
C-4	6 OF 11

NOTES:

1. REFER TO DRAWING NO. G-2, SHEET 2 FOR PROJECT NOTES, LEGEND, AND SYMBOLS.
2. REFER TO DRAWING NO. C-1, SHEET 3 FOR EROSION AND SEDIMENT CONTROL NOTES.

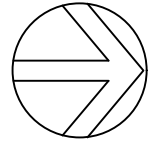
STORMWATER DETENTION BASIN NO. 2
 1.75' DEEP WITH 3:1 SIDE SLOPES
 VOLUME: ±179 C.F.
 TOP ELEV: 5012.00
 OVERFLOW ELEV: 5011.25
 BOTTOM ELEV: 5010.25

15" N-12 CULVERT
 L=±36 L.F. @ 1.75% SLOPE
 INV. IN (E): 5011.69
 INV. OUT (W): 5011.06

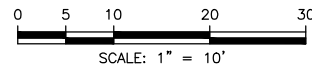


This may require a small culvert section to cross the swale to get to the hydrant.

Any spot elevations to show the direction of the stormwater flow in the swale?



NORTH

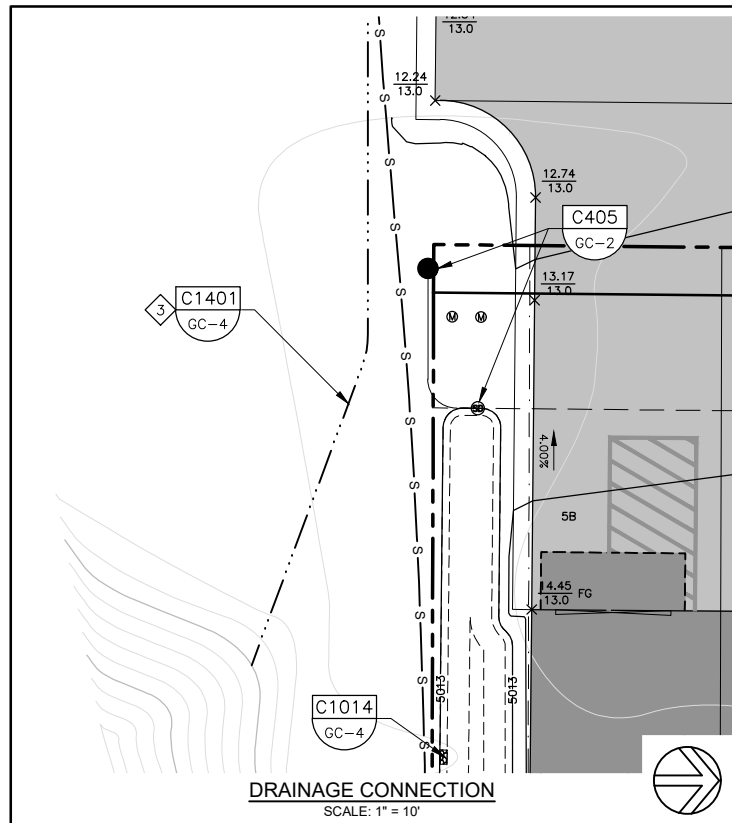


KEY NOTES:

1. STABILIZATION OF CONSTRUCTION ENTRANCE/EXIT - EROSION AND SEDIMENT CONTROL BMP 40.
2. SILT FENCE PROTECTION - EROSION AND SEDIMENT CONTROL BMP 65.
3. CONTRACTOR TO WORK WITH THE CITY OF McCALL TO PROVIDED ARMORED PROTECTION ALONG SLOPE TO RIVER FRONT PARK.

GRADING AND DRAINAGE NOTES:

1. IN GENERAL, ALL SITE GRADING ADJACENT TO NEW BUILDINGS/STRUCTURES SHALL BE SLOPED TO DRAIN AWAY FROM FOUNDATIONS AT A MINIMUM OF 1.5% IN HARDSCAPE AREAS AND 5% IN LANDSCAPE AREAS. AREAS BETWEEN NEW STRUCTURES AND PROPERTY BOUNDARIES SHALL BE SLOPED TO RETAIN STORMWATER ON SITE AND RELEASED INTO EXISTING LANDSCAPED AREAS.
2. THE CONTRACTOR SHALL MAINTAIN ALL DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL THE PROPOSED DRAINAGE IMPROVEMENTS ARE IN PLACE, FUNCTIONING, AND APPROVED BY THE PROJECT ENGINEER.
3. CONTRACTOR TO WORK WITH PROJECT ENGINEER TO EVALUATE SUBSURFACE SOILS WITHIN INFILTRATION TRENCH FOOTPRINT. IF SUBSURFACE SOILS ARE NOT FAVORABLE, THE OWNER/ENGINEER WILL WORK WITH CONTRACTOR TO DEVELOP A PLAN TO IMPROVE SUBSURFACE DRAINAGE.



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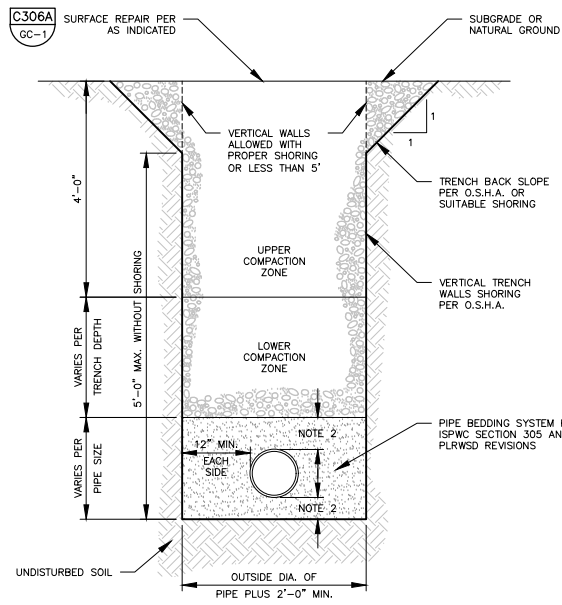


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 AND GRADING IMPROVEMENTS PROJECT
 GRADING, DRAINAGE AND STORMWATER MANAGEMENT PLAN

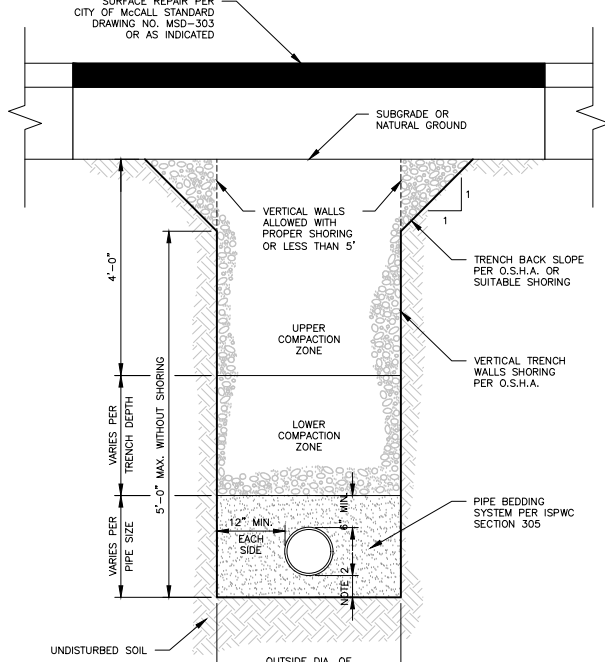
VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	C-5
SHEET NO.	7 OF 11



NOTES:

- TRENCH EXCAVATION PER ISPCW SECTION 301.
- PIPE BEDDING PER ISPCW SECTION 305 AND PLRWS D REVISIONS. FOR SEWER MAIN LINES AND SERVICES USE CLASS A-1 BEDDING SYSTEM AMENDED TO REQUIRE BEDDING EIGHT (8") INCHES BELOW THE BOTTOM AND ABOVE THE TOP PIPE PER PLRWS D REQUIREMENT. FOR WATER MAIN LINES AND SERVICES USE CLASS B-2 BEDDING SYSTEM DURING NORMAL CONDITIONS AND CLASS A-1 BEDDING SYSTEM WHEN GROUNDWATER IS OBSERVED IN THE TRENCH DURING EXCAVATION.
- BACKFILL AND COMPACTION PER ISPCW SECTION 306.
- REFER TO ISPCW SECTION 304 FOR ADDITIONAL INFORMATION ON TRENCH FOUNDATION STABILIZATION IF NECESSARY FOR PROJECT CONSTRUCTION.
- SURFACE REPAIR AND BASE PER ISPCW SECTION 307 AND CIVIL TYPICAL DETAIL C306.

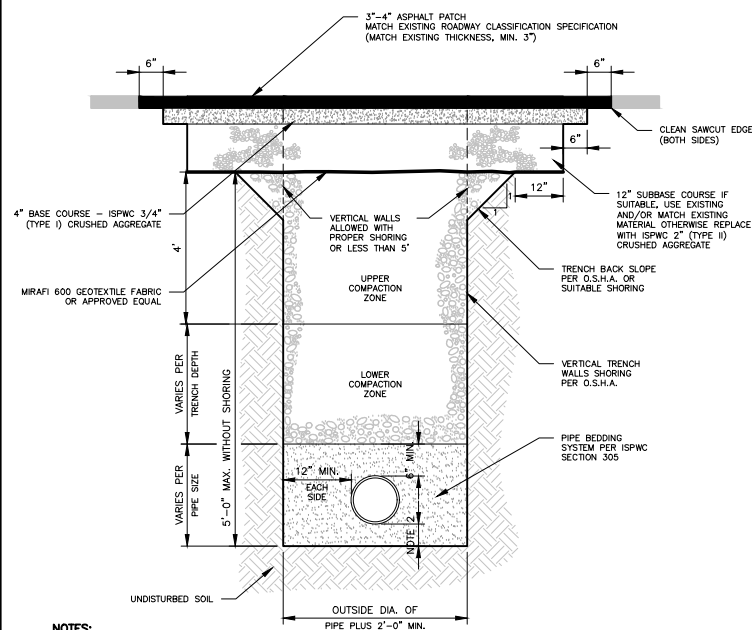
C302 TYPICAL TRENCH
TYP NOT TO SCALE



NOTES:

- TRENCH EXCAVATION PER ISPCW SECTION 301.
- PIPE BEDDING PER ISPCW SECTION 305.
- BACKFILL AND COMPACTION PER ISPCW SECTION 306.
- REFER TO ISPCW SECTION 304 FOR ADDITIONAL INFORMATION ON TRENCH FOUNDATION STABILIZATION IF NECESSARY FOR PROJECT CONSTRUCTION.
- SURFACE REPAIR PER CITY OF McCALL UTILITY TRENCH AND ISPCW SECTION 307.

C302A CITY OF McCALL - STANDARD UTILITY TRENCH
TYP NOT TO SCALE



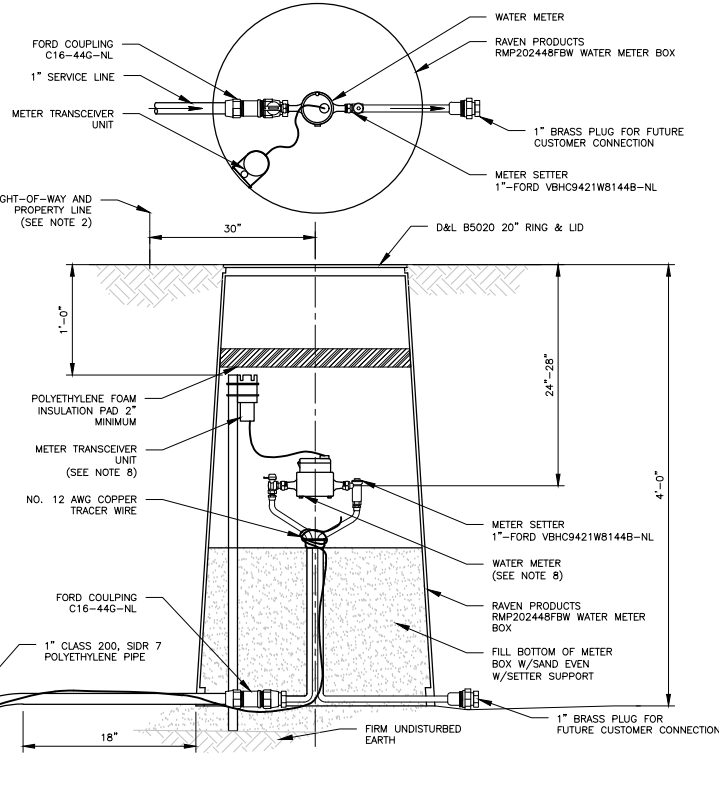
NOTES:

- TRENCH EXCAVATION PER ISPCW SECTION 301.
- PIPE BEDDING PER ISPCW SECTION 305.
- BACKFILL AND COMPACTION PER ISPCW SECTION 306.
- REFER TO ISPCW SECTION 304 FOR ADDITIONAL INFORMATION ON TRENCH FOUNDATION STABILIZATION IF NECESSARY FOR PROJECT CONSTRUCTION.
- STREET CUTS AND SURFACE REPAIRS PER ISPCW SECTION 307 UNLESS OTHERWISE SHOWN IN THIS DETAIL.
- ASPHALT CUTS AND PATCHES WILL NOT BE ALLOWED WITHIN THE WHEEL PATHS WITHOUT PRIOR WRITTEN APPROVAL FROM THE CITY OF McCALL PUBLIC WORKS DEPARTMENT.
- ALL WORKMANSHIP LOCATED WITHIN A CITY OF McCALL RIGHT-OF-WAY TO CARRY A 2-YEAR WARRANTY.

C306A CITY OF McCALL ASPHALT SURFACE REPAIR
TYP NOT TO SCALE

NOTES:

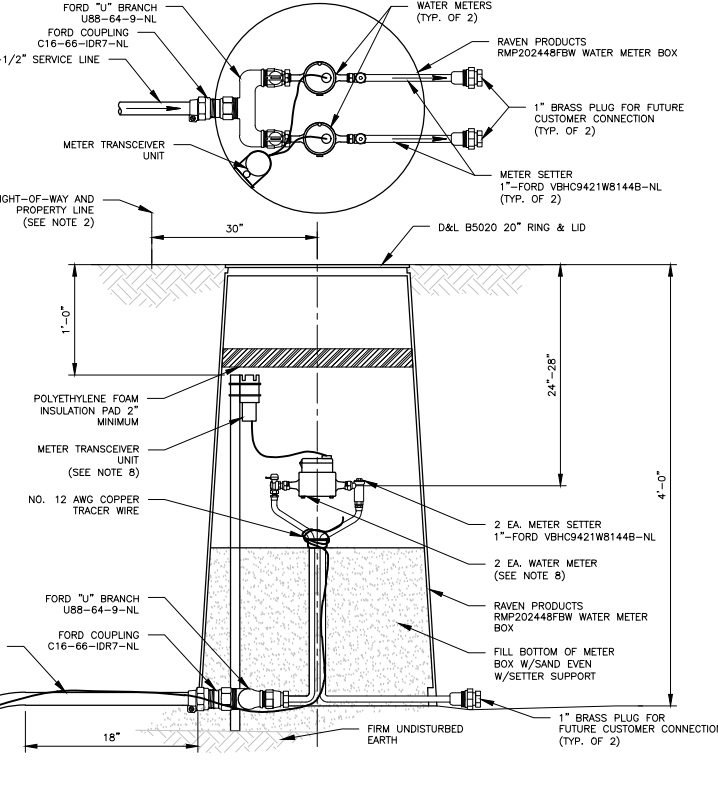
- ALL WATER SERVICE COMPONENTS SHALL BE IRON PIPE SIZE. NO GALVANIZED PIPE OR FITTINGS SHALL BE USED. WATER SERVICE SADDLE, CORPORATION STOP, AND PIPE SHALL BE SIZED AS FOLLOWS:
A. SINGLE SERVICE: 1".
- METER BOX LOCATIONS SHALL BE SHOWN ON WATER SYSTEM PLANS AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS. METER BOX LOCATION GENERALLY WILL BE LOCATED ON THE HOMEOWNER PROPERTY AS FOLLOWS:
A. SINGLE SERVICE: THIRTY (30") FROM R.O.W. CENTERED ON COMMON PROPERTY LINE.
- SERVICE PIPE SHALL BE CLASS 200, SIDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- FORD STAINLESS STEEL INSERT (STIFFENER) TO BE USED WITH POLYETHYLENE PRESSURE PIPE AT FITTINGS PER MANUFACTURERS RECOMMENDATIONS.
- SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6) FEET AND SHALL RISE TO FOUR (4) FEET, WITHIN A MAXIMUM DISTANCE OF EIGHTEEN (18") INCHES OF METER BOX.
- SERVICE CONNECTIONS SHALL BE THIRTY-SIX (36") INCHES FROM FITTINGS OR WATER MAIN PIPE ENDS. MULTIPLE SERVICE CONNECTIONS IN THE SAME JOINT OF PIPE SHALL BE SEPARATED BY TWENTY-FOUR (24") INCHES AND NOT IN THE SAME HORIZONTAL LEVEL. -ABSOLUTE-
- SERVICE PIPE SHALL BE FLUSHED IMMEDIATELY PRIOR TO METER INSTALLATION.
- WATER METERS AND TRANSCOVER UNITS TO BE SUPPLIED AND INSTALLED BY THE CITY OF McCALL.
- MAINTAIN SEPARATION DISTANCES IN ACCORDANCE WITH IDAPA 58.01.08.
- REFER TO CITY OF McCALL STANDARD REVISIONS TO ISPCW AND CONDITIONS SECTION 404 FOR REQUIREMENTS ON CONNECTIONS TO THE PRIVATE SIDE OF THE WATER METER.



C402B 1" WATER SERVICE CONNECTION
TYP NOT TO SCALE

NOTES:

- ALL WATER SERVICE COMPONENTS SHALL BE IRON PIPE SIZE. NO GALVANIZED PIPE OR FITTINGS SHALL BE USED. WATER SERVICE SADDLE, CORPORATION STOP, AND PIPE SHALL BE SIZED AS FOLLOWS:
A. DOUBLE SERVICE: 1-1/2".
- METER BOX LOCATIONS SHALL BE SHOWN ON WATER SYSTEM PLANS AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS. METER BOX LOCATION GENERALLY WILL BE LOCATED ON THE HOMEOWNER PROPERTY AS FOLLOWS:
A. DOUBLE SERVICE: THIRTY (30") FROM R.O.W. CENTERED ON COMMON PROPERTY LINE.
- SERVICE PIPE SHALL BE CLASS 200, SIDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- FORD STAINLESS STEEL INSERT (STIFFENER) TO BE USED WITH POLYETHYLENE PRESSURE PIPE AT FITTINGS PER MANUFACTURERS RECOMMENDATIONS.
- SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6) FEET AND SHALL RISE TO FOUR (4) FEET, WITHIN A MAXIMUM DISTANCE OF EIGHTEEN (18") INCHES OF METER BOX.
- SERVICE CONNECTIONS SHALL BE THIRTY-SIX (36") INCHES FROM FITTINGS OR WATER MAIN PIPE ENDS. MULTIPLE SERVICE CONNECTIONS IN THE SAME JOINT OF PIPE SHALL BE SEPARATED BY TWENTY-FOUR (24") INCHES AND NOT IN THE SAME HORIZONTAL LEVEL. -ABSOLUTE-
- SERVICE PIPE SHALL BE FLUSHED IMMEDIATELY PRIOR TO METER INSTALLATION.
- WATER METERS AND TRANSCOVER UNITS SHALL BE SUPPLIED AND INSTALLED BY THE CITY OF McCALL.
- MAINTAIN SEPARATION DISTANCES IN ACCORDANCE WITH IDAPA 58.01.08.
- REFER TO CITY OF McCALL STANDARD REVISIONS TO ISPCW AND CONDITIONS SECTION 404 FOR REQUIREMENTS ON CONNECTIONS TO THE PRIVATE SIDE OF THE WATER METER.



C404 DOUBLE WATER SERVICE CONNECTION
TYP NOT TO SCALE

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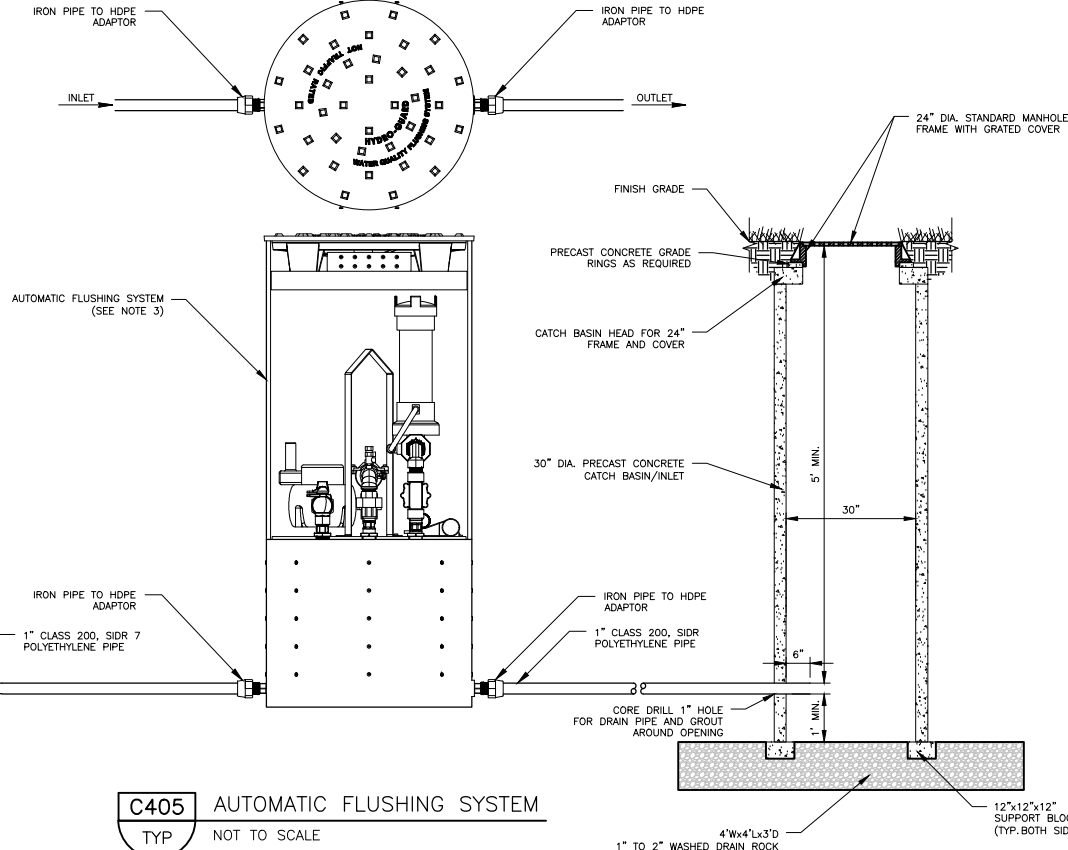
SIMMONS STREET TOWNHOUSES
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AND GRADING IMPROVEMENTS PROJECT
CIVIL TYPICAL DETAIL - 1

VERIFY SCALE	
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PROJECT	22025
DATE	4/26/2023
DRAWING NO.	SHEET NO.
GC-1	8 OF 11

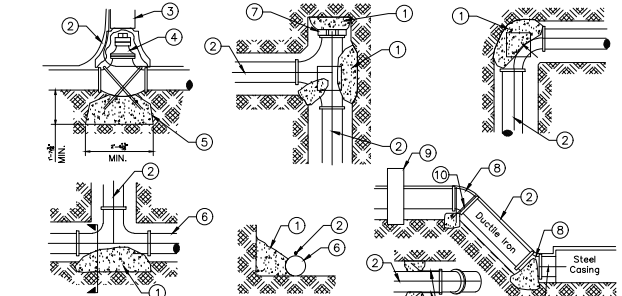
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NOTES:

- ALL WATER SERVICE COMPONENTS SHALL BE IRON PIPE SIZE. NO GALVANIZED PIPE OR FITTINGS SHALL BE USED. WATER SERVICE SADDLE, CORPORATION STOP, AND PIPE SHALL BE SIZED AS FOLLOWS:
 - SINGLE SERVICE: 1".
- AUTOMATIC FLUSHING SYSTEM LOCATIONS SHALL BE SHOWN ON WATER SYSTEM PLANS AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS.
- AUTOMATIC FLUSHING SYSTEM TO BE MUELLER HYDRO-GUARD 300 SERIES COLD CLIMATE FLUSHING SYSTEM WITH 60" BURY DEPTH. SEE INSTALLATION MANUAL FOR INFORMATION ON INSTALLATION OF AUTOMATIC FLUSHING SYSTEM.
- SERVICE PIPE SHALL BE CLASS 200, SIDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- FORD STAINLESS STEEL INSERT (STIFFENER) TO BE USED WITH POLYETHYLENE PRESSURE PIPE AT FITTINGS PER MANUFACTURERS RECOMMENDATIONS.
- SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6) FEET AND SHALL RISE TO FIVE (5) FEET, WITHIN A MAXIMUM DISTANCE OF EIGHTEEN (18) INCHES OF FLUSHING SYSTEM.
- SERVICE CONNECTIONS SHALL BE THIRTY-SIX (36) INCHES FROM FITTINGS OR WATER MAIN PIPE ENDS. MULTIPLE SERVICE CONNECTIONS IN THE SAME JOINT OF PIPE SHALL BE SEPARATED BY TWENTY-FOUR (24) INCHES AND NOT IN THE SAME HORIZONTAL LEVEL. -ABSOLUTE-
- MAINTAIN SEPARATION DISTANCES IN ACCORDANCE WITH IDAPA 56.01.06.
- ALL CATCH BASIN JOINTS TO INCLUDE CON-SEAL "CS-320 MASTIC" AND BE GROUTED (INSIDE & OUT) USING QUIKRETE "NON-SHRINK GENERAL PURPOSE GROUT." EXTERIOR MANHOLE JOINTS TO BE COVER WITH PRESS SEAL "EZ-WRAP" BUTYL ADHESIVE TAPE AFTER GROUTING. PRIME JOINT SURFACE USING A SPRAY ADHESIVE PRIOR TO EZ-WRAP APPLICATION.
- CATCH BASIN/INLET MANHOLE TO BE LOCATED PER PLANS.



C405 AUTOMATIC FLUSHING SYSTEM
TYP NOT TO SCALE



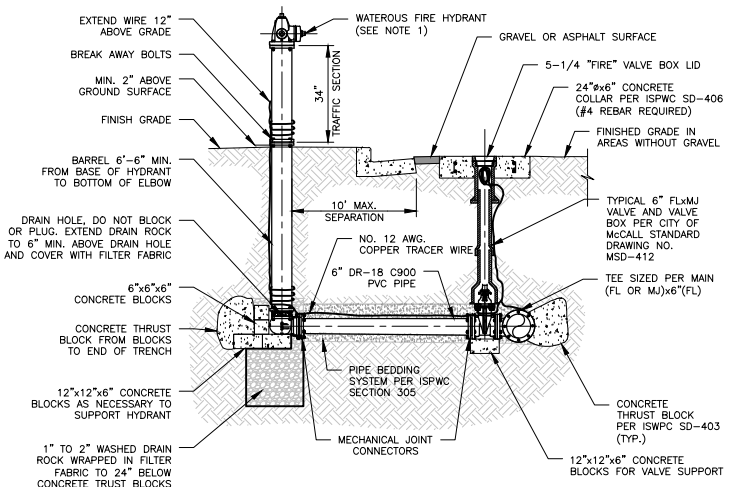
- LEGEND**
- FOR HORIZONTAL PIPE BENDS, BEARING THRUST BLOCKS MUST PROVIDE 2500 PSI CONCRETE, POURED AGAINST UNDISTURBED EARTH PER TABLE 1.
 - NO. 12 COPPER FINDER WIRE.
 - C.I. VALVE BOX WITH COVER.
 - C.I. GATE VALVE.
 - PRECAST BLOCK FOR CUT IN TEE AND VALVE OR CAST IN PLACE WITH (2) 1/2" MIN. REBAR.
 - PIPE.
 - PLUG.
 - RESTRAINED JOINTS.
 - HAMMERHEAD THRUST BLOCKING.
 - ANCHOR TIE (1/2" MIN.)
- GENERAL NOTES:**
- ANCHOR ALL BURIED VALVES AS SHOWN.
 - WRAP BOLTS AND FLANGES WITH 6 MIL. POLYPROPYLENE TO PROTECT FROM CONCRETE ADHERENCE DURING CONSTRUCTION OF THRUST BLOCKS.
 - SEE CHART FOR MINIMUM THRUST BLOCKS BEARING AREAS.
 - ALL CONCRETE SHALL BE MIN. OF 6 CU. FT. AND HAVE A MIN. TWENTY-EIGHT(28) DAY COMPRESSIVE STRENGTH OF NOT LESS THAN 2500 PSI POURED AGAINST UNDISTURBED EARTH.
 - THRUST BLOCKING SHALL BE PLACED BETWEEN UNDISTURBED EARTH AND THE FITTING TO BE ANCHORED.
 - THRUST BLOCKING SHALL BE PLACED SO THAT THE PIPE AND FITTING JOINTS WILL BE ACCESSIBLE TO REPAIRS.
 - ALL FITTINGS SHALL HAVE A 12"x12"x4" CONCRETE SUPPORT BLOCK.
 - ALL THRUST BLOCKS CAST IN PLACE UNLESS OTHERWISE NOTED.
 - PROVIDE 6 MIL. POLYPROPYLENE BETWEEN FITTINGS AND CONCRETE.
 - NOTIFY ENGINEER FOR ANY CONDITION OR PIPE SIZE NOT INDICATED.
 - ISWPC SD-403 APPLIES WHERE MORE STRINGENT.

SOIL BEARING PRESSURE = 2,000 PSF
WORKING PRESSURE RATING = 150 PSI
SAFETY FACTOR = 1.5

PIPE SIZE	TEE OR END	BENDS 45°	BENDS 90°	TEE OR END	REDUCER
3"	0.8	1.1	0.6	0.3	0.3
4"	1.4	2.0	1.1	0.6	0.6
6"	3.2	4.5	2.4	1.2	1.2
8"	5.7	8.0	4.3	2.2	2.2
10"	8.8	12.5	6.8	3.4	3.4
12"	12.7	18.0	9.7	5.0	5.0
14"	17.3	24.5	13.3	6.8	6.8
16"	22.6	32.0	17.3	8.8	8.8
18"	28.6	40.5	21.9	11.2	11.2

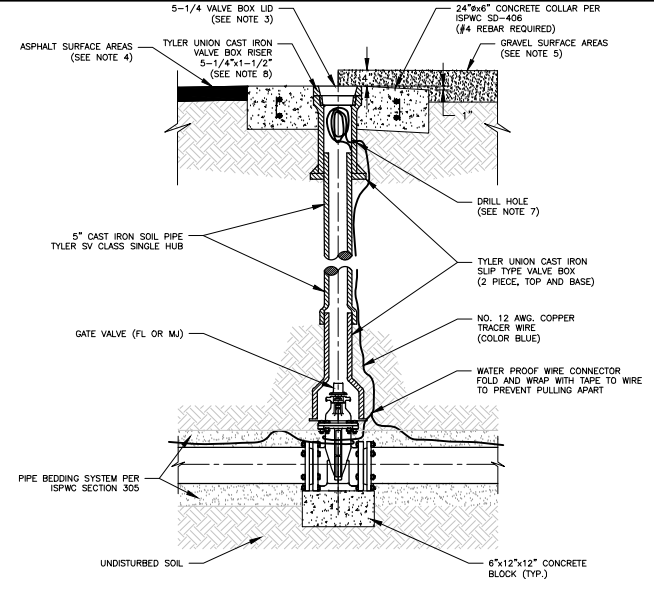
* MUST BE INCREASED BASED ON DIFFERENT CONDITIONS (HIGHER WORKING PRESSURE OR LOWER SOIL BEARING STRENGTH)
** OR TEE ACTING AS A 90° BEND
*** THRUST BLOCK DEPTH TO BE A MINIMUM OF 12" FOR PIPE SIZES 3"-8" AND 18" FOR PIPE SIZES 10"-18" OR THE SQUARE ROUTE OF THE REQUIRED BEARING AREA, WHICHEVER IS GREATER.

C406 THRUST BLOCKS
TYP NOT TO SCALE



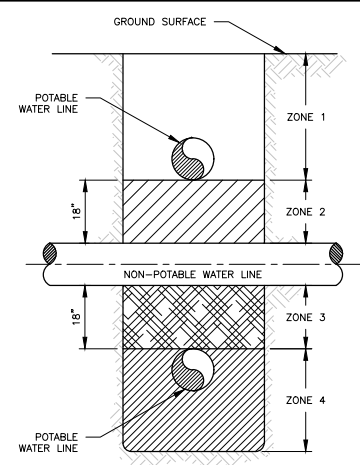
- NOTES:**
- FIRE HYDRANT SHALL BE PACER 100, MODEL NO. W867-250, WITH 1 4" PUMPER OUTLET AND 2 EA. 2-1/2" OUTLETS WITH A THIRTY-FOUR (34) INCH TRAFFIC SECTION, MADE BY WATEROUS CO. AND INSTALLED WITH THE FIRE HYDRANT HOSE ATTACHMENT FOUR (4) FEET ABOVE EXISTING GROUND. FIRE HYDRANT PAINT COLOR TO BE IN ACCORDANCE WITH LOCAL STANDARDS. 4" PUMPER NOZZLE SHALL ALIGN WITH LATERAL AND ASSOCIATED FIRE HYDRANT VALVE.
 - FINAL HYDRANT LOCATIONS SHALL BE FIELD APPROVED BY THE CITY OF McCALL AND McCALL FIRE PROTECTION DISTRICT PRIOR TO INSTALLATION.
 - HYDRANT SHALL NOT BE PLACED CLOSER THAN TEN (10) FEET MINIMUM FROM SEWER, FIFTY (50) FEET MINIMUM FROM SEPTIC SYSTEMS AND TWENTY FIVE (25) FEET MINIMUM FROM SEEPAGE BEDS.
 - HYDRANT MUST BE INSTALLED ABOVE GROUND/SURFACE WATER AND FINISHED GRADE TO SLOPE AWAY FROM STRUCTURE.
 - MINIMUM DISTANCE FROM THE FIRE HYDRANT TO THE FIRE HYDRANT GATE VALVE SHALL BE FIVE (5) FEET.
 - PLACE LOCATOR WIRE DIRECTLY ABOVE PIPE. SECURE FINDER WIRE UNDER (M) BOLT AT MAIN.
 - ALL JOINTS SHALL BE RESTRAINED. JOINT RESTRAINT DEVICES MAY BE USED AS AN ALTERNATE TO THRUST BLOCK WITH ENGINEER'S APPROVAL.
 - ALL ANCHORS AND BLOCKING TO BEAR AGAINST UNDISTURBED SOIL.
 - ALL AUXILIARY FIRE HYDRANT VALVES TO BE LOCATED AT THE TEE ON THE WATER MAIN AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER. WHERE EXISTING FITTINGS ARE NOT COMPATIBLE WITH NEW MAIN CONSTRUCTION, USE SUITABLE ADAPTERS OR NEW FITTINGS UPON APPROVAL BY THE ENGINEER.
 - IF WATER SERVICE TO HYDRANT IS TO COMMENCE PRIOR TO SETTING OF CONCRETE THRUST BLOCKING, USE APPROVED MECHANICAL JOINT RESTRAINTS, AS APPROVED BY THE ENGINEER.
 - HYDRANTS THAT ARE TO BE RELOCATED AS CALLED FOR ON THE PLANS SHALL BE REINSTALLED IN ACCORDANCE WITH THIS DETAIL LOCATION TO BE SET IN ACCORDANCE WITH LOCAL STANDARDS OR AS DIRECTED BY THE ENGINEER.

C408 FIRE HYDRANT INSTALLATION
TYP NOT TO SCALE



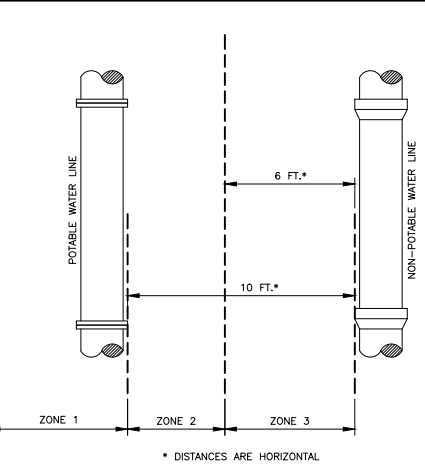
- NOTES:**
- ALL GATE VALVES SHALL BE NON-RISING STEM RESILIENT SEATED GATE VALVES MEETING ANSI/AWWA C515 FOR WATER SUPPLY SERVICE.
 - CLEAN VALVE BOX OF ALL DEBRIS AND SOIL.
 - ALL VALVE BOX LIDS TO BE 5 1/4" DROP LIDS. ALL WATER VALVE BOX LIDS TO BE STAMPED "WATER" AND ALL FIRE VALVE BOX LIDS TO BE STAMPED "FIRE".
 - FOR ASPHALT SURFACE, CONCRETE COLLAR TO BE 1/4" BELOW FINISHED GRADE.
 - FOR GRAVEL ROADWAY SURFACE, CONCRETE COLLAR TO BE 4" BELOW FINISHED GRADE AND SLOPED AWAY FROM VALVE BOX LID SO THAT OUTSIDE EDGE IS 1" LOWER.
 - VALVE BOXES OUTSIDE OF PAVED OR GRAVEL ROADWAYS SHALL HAVE A CONCRETE COLLAR POURED TO BE FLUSH WITH FINISHED GRADE.
 - DRILL 7/8" HOLE IN TOP PORTION OF VALVE BOX. PLACE PVC VALVE GROMMET INTO HOLE AND ROUTE TRACER WIRE THROUGH HOLE.
 - TYLER UNION CAST IRON RISER IS NOT TO BE USED WITHIN STATE HIGHWAYS. ONLY FOR USE WITHIN CITY OF McCALL ROADWAYS.

C412 STANDARD VALVE BOX INSTALLATION
TYP NOT TO SCALE



- VERTICAL SEPARATION REQUIREMENTS**
- ZONE 1: A) WATER AND NPWL MUST BE SEPARATED BY AT LEAST 18" AND B) ONE FULL, UN-CUT LENGTH OF BOTH PWL AND NPWL PIPE MUST BE CENTERED ON THE CROSSING SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE CROSSING.
- ZONE 2: A) ONE FULL, UN-CUT LENGTH OF BOTH PWL AND NPWL PIPE MUST BE CENTERED ON THE CROSSING SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE CROSSING.
- AND EITHER B) NPWL MUST BE CONSTRUCTED TO WATER MAIN STANDARDS AND PRESSURE TESTED FOR WATER TIGHTNESS FOR A HORIZONTAL DISTANCE OF 10 FEET ON BOTH SIDES OF CROSSING.
- OR C) EITHER THE NPWL OR WATER LINE OR BOTH MUST BE ENCASED WITH A SLEEVING MATERIAL ACCEPTABLE TO DEQ FOR A HORIZONTAL DISTANCE OF 10 FEET ON BOTH SIDES OF THE CROSSING.
- ZONE 3: A) SAME REQUIREMENTS AS ZONE 2 EXCEPT THE NPWL MUST ALSO BE SUPPORTED ABOVE THE CROSSING TO PREVENT SETTLING.
- ZONE 4: A) SAME REQUIREMENTS AS ZONE 1 EXCEPT THE NPWL MUST ALSO BE SUPPORTED ABOVE THE CROSSING TO PREVENT SETTLING.
- HORIZONTAL SEPARATION REQUIREMENTS**
- ZONE 1: A) NO SPECIAL REQUIREMENTS.
- ZONE 2: A) NO SPECIAL REQUIREMENTS FOR POTABLE OR NON-POTABLE SERVICES.
- B) WATER AND NPWL SEPARATED BY AT LEAST 6 FEET AT OUTSIDE WALLS.
- AND C) WATER AT LEAST 18 INCHES HIGHER IN ELEVATION THAN THE NPWL.
- AND EITHER D) NPWL CONSTRUCTED TO WATER MAIN STANDARDS AND PRESSURE TESTED FOR WATER TIGHTNESS.
- OR E) SITE SPECIFIC REQUIREMENTS APPROVED BY DEQ.
- ZONE 3: A) NOT ALLOWED WITHOUT DEQ WAIVER.

C414 POTABLE/NOT-POTABLE WATER LINE (NPWL) SEPARATION
TYP NOT TO SCALE



C426 CAP AND PLUG DETAIL
TYP NOT TO SCALE

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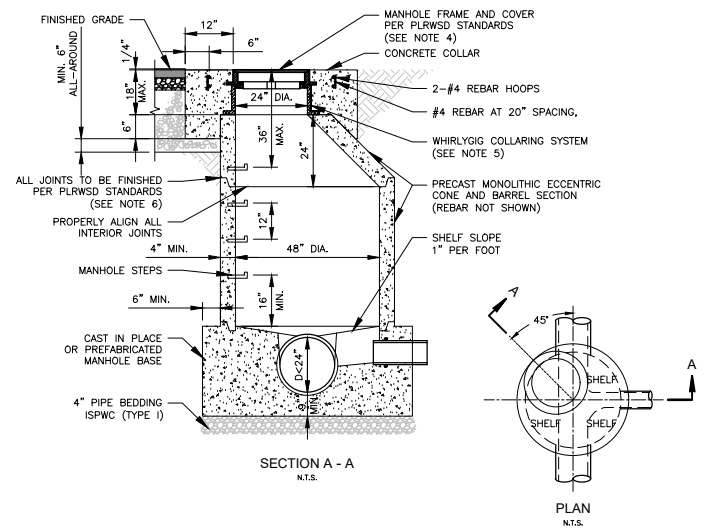


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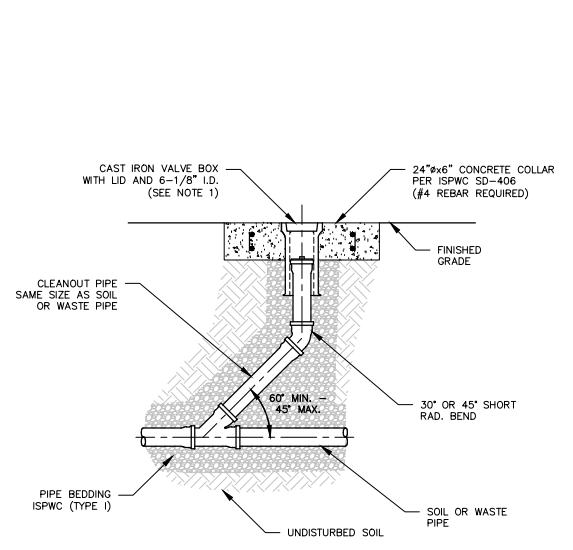
SIMMONS STREET TOWNHOUSES
McCALL, IDAHO
ROADWAY, DOMESTIC WATER, SANITARY SEWER
AND GRADING IMPROVEMENTS PROJECT
CIVIL TYPICAL DETAILS - 2

VERIFY SCALE	
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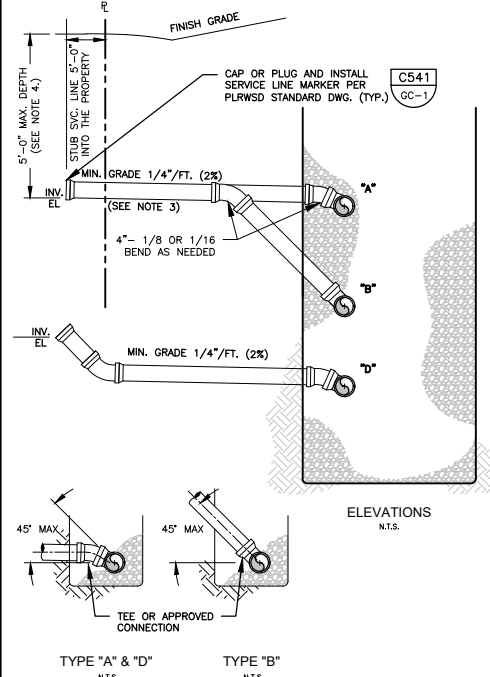
- NOTES:**
- OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEERS APPROVAL.
 - PLACE VERTICAL WALL ON UPSTREAM SIDE OF MANHOLE, ROTATED 45 DEGREES.
 - WHERE PVC PIPE IS UTILIZED, INSTALL A RUBBER RING OR GASKET COLLAR WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL.
 - ALL MANHOLES TO HAVE CAST-IRON DUST PANS CONSTRUCTED WITH INTEGRAL MACHINED FLANGES CAST INTO THE FRAME. DUST PANS TO HAVE A RAISED DRAIN HOLE AND WIRE LIFTING STRAP. MANHOLE COVER TO BE STAMPED "PLWSD SEWER". FRAMES, COVERS, AND DUSTPANS TO BE MANUFACTURED BY KITS FOUNDRY & MACHINE, INC. (208) 357-7773.
 - "WHIRLYGIG" COLLARING SYSTEM REQUIRED ON ALL MANHOLES IN PLACE OF CONCRETE GRADE RINGS. JOINT BETWEEN WHIRLYGIG COLLARING SYSTEM (BOTTOM OF PLASTIC FLANGE) AND TOP OF MANHOLE CONE SHALL BE SEALED WITH "VULKEM 116" HIGH-PERFORMANCE POLYURETHANE SEALANT.
 - ALL MANHOLE JOINTS TO INCLUDE CON-SEAL "CS-102 BUTYL RUBBER SEALANT," "VULKEM 116" HIGH-PERFORMANCE POLYURETHANE SEALANT, AND BE GROUTED (INSIDE & OUT) USING DAYTON 1107 ADVANTAGE, SPECHEM SC MULTIPURPOSE GROUT, OR EQUAL APPROVED BY PLWSD. EXTERIOR MANHOLE JOINTS TO BE COVERED WITH NINE (9") INCH WIDE INF-SHIELD GATER WRAP AFTER GROUTING.
 - PROVIDE MANHOLE CONCRETE REINFORCING TO ACCOMMODATE TRAFFIC LOADS.

C501 PLWSD - STANDARD MANHOLE
TYP NOT TO SCALE



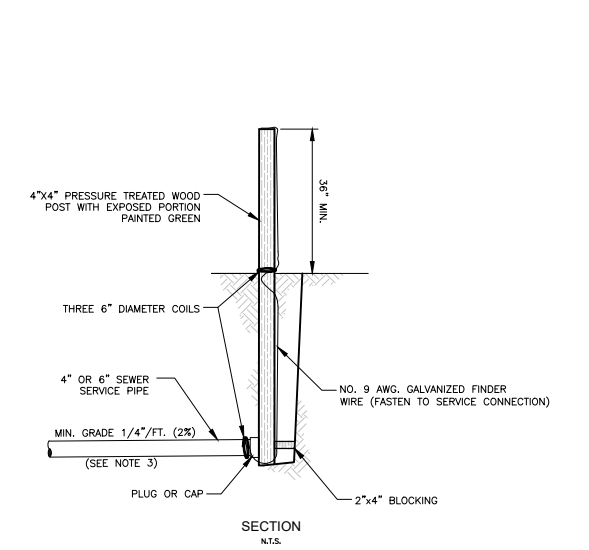
- NOTES:**
- CLEANOUT VALVE BOX LIDS TO BE A 5 1/4" DROP LID MARKED "SEWER" WHEN ASSOCIATED WITH GRAVITY SEWER PIPING AND HAVE NO MARKINGS (BLANK) WHEN ASSOCIATED WITH ALL OTHER PIPING.

C520 STANDARD SEWER CLEANOUT
TYP NOT TO SCALE



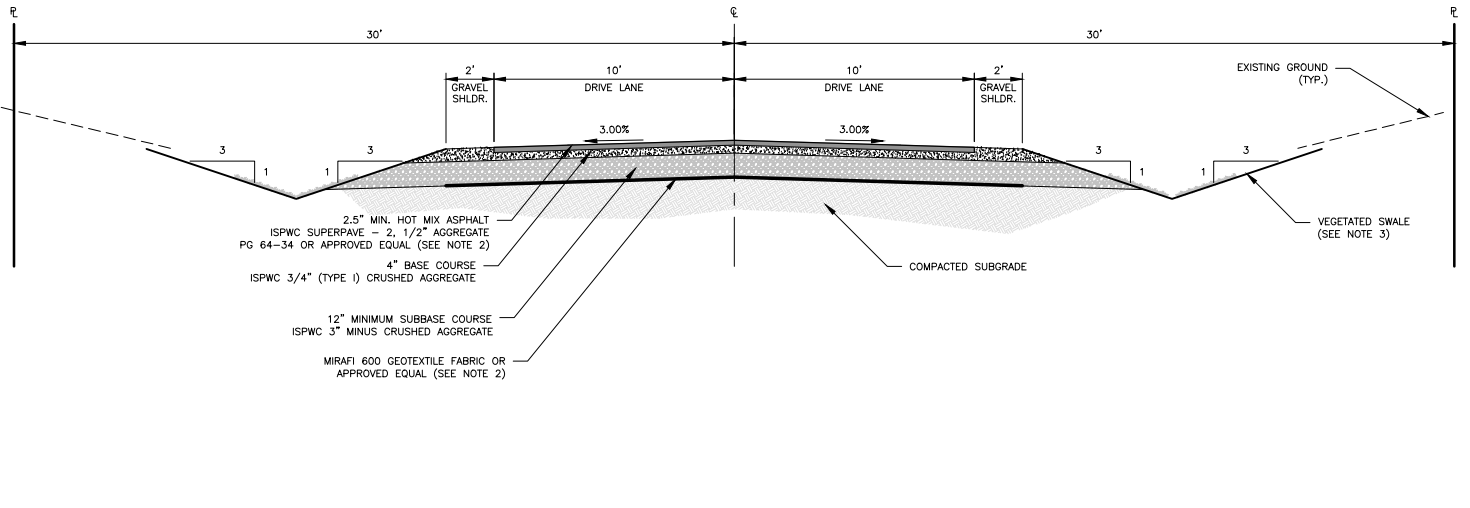
- NOTES:**
- ALL SERVICE LINES TO BE FOUR (4") INCHES INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - SERVICE LINE TO BE STUBBED A MINIMUM OF 5'-0" INTO PRIVATE PROPERTY OR AS INDICATED ON THE CONSTRUCTION PLANS.
 - MINIMUM SLOPE OF SEWER LATERALS SHALL BE 2% UNLESS OTHERWISE AUTHORIZED BY THE APPROVING AUTHORITY OR SPECIFICALLY CALLED OUT ON THE CONSTRUCTION DRAWINGS. IN NO CASE SHALL THE SLOPE BE LESS THAN 1%.
 - A MINIMUM OF THREE (3') FEET COVER DEPTH MAY BE ALLOWABLE WITH PRIOR APPROVAL FROM THE PLWSD.

C535 STANDARD SEWER SERVICE LINES
TYP NOT TO SCALE



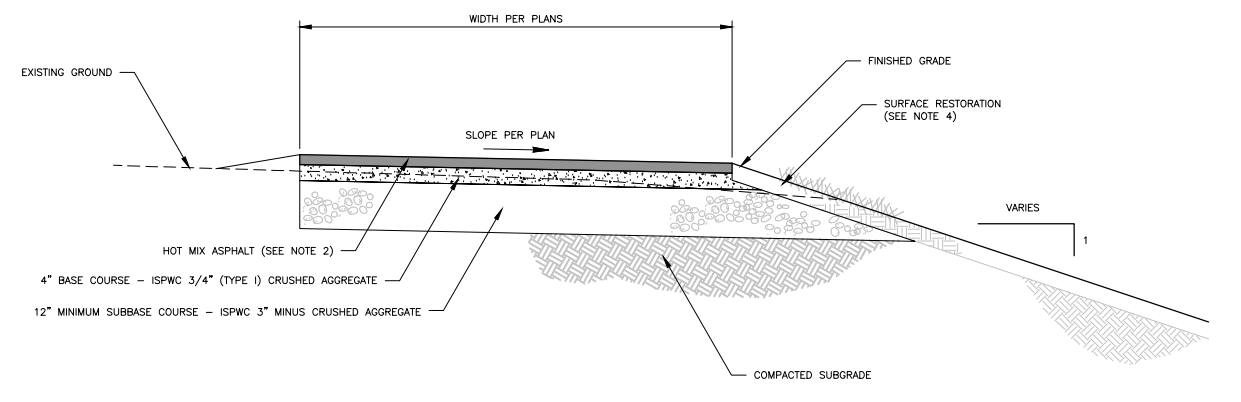
- NOTES:**
- ALL SERVICE LINES TO BE FOUR (4") INCHES INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - SERVICE LINE TO BE STUBBED A MINIMUM OF 5'-0" INTO PRIVATE PROPERTY OR AS INDICATED ON THE CONSTRUCTION PLANS.
 - MINIMUM SLOPE OF SEWER LATERALS SHALL BE 2% UNLESS OTHERWISE AUTHORIZED BY THE APPROVING AUTHORITY OR SPECIFICALLY CALLED OUT ON THE CONSTRUCTION DRAWINGS. IN NO CASE SHALL THE SLOPE BE LESS THAN 1%.

C541 STANDARD SEWER SERVICE MARKER
TYP NOT TO SCALE



- NOTES:**
- COMPACTION AND TESTING FOR ALL AGGREGATE BASE/SUBBASE MATERIAL SHALL BE IN ACCORDANCE WITH ISPCW 802.
 - ASPHALT FOUR (4") INCHES IN THICKNESS SHALL BE PLACED IN TWO (2") INCH LIFTS. ASPHALT THREE (3") INCHES OR LESS SHALL BE PLACED IN A SINGLE LIFT.
 - GEOTEXTILE FABRIC TO EXTEND 1' MIN. BEYOND THE EDGE OF ASPHALT. ALL SEAMS TO OVERLAP 2' MIN.
 - COMPACTION AND TESTING FOR ALL HOT MIX ASPHALT SHALL BE IN ACCORDANCE WITH ISPCW SECTION 810 AND PROJECT PLANS AND SPECIFICATIONS.
 - REVEGETATE ALL DISTURBED AREAS WITH A CITY APPROVED GRASS MIXTURE OVER FOUR (4") INCHES OF TOPSOIL, PER APPROVED LANDSCAPING PLAN, OR AS INDICATED WITHIN THE PLANS.

C800 ROADWAY TYPICAL SECTION - DRIVEWAY
TYP SCALE: 1" = 4'



- NOTES:**
- COMPACTION AND TESTING FOR ALL AGGREGATE BASE/SUBBASE MATERIAL SHALL BE IN ACCORDANCE WITH ISPCW SECTION 802.
 - HOT MIX ASPHALT THICKNESS/DEPTH TO BE PER THE PROJECTS GEOTECHNICAL EVALUATION. USE ISPCW 1/2" SP3, PG64-34 FOR ALL ROADS/MAIN DRIVEWAY SURFACES AND ISPCW 1/2" SP2, PG58-28 FOR INDIVIDUAL DRIVEWAY APPROACHES TO RESIDENCES.
 - COMPACTION AND TESTING FOR ALL HOT MIX ASPHALT SHALL BE IN ACCORDANCE WITH ISPCW SECTION 810.
 - SURFACE RESTORATION TO BE PER THE PROJECTS LANDSCAPING PLANS. IF LANDSCAPE PLANS HAVE NOT BEEN PROVIDED BY THE OWNER, SURFACE RESTORATION SHALL INCLUDE 2"-3" OF GRAVEL OR PLACED TOPSOIL REVEGETATED WITH A NATIVE SEED MIXTURE PER AS INDICATED.

C806 TYPICAL PAVING SECTION
TYP NOT TO SCALE

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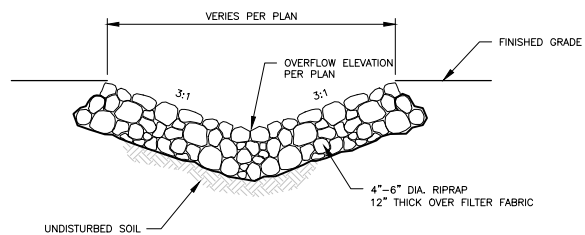


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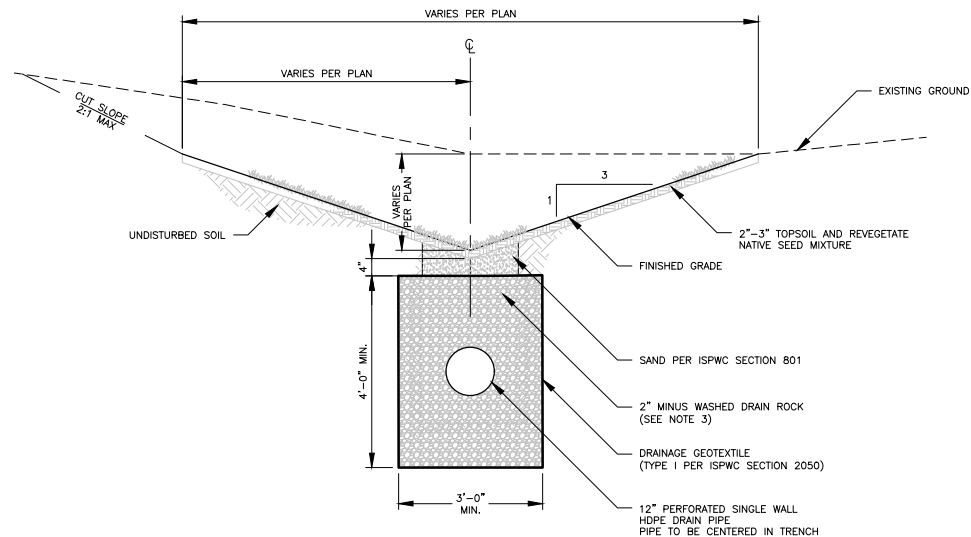
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AND GRADING IMPROVEMENTS PROJECT
CIVIL TYPICAL DETAILS - 3

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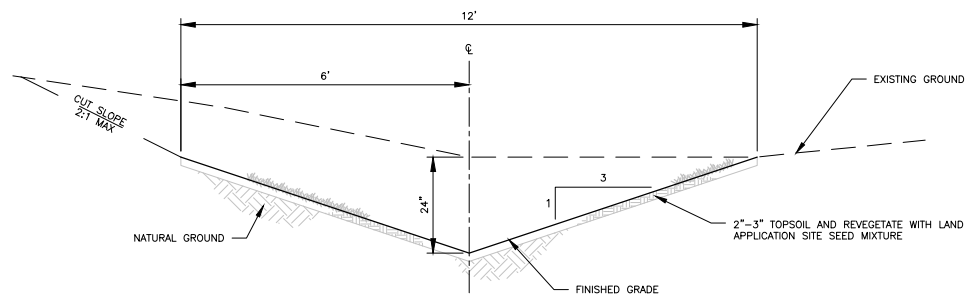
C1014 WEIR OVERFLOW DETAIL
TYP NOT TO SCALE



NOTES:

1. REFER TO IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY'S CATALOG OF STORMWATER BEST MANAGEMENT PRACTICES, VOLUME 4, SECTION 3, BMP 17 AT WWW.DEQ.IDAHO.GOV/MEDIA/622263--STORMWATER.PDF FOR ADDITIONAL INFORMATION.
2. TYPICAL TRENCH CONSTRUCTION AS PER TRENCH DETAIL STANDARD DRAWING OR ISPMC SD-301.
3. DRAIN ROCK BACKFILL TO BE 2" MINUS DIAMETER AND RELATIVELY CLEAN OF FINES. IF DRAIN ROCK IS FOUND TO BE UNSUITABLY DIRTY WHEN IT ARRIVES AT THE SITE, IT SHOULD BE CLEANED BEFORE PLACEMENT.
4. PERFORATED PIPE TO HAVE CAP ATTACHED TO BOTH ENDS TO PREVENT DRAIN ROCK FROM ENTERING THE PIPE.
5. BACKFILL AND COMPACTION PER ISPMC SECTION 306.

C1010 DRAINAGE SWALE/DETENTION DETAIL
TYP NOT TO SCALE



NOTES:

1. REFER TO IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY'S CATALOG OF STORMWATER BEST MANAGEMENT PRACTICES, VOLUME 4, SECTION 3, BMP 9 AT WWW.DEQ.IDAHO.GOV/MEDIA/622263--STORMWATER.PDF FOR ADDITIONAL INFORMATION.

C1401 BIOFILTRATION SWALE (VEGETATED SWALE)
TYP NOT TO SCALE

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CIVIL TYPICAL DETAILS - 4

VERIFY SCALE	
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DATE	4/26/2023
DRAWING NO.	SHEET NO.
GC-4	11 OF 11

SIMMONS STREET TOWNHOUSES

STORMWATER DRAINAGE REPORT

APRIL 2023

Prepared for:

Synergy Structures, LLC
PO Box 1006
McCall, ID 83638



Crestline Engineers, Inc.
323 Deinhard Lane, Suite C
PO Box 2330
McCall, Idaho 83638
(208) 634-4140

SIMMONS STREET TOWNHOUSES

STORMWATER DRAINAGE REPORT

APRIL 2023

Crestline Engineers, Inc.
323 Deinhard Lane, Suite C
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(208) 634-4140

SIMMONS STREET TOWNHOUSES
STORMWATER DRAINAGE REPORT
APRIL 2023

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DRAWING NO. C-5	GRADING, DRAINAGE, AND STORMWATER MANAGEMENT PLAN
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DRAWING NO. GC-2	CIVIL TYPICAL DETAILS – 2
DRAWING NO. GC-3	CIVIL TYPICAL DETAILS – 3
DRAWING NO. GC-4	CIVIL TYPICAL DETAILS – 4

SECTION I

STORMWATER APPLICATION, CITY OF MCCALL

STORMWATER APPLICATION
City of McCall

Fill in all information. Submit one copy of signed application and three copies of Stormwater Management Plan/Report to the City Engineer.

1. Project Name: _____
Location: _____

2. Owner's Name: _____
Street: _____ City: _____
State: _____ Zip Code: _____ Phone: _____

3. Project Description: _____

a. Total property area, in acres. _____
b. Proposed impervious surface (asphalt, rooftop, concrete, sidewalk, etc.) in square feet. _____


c. Describe existing vegetation present on site. _____

d. Start date of construction. _____
e. Estimated length of time to complete improvements. _____

4. Stormwater Management Plan/Report attached? Yes No

5. Circle the section of the Stormwater Management Plan/Report Checklist which are applicable to project.
A B C D E F

6. Party responsible for operation and maintenance of project, including maintenance of temporary and permanent Best Management Practices:

			8-23-22
_____	_____	_____	_____
Name	Title	Signature	Date
_____	_____	_____	_____
Address	Daytime Phone	After Hours Phone	

Do not write below this line.

This Stormwater Management Plan/Report is:

Approved: _____

Not Approved: _____

Approved, with conditions: _____

By The City of McCall

Representative	Title	Signature	Date

SECTION II
STORMWATER DRAINAGE REPORT

SIMMONS STREET TOWNHOUSES

STORMWATER DRAINAGE REPORT

APRIL 2023

PART A: BASIN CHARACTERISTICS

The proposed project consists of the construction of a 5-unit townhome style building, an asphalt driveway, and an asphalt parking lot. Construction improvements associated with the project include asphalt driveway, sanitary sewer, domestic water, grading, drainage, and stormwater management improvements. The project is located near the Scott Street just south of Scott Street on Simmons Street, McCall, Idaho 83638 (see Appendix A, Vicinity Map). The total property area is 0.33 acres (14,313.0 S.F.), consisting of the 5-unit townhouses and an asphalt parking lot. To better analyze the drainage patterns associated with the project, it was determined to divide the project into two drainage areas. Drainage area on-site consists mostly of the building and asphalt parking lot and is 0.43 acres (18,813.6 S.F.). Drainage area road consists of the asphalt driveway and is 0.28 acres (12,006.3 S.F.). Proposed improvements, as shown on this plan, are based upon drawings provided by Chrysalis Architecture.

The existing site consists predominately of pine trees with some existing native grass, vegetation, and weeds. The topography of the on-site drainage area is moderately flat with a shallow slope to the southwest, the average slope is approximately 0.84%. The topography of the road development area is moderately flat as well, with an average slope of approximately 1.00%. Soils located within the development areas consist primarily of Donnel sandy loam with minor amounts of Kangas fine gravelly loamy coarse sand. Donnel sandy loam is a somewhat excessively drained soil located on slopes ranging 0-2%. Please, refer to the *Soil Survey of Valley Area, Idaho, Parts of Adams and Valley Counties* for additional information on soils within the project area.

This report addresses the stormwater management and erosion/sediment control measures that will be implemented during the construction of the proposed project, thus showing the project's compliance with the City of McCall Drainage Management Guidelines (DMGs). Through the implementation of this plan, potential stormwater impacts to downstream water resources and adjoining properties will be mitigated.

The development area associated with this project consists of 0.71 acres (30,819.9 S.F.). The total proposed impervious surface area, which includes the construction of a 5-unit residential townhomes building, asphalt road, and asphalt parking, is approximately 0.44 acres (19,088.4 S.F.)¹.

a. Project Site

- a. The total site area is 0.71 acres (30,819.9 S.F.).
- b. The development areas are approximately:
 1. Drainage Area On-site: 0.43 acres (18,813.6 S.F.)

¹ The total impervious surface area represents the sum of impervious surfaces from drainage area on-site as well as drainage area road. Refer to Section III of the report for drainage area calculations.

- 2. Drainage Area Road: 0.28 acres (12,006.3 S.F.)
- c. The development density is one (1) townhome style building per 0.066 acres.
- d. The total roof area of the proposed townhome style building will be 0.17 acres (7,234.0 S.F.) after project completion.
- e. The total area of the proposed asphalt driveway/parking will be approximately:
 - 1. Drainage Area On-site: 0.18 acres (7,925.8 S.F.)
 - 2. Drainage Area Road: 0.09 acres (3,928.6 S.F.)
- f. The total post development impervious area will be approximately:
 - 1. Drainage Area On-site: 0.35 acres (15,159.8 S.F.)
 - 2. Drainage Area Road: 0.09 acres (3,928.6 S.F.)

b. Summary of the physical conditions onsite as well as for the upstream contributing area.

Onsite Drainage Area

The existing conditions within the property and upstream contributing areas are provided in Figure No. 2, Drainage Area Map, and include the following:

- a. The pre-development area is approximately 0.00% impervious.
- b. The primary flow path drainage length is approximately:
 - 1. Drainage Area On-site: 157.01ft.
 - 2. Drainage Area Road: 123.48 ft.
- c. The average slope of the primary flow path is approximately:
 - 1. Drainage Area On-site: 0.84%.
 - 2. Drainage Area Road: 1.00%.
- d. There are no known wetlands on the property.

Post development land use and associated stormwater improvements are shown within the Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan. Upon completion of the proposed project, the post development land use conditions will be as follows:

- a. The post development impervious areas will be approximately:
 - 1. Drainage Area On-site: 80.58%.
 - 2. Drainage Area Road: 32.72%.
- b. The primary flow path drainage length is approximately:
 - 1. Drainage Area On-site: 160.83ft.
 - 2. Drainage Area Road: 238.39 ft.
- c. The average slope of the post primary flow path is approximately:
 - 1. Drainage Area On-site: 1.52%.
 - 2. Drainage Area Road: 1.90%.
- d. There are no known wetlands on the property.

Upstream Contributing Drainage Area

Any off-site runoff flowing towards the site will be slowed, treated, and conveyed around the property by the proposed vegetated swales, detention basin and infiltration trench. Current runoff flowing on-site enters from the northeast side of the property and drains through the existing vegetation on-site, exiting near the southern property boundary.

c. Existing drainage facilities impacted by the proposed development on the site and downstream of the proposed development.

There are no known existing drainage facilities on-site that will be impacted by the proposed improvements.

PART B: EROSION AND SEDIMENT CONTROL

1. Description of existing site prior to activity.

- a. Total Property Area = 0.71 acres (30,819.9 S.F.)
Development Area On-site = 0.43 acres (18,813.6 S.F.)
 Woods – Grass Combination = 0.43 acres (18,813.6 S.F.)
Development Area Road = 0.28 acres (12,006.3 S.F.)
 Woods – Grass combination = 0.28 acres (12,006.3 S.F.)
Total Impervious Surface Area = 0.00 acres (0.00 S.F.)
- b. A minor amount of off-site runoff currently enters the project site from the northeast. The runoff flows through the existing vegetation, exiting at the southern property boundary as shown in Figure No. 2, Drainage Area Map.

2. Description of proposed land improvement activity.

- a. Total Property Area = 0.71 acres (30,819.9 S.F.)
Development Area On-site = 0.43 acres (18,813.6 S.F.)
 Building Roofs = 0.17 acres (7,234.0 S.F.)
 Asphalt Road/Parking = 0.18 acres (7,925.8 S.F.)
 Open Space = 0.08 acres (3,653.8 S.F.)
 Total Impervious Surface Area = 0.35 acres (15,159.8 S.F.)
Development Area Road = 0.28 acres (12,006.3 S.F.)
 Asphalt Road/Parking = 0.09 acres (3,928.6 S.F.)
 Open Space = 0.19 acres (8,077.7 S.F.)
 Total Impervious Surface Area = 0.09 acres (3,928.6 S.F.)
- b. The proposed project's overall drainage pattern will be slightly modified due to the proposed improvements. All on-site grading will be completed per Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan. Upon completion of the project, the site will utilize two (2) proposed detention basins to manage first-flush

The latest elevations I saw show the roofs sloping towards the east, and the detention basin is shown on the north side of the building.

treatment. In addition, the eastern side of the property has been sloped to convey roof runoff to the southern detention basin where it will be detained. The proposed detention basins will be located as shown within Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan.

3. A plan which demonstrates the methods for sediment and erosion control. The plan should indicate the size, location and method for installation or implementation of the BMPs.

Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan is shown within the figures/drawings found in Appendix A.

4. Details and specifications for the proposed BMPs which describe their installation and maintenance procedures.

Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan in Appendix A, identifies the locations of the proposed erosion and stormwater controls to be implemented as part of the project's construction. The following best management practices (BMPs) are presented, as listed in the Idaho Department of Environmental Quality's Catalog of Stormwater Best Management Practices for Idaho Cities and Counties:

- Timing of construction is critical to reduce erosion potential. Schedule and sequence construction work and erosion control applications so that they occur under optimal conditions that is, during periods when the potential for erosion is lowest, such as dry weather (Erosion and Sediment Control BMP 36, Construction Timing).
- The Staging Area is to be located near the project entrance along with portable toilets, garbage receptacles, concrete washout, and all other contractor facilities (Sediment Control BMP 37, Staging Areas).
- Protection of existing vegetation is prescribed for all areas outside of the grading and construction limits. If possible, existing weeds should be maintained to provide a vegetated buffer to filter runoff during construction (Erosion Control BMP 38, Preserve Topsoil and Vegetation).
- Work activities shall take place within the clearing/construction limits as shown on Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan. The contractor shall always preserve natural vegetation outside of clearing limits (Erosion Control BMP 39, Clearing Limits).
- Stabilize Construction Entrance/Exit (Erosion and Sediment Control BMP 41, Stabilized Construction Roads, and Staging Areas).
- Additional use of good housekeeping practices, where applicable, during all aspects of the construction project shall be incorporated.

- BMP 40 Vehicle Sediment Control
 - BMP 43 Dust Control
 - BMP 44 Stockpile Management
 - BMP 45 Minimize Soil Compaction
 - BMP 46 Spill Prevention and Control
 - BMP 47 Construction Equipment Washing and Maintenance
 - BMP 49 Concrete Waste Management
 - BMP 50 Sanitary/Septic Waste Management
 - BMP 51 Solid Waste Storage and Disposal
- Revegetation and stabilization of all disturbed project areas shall be in accordance with the projects landscape design to prevent sediment transport after construction is completed.
 - BMP 31 Topsoiling
 - BMP 32 Landscaping (Seeding, Sodding and Planting)
 - BMP 52 Mulching (Conventional and Hydromulching)
 - BMP 53 Geotextile
 - BMP 54 Matting
 - BMP 55 Soil Binders
- Install fiber rolls and/or silt fence as shown on Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan to prevent sediment and runoff from leaving the site. Fiber rolls may be used in place of silt fence were determined appropriate. Fiber rolls/silt fence shall be used at the contractor's discretion if unforeseen stormwater runoff and erosion takes place at the proposed construction site.
 - BMP 64 Fiber Rolls
 - BMP 65 Silt Fence
- Landscaping improvements and existing vegetation are intended to provide a vegetative buffer to filter, intercept, and detain stormwater runoff. Vegetative buffers reduce the flow and velocity of surface runoff, promote infiltration, and reduce pollutant discharge by capturing and holding sediments and other pollutants carried in runoff water.
 - BMP 32 Landscaping
 - BMP 38 Preserve Topsoil and Vegetation
- The swale(s) shall be constructed to convey/detain runoff where necessary. The swale(s) are intended to be field fit, functioning to convey runoff around the proposed building and driveway/parking area avoiding site features, as necessary. Construction of the proposed vegetated swale(s) on the property are intended to detain/convey runoff generated from the construction.
 - BMP 9 Vegetated (biofiltration) Swale

5. A sequence and schedule of construction activities, including when erosion and sediment control devices and practices will be implemented. The sequence and schedule must include a timetable for project finish and a strategy for long term site stabilization as well as removal of temporary BMP's.

Temporary and permanent BMPs described above will be constructed as shown in Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan; and using guidance from the Idaho Department of Environmental Quality's Catalog of Stormwater Best Management Practices for Idaho Cities and Counties and the City of McCall's Drainage Management Guidelines (DMGs) (Chapters III and IV).

- Fiber rolls and/or silt fence shall be installed prior to the start of any project construction or earth disturbing activities and should remain in place until all disturbed/exposed areas have been stabilized and/or revegetated.
 - BMP 64 Fiber Rolls
 - BMP 65 Silt Fence
- Establish all clearing/construction limits with construction fencing or silt fence to protect on-site vegetation and all trees not identified for removal.
 - BMP 39 Clearing Limits
- Construction of the vegetated swale(s) on the property shall be completed prior to the start of any upslope grading activities.
 - BMP 9 Vegetated (biofiltration) Swale
- Following roof construction, temporary erosion control measures should be installed along the drip lines if excessive erosion occurs.
 - BMP 90 Building, repair, remodeling, and construction
- Final stabilization and grading associated with the project shall take place once construction activities are nearing completion and when significant erosion impacts associated with the proposed improvements can be minimized.
 - BMP 36 Construction Timing
- The project's construction timeline is approximately 6-12 months from the start of construction. The owner and contractor will be responsible for long term stabilization and maintenance of the newly vegetated areas.

PART C: CONVEYANCE SYSTEM

A hydraulic analysis of the proposed project was performed using the Simplified SCS Runoff Curve Number Method (TR-55) and rainfall intensity data presented in the conclusion of Memorandum "Recommended Modifications to the McCall Drainage Management Guidelines: **First Flush Treatment and Storm Size Criteria**", from Nathan Stewart, City Engineer, dated February 17, 2016. The Memorandum as well as the City of McCall's DMGs presents a recommendation for using a design storm size of 1.83 inches associated with the **10-year, 24-hour rainfall event for project related stormwater conveyance systems**. All proposed conveyance system facilities have been sized to accommodate the flows predicted by these storm sizes as required by the DMGs.

Table 1

Calculation Method:	SCS Curve Number Method, Hydraflow Hydrographs Extension for AutoCAD Civil 3D
Composite Runoff Curve Number (CN):	Drainage Area On-site: 94 Drainage Area Road: 85
Design Event(s):	10-year, 24-hour
Rainfall, P (24 Hour):	1.83 inches, 10-year, 24-hour

The DMGs require that conveyance systems associated with project area be able to convey the 10-year storm event and minimize potential impacts to downstream/off-site conveyance facilities. The post development 10-year storm event was used to analyze the proposed culvert **underneath the proposed driveway**. Results of the stormwater and culvert modeling can be shown in the table below.

Drainage Area/Stormwater Modeling Summary:

the driveways or the private road?

Table 2

Drainage Area	Area (Acres)	Post-Development 10-year, 24-hour, Peak Discharge (CFS)	Culvert Size and Capacity (CFS)
Development Area Road	0.28	0.298	15" N-12 Culvert 4.25 (Hydrograph 4)

The total post development flow rate of the road development area is 0.298 CFS and the capacity of a 15" N-12 culvert is 4.25 CFS, therefore a 15" culvert will be sufficient.

PART D: FIRST FLUSH TREATMENT

A hydraulic analysis of the first flush of the proposed project was performed using the Simplified SCS Runoff Curve Number Method (TR-55) and rainfall intensity data presented in the conclusion of Memorandum “Recommended Modifications to the McCall Drainage Management Guidelines: First Flush Treatment and Storm Size Criteria”, from Nathan Stewart, City Engineer, dated February 17, 2016. The Memorandum presents a recommendation for using a storm size of 0.81 inches for the 24-hour, 95% rainfall event first flush stormwater treatment. ✓

Post Development Drainage Area General Assumptions:

Table 3

Calculation Method:	SCS Curve Number Method, Hydraflow Hydrographs Extension for AutoCAD Civil 3D
Composite Runoff Curve Number (CN):	Drainage Area On-Site: 94 Drainage Area Road: 85
Design Event:	24-hour 95% rainfall event
Rainfall, P (24 Hour):	0.81 inches

The proposed vegetated detention basins as shown on Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan (Appendix A) have been sized to capture and detain the first flush volume generated over their respective drainage area by the design storm.

It was determined detaining the first flush event would be sufficient because the property area impervious surface area is less than 15,000 S.F., therefore, the first flush event would be sufficient for all drainage areas. In addition, as each event is routed through the detention basins the post development flow rate will be reduced.

The total post development runoff volume of the 24-hour, 95% rainfall event for on-site drainage area was estimated to be 550 C.F. The detention of this volume will be detained within proposed detention basin No. 1. Storm and design volumes are presented in Table 4 below.

The total post development runoff volume of the 24-hour, 95% rainfall event for road drainage area was estimated to be 96 C.F. The detention of this volume will be detained within proposed detention basin No. 2. Storm and design volumes are presented in Table 4 below.

Excess flows from larger storm events will overflow from the vegetated detention basins and flow to the south. Runoff from this drainage area consists primarily of the asphalt road/parking and building roofs, therefore, the passive pretreatment for sediment through

the detention basins will provide the necessary treatment for the project and adjacent right-of-way. Storm and design volumes are presented in Table 4.

Table 4

	Pretreatment	24-hour, 95% storm volume	Detention design volume
Detention Basin No. 1	Yes (passive)	550 C.F.	605 ² C.F.
Detention Basin No. 2	Yes (passive)	96 C.F.	179 C.F.

In addition to the constructed vegetated detention basins, the sites natural/native landscape and revegetated areas will provide a vegetative buffer strip that will filter, as well as infiltrate stormwater runoff from the project.

PART E: PERMANENT BMP'S

Permanent BMPs for the project includes the following:

- Native and re-planted vegetation and the proposed vegetated swale(s) will provide filtration of stormwater runoff between the proposed project and adjacent properties.
- Vegetated swale along the property boundary to detain and treat the first flush storm event.
- Two (2) landscaped detention basins for first flush treatment.
- One infiltration trench for first flush treatment.

PART F: OPERATION AND MAINTENANCE

During construction, operation and maintenance of the Stormwater Management Plan will be the responsibility of the associated Contractor(s). This plan should be implemented in accordance with the Idaho Department of Environmental Quality’s Catalog of Stormwater Best Management Practices for Idaho Cities and Counties and the City of McCall DMGs. All erosion and sediment controls including stormwater treatment facilities shall be inspected weekly during construction. Additional inspections should be completed in anticipation of, and immediately following event-based runoff events (spring snow melt/significant precipitation events). Construction areas with excess sediment build-up around the fiber rolls and/or silt fence should be cleaned at the time of inspections.

² The detention design volume represents the total detention for the proposed detention basin No. 1 as well as the proposed 4’ deep infiltration trench. Refer to Section III of the report for detention basin and infiltration trench calculations.

Revegetated areas should be monitored for successful vegetation generation. Areas that remain exposed and/or may become eroded shall be stabilized immediately with mulch and/or straw blankets.

Adjustments to the stormwater management plan should be made by the contractor if excessive erosion continues to occur at the site during construction. After construction of the site improvements, upon final stabilization of the site and acceptance by the owner, the owner will assume responsibility for the operation and maintenance of the stormwater BMPs.

REFERENCES

City of McCall. Community Development Department. Drainage Management Guidelines. January 1997. evogov.s3.amazonaws.com/141/media/115536.pdf.

Rasmussen, L.M. 1981. Soil Survey of Valley Area, Idaho, Parts of Adams, and Valley Counties. United States Department of Agriculture, Soil Conservation Service, in cooperation with University of Idaho College of Agriculture and Idaho Soil Conservation Commission. The Service.

State of Idaho. Department of Environmental Quality. Idaho Catalog of Storm Water Best Management Practices. 2020. www2.deq.idaho.gov/admin/LEIA/api/document/download/14968.

SECTION III
STORMWATER CALCULATIONS



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 CIVIL ENGINEERING CONSULTANTS
 323 DEINHARD LANE, SUITE C
 PO BOX 2330
 McCALL, IDAHO 83638
 208.634.4140 · 208.634-4146 FAX

PROJECT: Simmons Street Townhouses

CLIENT: Synergy Structures, LLC

JOB NO.: 22025 **DATE:** April 26, 2023

BY: AMD

REVISION DATE: _____

RE: Simmons Street Townhouses - Stormwater Calculations

Drainage Area Calculations

Drainage Areas	(ft²)	(Acres)
Total Property Area/Boundary	14,313.0	0.33
Development Area On-site	18,813.6	0.43
Development Area Road	12,006.3	0.28

Pre-Development: Development Area On-site Surfaces	(ft²)	(Acres)	(%)
Woods - Grass Combination (CN = 76)	18,813.6	0.43	100.00%
	18,813.6	0.43	100.00%
Total Impervious Surface Area =	0.0	0.00	0.00%

Pre-Development: Development Area Road Surfaces	(ft²)	(Acres)	(%)
Woods - Grass Combination (CN = 76)	12,006.3	0.28	100.00%
	12,006.3	0.28	100.00%
Total Impervious Surface Area =	0.0	0.00	0.00%

I'm not sure what this area is? I thought there were only 2 drainage areas in this analysis.

Post Development: Total Property Area/Boundary (At Build-out)	(ft²)	(Acres)	(%)
Building Roofs (CN = 98)	7,234.0	0.17	50.54%
Asphalt Road/Parking (CN = 98)	3,886.1	0.09	27.15%
Open Space (CN = 79)	3,192.9	0.07	22.31%
	14,313.0	0.33	100.00%

Total Impervious Surface Area = 11,120.1 0.26 77.69%

Post Development: Development Area On-site Surfaces (At Build-out)	(ft²)	(Acres)	(%)
Building Roofs (CN = 98)	7,234.0	0.17	38.45%
Asphalt Road/Parking (CN = 98)	7,925.8	0.18	42.13%
Open Space (CN = 79)	3,653.8	0.08	19.42%
	18,813.6	0.43	100.00%

Total Impervious Surface Area = 15,159.8 0.35 80.58%

Post Development: Development Area Road Surfaces (At Build-out)	(ft²)	(Acres)	(%)
Asphalt Road/Parking (CN = 98)	3,928.6	0.09	32.72%
Open Space (CN = 79)	8,077.7	0.19	67.28%
	12,006.3	0.28	100.00%

Total Impervious Surface Area = 3,928.6 0.09 32.72%

Drainage Area Flow Paths

	Length	Elevation Change	Slope
	(ft)	(ft)	(%)
Pre-Development Flow Path: On-site			
1. Sheet Flow (n = 0.24, Woods - Light Underbrush)	157.01	1.32	0.84%

Total Length/Average Slope = 157.01 1.32 0.84%

	Length	Elevation Change	Slope
	(ft)	(ft)	(%)
Pre-Development Flow Path: Road			
1. Sheet Flow (n = 0.24, Woods - Light Underbrush)	123.48	1.24	1.00%

Total Length/Average Slope = 123.48 1.24 1.00%

	Length	Elevation Change	Slope
	(ft)	(ft)	(%)
Post Development Flow Path: On-site			
1. Sheet Flow (n = 0.011, Smooth Surface - Asphalt)	136.90	1.71	1.25%
2. Sheet Flow (n = 0.24, Grass - Dense Grass)	23.93	0.74	3.09%

Total Length/Average Slope = 160.83 2.45 1.52%

	Length	Elevation Change	Slope
	(ft)	(ft)	(%)
Post Development Flow Path: Road			
1. Sheet Flow (n = 0.011, Smooth Surface - Asphalt)	33.11	0.45	1.36%
2. Sheet Flow (n = 0.24, Grass - Dense Grass)	14.50	2.18	15.03%
3. Channel Flow (n = 0.24, Grass - Dense Grass)	190.78	1.91	1.00%

is this the correct length?



Total Length/Average Slope = 238.39 4.54 1.90%



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PROJECT: Simmons Street Townhouses

CLIENT: Synergy Structures, LLC

JOB NO.: 22025 **DATE:** April 26, 2023

BY: AMD

REVISION DATE: _____

RE: Simmons Street Townhouses - Stormwater Calculations

Stormwater Detention Basin Volume Calculations

Detention Basin Area No. 1 (Basin Volume)	Elev. (ft)	Height (ft)	Area (ft²)	Volume (ft³)
Top	5013.00		581.1	
Overflow	5012.75	0.25	453.2	
Bottom	5012.00	0.75	91.8	204
				204

Detention Basin Area No. 1 (Infiltration Trench)

Width	3	ft
Depth	4	ft
Pipe Diameter	1	ft
Pipe Area	0.79	ft ²
Length	76	ft
Trench Volume ((WxD-A)xL)x0.40	341	ft ³
Pipe Volume	60	ft ³
Net Trench Volume	401	ft³

Detention Basin No. 1 Total Volume 605 ft³

Detention Basin Area No. 2	Elev. (ft)	Height (ft)	Area (ft²)	Volume (ft³)
Top	5012.00		1,029.3	
Overflow	5011.25	0.75	357.5	
Bottom	5010.25	1.00	0.0	179
				179

Total Proposed Detention Volume = 784 (ft³)

Required Water Quality Detention Volume = 646 (ft³)

Proposed stormwater detention is greater than the required water quality detention volume and therefore, storage is adequate.

Notes:

1. The total proposed detention volume shown represents the minimum storage volume of the detention basins. As peak flows are routed through the basins additional storage will be attained as stormwater flows are restricted by individual overflows should it release/drain to downslope areas.

PROJECT: Simmons Street Townhouses

CLIENT: Synergy Structures, LLC

JOB NO.: 22025 **DATE:** April 26, 2023

BY: AMD

REVISION DATE: _____

RE: Simmons Street Townhouses - Stormwater Calculations

Stormwater Detention Storage/Peak Flow Attenuation Summary Tables

Drainage Area	Area (Acres)	Area (ft ²)	Post Dev. 1 st Flush Runoff Volume (V _{1st-Post}) (ft ³)	Pre-Dev. 10 Year Runoff Volume (V _{10-Pre}) (ft ³)	Post Dev. 10 Year Runoff Volume (V _{10-Post}) (ft ³)	V _{10-Post} - V _{10-Pre} (ft ³)	Required Storage Volume (ft ³)	Proposed Storage (ft ³)
Development Area On-site	0.43	18,814	550	514	1,933	1,419	550	605
Development Area Road	0.28	12,006	96	335	648	313	96	179

Notes:

1. See Hydrograph Report pages 1 - 10 for runoff calculations.

where is this basin?

Drainage Area	Area (Acres)	Area (ft ²)	Pre-Dev. Peak Discharge (Q _{10-Pre}) (ft ³ /s)	Post Dev. Peak Discharge (Q _{10-Post}) (ft ³ /s)	Post Dev. Peak Discharge w/Detention (Q _{10Post}) (ft ³ /s)
Development Area On-site	0.43	18,814	0.066	0.828	N/A
Development Area Road	0.28	12,006	0.051	0.298	N/A

Notes:

1. See Hydrograph Report pages 1 - 10 for runoff calculations.

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

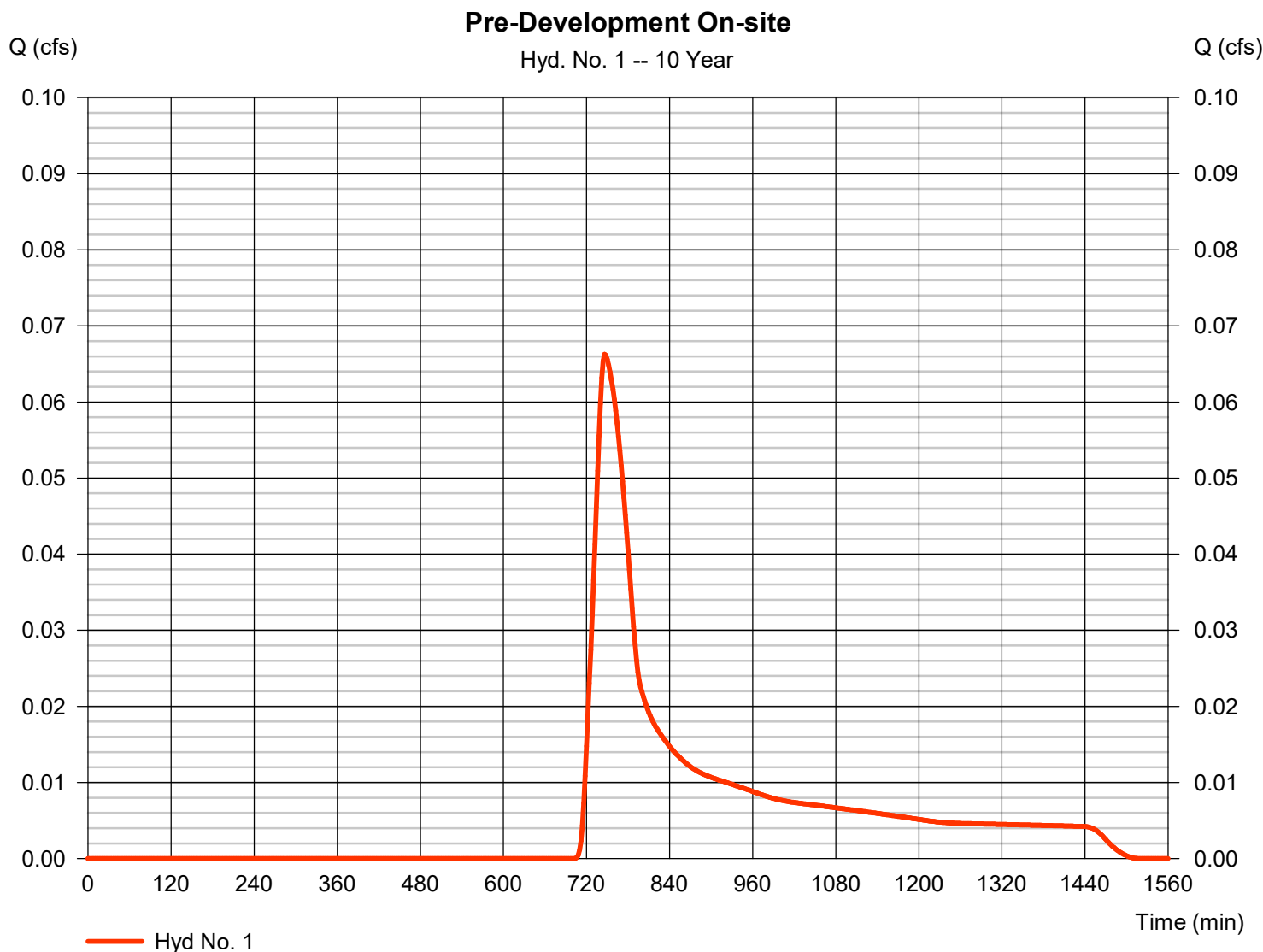
Wednesday, 04 / 26 / 2023

Hyd. No. 1

Pre-Development On-site

Hydrograph type	= SCS Runoff	Peak discharge	= 0.066 cfs
Storm frequency	= 10 yrs	Time to peak	= 746 min
Time interval	= 2 min	Hyd. volume	= 514 cuft
Drainage area	= 0.430 ac	Curve number	= 76*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 48.70 min
Total precip.	= 1.83 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.430 x 76)] / 0.430



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 1

Pre-Development On-site

<u>Description</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>Totals</u>
Sheet Flow				
Manning's n-value	= 0.240	0.011	0.011	
Flow length (ft)	= 157.0	0.0	0.0	
Two-year 24-hr precip. (in)	= 1.13	0.00	0.00	
Land slope (%)	= 0.84	0.00	0.00	
Travel Time (min)	= 48.74	+ 0.00	+ 0.00	= 48.74
Shallow Concentrated Flow				
Flow length (ft)	= 0.00	0.00	0.00	
Watercourse slope (%)	= 0.00	0.00	0.00	
Surface description	= Paved	Paved	Paved	
Average velocity (ft/s)	=0.00	0.00	0.00	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Channel Flow				
X sectional flow area (sqft)	= 0.00	0.00	0.00	
Wetted perimeter (ft)	= 0.00	0.00	0.00	
Channel slope (%)	= 0.00	0.00	0.00	
Manning's n-value	= 0.015	0.015	0.015	
Velocity (ft/s)	=0.00	0.00	0.00	
Flow length (ft)	0.0	0.0	0.0	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Total Travel Time, Tc				48.70 min

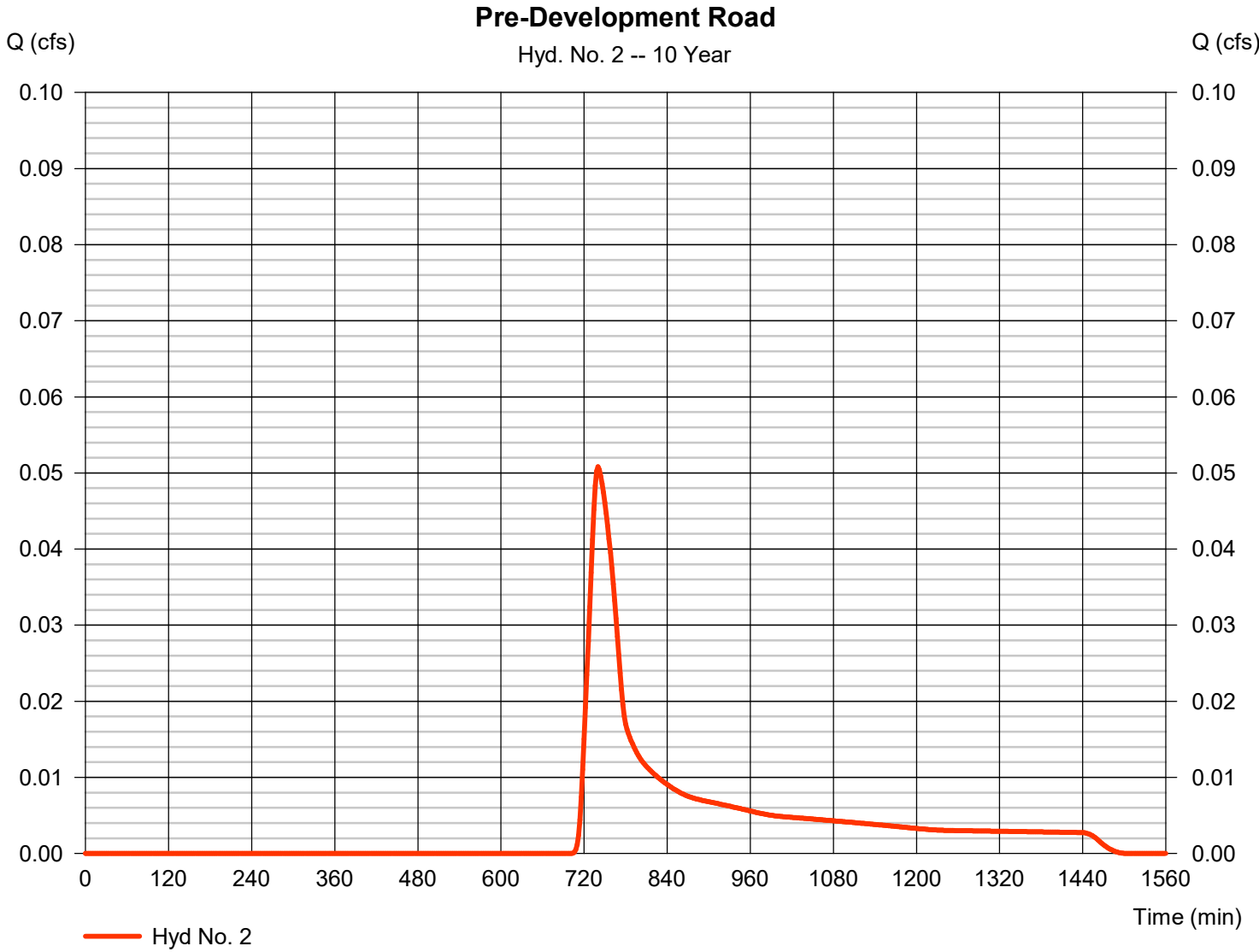
Hydrograph Report

Hyd. No. 2

Pre-Development Road

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.051 cfs
Storm frequency	=	10 yrs	Time to peak	=	740 min
Time interval	=	2 min	Hyd. volume	=	335 cuft
Drainage area	=	0.280 ac	Curve number	=	76*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	37.50 min
Total precip.	=	1.83 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.280 x 76)] / 0.280



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 2

Pre-Development Road

<u>Description</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>Totals</u>
Sheet Flow				
Manning's n-value	= 0.240	0.011	0.011	
Flow length (ft)	= 123.5	0.0	0.0	
Two-year 24-hr precip. (in)	= 1.13	0.00	0.00	
Land slope (%)	= 1.00	0.00	0.00	
Travel Time (min)	= 37.51	+ 0.00	+ 0.00	= 37.51
Shallow Concentrated Flow				
Flow length (ft)	= 0.00	0.00	0.00	
Watercourse slope (%)	= 0.00	0.00	0.00	
Surface description	= Paved	Paved	Paved	
Average velocity (ft/s)	=0.00	0.00	0.00	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Channel Flow				
X sectional flow area (sqft)	= 0.00	0.00	0.00	
Wetted perimeter (ft)	= 0.00	0.00	0.00	
Channel slope (%)	= 0.00	0.00	0.00	
Manning's n-value	= 0.015	0.015	0.015	
Velocity (ft/s)	=0.00	0.00	0.00	
Flow length (ft)	{{0}}0.0	0.0	0.0	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Total Travel Time, Tc				37.50 min

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

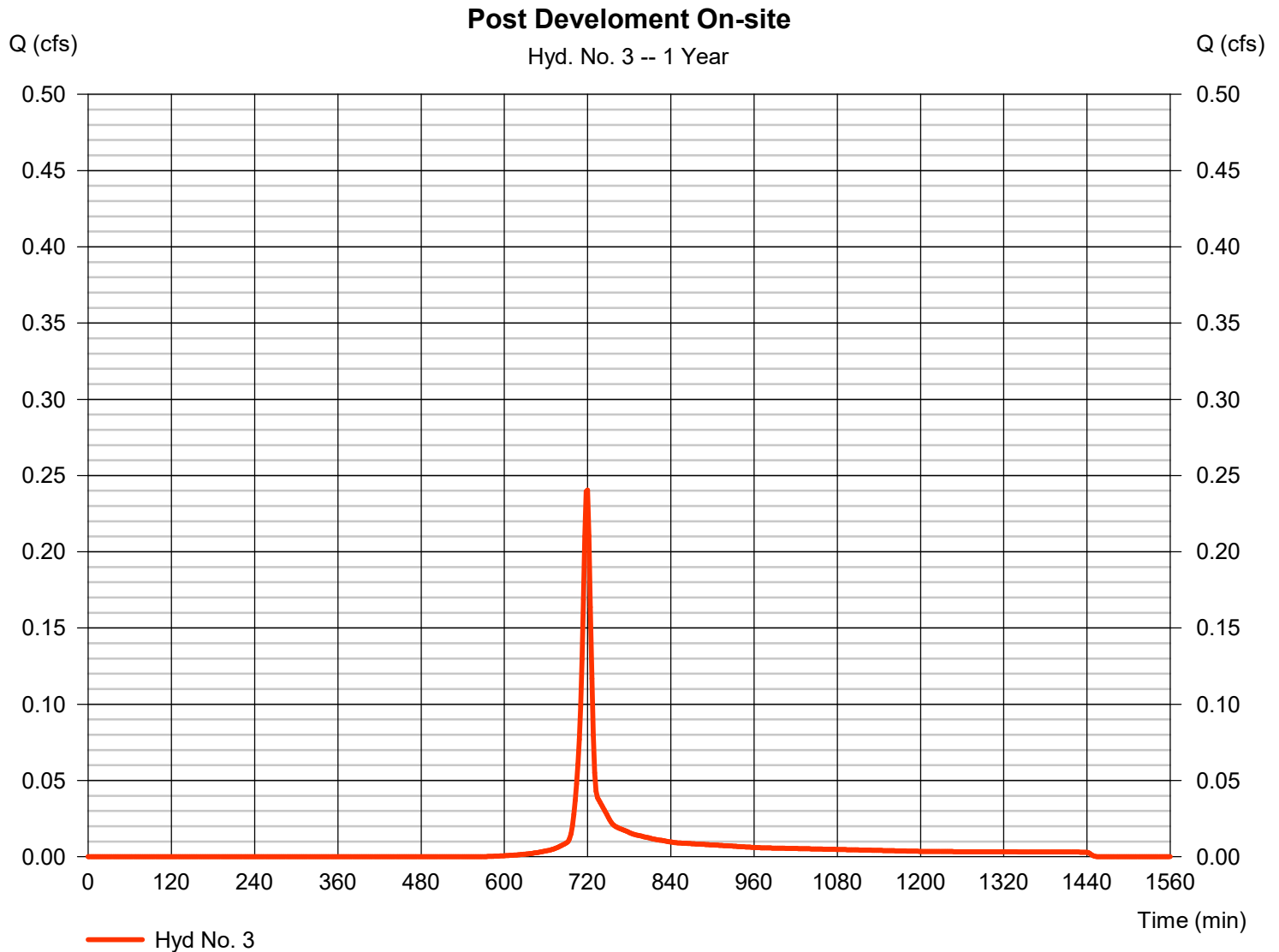
Wednesday, 04 / 26 / 2023

Hyd. No. 3

Post Development On-site

Hydrograph type	= SCS Runoff	Peak discharge	= 0.240 cfs
Storm frequency	= 1 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 550 cuft
Drainage area	= 0.430 ac	Curve number	= 94*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 9.60 min
Total precip.	= 0.81 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.170 x 98) + (0.180 x 98) + (0.080 x 79)] / 0.430



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 3

Post Development On-site

<u>Description</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>Totals</u>
Sheet Flow				
Manning's n-value	= 0.011	0.240	0.011	
Flow length (ft)	= 136.9	23.9	0.0	
Two-year 24-hr precip. (in)	= 1.13	1.13	0.00	
Land slope (%)	= 1.25	3.09	0.00	
Travel Time (min)	= 3.16	+ 6.43	+ 0.00	= 9.59
Shallow Concentrated Flow				
Flow length (ft)	= 0.00	0.00	0.00	
Watercourse slope (%)	= 0.00	0.00	0.00	
Surface description	= Paved	Paved	Paved	
Average velocity (ft/s)	=0.00	0.00	0.00	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Channel Flow				
X sectional flow area (sqft)	= 0.00	0.00	0.00	
Wetted perimeter (ft)	= 0.00	0.00	0.00	
Channel slope (%)	= 0.00	0.00	0.00	
Manning's n-value	= 0.015	0.015	0.015	
Velocity (ft/s)	=0.00	0.00	0.00	
Flow length (ft)	{{0}}0.0	0.0	0.0	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Total Travel Time, Tc				9.60 min

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

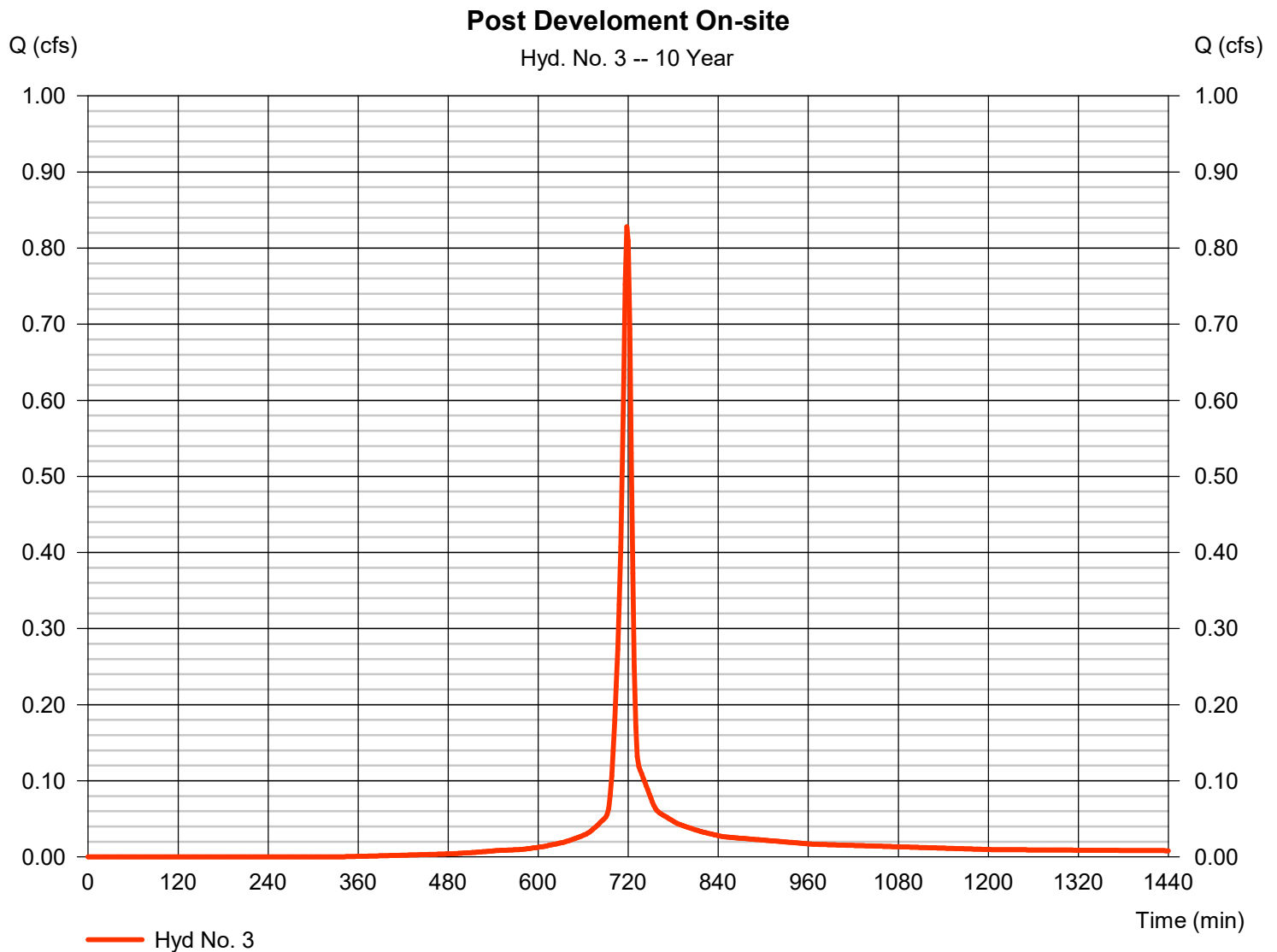
Wednesday, 04 / 26 / 2023

Hyd. No. 3

Post Development On-site

Hydrograph type	= SCS Runoff	Peak discharge	= 0.828 cfs
Storm frequency	= 10 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 1,933 cuft
Drainage area	= 0.430 ac	Curve number	= 94*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 9.60 min
Total precip.	= 1.83 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.170 x 98) + (0.180 x 98) + (0.080 x 79)] / 0.430



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

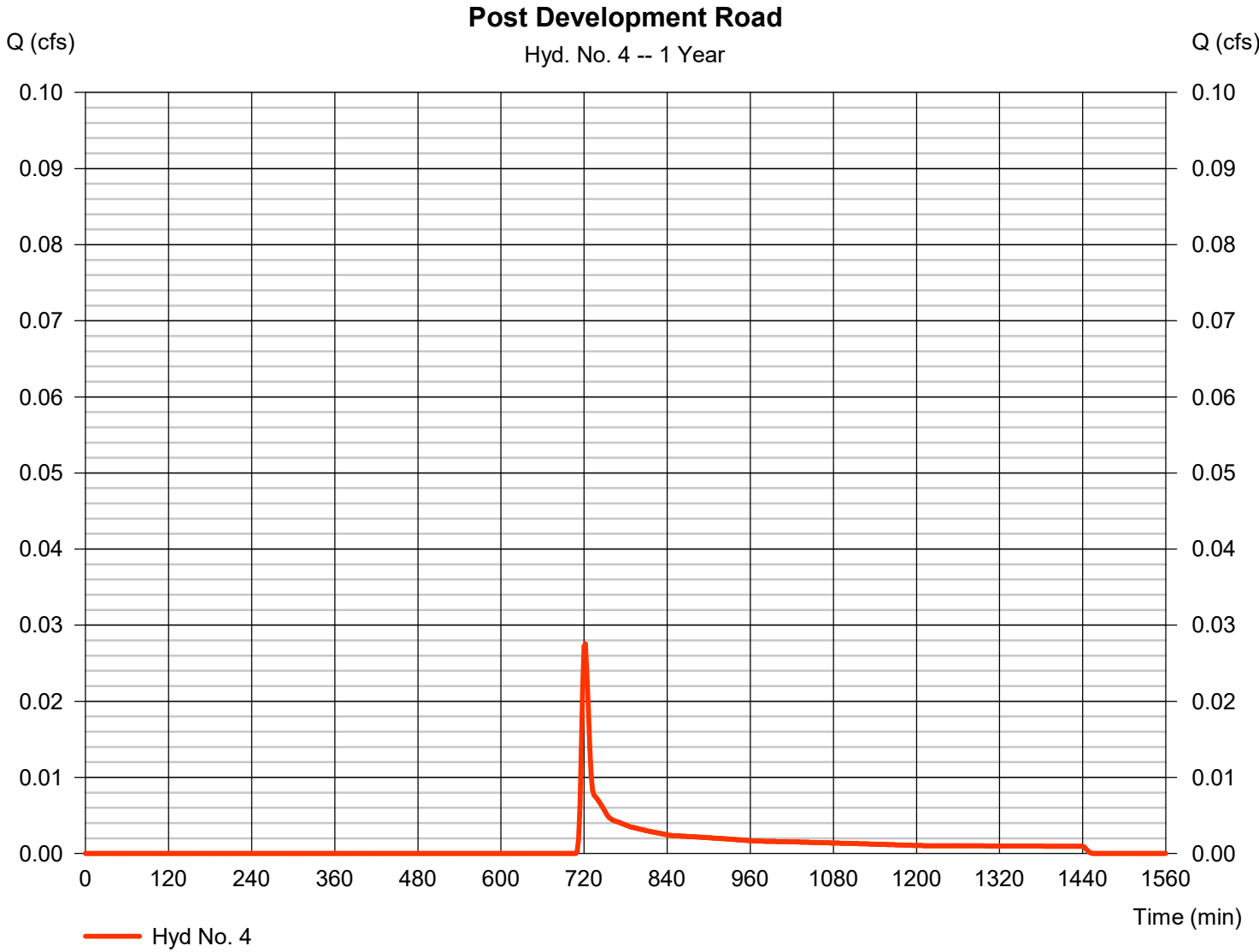
Wednesday, 04 / 26 / 2023

Hyd. No. 4

Post Development Road

Hydrograph type	= SCS Runoff	Peak discharge	= 0.028 cfs
Storm frequency	= 1 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 96 cuft
Drainage area	= 0.280 ac	Curve number	= 85*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 8.60 min
Total precip.	= 0.81 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.090 x 98) + (0.190 x 79)] / 0.280



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 4

Post Development Road

<u>Description</u>	<u>A</u>		<u>B</u>		<u>C</u>		<u>Totals</u>
Sheet Flow							
Manning's n-value	= 0.011		0.240		0.011		
Flow length (ft)	= 33.1		14.5		0.0		
Two-year 24-hr precip. (in)	= 1.13		1.13		0.00		
Land slope (%)	= 1.36		15.03		0.00		
Travel Time (min)	= 0.98	+	2.29	+	0.00	=	3.27
Shallow Concentrated Flow							
Flow length (ft)	= 0.00		0.00		0.00		
Watercourse slope (%)	= 0.00		0.00		0.00		
Surface description	= Paved		Paved		Paved		
Average velocity (ft/s)	=0.00		0.00		0.00		
Travel Time (min)	= 0.00	+	0.00	+	0.00	=	0.00
Channel Flow							
X sectional flow area (sqft)	= 12.00		0.00		0.00		
Wetted perimeter (ft)	= 12.65		0.00		0.00		
Channel slope (%)	= 1.00		0.00		0.00		
Manning's n-value	= 0.240		0.015		0.015		
Velocity (ft/s)	=0.60		0.00		0.00		
Flow length (ft)	{{0}}190.8		0.0		0.0		
Travel Time (min)	= 5.31	+	0.00	+	0.00	=	5.31
Total Travel Time, Tc							8.60 min

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

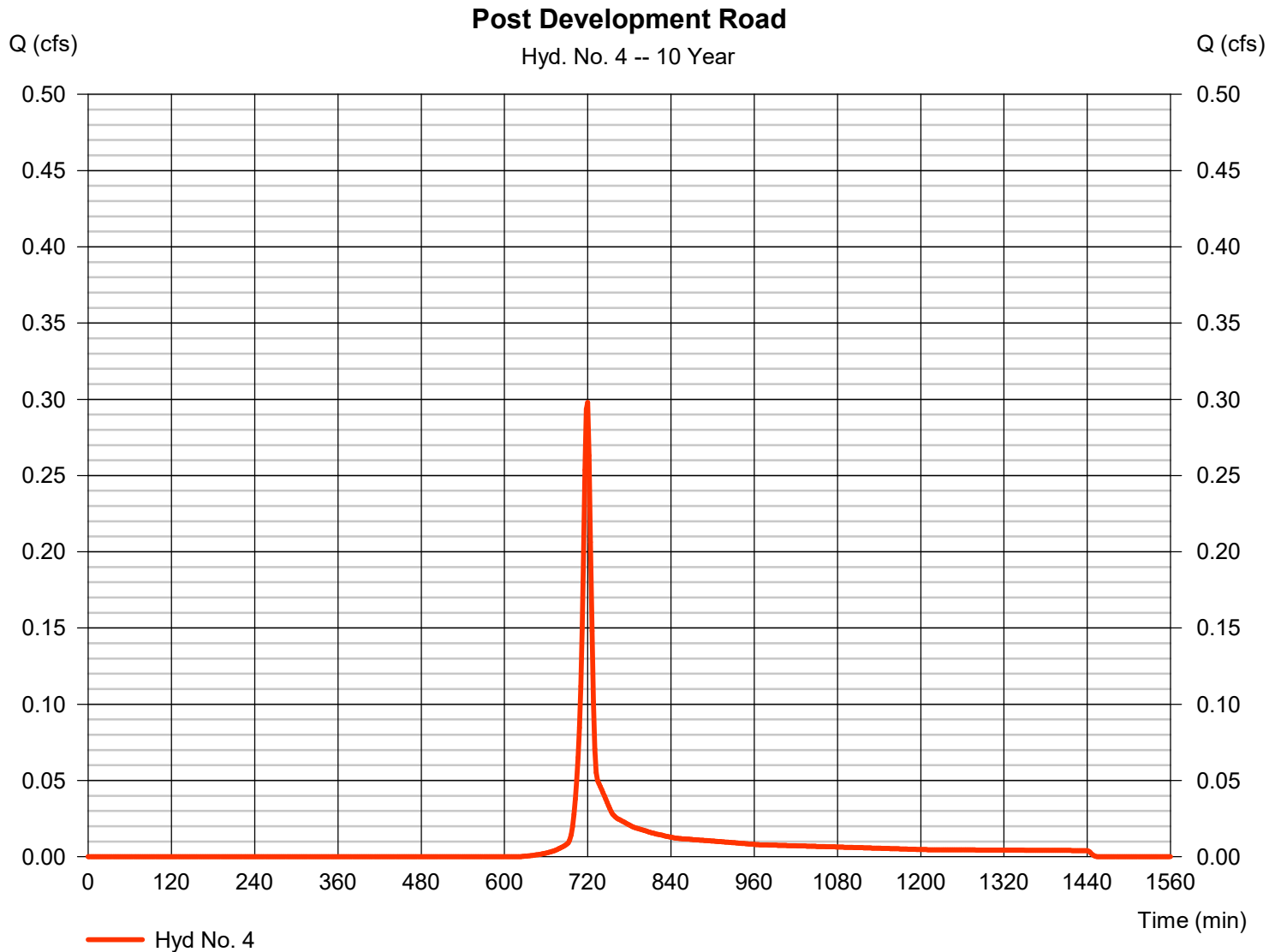
Wednesday, 04 / 26 / 2023

Hyd. No. 4

Post Development Road

Hydrograph type	= SCS Runoff	Peak discharge	= 0.298 cfs
Storm frequency	= 10 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 684 cuft
Drainage area	= 0.280 ac	Curve number	= 85*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 8.60 min
Total precip.	= 1.83 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.090 x 98) + (0.190 x 79)] / 0.280



Culvert Report

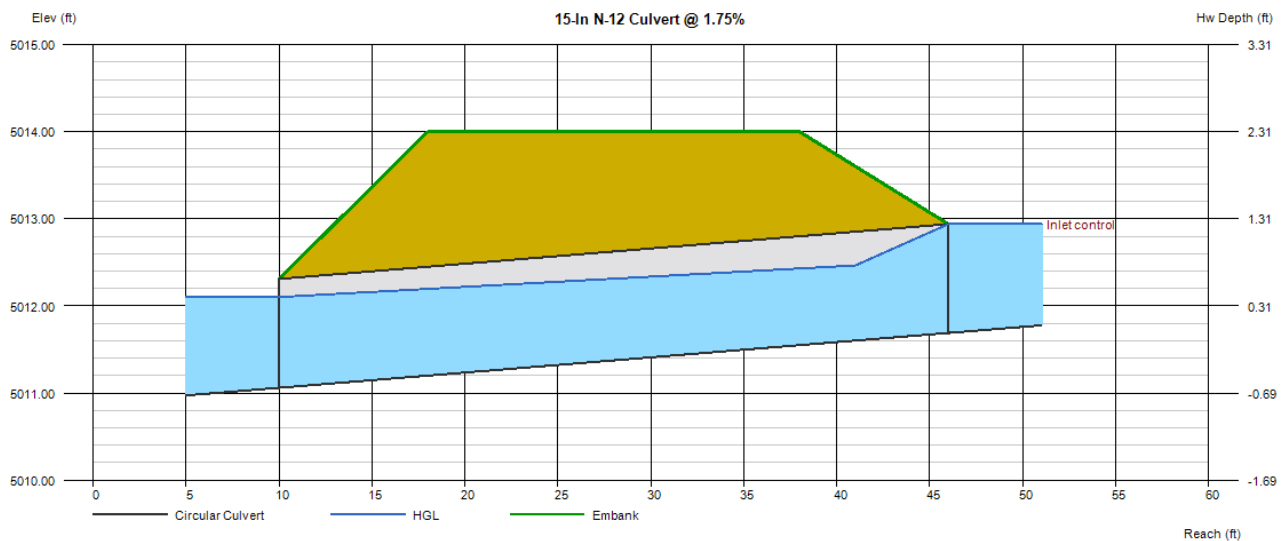
15-In N-12 Culvert @ 1.75%

Invert Elev Dn (ft)	=	5011.06
Pipe Length (ft)	=	36.00
Slope (%)	=	1.75
Invert Elev Up (ft)	=	5011.69
Rise (in)	=	15.0
Shape	=	Circular
Span (in)	=	15.0
No. Barrels	=	1
n-Value	=	0.023
Culvert Type	=	Circular Culvert
Culvert Entrance	=	Smooth tapered inlet throat
Coeff. K,M,c,Y,k	=	0.534, 0.555, 0.0196, 0.9, 0.2

Embankment	
Top Elevation (ft)	= 5014.00
Top Width (ft)	= 20.00
Crest Width (ft)	= 50.00

Calculations	
Qmin (cfs)	= 0.00
Qmax (cfs)	= 4.25
Tailwater Elev (ft)	= (dc+D)/2

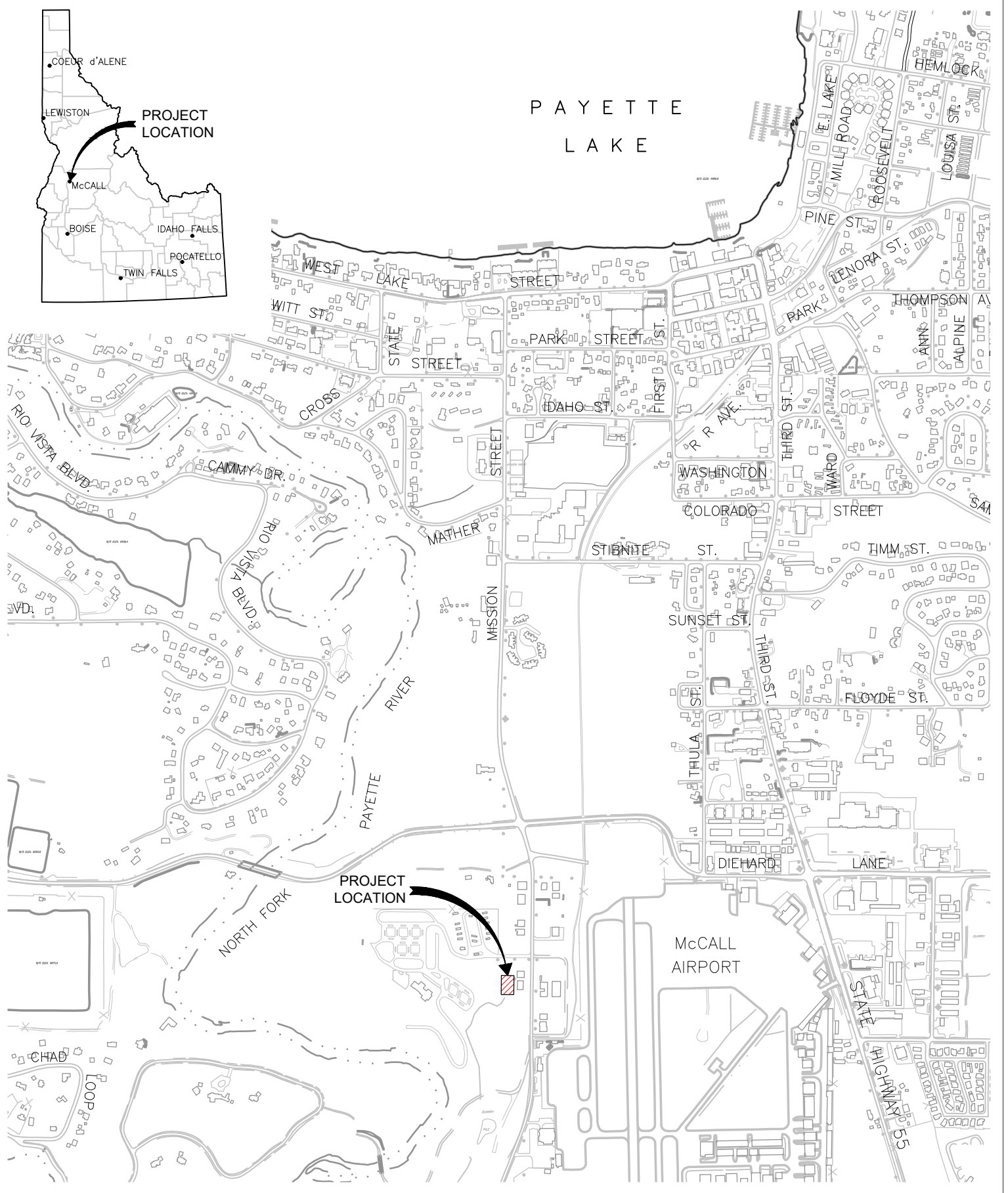
Highlighted	
Qtotal (cfs)	= 4.25
Qpipe (cfs)	= 4.25
Qovertop (cfs)	= 0.00
Veloc Dn (ft/s)	= 3.89
Veloc Up (ft/s)	= 4.88
HGL Dn (ft)	= 5012.10
HGL Up (ft)	= 5012.52
Hw Elev (ft)	= 5012.94
Hw/D (ft)	= 1.00
Flow Regime	= Inlet Control



APPENDIX A
FIGURES/DRAWINGS

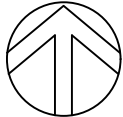


PAYETTE
LAKE



PROJECT
LOCATION

McCALL
AIRPORT



NORTH
SCALE: 1" = 1000'

CRESTLINE
ENGINEERS

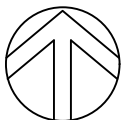
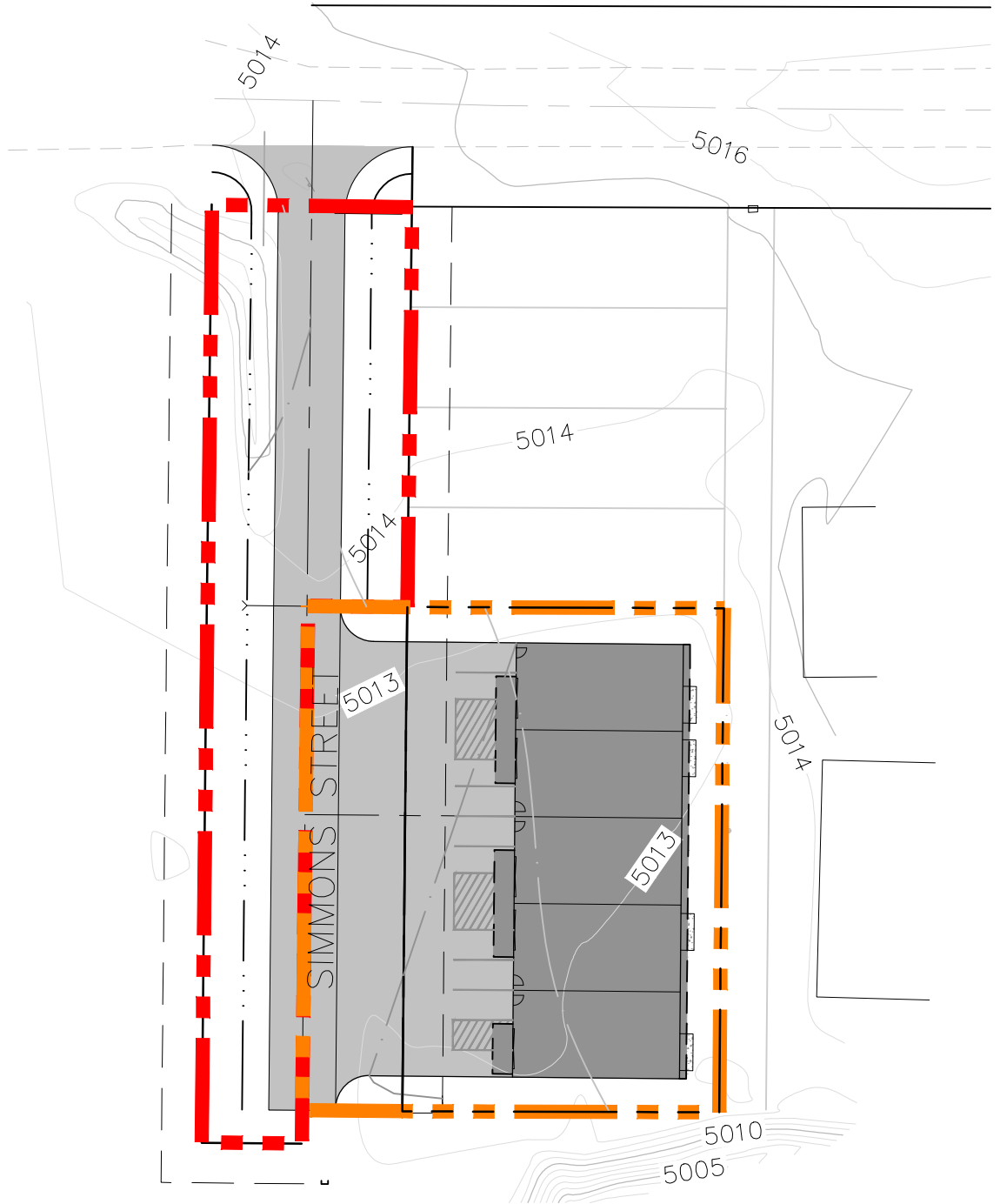
323 DEINHARD LANE, SUITE C · PO BOX 2330
McCALL, IDAHO 83638
208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
VICINITY MAP

PROJECT	22025	DRAWN	FIGURE NO.
DATE	4/20/2023	AMD	1 OF 2

LEGEND:

- · — PRE-DEVELOPMENT FLOW PATH
- · — POST DEVELOPMENT FLOW PATH
- - - PROPERTY BOUNDARY
- ■ ■ ■ DRAINAGE AREA ON-SITE
- ■ ■ ■ DRAINAGE AREA ROAD



NORTH
SCALE: 1" = 50'

CRESTLINE
ENGINEERS

323 DEINHARD LANE, SUITE C · PO BOX 2330
McCALL, IDAHO 83638
208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
DRAINAGE AREA MAP

PROJECT	22025	DRAWN	FIGURE NO.
DATE	4/26/2023	SMR	2 OF 2

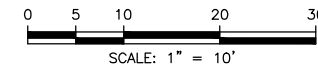
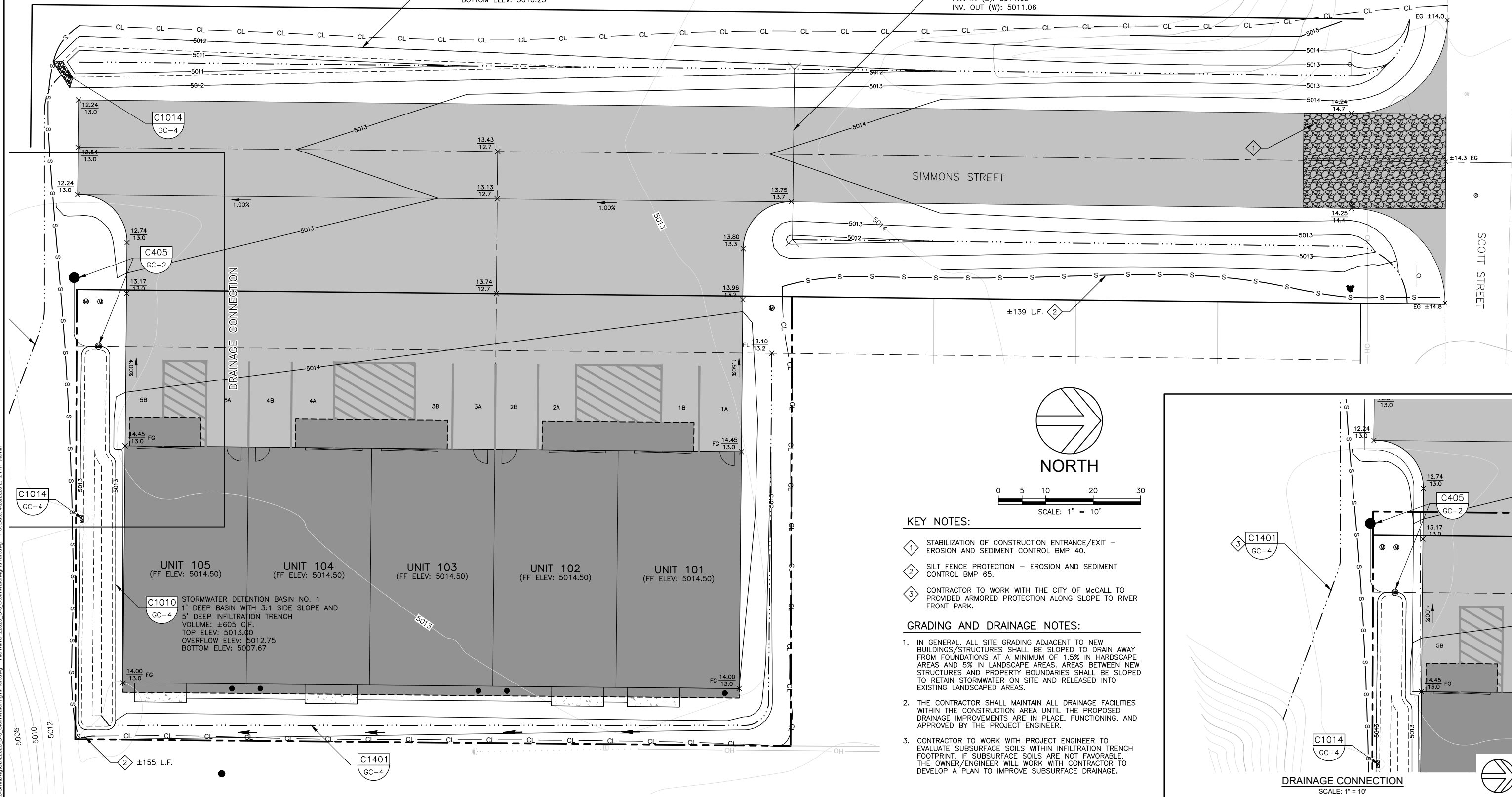
NOTES:

- REFER TO DRAWING NO. G-2, SHEET 2 FOR PROJECT NOTES, LEGEND, AND SYMBOLS.
- REFER TO DRAWING NO. C-1, SHEET 3 FOR EROSION AND SEDIMENT CONTROL NOTES.

This drawing differs from the one found in the civil plans. Which one is more correct?

STORMWATER DETENTION BASIN NO. 2
 1.75' DEEP WITH 3:1 SIDE SLOPES
 VOLUME: ±179 C.F.
 TOP ELEV: 5012.00
 OVERFLOW ELEV: 5011.25
 BOTTOM ELEV: 5010.25

15" N-12 CULVERT
 L=±36 L.F. @ 1.75% SLOPE
 INV. IN (E): 5011.69
 INV. OUT (W): 5011.06

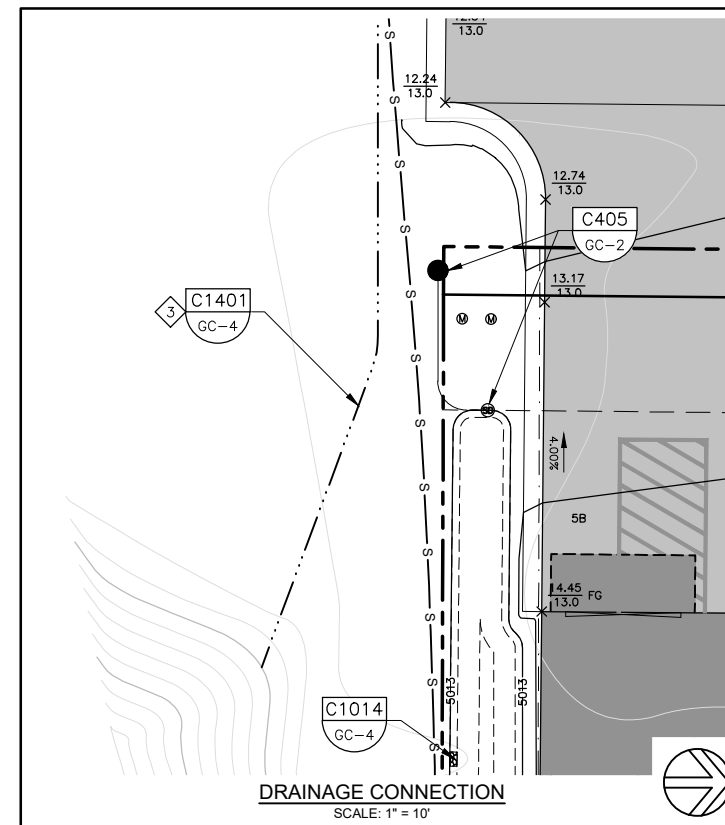


KEY NOTES:

- 1 STABILIZATION OF CONSTRUCTION ENTRANCE/EXIT - EROSION AND SEDIMENT CONTROL BMP 40.
- 2 SILT FENCE PROTECTION - EROSION AND SEDIMENT CONTROL BMP 65.
- 3 CONTRACTOR TO WORK WITH THE CITY OF McCALL TO PROVIDED ARMORED PROTECTION ALONG SLOPE TO RIVER FRONT PARK.

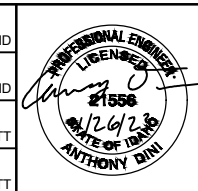
GRADING AND DRAINAGE NOTES:

- IN GENERAL, ALL SITE GRADING ADJACENT TO NEW BUILDINGS/STRUCTURES SHALL BE SLOPED TO DRAIN AWAY FROM FOUNDATIONS AT A MINIMUM OF 1.5% IN HARDSCAPE AREAS AND 5% IN LANDSCAPE AREAS. AREAS BETWEEN NEW STRUCTURES AND PROPERTY BOUNDARIES SHALL BE SLOPED TO RETAIN STORMWATER ON SITE AND RELEASED INTO EXISTING LANDSCAPED AREAS.
- THE CONTRACTOR SHALL MAINTAIN ALL DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL THE PROPOSED DRAINAGE IMPROVEMENTS ARE IN PLACE, FUNCTIONING, AND APPROVED BY THE PROJECT ENGINEER.
- CONTRACTOR TO WORK WITH PROJECT ENGINEER TO EVALUATE SUBSURFACE SOILS WITHIN INFILTRATION TRENCH FOOTPRINT. IF SUBSURFACE SOILS ARE NOT FAVORABLE, THE OWNER/ENGINEER WILL WORK WITH CONTRACTOR TO DEVELOP A PLAN TO IMPROVE SUBSURFACE DRAINAGE.



Path: M:\010\S\Symbio\Structures\22025\Civil\Draw\Grading\CD\22025 C-5 StormwaterMgmtPlan.dwg File Name: 22025 C-5 StormwaterMgmtPlan.dwg Plot Date: 4/26/2023 2:12 PM Admin

NO.	REVISION	BY	DATE	DESIGN
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				DRAWN
				AMD
				CHECKED
				GTT
				APPROVED
				GTT

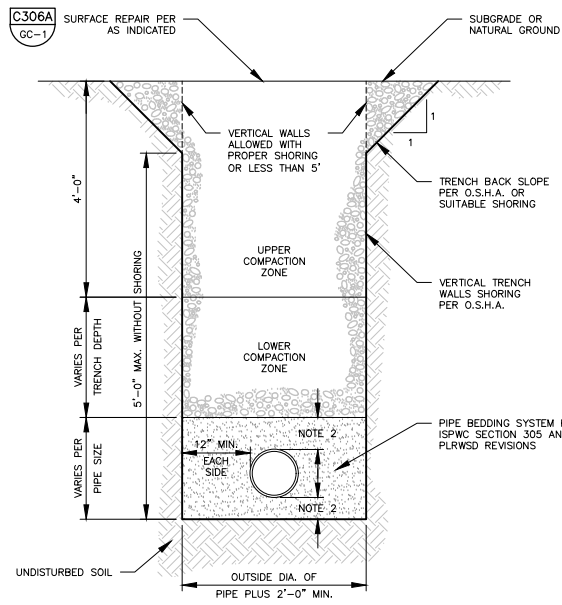


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 McCALL, IDAHO 83638
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SIMMONS STREET TOWNHOUSES
 McCALL, IDAHO
 ROADWAY, DOMESTIC WATER, SANITARY SEWER
 AND GRADING IMPROVEMENTS PROJECT
 GRADING, DRAINAGE AND STORMWATER MANAGEMENT PLAN

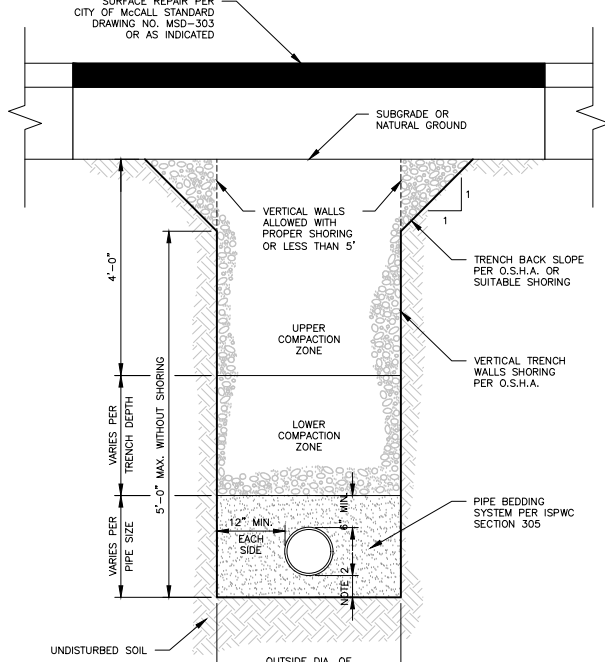
VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	C-5
SHEET NO.	7 OF 11



NOTES:

- TRENCH EXCAVATION PER ISPCW SECTION 301.
- PIPE BEDDING PER ISPCW SECTION 305 AND PLRWS D REVISIONS. FOR SEWER MAIN LINES AND SERVICES USE CLASS A-1 BEDDING SYSTEM AMENDED TO REQUIRE BEDDING EIGHT (8") INCHES BELOW THE BOTTOM AND ABOVE THE TOP PIPE PER PLRWS D REQUIREMENT. FOR WATER MAIN LINES AND SERVICES USE CLASS B-2 BEDDING SYSTEM DURING NORMAL CONDITIONS AND CLASS A-1 BEDDING SYSTEM WHEN GROUNDWATER IS OBSERVED IN THE TRENCH DURING EXCAVATION.
- BACKFILL AND COMPACTION PER ISPCW SECTION 306.
- REFER TO ISPCW SECTION 304 FOR ADDITIONAL INFORMATION ON TRENCH FOUNDATION STABILIZATION IF NECESSARY FOR PROJECT CONSTRUCTION.
- SURFACE REPAIR AND BASE PER ISPCW SECTION 307 AND CIVIL TYPICAL DETAIL C306.

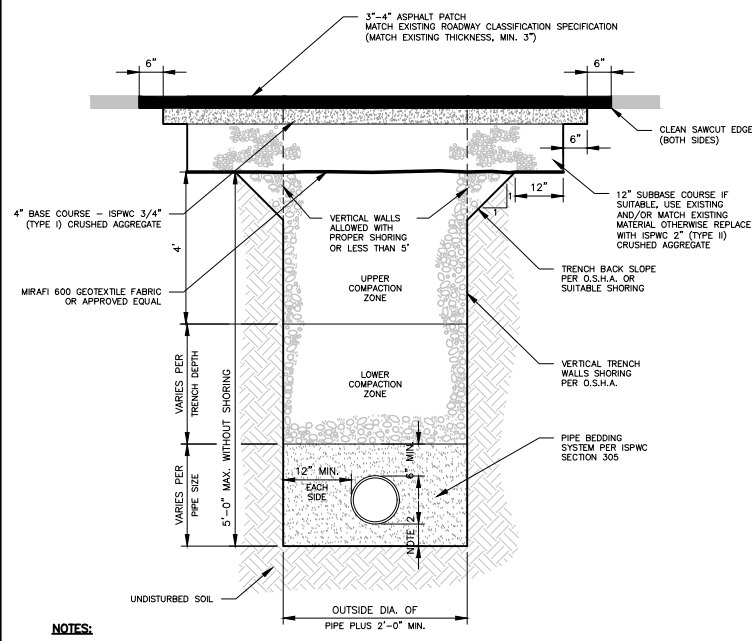
C302 TYPICAL TRENCH
TYP NOT TO SCALE



NOTES:

- TRENCH EXCAVATION PER ISPCW SECTION 301.
- PIPE BEDDING PER ISPCW SECTION 305.
- BACKFILL AND COMPACTION PER ISPCW SECTION 306.
- REFER TO ISPCW SECTION 304 FOR ADDITIONAL INFORMATION ON TRENCH FOUNDATION STABILIZATION IF NECESSARY FOR PROJECT CONSTRUCTION.
- SURFACE REPAIR PER CITY OF McCALL UTILITY TRENCH AND ISPCW SECTION 307.

C302A CITY OF McCALL - STANDARD UTILITY TRENCH
TYP NOT TO SCALE



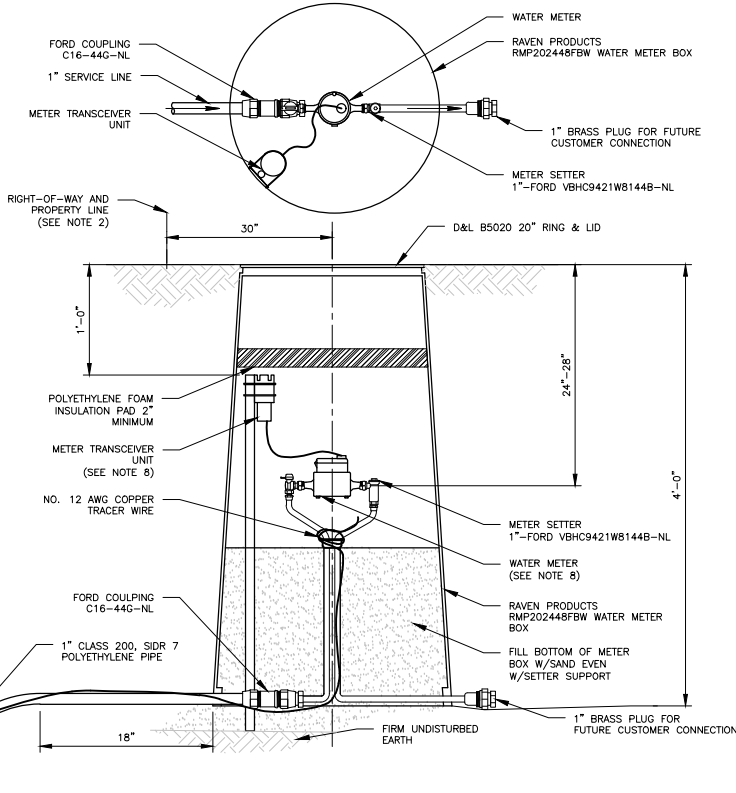
NOTES:

- TRENCH EXCAVATION PER ISPCW SECTION 301.
- PIPE BEDDING PER ISPCW SECTION 305.
- BACKFILL AND COMPACTION PER ISPCW SECTION 306.
- REFER TO ISPCW SECTION 304 FOR ADDITIONAL INFORMATION ON TRENCH FOUNDATION STABILIZATION IF NECESSARY FOR PROJECT CONSTRUCTION.
- STREET CUTS AND SURFACE REPAIRS PER ISPCW SECTION 307 UNLESS OTHERWISE SHOWN IN THIS DETAIL.
- ASPHALT CUTS AND PATCHES WILL NOT BE ALLOWED WITHIN THE WHEEL PATHS WITHOUT PRIOR WRITTEN APPROVAL FROM THE CITY OF McCALL PUBLIC WORKS DEPARTMENT.
- ALL WORKMANSHIP LOCATED WITHIN A CITY OF McCALL RIGHT-OF-WAY TO CARRY A 2-YEAR WARRANTY.

C306A CITY OF McCALL ASPHALT SURFACE REPAIR
TYP NOT TO SCALE

NOTES:

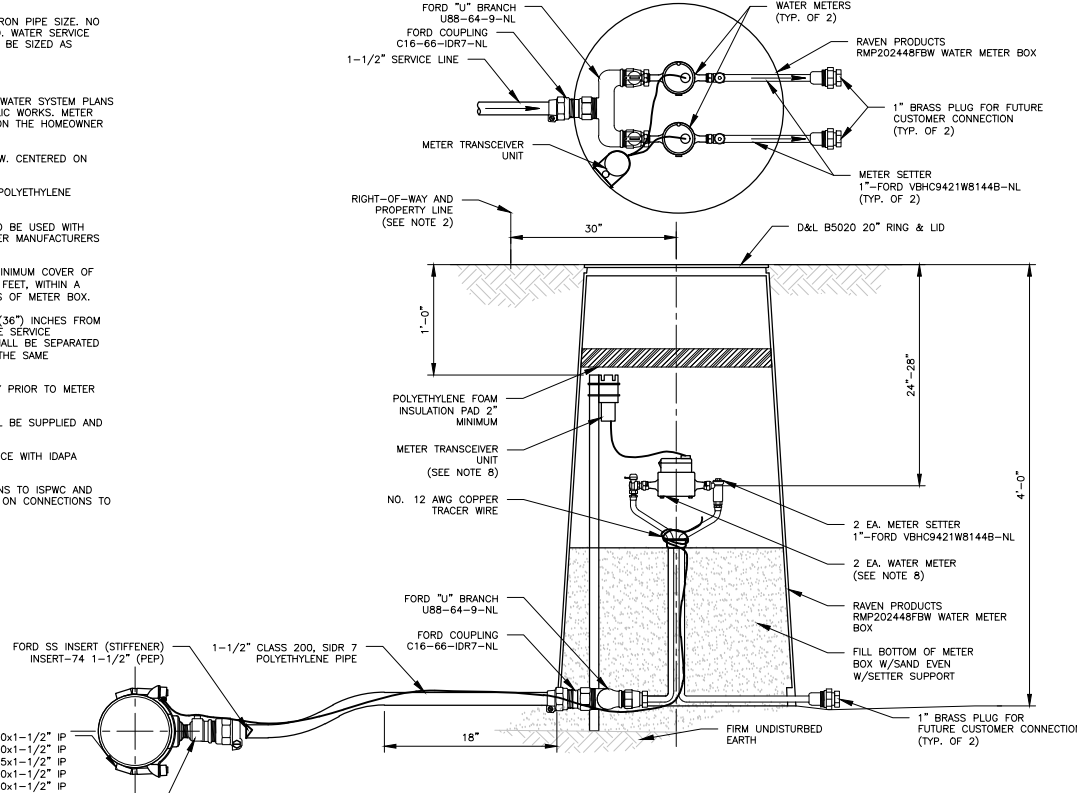
- ALL WATER SERVICE COMPONENTS SHALL BE IRON PIPE SIZE. NO GALVANIZED PIPE OR FITTINGS SHALL BE USED. WATER SERVICE SADDLE, CORPORATION STOP, AND PIPE SHALL BE SIZED AS FOLLOWS:
A. SINGLE SERVICE: 1".
- METER BOX LOCATIONS SHALL BE SHOWN ON WATER SYSTEM PLANS AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS. METER BOX LOCATION GENERALLY WILL BE LOCATED ON THE HOMEOWNER PROPERTY AS FOLLOWS:
A. SINGLE SERVICE: THIRTY (30") FROM R.O.W. CENTERED ON COMMON PROPERTY LINE.
- SERVICE PIPE SHALL BE CLASS 200, SDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- FORD STAINLESS STEEL INSERT (STIFFENER) TO BE USED WITH POLYETHYLENE PRESSURE PIPE AT FITTINGS PER MANUFACTURERS RECOMMENDATIONS.
- SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6) FEET AND SHALL RISE TO FOUR (4) FEET, WITHIN A MAXIMUM DISTANCE OF EIGHTEEN (18") INCHES OF METER BOX.
- SERVICE CONNECTIONS SHALL BE THIRTY-SIX (36") INCHES FROM FITTINGS OR WATER MAIN PIPE ENDS. MULTIPLE SERVICE CONNECTIONS IN THE SAME JOINT OF PIPE SHALL BE SEPARATED BY TWENTY-FOUR (24") INCHES AND NOT IN THE SAME HORIZONTAL LEVEL. -ABSOLUTE-
- SERVICE PIPE SHALL BE FLUSHED IMMEDIATELY PRIOR TO METER INSTALLATION.
- WATER METERS AND TRANSCIVER UNITS TO BE SUPPLIED AND INSTALLED BY THE CITY OF McCALL.
- MAINTAIN SEPARATION DISTANCES IN ACCORDANCE WITH IDAPA 58.01.08.
- REFER TO CITY OF McCALL STANDARD REVISIONS TO ISPCW AND CONDITIONS SECTION 404 FOR REQUIREMENTS ON CONNECTIONS TO THE PRIVATE SIDE OF THE WATER METER.



C402B 1" WATER SERVICE CONNECTION
TYP NOT TO SCALE

NOTES:

- ALL WATER SERVICE COMPONENTS SHALL BE IRON PIPE SIZE. NO GALVANIZED PIPE OR FITTINGS SHALL BE USED. WATER SERVICE SADDLE, CORPORATION STOP, AND PIPE SHALL BE SIZED AS FOLLOWS:
A. DOUBLE SERVICE: 1-1/2".
- METER BOX LOCATIONS SHALL BE SHOWN ON WATER SYSTEM PLANS AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS. METER BOX LOCATION GENERALLY WILL BE LOCATED ON THE HOMEOWNER PROPERTY AS FOLLOWS:
A. DOUBLE SERVICE: THIRTY (30") FROM R.O.W. CENTERED ON COMMON PROPERTY LINE.
- SERVICE PIPE SHALL BE CLASS 200, SDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- FORD STAINLESS STEEL INSERT (STIFFENER) TO BE USED WITH POLYETHYLENE PRESSURE PIPE AT FITTINGS PER MANUFACTURERS RECOMMENDATIONS.
- SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6) FEET AND SHALL RISE TO FOUR (4) FEET, WITHIN A MAXIMUM DISTANCE OF EIGHTEEN (18") INCHES OF METER BOX.
- SERVICE CONNECTIONS SHALL BE THIRTY-SIX (36") INCHES FROM FITTINGS OR WATER MAIN PIPE ENDS. MULTIPLE SERVICE CONNECTIONS IN THE SAME JOINT OF PIPE SHALL BE SEPARATED BY TWENTY-FOUR (24") INCHES AND NOT IN THE SAME HORIZONTAL LEVEL. -ABSOLUTE-
- SERVICE PIPE SHALL BE FLUSHED IMMEDIATELY PRIOR TO METER INSTALLATION.
- WATER METERS AND TRANSCIVER UNITS SHALL BE SUPPLIED AND INSTALLED BY THE CITY OF McCALL.
- MAINTAIN SEPARATION DISTANCES IN ACCORDANCE WITH IDAPA 58.01.08.
- REFER TO CITY OF McCALL STANDARD REVISIONS TO ISPCW AND CONDITIONS SECTION 404 FOR REQUIREMENTS ON CONNECTIONS TO THE PRIVATE SIDE OF THE WATER METER.



C404 DOUBLE WATER SERVICE CONNECTION
TYP NOT TO SCALE

NO.	REVISION	BY	DATE	DESIGN
1.	CITY OF McCALL AND PLRWS ENGINEERING SUBMITTAL	AMD	4/26/2023	AMD
				DRAWN
				AMD
				CHECKED
				GTT
				APPROVED
				GTT

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323 DEINHARD LANE, SUITE C · PO BOX 2330
McCALL, IDAHO 83638
208.634.4140 · 208.634.4146 FAX

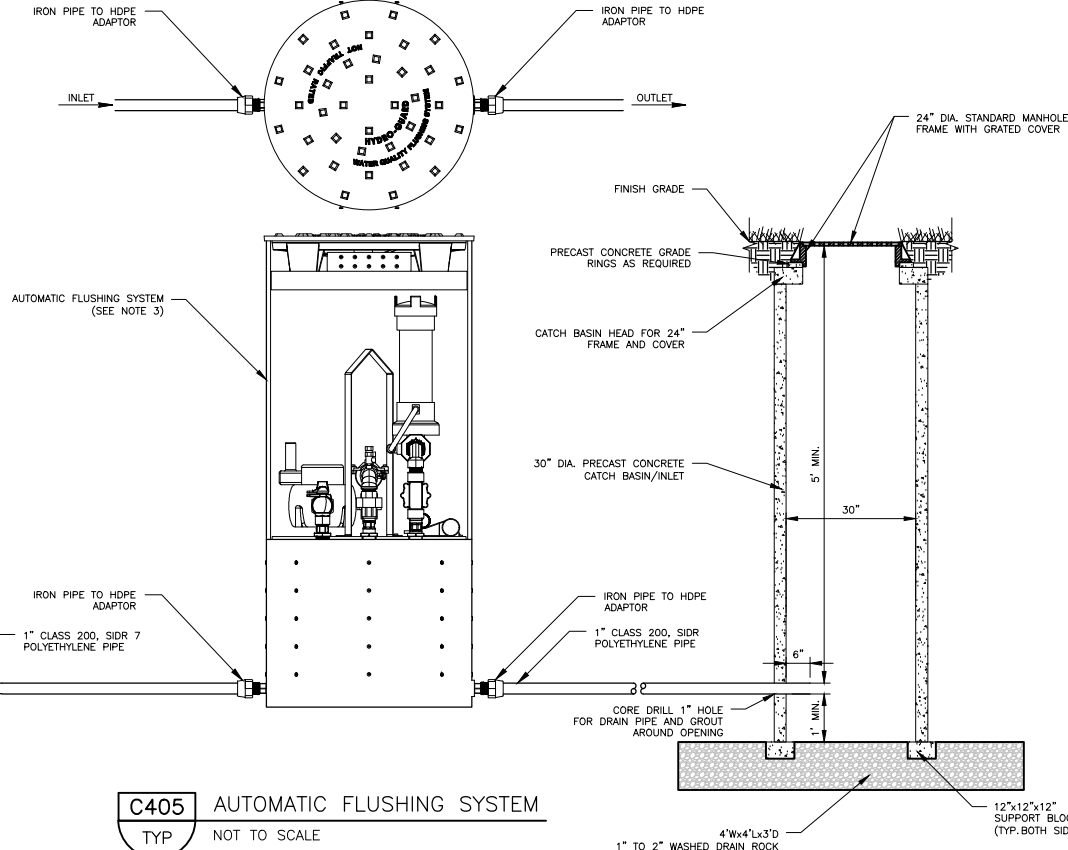
SIMMONS STREET TOWNHOUSES
McCALL, IDAHO
ROADWAY, DOMESTIC WATER, SANITARY SEWER
AND GRADING IMPROVEMENTS PROJECT
CIVIL TYPICAL DETAIL - 1

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	SHEET NO.
GC-1	8 OF 11

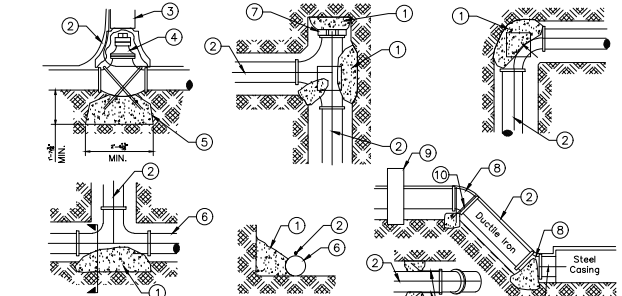
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NOTES:

- ALL WATER SERVICE COMPONENTS SHALL BE IRON PIPE SIZE. NO GALVANIZED PIPE OR FITTINGS SHALL BE USED. WATER SERVICE SADDLE, CORPORATION STOP, AND PIPE SHALL BE SIZED AS FOLLOWS:
 - SINGLE SERVICE: 1".
- AUTOMATIC FLUSHING SYSTEM LOCATIONS SHALL BE SHOWN ON WATER SYSTEM PLANS AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS.
- AUTOMATIC FLUSHING SYSTEM TO BE MUELLER HYDRO-GUARD 300 SERIES COLD CLIMATE FLUSHING SYSTEM WITH 60" BURY DEPTH. SEE INSTALLATION MANUAL FOR INFORMATION ON INSTALLATION OF AUTOMATIC FLUSHING SYSTEM.
- SERVICE PIPE SHALL BE CLASS 200, SDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- FORD STAINLESS STEEL INSERT (STIFFENER) TO BE USED WITH POLYETHYLENE PRESSURE PIPE AT FITTINGS PER MANUFACTURERS RECOMMENDATIONS.
- SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6) FEET AND SHALL RISE TO FIVE (5) FEET, WITHIN A MAXIMUM DISTANCE OF EIGHTEEN (18) INCHES OF FLUSHING SYSTEM.
- SERVICE CONNECTIONS SHALL BE THIRTY-SIX (36) INCHES FROM FITTINGS OR WATER MAIN PIPE ENDS. MULTIPLE SERVICE CONNECTIONS IN THE SAME JOINT OF PIPE SHALL BE SEPARATED BY TWENTY-FOUR (24) INCHES AND NOT IN THE SAME HORIZONTAL LEVEL. -ABSOLUTE-
- MAINTAIN SEPARATION DISTANCES IN ACCORDANCE WITH IDAPA 58.01.08.
- ALL CATCH BASIN JOINTS TO INCLUDE CON-SEAL "CS-320 MASTIC" AND BE GROUTED (INSIDE & OUT) USING QUIKRETE "NON-SHRINK GENERAL PURPOSE GROUT." EXTERIOR MANHOLE JOINTS TO BE COVER WITH PRESS SEAL "EZ-WRAP" BUTYL ADHESIVE TAPE AFTER GROUTING. PRIME JOINT SURFACE USING A SPRAY ADHESIVE PRIOR TO EZ-WRAP APPLICATION.
- CATCH BASIN/INLET MANHOLE TO BE LOCATED PER PLANS.



C405 AUTOMATIC FLUSHING SYSTEM
TYP NOT TO SCALE



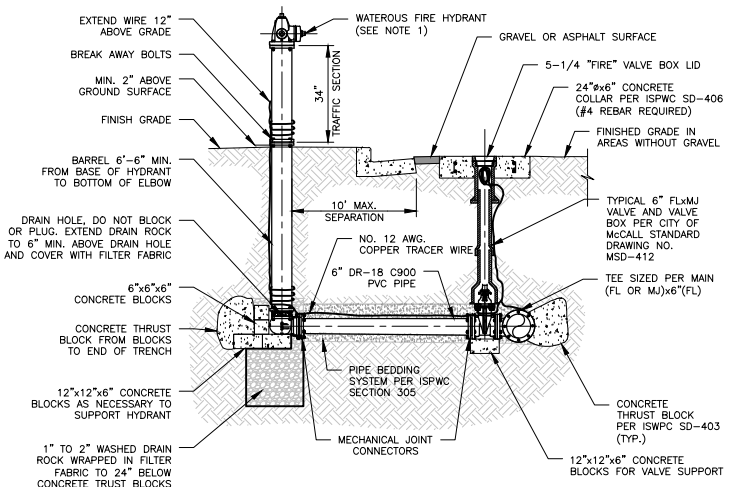
- LEGEND**
- FOR HORIZONTAL PIPE BENDS, BEARING THRUST BLOCKS MUST PROVIDE 2500 PSI CONCRETE, POURED AGAINST UNDISTURBED EARTH PER TABLE 1.
 - NO. 12 COPPER FINDER WIRE.
 - C.I. VALVE BOX WITH COVER.
 - C.I. GATE VALVE.
 - PRECAST BLOCK FOR CUT IN TEE AND VALVE OR CAST IN PLACE WITH (2) 1/2" MIN. REBAR.
 - PIPE.
 - PLUG.
 - RESTRAINED JOINTS.
 - HAMMERHEAD THRUST BLOCKING.
 - ANCHOR TIE (1/2" MIN.)
- GENERAL NOTES:**
- ANCHOR ALL BURIED VALVES AS SHOWN.
 - WRAP BOLTS AND FLANGES WITH 6 MIL. POLYPROPYLENE TO PROTECT FROM CONCRETE ADHERENCE DURING CONSTRUCTION OF THRUST BLOCKS.
 - SEE CHART FOR MINIMUM THRUST BLOCKS BEARING AREAS.
 - ALL CONCRETE SHALL BE MIN. OF 6 CU. FT. AND HAVE A MIN. TWENTY-EIGHT(28) DAY COMPRESSIVE STRENGTH OF NOT LESS THAN 2500 PSI POURED AGAINST UNDISTURBED EARTH.
 - THRUST BLOCKING SHALL BE PLACED BETWEEN UNDISTURBED EARTH AND THE FITTING TO BE ANCHORED.
 - THRUST BLOCKING SHALL BE PLACED SO THAT THE PIPE AND FITTING JOINTS WILL BE ACCESSIBLE TO REPAIRS.
 - ALL FITTINGS SHALL HAVE A 12"x12"x4" CONCRETE SUPPORT BLOCK.
 - ALL THRUST BLOCKS CAST IN PLACE UNLESS OTHERWISE NOTED.
 - PROVIDE 6 MIL. POLYPROPYLENE BETWEEN FITTINGS AND CONCRETE.
 - NOTIFY ENGINEER FOR ANY CONDITION OR PIPE SIZE NOT INDICATED.
 - ISPPW SD-403 APPLIES WHERE MORE STRINGENT.

SOIL BEARING PRESSURE = 2,000 PSF
WORKING PRESSURE RATING = 150 PSI
SAFETY FACTOR = 1.5

PIPE SIZE	TEE OR END	BENDS 45°	BENDS 90°	TEE OR END	REDUCER
3"	0.8	1.1	0.6	0.3	0.3
4"	1.4	2.0	1.1	0.6	0.6
6"	3.2	4.5	2.4	1.2	1.2
8"	5.7	8.0	4.3	2.2	2.2
10"	8.8	12.5	6.8	3.4	3.4
12"	12.7	18.0	9.7	5.0	5.0
14"	17.3	24.5	13.3	6.8	6.8
16"	22.6	32.0	17.3	8.8	8.8
18"	28.6	40.5	21.9	11.2	11.2

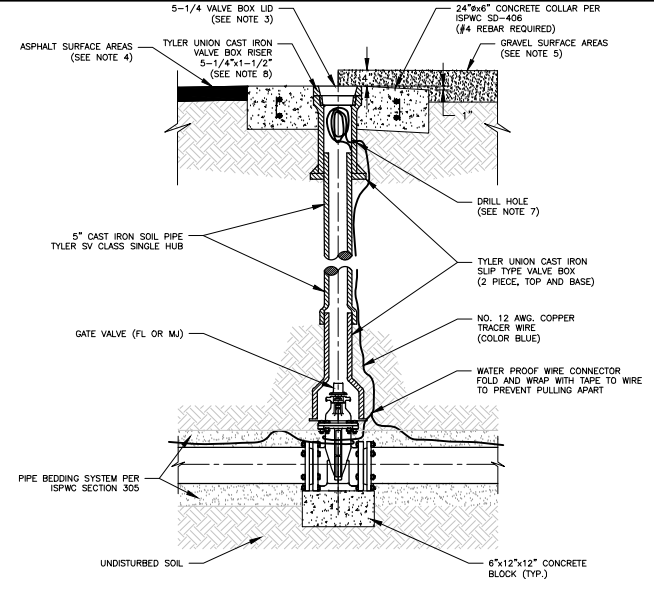
* MUST BE INCREASED BASED ON DIFFERENT CONDITIONS (HIGHER WORKING PRESSURE OR LOWER SOIL BEARING STRENGTH)
** OR TEE ACTING AS A 90° BEND
*** THRUST BLOCK DEPTH TO BE A MINIMUM OF 12" FOR PIPE SIZES 3"-8" AND 18" FOR PIPE SIZES 10"-18" OR THE SQUARE ROUTE OF THE REQUIRED BEARING AREA, WHICHEVER IS GREATER.

C406 THRUST BLOCKS
TYP NOT TO SCALE



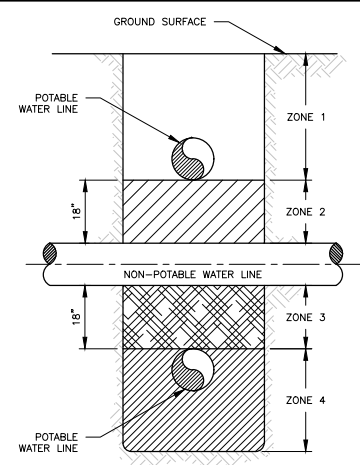
- NOTES:**
- FIRE HYDRANT SHALL BE PACER 100, MODEL NO. W867-250, WITH 1 4" PUMPER OUTLET AND 2 EA. 2-1/2" OUTLETS WITH A THIRTY-FOUR (34) INCH TRAFFIC SECTION, MADE BY WATEROUS CO. AND INSTALLED WITH THE FIRE HYDRANT HOSE ATTACHMENT FOUR (4) FEET ABOVE EXISTING GROUND. FIRE HYDRANT PAINT COLOR TO BE IN ACCORDANCE WITH LOCAL STANDARDS. 4" PUMPER NOZZLE SHALL ALIGN WITH LATERAL AND ASSOCIATED FIRE HYDRANT VALVE.
 - FINAL HYDRANT LOCATIONS SHALL BE FIELD APPROVED BY THE CITY OF McCALL AND McCALL FIRE PROTECTION DISTRICT PRIOR TO INSTALLATION.
 - HYDRANT SHALL NOT BE PLACED CLOSER THAN TEN (10) FEET MINIMUM FROM SEWER, FIFTY (50) FEET MINIMUM FROM SEPTIC SYSTEMS AND TWENTY FIVE (25) FEET MINIMUM FROM SEEPAGE BEDS.
 - HYDRANT MUST BE INSTALLED ABOVE GROUND/SURFACE WATER AND FINISHED GRADE TO SLOPE AWAY FROM STRUCTURE.
 - MINIMUM DISTANCE FROM THE FIRE HYDRANT TO THE FIRE HYDRANT GATE VALVE SHALL BE FIVE (5) FEET.
 - PLACE LOCATOR WIRE DIRECTLY ABOVE PIPE. SECURE FINDER WIRE UNDER (M) BOLT AT MAIN.
 - ALL JOINTS SHALL BE RESTRAINED. JOINT RESTRAINT DEVICES MAY BE USED AS AN ALTERNATE TO THRUST BLOCK WITH ENGINEER'S APPROVAL.
 - ALL ANCHORS AND BLOCKING TO BEAR AGAINST UNDISTURBED SOIL.
 - ALL AUXILIARY FIRE HYDRANT VALVES TO BE LOCATED AT THE TEE ON THE WATER MAIN AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER. WHERE EXISTING FITTINGS ARE NOT COMPATIBLE WITH NEW MAIN CONSTRUCTION, USE SUITABLE ADAPTERS OR NEW FITTINGS UPON APPROVAL BY THE ENGINEER.
 - IF WATER SERVICE TO HYDRANT IS TO COMMENCE PRIOR TO SETTING OF CONCRETE THRUST BLOCKING, USE APPROVED MECHANICAL JOINT RESTRAINTS, AS APPROVED BY THE ENGINEER.
 - HYDRANTS THAT ARE TO BE RELOCATED AS CALLED FOR ON THE PLANS SHALL BE REINSTALLED IN ACCORDANCE WITH THIS DETAIL LOCATION TO BE SET IN ACCORDANCE WITH LOCAL STANDARDS OR AS DIRECTED BY THE ENGINEER.

C408 FIRE HYDRANT INSTALLATION
TYP NOT TO SCALE



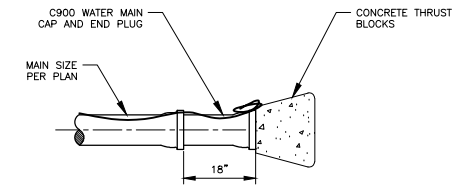
- NOTES:**
- ALL GATE VALVES SHALL BE NON-RISING STEM RESILIENT SEATED GATE VALVES MEETING ANSI/AWWA C515 FOR WATER SUPPLY SERVICE.
 - CLEAN VALVE BOX OF ALL DEBRIS AND SOIL.
 - ALL VALVE BOX LIDS TO BE 5 1/4" DROP LIDS. ALL WATER VALVE BOX LIDS TO BE STAMPED "WATER" AND ALL FIRE VALVE BOX LIDS TO BE STAMPED "FIRE".
 - FOR ASPHALT SURFACE, CONCRETE COLLAR TO BE 1/4" BELOW FINISHED GRADE.
 - FOR GRAVEL ROADWAY SURFACE, CONCRETE COLLAR TO BE 4" BELOW FINISHED GRADE AND SLOPED AWAY FROM VALVE BOX LID SO THAT OUTSIDE EDGE IS 1" LOWER.
 - VALVE BOXES OUTSIDE OF PAVED OR GRAVEL ROADWAYS SHALL HAVE A CONCRETE COLLAR POURED TO BE FLUSH WITH FINISHED GRADE.
 - DRILL 7/8" HOLE IN TOP PORTION OF VALVE BOX. PLACE PVC VALVE GROMMET INTO HOLE AND ROUTE TRACER WIRE THROUGH HOLE.
 - TYLER UNION CAST IRON RISER IS NOT TO BE USED WITHIN STATE HIGHWAYS. ONLY FOR USE WITHIN CITY OF McCALL ROADWAYS.

C412 STANDARD VALVE BOX INSTALLATION
TYP NOT TO SCALE



- VERTICAL SEPARATION REQUIREMENTS**
- ZONE 1: A) WATER AND NPWL MUST BE SEPARATED BY AT LEAST 18" AND B) ONE FULL, UN-CUT LENGTH OF BOTH PWL AND NPWL PIPE MUST BE CENTERED ON THE CROSSING SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE CROSSING.
- ZONE 2: A) ONE FULL, UN-CUT LENGTH OF BOTH PWL AND NPWL PIPE MUST BE CENTERED ON THE CROSSING SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE CROSSING.
- AND EITHER B) NPWL MUST BE CONSTRUCTED TO WATER MAIN STANDARDS AND PRESSURE TESTED FOR WATER TIGHTNESS FOR A HORIZONTAL DISTANCE OF 10 FEET ON BOTH SIDES OF CROSSING.
- OR C) EITHER THE NPWL OR WATER LINE OR BOTH MUST BE ENCASED WITH A SLEEVING MATERIAL ACCEPTABLE TO DEQ FOR A HORIZONTAL DISTANCE OF 10 FEET ON BOTH SIDES OF THE CROSSING.
- ZONE 3: A) SAME REQUIREMENTS AS ZONE 2 EXCEPT THE NPWL MUST ALSO BE SUPPORTED ABOVE THE CROSSING TO PREVENT SETTLING.
- ZONE 4: A) SAME REQUIREMENTS AS ZONE 1 EXCEPT THE NPWL MUST ALSO BE SUPPORTED ABOVE THE CROSSING TO PREVENT SETTLING.
- HORIZONTAL SEPARATION REQUIREMENTS**
- ZONE 1: A) NO SPECIAL REQUIREMENTS.
- ZONE 2: A) NO SPECIAL REQUIREMENTS FOR POTABLE OR NON-POTABLE SERVICES.
- B) WATER AND NPWL SEPARATED BY AT LEAST 6 FEET AT OUTSIDE WALLS.
- AND C) WATER AT LEAST 18 INCHES HIGHER IN ELEVATION THAN THE NPWL.
- AND EITHER D) NPWL CONSTRUCTED TO WATER MAIN STANDARDS AND PRESSURE TESTED FOR WATER TIGHTNESS.
- OR E) SITE SPECIFIC REQUIREMENTS APPROVED BY DEQ.
- ZONE 3: A) NOT ALLOWED WITHOUT DEQ WAIVER.

C414 POTABLE/NOT-POTABLE WATER LINE (NPWL) SEPARATION
TYP NOT TO SCALE



C426 CAP AND PLUG DETAIL
TYP NOT TO SCALE

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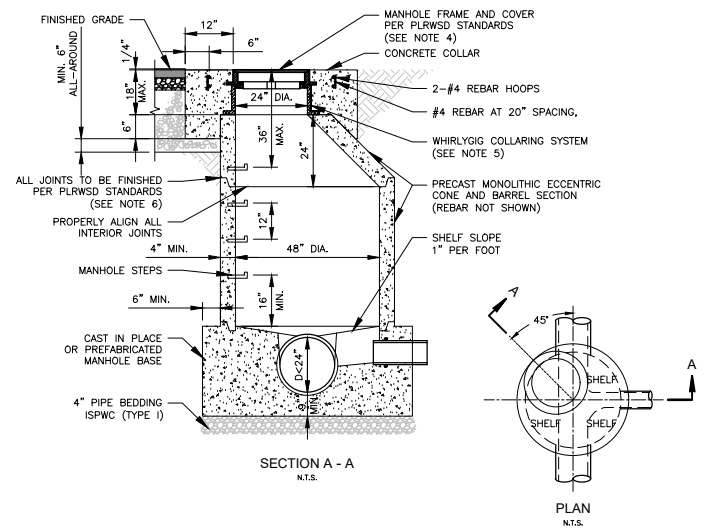


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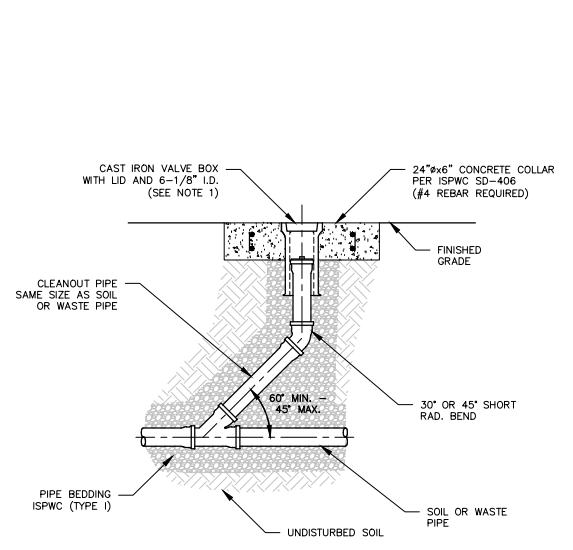
SIMMONS STREET TOWNHOUSES
McCALL, IDAHO
ROADWAY, DOMESTIC WATER, SANITARY SEWER
AND GRADING IMPROVEMENTS PROJECT
CIVIL TYPICAL DETAILS - 2

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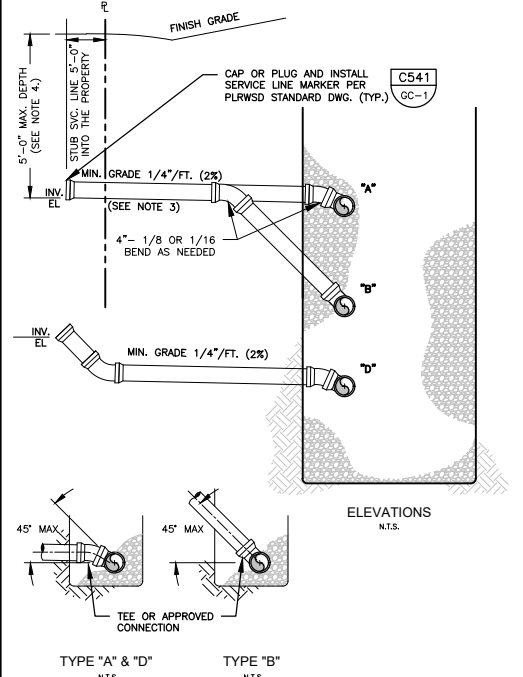
- NOTES:**
- OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEERS APPROVAL.
 - PLACE VERTICAL WALL ON UPSTREAM SIDE OF MANHOLE, ROTATED 45 DEGREES.
 - WHERE PVC PIPE IS UTILIZED, INSTALL A RUBBER RING OR GASKET COLLAR WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL.
 - ALL MANHOLES TO HAVE CAST-IRON DUST PANS CONSTRUCTED WITH INTEGRAL MACHINED FLANGES CAST INTO THE FRAME. DUST PANS TO HAVE A RAISED DRAIN HOLE AND WIRE LIFTING STRAP. MANHOLE COVER TO BE STAMPED "PLWSD SEWER". FRAMES, COVERS, AND DUSTPANS TO BE MANUFACTURED BY KITS FOUNDRY & MACHINE, INC. (208) 357-7773.
 - "WHIRLYGIG" COLLARING SYSTEM REQUIRED ON ALL MANHOLES IN PLACE OF CONCRETE GRADE RINGS. JOINT BETWEEN WHIRLYGIG COLLARING SYSTEM (BOTTOM OF PLASTIC FLANGE) AND TOP OF MANHOLE CONE SHALL BE SEALED WITH "VULKEM 116" HIGH-PERFORMANCE POLYURETHANE SEALANT.
 - ALL MANHOLE JOINTS TO INCLUDE CON-SEAL "CS-102 BUTYL RUBBER SEALANT," "VULKEM 116" HIGH-PERFORMANCE POLYURETHANE SEALANT, AND BE GROUTED (INSIDE & OUT) USING DAYTON 1107 ADVANTAGE, SPECHEM SC MULTIPURPOSE GROUT, OR EQUAL APPROVED BY PLWSD. EXTERIOR MANHOLE JOINTS TO BE COVERED WITH NINE (9") INCH WIDE INF-SHIELD GATER WRAP AFTER GROUTING.
 - PROVIDE MANHOLE CONCRETE REINFORCING TO ACCOMMODATE TRAFFIC LOADS.

C501 PLWSD - STANDARD MANHOLE
TYP NOT TO SCALE



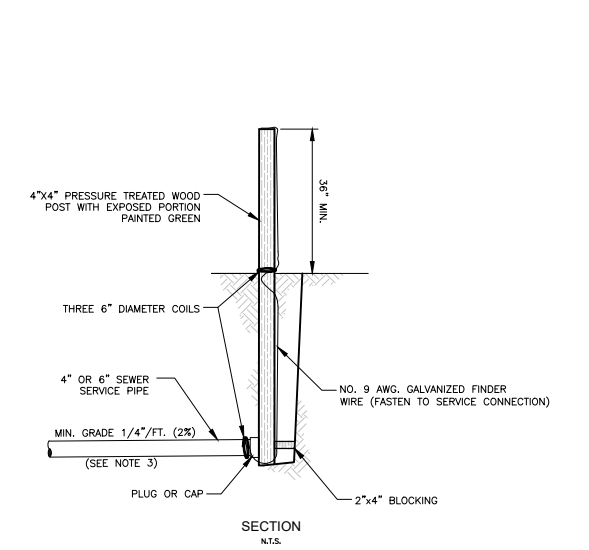
- NOTES:**
- CLEANOUT VALVE BOX LIDS TO BE A 5 1/4" DROP LID MARKED "SEWER" WHEN ASSOCIATED WITH GRAVITY SEWER PIPING AND HAVE NO MARKINGS (BLANK) WHEN ASSOCIATED WITH ALL OTHER PIPING.

C520 STANDARD SEWER CLEANOUT
TYP NOT TO SCALE



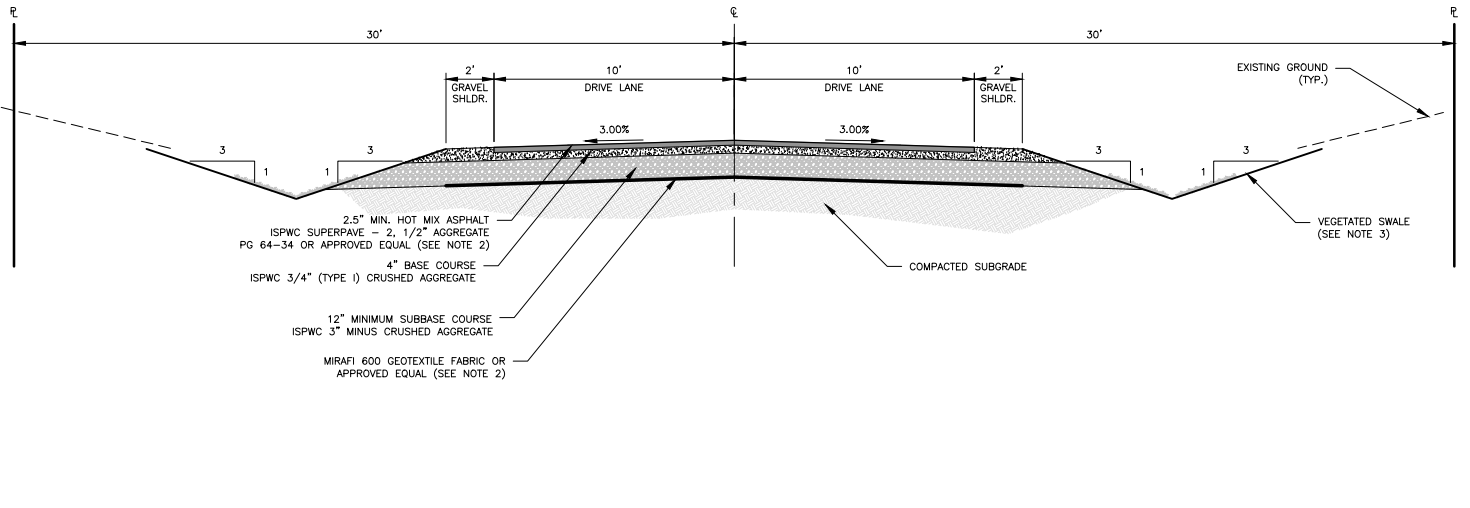
- NOTES:**
- ALL SERVICE LINES TO BE FOUR (4") INCHES INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - SERVICE LINE TO BE STUBBED A MINIMUM OF 5'-0" INTO PRIVATE PROPERTY OR AS INDICATED ON THE CONSTRUCTION PLANS.
 - MINIMUM SLOPE OF SEWER LATERALS SHALL BE 2% UNLESS OTHERWISE AUTHORIZED BY THE APPROVING AUTHORITY OR SPECIFICALLY CALLED OUT ON THE CONSTRUCTION DRAWINGS. IN NO CASE SHALL THE SLOPE BE LESS THAN 1%.
 - A MINIMUM OF THREE (3') FEET COVER DEPTH MAY BE ALLOWABLE WITH PRIOR APPROVAL FROM THE PLWSD.

C535 STANDARD SEWER SERVICE LINES
TYP NOT TO SCALE



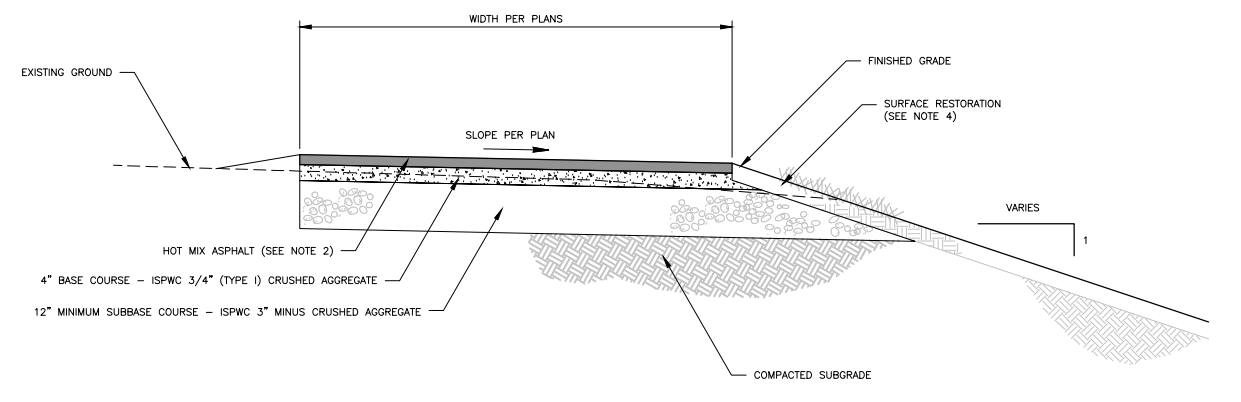
- NOTES:**
- ALL SERVICE LINES TO BE FOUR (4") INCHES INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - SERVICE LINE TO BE STUBBED A MINIMUM OF 5'-0" INTO PRIVATE PROPERTY OR AS INDICATED ON THE CONSTRUCTION PLANS.
 - MINIMUM SLOPE OF SEWER LATERALS SHALL BE 2% UNLESS OTHERWISE AUTHORIZED BY THE APPROVING AUTHORITY OR SPECIFICALLY CALLED OUT ON THE CONSTRUCTION DRAWINGS. IN NO CASE SHALL THE SLOPE BE LESS THAN 1%.

C541 STANDARD SEWER SERVICE MARKER
TYP NOT TO SCALE



- NOTES:**
- COMPACTION AND TESTING FOR ALL AGGREGATE BASE/SUBBASE MATERIAL SHALL BE IN ACCORDANCE WITH ISPCW 802.
 - ASPHALT FOUR (4") INCHES IN THICKNESS SHALL BE PLACED IN TWO (2") INCH LIFTS. ASPHALT THREE (3") INCHES OR LESS SHALL BE PLACED IN A SINGLE LIFT.
 - GEOTEXTILE FABRIC TO EXTEND 1' MIN. BEYOND THE EDGE OF ASPHALT. ALL SEAMS TO OVERLAP 2' MIN.
 - COMPACTION AND TESTING FOR ALL HOT MIX ASPHALT SHALL BE IN ACCORDANCE WITH ISPCW SECTION 810 AND PROJECT PLANS AND SPECIFICATIONS.
 - REVEGETATE ALL DISTURBED AREAS WITH A CITY APPROVED GRASS MIXTURE OVER FOUR (4") INCHES OF TOPSOIL, PER APPROVED LANDSCAPING PLAN, OR AS INDICATED WITHIN THE PLANS.

C800 ROADWAY TYPICAL SECTION - DRIVEWAY
TYP SCALE: 1" = 4'



- NOTES:**
- COMPACTION AND TESTING FOR ALL AGGREGATE BASE/SUBBASE MATERIAL SHALL BE IN ACCORDANCE WITH ISPCW SECTION 802.
 - HOT MIX ASPHALT THICKNESS/DEPTH TO BE PER THE PROJECTS GEOTECHNICAL EVALUATION. USE ISPCW 1/2" SP3, PG64-34 FOR ALL ROADS/MAIN DRIVEWAY SURFACES AND ISPCW 1/2" SP2, PG58-28 FOR INDIVIDUAL DRIVEWAY APPROACHES TO RESIDENCES.
 - COMPACTION AND TESTING FOR ALL HOT MIX ASPHALT SHALL BE IN ACCORDANCE WITH ISPCW SECTION 810.
 - SURFACE RESTORATION TO BE PER THE PROJECTS LANDSCAPING PLANS. IF LANDSCAPE PLANS HAVE NOT BEEN PROVIDED BY THE OWNER, SURFACE RESTORATION SHALL INCLUDE 2"-3" OF GRAVEL OR PLACED TOPSOIL REVEGETATED WITH A NATIVE SEED MIXTURE PER AS INDICATED.

C806 TYPICAL PAVING SECTION
TYP NOT TO SCALE

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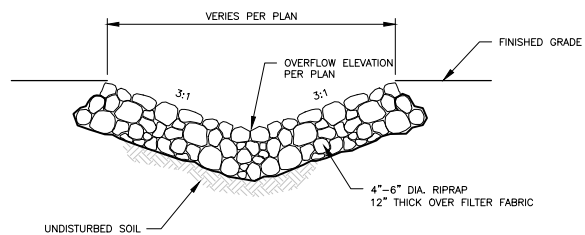


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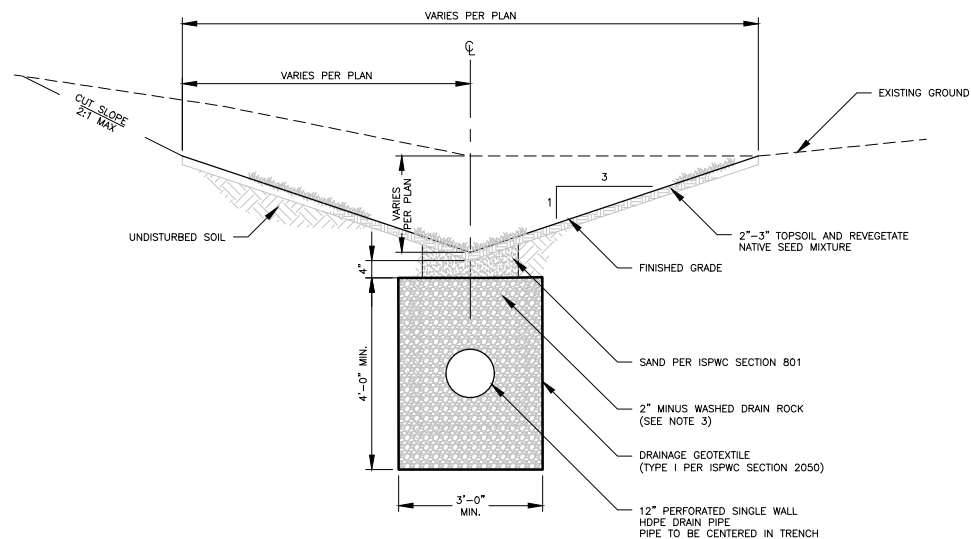
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ROADWAY, DOMESTIC WATER, SANITARY SEWER
AND GRADING IMPROVEMENTS PROJECT
CIVIL TYPICAL DETAILS - 3

VERIFY SCALE	
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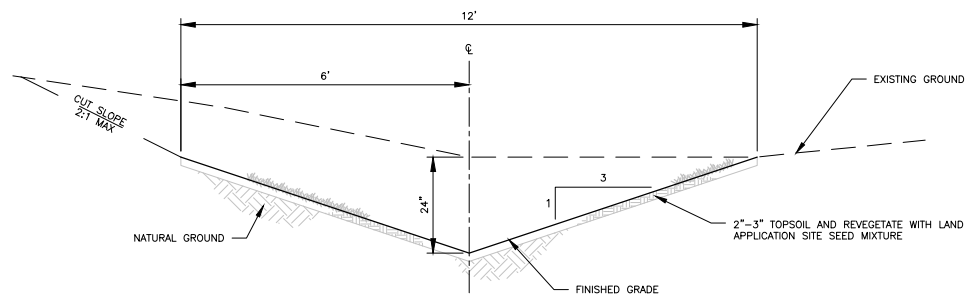
C1014 WEIR OVERFLOW DETAIL
TYP NOT TO SCALE



NOTES:

1. REFER TO IDAHO DEPARTMENT OF ENVIRONMENTALLY QUALITY'S CATALOG OF STORMWATER BEST MANAGEMENT PRACTICES, VOLUME 4, SECTION 3, BMP 17 AT WWW.DEQ.IDAHO.GOV/MEDIA/622263--STORMWATER.PDF FOR ADDITIONAL INFORMATION.
2. TYPICAL TRENCH CONSTRUCTION AS PER TRENCH DETAIL STANDARD DRAWING OR ISPMC SD-301.
3. DRAIN ROCK BACKFILL TO BE 2" MINUS DIAMETER AND RELATIVELY CLEAN OF FINES. IF DRAIN ROCK IS FOUND TO BE UNSUITABLY DIRTY WHEN IT ARRIVES AT THE SITE, IT SHOULD BE CLEANED BEFORE PLACEMENT.
4. PERFORATED PIPE TO HAVE CAP ATTACHED TO BOTH ENDS TO PREVENT DRAIN ROCK FROM ENTERING THE PIPE.
5. BACKFILL AND COMPACTION PER ISPMC SECTION 306.

C1010 DRAINAGE SWALE/DETENTION DETAIL
TYP NOT TO SCALE



NOTES:

1. REFER TO IDAHO DEPARTMENT OF ENVIRONMENTALLY QUALITY'S CATALOG OF STORMWATER BEST MANAGEMENT PRACTICES, VOLUME 4, SECTION 3, BMP 9 AT WWW.DEQ.IDAHO.GOV/MEDIA/622263--STORMWATER.PDF FOR ADDITIONAL INFORMATION.

C1401 BIOFILTRATION SWALE (VEGETATED SWALE)
TYP NOT TO SCALE

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CIVIL TYPICAL DETAILS - 4

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Civil Engineering Consultants

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PO Box 2330

McCall, Idaho 83638

(208) 634-4140

SIMMONS STREET TOWNHOUSES

STORMWATER DRAINAGE REPORT

APRIL 2023

Prepared for:

Synergy Structures, LLC
PO Box 1006
McCall, ID 83638



Crestline Engineers, Inc.
323 Deinhard Lane, Suite C
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McCall, Idaho 83638
(208) 634-4140

SIMMONS STREET TOWNHOUSES

STORMWATER DRAINAGE REPORT

APRIL 2023

Crestline Engineers, Inc.
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SIMMONS STREET TOWNHOUSES
STORMWATER DRAINAGE REPORT
APRIL 2023

TABLE OF CONTENTS **PAGE**

SECTION I – STORMWATER APPLICATION, CITY OF McCALL

SECTION II – STORMWATER DRAINAGE REPORT

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B. Erosion and Sediment Control.....	3
C. Conveyance System.....	7
D. First Flush Treatment.....	8
E. Permanent BMP's.....	9
F. Operation and Maintenance.....	9

SECTION III – STORMWATER CALCULATIONS

1. Drainage Area Calculations (4 Pages)
2. Hydrograph Report with TR55 Tc Worksheets (10 Pages)

APPENDIX A – FIGURES/DRAWINGS

FIGURE NO. 1 OF 2	VICINTY MAP
FIGURE NO. 2 OF 2	DRAINAGE AREA MAP
DRAWING NO. C-5	GRADING, DRAINAGE, AND STORMWATER MANAGEMENT PLAN
DRAWING NO. GC-1	CIVIL TYPICAL DETAILS – 1
DRAWING NO. GC-2	CIVIL TYPICAL DETAILS – 2
DRAWING NO. GC-3	CIVIL TYPICAL DETAILS – 3
DRAWING NO. GC-4	CIVIL TYPICAL DETAILS – 4

SECTION I

STORMWATER APPLICATION, CITY OF MCCALL

STORMWATER APPLICATION
City of McCall

Fill in all information. Submit one copy of signed application and three copies of Stormwater Management Plan/Report to the City Engineer.

1. Project Name: _____
Location: _____

2. Owner's Name: _____
Street: _____ City: _____
State: _____ Zip Code: _____ Phone: _____

3. Project Description: _____

a. Total property area, in acres. _____
b. Proposed impervious surface (asphalt, rooftop, concrete, sidewalk, etc.) in square feet. _____


c. Describe existing vegetation present on site. _____

d. Start date of construction. _____
e. Estimated length of time to complete improvements. _____

4. Stormwater Management Plan/Report attached? Yes No

5. Circle the section of the Stormwater Management Plan/Report Checklist which are applicable to project.
A B C D E F

6. Party responsible for operation and maintenance of project, including maintenance of temporary and permanent Best Management Practices:

		8-23-22	
_____	_____	_____	_____
Name	Title	Signature	Date
_____	_____	_____	_____
Address	Daytime Phone	After Hours Phone	

Do not write below this line.

This Stormwater Management Plan/Report is:

Approved: _____

Not Approved: _____

Approved, with conditions: _____

By The City of McCall

Representative	Title	Signature	Date

SECTION II
STORMWATER DRAINAGE REPORT

SIMMONS STREET TOWNHOUSES
STORMWATER DRAINAGE REPORT
APRIL 2023

PART A: BASIN CHARACTERISTICS

The proposed project consists of the construction of a 5-unit townhome style building, an asphalt driveway, and an asphalt parking lot. Construction improvements associated with the project include asphalt driveway, sanitary sewer, domestic water, grading, drainage, and stormwater management improvements. The project is located near the Scott Street just south of Scott Street on Simmons Street, McCall, Idaho 83638 (see Appendix A, Vicinity Map). The total property area is 0.33 acres (14,313.0 S.F.), consisting of the 5-unit townhouses and an asphalt parking lot. To better analyze the drainage patterns associated with the project, it was determined to divide the project into two drainage areas. Drainage area on-site consists mostly of the building and asphalt parking lot and is 0.43 acres (18,813.6 S.F.). Drainage area road consists of the asphalt driveway and is 0.28 acres (12,006.3 S.F.). Proposed improvements, as shown on this plan, are based upon drawings provided by Chrysalis Architecture.

The existing site consists predominately of pine trees with some existing native grass, vegetation, and weeds. The topography of the on-site drainage area is moderately flat with a shallow slope to the southwest, the average slope is approximately 0.84%. The topography of the road development area is moderately flat as well, with an average slope of approximately 1.00%. Soils located within the development areas consist primarily of Donnel sandy loam with minor amounts of Kangas fine gravelly loamy coarse sand. Donnel sandy loam is a somewhat excessively drained soil located on slopes ranging 0-2%. Please, refer to the *Soil Survey of Valley Area, Idaho, Parts of Adams and Valley Counties* for additional information on soils within the project area.

This report addresses the stormwater management and erosion/sediment control measures that will be implemented during the construction of the proposed project, thus showing the project's compliance with the City of McCall Drainage Management Guidelines (DMGs). Through the implementation of this plan, potential stormwater impacts to downstream water resources and adjoining properties will be mitigated.

The development area associated with this project consists of 0.71 acres (30,819.9 S.F.). The total proposed impervious surface area, which includes the construction of a 5-unit residential townhomes building, asphalt road, and asphalt parking, is approximately 0.44 acres (19,088.4 S.F.)¹.

a. Project Site

- a. The total site area is 0.71 acres (30,819.9 S.F.).
- b. The development areas are approximately:
 - 1. Drainage Area On-site: 0.43 acres (18,813.6 S.F.)

¹ The total impervious surface area represents the sum of impervious surfaces from drainage area on-site as well as drainage area road. Refer to Section III of the report for drainage area calculations.

- 2. Drainage Area Road: 0.28 acres (12,006.3 S.F.)
- c. The development density is one (1) townhome style building per 0.066 acres.
- d. The total roof area of the proposed townhome style building will be 0.17 acres (7,234.0 S.F.) after project completion.
- e. The total area of the proposed asphalt driveway/parking will be approximately:
 - 1. Drainage Area On-site: 0.18 acres (7,925.8 S.F.)
 - 2. Drainage Area Road: 0.09 acres (3,928.6 S.F.)
- f. The total post development impervious area will be approximately:
 - 1. Drainage Area On-site: 0.35 acres (15,159.8 S.F.)
 - 2. Drainage Area Road: 0.09 acres (3,928.6 S.F.)

b. Summary of the physical conditions onsite as well as for the upstream contributing area.

Onsite Drainage Area

The existing conditions within the property and upstream contributing areas are provided in Figure No. 2, Drainage Area Map, and include the following:

- a. The pre-development area is approximately 0.00% impervious.
- b. The primary flow path drainage length is approximately:
 - 1. Drainage Area On-site: 157.01ft.
 - 2. Drainage Area Road: 123.48 ft.
- c. The average slope of the primary flow path is approximately:
 - 1. Drainage Area On-site: 0.84%.
 - 2. Drainage Area Road: 1.00%.
- d. There are no known wetlands on the property.

Post development land use and associated stormwater improvements are shown within the Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan. Upon completion of the proposed project, the post development land use conditions will be as follows:

- a. The post development impervious areas will be approximately:
 - 1. Drainage Area On-site: 80.58%.
 - 2. Drainage Area Road: 32.72%.
- b. The primary flow path drainage length is approximately:
 - 1. Drainage Area On-site: 160.83ft.
 - 2. Drainage Area Road: 238.39 ft.
- c. The average slope of the post primary flow path is approximately:
 - 1. Drainage Area On-site: 1.52%.
 - 2. Drainage Area Road: 1.90%.
- d. There are no known wetlands on the property.

Upstream Contributing Drainage Area

Any off-site runoff flowing towards the site will be slowed, treated, and conveyed around the property by the proposed vegetated swales, detention basin and infiltration trench. Current runoff flowing on-site enters from the northeast side of the property and drains through the existing vegetation on-site, exiting near the southern property boundary.

c. Existing drainage facilities impacted by the proposed development on the site and downstream of the proposed development.

There are no known existing drainage facilities on-site that will be impacted by the proposed improvements.

PART B: EROSION AND SEDIMENT CONTROL

1. Description of existing site prior to activity.

- a. Total Property Area = 0.71 acres (30,819.9 S.F.)
Development Area On-site = 0.43 acres (18,813.6 S.F.)
 Woods – Grass Combination = 0.43 acres (18,813.6 S.F.)
Development Area Road = 0.28 acres (12,006.3 S.F.)
 Woods – Grass combination = 0.28 acres (12,006.3 S.F.)
Total Impervious Surface Area = 0.00 acres (0.00 S.F.)
- b. A minor amount of off-site runoff currently enters the project site from the northeast. The runoff flows through the existing vegetation, exiting at the southern property boundary as shown in Figure No. 2, Drainage Area Map.

2. Description of proposed land improvement activity.

- a. Total Property Area = 0.71 acres (30,819.9 S.F.)
Development Area On-site = 0.43 acres (18,813.6 S.F.)
 Building Roofs = 0.17 acres (7,234.0 S.F.)
 Asphalt Road/Parking = 0.18 acres (7,925.8 S.F.)
 Open Space = 0.08 acres (3,653.8 S.F.)
 Total Impervious Surface Area = 0.35 acres (15,159.8 S.F.)
Development Area Road = 0.28 acres (12,006.3 S.F.)
 Asphalt Road/Parking = 0.09 acres (3,928.6 S.F.)
 Open Space = 0.19 acres (8,077.7 S.F.)
 Total Impervious Surface Area = 0.09 acres (3,928.6 S.F.)
- b. The proposed project's overall drainage pattern will be slightly modified due to the proposed improvements. All on-site grading will be completed per Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan. Upon completion of the project, the site will utilize two (2) proposed detention basins to manage first-flush

treatment. In addition, the eastern side of the property has been sloped to convey roof runoff to the southern detention basin where it will be detained. The proposed detention basins will be located as shown within Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan.

3. A plan which demonstrates the methods for sediment and erosion control. The plan should indicate the size, location and method for installation or implementation of the BMPs.

Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan is shown within the figures/drawings found in Appendix A.

4. Details and specifications for the proposed BMPs which describe their installation and maintenance procedures.

Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan in Appendix A, identifies the locations of the proposed erosion and stormwater controls to be implemented as part of the project's construction. The following best management practices (BMPs) are presented, as listed in the Idaho Department of Environmental Quality's Catalog of Stormwater Best Management Practices for Idaho Cities and Counties:

- Timing of construction is critical to reduce erosion potential. Schedule and sequence construction work and erosion control applications so that they occur under optimal conditions that is, during periods when the potential for erosion is lowest, such as dry weather (Erosion and Sediment Control BMP 36, Construction Timing).
- The Staging Area is to be located near the project entrance along with portable toilets, garbage receptacles, concrete washout, and all other contractor facilities (Sediment Control BMP 37, Staging Areas).
- Protection of existing vegetation is prescribed for all areas outside of the grading and construction limits. If possible, existing weeds should be maintained to provide a vegetated buffer to filter runoff during construction (Erosion Control BMP 38, Preserve Topsoil and Vegetation).
- Work activities shall take place within the clearing/construction limits as shown on Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan. The contractor shall always preserve natural vegetation outside of clearing limits (Erosion Control BMP 39, Clearing Limits).
- Stabilize Construction Entrance/Exit (Erosion and Sediment Control BMP 41, Stabilized Construction Roads, and Staging Areas).
- Additional use of good housekeeping practices, where applicable, during all aspects of the construction project shall be incorporated.

- BMP 40 Vehicle Sediment Control
 - BMP 43 Dust Control
 - BMP 44 Stockpile Management
 - BMP 45 Minimize Soil Compaction
 - BMP 46 Spill Prevention and Control
 - BMP 47 Construction Equipment Washing and Maintenance
 - BMP 49 Concrete Waste Management
 - BMP 50 Sanitary/Septic Waste Management
 - BMP 51 Solid Waste Storage and Disposal
- Revegetation and stabilization of all disturbed project areas shall be in accordance with the projects landscape design to prevent sediment transport after construction is completed.
 - BMP 31 Topsoiling
 - BMP 32 Landscaping (Seeding, Sodding and Planting)
 - BMP 52 Mulching (Conventional and Hydromulching)
 - BMP 53 Geotextile
 - BMP 54 Matting
 - BMP 55 Soil Binders
- Install fiber rolls and/or silt fence as shown on Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan to prevent sediment and runoff from leaving the site. Fiber rolls may be used in place of silt fence were determined appropriate. Fiber rolls/silt fence shall be used at the contractor's discretion if unforeseen stormwater runoff and erosion takes place at the proposed construction site.
 - BMP 64 Fiber Rolls
 - BMP 65 Silt Fence
- Landscaping improvements and existing vegetation are intended to provide a vegetative buffer to filter, intercept, and detain stormwater runoff. Vegetative buffers reduce the flow and velocity of surface runoff, promote infiltration, and reduce pollutant discharge by capturing and holding sediments and other pollutants carried in runoff water.
 - BMP 32 Landscaping
 - BMP 38 Preserve Topsoil and Vegetation
- The swale(s) shall be constructed to convey/detain runoff where necessary. The swale(s) are intended to be field fit, functioning to convey runoff around the proposed building and driveway/parking area avoiding site features, as necessary. Construction of the proposed vegetated swale(s) on the property are intended to detain/convey runoff generated from the construction.
 - BMP 9 Vegetated (biofiltration) Swale

5. A sequence and schedule of construction activities, including when erosion and sediment control devices and practices will be implemented. The sequence and schedule must include a timetable for project finish and a strategy for long term site stabilization as well as removal of temporary BMP's.

Temporary and permanent BMPs described above will be constructed as shown in Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan; and using guidance from the Idaho Department of Environmental Quality's Catalog of Stormwater Best Management Practices for Idaho Cities and Counties and the City of McCall's Drainage Management Guidelines (DMGs) (Chapters III and IV).

- Fiber rolls and/or silt fence shall be installed prior to the start of any project construction or earth disturbing activities and should remain in place until all disturbed/exposed areas have been stabilized and/or revegetated.
 - BMP 64 Fiber Rolls
 - BMP 65 Silt Fence
- Establish all clearing/construction limits with construction fencing or silt fence to protect on-site vegetation and all trees not identified for removal.
 - BMP 39 Clearing Limits
- Construction of the vegetated swale(s) on the property shall be completed prior to the start of any upslope grading activities.
 - BMP 9 Vegetated (biofiltration) Swale
- Following roof construction, temporary erosion control measures should be installed along the drip lines if excessive erosion occurs.
 - BMP 90 Building, repair, remodeling, and construction
- Final stabilization and grading associated with the project shall take place once construction activities are nearing completion and when significant erosion impacts associated with the proposed improvements can be minimized.
 - BMP 36 Construction Timing
- The project's construction timeline is approximately 6-12 months from the start of construction. The owner and contractor will be responsible for long term stabilization and maintenance of the newly vegetated areas.

PART C: CONVEYANCE SYSTEM

A hydraulic analysis of the proposed project was performed using the Simplified SCS Runoff Curve Number Method (TR-55) and rainfall intensity data presented in the conclusion of Memorandum "Recommended Modifications to the McCall Drainage Management Guidelines: First Flush Treatment and Storm Size Criteria", from Nathan Stewart, City Engineer, dated February 17, 2016. The Memorandum as well as the City of McCall's DMGs presents a recommendation for using a design storm size of 1.83 inches associated with the 10-year, 24-hour rainfall event for project related stormwater conveyance systems. All proposed conveyance system facilities have been sized to accommodate the flows predicted by these storm sizes as required by the DMGs.

Table 1

Calculation Method:	SCS Curve Number Method, Hydraflow Hydrographs Extension for AutoCAD Civil 3D
Composite Runoff Curve Number (CN):	Drainage Area On-site: 94 Drainage Area Road: 85
Design Event(s):	10-year, 24-hour
Rainfall, P (24 Hour):	1.83 inches, 10-year, 24-hour

The DMGs require that conveyance systems associated with project area be able to convey the 10-year storm event and minimize potential impacts to downstream/off-site conveyance facilities. The post development 10-year storm event was used to analyze the proposed culvert underneath the proposed driveway. Results of the stormwater and culvert modeling can be shown in the table below.

Drainage Area/Stormwater Modeling Summary:

Table 2

Drainage Area	Area (Acres)	Post-Development 10-year, 24-hour, Peak Discharge (CFS)	Culvert Size and Capacity (CFS)
Development Area Road	0.28	0.298	15" N-12 Culvert 4.25 (Hydrograph 4)

The total post development flow rate of the road development area is 0.298 CFS and the capacity of a 15" N-12 culvert is 4.25 CFS, therefore a 15" culvert will be sufficient.

PART D: FIRST FLUSH TREATMENT

A hydraulic analysis of the first flush of the proposed project was performed using the Simplified SCS Runoff Curve Number Method (TR-55) and rainfall intensity data presented in the conclusion of Memorandum “Recommended Modifications to the McCall Drainage Management Guidelines: First Flush Treatment and Storm Size Criteria”, from Nathan Stewart, City Engineer, dated February 17, 2016. The Memorandum presents a recommendation for using a storm size of 0.81 inches for the 24-hour, 95% rainfall event first flush stormwater treatment.

Post Development Drainage Area General Assumptions:

Table 3

Calculation Method:	SCS Curve Number Method, Hydraflow Hydrographs Extension for AutoCAD Civil 3D
Composite Runoff Curve Number (CN):	Drainage Area On-Site: 94 Drainage Area Road: 85
Design Event:	24-hour 95% rainfall event
Rainfall, P (24 Hour):	0.81 inches

The proposed vegetated detention basins as shown on Drawing No. C-5, Grading, Drainage, and Stormwater Management Plan (Appendix A) have been sized to capture and detain the first flush volume generated over their respective drainage area by the design storm.

It was determined detaining the first flush event would be sufficient because the property area impervious surface area is less than 15,000 S.F., therefore, the first flush event would be sufficient for all drainage areas. In addition, as each event is routed through the detention basins the post development flow rate will be reduced.

The total post development runoff volume of the 24-hour, 95% rainfall event for on-site drainage area was estimated to be 550 C.F. The detention of this volume will be detained within proposed detention basin No. 1. Storm and design volumes are presented in Table 4 below.

The total post development runoff volume of the 24-hour, 95% rainfall event for road drainage area was estimated to be 96 C.F. The detention of this volume will be detained within proposed detention basin No. 2. Storm and design volumes are presented in Table 4 below.

Excess flows from larger storm events will overflow from the vegetated detention basins and flow to the south. Runoff from this drainage area consists primarily of the asphalt road/parking and building roofs, therefore, the passive pretreatment for sediment through

the detention basins will provide the necessary treatment for the project and adjacent right-of-way. Storm and design volumes are presented in Table 4.

Table 4

	Pretreatment	24-hour, 95% storm volume	Detention design volume
Detention Basin No. 1	Yes (passive)	550 C.F.	605 ² C.F.
Detention Basin No. 2	Yes (passive)	96 C.F.	179 C.F.

In addition to the constructed vegetated detention basins, the sites natural/native landscape and revegetated areas will provide a vegetative buffer strip that will filter, as well as infiltrate stormwater runoff from the project.

PART E: PERMANENT BMP'S

Permanent BMPs for the project includes the following:

- Native and re-planted vegetation and the proposed vegetated swale(s) will provide filtration of stormwater runoff between the proposed project and adjacent properties.
- Vegetated swale along the property boundary to detain and treat the first flush storm event.
- Two (2) landscaped detention basins for first flush treatment.
- One infiltration trench for first flush treatment.

PART F: OPERATION AND MAINTENANCE

During construction, operation and maintenance of the Stormwater Management Plan will be the responsibility of the associated Contractor(s). This plan should be implemented in accordance with the Idaho Department of Environmental Quality’s Catalog of Stormwater Best Management Practices for Idaho Cities and Counties and the City of McCall DMGs. All erosion and sediment controls including stormwater treatment facilities shall be inspected weekly during construction. Additional inspections should be completed in anticipation of, and immediately following event-based runoff events (spring snow melt/significant precipitation events). Construction areas with excess sediment build-up around the fiber rolls and/or silt fence should be cleaned at the time of inspections.

² The detention design volume represents the total detention for the proposed detention basin No. 1 as well as the proposed 4’ deep infiltration trench. Refer to Section III of the report for detention basin and infiltration trench calculations.

Revegetated areas should be monitored for successful vegetation generation. Areas that remain exposed and/or may become eroded shall be stabilized immediately with mulch and/or straw blankets.

Adjustments to the stormwater management plan should be made by the contractor if excessive erosion continues to occur at the site during construction. After construction of the site improvements, upon final stabilization of the site and acceptance by the owner, the owner will assume responsibility for the operation and maintenance of the stormwater BMPs.

REFERENCES

City of McCall. Community Development Department. Drainage Management Guidelines. January 1997. evogov.s3.amazonaws.com/141/media/115536.pdf.

Rasmussen, L.M. 1981. Soil Survey of Valley Area, Idaho, Parts of Adams, and Valley Counties. United States Department of Agriculture, Soil Conservation Service, in cooperation with University of Idaho College of Agriculture and Idaho Soil Conservation Commission. The Service.

State of Idaho. Department of Environmental Quality. Idaho Catalog of Storm Water Best Management Practices. 2020. www2.deq.idaho.gov/admin/LEIA/api/document/download/14968.

SECTION III
STORMWATER CALCULATIONS



CRESTLINE ENGINEERS, INC.
 CIVIL ENGINEERING CONSULTANTS
 323 DEINHARD LANE, SUITE C
 PO BOX 2330
 McCALL, IDAHO 83638
 208.634.4140 · 208.634-4146 FAX

PROJECT: Simmons Street Townhouses

CLIENT: Synergy Structures, LLC

JOB NO.: 22025 **DATE:** April 26, 2023

BY: AMD

REVISION DATE: _____

RE: Simmons Street Townhouses - Stormwater Calculations

Drainage Area Calculations

Drainage Areas	(ft²)	(Acres)
Total Property Area/Boundary	14,313.0	0.33
Development Area On-site	18,813.6	0.43
Development Area Road	12,006.3	0.28

Pre-Development: Development Area On-site Surfaces	(ft²)	(Acres)	(%)
Woods - Grass Combination (CN = 76)	18,813.6	0.43	100.00%
	18,813.6	0.43	100.00%
Total Impervious Surface Area =	0.0	0.00	0.00%

Pre-Development: Development Area Road Surfaces	(ft²)	(Acres)	(%)
Woods - Grass Combination (CN = 76)	12,006.3	0.28	100.00%
	12,006.3	0.28	100.00%
Total Impervious Surface Area =	0.0	0.00	0.00%

Post Development: Total Property Area/Boundary (At Build-out)	(ft²)	(Acres)	(%)
Building Roofs (CN = 98)	7,234.0	0.17	50.54%
Asphalt Road/Parking (CN = 98)	3,886.1	0.09	27.15%
Open Space (CN = 79)	3,192.9	0.07	22.31%
	14,313.0	0.33	100.00%
Total Impervious Surface Area =	11,120.1	0.26	77.69%

Post Development: Development Area On-site Surfaces (At Build-out)	(ft²)	(Acres)	(%)
Building Roofs (CN = 98)	7,234.0	0.17	38.45%
Asphalt Road/Parking (CN = 98)	7,925.8	0.18	42.13%
Open Space (CN = 79)	3,653.8	0.08	19.42%
	18,813.6	0.43	100.00%
Total Impervious Surface Area =	15,159.8	0.35	80.58%

Post Development: Development Area Road Surfaces (At Build-out)	(ft²)	(Acres)	(%)
Asphalt Road/Parking (CN = 98)	3,928.6	0.09	32.72%
Open Space (CN = 79)	8,077.7	0.19	67.28%
	12,006.3	0.28	100.00%
Total Impervious Surface Area =	3,928.6	0.09	32.72%

Drainage Area Flow Paths

	Length	Elevation	Slope
	(ft)	Change	(%)
Pre-Development Flow Path: On-site			
1. Sheet Flow (n = 0.24, Woods - Light Underbrush)	157.01	1.32	0.84%

Total Length/Average Slope = 157.01 1.32 0.84%

	Length	Elevation	Slope
	(ft)	Change	(%)
Pre-Development Flow Path: Road			
1. Sheet Flow (n = 0.24, Woods - Light Underbrush)	123.48	1.24	1.00%

Total Length/Average Slope = 123.48 1.24 1.00%

	Length	Elevation	Slope
	(ft)	Change	(%)
Post Development Flow Path: On-site			
1. Sheet Flow (n = 0.011, Smooth Surface - Asphalt)	136.90	1.71	1.25%
2. Sheet Flow (n = 0.24, Grass - Dense Grass)	23.93	0.74	3.09%

Total Length/Average Slope = 160.83 2.45 1.52%

	Length	Elevation	Slope
	(ft)	Change	(%)
Post Development Flow Path: Road			
1. Sheet Flow (n = 0.011, Smooth Surface - Asphalt)	33.11	0.45	1.36%
2. Sheet Flow (n = 0.24, Grass - Dense Grass)	14.50	2.18	15.03%
3. Channel Flow (n = 0.24, Grass - Dense Grass)	190.78	1.91	1.00%

Total Length/Average Slope = 238.39 4.54 1.90%



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PROJECT: Simmons Street Townhouses

CLIENT: Synergy Structures, LLC

JOB NO.: 22025 **DATE:** April 26, 2023

BY: AMD

REVISION DATE: _____

RE: Simmons Street Townhouses - Stormwater Calculations

Stormwater Detention Basin Volume Calculations

Detention Basin Area No. 1 (Basin Volume)	Elev. (ft)	Height (ft)	Area (ft²)	Volume (ft³)
Top	5013.00		581.1	
Overflow	5012.75	0.25	453.2	
Bottom	5012.00	0.75	91.8	204
				204

Detention Basin Area No. 1 (Infiltration Trench)

Width	3	ft
Depth	4	ft
Pipe Diameter	1	ft
Pipe Area	0.79	ft ²
Length	76	ft
Trench Volume ((WxD-A)xL)x0.40	341	ft ³
Pipe Volume	60	ft ³
Net Trench Volume	401	ft³

Detention Basin No. 1 Total Volume **605 ft³**

Detention Basin Area No. 2	Elev. (ft)	Height (ft)	Area (ft²)	Volume (ft³)
Top	5012.00		1,029.3	
Overflow	5011.25	0.75	357.5	
Bottom	5010.25	1.00	0.0	179
				179

Total Proposed Detention Volume = 784 (ft³)

Required Water Quality Detention Volume = 646 (ft³)

Proposed stormwater detention is greater than the required water quality detention volume and therefore, storage is adequate.

Notes:

1. The total proposed detention volume shown represents the minimum storage volume of the detention basins. As peak flows are routed through the basins additional storage will be attained as stormwater flows are restricted by individual overflows should it release/drain to downslope areas.

PROJECT: Simmons Street Townhouses

CLIENT: Synergy Structures, LLC

JOB NO.: 22025 **DATE:** April 26, 2023

BY: AMD

REVISION DATE: _____

RE: Simmons Street Townhouses - Stormwater Calculations

Stormwater Detention Storage/Peak Flow Attenuation Summary Tables

Drainage Area	Area (Acres)	Area (ft ²)	Post Dev. 1 st Flush Runoff Volume (V _{1st-Post}) (ft ³)	Pre-Dev. 10 Year Runoff Volume (V _{10-Pre}) (ft ³)	Post Dev. 10 Year Runoff Volume (V _{10-Post}) (ft ³)	V _{10-Post} - V _{10-Pre} (ft ³)	Required Storage Volume (ft ³)	Proposed Storage (ft ³)
Development Area On-site	0.43	18,814	550	514	1,933	1,419	550	605
Development Area Road	0.28	12,006	96	335	648	313	96	179

Notes:

1. See Hydrograph Report pages 1 - 10 for runoff calculations.

Drainage Area	Area (Acres)	Area (ft ²)	Pre-Dev. Peak Discharge (Q _{10-Pre}) (ft ³ /s)	Post Dev. Peak Discharge (Q _{10-Post}) (ft ³ /s)	Post Dev. Peak Discharge w/Detention (Q _{10Post}) (ft ³ /s)
Development Area On-site	0.43	18,814	0.066	0.828	N/A
Development Area Road	0.28	12,006	0.051	0.298	N/A

Notes:

1. See Hydrograph Report pages 1 - 10 for runoff calculations.

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

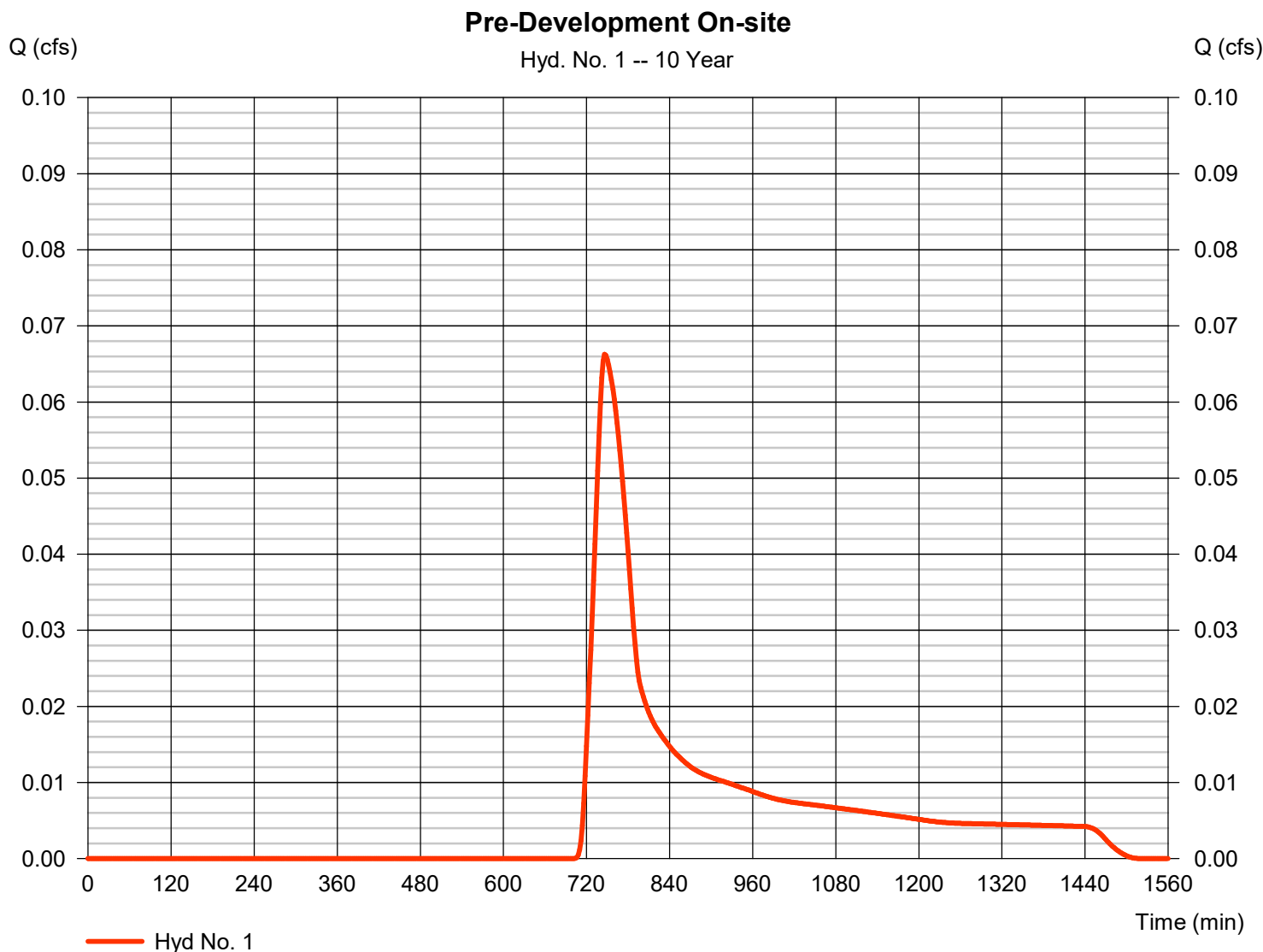
Wednesday, 04 / 26 / 2023

Hyd. No. 1

Pre-Development On-site

Hydrograph type	= SCS Runoff	Peak discharge	= 0.066 cfs
Storm frequency	= 10 yrs	Time to peak	= 746 min
Time interval	= 2 min	Hyd. volume	= 514 cuft
Drainage area	= 0.430 ac	Curve number	= 76*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 48.70 min
Total precip.	= 1.83 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.430 x 76)] / 0.430



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 1

Pre-Development On-site

<u>Description</u>	<u>A</u>		<u>B</u>		<u>C</u>		<u>Totals</u>
Sheet Flow							
Manning's n-value	= 0.240		0.011		0.011		
Flow length (ft)	= 157.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 1.13		0.00		0.00		
Land slope (%)	= 0.84		0.00		0.00		
Travel Time (min)	= 48.74	+	0.00	+	0.00	=	48.74
Shallow Concentrated Flow							
Flow length (ft)	= 0.00		0.00		0.00		
Watercourse slope (%)	= 0.00		0.00		0.00		
Surface description	= Paved		Paved		Paved		
Average velocity (ft/s)	=0.00		0.00		0.00		
Travel Time (min)	= 0.00	+	0.00	+	0.00	=	0.00
Channel Flow							
X sectional flow area (sqft)	= 0.00		0.00		0.00		
Wetted perimeter (ft)	= 0.00		0.00		0.00		
Channel slope (%)	= 0.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	=0.00		0.00		0.00		
Flow length (ft)	{{0}}0.0		0.0		0.0		
Travel Time (min)	= 0.00	+	0.00	+	0.00	=	0.00
Total Travel Time, Tc							48.70 min

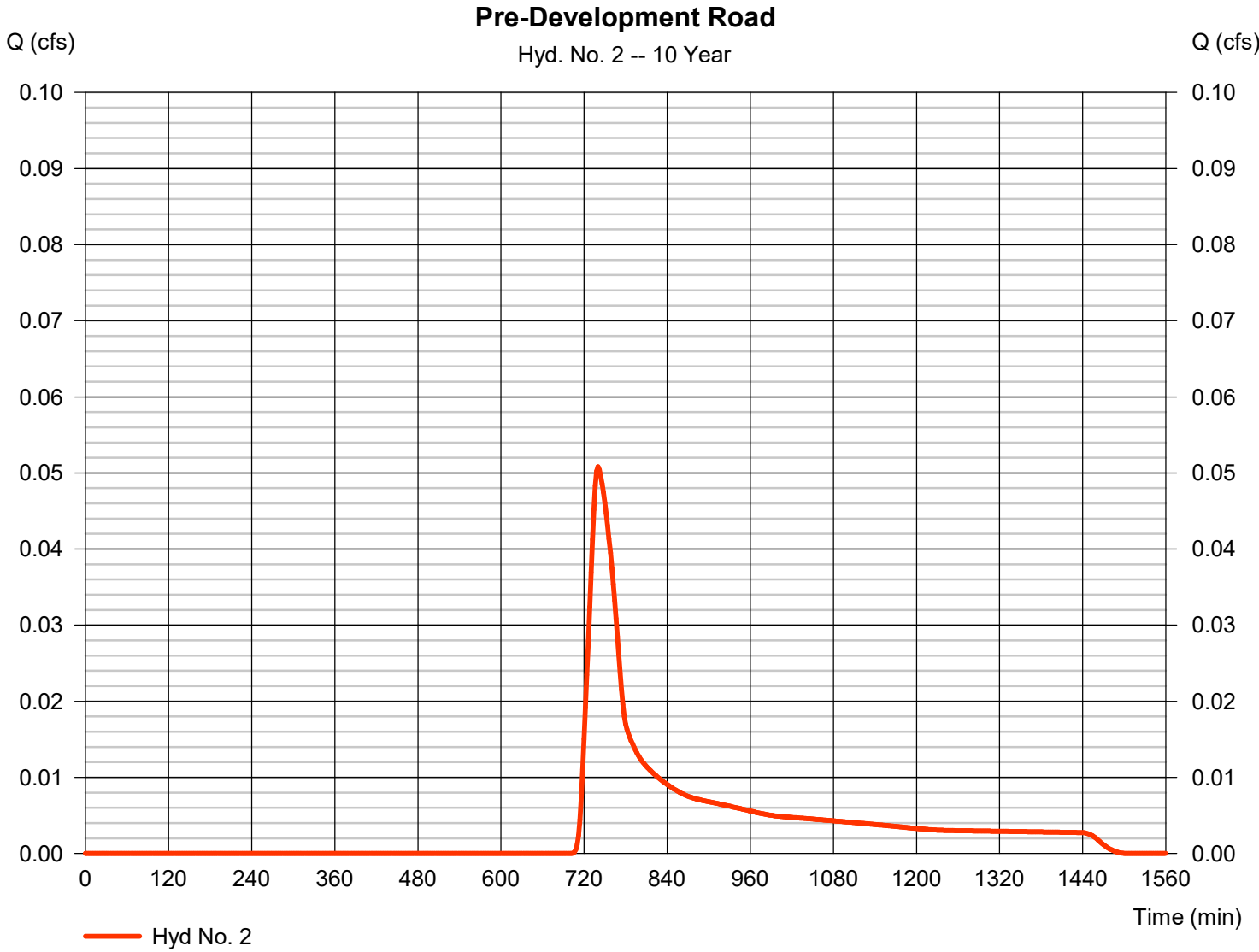
Hydrograph Report

Hyd. No. 2

Pre-Development Road

Hydrograph type	= SCS Runoff	Peak discharge	= 0.051 cfs
Storm frequency	= 10 yrs	Time to peak	= 740 min
Time interval	= 2 min	Hyd. volume	= 335 cuft
Drainage area	= 0.280 ac	Curve number	= 76*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 37.50 min
Total precip.	= 1.83 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.280 x 76)] / 0.280



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 2

Pre-Development Road

<u>Description</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>Totals</u>
Sheet Flow				
Manning's n-value	= 0.240	0.011	0.011	
Flow length (ft)	= 123.5	0.0	0.0	
Two-year 24-hr precip. (in)	= 1.13	0.00	0.00	
Land slope (%)	= 1.00	0.00	0.00	
Travel Time (min)	= 37.51	+ 0.00	+ 0.00	= 37.51
Shallow Concentrated Flow				
Flow length (ft)	= 0.00	0.00	0.00	
Watercourse slope (%)	= 0.00	0.00	0.00	
Surface description	= Paved	Paved	Paved	
Average velocity (ft/s)	=0.00	0.00	0.00	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Channel Flow				
X sectional flow area (sqft)	= 0.00	0.00	0.00	
Wetted perimeter (ft)	= 0.00	0.00	0.00	
Channel slope (%)	= 0.00	0.00	0.00	
Manning's n-value	= 0.015	0.015	0.015	
Velocity (ft/s)	=0.00	0.00	0.00	
Flow length (ft)	0.0	0.0	0.0	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Total Travel Time, Tc				37.50 min

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

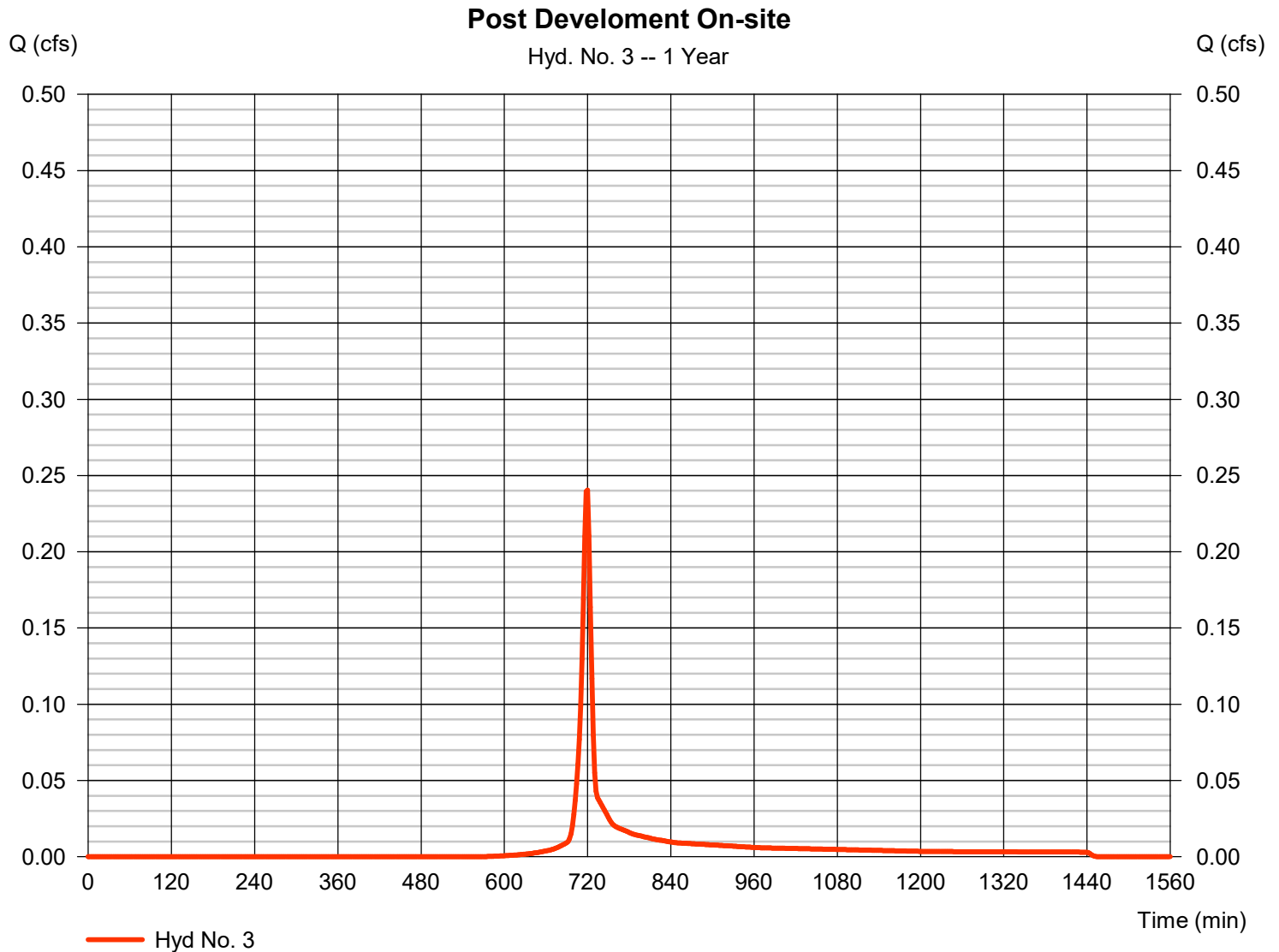
Wednesday, 04 / 26 / 2023

Hyd. No. 3

Post Development On-site

Hydrograph type	= SCS Runoff	Peak discharge	= 0.240 cfs
Storm frequency	= 1 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 550 cuft
Drainage area	= 0.430 ac	Curve number	= 94*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 9.60 min
Total precip.	= 0.81 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.170 x 98) + (0.180 x 98) + (0.080 x 79)] / 0.430



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 3

Post Development On-site

<u>Description</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>Totals</u>
Sheet Flow				
Manning's n-value	= 0.011	0.240	0.011	
Flow length (ft)	= 136.9	23.9	0.0	
Two-year 24-hr precip. (in)	= 1.13	1.13	0.00	
Land slope (%)	= 1.25	3.09	0.00	
Travel Time (min)	= 3.16	+ 6.43	+ 0.00	= 9.59
Shallow Concentrated Flow				
Flow length (ft)	= 0.00	0.00	0.00	
Watercourse slope (%)	= 0.00	0.00	0.00	
Surface description	= Paved	Paved	Paved	
Average velocity (ft/s)	=0.00	0.00	0.00	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Channel Flow				
X sectional flow area (sqft)	= 0.00	0.00	0.00	
Wetted perimeter (ft)	= 0.00	0.00	0.00	
Channel slope (%)	= 0.00	0.00	0.00	
Manning's n-value	= 0.015	0.015	0.015	
Velocity (ft/s)	=0.00	0.00	0.00	
Flow length (ft)	{{0}}0.0	0.0	0.0	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Total Travel Time, Tc				9.60 min

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

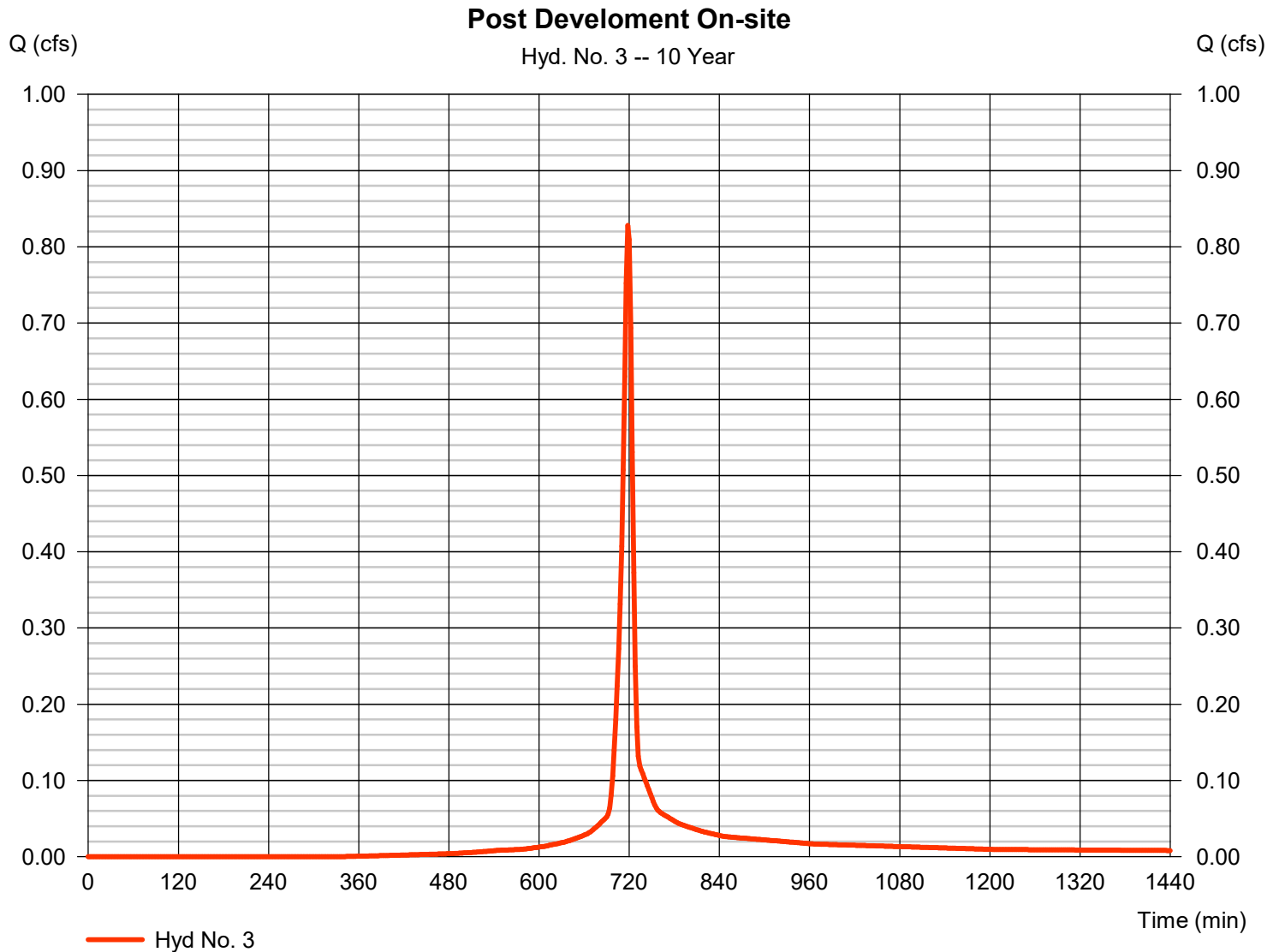
Wednesday, 04 / 26 / 2023

Hyd. No. 3

Post Development On-site

Hydrograph type	= SCS Runoff	Peak discharge	= 0.828 cfs
Storm frequency	= 10 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 1,933 cuft
Drainage area	= 0.430 ac	Curve number	= 94*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 9.60 min
Total precip.	= 1.83 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.170 x 98) + (0.180 x 98) + (0.080 x 79)] / 0.430



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

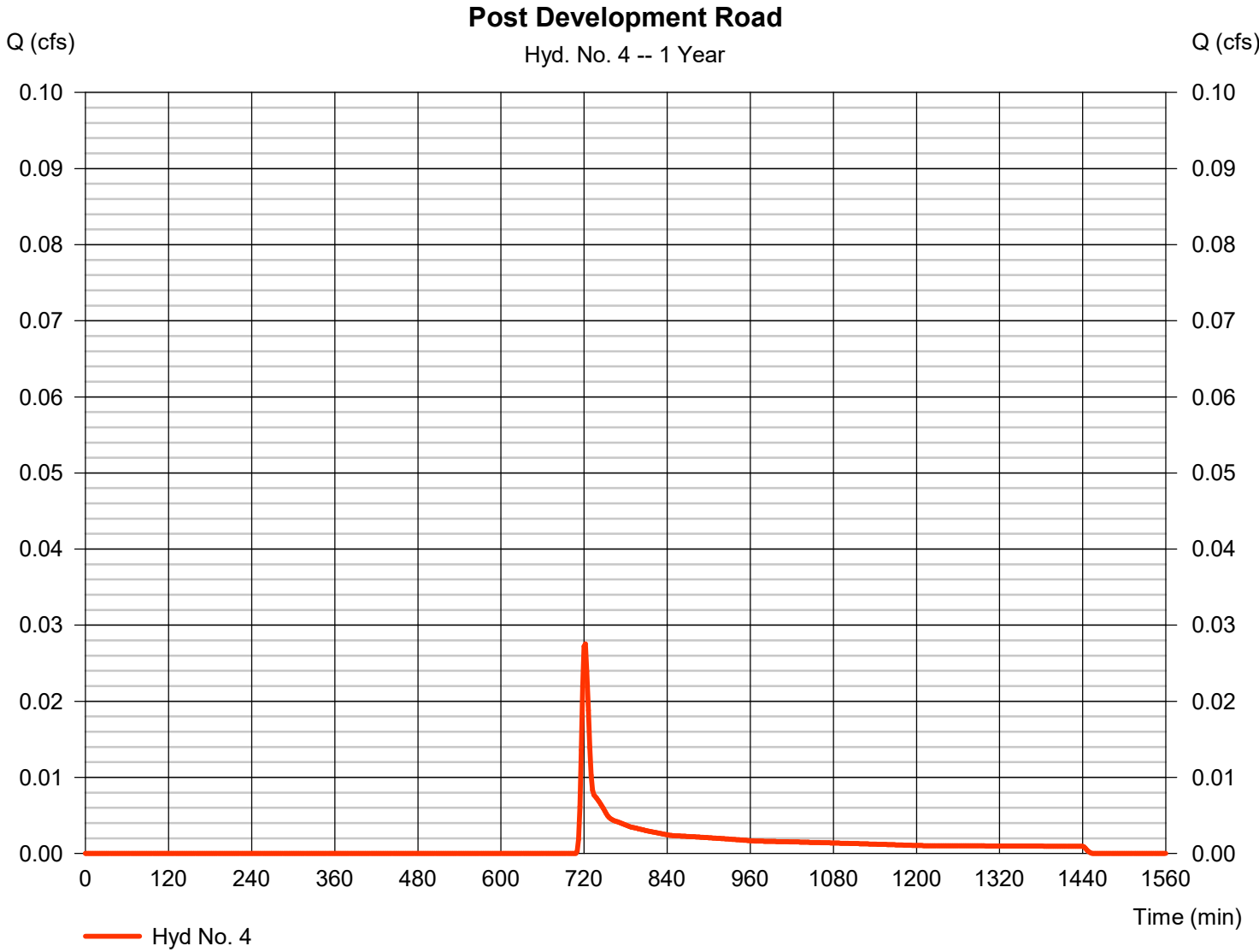
Wednesday, 04 / 26 / 2023

Hyd. No. 4

Post Development Road

Hydrograph type	= SCS Runoff	Peak discharge	= 0.028 cfs
Storm frequency	= 1 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 96 cuft
Drainage area	= 0.280 ac	Curve number	= 85*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 8.60 min
Total precip.	= 0.81 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.090 x 98) + (0.190 x 79)] / 0.280



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 4

Post Development Road

<u>Description</u>	<u>A</u>		<u>B</u>		<u>C</u>		<u>Totals</u>
Sheet Flow							
Manning's n-value	= 0.011		0.240		0.011		
Flow length (ft)	= 33.1		14.5		0.0		
Two-year 24-hr precip. (in)	= 1.13		1.13		0.00		
Land slope (%)	= 1.36		15.03		0.00		
Travel Time (min)	= 0.98	+	2.29	+	0.00	=	3.27
Shallow Concentrated Flow							
Flow length (ft)	= 0.00		0.00		0.00		
Watercourse slope (%)	= 0.00		0.00		0.00		
Surface description	= Paved		Paved		Paved		
Average velocity (ft/s)	=0.00		0.00		0.00		
Travel Time (min)	= 0.00	+	0.00	+	0.00	=	0.00
Channel Flow							
X sectional flow area (sqft)	= 12.00		0.00		0.00		
Wetted perimeter (ft)	= 12.65		0.00		0.00		
Channel slope (%)	= 1.00		0.00		0.00		
Manning's n-value	= 0.240		0.015		0.015		
Velocity (ft/s)	=0.60		0.00		0.00		
Flow length (ft)	{{0}}190.8		0.0		0.0		
Travel Time (min)	= 5.31	+	0.00	+	0.00	=	5.31
Total Travel Time, Tc							8.60 min

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

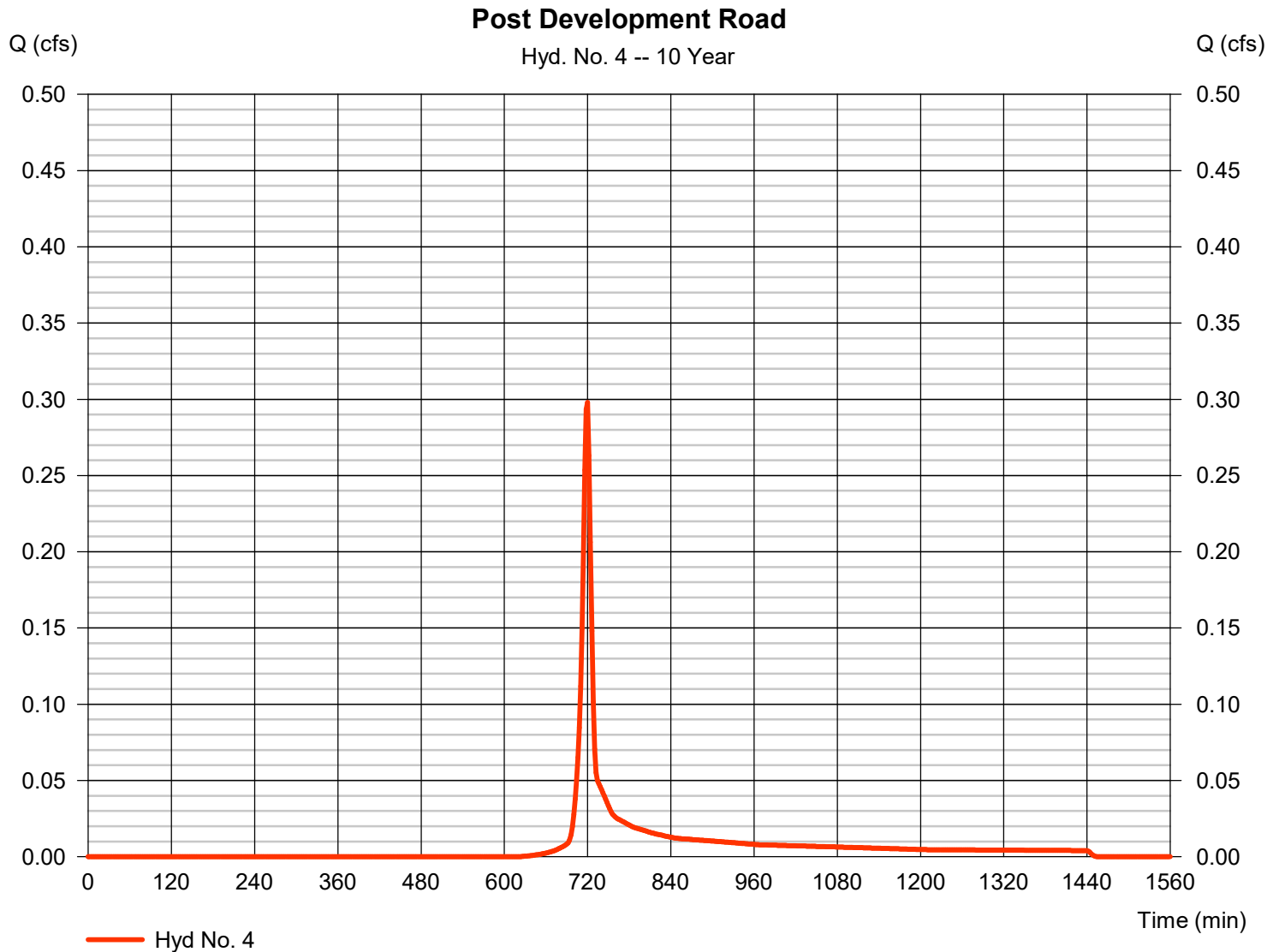
Wednesday, 04 / 26 / 2023

Hyd. No. 4

Post Development Road

Hydrograph type	= SCS Runoff	Peak discharge	= 0.298 cfs
Storm frequency	= 10 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 684 cuft
Drainage area	= 0.280 ac	Curve number	= 85*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 8.60 min
Total precip.	= 1.83 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.090 x 98) + (0.190 x 79)] / 0.280



Culvert Report

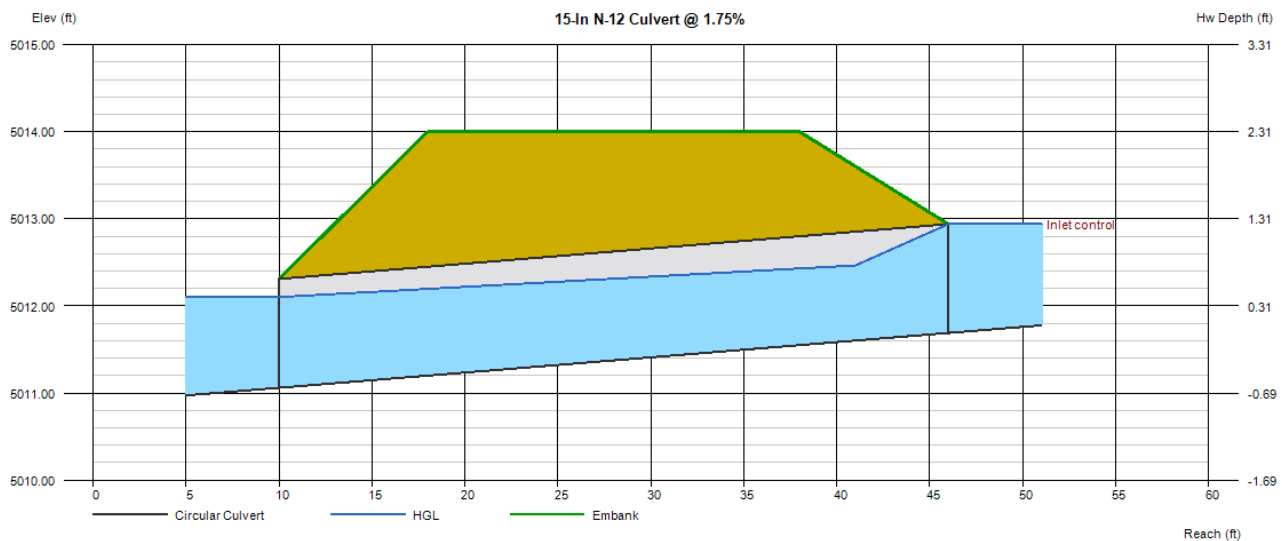
15-In N-12 Culvert @ 1.75%

Invert Elev Dn (ft)	= 5011.06
Pipe Length (ft)	= 36.00
Slope (%)	= 1.75
Invert Elev Up (ft)	= 5011.69
Rise (in)	= 15.0
Shape	= Circular
Span (in)	= 15.0
No. Barrels	= 1
n-Value	= 0.023
Culvert Type	= Circular Culvert
Culvert Entrance	= Smooth tapered inlet throat
Coeff. K,M,c,Y,k	= 0.534, 0.555, 0.0196, 0.9, 0.2

Embankment	
Top Elevation (ft)	= 5014.00
Top Width (ft)	= 20.00
Crest Width (ft)	= 50.00

Calculations	
Qmin (cfs)	= 0.00
Qmax (cfs)	= 4.25
Tailwater Elev (ft)	= (dc+D)/2

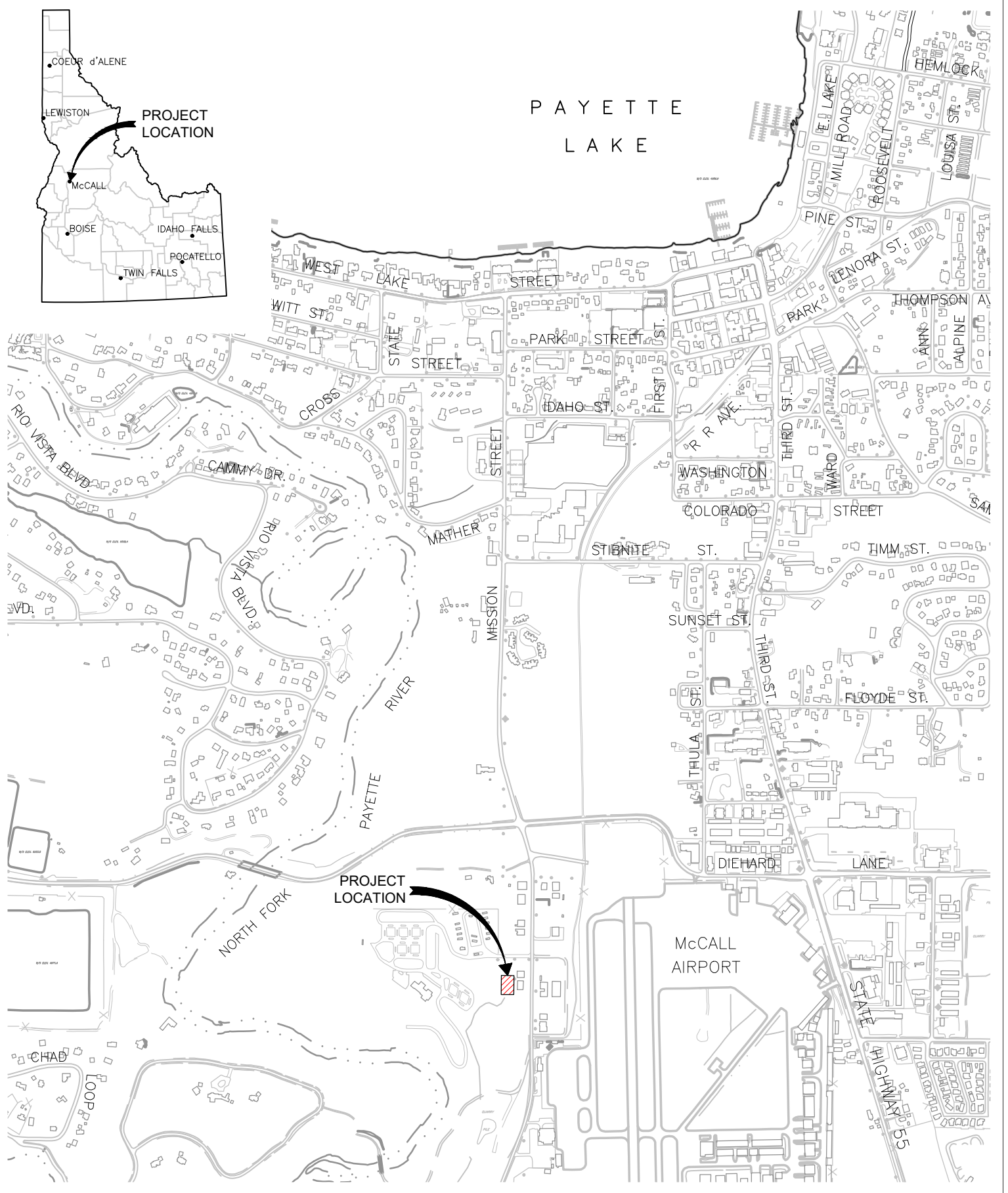
Highlighted	
Qtotal (cfs)	= 4.25
Qpipe (cfs)	= 4.25
Qovertop (cfs)	= 0.00
Veloc Dn (ft/s)	= 3.89
Veloc Up (ft/s)	= 4.88
HGL Dn (ft)	= 5012.10
HGL Up (ft)	= 5012.52
Hw Elev (ft)	= 5012.94
Hw/D (ft)	= 1.00
Flow Regime	= Inlet Control



APPENDIX A
FIGURES/DRAWINGS

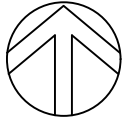


PAYETTE
LAKE



PROJECT
LOCATION

McCALL
AIRPORT



NORTH
SCALE: 1" = 1000'

CRESTLINE
ENGINEERS

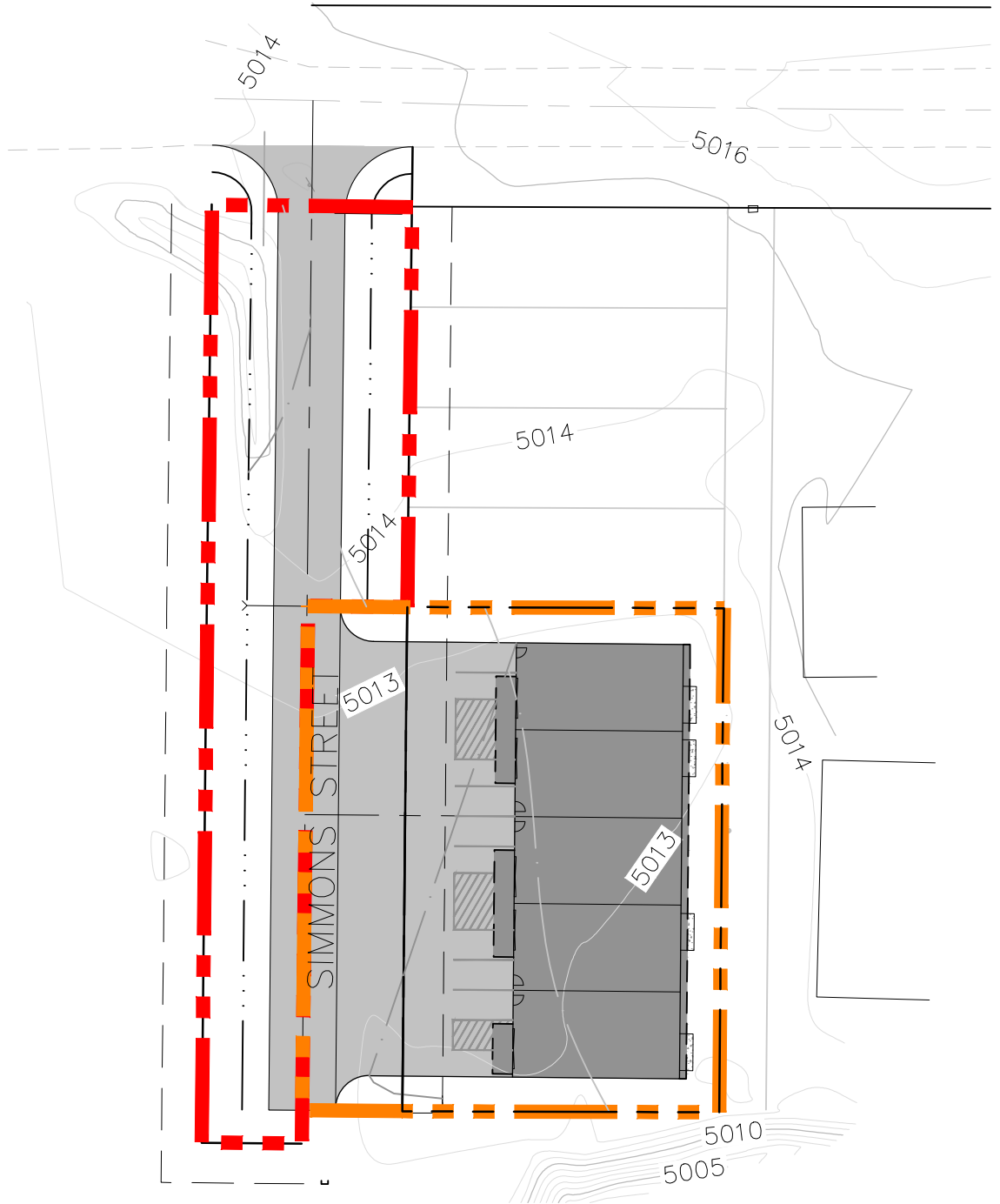
323 DEINHARD LANE, SUITE C · PO BOX 2330
McCALL, IDAHO 83638
208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
VICINITY MAP

PROJECT	22025	DRAWN	FIGURE NO.
DATE	4/20/2023	AMD	1 OF 2

LEGEND:

- · — PRE-DEVELOPMENT FLOW PATH
- · — POST DEVELOPMENT FLOW PATH
- - - PROPERTY BOUNDARY
- ■ ■ ■ DRAINAGE AREA ON-SITE
- ■ ■ ■ DRAINAGE AREA ROAD



NORTH
SCALE: 1" = 50'

CRESTLINE
ENGINEERS

323 DEINHARD LANE, SUITE C · PO BOX 2330
McCALL, IDAHO 83638
208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
DRAINAGE AREA MAP

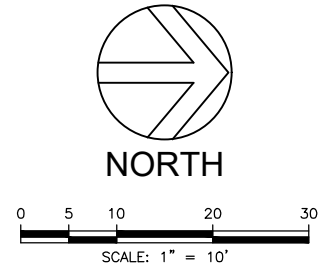
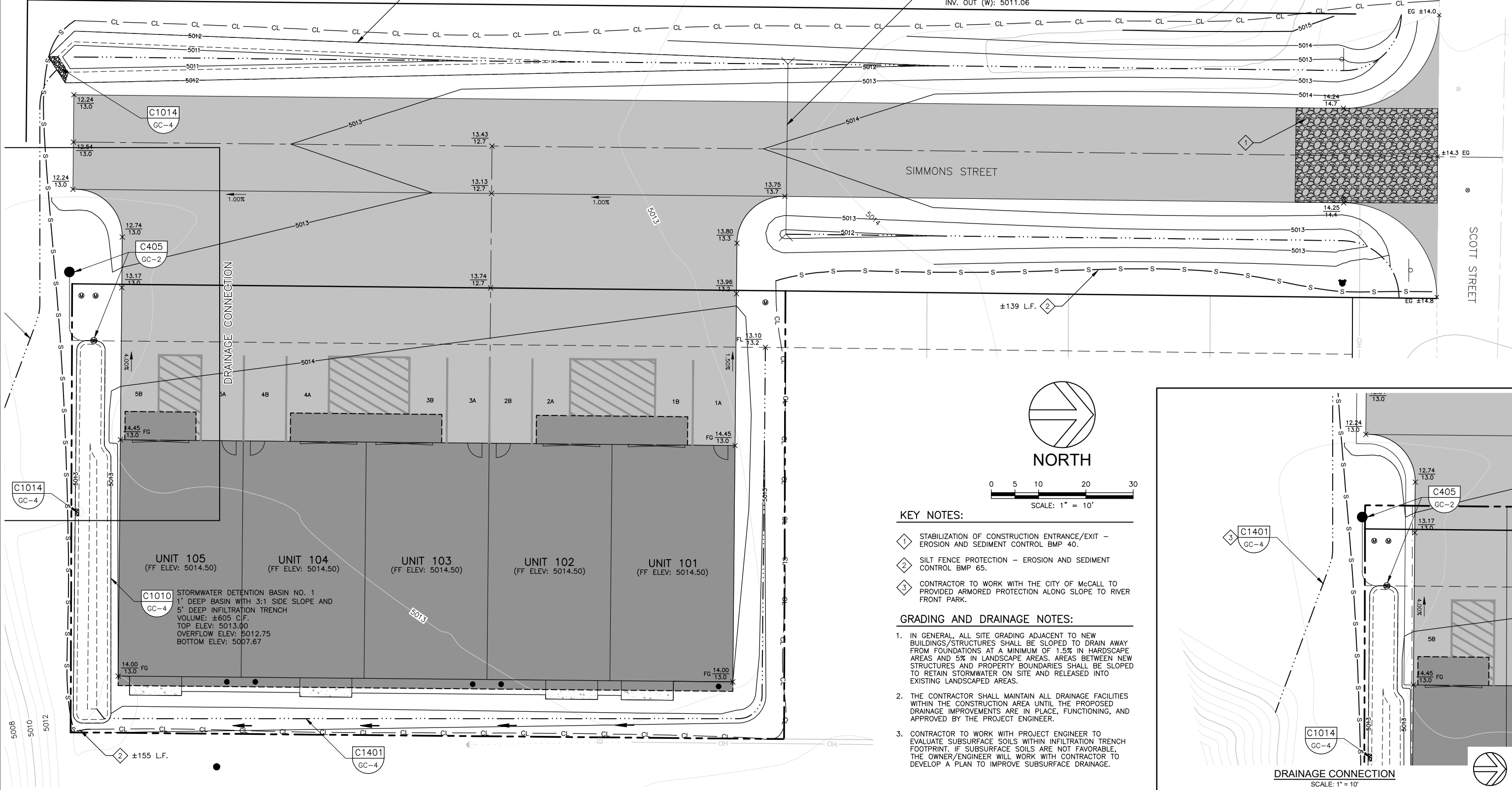
PROJECT	22025	DRAWN	FIGURE NO.
DATE	4/26/2023	SMR	2 OF 2

NOTES:

1. REFER TO DRAWING NO. G-2, SHEET 2 FOR PROJECT NOTES, LEGEND, AND SYMBOLS.
2. REFER TO DRAWING NO. C-1, SHEET 3 FOR EROSION AND SEDIMENT CONTROL NOTES.

STORMWATER DETENTION BASIN NO. 2
 1.75' DEEP WITH 3:1 SIDE SLOPES
 VOLUME: ±179 C.F.
 TOP ELEV: 5012.00
 OVERFLOW ELEV: 5011.25
 BOTTOM ELEV: 5010.25

15" N-12 CULVERT
 L=±36 L.F. @ 1.75% SLOPE
 INV. IN (E): 5011.69
 INV. OUT (W): 5011.06

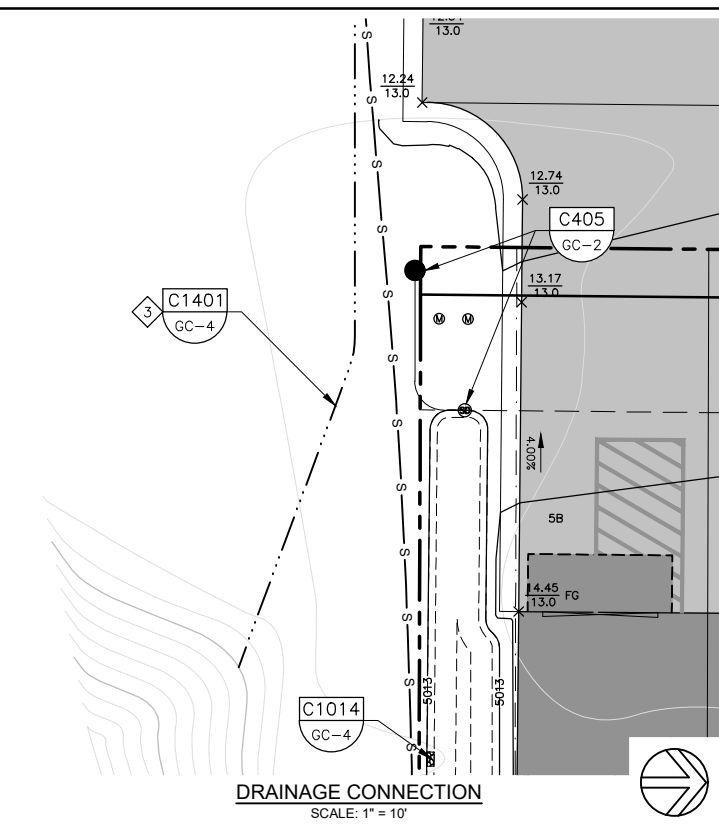


KEY NOTES:

1. STABILIZATION OF CONSTRUCTION ENTRANCE/EXIT - EROSION AND SEDIMENT CONTROL BMP 40.
2. SILT FENCE PROTECTION - EROSION AND SEDIMENT CONTROL BMP 65.
3. CONTRACTOR TO WORK WITH THE CITY OF McCALL TO PROVIDED ARMORED PROTECTION ALONG SLOPE TO RIVER FRONT PARK.

GRADING AND DRAINAGE NOTES:

1. IN GENERAL, ALL SITE GRADING ADJACENT TO NEW BUILDINGS/STRUCTURES SHALL BE SLOPED TO DRAIN AWAY FROM FOUNDATIONS AT A MINIMUM OF 1.5% IN HARDSCAPE AREAS AND 5% IN LANDSCAPE AREAS. AREAS BETWEEN NEW STRUCTURES AND PROPERTY BOUNDARIES SHALL BE SLOPED TO RETAIN STORMWATER ON SITE AND RELEASED INTO EXISTING LANDSCAPED AREAS.
2. THE CONTRACTOR SHALL MAINTAIN ALL DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL THE PROPOSED DRAINAGE IMPROVEMENTS ARE IN PLACE, FUNCTIONING, AND APPROVED BY THE PROJECT ENGINEER.
3. CONTRACTOR TO WORK WITH PROJECT ENGINEER TO EVALUATE SUBSURFACE SOILS WITHIN INFILTRATION TRENCH FOOTPRINT. IF SUBSURFACE SOILS ARE NOT FAVORABLE, THE OWNER/ENGINEER WILL WORK WITH CONTRACTOR TO DEVELOP A PLAN TO IMPROVE SUBSURFACE DRAINAGE.



Path: M:\01015\Synergy\Structures\22025\Civil\DWG\CD\22025 C-5 StormwaterMgmtPlan.dwg File Name: 22025 C-5 StormwaterMgmtPlan.dwg Plot Date: 4/26/2023 2:12 PM Admin

NO.	REVISION	BY	DATE	DESIGN
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				DRAWN
				AMD
				CHECKED
				GTT
				APPROVED
				GTT

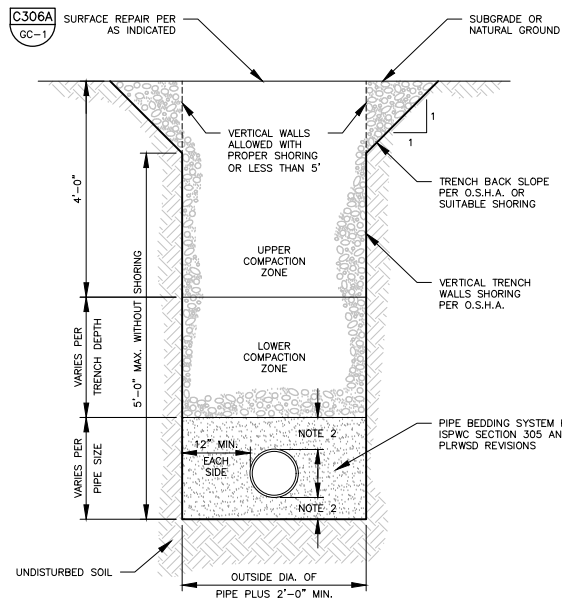


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 McCALL, IDAHO 83638
 208.634.4140 · 208.634.4146 FAX

SIMMONS STREET TOWNHOUSES
 McCALL, IDAHO
 ROADWAY, DOMESTIC WATER, SANITARY SEWER
 AND GRADING IMPROVEMENTS PROJECT
 GRADING, DRAINAGE AND STORMWATER MANAGEMENT PLAN

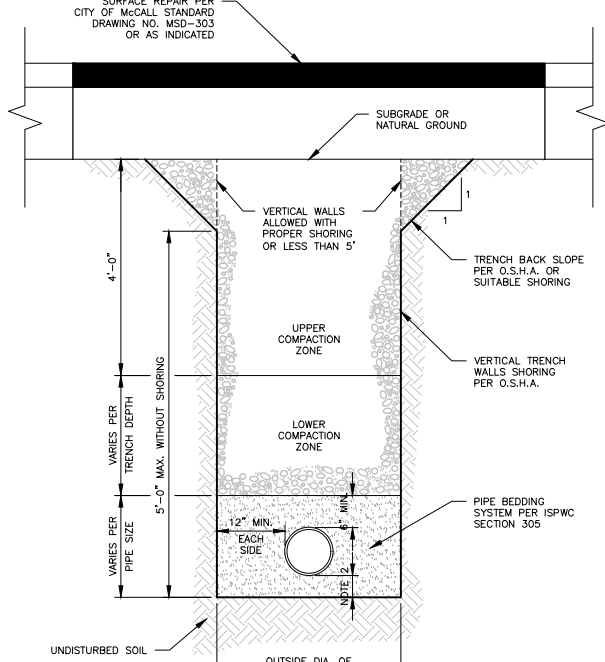
VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	C-5
SHEET NO.	7 OF 11



NOTES:

- TRENCH EXCAVATION PER ISPCW SECTION 301.
- PIPE BEDDING PER ISPCW SECTION 305 AND PLRWS D REVISIONS. FOR SEWER MAIN LINES AND SERVICES USE CLASS A-1 BEDDING SYSTEM AMENDED TO REQUIRE BEDDING EIGHT (8") INCHES BELOW THE BOTTOM AND ABOVE THE TOP PIPE PER PLRWS D REQUIREMENT. FOR WATER MAIN LINES AND SERVICES USE CLASS B-2 BEDDING SYSTEM DURING NORMAL CONDITIONS AND CLASS A-1 BEDDING SYSTEM WHEN GROUNDWATER IS OBSERVED IN THE TRENCH DURING EXCAVATION.
- BACKFILL AND COMPACTION PER ISPCW SECTION 306.
- REFER TO ISPCW SECTION 304 FOR ADDITIONAL INFORMATION ON TRENCH FOUNDATION STABILIZATION IF NECESSARY FOR PROJECT CONSTRUCTION.
- SURFACE REPAIR AND BASE PER ISPCW SECTION 307 AND CIVIL TYPICAL DETAIL C306.

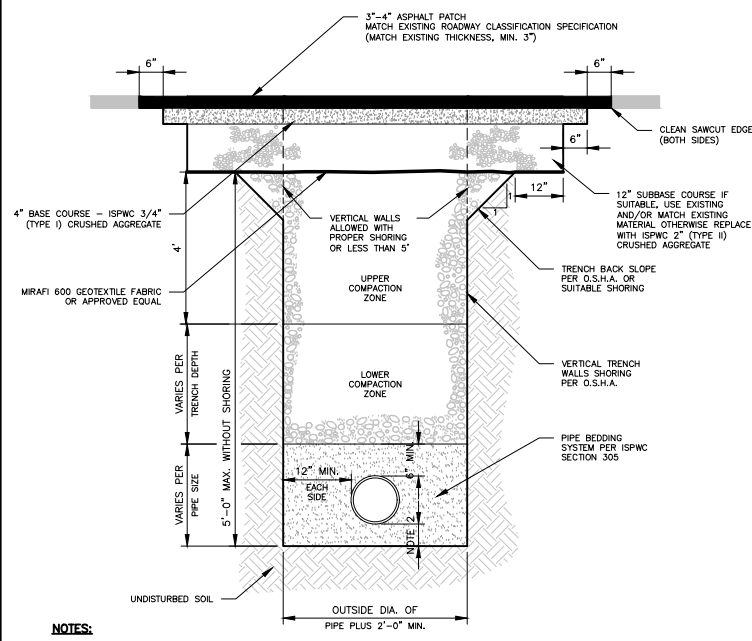
C302 TYPICAL TRENCH
TYP NOT TO SCALE



NOTES:

- TRENCH EXCAVATION PER ISPCW SECTION 301.
- PIPE BEDDING PER ISPCW SECTION 305.
- BACKFILL AND COMPACTION PER ISPCW SECTION 306.
- REFER TO ISPCW SECTION 304 FOR ADDITIONAL INFORMATION ON TRENCH FOUNDATION STABILIZATION IF NECESSARY FOR PROJECT CONSTRUCTION.
- SURFACE REPAIR PER CITY OF McCALL UTILITY TRENCH AND ISPCW SECTION 307.

C302A CITY OF McCALL - STANDARD UTILITY TRENCH
TYP NOT TO SCALE



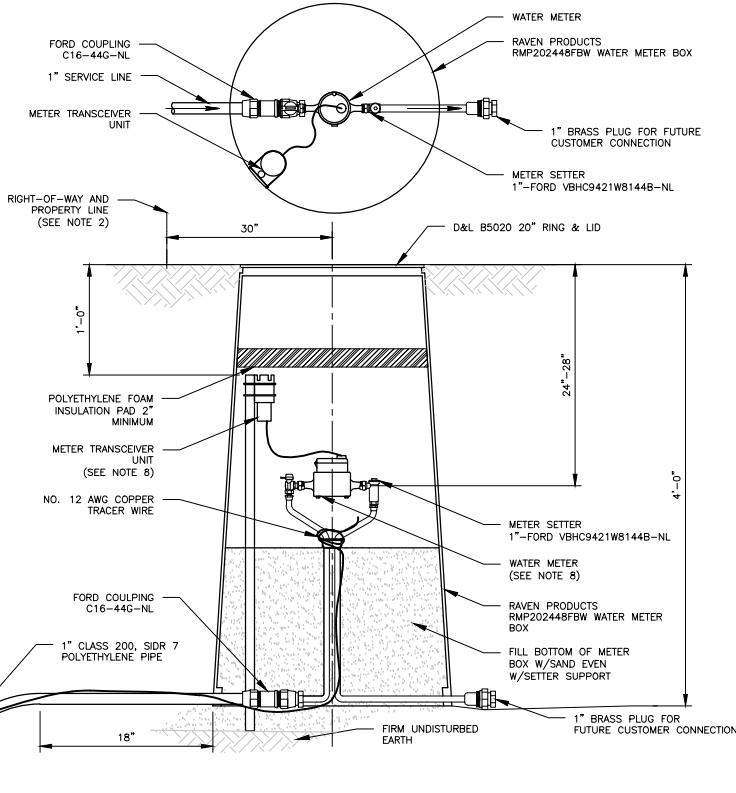
NOTES:

- TRENCH EXCAVATION PER ISPCW SECTION 301.
- PIPE BEDDING PER ISPCW SECTION 305.
- BACKFILL AND COMPACTION PER ISPCW SECTION 306.
- REFER TO ISPCW SECTION 304 FOR ADDITIONAL INFORMATION ON TRENCH FOUNDATION STABILIZATION IF NECESSARY FOR PROJECT CONSTRUCTION.
- STREET CUTS AND SURFACE REPAIRS PER ISPCW SECTION 307 UNLESS OTHERWISE SHOWN IN THIS DETAIL.
- ASPHALT CUTS AND PATCHES WILL NOT BE ALLOWED WITHIN THE WHEEL PATHS WITHOUT PRIOR WRITTEN APPROVAL FROM THE CITY OF McCALL PUBLIC WORKS DEPARTMENT.
- ALL WORKMANSHIP LOCATED WITHIN A CITY OF McCALL RIGHT-OF-WAY TO CARRY A 2-YEAR WARRANTY.

C306A CITY OF McCALL ASPHALT SURFACE REPAIR
TYP NOT TO SCALE

NOTES:

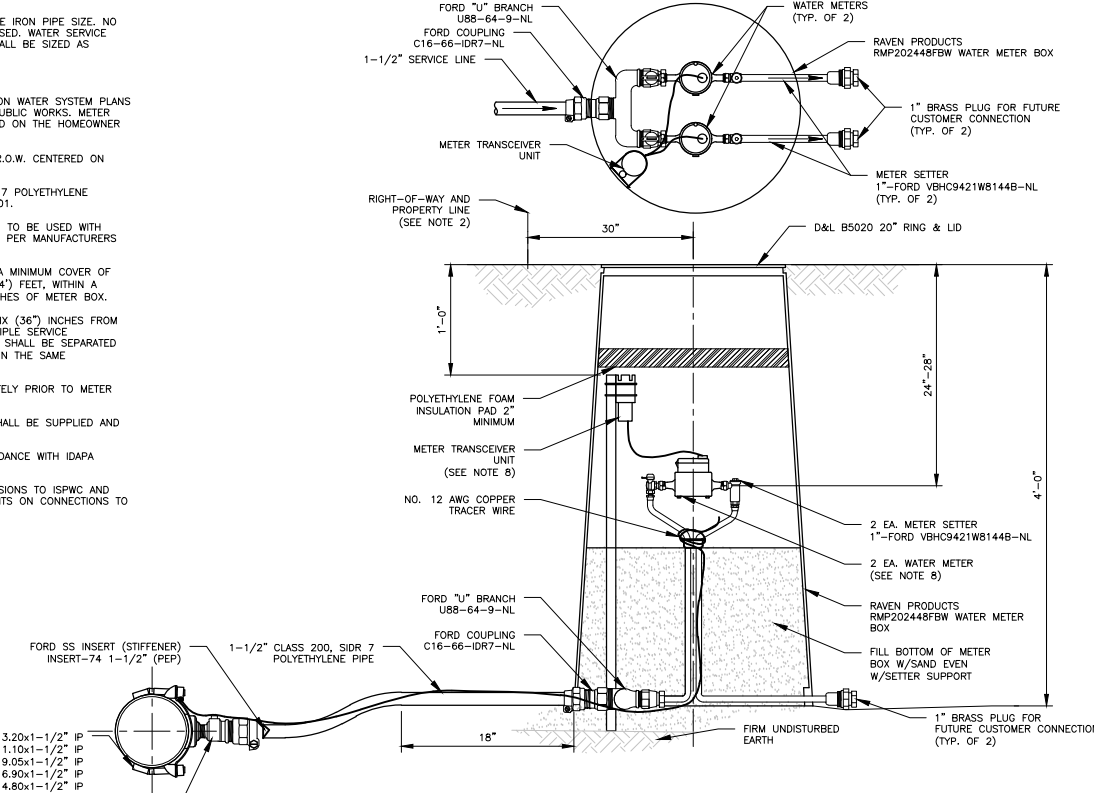
- ALL WATER SERVICE COMPONENTS SHALL BE IRON PIPE SIZE. NO GALVANIZED PIPE OR FITTINGS SHALL BE USED. WATER SERVICE SADDLE, CORPORATION STOP, AND PIPE SHALL BE SIZED AS FOLLOWS:
A. SINGLE SERVICE: 1".
- METER BOX LOCATIONS SHALL BE SHOWN ON WATER SYSTEM PLANS AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS. METER BOX LOCATION GENERALLY WILL BE LOCATED ON THE HOMEOWNER PROPERTY AS FOLLOWS:
A. SINGLE SERVICE: THIRTY (30") FROM R.O.W. CENTERED ON COMMON PROPERTY LINE.
- SERVICE PIPE SHALL BE CLASS 200, SDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- FORD STAINLESS STEEL INSERT (STIFFENER) TO BE USED WITH POLYETHYLENE PRESSURE PIPE AT FITTINGS PER MANUFACTURERS RECOMMENDATIONS.
- SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6) FEET AND SHALL RISE TO FOUR (4) FEET, WITHIN A MAXIMUM DISTANCE OF EIGHTEEN (18") INCHES OF METER BOX.
- SERVICE CONNECTIONS SHALL BE THIRTY-SIX (36") INCHES FROM FITTINGS OR WATER MAIN PIPE ENDS. MULTIPLE SERVICE CONNECTIONS IN THE SAME JOINT OF PIPE SHALL BE SEPARATED BY TWENTY-FOUR (24") INCHES AND NOT IN THE SAME HORIZONTAL LEVEL. -ABSOLUTE-
- SERVICE PIPE SHALL BE FLUSHED IMMEDIATELY PRIOR TO METER INSTALLATION.
- WATER METERS AND TRANSCIVER UNITS TO BE SUPPLIED AND INSTALLED BY THE CITY OF McCALL.
- MAINTAIN SEPARATION DISTANCES IN ACCORDANCE WITH IDAPA 58.01.08.
- REFER TO CITY OF McCALL STANDARD REVISIONS TO ISPCW AND CONDITIONS SECTION 404 FOR REQUIREMENTS ON CONNECTIONS TO THE PRIVATE SIDE OF THE WATER METER.



C402B 1" WATER SERVICE CONNECTION
TYP NOT TO SCALE

NOTES:

- ALL WATER SERVICE COMPONENTS SHALL BE IRON PIPE SIZE. NO GALVANIZED PIPE OR FITTINGS SHALL BE USED. WATER SERVICE SADDLE, CORPORATION STOP, AND PIPE SHALL BE SIZED AS FOLLOWS:
A. DOUBLE SERVICE: 1-1/2".
- METER BOX LOCATIONS SHALL BE SHOWN ON WATER SYSTEM PLANS AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS. METER BOX LOCATION GENERALLY WILL BE LOCATED ON THE HOMEOWNER PROPERTY AS FOLLOWS:
A. DOUBLE SERVICE: THIRTY (30") FROM R.O.W. CENTERED ON COMMON PROPERTY LINE.
- SERVICE PIPE SHALL BE CLASS 200, SDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- FORD STAINLESS STEEL INSERT (STIFFENER) TO BE USED WITH POLYETHYLENE PRESSURE PIPE AT FITTINGS PER MANUFACTURERS RECOMMENDATIONS.
- SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6) FEET AND SHALL RISE TO FOUR (4) FEET, WITHIN A MAXIMUM DISTANCE OF EIGHTEEN (18") INCHES OF METER BOX.
- SERVICE CONNECTIONS SHALL BE THIRTY-SIX (36") INCHES FROM FITTINGS OR WATER MAIN PIPE ENDS. MULTIPLE SERVICE CONNECTIONS IN THE SAME JOINT OF PIPE SHALL BE SEPARATED BY TWENTY-FOUR (24") INCHES AND NOT IN THE SAME HORIZONTAL LEVEL. -ABSOLUTE-
- SERVICE PIPE SHALL BE FLUSHED IMMEDIATELY PRIOR TO METER INSTALLATION.
- WATER METERS AND TRANSCIVER UNITS SHALL BE SUPPLIED AND INSTALLED BY THE CITY OF McCALL.
- MAINTAIN SEPARATION DISTANCES IN ACCORDANCE WITH IDAPA 58.01.08.
- REFER TO CITY OF McCALL STANDARD REVISIONS TO ISPCW AND CONDITIONS SECTION 404 FOR REQUIREMENTS ON CONNECTIONS TO THE PRIVATE SIDE OF THE WATER METER.



C404 DOUBLE WATER SERVICE CONNECTION
TYP NOT TO SCALE

NO.	REVISION	BY	DATE	DESIGN
1.	CITY OF McCALL AND PLRWS ENGINEERING SUBMITTAL	AMD	4/26/2023	AMD
				DRAWN
				AMD
				CHECKED
				GTT
				APPROVED
				GTT

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323 DEINHARD LANE, SUITE C · PO BOX 2330
McCALL, IDAHO 83638
208.634.4140 · 208.634.4146 FAX

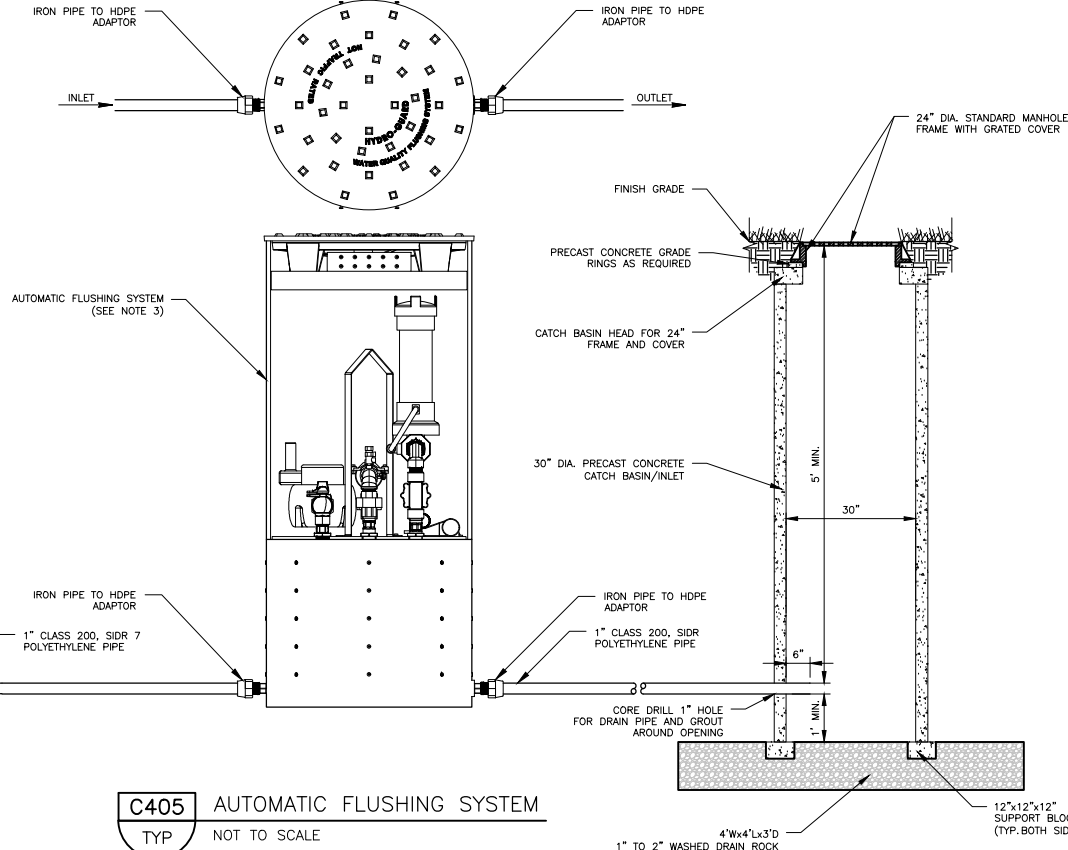
SIMMONS STREET TOWNHOUSES
McCALL, IDAHO
ROADWAY, DOMESTIC WATER, SANITARY SEWER
AND GRADING IMPROVEMENTS PROJECT
CIVIL TYPICAL DETAIL - 1

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT	22025
DATE	4/26/2023
DRAWING NO.	SHEET NO.
GC-1	8 OF 11

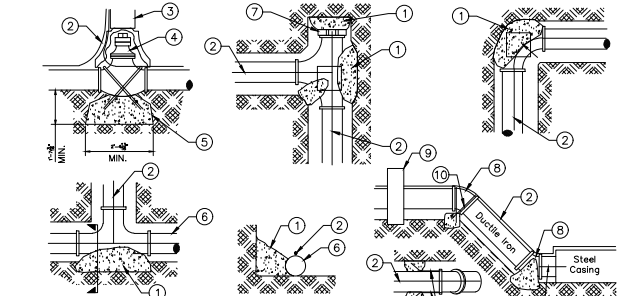
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NOTES:

- ALL WATER SERVICE COMPONENTS SHALL BE IRON PIPE SIZE. NO GALVANIZED PIPE OR FITTINGS SHALL BE USED. WATER SERVICE SADDLE, CORPORATION STOP, AND PIPE SHALL BE SIZED AS FOLLOWS:
 - A. SINGLE SERVICE: 1".
- AUTOMATIC FLUSHING SYSTEM LOCATIONS SHALL BE SHOWN ON WATER SYSTEM PLANS AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS.
- AUTOMATIC FLUSHING SYSTEM TO BE MUELLER HYDRO-GUARD 300 SERIES COLD CLIMATE FLUSHING SYSTEM WITH 60" BURY DEPTH. SEE INSTALLATION MANUAL FOR INFORMATION ON INSTALLATION OF AUTOMATIC FLUSHING SYSTEM.
- SERVICE PIPE SHALL BE CLASS 200, SIDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- FORD STAINLESS STEEL INSERT (STIFFENER) TO BE USED WITH POLYETHYLENE PRESSURE PIPE AT FITTINGS PER MANUFACTURERS RECOMMENDATIONS.
- SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6) FEET AND SHALL RISE TO FIVE (5) FEET, WITHIN A MAXIMUM DISTANCE OF EIGHTEEN (18) INCHES OF FLUSHING SYSTEM.
- SERVICE CONNECTIONS SHALL BE THIRTY-SIX (36) INCHES FROM FITTINGS OR WATER MAIN PIPE ENDS. MULTIPLE SERVICE CONNECTIONS IN THE SAME JOINT OF PIPE SHALL BE SEPARATED BY TWENTY-FOUR (24) INCHES AND NOT IN THE SAME HORIZONTAL LEVEL. -ABSOLUTE-
- MAINTAIN SEPARATION DISTANCES IN ACCORDANCE WITH IDAPA 58.01.08.
- ALL CATCH BASIN JOINTS TO INCLUDE CON-SEAL "CS-320 MASTIC" AND BE GROUTED (INSIDE & OUT) USING QUIKRETE "NON-SHRINK GENERAL PURPOSE GROUT." EXTERIOR MANHOLE JOINTS TO BE COVER WITH PRESS SEAL "EZ-WRAP" BUTYL ADHESIVE TAPE AFTER GROUTING. PRIME JOINT SURFACE USING A SPRAY ADHESIVE PRIOR TO EZ-WRAP APPLICATION.
- CATCH BASIN/INLET MANHOLE TO BE LOCATED PER PLANS.



C405 AUTOMATIC FLUSHING SYSTEM
TYP NOT TO SCALE



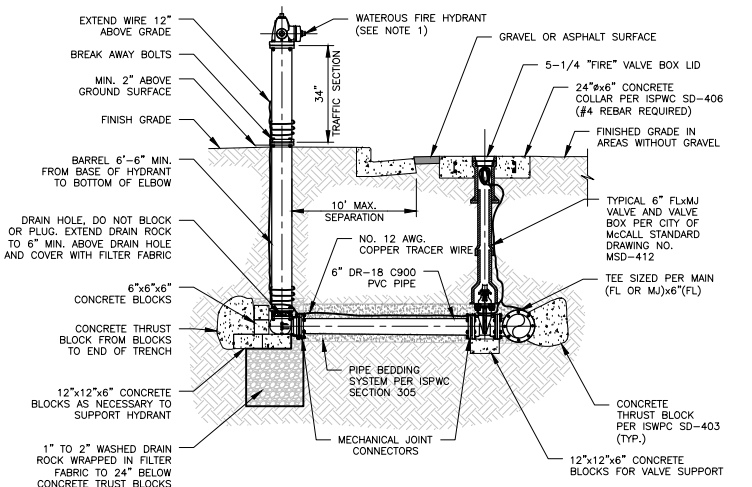
- LEGEND**
- FOR HORIZONTAL PIPE BENDS, BEARING THRUST BLOCKS MUST PROVIDE 2500 PSI CONCRETE, POURED AGAINST UNDISTURBED EARTH PER TABLE 1.
 - NO. 12 COPPER FINDER WIRE.
 - C.I. VALVE BOX WITH COVER.
 - C.I. GATE VALVE.
 - PRECAST BLOCK FOR CUT IN TEE AND VALVE OR CAST IN PLACE WITH (2) 1/2" MIN. REBAR.
 - PIPE.
 - PLUG.
 - RESTRAINED JOINTS.
 - HAMMERHEAD THRUST BLOCKING.
 - ANCHOR TIE (1/2" MIN.)
- GENERAL NOTES:**
- ANCHOR ALL BURIED VALVES AS SHOWN.
 - WRAP BOLTS AND FLANGES WITH 6 MIL. POLYPROPYLENE TO PROTECT FROM CONCRETE ADHERENCE DURING CONSTRUCTION OF THRUST BLOCKS.
 - SEE CHART FOR MINIMUM THRUST BLOCKS BEARING AREAS.
 - ALL CONCRETE SHALL BE MIN. OF 6 CU. FT. AND HAVE A MIN. TWENTY-EIGHT(28) DAY COMPRESSIVE STRENGTH OF NOT LESS THAN 2500 PSI POURED AGAINST UNDISTURBED EARTH.
 - THRUST BLOCKING SHALL BE PLACED BETWEEN UNDISTURBED EARTH AND THE FITTING TO BE ANCHORED.
 - THRUST BLOCKING SHALL BE PLACED SO THAT THE PIPE AND FITTING JOINTS WILL BE ACCESSIBLE TO REPAIRS.
 - ALL FITTINGS SHALL HAVE A 12"x12"x4" CONCRETE SUPPORT BLOCK.
 - ALL THRUST BLOCKS CAST IN PLACE UNLESS OTHERWISE NOTED.
 - PROVIDE 6 MIL. POLYPROPYLENE BETWEEN FITTINGS AND CONCRETE.
 - NOTIFY ENGINEER FOR ANY CONDITION OR PIPE SIZE NOT INDICATED.
 - ISPPW SD-403 APPLIES WHERE MORE STRINGENT.

SOIL BEARING PRESSURE = 2,000 PSF
WORKING PRESSURE RATING = 150 PSI
SAFETY FACTOR = 1.5

PIPE SIZE	TEE OR END	BENDS 45°	BENDS 90°	1 1/4" REDUCER
3"	0.8	1.1	0.6	0.3
4"	1.4	2.0	1.1	0.6
6"	3.2	4.5	2.4	1.2
8"	5.7	8.0	4.3	2.2
10"	8.8	12.5	6.8	3.4
12"	12.7	18.0	9.7	5.0
14"	17.3	24.5	13.3	6.8
16"	22.6	32.0	17.3	8.8
18"	28.6	40.5	21.9	11.2

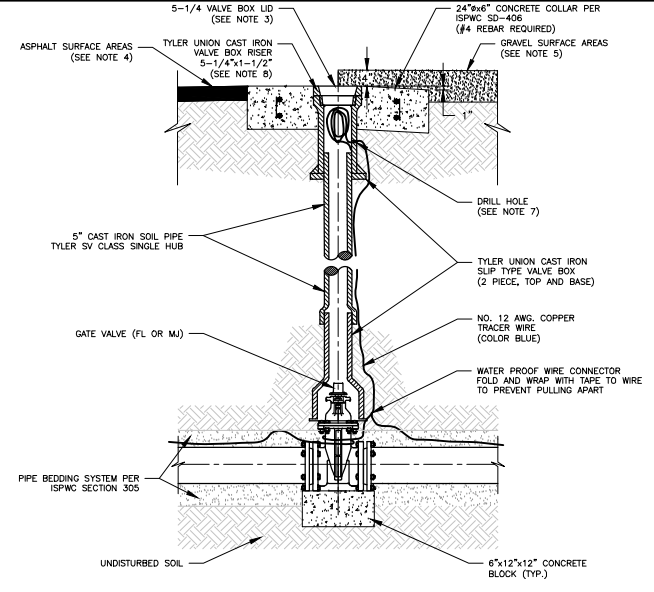
* MUST BE INCREASED BASED ON DIFFERENT CONDITIONS (HIGHER WORKING PRESSURE OR LOWER SOIL BEARING STRENGTH)
** OR TEE ACTING AS A 90° BEND
*** THRUST BLOCK DEPTH TO BE A MINIMUM OF 12" FOR PIPE SIZES 3"-8" AND 18" FOR PIPE SIZES 10"-18" OR THE SQUARE ROUTE OF THE REQUIRED BEARING AREA, WHICHEVER IS GREATER.

C406 THRUST BLOCKS
TYP NOT TO SCALE



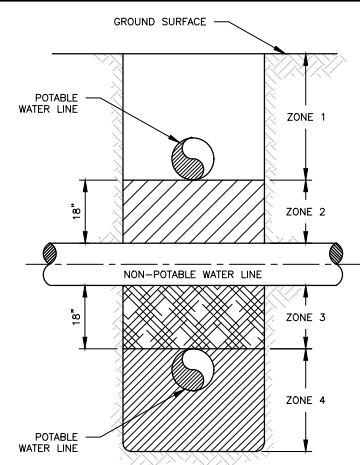
- NOTES:**
- FIRE HYDRANT SHALL BE PACER 100, MODEL NO. W867-250, WITH 1 4" PUMPER OUTLET AND 2 EA. 2-1/2" OUTLETS WITH A THIRTY-FOUR (34) INCH TRAFFIC SECTION, MADE BY WATEROUS CO. AND INSTALLED WITH THE FIRE HYDRANT HOSE ATTACHMENT FOUR (4) FEET ABOVE EXISTING GROUND. FIRE HYDRANT PAINT COLOR TO BE IN ACCORDANCE WITH LOCAL STANDARDS. 4" PUMPER NOZZLE SHALL ALIGN WITH LATERAL AND ASSOCIATED FIRE HYDRANT VALVE.
 - FINAL HYDRANT LOCATIONS SHALL BE FIELD APPROVED BY THE CITY OF McCALL AND McCALL FIRE PROTECTION DISTRICT PRIOR TO INSTALLATION.
 - HYDRANT SHALL NOT BE PLACED CLOSER THAN TEN (10) FEET MINIMUM FROM SEWER, FIFTY (50) FEET MINIMUM FROM SEPTIC SYSTEMS AND TWENTY FIVE (25) FEET MINIMUM FROM SEEPAGE BEDS.
 - HYDRANT MUST BE INSTALLED ABOVE GROUND/SURFACE WATER AND FINISHED GRADE TO SLOPE AWAY FROM STRUCTURE.
 - MINIMUM DISTANCE FROM THE FIRE HYDRANT TO THE FIRE HYDRANT GATE VALVE SHALL BE FIVE (5) FEET.
 - PLACE LOCATOR WIRE DIRECTLY ABOVE PIPE. SECURE FINDER WIRE UNDER (M) BOLT AT MAIN.
 - ALL JOINTS SHALL BE RESTRAINED. JOINT RESTRAINT DEVICES MAY BE USED AS AN ALTERNATE TO THRUST BLOCK WITH ENGINEER'S APPROVAL.
 - ALL ANCHORS AND BLOCKING TO BEAR AGAINST UNDISTURBED SOIL.
 - ALL AUXILIARY FIRE HYDRANT VALVES TO BE LOCATED AT THE TEE ON THE WATER MAIN AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER. WHERE EXISTING FITTINGS ARE NOT COMPATIBLE WITH NEW MAIN CONSTRUCTION, USE SUITABLE ADAPTERS OR NEW FITTINGS UPON APPROVAL BY THE ENGINEER.
 - IF WATER SERVICE TO HYDRANT IS TO COMMENCE PRIOR TO SETTING OF CONCRETE THRUST BLOCKING, USE APPROVED MECHANICAL JOINT RESTRAINTS, AS APPROVED BY THE ENGINEER.
 - HYDRANTS THAT ARE TO BE RELOCATED AS CALLED FOR ON THE PLANS SHALL BE REINSTALLED IN ACCORDANCE WITH THIS DETAIL LOCATION TO BE SET IN ACCORDANCE WITH LOCAL STANDARDS OR AS DIRECTED BY THE ENGINEER.

C408 FIRE HYDRANT INSTALLATION
TYP NOT TO SCALE



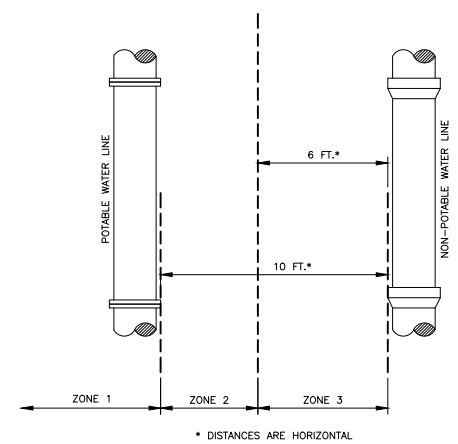
- NOTES:**
- ALL GATE VALVES SHALL BE NON-RISING STEM RESILIENT SEATED GATE VALVES MEETING ANSI/AWWA C515 FOR WATER SUPPLY SERVICE.
 - CLEAN VALVE BOX OF ALL DEBRIS AND SOIL.
 - ALL VALVE BOX LIDS TO BE 5 1/4" DROP LIDS. ALL WATER VALVE BOX LIDS TO BE STAMPED "WATER" AND ALL FIRE VALVE BOX LIDS TO BE STAMPED "FIRE".
 - FOR ASPHALT SURFACE, CONCRETE COLLAR TO BE 1/4" BELOW FINISHED GRADE.
 - FOR GRAVEL ROADWAY SURFACE, CONCRETE COLLAR TO BE 4" BELOW FINISHED GRADE AND SLOPED AWAY FROM VALVE BOX LID SO THAT OUTSIDE EDGE IS 1" LOWER.
 - VALVE BOXES OUTSIDE OF PAVED OR GRAVEL ROADWAYS SHALL HAVE A CONCRETE COLLAR POURED TO BE FLUSH WITH FINISHED GRADE.
 - DRILL 7/8" HOLE IN TOP PORTION OF VALVE BOX. PLACE PVC VALVE GROMMET INTO HOLE AND ROUTE TRACER WIRE THROUGH HOLE.
 - TYLER UNION CAST IRON RISER IS NOT TO BE USED WITHIN STATE HIGHWAYS. ONLY FOR USE WITHIN CITY OF McCALL ROADWAYS.

C412 STANDARD VALVE BOX INSTALLATION
TYP NOT TO SCALE



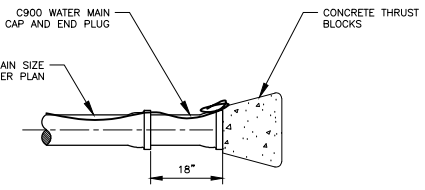
- VERTICAL SEPARATION REQUIREMENTS**
- ZONE 1: A) WATER AND NPWL MUST BE SEPARATED BY AT LEAST 18" AND B) ONE FULL, UN-CUT LENGTH OF BOTH PWL AND NPWL PIPE MUST BE CENTERED ON THE CROSSING SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE CROSSING.
- ZONE 2: A) ONE FULL, UN-CUT LENGTH OF BOTH PWL AND NPWL PIPE MUST BE CENTERED ON THE CROSSING SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE CROSSING.
- AND EITHER B) NPWL MUST BE CONSTRUCTED TO WATER MAIN STANDARDS AND PRESSURE TESTED FOR WATER TIGHTNESS FOR A HORIZONTAL DISTANCE OF 10 FEET ON BOTH SIDES OF CROSSING.
- OR C) EITHER THE NPWL OR WATER LINE OR BOTH MUST BE ENCASED WITH A SLEEVING MATERIAL ACCEPTABLE TO DEQ FOR A HORIZONTAL DISTANCE OF 10 FEET ON BOTH SIDES OF THE CROSSING.
- ZONE 3: A) SAME REQUIREMENTS AS ZONE 2 EXCEPT THE NPWL MUST ALSO BE SUPPORTED ABOVE THE CROSSING TO PREVENT SETTLING.
- ZONE 4: A) SAME REQUIREMENTS AS ZONE 1 EXCEPT THE NPWL MUST ALSO BE SUPPORTED ABOVE THE CROSSING TO PREVENT SETTLING.

C414 POTABLE/NOT-POTABLE WATER LINE (NPWL) SEPARATION
TYP NOT TO SCALE



- HORIZONTAL SEPARATION REQUIREMENTS**
- ZONE 1: A) NO SPECIAL REQUIREMENTS.
- ZONE 2: A) NO SPECIAL REQUIREMENTS FOR POTABLE OR NON-POTABLE SERVICES.
- B) WATER AND NPWL SEPARATED BY AT LEAST 6 FEET AT OUTSIDE WALLS.
- AND C) WATER AT LEAST 18 INCHES HIGHER IN ELEVATION THAN THE NPWL.
- AND EITHER D) NPWL CONSTRUCTED TO WATER MAIN STANDARDS AND PRESSURE TESTED FOR WATER TIGHTNESS.
- OR E) SITE SPECIFIC REQUIREMENTS APPROVED BY DEQ.
- ZONE 3: A) NOT ALLOWED WITHOUT DEQ WAIVER.

- NOTES:**
- SANITARY SEWAGE FORCE MAINS MUST HAVE MIN. 10' HORIZONTAL SEPARATION AND 18" VERTICAL SEPARATION. ZONE 2 AND ZONE 3 PLACEMENTS ARE NOT ALLOWED WITHOUT A WAIVER GRANTED BY DEQ.



C426 CAP AND PLUG DETAIL
TYP NOT TO SCALE

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				GTT

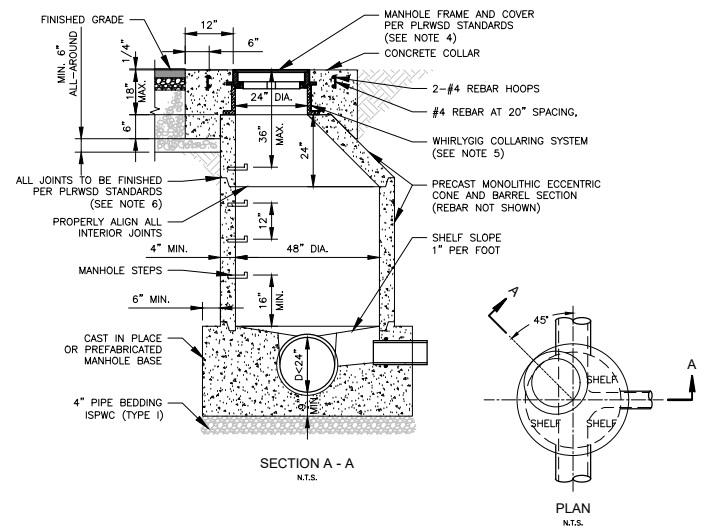


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208.634.4140 · 208.634.4146 FAX

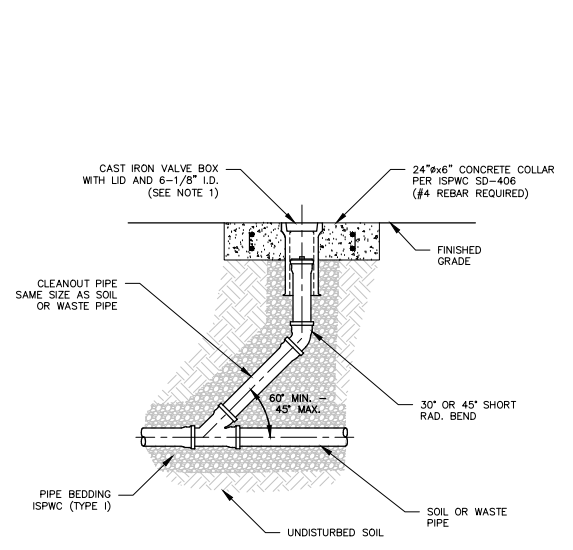
SIMMONS STREET TOWNHOUSES
McCALL, IDAHO
ROADWAY, DOMESTIC WATER, SANITARY SEWER
AND GRADING IMPROVEMENTS PROJECT
CIVIL TYPICAL DETAILS - 2

VERIFY SCALE	
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PROJECT	22025
DATE	4/26/2023
DRAWING NO.	SHEET NO.
GC-2	9 OF 11



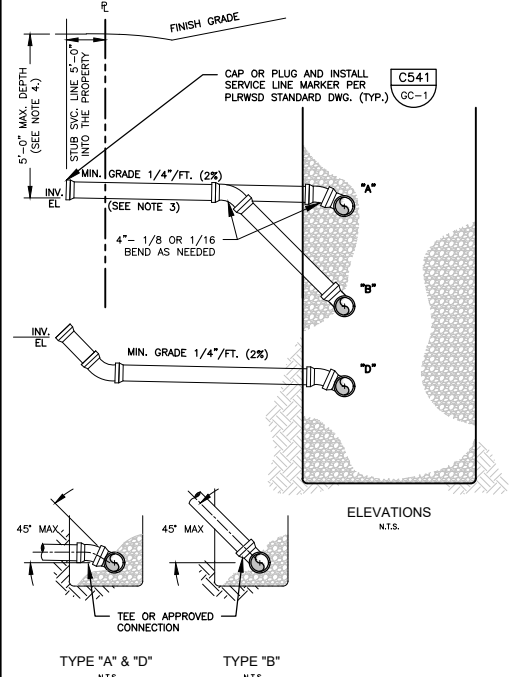
- NOTES:**
- OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEERS APPROVAL.
 - PLACE VERTICAL WALL ON UPSTREAM SIDE OF MANHOLE, ROTATED 45 DEGREES.
 - WHERE PVC PIPE IS UTILIZED, INSTALL A RUBBER RING OR GASKET COLLAR WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL.
 - ALL MANHOLES TO HAVE CAST-IRON DUST PANS CONSTRUCTED WITH INTEGRAL MACHINED FLANGES CAST INTO THE FRAME. DUST PANS TO HAVE A RAISED DRAIN HOLE AND WIRE LIFTING STRAP. MANHOLE COVER TO BE STAMPED "PLRWS SEWER". FRAMES, COVERS, AND DUSTPANS TO BE MANUFACTURED BY KITS FOUNDRY & MACHINE, INC. (208) 357-7773.
 - "WHIRLYGIG" COLLARING SYSTEM REQUIRED ON ALL MANHOLES IN PLACE OF CONCRETE GRADE RINGS. JOINT BETWEEN WHIRLYGIG COLLARING SYSTEM (BOTTOM OF PLASTIC FLANGE) AND TOP OF MANHOLE CONE SHALL BE SEALED WITH "VULKEM 116" HIGH-PERFORMANCE POLYURETHANE SEALANT.
 - ALL MANHOLE JOINTS TO INCLUDE CON-SEAL "CS-102 BUTYL RUBBER SEALANT," "VULKEM 116" HIGH-PERFORMANCE POLYURETHANE SEALANT, AND BE GROUTED (INSIDE & OUT) USING DAYTON 1107 ADVANTAGE, SPECHEM SC MULTIPURPOSE GROUT, OR EQUAL APPROVED BY PLRWS. EXTERIOR MANHOLE JOINTS TO BE COVERED WITH NINE (9) INCH WIDE INF-SHIELD GATER WRAP AFTER GROUTING.
 - PROVIDE MANHOLE CONCRETE REINFORCING TO ACCOMMODATE TRAFFIC LOADS.

C501 PLRWS - STANDARD MANHOLE
TYP NOT TO SCALE



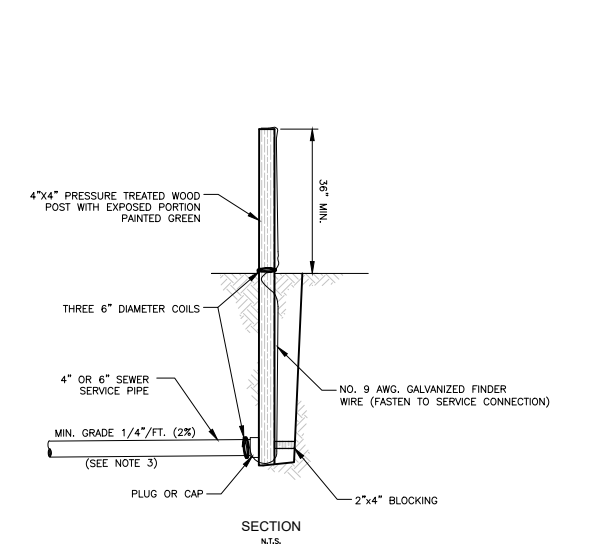
- NOTES:**
- CLEANOUT VALVE BOX LIDS TO BE A 5 1/4" DROP LID MARKED "SEWER" WHEN ASSOCIATED WITH GRAVITY SEWER PIPING AND HAVE NO MARKINGS (BLANK) WHEN ASSOCIATED WITH ALL OTHER PIPING.

C520 STANDARD SEWER CLEANOUT
TYP NOT TO SCALE



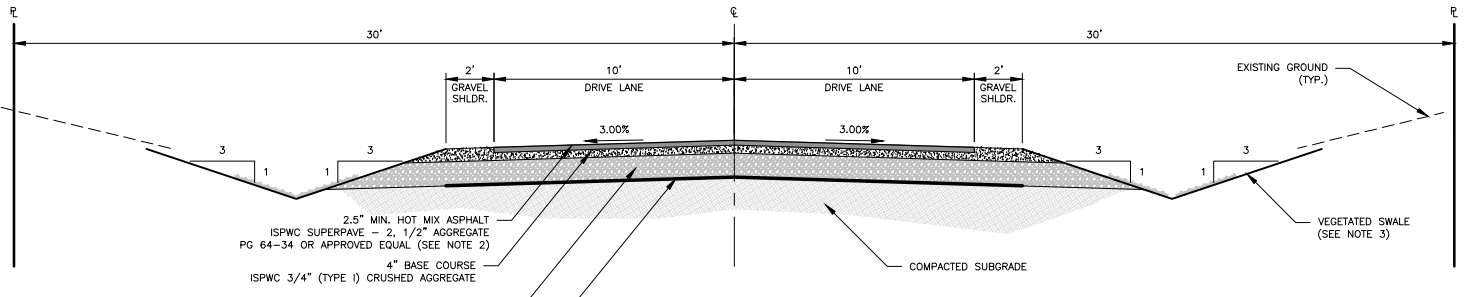
- NOTES:**
- ALL SERVICE LINES TO BE FOUR (4) INCHES INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - SERVICE LINE TO BE STUBBED A MINIMUM OF 5'-0" INTO PRIVATE PROPERTY OR AS INDICATED ON THE CONSTRUCTION PLANS.
 - MINIMUM SLOPE OF SEWER LATERALS SHALL BE 2% UNLESS OTHERWISE AUTHORIZED BY THE APPROVING AUTHORITY OR SPECIFICALLY CALLED OUT ON THE CONSTRUCTION DRAWINGS. IN NO CASE SHALL THE SLOPE BE LESS THAN 1%.
 - A MINIMUM OF THREE (3) FEET COVER DEPTH MAY BE ALLOWABLE WITH PRIOR APPROVAL FROM THE PLRWS.

C535 STANDARD SEWER SERVICE LINES
TYP NOT TO SCALE



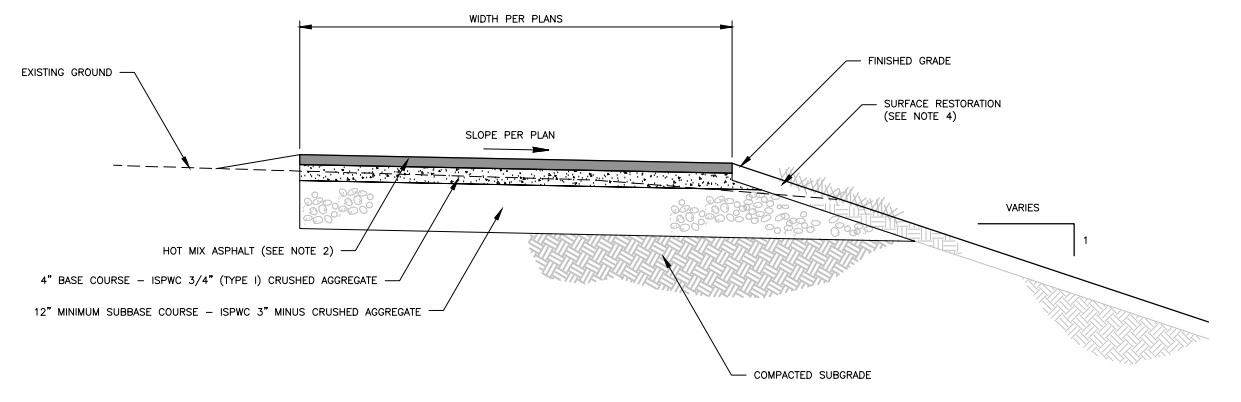
- NOTES:**
- ALL SERVICE LINES TO BE FOUR (4) INCHES INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - SERVICE LINE TO BE STUBBED A MINIMUM OF 5'-0" INTO PRIVATE PROPERTY OR AS INDICATED ON THE CONSTRUCTION PLANS.
 - MINIMUM SLOPE OF SEWER LATERALS SHALL BE 2% UNLESS OTHERWISE AUTHORIZED BY THE APPROVING AUTHORITY OR SPECIFICALLY CALLED OUT ON THE CONSTRUCTION DRAWINGS. IN NO CASE SHALL THE SLOPE BE LESS THAN 1%.

C541 STANDARD SEWER SERVICE MARKER
TYP NOT TO SCALE



- NOTES:**
- COMPACTION AND TESTING FOR ALL AGGREGATE BASE/SUBBASE MATERIAL SHALL BE IN ACCORDANCE WITH ISPC 802.
 - ASPHALT FOUR (4) INCHES IN THICKNESS SHALL BE PLACED IN TWO (2) INCH LIFTS. ASPHALT THREE (3) INCHES OR LESS SHALL BE PLACED IN A SINGLE LIFT.
 - GEOTEXTILE FABRIC TO EXTEND 1' MIN. BEYOND THE EDGE OF ASPHALT. ALL SEAMS TO OVERLAP 2' MIN.
 - COMPACTION AND TESTING FOR ALL HOT MIX ASPHALT SHALL BE IN ACCORDANCE WITH ISPC SECTION 810 AND PROJECT PLANS AND SPECIFICATIONS.
 - REVEGETATE ALL DISTURBED AREAS WITH A CITY APPROVED GRASS MIXTURE OVER FOUR (4) INCHES OF TOPSOIL, PER APPROVED LANDSCAPING PLAN, OR AS INDICATED WITHIN THE PLANS.

C800 ROADWAY TYPICAL SECTION - DRIVEWAY
TYP SCALE: 1" = 4'

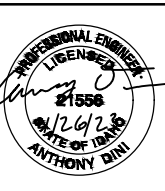


- NOTES:**
- COMPACTION AND TESTING FOR ALL AGGREGATE BASE/SUBBASE MATERIAL SHALL BE IN ACCORDANCE WITH ISPC SECTION 802.
 - HOT MIX ASPHALT THICKNESS/DEPTH TO BE PER THE PROJECTS GEOTECHNICAL EVALUATION. USE ISPC 1/2" SP3, PG64-34 FOR ALL ROADS/MAIN DRIVEWAY SURFACES AND ISPC 1/2" SP2, PG58-28 FOR INDIVIDUAL DRIVEWAY APPROACHES TO RESIDENCES.
 - COMPACTION AND TESTING FOR ALL HOT MIX ASPHALT SHALL BE IN ACCORDANCE WITH ISPC SECTION 810.
 - SURFACE RESTORATION TO BE PER THE PROJECTS LANDSCAPING PLANS. IF LANDSCAPE PLANS HAVE NOT BEEN PROVIDED BY THE OWNER, SURFACE RESTORATION SHALL INCLUDE 2"-3" OF GRAVEL OR PLACED TOPSOIL REVEGETATED WITH A NATIVE SEED MIXTURE PER AS INDICATED.

C806 TYPICAL PAVING SECTION
TYP NOT TO SCALE

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NO.	REVISION	BY	DATE	DESIGN
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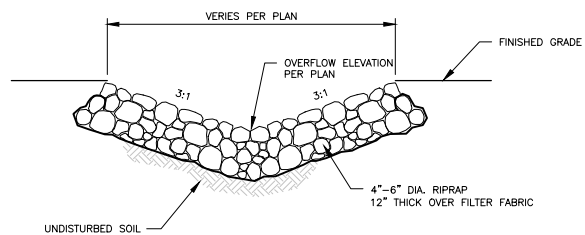


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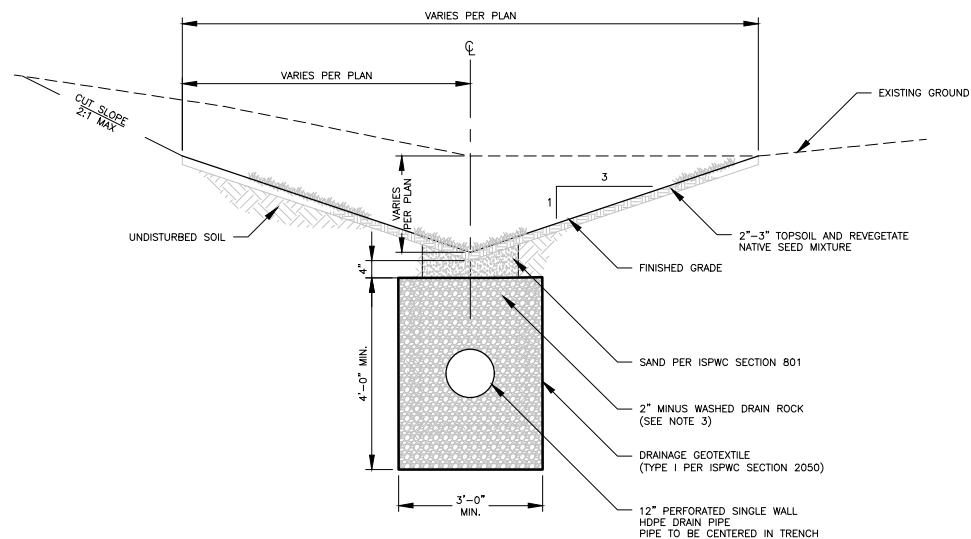
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SIMMONS STREET TOWNHOUSES
McCALL, IDAHO
ROADWAY, DOMESTIC WATER, SANITARY SEWER
AND GRADING IMPROVEMENTS PROJECT
CIVIL TYPICAL DETAILS - 3

VERIFY SCALE	
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PROJECT	22025
DATE	4/26/2023
DRAWING NO.	SHEET NO.
GC-3	10 OF 11



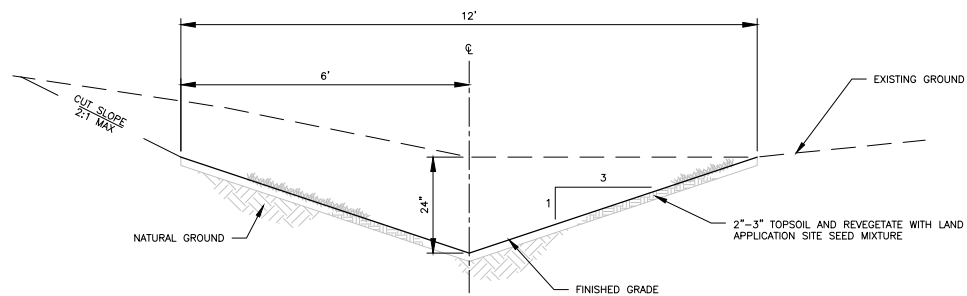
C1014 WEIR OVERFLOW DETAIL
TYP NOT TO SCALE



NOTES:

1. REFER TO IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY'S CATALOG OF STORMWATER BEST MANAGEMENT PRACTICES, VOLUME 4, SECTION 3, BMP 17 AT WWW.DEQ.IDAHO.GOV/MEDIA/622263-STORMWATER.PDF FOR ADDITIONAL INFORMATION.
2. TYPICAL TRENCH CONSTRUCTION AS PER TRENCH DETAIL STANDARD DRAWING OR ISPMC SD-301.
3. DRAIN ROCK BACKFILL TO BE 2" MINUS DIAMETER AND RELATIVELY CLEAN OF FINES. IF DRAIN ROCK IS FOUND TO BE UNSUITABLY DIRTY WHEN IT ARRIVES AT THE SITE, IT SHOULD BE CLEANED BEFORE PLACEMENT.
4. PERFORATED PIPE TO HAVE CAP ATTACHED TO BOTH ENDS TO PREVENT DRAIN ROCK FROM ENTERING THE PIPE.
5. BACKFILL AND COMPACTION PER ISPMC SECTION 306.

C1010 DRAINAGE SWALE/DETENTION DETAIL
TYP NOT TO SCALE



NOTES:

1. REFER TO IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY'S CATALOG OF STORMWATER BEST MANAGEMENT PRACTICES, VOLUME 4, SECTION 3, BMP 9 AT WWW.DEQ.IDAHO.GOV/MEDIA/622263-STORMWATER.PDF FOR ADDITIONAL INFORMATION.

C1401 BIOFILTRATION SWALE (VEGETATED SWALE)
TYP NOT TO SCALE

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				DRAWN
				AMD
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				APPROVED
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ROADWAY, DOMESTIC WATER, SANITARY SEWER
AND GRADING IMPROVEMENTS PROJECT
CIVIL TYPICAL DETAILS - 4

VERIFY SCALE	
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DATE	4/26/2023
DRAWING NO.	SHEET NO.
GC-4	11 OF 11



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**McCALL CITY COUNCIL
AGENDA BILL**

216 East Park Street
McCall, Idaho 83638

**Number AB 23-119
Meeting Date June 9, 2023**

AGENDA ITEM INFORMATION				
SUBJECT:		<i>Department Approvals</i>	<i>Initials</i>	<i>Originator or Supporter</i>
Wildlife Public Engagement Recap and Direction to Staff		Mayor / Council		
		City Manager		
		Clerk	<i>EW</i>	
		Treasurer		
		Community Development		
		Police Department		
		Public Works		
		Golf Course		
		COST IMPACT:	n/a	Parks and Recreation
FUNDING SOURCE:	n/a	Airport		
		Library		
TIMELINE:	n/a	Information Systems		
		Communications	<i>EW</i>	Originator
SUMMARY STATEMENT:				
<p>On April 27th, 2023, Council gave staff direction to move forward with a community conversation and survey surrounding the concept of a possible wildlife ordinance in the City of McCall. Erin Greaves, Communications Manager, will present a summary of public opinion from that meeting and other takeaways during the recent survey outreach portion and introduce options for the next steps in the City Council and citizen education process.</p> <p>Attached is a memo from Communications Manager Erin Greaves.</p>				
RECOMMENDED ACTION:				
Direction to Staff				
RECORD OF COUNCIL ACTION				
MEETING DATE	ACTION			
May 4				



City of McCall

MEMORANDUM

TO: City Council
FROM: Erin Greaves
DATE: 05/31/2023
RE: Wildlife Conversations and Survey

Council Members,

On May 4th, 2023, the City of McCall invited the public to participate in a Community Conversation held at the McCall-Donnelly School Commons. The Community Conversation was well-attended, with over 44 members of the public and the presence of 4 Councilors.

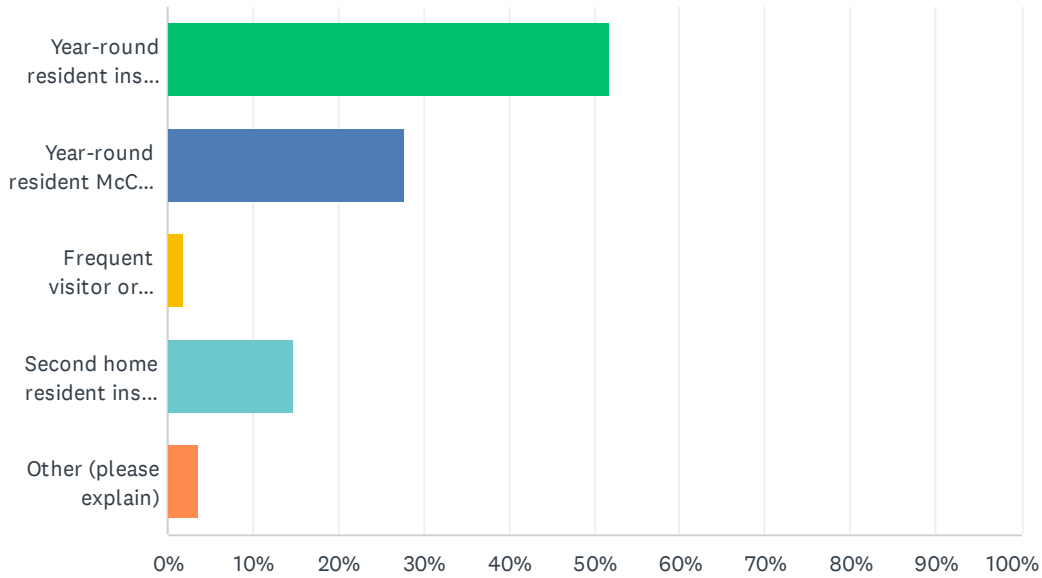
To facilitate meaningful discussions, the attendees were divided into 4 table groups. Each group consisted of a City Council representative, a staff member, and a wildlife biologist, scientist, or expert. Throughout the event, notes were taken, and tables were recorded. We have developed a transcript where available to ensure an accurate representation of the discussions, although some tables had a technical difficulty with transcription. The audio recordings, however, are available upon request.

In preparation for the Community Conversation, a series of 9 questions was developed based on your criteria and the content that required exploration for future action. These questions served as a framework for the discussions and enabled us to focus on key areas of interest. Additionally, following the event, we made a survey available to the wider public through Survey Monkey. The survey, which utilized the same set of questions, received participation from 54 individuals, some of whom had also attended the Community Conversation. The survey allowed respondents to provide additional comments, enriching our understanding of their perspectives.

We have taken the time to process the valuable data collected from both the Community Conversation and the survey. I look forward to presenting the common themes and valuable insights we heard to inform future actions and decisions.

Q1 Please tell us where you live.

Answered: 54 Skipped: 0



ANSWER CHOICES	RESPONSES	
Year-round resident inside McCall city limits	51.85%	28
Year-round resident McCall area	27.78%	15
Frequent visitor or tourist	1.85%	1
Second home resident inside McCall city limits	14.81%	8
Other (please explain)	3.70%	2
TOTAL		54

#	OTHER (PLEASE EXPLAIN)	DATE
1	Work in McCall; live in Cascade	5/6/2023 7:38 PM
2	Frequent visitor and property owner/taxpayer	5/4/2023 8:33 AM

May 4th Wildlife Community Conversation Summary – (Four tables of themes condensed)

Overall Themes and highlights:

- **Balance:** Need to find a balance between human activities and the preservation of wildlife, with a focus on mitigating the negative impacts of human behavior on the ecosystem.
- **Population management:** The impact of a feeding ordinance is discussed, with concerns about the potential starvation of deer due to limited natural forage. The suggestion of humanely culling deer and donating the meat to local families is raised as an alternative.
- **Problem urgency:** The urgency of addressing the deer issue is emphasized, as participants discuss the growth of the deer population and the potential risks, such as Chronic Wasting Disease (CWD).
- **Safety and accidents:** The high number of deer-vehicle collisions is seen as a failure of the city to warn drivers effectively. Suggestions include placing signs and providing educational materials to rental management companies.
- **Partnering with specific organizations.** Although there is some debate about the trustworthiness and dependability of Fish and Game to manage wildlife.
- **Ensuring the City is getting its information about wildlife, specifically deer, from trusted sources** such as experts, wildlife management organizations, local fish and game departments, and personal observations.
- **Lack of public awareness and education:** There is a concern about the public's lack of understanding regarding the consequences of feeding deer. Education and awareness campaigns are seen as necessary to address this issue. The need for the city to balance education and enforcement in addressing wildlife issues. There is a recognition of the need to balance different aspects, such as avoiding sign clutter, considering code management, and finding creative solutions that are both effective and visually appealing. Many believed a more robust campaign approach was necessary possibly integrated in the city's overall mission.
- **Formation of a wildlife committee:** Opinions vary on whether a committee is needed to address wildlife-related issues. Some believe it would delay action, while others see it as a way to gather knowledge and research from other towns facing similar challenges. Most believe the formation of a committee should be isolated to professionals in the field, while others stressed the need for citizen input.
- **Management and decision-making:** There is a focus on the need for proactive management of wildlife, particularly deer, wolves, and cougars. The decision-making process should be ongoing and based on expert advice. Participants expressed concerns about the lack of wildlife studies and environmental impact assessments in the community's development plans. They discuss how fragmented and disturbed habitats can lead to various issues beyond just the deer population.
- **Ordinance Support:** Although some stated they believed deer could be fed if citizens were taught safely, most believed in and supported an ordinance with meaningful fines.
- **The general feeling from all of the comments is that there is an issue that needs to be addressed.** People agreed that consultations should be sought with experts and municipalities dealing with wildlife issues.

Q2 When protecting or learning best practices for wildlife, who do you trust? Where do you get your information?

Answered: 54 Skipped: 0

#	RESPONSES	DATE
1	Common sense	5/29/2023 7:12 AM
2	Ecologists and educators	5/28/2023 12:06 PM
3	Idaho Fish and Game	5/27/2023 3:35 PM
4	Star news	5/19/2023 6:40 PM
5	Idaho fish and game	5/19/2023 6:33 PM
6	fish & game, long time locals	5/17/2023 10:57 AM
7	department of Idaho fish and wildlife	5/16/2023 4:53 PM
8	Fish and Game	5/14/2023 10:20 AM
9	f & gg	5/13/2023 6:48 AM
10	Idaho Fish & Game	5/12/2023 7:51 PM
11	Fish and Game Department	5/12/2023 10:49 AM
12	Idaho Fish and Game	5/10/2023 12:38 PM
13	Fish and Game	5/9/2023 1:52 PM
14	Fish and game, University of idaho	5/8/2023 5:36 PM
15	IDFG biologists, peer reviewed literature, other communities stories success in dealing with wildlife issues.	5/8/2023 5:15 PM
16	I feel the city has influenced fish & game resulting in a scare tactic to the public with unresearched, undocumented information. I don't trust these sources. I prefer to hear/read from other areas with similar issues to obtain helpful insights.	5/8/2023 10:06 AM
17	Fish and Game	5/7/2023 6:34 PM
18	local friends and acquaintances	5/7/2023 5:27 PM
19	Not Regan. It is obvious that she has an agenda. The more she says that Fish and Game does not push for a specific outcome, the less believable she is. She thinks we are stupid, and she definitely thinks that the council members are stupid.	5/7/2023 10:53 AM
20	The city	5/7/2023 8:54 AM
21	Fisch and game	5/6/2023 9:12 PM
22	Idaho Fish and Game. Idaho Fish and Game. Local news articles.	5/6/2023 8:51 PM
23	I trust those who have years of experience studying wildlife and my own common sense. Animal experts, journals, internet articles.	5/6/2023 8:39 PM
24	I trust my own experience growing up in nature, animal experts, and common sense in what is best for animals.	5/6/2023 8:22 PM
25	Ecologists, conservationists, preservationists, environmentalists	5/6/2023 7:38 PM
26	Fish and Game.	5/6/2023 4:01 PM
27	Fish& game	5/6/2023 3:05 PM

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28	Various reports from agencies, cities and counties around the country. Their experiences of how they best dealt, and are dealing with wild life in their areas.	5/6/2023 2:29 PM
29	Snowden, Wildlife Experts from other communities, Julie Conrad,	5/6/2023 8:58 AM
30	Idaho Fish and Game and personal experience.	5/5/2023 2:46 PM
31	ID FISH AND GAME, USFS, PONDEROSA STATE PARK	5/5/2023 2:09 PM
32	From several sources throughout the state and neighboring states. The sources are very experienced wildlife personnel. They have years of wisdom, experience, and know how to communicate and work with the public. They have learned how to work in partnership with the local citizens and local governments. They demonstrate a passion and compassion for the wildlife.	5/5/2023 1:50 PM
33	U of I and ID Fish and Game	5/5/2023 9:47 AM
34	The subject matter experts at the Idaho fish and game and the forest service wildlife biologists.	5/4/2023 11:26 PM
35	Professional wildlife biologists	5/4/2023 11:03 PM
36	Idaho Fish and Game, wildlife biologists (and not those on Facebook who think they are...real life biologists)	5/4/2023 9:35 PM
37	Government agencies, universities, public health organizations	5/4/2023 7:39 PM
38	I trust Idaho fish and game and Local Government. The star news and city council minutes.	5/4/2023 7:38 PM
39	Nature conservancy, Sierra club.	5/4/2023 7:01 PM
40	From experts, ideally multiple experts.	5/4/2023 6:06 PM
41	Idaho Fish and Game, wildlife biologists, veterinarians, US Forest Service	5/4/2023 4:58 PM
42	DNRP, Fish & Wildlife, THE EXPERTS	5/4/2023 4:25 PM
43	I do NOT trust our local fish and game, particularly Regan Berkley who has been inciting fear and panic regarding our town deer who have been here for a 100+ years. She is spewing untruths and propaganda about our deer and other wildlife. To what end? For what reasons? I conduct my research by reading countless articles about deer and wildlife from true experts, and talking to experts in the field, including fish and game directors and wildlife specialists in states surrounding Idaho (CO, UT, WY, MT, OR, WA) as they have already done the research about "best practices" that Regan Berkley is trying so desperately to reinvent the wheel on. The City Council of McCall and the city officials don't seem to have done their own research on this topic, but rather are listening to the voice of ONE or two fish and game youngsters that have yet to do any research themselves. Where is their historical data on the propaganda they are spreading? So far there isn't any. No tagging of deer to get an accurate count, or to show these deer migrate. No historical data on deer:doe ratios. No historical data on a "growing herd" or "increase in mountain lions", etc, etc, etc. This is NOT research. And this not scientific or unbiased in any way. They should be ashamed.	5/4/2023 3:10 PM
44	I do my own research.	5/4/2023 2:50 PM
45	US Fish & Game	5/4/2023 2:02 PM
46	I researched neighboring states that have studied wildlife within city limits coexistence. I specifically spoke to a Wildlife Biologist and management specialist in Boulder Colorado. After extensive research and science they have found successful ways to educate the public about wildlife and not feeding them, and still enjoying their existence in their communities.	5/4/2023 1:48 PM
47	Idaho fish and game	5/4/2023 1:18 PM
48	Idaho Fish and Game and Science	5/4/2023 12:53 PM
49	Scientists, Wildlife Management Agencies, and Common Sense.	5/4/2023 12:10 PM
50	I don't trust many sources as they seem to be directed to biased goals. Common sense makes the most sense to me. I do read what F&G has to say and look at national forestry info.	5/4/2023 12:01 PM
51	Not McCall Fish and Game. They protect the interest of hunters, they have shown to be biased, they present misleading information to council, etc. I question the trustworthiness and competence of its managers. I do not trust any one person or entity when it comes to	5/4/2023 8:33 AM

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protecting or learning best practices. I do my research from many sources. I look for common elements and for what would make sense in McCall.

52	Fish and Game	5/4/2023 8:14 AM
53	I certainly do not trust Regan Berkley, and I now have little trust in IDF&G. I do trust the Foxwood Wildlife Rescue, and get a lot of information from their website.	5/3/2023 11:02 PM
54	fish and games	5/3/2023 7:08 PM

Q3 Do you believe that individual actions, such as feeding deer, have a significant impact on the larger ecosystem, and why or why not?

Answered: 54 Skipped: 0

#	RESPONSES	DATE
1	I believe you do NOT feed the wild Life!	5/29/2023 7:12 AM
2	Yes, because it creates a disturbance in natural feeding cycles and habituates animals to become dependent on human intervention	5/28/2023 12:06 PM
3	If your speaking about deer in McCall, then yes they are having a significant impact on my property ecosystem. They should be rounded up and taken in to the mountains.	5/27/2023 3:35 PM
4	Yes because it's not natural to deprive them of their ability to maintain themselves	5/19/2023 6:40 PM
5	Yes, it interferes with the ecosystem.	5/19/2023 6:33 PM
6	Yes I have seen in my 40+ years in town that the herd has grown substantially and does not migrate as in the past.	5/17/2023 10:57 AM
7	individuals feeding deer turns neighbor's properties into feed lots / barnyards with 12-20 deer foraging twice daily.	5/16/2023 4:53 PM
8	Yes, it hinders the deer's natural tendency to migrate during the winter months. It leads to an over population of deer within the city limits.	5/14/2023 10:20 AM
9	yes	5/13/2023 6:48 AM
10	Without a doubt - and not positively. We live in a mountain environment and must share the space with wildlife. However, by allowing feeding of the deer, we fail to respect their well being.	5/12/2023 7:51 PM
11	Absolutely. Animals develop patterns of food sourcing. Easy food and they return	5/12/2023 10:49 AM
12	Yes. The effects are cumulative: humans feeding deer disrupts the natural migrations, behavior and demographics of the deer, which in turn affects the predators of deer, the health of the herds and our community.	5/10/2023 12:38 PM
13	Yes. Feeding deer has stopped their natural migration and they are becoming diseased. They are not wild anymore and aren't scared of predators which are moving into the town because of this.	5/9/2023 1:52 PM
14	Yes because nature is all connected in dome way, shape, or form.	5/8/2023 5:36 PM
15	Certainly. Providing terrestrial animals access to artificial feed sources either in winter or summer has many negative consequences. It concentrates the animals and disrupts their seasonal migrations. By doing so, this increases disease and parasite risks to people and other species, unnaturally attracts predators, leads to destruction of private property (landscaping) as well as native trees and shrubs by overpopulation of animals. Further, human-supplied food sources attract skunks which carry highly pathogenic avian influenza and rabies, and raccoons, which can be very destructive and dangerous around homes and people.	5/8/2023 5:15 PM
16	I've lived here for 22 years and don't believe that deer have been an issue yet openminded to hearing otherwise. I do NOT agree with feeding deer.	5/8/2023 10:06 AM
17	Yes, the deer get used to an easy food source and don't migrate.	5/7/2023 6:34 PM
18	yes	5/7/2023 5:27 PM
19	You are not worried about ecosystem as you are scaring people with mountain lions. Yes, people feed the deer during the winter. So does Fish & Game during harsh winters when they want to protect deer to be hunted. Why are you not asking what effect will killing the deer have on the ecosystem. Certainly feeding deer has less impact than the stibnite mine. You should worry about that.	5/7/2023 10:53 AM

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20	No. If they are living in town might as well take care of them. But I would rather they lived somewhere else.	5/7/2023 8:54 AM
21	Of course it has, weak and sick animal survive and the natural selection is not working anymore. The herds of deer get too big and predators like cougars enter the city because of a lot and easy prey. Coexistence with predators within the city limits is very difficult or impossible in my eyes.	5/6/2023 9:12 PM
22	Yes. Feeding wild animals disrupts natural migration and makes wild animals dependent on unnatural feeding.	5/6/2023 8:51 PM
23	Yes, individual actions do affect and impact significantly the ecosystem. Unfortunately, humans tend to think what is best for humans will also be best for wild animals.	5/6/2023 8:39 PM
24	Yes, I believe unnatural feeding leads to unhealthy animals, unbalanced ecosystems, disease in animals and enhanced predator issues in undesirable areas.	5/6/2023 8:22 PM
25	It's not a belief, it's a fact. Encouraging the concentration of any wildlife population, in this case, habituated deer, will cause the spread of lice and other diseases. Think about other species. How often are we hearing "Take your bird feeders down. An avian disease is wiping out birds." It's the same principle. One individual action can start a chain reaction in the ecosystem.	5/6/2023 7:38 PM
26	Yes, deer should not be feed.	5/6/2023 4:01 PM
27	Yes, they are very destructive to landscaping	5/6/2023 3:05 PM
28	Of course, feeding deer will impact the ecosystem. However, the deer here in town are not wild anymore, have not been for generations. We lure them into town also during summer with beautiful landscapes, lawns, golf course etc. Why do we expect them to leave in winter? Maybe we should prohibit people who live here from cultivating beautiful yards so that deer don't stick around in summer?	5/6/2023 2:29 PM
29	I believe when there is food available they should not be fed. But it would be ok to have feeding stations during kate winter.	5/6/2023 8:58 AM
30	Yes feeding deer concentrates the deer impacting the area as well as artificially increasing the herd size.	5/5/2023 2:46 PM
31	YES. I BELIEVE FEEDING DEER HAS A SIGNIFICANT HAZARD ON BOTH DEER AND HUMANS. MANY OF THE TOWN DEER DON'T LOOK HEALTHY. CROWDED, THEY SPREAD DISEASE, COMPETE FOR HUMAN PROVIDED FOOD AND ARE AT RISK OF INJURY FROM TRAFFIC.	5/5/2023 2:09 PM
32	One should look at the eco system as a whole. We have to be stewards for our wildlife so they can coexist with people. Our ecosystems suffer because of humans, overdevelopment, not planning for wildlife corridors, encroaching on their habitat and destroying their foliage. We need to give back to our wildlife.	5/5/2023 1:50 PM
33	Yes. Feeding deer causes them to lose their natural foraging and migrating habits.	5/5/2023 9:47 AM
34	Yes I do. Ungulates (deer and elk) don't usually stay in one location all yer long. They typically regionally migrate to winter range to survive the winter. It is not healthy for deer to have the variety of feed that they can aquire in McCall, especially the food that residents and tourists feed them.	5/4/2023 11:26 PM
35	Yes. Deer populations are far above historic levels. When any organism exceeds carrying capacity it throws other elements of the ecosystem off and the entire ecosystem becomes threatened. The lack of predators on deer and the artificial sustenance provided to them by humans has altered their migration patterns and habituated them to living amongst humans. Browsing by deer that exceed the historical levels of variability put pressure on shrubs, forbs and graminoids eaten by deer in the forest, changing ecosystem dynamics. This can have cascading effects not only on the plants, but on other mammals, birds etc. Changing the understory in a forest can alter fire regimes, further damaging the ecosystem.	5/4/2023 11:03 PM
36	Yes. We see a little group around our home linger at a neighbors who often leaves food. There are more this year and they are less and less afraid of people. Not healthy for anyone.	5/4/2023 9:35 PM
37	I do. Individual actions, be active and positive always have ripple effects either on the environment around the individual or other individuals within the environment. Like follows like.	5/4/2023 7:39 PM

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	Cause and effect.	
38	YES I Do!! Just look at the landscape not to mention the deer.	5/4/2023 7:38 PM
39	Yes, feeding wildlife is a bad practice	5/4/2023 7:01 PM
40	Relative to the numbers of deer claimed to be in town, I do not believe that currently human feeding is driving the population growth. More likely, human landscapes and practices (ornamental plants, for example), plus lack of predators explains the alleged growth. (Have you seen all the non-migrating geese at the parks in Boise. Same situation?)	5/4/2023 6:06 PM
41	Yes, feeding wild animals is not good for them, the ecosystem, or human/animal interactions.	5/4/2023 4:58 PM
42	YES. Feeding deer = killing deer.	5/4/2023 4:25 PM
43	No. "Feeding deer" does not have significant impact on the larger ecosystem. KILLING deer by "playing God", DOES have an impact. How can we let a 30-something fish and game employee run the show and say that either transporting or killing all the town deer is the only thing to do because she needs job justification? Inciting fear and killing the deer, mountain lions, bears, coyotes and wolves has a SIGNIFICANT impact on the larger ecosystem. But what we are hearing is: "Run for the hills, the deer have lice!!" "Run for the hills because there are mountain lions in the wilds of McCall"!!!! "There are TOO MANY deer"!!!! "Poor us, we have to field three or four calls a month regarding deer or mountain lion sightings in McCall, OH MY"!	5/4/2023 3:10 PM
44	Keeps the deer alive during the winter. Same with some birds. I know several people who feed the birds in McCall. No one is after the birds.	5/4/2023 2:50 PM
45	Yes, human interferences such as feeding deer results in a loss of migratory traditions for herds, makes them more vulnerable to disease and contributes to unsustainable population increases above what natural habitat can support. I had a deer walk towards me "begging" for food in the public parking area by Toll Station. This is not normal wild animal behavior and poses many public health & safety risks.	5/4/2023 2:02 PM
46	I believe these animals have found a higher protein content in landscaping in town, but would love to find how other towns are approaching this.	5/4/2023 1:48 PM
47	Absolutely. Deer as re meant to be wild and find their own food. When we feed them, they become dependent, and hang around which is exactly what has happened in town. Everything is connected and this causes many other issues.	5/4/2023 1:18 PM
48	Yes. Feeding wildlife is harmful to them and us. There were never deer, and rarely cougars or wolves, in town during the winter before people started feeding them. DEER ARE NOT EMOTIONAL SUPPORT ANIMALS!	5/4/2023 12:53 PM
49	Feeding deer absolutely has an impact on the larger ecosystem. The population in town grows and diseases are spread more easily in dense populations through contact with other animal's urine/feces. Then those diseases are transmitted to other populations and spread throughout the state. CWD is here in Idaho and McCall will be a hotbed for it if the feeding issue is not addressed. Just look at the density of deer feces on public sidewalks and green spaces downtown where they congregate. We are doing a disservice to all Deer/Elk/Moose everywhere by not taking action to prevent this highly foreseeable consequence. If we care about wildlife, we will take action.	5/4/2023 12:10 PM
50	These sorts of individual actual actions (feeding deer & other wildlife) cause a spiral of other situations such as the increase in other predators like the mountain lions this year. Also, left to their natural system, the ecosystem is healthier and so are the various herds. They cull each other.	5/4/2023 12:01 PM
51	Since the deer we are talking about do not migrate, and have not migrated for generations, feeding them during the winter keeps them alive. Banning all feeding is cruel and unwarranted.	5/4/2023 8:33 AM
52	Yes. Feeding wild animals removes their incentive to forage for natural foods. Their bodies are not suited to domestic feed which effects their overall health. Feeding animals brings them into conflict with humans which is NOT natural at all. Feeding one species making it easier for them to breed and overpopulate an area will, in turn provide easy access to prey for other species that will then acclimate to the new living environment, be well fed and able to breed and overpopulate in the same environment. We already have big cats moving into town. I am waiting for the wolf packs to arrive. (Frankly I thought they would come before the cougars)	5/4/2023 8:14 AM

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53	Not particularly when it comes to the town deer. They have been around since the city was founded, and have only recently become a supposed "problem".	5/3/2023 11:02 PM
54	yes. ticks, lice, traffic, cougars, unnatural super breeding	5/3/2023 7:08 PM

Q4 What thoughts do you have regarding recent mountain lion reports?

Answered: 54 Skipped: 0

#	RESPONSES	DATE
1	I myself have not seen any, but I believe you should leave that up to the experts.	5/29/2023 7:12 AM
2	Not surprised, nor do I feel threatened by their presence.	5/28/2023 12:06 PM
3	Again, with sightings in town, they should be captured and taken far from town.	5/27/2023 3:35 PM
4	I'm not sure if it's true because I haven't seen them or heard anyone seeing them.	5/19/2023 6:40 PM
5	Not concerned	5/19/2023 6:33 PM
6	Concerned, of course, but it could possibly be a case of heavy snow pack and more cameras, Need to give it another year and see if it continues.	5/17/2023 10:57 AM
7	Hopefully the mountain lions culled the deer herds significantly.	5/16/2023 4:53 PM
8	Not concerned, but it is possible that the large number of deer could entice more mountain lion activity within the city.	5/14/2023 10:20 AM
9	none they follow the food base deer	5/13/2023 6:48 AM
10	They live in the same environment that we do and should be allowed to. I don't think that we should be feeding them either, but we are indirectly by our allowing of residents and visitors to feed the 'city deer.' Mountain lions are not the issue.	5/12/2023 7:51 PM
11	Worrisome. Once one (God forbid) one attacks human in town it will be too late to "reborn the horse" so to speak	5/12/2023 10:49 AM
12	Not surprising. A predator will naturally follow prey	5/10/2023 12:38 PM
13	They are naturally going to move where there is easy prey. They have every right to be here. We have caused them to move in.	5/9/2023 1:52 PM
14	It's to be expected with such a large herd of prey for them to hunt in the winter.	5/8/2023 5:36 PM
15	No one should be surprised. I don't believe they will be a problem unless some stay in town after the removal of the deer herd. Any problems with mountain lions are really the fault of those who have fed the deer. Of course and sadly, "problem" mountain lions will be killed, otherwise I expect the rest will go back to where their natural prey is found.	5/8/2023 5:15 PM
16	in my experience they've been here since i've lived here with no incidences.	5/8/2023 10:06 AM
17	Not suprised.	5/7/2023 6:34 PM
18	Do we have any reports at all regarding threats to citizens? Don't get all worked up just because they are here. Are there really more sightings recently? Or, are there simply more camera reports from the middle of the night.	5/7/2023 5:27 PM
19	One mountain lion eat one deer a week. They prey on the weak and unhealthy. Let them do their job. Stop scaring people. They have always been around. People with cameras see them. Those same people could not recognize the tracks in the snow before. Again Regan's agenda. How about bears? Are you taking out the bears now too?	5/7/2023 10:53 AM
20	Not sure	5/7/2023 8:54 AM
21	It needs a lot of attention and we should try to keep them in a distance.	5/6/2023 9:12 PM
22	It makes sense that more mountain lions are coming into town due to the large and unnatural deer population.	5/6/2023 8:51 PM
23	I think the mountain lions are going where the food supply is. They are coming down the mountains to eat the large herd of non-migrating deer. Can you imagine the buffet that awaits	5/6/2023 8:39 PM

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them in McCall? I also feel really bad for people with small dogs or children, I would hate for someone to lose a pet or child.

24	I think they are a dangerous occurrence and can almost certainly be correlated to the enhance deer population. It's a target rich environment for a predator.	5/6/2023 8:22 PM
25	This is mountain lion habitat. We built in and around it. Coexistence is key. Need a campaign to stop the fearmongering.	5/6/2023 7:38 PM
26	They will continue to move in with such a large deer population.	5/6/2023 4:01 PM
27	These are not good around town. They don't know the difference between a deer and a domestic animal	5/6/2023 3:05 PM
28	It is my believe that we have had mountain lions in this area for ever. I don't believe the numbers have risen. Rather the many cameras we now have around our homes are making them visible so to speak. Are mountain lions really a danger to us? Maybe to our pets if the roam on their own. But mountain lions in general don't attack unless they are provoked or have young ones and feel threatened.	5/6/2023 2:29 PM
29	Feel they are just passing through during winter as they always have. Due to wildlife cameras and Ring Doorbells we see them more now.	5/6/2023 8:58 AM
30	I believe the reports as predators follow the prey.	5/5/2023 2:46 PM
31	I AM NOT CONFIDENT THAT THERE IS ENOUGH DATA IN, IT IS CONCERNING TO THINK THAT THE LARGE DEER HERD MAY BE DRAWING MOUNTAIN LIONS INTO RESIDENTIAL AREAS. IT JEOPARDIZES THE SAFETY OF CHILDREN AND SMALL COMPANION ANIMALS.	5/5/2023 2:09 PM
32	Mtn. Lions live here year round. They always have. We don't have as many as some people think. The mtn. lions are quite territorial and they don't like other lions moving into their space. People are just seeing them more because of all the cameras. They don't live in packs. We have wolves, bears, moose, and elk also. The elk are fed in the winter down in Donnelly. We have all kinds of wildlife. We live in the mountains. People need to learn to respect and live in harmony with all our wildlife.	5/5/2023 1:50 PM
33	Mountain lions are attracted to town by the town deer herd. They pose a threat to pets and could harm people.	5/5/2023 9:47 AM
34	I believe that they are induced to come into town to prey on the complacent and poor condition of the deer that are born and raised in McCall (those deer are the easiest for lions to acquire with little energy spent.	5/4/2023 11:26 PM
35	We need more predators to keep deer populations in check. However, these predators don't coexist well close to human habitation. The deer need to be back in the forests and sagebrush ecosystems where they belong, and the mountain lion will follow them back there.	5/4/2023 11:03 PM
36	How can anyone be surprised? It does make me very nervous about more predators feeling like the city is a legitimate hunting ground. Between small kids and dogs, we have a lot of vulnerability at our house!	5/4/2023 9:35 PM
37	It's concerning. It feels like a consequence of not doing something sooner. I acknowledge wild creatures are guided by their own instinct. But I worry that visitors are careless, could get hurt, then will blame the town like they blame us for everything else.	5/4/2023 7:39 PM
38	They are ok considering the situation we have created.	5/4/2023 7:38 PM
39	Concerned	5/4/2023 7:01 PM
40	We have lived here continuously for more than a decade. Ten years ago I repeatedly saw cougar tracks down our street in the middle of winter. I think recent reports are most likely due to more people living here year round, game cameras and multiple reports from different parts of town involving the same animal. Cougars will avoid people if given the chance.	5/4/2023 6:06 PM
41	Not surprised, predators follow prey.	5/4/2023 4:58 PM
42	This is what happens when you let people feed deer.	5/4/2023 4:25 PM
43	WAY Overblown. The mountain lions have always been present in McCall since the early 60's when I was a child (and much longer, of course). Neighbors would casually mention a sighting	5/4/2023 3:10 PM

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while they were hiking or snowshoeing and tell others that they were passing through again in the springtime, just like they still do every year. The ONLY reason why mountain lions sightings have increased in the last couple of years is due to the game and ring cameras on everyone's home, particularly since covid days, and particularly on 2nd homes with owners who live full time in the city. They are unaccustomed to any wildlife sightings. The mountain lions have been here silently all along. People are now seeing them because they have game cameras. The mountain lion population isn't growing. Sightings are. They have been passing through in the spring for generations and generations. They do not like human interaction and will continue to pass through McCall just like they do everywhere. Again, education is they key. The city spends a ton of money on educating the public about bears in the spring, why not mountain lions? We don't need the likes of Regan Berkley inciting panic and fear over mountain lions or any other wildlife that have always been here. As a fish and game "expert", how is it that she doesn't know this? Where is her historical data that proves that there are "More Mountain Lions"? She doesn't have any. The mountain lions are not here because of "people feeding the deer". What a sophomoric statement. It has been a long harsh winter for all wildlife. Is it any wonder that the mountain lions also do their best to survive by simply moving to lower elevations to avoid the deep snow? They are not setting up residence here. Mountain lions have a very large range of territory and are loners that will defend their territory. It would be a miracle if there was more than one adult mountain lion in McCall. If three are seen together, it is a mom with last years cubs with her. Regan needs to stop saying that there are 50 mountain lions. Feilding 50 or so calls about sightings on game cameras are very likely about the same one or two mountain lions passing through. She sounds extremely uneducated and highly unintelligent.

44	I see it as no problem.	5/4/2023 2:50 PM
45	I'm very disturbed by this. I live in Rio Vista and reported my visiting friend's dog as "likely" attached by a mountain Lion feeding on a dead deer on my own private property. The dog survived and we have no video evidence, but the veterinarian said the puncture wounds on top of the dog's head and slices of the upper lip are consistent with a possible Mountain Lion bite. No other dog was involved in the altercation.	5/4/2023 2:02 PM
46	I have lived here 47 years, I know we have had mountain lions here. I don't feel threatened but them at all or feel my pets are in danger. They will continue to eat the weak or hurt deer which is culling the herd naturally.	5/4/2023 1:48 PM
47	They are because of the deer. They are looking for easy food.	5/4/2023 1:18 PM
48	Feeding deer is directly responsible for cougars in town and will end badly for everyone, especially the innocent cougars.	5/4/2023 12:53 PM
49	Its common sense that Mtn. Lion populations will thrive where there is easy prey. It's only a matter of time until F&G is forced to kill lions here, as they have done in the wood river valley, and it will be because of those who fed the deer and created the original issue. Wildlife shouldn't pay the price for people's bad decisions.	5/4/2023 12:10 PM
50	The mountain lions are following the food source. They should not be killed and people should just be aware of their existance. Deer should not be fed because the cats come to those feeding places. We live in a forest, let the wildlife be.	5/4/2023 12:01 PM
51	Even Fish and Game said that they have no concerns about mountain lion behavior in McCall. The more this artificially drummed-up "problem" is talked about, the more people will call if they see a mountain lion on their Ring camera at night. If the City is concerned about "growing" deer population (with no data to back it up), the City should be happy to know that we have mountain lions, as they are the main predators that eat deer. They help control the deer population and keep the deer population healthy. It's a good thing.	5/4/2023 8:33 AM
52	I was expecting some apex predators to arrive. Many stupid overfed deer is an open invitation. Am I happy that I have to be cautious for the safety of my pets? No. Am I happy that something is finally removing deer from town. YES!!	5/4/2023 8:14 AM
53	There are reports of mountain lion sightings each and every year here. I have lived here for 21 years, and I cannot recall a single year where I have not heard about sightings. I believe that many of the recent sightings are not of large numbers, but of a few individuals over time. I believe this aspect of sightings has been blown way out of proportion.	5/3/2023 11:02 PM
54	directly related to deer feeding	5/3/2023 7:08 PM

Q5 In your view, what role should local government play in managing the deer population and preventing dangerous behavior towards deer?

Answered: 54 Skipped: 0

#	RESPONSES	DATE
1	I don't think that the government should be involved in the states issues..	5/29/2023 7:12 AM
2	Education, first and foremost, and perhaps policy geared towards minimizing any feeding of any wild animal.	5/28/2023 12:06 PM
3	The City of McCall is 100% responsible for this and should manage the deer right out of town	5/27/2023 3:35 PM
4	I think they should enact a law to stop people from feeding them.	5/19/2023 6:40 PM
5	Establish laws and regulations that prevent feeding deer.	5/19/2023 6:33 PM
6	Dangerous behavior towards deer by who, people or predators? It should be up to fish & game to take care of predators, as for people not much will really be effective or enforceable.	5/17/2023 10:57 AM
7	A very least, a no feeding and no petting ordinance, since you've unfortunately taken eradication off the table.	5/16/2023 4:53 PM
8	Make it illegal to feed deer within city limits and enforce it!	5/14/2023 10:20 AM
9	reduce the numbers based on habitat	5/13/2023 6:48 AM
10	Certainly education, however, this will only work so far. Residents and visitors need to understand that what they think is helping the deer (feeding them) is actually creating more harm to the herds. Seeing a wild animal should be both special and unexpected. McCall has evolved into a local zoo and at the expense of the health of the herds. I wish that residents and visitors would understand the impacts of their behaviors - but have no confidence in that. It is then up to local government to impose consequences on those that violate what is best for the wildlife we live amongst.	5/12/2023 7:51 PM
11	Who else is better suited? In conjunction with state experts I might add.	5/12/2023 10:49 AM
12	I think the local government should work with Fish and Game experts and the Chamber to develop policies that encourage healthy interactions with wildlife.	5/10/2023 12:38 PM
13	I believe that the city should make it unlawful to feed the deer with increasing penalty. Feeders should also be responsible for hauling off the dead ones.	5/9/2023 1:52 PM
14	Clearly it's needed since common sense from humans is not working.	5/8/2023 5:36 PM
15	Adopt strict code with fines and enforcement, toward prohibiting people from providing outdoor food sources accessible by animals from the ground. Research and if possible adopt rules for preventing bird feeders from becoming food sources for terrestrial animals. Cite pedestrians who feed terrestrial wildlife. Cite dog owners for dogs at large, which may chase deer into traffic. Support vigorous code enforcement with adequate compensation and budgets for CEOs. Penalize STRs where feeding of terrestrial wildlife occurs. Take responsibility and assume the financial burden for promptly removing carcasses from public rights-of-way.	5/8/2023 5:15 PM
16	Education!	5/8/2023 10:06 AM
17	Fish and Game should manage the population by whatever means.	5/7/2023 6:34 PM
18	Leave them alone What exactly do you mean "dangerous behavior towards deer"?	5/7/2023 5:27 PM
19	The deer are fine. Most people love to see them. Local government should focus on actual problems, not on fake issues. Why not do what Fish & Game always tells people who call about injured wildlife they found? They are told to let nature take its course. The lions will get them. Why does the city feel the need to interfere? Do you want to take on the job if feeding the deer? Maybe next the city will pass an ordinance that will make watering lawns a crime.	5/7/2023 10:53 AM

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Let the lawns all natural and die during the summer. Want all things "natural" there's a lot of stuff that you can meddle in.

20	Or dangerous behavior from the deer. I think they should live elsewhere and be moved.	5/7/2023 8:54 AM
21	They should have the leading role. The city of McCall should prohibit feeding deers. They should start an offensive campaign on all media channels to make clear, how bad feeding the deers is	5/6/2023 9:12 PM
22	Making it illegal to feed deer through an ordinance with a significant fine.	5/6/2023 8:51 PM
23	I think local government needs to seek the experts in wildlife management and take their advice. I do not think wildlife management is in the wheelhouse of local government. Therefore, seeking the advice and heeding that advice is what local government should do.	5/6/2023 8:39 PM
24	Removing the sick deer from town, relocating the healthy deer. Very serious fines and a zero tolerance policy for feeding of wildlife of any kind. The city takes a hard line on feeding bears, but seems less serious about the deer. The threat to humans shouldn't be the deciding factor in how serious the issue is...	5/6/2023 8:22 PM
25	Ungulates are the jurisdiction of the Idaho Department of Fish and Game (for better or worse), not the City of McCall or Cascade or Donnelly, etc. IDFG needs to be patrolling and citing anyone interacting with deer that will lead to habituation. You can patrol the forest all you want but at least those populations (sans Slate Creek) are at least acting more like wild deer. IDFG needs to focus efforts where the chance of disease and insect infestation are likely to spread.	5/6/2023 7:38 PM
26	Remove the problem.	5/6/2023 4:01 PM
27	Reduce the town herd size quickly regardless of popularity. Create and enforce no feeding codes	5/6/2023 3:05 PM
28	This is funny. The only dangerous behavior towards deer I see comes from humans, in this case, from the local government. Joke aside. I trust that education goes a long way. Education about feeding, about their behavior, about what deer look like at the end of the winter (not very pretty but that does not mean they are sick), the truth about lice, the importance of sticking to driving limits etc. I also believe that so far no humans or their pets have been killed by a deer. They really are no threat at all. Are they?	5/6/2023 2:29 PM
29	Leave them be....there is a natural dying off rate due to traffic and winter.	5/6/2023 8:58 AM
30	I believe the government should control artificial deer feeding by residents. Also consider limiting certain landscape plantings such as crab apple trees and similar not native plants that attract deer.	5/5/2023 2:46 PM
31	THE LOCAL GOVERNMENT SHOULD HAVE PUBLIC SAFETY AS A PRIORITY. IT IS RESPONSIBLE FOR PASSING LAWS THAT PROTECT THE PUBLIC (AND THE DEER!)	5/5/2023 2:09 PM
32	Our local City government should definitely help manage our local wildlife along with help from our citizens and guidance from the ICL and other respected and trusted sources. It needs to be practical and not fear based. Again, we live in the mountains along with the wildlife. The City already has shown some effort in managing such as the proper use of bear proof trash cans, etc. Management from our local City government is better because we, the citizens, elect you and we have a say so in what happens. Talking, sharing, and resolving issues as a community with our City government is far better than giving a state entity control.	5/5/2023 1:50 PM
33	The should be an ordinance prohibiting feeding deer. Education and enforcement are needed as well.	5/5/2023 9:47 AM
34	Local government should heed the advise of wildlife proffesionals.	5/4/2023 11:26 PM
35	Professional wildlife biologists should be the ones to manage the populations and the local city government should seek the counsel of wildlife and habitat professionals. Don't give in to the whims of a spoiled and misguided, yet influential human population! Follow the science.	5/4/2023 11:03 PM
36	I am 100% in favor of city ordinances put in place to ensure the safety of both the wildlife and the humans who live in their territory...as long as it is developed in partnership with knowledgeable experts like Fish and Game.	5/4/2023 9:35 PM
37	There should be consequences for bad behavior. As long as resources are available to learn about "why it's bad." But ultimately consequences are a crucial part of learning and we don't	5/4/2023 7:39 PM

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	have consequences to hand people so there's an incentive to keep behaving poorly.	
38	Rules and regulations and enforcement.	5/4/2023 7:38 PM
39	Large fines for feeding deer	5/4/2023 7:01 PM
40	Not sure I understand this question. If people would keep their distance, drive more slowly, avoid feeding deer (this includes not planting gardens with plants deer eat), I think most negative interactions between deer and people would be minimal. Local government's best role is educating people how to live safely with deer but also with all wild animals that frequent our town.	5/4/2023 6:06 PM
41	There should be a feeding ban, it's a public health issue. We never had ticks in town before but we will now because the ticks travel on the deer.	5/4/2023 4:58 PM
42	Kill the sick ones. Relocate the rest. Ban AND ENFORCE no feeding of the deer. The deer will come back and just be wildlife. They are not pets nor for Boise/tourists/second homeowners enjoyment	5/4/2023 4:25 PM
43	What is "dangerous behavior towards deer"??? By humans you mean??? Local Government needs to focus on other much higher priority issues. Our town is literally falling apart at the seams and all out "local government" seems to be able to do is focus on the town deer? We are facing CRITICAL PROBLEMS IN OUR TOWN! Town Deer isn't one of them. Roadways falling apart, potholes everywhere, no safe bike paths, walking paths or sidewalks IN TOWN. Ponderosa Park has OVER 600,000 visitors annually and the city is directing all of that traffic down Davis, Wooley and Lick Creek, Spring Mountain. Davis and Wooley have zero walking/bike paths. Wooly has a partial boardwalk. I watched in horror two days ago while a young 7 or 8 year old boy riding his bike west on Wooly in the middle of the street abeam the boardwalk. A very large, speeding pick up truck was coming around the blind corner and nearly hit this child from behind. THAT is a local government issue. We have a housing issue, a speeding issue, a distracted driving issue, a dogs off leash issue, a MAJOR illegal drug issue within our city limits, a child suicide rate issue, a local business issue of not supporting local businesses and forcing them to leave McCall, a sewer issue, a water quality issue, a lake water quality issue, a unsafe boating issue, an infrastructure issue. We don't need local government to "manage the deer population". That is what nature does. NOT Man... Get back to the real issues at hand. Begin doing your research and studies on the deer if necessary. Compile your long term data and historical data before making ANY decisions about the town deer and other wildlife.	5/4/2023 3:10 PM
44	Fine those who speed, fine those who do not have control over their dogs and allow their dogs to harass the deer.	5/4/2023 2:50 PM
45	Changing City code to disallow feeding wildlife is a good start. The public has been well educated and given many warnings, yet they are not changing their behavior. I believe a hefty fine of more than \$100 is appropriate for people caught feeding deer. I saw a car with 1A plates parked facing the wrong way towards oncoming traffic in the middle of my lane on dienhard near the bike path crossing one day ago feeding deer from the car window. Cars do this all the time. Some people leave tubs of food in their yards. Some local breweries leave spent grains out for the wildlife to eat.	5/4/2023 2:02 PM
46	I feel that the city needs to use the best practices that other cities are using in order to coexist with all wildlife. I think we need to look into why they are getting hit by cars, are people driving too fast to stop? Are people on their cell phone and not paying complete attention while driving? My practice is if I see a deer eating in the side of the road, I slow down and plan that there is a good possibility there will be more behind them. I think one problem occurring in town from time to time is interaction between dogs and deer. We have a leash law within the city limits, I feel that if a dog is under your control with a leash the chances of having mama deer/dog occurrences will be drastically reduced.	5/4/2023 1:48 PM
47	Its not just toward deer, it involves the humans and pets/livestock in the area. In my opinion local government should be enforcing rules to mitigate the deer population issues.	5/4/2023 1:18 PM
48	Make feeding, petting, and encouraging deer illegal and significantly fine those who do.	5/4/2023 12:53 PM
49	An ordinance should be passed to prohibit feeding of wildlife.	5/4/2023 12:10 PM
50	What does the local government do in Canada, in Montana? Local government can emphasize the harm done by individual homoner feeding the deer. Blame the feeders, not the animals.	5/4/2023 12:01 PM

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51	Enforce existing laws before passing new ones. For example, enforce speed limits, inattentive driving (e.g. illegal use of cell phones), leash laws, etc. Signage, education, etc.	5/4/2023 8:33 AM
52	McCall has shamelessly used the "wild" deer as a tourist attraction. There have not been any attempts to harass deer into leaving town. There have been no visible discouragement of human/deer interaction. There are many posted signs indicating that we should be kind and welcoming to the deer. We need to codify sanctions for deer feeding. \$100 fine for feeding is not enough. \$250 at least would be appropriate. We need to thin the herd and remove at least half of the deer munching on landscaping and wandering around the center of town.	5/4/2023 8:14 AM
53	#1 - ENFORCE our dog leash law and dog at large law. I know from numerous incidents that I have personally witnessed, where irresponsible dog owners allow their dogs to roam free, and/or off leash in the city and have been the instigators of "negative" deer behaviors. Three winters ago, I witnessed a large dog jump out of the cab of a pickup, chase after an elderly man, then attack a young deer. The dog ripped off the deer's tail, and probably would have killed the deer if I had not stopped my car in the intersection of Deinhard and Hwy 55, and intervened. I know for a fact that the dog owner was only given a verbal warning, which was ridiculous!	5/3/2023 11:02 PM
54	outlaw wildlife feeding	5/3/2023 7:08 PM

Q6 What are your thoughts on a proposed wildlife feeding ordinance, and how do you believe it will impact wildlife in our community?

Answered: 54 Skipped: 0

#	RESPONSES	DATE
1	As I said before, no one should be feeding the wildlife..But also my thoughts are to put up signs with a huge fine for feeding the wildlife, but let the wildlife Rome unless they're endangering humans..	5/29/2023 7:12 AM
2	This is a wildlife interface and corridor, and will remain so, as long as native forage and prey exist. I think enforcement of a feeding ordinance would be difficult, but possible, and ultimately helpful in re-wilding what should stay wild.	5/28/2023 12:06 PM
3	It would not be an issue if the deer were removed	5/27/2023 3:35 PM
4	I think we need an ordinance to stop people from feeding deer as it does more harm than good. They think they are taking care of the ser but they are so short sighted.	5/19/2023 6:40 PM
5	Hope it helps	5/19/2023 6:33 PM
6	I think it should be implemented, but not sure how enforceable it really is. The main impact noticeable first will probably be me & the rest of the community spending most of our time trying to chase the out of our yards and gardens to keep at least some plants alive. Eventually it will probably lead to a larger number of winter kill.	5/17/2023 10:57 AM
7	An ordinance will help marginally. At least my neighbor might not feed, hopefully reducing some of their feed lot herd in my yard year around.	5/16/2023 4:53 PM
8	As stated above, make it illegal to feed the town deer, with the intention to reduce the deer population.	5/14/2023 10:20 AM
9	ban feeding deer in city limits	5/13/2023 6:48 AM
10	It is proper and a good step in the right direction. It will take a number of years of better behavior by residents and visitors to see local herds return to proper numbers and winter behaviors.	5/12/2023 7:51 PM
11	Well, education was tried with limited to poor results. Now a stick needs to be used	5/12/2023 10:49 AM
12	I am in favor of a wildlife feeding ordinance, however, I think education is the key effort.	5/10/2023 12:38 PM
13	I believe it should be done. Yes we are going to have more dead deer but they are going to die anyway.	5/9/2023 1:52 PM
14	I absolutely support it. It will help keep deer a bit more wild and will hopefully help control the spread of disease and parasites within the herd.	5/8/2023 5:36 PM
15	City leaders have been derelict in failing to adopt such an ordinance when previously discussed. See answer to #3, 4, and 5 for more.	5/8/2023 5:15 PM
16	Yes, to a feeding ordinance. We won't know until it's been tried. I'd prefer to see a natural order to wildlife.	5/8/2023 10:06 AM
17	The deer feel safe in town because of a lack of predators/hunting. Feeding is a small part of this.	5/7/2023 6:34 PM
18	Plain and simple - don't feed the wildlife	5/7/2023 5:27 PM
19	Why do you keep pushing this? Why don't you lay it off? The city can start by not watering the lawn anywhere so it dies. Start by not providing grass for deer. Then you can cut off the trees and bushes you planted, because that also feeds the deer. Lead the way! You are messing with the ecosystem by artificially maintaining lawns and other vegetation.	5/7/2023 10:53 AM
20	How large is too large for the herd!	5/7/2023 8:54 AM

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21	I do support it. It needs high fees and a campaign including road signs at the entry of McCall to have a positive impact.	5/6/2023 9:12 PM
22	I support this. It's at least a first step. It could potentially reduce the deer population and would let wildlife naturally find their own food.	5/6/2023 8:51 PM
23	So, how will a feeding ordinance work? Are we supposed to rat out our neighbors? How do you enforce it? Are cops supposed to watch us at all times? Or is it just when you get "caught" in front of them? How do you prevent out of town visitors from knowing or caring about the ordinance? I'm not sure a feeding ordinance will do anything to curb feeding the deer. I really don't.	5/6/2023 8:39 PM
24	Stop the feeding, zero tolerance. The town isn't a petting zoo, tourists will still visit and life will go on.	5/6/2023 8:22 PM
25	Stop feeding wildlife. It increases the chance of disease and then you have dead deer in the end anyways. Unfortunately, humans have created a storm that is only going to get worse before it gets better. We may need to witness death before we see healthy populations. It'scsad, but we created the mess.	5/6/2023 7:38 PM
26	Yes, fine people.	5/6/2023 4:01 PM
27	The results will be very hard to watch next winter. Herd size needs to be reduced beforehand	5/6/2023 3:05 PM
28	If feeding the wildlife will be strictly enforced it might impact the deer quite a bit. There are quite a few people who have stopped feeding them because of the ordinance, and still, the herd survived. Question: why is feeding them so bad? We feed the elk on a field outside of town? Would we do something like that for the deer? That said, we personally do not feed them and trust they will survive without our help.	5/6/2023 2:29 PM
29	All we need is more signage.	5/6/2023 8:58 AM
30	The feeding ordinance is a good starting point. It should reduce the deer herd size over time.	5/5/2023 2:46 PM
31	I AM IN FAVOR OF A WILDLIFE FEEDING ORDINANCE. THE SHORT-TERM IMPACT ON WILDLIFE IS SAD, BUT THE BEST THING FOR ALL IN THE LONG RUN.	5/5/2023 2:09 PM
32	A properly designed wildlife ordinance would be highly beneficial. If put together thoughtfully, people and wildlife can coexist peacefully. Many communities have done it and it has worked well. I would hate to be the community known for killing wildlife just because they (the wildlife) wanted to still live in their decades old ancestral habitat.	5/5/2023 1:50 PM
33	A no feeding ordinance would result in the reduction of the number of deer in town to a natural carrying capacity. The human habituated deer would soon be replaced by wild deer that migrate in the winter.	5/5/2023 9:47 AM
34	I think it is a large step in the right direction. When the deer in town are habituated to being fed, the result is a fairly domesticated wild animal	5/4/2023 11:26 PM
35	It will encourage wildlife to become wild again, not habituated to humans. Deer, fox and other wild animals do not benefit by humans feeding them. People think it is cute - but it is disrespectful to the animal to make them a "pet". They belong wild.	5/4/2023 11:03 PM
36	Very much in favor. It is really easy to NOT feed wildlife - it takes effort to offer food. I would like to see some repercussions for those who are so actively irresponsible.	5/4/2023 9:35 PM
37	I think it is both necessary and aspirational. We can't ever guarantee anything will work. And if it doesn't, ordinances can be repealed. But we have to try. Along with other coordinated strategies. But forward movement without some enforcement power seems like a waste of tax dollars and effort.	5/4/2023 7:39 PM
38	It should be strictly enforced and it will totally improve all wildlife.	5/4/2023 7:38 PM
39	I support it	5/4/2023 7:01 PM
40	Since the city started asking people to not feed the town deer, I suspect most law abiding citizens have complied. Why criminalize behavior engaged in by a few people? That should be done only as a last resort.	5/4/2023 6:06 PM
41	See above. Sometimes you just can't do whatever you want. We have other rules and	5/4/2023 4:58 PM

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	regulations in place like speed limits and traffic lights. This is no different.	
42	Ban feeding of wildlife, follow the experts advice. They are WILD, let's keep them that way.	5/4/2023 4:25 PM
43	<p>IF the "no feed ordinance" has an attached fish and game agenda ordinance giving fish and game the go-ahead to kill the town deer like two and a half years ago, then I am adamantly against it. Who is going to police an ordinance if one is put in place? The lone city code enforcer? The police department? Why not focus on the ordinances that are ALREADY on the books? Speeders, inattentive driving, illegal drug use, off leash dogs, etc, etc. If the police can't issue speeding tickets for fear of driving out tourists, then what do you think a feeding ordinance will do when someone is jailed for feeding a carrot or apple to a deer? And what is considered "feeding"? A beautifully planted yard full of beautiful green grass? Newly planted fruit trees on homeowners properties? Ornamental non-native landscaping and bushes/trees planted in yards that the deer LOVE? Colorful flower baskets and vegetable gardens? Hanging bird feeders? Even if placed 50 feet up in a tree? (Squirrels and even birds are messy feeders, so the spray birdseed allll over on the ground where deer can easily reach it. Is *that * considered "feeding". The deer are simply "collateral damage" so to speak if they can reach the birdseed intended for birds and squirrels, right? Kind of like the golf course spreading poison like confetti that is intended for "voles". The collateral damage is far more serious than deer getting birdseed. The collateral damage of rodenticide poisoning is the State protected ground squirrels on the golf course, and ANY secondary wildlife that eats a staggering poisoned vole or ground squirrel (domestic cats, dogs, Eagles, Owls, all other birds and raptors, Fox, Bears, Coyotes)...ALL can die by eating poisoned voles and ground squirrels. Why isn't THAT being talked about? IF a feeding ordinance is put in place, it needs to be a PILOT STUDY ONLY, with a minimum of a year to three years of collected data on any impact on the wildlife and deer (which is what you are really talking about here, right)? The handouts deer get in the winter by locals, 2nd homeowners, tourists, and visitors is simply NOT enough to sustain them. The deer are obviously finding plenty of native foods (trees, fruit trees, grasses, brush, gardens, etc) to survive our winters. They have always been here (again since I was a child in the 60's), and have found ways to adapt to our winters. It's not due to the "feeders". I can guarantee you that VERY few residents of McCall have the extra money to properly feed the deer, even a small herd of 10 or 20 can costs thousands of dollars in a single winter in cobb molasses oats or hay or seed. Do I believe that the deer will simply be dropping dead in our streets if an ordinance is passed? No. But Regan Berkley is spreading that unfounded fear. The old, weak, very young, or even orphaned deer might succumb naturally to a harsh winter. That is nature. The deer just endured a very LONG winter...7 months of snow on the ground. The majority found enough native foods to survive. Many look skinny or "mangy" which is normal this time of year, is it not? And particularly so after a very long winter. I have a database of thousands of photos of the deer in McCall over the past 12 years in EVERY MONTH OF EVERY YEAR. Thousands. THAT is "historical data" if you need it. Why doesn't fish and game have this data? Twelve plus years of photos show the health of the deer population in McCall. At the end of winter, they "look" unhealthy. A few "may" die. Most will survive. And IF the deer actually are found to be "starving" if an ordinance is put in place, then do what every other State and fish and game department surrounding us does: FEED THE DEER in a safe location so they make it through tough winters. Not watch them suffer or die or simply KILL THEM. And enough with the fear tactics of "lice", etc. The deer self-eradicate lice. It does not kill them or harm them unless in very rare circumstances of extreme, prolonged cold winters, which we rarely get here. Lice does NOT harm or infect humans, pets, or even livestock....</p>	5/4/2023 3:10 PM
44	I am very much against it. The city is forcing a situation that ensures that it will kill the deer, but of course will use terms such as "culling." If the goal is healthy deer, we should all agree that dead deer are not healthy deer.	5/4/2023 2:50 PM
45	We need this ordinance and it NEEDS to be ENFORCED. It will only help if enforced in conjunction with allowing fish & wildlife to remove the diseased deer. The deer breed, teach their fawns the same dependable e and they don't learn natural migration and eating habits.	5/4/2023 2:02 PM
46	I am for a no feeding ordinance, I think our deer will end up healthier	5/4/2023 1:48 PM
47	No feeding should be allowed. Period. And it should be enforced. Initially, they may get a little aggressive because they have been used to being fed, then many will likely die because they don't know how to find food on their own because let's face it, at this point they are domesticated. But if the feeding continues the deer population, along with their predators in town will continue to increase. It is a hazard to everyone. Leave deer wild.	5/4/2023 1:18 PM
48	Yes, please pass an ordinance and enforce it. It may take some time but will eventually stop	5/4/2023 12:53 PM

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deer wintering in town. It is not natural for them.

49	I favor the ordinance. It will provide an avenue for the public to be educated on the issue, with a consequence actually backing up the education. As of now, there's nothing to keep anyone accountable. Education only can go so far, and if there is no law against feeding, law enforcement has nothing that legally allows them to approach someone feeding a deer and ask them to stop and tell them about the law.	5/4/2023 12:10 PM
50	Do it. Hopefully people will listen and it will help.	5/4/2023 12:01 PM
51	I strongly oppose the feeding ordinance. First, it is cruel knowing that deer do not migrate and will likely starve if all feeding stops. I also oppose criminal penalties. The City does not have enough data to make an informed decision. If, despite everything, the City moves forward with a no feeding ordinance, I think the City should take on the responsibility of feeding the deer. That way they control what the deer is being fed (no more argument that private individuals may not be feeding the "right" things) and would ensure that the deer would not starve.	5/4/2023 8:33 AM
52	I think that putting an ordinance in place is one step. I think enforcing the ordinance is critical to making it work. I don't think it will do much at this point. The damage is done. The deer are generationally acclimated. Wait until I had parked my car and approach me for a handout. This is generational knowledge taught by their mother. It will take several generations for this behavior to become unlearned.	5/4/2023 8:14 AM
53	An ordinance is only as good as the enforcement. While I don't particularly agree with the implementation of a new ordinance, I believe that any enforcement should be consistent with current enforcement of other ordinances. For instance: I listen to a police scanner often. I would conservatively estimate that 95+ percent of all traffic stops made in the city end with a warning. I also know that there is virtually zero enforcement of the hands free/distracted driving ordinance. If an ordinance is instituted, it better include feeding birds, as bird feeding attracts not only birds, but also deer, raccoons, skunks, squirrels, etc.	5/3/2023 11:02 PM
54	please implement feeding ordinance	5/3/2023 7:08 PM

Q7 In your opinion, what is the best way to educate the public about the dangers of feeding wildlife? Do you have ideas on how to encourage more responsible and natural practices when it comes to interacting with wildlife in our community?

Answered: 54 Skipped: 0

#	RESPONSES	DATE
1	Don't feed them!! Put signs up and start giving out fines BIG FINES!!! We love our wild life but people need to use common sense They Are Wild...We Love seeing them roam around McCall..	5/29/2023 7:12 AM
2	As a landscape contractor, I take it upon myself to have those conversations with my otherwise ignorant clients. The problem I see with McCall is that many of our residents are only part-time and don't read the Star News, which is one means of disseminating information. The more ways the message gets out the better.	5/28/2023 12:06 PM
3	This is not an issue if the city would take action. Round up the deer and take them away.	5/27/2023 3:35 PM
4	Enjoy them but Leave them alone campaign	5/19/2023 6:40 PM
5	Circulate through social media the benefits of not interacting with deer by feeding them.	5/19/2023 6:33 PM
6	Nothing that you have not been trying.	5/17/2023 10:57 AM
7	Signs all over town. Plenty of social media. Spots on the news out of Boise. Lots of information from Fish & Wildlife Department to eventually dispel people's misinformed ideas.	5/16/2023 4:53 PM
8	You can lead a fool to the truth, but you can't make him/her believe it.	5/14/2023 10:20 AM
9	door to door visits by both fish & game plus city officials	5/13/2023 6:48 AM
10	I wish that I did. Whether they believe it or not, they are promoting the death of these city herds by their actions. Perhaps sharing more stories and numbers on the impacts of deer/vehicle collisions or lion kills.	5/12/2023 7:51 PM
11	It's been tried, there are those that just won't voluntarily do the right thing.	5/12/2023 10:49 AM
12	Community wide effort, multiple approaches/media. Nice to enlist prominent business owners and other community members as spokespeople. Highlight the benefits to deer and our community. Is there such a thing as a designated or certified "Wildlife Aware" community program (similar to being designated a Tree City)?	5/10/2023 12:38 PM
13	They need to see what is really happening to the deer. They look bad. They are dying and not just because they are hit by cars. I have two dogs and there is more deer poop in my yard than dog.	5/9/2023 1:52 PM
14	Honestly I have no idea how to best educate people who feel they already know the best answer. The National Parks Service offers good short tidbits on their instagram and Twitter on how to interact with wildlife in the parks and maybe we start posting signage around town with similar info.	5/8/2023 5:36 PM
15	Find good programs that other communities have adopted, use the public domain, steal from the best. Publish or request news stories with photos featuring winter-killed and diseased animals. Publicize the danger of pathogens harbored by unhealthy wildlife.	5/8/2023 5:15 PM
16	Putting signs on the highway, signs at the parks, signs everywhere even if they're a piece of paper plastered on bulletin boards at the grocery stores, on the website, chamber of commerce, public service announcements, presentations to the schools, service clubs, everywhere. If a committee is formed this could be done by volunteers who are most passionate about the severity of the issue, see the need of education to impact and change our community for a common goal.	5/8/2023 10:06 AM

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17	If the deer weren't around this wouldn't be a problem.	5/7/2023 6:34 PM
18	Simply put a statement in the paper every week - "PLEASE DON'T FEED THE WILDLIFE"	5/7/2023 5:27 PM
19	This survey is an example of how you don't educate. You already decided that feeding is dangerous, that you want to pass the ordinance, and you want to kill at least some of the deer. Now you are just using Erin to package it and make the community believe that it was their idea all along.	5/7/2023 10:53 AM
20	Too many new visitors for any consistency.	5/7/2023 8:54 AM
21	The easiest audience to convince are the kids. They should have a wildlife education in school. Most adults are reachable with scientific arguments. We need all media channels to spread these arguments. Owners of rental homes should be obliged to at least inform their customers, better write into their rental contracts feeding the deers is forbidden. And I would mount road signs at the entries of McCall saying 'don't feed the deers'.	5/6/2023 9:12 PM
22	Using traditional marketing strategies, including signs. Require info to be posted at all short term rentals and hotels.	5/6/2023 8:51 PM
23	I think you educate by telling the public honestly and openly what is happening to the deer and that a large portion of this herd is infected with lice. That they are suffering with the lice and the lice is spreading. I think you have to be blunt and honest about what is really happening here. Actually, and graphically, tell people how the deer are not being helped by being feed human food. They are not migrating, they are losing their fur due to the lice, they are not healthy vibrant deer.	5/6/2023 8:39 PM
24	Maybe a shock and awe campaign of the after math of 40+ road kill accidents, starvation, lice infections, extremely poor psychical appearance. Let's face it, the deer look horrible in the winter and I pity them...	5/6/2023 8:22 PM
25	"Fed Deer are Dead Deer." Use examples from the black bear/ Grizzly Bear playbook. It's the same principles and education tactics. There is no such thing as "natural practices when it comes to interacting with wildlife in our community." We might as well stop referring to these animals as wildlife. None of this is natural. That's the problem. It may take a couple iterations of deer populations to allow the populations to naturally fix themselves. Never underestimate the power of hands-off policies and time for species to "fix" themselves.	5/6/2023 7:38 PM
26	Flyers, ads, signs.	5/6/2023 4:01 PM
27	Signs entering and within town. Continue with social media. Start progressive fining on repeat large feeding operations	5/6/2023 3:05 PM
28	As I said before, we are drawing the deer into town, and keep them here by having beautiful, yummy yards and lawns. Why make such a big deal out of it when it comes to winter. What do you expect? Please, prohibit every home owner in town to have flowers, shrubs, and a lawn in summer time.	5/6/2023 2:29 PM
29	Brochures, signage, maybe internet or newspaper.	5/6/2023 8:58 AM
30	Reminders around town using signage such as on the buses and updates on web pages. Also perhaps an annual information sharing in the schools with class group such as fifth graders or such. I think snow depth will limit any practices.	5/5/2023 2:46 PM
31	EDUCATE SCHOOL CHILDREN. PUT UP POSTERS IN PUBLIC PLACES WITH QR CODES DIRECTING READERS TO AN INFORMATIONAL WEBSITE. PLACE PS MESSAGES IN NEWSPAPER.	5/5/2023 2:09 PM
32	There a lot of ways to educate people. A committee could brainstorm an amazing plan to educate people. Some ways are through a strong media campaign blitz using all media not just social media. Signage, pamphlets, My mind is whirling with ideas. Citizen ambassadors to help hand out pamphlets to visitors downtown just like they have ambassadors at Tamarack. Too many ideas to write here. I may mail you a list of my thoughts.	5/5/2023 1:50 PM
33	Newspaper articles, signage, notices in STRs and motels, social media posts and public employees interacting with people seen feeding deer.	5/5/2023 9:47 AM
34	I believe the Idaho fish and game, as well as the forest service have public education as part of thier missions	5/4/2023 11:26 PM

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35	Their needs to be a public education campaign, similar to education about such things as defensible space. The public needs to understand what it means to live on the wildland-urban interface and how their actions affect things. If given the right education and tools, most people will do the right thing. However, fines for feeding wildlife are also appropriate.	5/4/2023 11:03 PM
36	At this point it seems a door to door campaign is needed. I have seen the social posts, the newspaper ads. There SHOULD be a common sense element here but communication in this town can be difficult. It seems extreme, but maybe a door hanger on properties? Something people can't ignore?	5/4/2023 9:35 PM
37	Have the interested community members in being on a committee for a public outreach and education group to do the door knocking and roving around town during the tourist season. If they want to volunteer so bad that's how they should do it. Put in the time.	5/4/2023 7:39 PM
38	Communicate via the social media and signage as well a informing businesses and HOAs.	5/4/2023 7:38 PM
39	Make them aware of large fines on social media, newspaper	5/4/2023 7:01 PM
40	I think the ads the city has been running in our local paper, combined with signage around town have been a great start. Open houses on the subject can't hurt, and should be periodically held. Finally, might be a good idea develop and email list of city residents and periodically pepper them with helpful information on this and other issues (e.g., dark skies ordinance, public consumption of alcohol in parks, etc.	5/4/2023 6:06 PM
41	I think you have tried your best, time for a regulator approach.	5/4/2023 4:58 PM
42	FINE THEM. Education does not and has not worked. Some folks feel that they are entitled to wildlife and can do with it what they want. FINE THEM.	5/4/2023 4:25 PM
43	The city actually needs to BEGIN a viable and verifiable "Educational Campaign" before making ANY decisions regarding the town deer and other wildlife. That has NOT been done yet in my opinion or the opinions of a large majority of residents and 2nd homeowners/visitors here. My line of work, my business, my company focuses almost solely on "social media" and advertising. I am on social media and intuned to local advertising, etc nearly 24/7. I, myself, barely saw a few Facebook posts here and there, and a one or two mentions in the Star News, or the Chamber magazine that only comes out twice annually. If I barely saw anything that could be considered and "educational campaign", how many people do you think actually saw ANYTHING?! Do you know what percentage of our population is on Facebook or reads the Star News to even see these few ads or mentions? Likely no more than 1% to 3%, THAT is not an "educational campaign". The city cannot in good conscience say "Oh, we tried to educate the public in the past year, but gee, it didn't work, so we need to "make the tough decisions now about the deer". That is a total cop out. Extremely few residents/visitors follow the City of McCall FB page, or the McCall Police Dept FB page, or even read the Star News. And fewer still go to the Fish and Game site to read what THEY have to spew about the deer. Going forward from today, the city needs to invest time and money and resources on an ACTUAL CAMPAIGN. Not this one and done "we tried". Hire an ad agency if necessary. Use "humor" vs mandates and threats of jail time. If the city has money for art projects around town, and has money for a WAY OVERBUDGET \$11MILLION++ DOLLAR LIBRARY that gets our towns and Emergency Fund as well as extra tax money and other city funds thrown at it, then the city NEEDS to put money toward the "problem of the town deer". A made-up problem no-less, but now you have it. You need to spend time and money. One or two brochures in a Property Managment office doesn't cut it either. Send the council out to put brochures in EVERY single VRBO and Vacation Rental By Owner. And every single shop and business in town. Every restaurant and bar. That is what it will take. Do the hard work for the problem you have created. Or, create a task force of interested residents and citizens like many of us ASKED FOR two and half years ago. WE said we would be happy to do the work of creating a campaign, designing brochures and other educational materials, depositing them around town. We were never asked, despite volunteering our time and energy. WHY??? Why has no one considered signage??? At the entrances to town, in town, at every single KNOWN deer crossing in town? The same crossings and corridors they have been using for generations despite our building and paving over all of them? Large signs, lit signs at known crossings and corridors like every street bording the golf course (Lick Creek, Davis, Wooly and Spring Mountain Blvd). In town by Franz Witte, in town by the Shell gas station, and Maverick and Growlers? In town by Albertsons, and by Shore Lodge. Signage should be a first step.	5/4/2023 3:10 PM
44	Danger to whom? Who decided that there was a danger?	5/4/2023 2:50 PM

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45	We should require hotels, STR's to post warnings to the guests. We should have signs along the roadways at key entry points to McCall. Provide and encourage local businesses to put signs up voluntarily if they wish. Continue to advertise on social and print media spaces. People know, they just don't care because there are no consequences.	5/4/2023 2:02 PM
46	Signs posted as you come into town maybe even a few billboards. Possibly have the code enforcement department stop and talk to people about the harm of feeding them French fries or tacos etc. Maybe even have pamphlets to hand out	5/4/2023 1:48 PM
47	People only listen to what they want. I know plenty of people who say "I know I shouldn't but I do it anyway." Or "they're too cute not to feed". Good luck. If people are just getting talked to, they are going to continue to do it because they are selfish and thinking about how it brings them gratification.	5/4/2023 1:18 PM
48	Education is essential but seems to have little effect on the loud minority who react emotionally.	5/4/2023 12:53 PM
49	The best way to educate is to make it known that it's important enough to pass an ordinance against feeding. If there's no real action, why would anyone think it's truly a serious issue? Once an ordinance is passed education should be the first priority. Warnings should be issued first, citations only if someone is purposely/repeatedly ignoring the law. Additionally, temporary informational signage could be placed in tourist-heavy areas downtown to highlight the negative outcomes human feeding has on wildlife.	5/4/2023 12:10 PM
50	Newspaper. Signs around town. emphasis at public city meetings. Shaming--call people out.	5/4/2023 12:01 PM
51	This question, as many in this survey, is loaded and biased. You assume that feeding the deer is "dangerous."	5/4/2023 8:33 AM
52	Lets see... In the wild deer get chased by all sorts of creatures. Cougars, wolves, coyotes which makes them very nervous about gathering and foraging without being watchful for predators. One way to make the deer in McCall more skittish and less likely to clump would be to allow the only animal in town (other than our new resident cougars) that is inclined to chase them to chase them. Deer that do not feel safe will leave an area.	5/4/2023 8:14 AM
53	Signage in public areas frequented by visitors and locals alike. Informational articles in not only the local newspaper, but regional papers as well. Public service announcements on local radio stations and television stations. Fliers posted in local businesses. The list goes on. It would also help a lot if all the local air b&b management companies would educate their renters to not feed the deer. I share a driveway with a neighboring Air B&B. So far over the winter, I only saw one renting group of people not feed the deer. It got so bad (until the thaw) that I couldn't even pull into the driveway, or open my garage door, without deer coming up the driveway looking for a handout and hanging out. I like the deer, and think a lot more of the above suggestions should be implemented long before an actual ordinance.	5/3/2023 11:02 PM
54	fines	5/3/2023 7:08 PM

Q8 Do you support the creation of a wildlife committee, and what kind of initiatives do you think it should prioritize?

Answered: 53 Skipped: 1

#	RESPONSES	DATE
1	Clean up out Deer and put them back Very Upset That they where moved, I understand if they are sick but we want the healthy Back!!!	5/29/2023 7:12 AM
2	Yes, and it should prioritize education.	5/28/2023 12:06 PM
3	no, more government of any kind should not be the method to fix problems.	5/27/2023 3:35 PM
4	Campaigns to say enjoy them but leave them alone. Enforce it.	5/19/2023 6:40 PM
5	Yes, take input from citizens to come up with effective initiatives. We love having wildlife in McCall and we need to be good stewards.	5/19/2023 6:33 PM
6	Possibly Fish & Game!!!	5/17/2023 10:57 AM
7	Yes. Educating locals and visitors with good information from Fish & Wildlife Department to eventually dispel misinformed ideas.	5/16/2023 4:53 PM
8	Yah, sure. But such a committee needs to have legitimacy and accountability, as well as some teeth.	5/14/2023 10:20 AM
9	no	5/13/2023 6:48 AM
10	Only if they are action oriented. Must develop a solid plan and then execute.	5/12/2023 7:51 PM
11	Limited to advice and council. The elected officials need to take responsibility	5/12/2023 10:49 AM
12	I'd need to know more about the purpose and role of the committee.	5/10/2023 12:38 PM
13	I think that it would be a waste of time because the people that would ask to get on the committee would be the deer feeders.	5/9/2023 1:52 PM
14	If it would help relieve the burden of dealing with this from city council sure. I'd hope the committee would be made up of qualified individuals who have a background in wildlife management. Deer management, mange irradiation, tick information, education of public on all of the above.	5/8/2023 5:36 PM
15	A temporary - no more than 4 months - task force to provide policy recommendations to City leadership. Not a standing committee. Adopt good policies and code, and move on.	5/8/2023 5:15 PM
16	Sure, as long as it's not a paid position. It should prioritize education.	5/8/2023 10:06 AM
17	Yes, herd reduction.	5/7/2023 6:34 PM
18	PLEASE, not another committee. Please refer to #6.	5/7/2023 5:27 PM
19	No. You already made up your mind. Stop trying to make it appear that someone else will recommend what you want.	5/7/2023 10:53 AM
20	No	5/7/2023 8:54 AM
21	I do. The committee should set up a huge campaign on social media, internet, print media, radio...	5/6/2023 9:12 PM
22	I think you should rely on Fish and Game, they are t g e experts and should be utilized and trusted.	5/6/2023 8:51 PM
23	No, I do not support the creation of a wildlife committee. We have to stop kicking this can of deer further down the road. It's embarrassing to me how long this problem has been "considered" "discussed" "talked about". Meanwhile the herd is growing and suffering.	5/6/2023 8:39 PM

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24	Committee's are great at brainstorming, but short on action in my experience. I would take the public input and simply take action.	5/6/2023 8:22 PM
25	IDFG needs to do their job using principles of ecology. Committees are a waste of time at this point.	5/6/2023 7:38 PM
26	Yes, health of animals.	5/6/2023 4:01 PM
27	I'm not sure we need another committee	5/6/2023 3:05 PM
28	No, it is a waste of tax payers money that should be spent on much more urgent issues.	5/6/2023 2:29 PM
29	I suppose. Signage Wildlife Crossing. Feeding stations on empty lots when natural food is not available.	5/6/2023 8:58 AM
30	No opinion	5/5/2023 2:46 PM
31	YES.	5/5/2023 2:09 PM
32	Yes, it would be a wise creation/decision as long as it had a variety of citizens on it as well as some trusted officials from the city and ICL . Developing a logical, reasonable, and enforceable ordinance that promotes education not eradication and a fine system. It doesn't need criminalization such as jail time unless there is an egregious act. That would be something to fine tune with the committee and our legal experts. The purpose is to protect our wildlife from the actions and behaviors of humans. we are the ones that need to change.	5/5/2023 1:50 PM
33	A committee could be useful in educating the public about a no feeding ordinance.	5/5/2023 9:47 AM
34	Yes. Getting "wild" deer back to the wild. Black bears in town are also a problem that should be adressed.	5/4/2023 11:26 PM
35	Yes I would support this. Public education would be an important initiative.	5/4/2023 11:03 PM
36	It's a great idea - this issue is likely going to grow and expand so a grip to address new and changing concerns would be a great proactive step. It may also be a good mediation step if there are "feeding offenders" - rather than going straight to a penalty, they could go to a committee for a little eduction. That may be too much, but a thought!	5/4/2023 9:35 PM
37	Only if their job and duty is to actually be helpful and not just be armchair specialists. Making a difference on this topic means actual boots on the ground and their enthusiasm and energy is readily available. Hiring a paid position or spending more tax paid time should be for enforcement related purposes at this point.	5/4/2023 7:39 PM
38	Not really. This is a simple problem our elected officials can take care of.	5/4/2023 7:38 PM
39	Yes	5/4/2023 7:01 PM
40	I think this is an excellent idea. Right now the "town deer" issue seems to have become overly polarized, with extreme viewpoints getting most of the attention. Hopefully, such a committee could slow down the discussion, do some thorough research that reaches beyond the "usual suspects", and make some thoughtful proposals that go beyond "cull them all" vs. "don't ever touch the town deer"?!?	5/4/2023 6:06 PM
41	Not really.	5/4/2023 4:58 PM
42	FINE PEOPLE WHO FEED WILDLIFE.	5/4/2023 4:25 PM
43	Yes. But not one with Regan Berkley at the helm or even on the committee. She has spread enough fear and outright lies in our town and all over Idaho to anyone who will listen. How is it, by the way, that she didn't have the time nor personnel to pick up dead deer in our city streets that were mowed down by speeders or destroyed by off leash dogs (that attracted mountain lions because she couldn't be bothered to pick them up), but she had the time to go to 7+ (SEVEN+) news outlets and do interviews for print and radio stations? (NPR, BoiseDev, KTVB, Star News, Idaho Tribune, Idaho Statesman, Idaho Press, plus more over the last year? And especially the last 4 or 5 months). What a smear campaign by her. She should be fired, not congratulated. Did our tax dollars pay for that??? Keep Regan OUT. Initiatives? 1. A major ad campaign that uses facts, not fear, and uses humor to get the point across, not fear of imprisonment and fines for those who feed an apple or carrot to the deer. You can't spend years bringing tourists to town and expect them to know how to be and act around deer and wildlife. Some of them have never seen wildlife. How can you expect them to know not to feed	5/4/2023 3:10 PM

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them, unless you tell them....over and over again if necessary? And you can't expect the deer to change any patterns of behavior overnight either. 2. There needs to be a long-term study of at least three years before making any major decisions or changes with the town deer. To preemptively euthanize the deer because there are "too many" or they "have lice", or "CWD *might* come here one day") is not the direction the city should take. What type of legacy do YOU want to leave as city council members and city officials? What do you want McCall to be KNOWN FOR? Killing the town deer because Regan thinks it is the best thing to do? 3. Hire an ad agency. The city finds money for every other project or "problem", why not this one? Utilize those of us who have been in McCall for 10, 40, even 70+ years. We have historical data that the local fish and game does not, obviously. We are here to HELP. Let us be on the committees. We offered to help two and a half years ago and were not even called or asked. 4. Use signage at the entrances of McCall. Big yellow, lighted signage. Put them at every deer crossing in town...there are many that have been the deer's natural crossings and corridors for generations. 1. The streets on the perimeter of the 27 hole golf course (Lick Creek, Davis, Wooley, Spring Mountain Blvd). By Franz Witte, downtown at the known deer crossings....by Growlers, May Hardware, Shell Station, Albertsons, the high school, Shore Lodge, etc). 4. Have an ad agency or local talent design signage, brochures, ads, etc that help to educate...again, a long-term project. Not just a one and done, hey we tried, and failed and now we must "deal with the town deer because they are such a problem". To whom are they a problem? The 2nd homeowners that need to educate themselves on what types of grass/plants/shrubs/trees/flowers they should or should not plant in mountain town with daily wildlife? Mr. Joe Klobucher who believes he and his wife will be attacked by a mountain lion in downtown McCall while walking to dinner or the bank? (Thanks for that Regan Berkley. Shame on her, and poor Joe for being so damn gullible). The habitual speeders in town that drive their rigs 10 to 30mph OVER the speed limit. I watched a guy barreling down Spring Mt Blvd today going up the hill toward the middle school at 50mph. It was a black pickup truck with California plates. It was going so fast I couldn't even get the license number. It was actually the fastest I have EVER seen a car go in our city limits. They can't be bothered to slow down and let deer cross the street. One client of mine said a big jacked up black pickup truck sped around several cars that were waiting for three deer to cross by Foglifters the other day. What if it had been children in the crosswalk instead of deer? I also watched as our mayor was driving south on Davis today giving a bicycle rider wide berth since she was nearly in the road since there are no bike lanes. I was going north on Davis at the same time and had to brake to avoid having a head on with Bob Giles. Great. But no, the deer are a much bigger problem than public safety while walking or biking???. 5. Utilize the city council and city officials to put up signage, hand out brochures, place brochures in EVERY SINGLE BUSINESS in town and EVERY SINGLE VRBO OR RENTAL IN TOWN. Yes, DO the "tough work". Not the cowardly work of telling Regan she needs to KILL all the town deer. THAT is not Humane. THAT is not a solution. THAT is not warranted. THAT is not "keeping a healthy deer population" (A dead deer is NOT a healthy deer). THAT is not a legacy that McCall wants to be known for. A big red blood stain on our town because our city council or officials couldn't be bothered with an actual solution and the time and energy it warrants. 6. UNDO the propaganda machine that is Regan Berkley. She has incited fear and chaos among our town and visitors with "lice", "mountain lions", "too many deer", etc. The city needs to do their own research so you know just how ridiculous her assertions are. Lice are not a harm to the deer, to humans, to domestic pets or livestock. DO.The.Research. Mountain Lions are not an issue. They pass through every single year. Deer feeders are NOT the issue. Do.The.Tough.Research. A large group of residents and citizens have a LOT of ideas as to "initiatives" if you let us help.

44	It depends. If the role of the committee is to help the city to where the deer will need to be killed, don't waste anyone's time.	5/4/2023 2:50 PM
45	It depends on who is on the committee and what education level & their intentions are. Are they Fish & Wildlife officers? Do they have education in wildlife or biology or are they educated by Facebook? Not if they just want to say ignorant things like, "if you don't like deer, don't live here" or "the deer were here first" and so on...	5/4/2023 2:02 PM
46	I do, I would love to meet and share ideas and research.	5/4/2023 1:48 PM
47	I think this is better left to IDFG	5/4/2023 1:18 PM
48	Just follow the science and pass a strong ordinance!	5/4/2023 12:53 PM
49	Yes. I think it should prioritize community outreach on not only deer issues but bear/garbage issues in town. If an ordinance were passed they could also educate on how to hang bird feeders that prevents access from other species.	5/4/2023 12:10 PM

Wildlife Community Conversation Survey

50	Good god, there are too many committees!!	5/4/2023 12:01 PM
51	Sure, if the City has nothing better to do. They could apply for grants for funding as the City has not allocated enough funds for this "issue" that seems to be one of the most important issues for the City.	5/4/2023 8:33 AM
52	I think a committee is a good idea only if it is balanced in it's composition.	5/4/2023 8:14 AM
53	Yes. I think they should make some, if not all of the above suggestions (question #7) a priority. I also think that any committee needs to be made up of an equal number of citizens from both sides of the fence.	5/3/2023 11:02 PM

Q9 If a feeding ordinance is passed, specialists tell us the town deer will likely starve because there is not enough natural forage to sustain the deer herd throughout winter. What are your thoughts on either letting nature take its course or humanely culling deer so that meat could be donated to local families in need?

Answered: 54 Skipped: 0

#	RESPONSES	DATE
1	Let Nature take its course!	5/29/2023 7:12 AM
2	I think humanely culling sounds better than watching habituated deer starve. There is plenty of forage in the McCall area for a healthy and seasonally migrating population of deer. They wouldn't be here in the winter if it weren't for our interference.	5/28/2023 12:06 PM
3	again, This is not an issue if the city would take action. Round up the deer and take them away.	5/27/2023 3:35 PM
4	Let nature take its course. No culling. That's cruel.	5/19/2023 6:40 PM
5	Culling the deer population one time would be appropriate.	5/19/2023 6:33 PM
6	I think culling the deer is a much better option and something that should have been done years ago. The herd should never have been allowed to get this large. It is not sustainable and I for one do not like spending all of my time trying to control them myself and replacing all the plants and trees that they have destroyed. I also don't like seeing all the deer that are obviously in not good health .	5/17/2023 10:57 AM
7	Culling would be an excellent idea!!! Or they will starve, as many do every winter because they don't belong here in winter.	5/16/2023 4:53 PM
8	I am in favor of either approach.	5/14/2023 10:20 AM
9	fish & game problem for not managing numbers	5/13/2023 6:48 AM
10	I'm good with either. Until the deer are 'retrained' to migrate to lower elevations in the winter, some culling is probably a positive thing for the community as it will provide food to those in need. I live off of West Mountain road and see NO deer in the winter until I hit the McCall city limits. Obviously, the McCall herd has been trained.	5/12/2023 7:51 PM
11	Culling seems appropriate	5/12/2023 10:49 AM
12	I'm in favor of culling deer.	5/10/2023 12:38 PM
13	I believe they should be humanely culled and the meat donated. But who would pay for this. Do we expect Fish and Game to who are supported by hunting licenses?	5/9/2023 1:52 PM
14	If the meat can be harvested and used absolutely especially because it will eliminate trying to deal with dead deer when they die on private property. I worry that some will be too diseased to process though.	5/8/2023 5:36 PM
15	Nature can't take its course, that option has been removed already. Remove the entire unhealthy, overpopulated herd with a control hunt to protect both citizens and other wild animals. If the meat is safe to eat, make it available, that's fine.	5/8/2023 5:15 PM
16	I'd rather see nature take it's course.	5/8/2023 10:06 AM
17	Humanely reducing the population is better than watching them suffer from a lack of nutrition or from disease.	5/7/2023 6:34 PM
18	let nature take its course	5/7/2023 5:27 PM

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19	Why are we not surprised that the killing option is presented as the "humane" option? Oh and feeding the hungry is a nice touch. No intelligent person can take this survey seriously as neutral. It reeks of bias. It is part of the community's brain washing. You forgot to add that disabled veterans will be the in-town hunters doing the "culling." Who decides how many to kill? Who decides which ones to kill? Just enough to satisfy your need for deer killing? How will we know when enough is enough? You don't even know for sure how many deer there are in McCall. Don't insult our intelligence by blindly relying on the ridiculous one-time counting done by Regan and company. How often will you have open season on McCall deer? Once a year?	5/7/2023 10:53 AM
20	Move them	5/7/2023 8:54 AM
21	We made the problem, we have to solve it. I support culling deer. If the animals are healthy and the meat is good, donating to families in need is a great idea.	5/6/2023 9:12 PM
22	Due to letting the deer population get to where it is today, it will likely take a combination of both.	5/6/2023 8:51 PM
23	Humans have created this problem by feeding deer. Humans are to be good stewards over animals, that is our responsibility. We must humanely cull the deer and donate to local families. These deer must be able to go back to migrating to a food source, they must leave town in the winter, and venture to a lower elevation. If we continue to feed them every winter, they will not migrate, and we will be back to the same issue.	5/6/2023 8:39 PM
24	I would handle the problem as humanely as possible. This is larger human created and needs to solved now before the problem really gets out of hand. Culling the healthy animals is a good approach if relocating them is too expensive and not really feasible.	5/6/2023 8:22 PM
25	Nature must take its course and people need to bear witness and find the lesson in it. If it's not town deer, it will be another species. Then take the carcasses and spread them across the forest if the carcasses are disease and insect-free. I do not want this idea of "culling town deer to feed families" to become the norm.	5/6/2023 7:38 PM
26	Cull the dear.	5/6/2023 4:01 PM
27	Reduce the herd substantially before next winter. None of us could watch them starve. We would unfortunately step in and feed them again	5/6/2023 3:05 PM
28	Don't pass the new ordinance. It is cruel. Still, as I said earlier, quite a few people I know stopped feeding them and yet they survived. Not all of them, some starved to death. But what is humane about culling the deer? And donating the meet to local families in need? You mean culling them after they survived a hard winter and are skin and bones and donating that?	5/6/2023 2:29 PM
29	I am completely against culling our herd.	5/6/2023 8:58 AM
30	I am fine with nature taking its course.	5/5/2023 2:46 PM
31	IDK	5/5/2023 2:09 PM
32	Ah.. Here it comes. The truth as to what the city really wants to do. Was all this a ploy to hand over the control to your 'specialist'? hmmm This survey has been a rather biased/slanted one. Fact .. Wildlife are made to sustain hard winters. It is natural for some to starve and die; it is the way of nature. Maybe your 'specialist' needs to get out more and see all the wildlife in the mountains and deserts that die every year whether they live in a town or not. Again, the elk are fed down the road during the winter. Many places have feeding stations for deer. and elk. Your 'specialist' seems to be bent on killing not solving. Besides the specialist is the one 'claiming' our deer are so 'sick' yet she/he wants to kill the 'sick' deer to feed the poor? Are we going to kill every animal in our town to feed the poor because the 'specialist' has a bee up her/his backside? All animals carry diseases and lice including people. My My, what is the plan about all the disease and lice carrying humans? Is the plan to kill the wildlife that roam in and out of Ponderosa State Park? What a slippery slope you are considering to go down.	5/5/2023 1:50 PM
33	It would make sense to reduce the population by culling the herd to the number that could survive without being fed. Using the meat if it is safe for consumption makes sense as well.	5/5/2023 9:47 AM
34	There will lically be negative consequences for many of the deer in town but that is the result of McCall residents and tourist long history of artificially feeding wild deer.	5/4/2023 11:26 PM
35	Let the local tribes harvest the meat.	5/4/2023 11:03 PM
36	Well, it sucks. The sweet little deer around our house are a nuisance but they really are quite	5/4/2023 9:35 PM

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sweet. That said, they are thriving in an unnatural way so as sad as it might be, nature needs to make a correction for the health of all.

37	Both culling and nature sound fine. Again. Consequences. Community benefit is more palatable than road kill.	5/4/2023 7:39 PM
38	Let's see what nature does and have a plan to cull deer if needed.	5/4/2023 7:38 PM
39	Humanely cull	5/4/2023 7:01 PM
40	I think the assumption underlying this question is suspect. I see the deer foraging throughout the winter, and yes quite a few young deer die, but the non-town deer who live out in undeveloped parts of the county also die in fairly large numbers. What I would deeply resent is the Dept. of Fish and Game culling large numbers of town deer while ignoring the health of non town deer, and while spending lots of money on town culling when the department has been crying for many years that they don't have the budget to relocate bears or cougars who become overly familiar with living in town. Why does F&G have the budget to cull town deer, but not humanely deal with bears before they become a problem? For example.	5/4/2023 6:06 PM
41	I think culling the deer is more humane than letting them starve or eat everyone's landscaping.	5/4/2023 4:58 PM
42	CULL THE DEER. Using the meat to feed the hungry is a bonus.	5/4/2023 4:25 PM
43	What a Horrible Question. And WHAT "Specialists"? I want the names of these "specialists". How do they KNOW this? Is there historical data to prove it? Or are the "specialists" just assuming and conjecturing? Do they honestly think the deer will die without the handouts from a few apples, sandwiches, carrots or birdseed? Of COURSE people would choose "humanely culling (KILLING) the town deer and feeding the poor" vs "letting them starve". Again, what a horrible assertion and horrible question. Geez, who the heck thought of that one? Would love to know. A baited question that is a set up for you all to say "SEE?! Everyone wants the town deer herd to be KILLED "humanely" and to feed the poor vs just letting them starve to death"! I was actually going to be "For" a feeding ordinance before I read the above question. Now I am not. What a messed up, twisted way to pose the issue. Before a feeding ordinance should ever be passed, there needs to be a pilot project for a minimum of one year, preferably three to see what affect it has on the deer. IF they are found to be struggling or starving to death, don't just shoot them in the city, or round them up and slaughter them like Idaho did with the rabbits or coyotes in the 80's and 90's (Great way to way to KILL TOURISM in One Easy Step). Rather do what all surrounding States to Idaho do: They have "emergency feeding" sites for the deer to help them through a tough winter. Our town deer are ON their wintering range here. That is the ONLY TRULY HUMANE thing to do. NOT KILL THEM because no one wants to actually DO THE TOUGH WORK. Given the above horrible question: NO. I AM NOT FOR A FEEDING ORDINANCE. Particularly IF the "no feed ordinance" has an attached fish and game agenda ordinance giving fish and game the go-ahead to kill the town deer like two and a half years ago, then I am adamantly against it. Who is going to police an ordinance if one is put in place? The lone city code enforcer? The police department? Why not focus on the ordinances that are ALREADY on the books? Speeders, inattentive driving, illegal drug use, off leash dogs, etc, etc. If the police can't issue speeding tickets for fear of driving out tourists, then what do you think a feeding ordinance will do when someone is jailed for feeding a carrot or apple to a deer? And what is considered "feeding"? A beautifully planted yard full of beautiful green grass? Newly planted fruit trees on homeowners properties? Ornamental non-native landscaping and bushes/trees planted in yards that the deer LOVE? Colorful flower baskets and vegetable gardens? Hanging bird feeders? Even if placed 50 feet up in a tree? (Squirrels and even birds are messy feeders, so the spray birdseed allll over on the ground where deer can easily reach it. Is *that * considered "feeding". The deer are simply "collateral damage" so to speak if they can reach the birdseed intended for birds and squirrels, right? Kind of like the golf course spreading poison like confetti that is intended for "voles". The collateral damage is far more serious than deer getting birdseed. The collateral damage of rodenticide poisoning is the State protected ground squirrels on the golf course, and ANY secondary wildlife that eats a staggering poisoned vole or ground squirrel (domestic cats, dogs, Eagles, Owls, all other birds and raptors, Fox, Bears, Coyotes)...ALL can die by eating poisoned voles and ground squirrels. Why isn't THAT being talked about? IF a feeding ordinance is put in place, it needs to be a PILOT STUDY ONLY, with a minimum of a year to three years of collected data on any impact on the wildlife and deer (which is what you are really talking about here, right)? The handouts deer get in the winter by locals, 2nd homeowners, tourists, and visitors is simply NOT enough to sustain them. The deer are obviously finding plenty of native foods (trees, fruit trees, grasses, brush, gardens, etc) to survive our winters. They have always been here (again since I was a child in the 60's), and have found ways to adapt to our winters. It's not due to the	5/4/2023 3:10 PM

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"feeders". I can guarantee you that VERY few residents of McCall have the extra money to properly feed the deer, even a small herd of 10 or 20 can costs thousands of dollars in a single winter in cobb molasses oats or hay or seed. Do I believe that the deer will simply be dropping dead in our streets if an ordinance is passed? No. But Regan Berkley is spreading that unfounded fear. The old, weak, very young, or even orphaned deer might succumb naturally to a harsh winter. That is nature. The deer just endured a very LONG winter...7 months of snow on the ground. The majority found enough native foods to survive. Many look skinny or "mangy" which is normal this time of year, is it not? And particularly so after a very long winter. I have a database of thousands of photos of the deer in McCall over the past 12 years in EVERY MONTH OF EVERY YEAR. Thousands. THAT is "historical data" if you need it. Why doesn't fish and game have this data? Twelve plus years of photos show the health of the deer population in McCall. At the end of winter, they "look" unhealthy. A few "may" die. Most will survive. And IF the deer actually are found to be "starving" if an ordinance is put in place, then do what every other State and fish and game department surrounding us does: FEED THE DEER in a safe location so they make it through tough winters. Not watch them suffer or die or simply KILL THEM....Again, WHAT LEGACY DO YOU ALL WANT TO LEAVE, AND WHAT LEGACY DO YOU WANT FOR MCCALL TO LEAVE? A town devoid of deer and wildlife? What a horrible thought and horrible future for McCall...

44	This is not a survey, it is brainwashing.	5/4/2023 2:50 PM
45	We created this problem by ignoring it, so it's our duty to fix it. If Fish & wildlife says they should be euthanized for health & safety of the remaining healthy deer population, then I trust their judgement. They are the experts, not the general public.	5/4/2023 2:02 PM
46	I don't believe that we need to humanly cull the herds. I believe most people have stopped feeding these deer and hopefully with education more will follow. Again I am excited to see how other places have done it and are succeeding to coexist	5/4/2023 1:48 PM
47	The deer in town should not be eaten by humans. Have you seen the growths on them? They literally eat garbage and lick the salt on the side of the road. Let them die naturally.	5/4/2023 1:18 PM
48	I like the idea of feeding people but if killing Bambi is politically impossible then fund a carcass clean-up crew for a year or two. The deer are already dying of starvation because popcorn doesn't sustain life.	5/4/2023 12:53 PM
49	Currently I see many deer killed yearly by vehicles or health issues, and poor body condition is evident in so many deer this time of year, particularly fawns from the previous Spring. I believe the starvation is already happening, and it continues to happen as the population increases without any deer moving into winter range. A whole new crew of babies will be born this Spring just to be hit by cars or starve next winter because they only learn how to beg for food outside the gas station and not how to be a wild deer. The fries they get fed at the local burger joint or the apples they get handed out a car window are not adequately sustaining them. Culling is a hard thing to think about, especially to those who think more about the individual than the well being of the population as a whole. I think it would be better to focus on stopping the feeding and take things one step at a time, measuring actions as they appear to be needed. I really don't think we would see a huge die off from starvation, as I think they are being "sustained" mostly during winter by the few plants that are accessible. You can observe that every tree and plant is stripped bare at deer height by spring. It's just not enough for the population and they are encouraged to keep begging for "people food" and not find their own. I was attempting to take a photo of a group of deer a few weeks back and they all rushed at me, surrounded me, and were searching for food in my hands. They were evidently unhealthy, with their ribs and hipbones visible. It was so sad to see as someone who loves wildlife.	5/4/2023 12:10 PM
50	This is a tough question. Are the specialists right? Are the deer smart enough to travel south? Ugh	5/4/2023 12:01 PM
51	First, the City can take over the responsibility of feeding the deer, if it wants to punish private individuals who for decades have shouldered this responsibility. I strongly oppose both "options" you present here. "Letting nature take its course" WTH?! Is this inline with McCall's values? You may want to re-visit your values statement that is published everywhere. Culling? Shooting deer with firearms or crossbow in town? The deer that trust people so much that they walk up to them? Who are you?	5/4/2023 8:33 AM
52	I think that culling the herd humanely would be a much better option. Letting the animals suffer and starve to death only to toss their dead carcasses in the trash is a painful and tragic waste.	5/4/2023 8:14 AM

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53	If need be, let nature take its course. I think that killing deer in the city will only give the city a bad name, and cause long term animosity towards the people/agencies involved. Why limit culling to just deer, and not other wildlife as well?	5/3/2023 11:02 PM
54	cull the herd	5/3/2023 7:08 PM

Q10 Please tell us your name.

Answered: 47 Skipped: 7

#	RESPONSES	DATE
1	Candy Lynn Clements	5/29/2023 7:12 AM
2	Bridget Feider	5/28/2023 12:06 PM
3	John Baker	5/27/2023 3:35 PM
4	Kathaleen Winslow	5/19/2023 6:40 PM
5	Robin Winslow	5/19/2023 6:33 PM
6	Kathy Jackson	5/17/2023 10:57 AM
7	Genevieve Lukecart	5/16/2023 4:53 PM
8	Don Sanda	5/14/2023 10:20 AM
9	Glenn Jacobsen	5/13/2023 6:48 AM
10	Walt Sledzieski	5/12/2023 7:51 PM
11	Dean W Martin	5/12/2023 10:49 AM
12	Diane Penny	5/10/2023 12:38 PM
13	Kaitlin Waterloo	5/8/2023 5:36 PM
14	David Simmonds	5/8/2023 5:15 PM
15	Christine	5/8/2023 10:06 AM
16	Mike Barton	5/7/2023 6:34 PM
17	Geoffrey HH Roth	5/7/2023 5:27 PM
18	Why? So you can target your message? I am not interested.	5/7/2023 10:53 AM
19	Monique Norseth	5/7/2023 8:54 AM
20	Deike Schuett	5/6/2023 9:12 PM
21	Laura Crawford	5/6/2023 8:51 PM
22	Trisha Scott	5/6/2023 8:39 PM
23	Chad Scott	5/6/2023 8:22 PM
24	Ashley	5/6/2023 7:38 PM
25	K.	5/6/2023 4:01 PM
26	Emmett Price	5/6/2023 3:05 PM
27	Katharina Roth	5/6/2023 2:29 PM
28	Colleen Ross	5/6/2023 8:58 AM
29	Brent R. Snider	5/5/2023 2:46 PM
30	LYNN SIEGEL	5/5/2023 2:09 PM
31	Jeff Canfield	5/5/2023 9:47 AM
32	I would rather not say.	5/4/2023 11:26 PM
33	McKenzie Kraemer	5/4/2023 9:35 PM

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34	John Konczos	5/4/2023 7:39 PM
35	Rich & Catherine Lynd	5/4/2023 7:38 PM
36	Alice Anderson	5/4/2023 7:01 PM
37	Charles L. Ross	5/4/2023 6:06 PM
38	No thanks	5/4/2023 4:58 PM
39	Respectfully, no. I fear for my safety.	5/4/2023 4:25 PM
40	Julie Conrad	5/4/2023 3:10 PM
41	Why? You don't really care.	5/4/2023 2:50 PM
42	Jodi Guliuzza	5/4/2023 2:02 PM
43	Patty Hickman	5/4/2023 1:48 PM
44	Rachel	5/4/2023 1:18 PM
45	Ernie Revello	5/4/2023 12:53 PM
46	Krystal	5/4/2023 12:10 PM
47	Maggie Weissman	5/4/2023 12:01 PM

Q11 Please consider sharing an email.

Answered: 42 Skipped: 12

#	RESPONSES	DATE
1	Jesusrulesworld@gmail.com	5/29/2023 7:12 AM
2	bridget.feider@gmail.com	5/28/2023 12:06 PM
3	johnornina@gmail.com	5/27/2023 3:35 PM
4	rkwinslow@gmail.com	5/19/2023 6:40 PM
5	robwinslow18@gmail.com	5/19/2023 6:33 PM
6	kathymjackson@outlook.com	5/17/2023 10:57 AM
7	glukecart@hotmail.com	5/16/2023 4:53 PM
8	dpsanda1@gmail.com	5/14/2023 10:20 AM
9	glennpattyjacobsen@gmail.com	5/13/2023 6:48 AM
10	waltsledz@gmail.com	5/12/2023 7:51 PM
11	deancrna16@gmail.com	5/12/2023 10:49 AM
12	s_d_penny@msn.com	5/10/2023 12:38 PM
13	kawaterloo@gmail.com	5/8/2023 5:36 PM
14	dsimmonds50@gmail.com	5/8/2023 5:15 PM
15	char925208@gmail.com	5/7/2023 6:34 PM
16	Why? You don't listen. Your "education" is brain washing.	5/7/2023 10:53 AM
17	M_norseth@msn.com	5/7/2023 8:54 AM
18	deike@ymail.com	5/6/2023 9:12 PM
19	lauraicraw@gmail.com	5/6/2023 8:51 PM
20	scotttrisha4@gmail.com	5/6/2023 8:39 PM
21	Cscott21@hotmail.com	5/6/2023 8:22 PM
22	Nope!	5/6/2023 7:38 PM
23	No thanks.	5/6/2023 4:01 PM
24	empbn4@gmail.com	5/6/2023 3:05 PM
25	26kats@gmail.com	5/6/2023 2:29 PM
26	bmfitness@sbcglobal.net	5/6/2023 8:58 AM
27	snidrson@gmail.com	5/5/2023 2:46 PM
28	lynnsiegel@hotmail.com	5/5/2023 2:09 PM
29	jeffcanfieldm6@gmail.com	5/5/2023 9:47 AM
30	No thank you.	5/4/2023 11:26 PM
31	Mckenzie@micaelmckenzieinc.com	5/4/2023 9:35 PM
32	rc_lynd@msn.com	5/4/2023 7:38 PM
33	lross805@gmail.com	5/4/2023 6:06 PM

Wildlife Community Conversation Survey

34	No thanks	5/4/2023 4:58 PM
35	Yea, no.	5/4/2023 4:25 PM
36	julieconrad11@yahoo.com	5/4/2023 3:10 PM
37	Jodiguliuzza@gmail.com	5/4/2023 2:02 PM
38	hickmanpatty35@gmail.com	5/4/2023 1:48 PM
39	No thanks	5/4/2023 1:18 PM
40	altitudeconstruction@yahoo.com	5/4/2023 12:53 PM
41	krystalgiessen@gmail.com	5/4/2023 12:10 PM
42	maggie.weissman@gmail.com	5/4/2023 12:01 PM



17

A WILDLIFE COMMUNITY CONVERSATION SIGN-IN

44

NAME	ADDRESS	EMAIL	MCCALL RESIDENT Y/N
Meredith Todd	14246 Hamilton Rd	[REDACTED]	mail.com Workforce/County (N)
Mari Todd	3520 N Rampart St	[REDACTED]	.com (N) regular visitor
Patty Hickman	1603 DAVIS AVE	[REDACTED]	son y
Jerry Randolph	135 Mather Rd	[REDACTED]	om y
JULIE CONRAD	1423 EAGLE DR MCC	[REDACTED]	ho.com YES
LYNNE LAWLESS	635 S. SAMSON TR	[REDACTED]	YES
Colleen Ross	915 Camas Place	[REDACTED]	abd.net Yes
WALT SINCLAIR	2083 LAKEVIEW AVE	[REDACTED]	@GMAIL.COM YES
Kristina Sinclair	"	[REDACTED]	ML.COM YES
Debra Staup	1624 Davis Ave	[REDACTED]	m YES
Judy Mathis	305 Hill Rd	[REDACTED]	ernet.net Yes
Linda Wolfe	732 Deer Forest Drive	[REDACTED]	Yes
GREG ALLEN	1358 PAR LANE	[REDACTED]	yes
DAVID GALLIPIOLI	200 SCOTT ST	[REDACTED]	YES
LUKE CHASTAIN	609 Fox Ridge	[REDACTED]	Yes
EDDIE GRAY	MOS REED LN	[REDACTED]	YES
Carter Tucker	415 Colorado St	[REDACTED]	yes



12A

WILDLIFE COMMUNITY CONVERSATION SIGN-IN

NAME	ADDRESS	EMAIL	MCCALL RESIDENT Y/N
Julie Araquistain	803 Fairway Dr	[REDACTED]	Y
Tory Araquistain	803 Fairway Dr.	[REDACTED]	Y
Penelope Geisler	17 Haymaker Pl	[REDACTED]	gmail.com IMPACT
Eric Geisler	17 Haymaker Pl	[REDACTED]	IMPACT
Beth Weida	Bill Forest Cove	[REDACTED]	impact
Bill Weida	1311 Forest Cove	[REDACTED]	impact -
Glenn Jacobsen	900 Ann St	[REDACTED]	Yes
Mary Allen	1358 Par Lane	[REDACTED]	mail.com yes
Rita Teders	703 Brown Cr.	[REDACTED]	yes
Ruby Anderson	"	[REDACTED]	yes
Pat Diemont	319 B N Mission	[REDACTED]	yes
Marilyn Olson	890 Timber Ridge Ct.	[REDACTED]	yes
44			



5

A WILDLIFE COMMUNITY CONVERSATION SIGN-IN

NAME	ADDRESS	EMAIL	MCCALL RESIDENT Y/N
Rick Orme	501 Ward St.		y
Kathryn Roseison	704 Bronn Dr		y
Angela Stump	1624 Davis		y
Don McCraw	304 Rio		EMAIL AREA y
Kate Strum	231 Ernesto Dr.		m y
<p>4/4</p>			

WILDLIFE SURVEY

Available Now

engagemccall.com/wildlifesurvey



City of
McCall
IDAHO



1. When protecting or learning best practices for wildlife, who do trust? Where do you get your information?
2. Do you believe that individual actions, such as feeding deer, have a significant impact on the larger ecosystem, and why or why not?
3. What thoughts do you have regarding recent mountain lion reports?
4. In your view, what role should local government play in managing the deer population and preventing dangerous behavior towards deer?
5. What are your thoughts on a proposed deer feeding ordinance, and how do you believe it will impact wildlife in our community?
6. In your opinion, what is the best way to educate the public about the dangers of feeding deer? Do you have ideas on how to encourage more responsible and natural practices when it comes to interacting with wildlife in our community?
7. Do you support the creation of a wildlife committee and what kind of initiatives do you think it should prioritize?
8. If a feeding ordinance is passed, specialists tell us the town deer will likely starve because there is not enough natural forage to sustain the deer herd throughout winter. What are your thoughts on either letting nature take its course or humanely culling deer so that meat could be donated to local families in need?
9. Do you have any other thoughts or concerns on how we interact with our wildlife in McCall?

"Good relationship"

more people

golf course = food,

Deer Farm Idea

Kat
Mary
Pat
Debra
Kathy
Angela
Greg

source

game: F+G

non-game: USFS

Univ of Idaho

Feeding Deer Impact

- not migrating - why do they stop?
- not natural
- too close to things
- landscaping attraction
- neighbors feeding block attracting them and damaging flowers
- mostly does + fawns
- not frisky, happy or healthy Bucks
- do migrate

Ecosystem is not natural now + so they are starving

emotional drive to feed
30 yrs ago no deer
in town.

Wm Lions

3 kills in Mather area
there have been lions
in towns.

Unfair to lions, we've
attracted them in
& it is harmful to
them.

We're setting people up to
get hurt.

It's naive to think we
can ignore the lions
& not have consequences

Having the deer in town
is drawing the cats.

Have to reduce the deer
population

talk to the tribe and see what they do to manage deer population.

A couple times BME impacted by cougar.

What's GOV ROLE to play?

A. big fee \$1000
joint effort as a team
W/ F + G

Address landscape

"Re wild" Idaho approach

Animals don't know boundaries, will need to work with county.

Signage "DON'T FEED"
"DON'T APPROACH".

Code should include
Salt LICKS

Deer Feeding Ordinance

- will start to reduce them but were in their habitat as they migrate
- how has this worked in other areas?
- contraception? is it practical
- wants to hear from law enforcement about their opinion
- this is going to cost \$, how to pay
- look at where it started (by airport?)
- Yellowstone fine \$5K

Education

- Videos of negative interactions
- Retailers not selling salt licks
- Give out info @ hotel motels to tourists
- Every park should have a sign not to feed wildlife
- news media
- dual communication
 - residents
 - vs
 - visitors
- School projects in English class

Vacation Rental Rule

Feels its the residents
who are feeding

Are they actually
starving?

McFaws gets calls of dead
+ starving deer all the
time.

Education on how what
people are feeding them
is actually harmful

Have to address the
compassion piece of this
Students can be a partner

Community Committee

Yes need a core group of people to help the city

Can't turn this around tomorrow, will take time for nature to go through the process

Food Bank

Thinks F+G is the committee

City can't eliminate deer on their own w/out F+G involvement

Educate they are dangerous Ponderosa State Park as partners

Humanely cull +
give to Food Bank

~~let~~ let nature take
its course

Heartland Hunger does
want the venison.

What about "salvage"
rules for people to
get a dispatched deer
for their own
consumption

Concerned about lions
What about ticks from
deer + diseases

— Lyle Nelson

Partner, Wild Experience
Experts
NPR

Longtime stories,

What other community.
i.e.

Not feeding Deer.
Shouldn't feed deer

— pro ordinance. —

SRD-Mash. Bowlines

more signage. —

Do Not feed
the deer.

To Education Key.

Promising

pulling

problem for the
entire area.

Bulldoz - Wild fire

- disturbed w/ building

- Springs Nat. Ranch

maintain lions.

Scared.

Always remember

maintain lions.

(never heard attacks.

Trupest Area. 20 years

is never seen.
Killed deer by entrance

lot of deer attract
lions.

Wolves, (pack moved)
look into that
"But Lisa's Don't bother
me"

Rio Vista (Dogs in
golf piles)

Calls the Crows in
Neighbors, are feeding

X2 - Tick Carriers (Checking)
Lyme Disease
spread home.

- Lice, (parasites).

Deer Explosion, is
bringing ticks lice
into the house.

CONFIRM NUMBERS.

Reheum maintain
lows. "Culling!"

FTG NOT DONE
their due dilligence.

- Why AREN'T FTG. doing
more,

- manage plans.
Buckets of Responsibility

Who is Responsible?

URBAN INTERFACE

NO

YES

could B.

City has
TO TAKE " "

TIME TO STOP BLAME.

What does IDFG has
an option?

Stakeholders/Co Managers
"City needs to step
up,"

Should we "police"?

Ordinance YES or
NO.

||||| PRO |||

Against

| Reeducation
visitors

Ⓟ (VISITORS)

FINE? BUSINESS

Trust Feeding.

EDUCATION (Research).

Aspen Condos - Restaurant
+ Stores

Stiffer fines

To respond to smaller staff.

Property Sheet / Agreement
Education. Manage.

→ Schools.

higher fine!

public relations

Specialize
education out.

? Recognize the problem.

? Commit long term
resources.

- decade plus.

ASK above before an ordinance.

policy

— Must have the fortitude to follow through.

— long term strategy.

Does the community have the fortitude.

Regionally Relevant.

Mule Deer.

Educator

Honor.

Traffic

— Fun-Deer.

Signage. — WORD OF MOUTH

Neighborhood WATCH.

— Community INFLUENCE

1-2x per year.

A public meeting,
COORDINATION MEETINGS.

Tourism/Economy
pressure on IDPG.

Herd has grown.

Take out the emotion

ACTION — EDUCATE
— FINE
— Management
plan.

INCORPORATE INTO
Signs — Hotline

— CONTACT EVERYTIME

|| Create a culture
that doesn't feed
the deer. ||

Theme
Wildlife Supportive
Culture.

Emotion in right
direction

Leader in Culture

Experts. - Balank.

- Community #SMART
or

Healthy Wildlife

Embrace Healthy.

Health of the Community

published. in paper
evidence.

Nature -- Compromise?
options.

More Research

Support Culling.

MODELS. — STRIPPING
— Transition.
— Culling.

Hundreds of
Deer.

When to start program.

Cost — Financially

Number deer, need
for per reduction.

Over 200 is a good
rebound.

200, Balanced.

Mayor Giles called to order at _____

Roll call:

Mayor Giles, Council Member Nelson,
Council Member Nielson, Council
Member Throver.

CM absent.

Table 1

Bob/Sarah

Introductions

#1 • Heart and Blood book
Richard Nelson

- Brian Peck • No feed ordinance
- No reinventing the wheel
- Snowden / IDFG - local
- friends that do research - Julie Conrad
- IDFG / online resources
- IDFG - local
- online / Julie Conrad / social media observations
- City of McCall / observations
- observation / Regan Berkeley -
City Council
- Nathan Borg
- IDFG / observation

#2 • Yes, seen it. eating landscape.
Birth rate increase.

• Yes, personal experience. Compost pile.

• Yes, Not handing food but landscape

• eating landscape because no food in winter. wildlife need to grow up helping themselves

• 9th hole not many deer: extra hungry this year. difficult for all wildlife.

• eat all the maintain ash and native plants. Deer know how to forage on their own. feeding will stop foraging.

• used to feed. No longer feed until they got thin over winter because of the long winter landscape. hard to watch waste away, seeing dead deer. Empathy
Compost

Elk ranch feed elk during certain points so they can survive.

- Previous feeder. three years ago stopped. Education.

Deer look horrible. Deer didn't stay because of being fed they stay because there is food to forage.

- yes, feed animals = not wild anymore.

- feeding stations not down town previously - health deer. didn't wonder downtown. Designated feeding stations not bad.

#3 Yes concerns. ML should be afraid of people.

- Scared because small dog

- Scared because child escalation of people fear being gone

- Natural prey in area

- wolf ~~fox~~ are next

- ~~Now~~ See 1 ML 10 years ago chasing a deer.

- Sunvalley serious problem. ML danger and education is important.

- always come through town. more aware because of tech.

huge territorial range
there may be many sightings of the same one. hard winter

- ~~Seeing~~ sighting of dead deer this winter

- notice more with wildlife cameras. ML call the herd. Not a personal danger

4

- local gov should play a roll responsible.
- depending on experience and research done by LG not killing a bunch of deer. cascade example. more research be mild with choices
- enforcement is not the answer. Education of Vacation rentals/Tourists
- Education. ~ Tourists. Signs at restaurants. Bolliters as entering the city.
- feed = no longer wild education doesn't help much fines for feeding.
- enforcement w/ IDFG and experts. Wolves. all wildlife can be an asset. Making decisions

- Yes, Not simpler tourist think its cool to feed the deer. Education is not getting to tourists.

- Legal aspect, if the city doesn't mitigate - lawsuit for animal attacks

- yes to listen to wildlife experts and the public.

↑

- Same

- City has failed with education and vehicles not being careful. other road hazards get sign. Education.

- Signs for wildlife crossing and please don't feed the deer.

- school education

- add to vobo/rentals

#6 • Signs, ~~at~~ Signs at hotels and vacation rentals

- Contest at schools for Posters to educate

- Known deer crossing Signs

-

#7 • No Committee. Tools already available. Committee will delay action

- Same

- IDK - does the city need more help? good experts to help make decisions

- agrees with and ↗

- agree ↗

- yes, burden off city council to do the research.

- yes to committee to do research.
- if there is a way for community to make it easier for the greater good.
- would like to see action now not later - committee takes longer.

#8

- IDFG - Some deer will die most winter range is below 5000ft.
Artificial # of deer due to feeding.
minimum count 258.
No previous year counts all at the same time.
Yearly counts going forward
- competing for food
- herd used to migrate.

Community-Based Deer Management

Collaborative Deer Management Outreach Initiative



Cornell University
Department of Natural Resources
Human Dimensions Research Unit



**Department of
Environmental
Conservation**

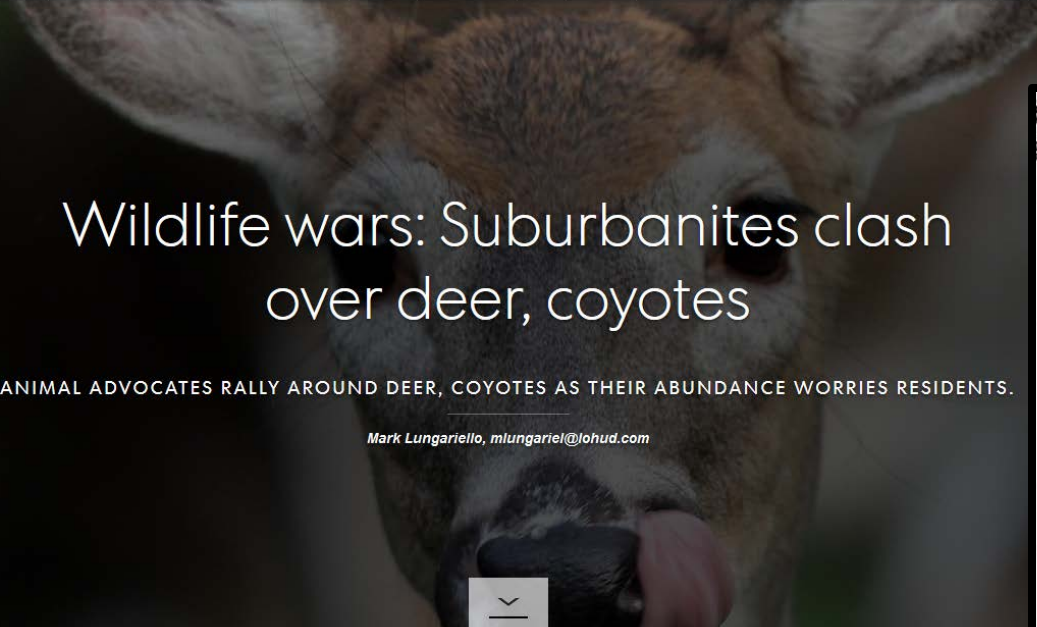


Cornell University
Cooperative Extension





Kiley Blackman and Adrienne Hernandez, members of the group Animal Defenders of Westchester, pose with picket signs at the Marshlands Conservancy on Feb. 27, 2015. The group opposes killing deer and favors a sterilization program.



Wildlife wars: Suburbanites clash over deer, coyotes

ANIMAL ADVOCATES RALLY AROUND DEER, COYOTES AS THEIR ABUNDANCE WORRIES RESIDENTS.

Mark Lungariello, mlungariello@lohud.com

SHARE THIS STORY

64 9 Share Email Comment

LONG ISLAND Wildlife, Bill Dimer (607-355-2349)

YOUR NEIGHBORHOOD

Islip Town grapples with Bambi boom

By ROBERT GEARTY
PHOTO NEWS SERVICE

GREAT RIVER CIVIC leader Barbara Liobell said she has received lots of complaints about deer in her neighborhood, which borders Heckscher State Park.

"The deer are destroying people's yards and property," she said. "They just walk down the street and eat shrubs, bushes and plants. There's very little we can do about it."

Lots of white-tailed deer seem to be roaming through parts of Islip Town, such as Great River, these days. To some residents, they have become a major problem.

Prompted by dozens of complaints, State Sen. Caesar Trunzo (R-Brentwood) last April called a meeting of state, town and federal officials to discuss the situation.

As a result of that meeting, the state Department of Environmental Conservation announced a deer management plan to shoot to reduce the number of deer. The shoot was conducted, but only after a lengthy legal battle.

The state is hoping to avoid

OH, DEER! White-tailed deer pauses (right) during recent roam in Islip. Car passes sign instructing people not to feed the deer, which have created a problem in the area.

WILLIE ANDERSON DAILY NEWS

Identifying Potential
Issues



Focusing
Issues

Planning
Actions

Taking
Action

Checklist

- ✓ A structured process for making community decisions that includes multiple perspectives
- ✓ Shared understandings about desired goals and a desire for achieving generally acceptable solutions
- ✓ An understanding that this will be an ongoing process
- ✓ A commitment to evaluation of the decision-making process and the subsequent management program



Need government legitimacy & public interest

What do we mean by the term **stakeholder**?

Stakeholder has been an evolving concept of who the **beneficiaries** of wildlife management are or ought to be.

This relates to the **Public Trust Doctrine** that is the legal foundation of why government wildlife agencies exist — to provide benefits for citizens of both current and future generations.

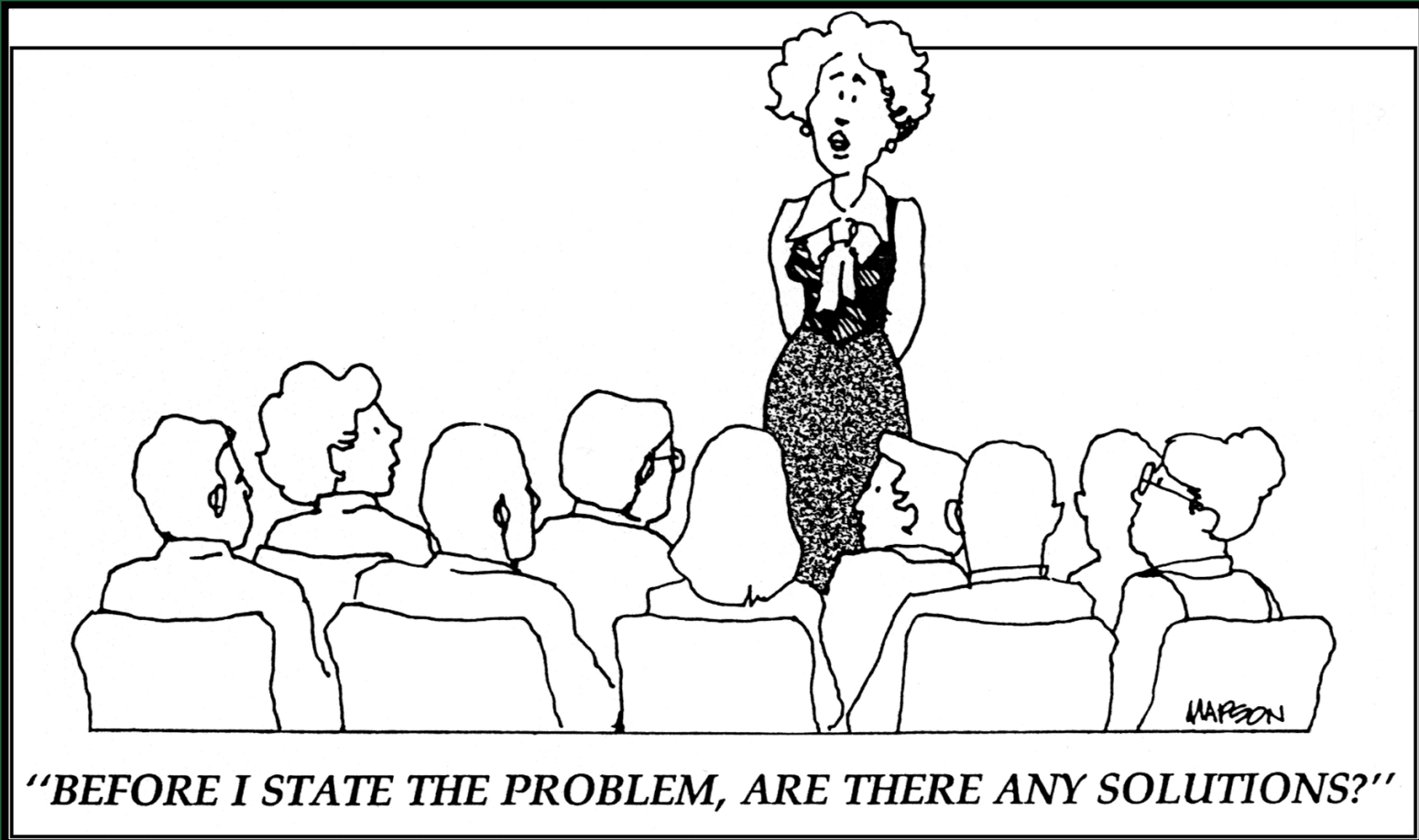
Stakeholders = people experiencing impacts from wildlife





What is **possible** in my community?

First identify the **problem**, then identify the outcome **objectives**.

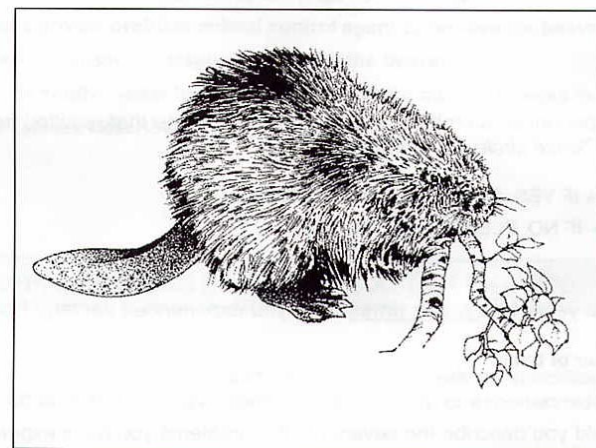


Expect **controversy!**

- 1) Controversy over whether or not deer should be managed at all
- 2) Controversy over the acceptability of the chosen approach



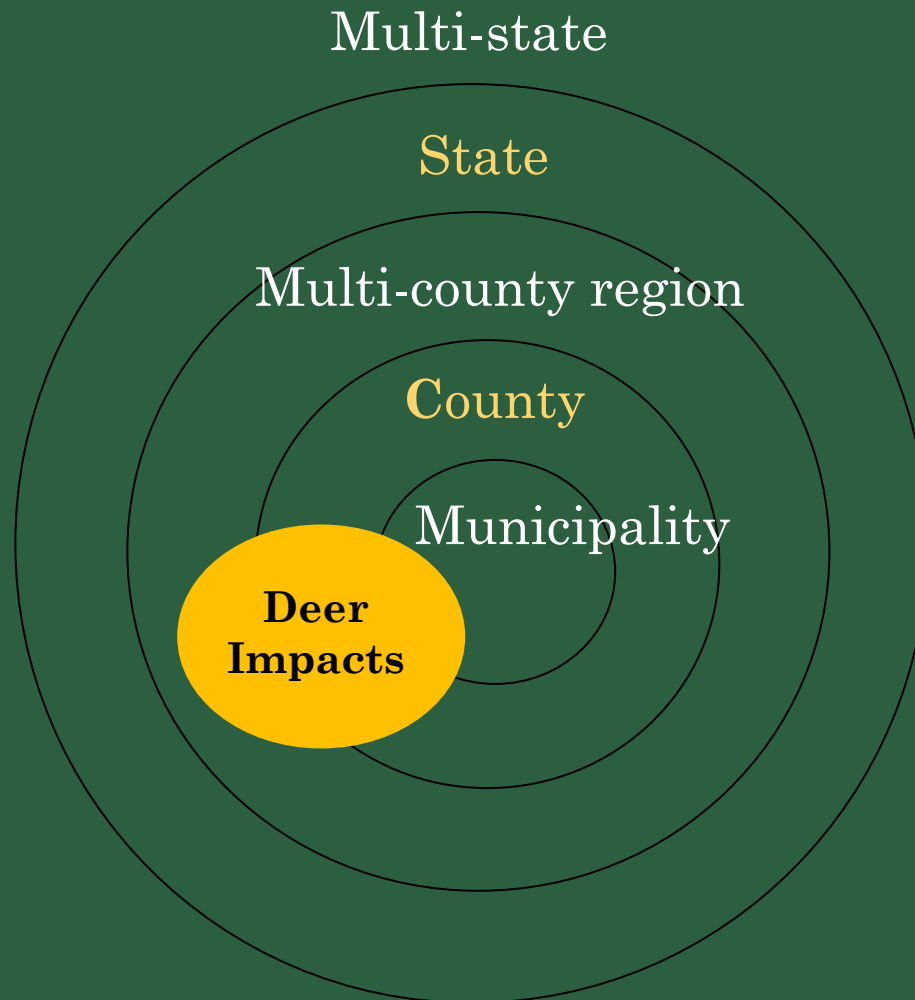
BEAVER IN MASSACHUSETTS: YOUR EXPERIENCES AND OPINIONS



Research conducted by
Department of Natural Resources Conservation
University of Massachusetts at Amherst



Consider the **scope** of the issue





Evaluate and select the **right tools** for your community.

Consider:



Legality

Effectiveness

Cost

Social acceptability

Capacity to implement

Time

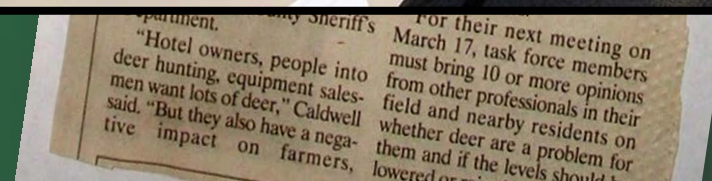


Role for stakeholders

Identify impacts

Provide feedback
on decision
making process,
desired outcomes,
& tools

Processes for
engaging the
public are diverse



Role for wildlife expert

Describe events and interactions and their consequential effects

Increase understanding of systems

Clarify tradeoffs among alternatives



© Greg Kleberg Wildlife Research

Role for local government leader

Legitimize the effort

Can help determine legal ramifications of decisions

Can be a voice for community members who are less engaged



Role for key partners

There may be partners that need to be involved in order to achieve success, e.g. a nearby state park

Other partners may be able to lend resources or expertise, e.g. a local university



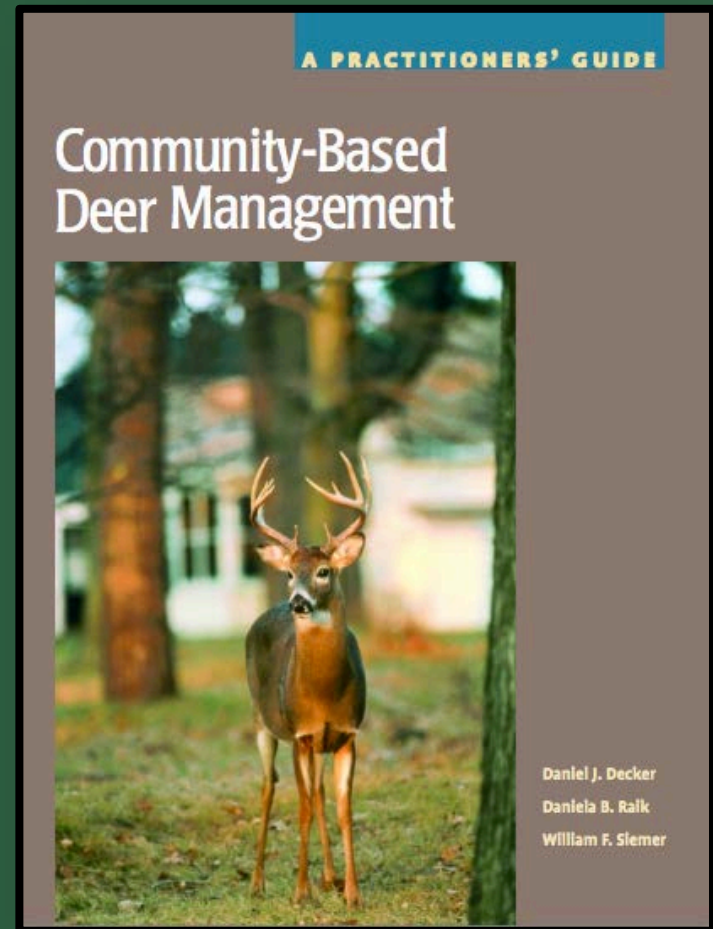
J. Stephen Conn

Role for public issues educators

Increase people's awareness of impacts and knowledge about issues

Build skills and provide opportunities for participation in decision making processes

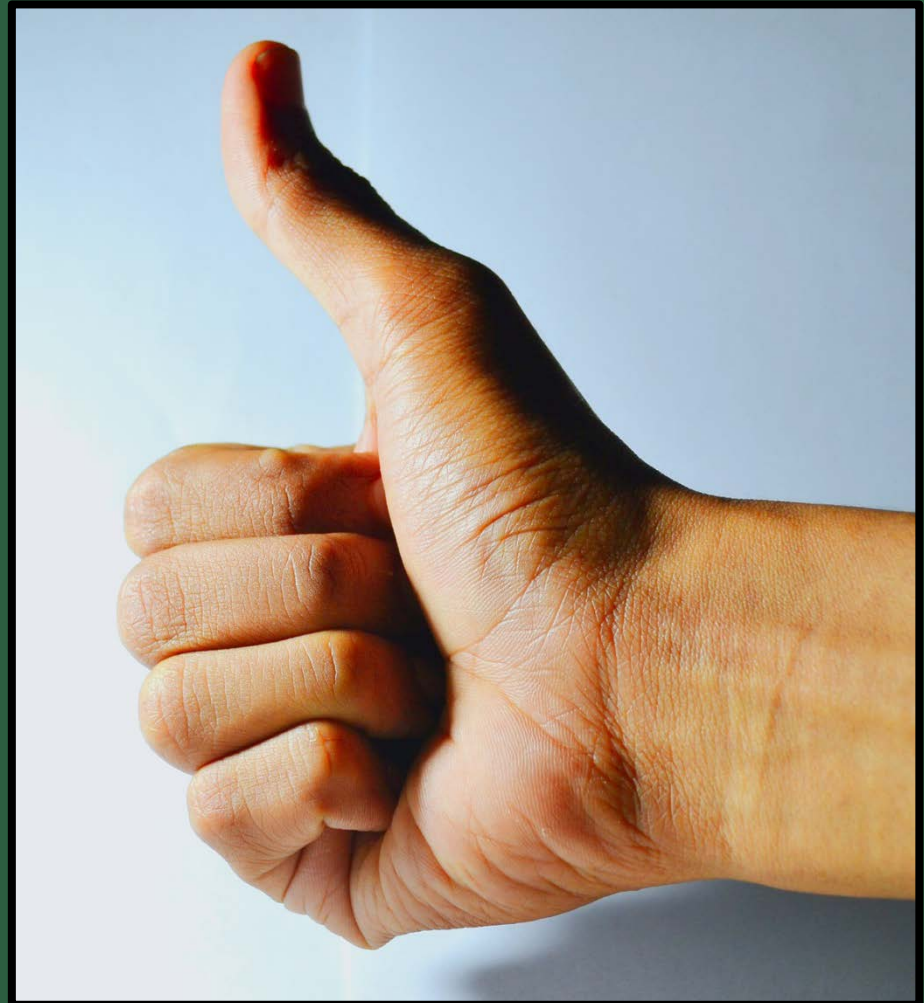
Help people craft, evaluate and implement solutions



Role for local leaders

The support of respected local leaders may be needed in order to generate broad public support

May be elected or otherwise



Role for facilitators

Needed to stimulate discussion, and resolve conflict as it arises

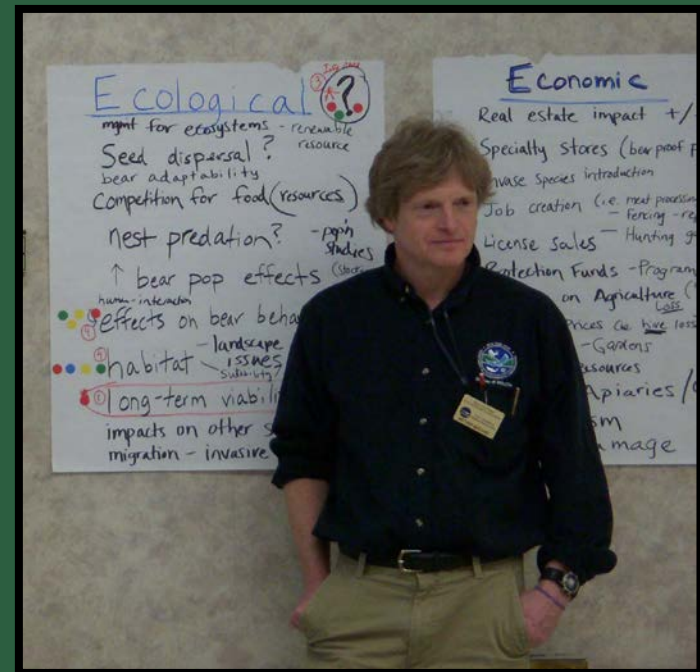
May be needed to facilitate certain processes, such as task forces

A facilitator may be a local official, a hired professional, recruited from other organizations like Cooperative Extension



Role for the wildlife manager

Provide information on deer and deer management, tools and possibilities available to communities from the agency, identify any regulatory limitations to certain actions



Provide guidance based on experiences with other communities

What **conditions** are needed for an effective community-based deer management process?

- Adequate knowledge about the situation
- Essential working relationships
- Effective local leadership
- Sufficient credibility
- Commitment to a common purpose

What **can be done** to help achieve the right conditions for effective community-based deer management processes?

- Stakeholder involvement
- Education and learning
- Informative communication
- Assessment
- Key partnerships

Be open to what your community's
outcome will be.

There's always the possibility for
innovation!



Remember:



These efforts require **time & patience**

Effective, consistent **leadership** is key



Community-based deer management may seem like a daunting task, but in communities where deer become an issue, accept that addressing it is inevitable and success is possible

A PRACTITIONERS' GUIDE

Human-Wildlife Conflict Management



Daniel J. Decker
T. Bruce Lauber
William F. Siemer

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This document is a synthesis of research and experience, and as such it relies on previously published works. Most notably, we drew heavily on Chase et al. (2000), Lauber and Knuth (2000), and Riley et al. (2002) to develop various sections of the guide. We are grateful for the authors' permission to draw from these important publications.

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PREPARED BY

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Cover photo by Tim Christie



Human-Wildlife Conflict Management

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INTRODUCTION

The Northeast Wildlife Damage Management Research and Outreach Cooperative was formed to advance the field of wildlife damage management in its 13 member states. One goal of the cooperative is to support professionals with information needed to practice effective wildlife damage management. *Human-Wildlife Conflict Management: A Practitioners' Guide* was developed with this purpose.

Comprehensive wildlife management integrates social and biological sciences (Decker et al. 1992). Traditionally, management decisions have relied more heavily on insight from the biological sciences than social assessments of the human dimension. The purpose of this guide is to help wildlife managers with biological backgrounds integrate human dimensions considerations into wildlife damage management. We focus on two components of the human dimension: social assessment (e.g., stakeholder beliefs and attitudes) and stakeholder engagement (e.g., citizen participation and involvement).

Members of the Human Dimensions Research Unit at Cornell University have been

investigating the human behavioral aspects of wildlife damage management for over 25 years. Inquiries by researchers at Cornell and other institutions and agencies have shed light on stakeholder concerns about their interactions with white-tailed deer, beaver, Canada geese, and other wildlife (e.g., Pomerantz et al. 1986, Siemer and Decker 1991). In this guide we share insights about stakeholders with respect to wildlife damage issues. We also offer guidance for designing and implementing wildlife damage management programs. The primary audience for this guide is state and federal wildlife agency staff in the 13 member states of the Northeast Wildlife Damage Management Research and Outreach Cooperative. Our secondary audience is state extension staff in the Northeast.

This guide is organized into three parts. Part 1 presents a conceptual foundation for the practice of wildlife damage management. Part 2 summarizes key insights about human tolerance of negative interactions with wildlife. Part 3 offers practical guidance on designing, implementing, and evaluating stakeholder engagement processes in support of wildlife damage management objectives.

Wildlife Damage Management in Perspective

Human-Wildlife Conflict Management: A Practitioners' Guide is based on a certain philosophy about wildlife damage management. The four cornerstones of our philosophical foundation relate to the centrality of damage management in wildlife management, defining management in terms of impacts on people, stakeholder involvement, and wildlife management as an adaptive process. We believe these four ideas, described below, provide a solid conceptual foundation on which to build your wildlife damage management programs.

Damage Management is Central to Wildlife Management

Wildlife damage management is no different than any other focus for wildlife management—increasing net benefit for society through purposeful intervention. Interventions can take many forms—educational communication to influence beliefs and attitudes; information, training, incentives, and regulations to affect human behavior; wildlife behavior modification; and wildlife population control.

If certain wildlife populations continue to grow and conflicts between people and wildlife escalate, wildlife *damage* management may become the major venue through which benefits from public wildlife management are delivered to individuals and communities. The demands of wildlife damage management often require partnerships between state and federal agencies, nongovernmental organizations, local governments, communities, and private wildlife control professionals.

Management Focus on “Impacts”

This guide is based on the fundamental assumption that wildlife management is conducted to achieve a range of outcomes that people desire—outcomes such as the continued existence of wildlife, opportunities to utilize wildlife in sustainable ways, or relief from problems related to

wildlife. We have adopted the following definition of wildlife management (Riley et al. 2002):

Wildlife management is the guidance of decision-making processes and the implementation of practices to purposefully influence interactions among and between people, wildlife, and habitats to achieve impacts valued by stakeholders.



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The term “impacts” is central to our definition of wildlife management. We think of impacts as a special subset of the many effects resulting from interactions among people, wildlife, and wildlife habitat. Interactions pertinent to wildlife damage management can be of several types (Table 1.1).

Wildlife-related effects and impacts

- » **Effects.** Positive and negative outcomes of interactions among wildlife, people, and wildlife habitat.
- » **Impacts.** A subset of wildlife-related effects that a stakeholder recognizes and regards as important.

Countless effects are caused by the interactions between people, wildlife, and wildlife habitat. Many go unnoticed by stakeholders. But a subset of effects are recognized by stakeholders and interpreted as being important. Effects in this subset are “impacts” (Riley et al. 2002). Stakeholders evaluate impacts as positive or negative,

Fig. 1.1 Addressing human-wildlife conflicts is central to wildlife damage management.

Table 1.1 Interactions That May Lead to “Impacts”*

Interaction type	Example of interaction	Example impacts
Wildlife interactions with other wildlife	Predation	Reduced populations of game animals
	Displacement of native wildlife by exotics	Extirpation of native wildlife
Wildlife interactions with their environment	Deer browsing on native plants	Reduced capacity for forest regeneration
		Loss of plant species diversity
Interactions between wildlife and people	Deer browsing on crops	Reduced crop yields
	Deer browsing on ornamental landscaping plants.	Reduced enjoyment of residential property
	Deer crossing roads	Risk to motorists
Interactions among people where wildlife is the reason for the interaction	Value disputes regarding how to handle urban goose problems	Community discord
		Psychological stress

* Impacts are effects to which people ascribe high importance

“good” or “bad.” Much of wildlife damage management involves minimizing the negative (“bad”) impacts associated with wildlife. The range of all possible impacts is large, so it is useful to organize impacts into a manageable number of categories (Table 1.2).

A single interaction between wildlife and people may generate both positive and negative impacts. Different stakeholders can have very different evaluations of the same interaction. Even the same individual may perceive an interaction as creating both positive and negative impacts. Whether that stakeholder evaluates the overall interaction positively or negatively depends on how he or she personally weighs the importance of each positive and negative impact.

The difference between wildlife-related effects and wildlife-related impacts can be illustrated by considering a specific interaction between people and wildlife. Consider the following: a person driving home from work observes a group of deer feeding at the edge of a cornfield. The motorist in our example might quickly recognize that this interaction produces a range of personally important effects, some positive and some negative. (e.g., enjoyment associated with seeing deer, excitement about participating in the upcoming hunting season, but also dread associated with a possible collision with a deer, costs associ-

ated with vehicle repair, the potential for personal injury, or lost work time while his vehicle is being repaired). These recognized and important effects would be considered impacts for this motorist. Other effects may be recognized by this motorist, but regarded with low importance. For instance, the motorist may recognize that deer are damaging the local farmer’s corn crop, but believe that this is an unimportant effect. There may be other effects that the motorist fails to recognize at all. For example, he may be unaware that the deer he sees may be influencing the tree composition of local forests, causing the decline of some spring flowering plants he enjoys during weekend walks in the local park, etc. The unimportant and unrecognized effects are not impacts for the motorist in our example (though other stakeholders may regard them as very important impacts).

Public revelation of effects described by scientists is an important role of managers and educators, because those effects will not register with stakeholders as impacts unless they are recognized and understood. Nevertheless, while scientists, managers, or educators may explain effects, it is ultimately stakeholders who interpret the effects based on their values and determine relative importance. It is a collective effort for various stakeholders to determine which effects constitute impacts that deserve management attention.

In summary, managing to achieve human benefits—taking action to achieve more or less of the impacts people care about—is a fundamental objective of wildlife management (Riley et al. 2002). You can practice this principle by asking three questions about your own programs.

Guiding questions

- » What are the impacts that concern stakeholders for this damage management issue?
- » Is my management program focused on the impacts that matter most to stakeholders?
- » Am I maximizing program effectiveness by investing in a suite of activities that will do the most to increase positive impacts or reduce negative impacts?

Stakeholder Involvement is Essential

Stakeholder involvement in various aspects of wildlife management can yield many benefits (Chase et al. 2000). The extent and nature of stakeholder engagement will necessarily vary

depending on the circumstances; one size doesn't fit all situations (Chase et al. 1999). Stakeholders are individuals and groups who may be affected by or can affect wildlife management decisions and programs (Decker et al. 1996:72). Stakeholders may be affected positively or negatively. Wildlife professionals tend to think first about the stakeholders who will benefit from wildlife management. But that's not the whole story. Consideration also must be given to stakeholders who could be impacted negatively by management actions. Such trade-offs are common when trying to optimize benefit from a wildlife resource across a spectrum of stakeholders. Trade-offs associated with management alternatives need to be explicitly recognized through stakeholder engagement processes. We discuss stakeholder engagement more fully in Part 3 and offer guidelines for selecting and designating roles for stakeholders.

A suite of unique impacts relates to how stakeholders interact with one another with respect to wildlife damage events. Many controversies about wildlife damage result in impacts for stakeholders. These may involve a variety of human values, and represent some of the more important and vexing impacts regularly dealt with by wildlife managers. However, stakeholders and managers are recognizing that resolution of most natural resource issues is not the sole responsibility of agencies (Pinkerton 1999). Concerns of stakeholders often become community issues, with those communities sharing ownership of the processes to mitigate or enhance the impacts. Various community-based co-management arrangements allow sharing of responsibility between state wildlife agencies, NGO's, community groups, and local government (Schusler 1999).

Wildlife stakeholder acceptance capacity

Understanding stakeholders' tolerance of wildlife problems is at the core of developing damage management programs. This is captured in the concept of "wildlife stakeholder acceptance capacity" (Box 1.1).

Wildlife stakeholder acceptance capacity (WSAC) is a mixture of tolerance of problems and desires for benefits from wildlife (Carpenter et al. 2000). Managers often find that a par-

Table 1.2 Major Categories of Wildlife Impacts

Impact category	Description	Examples
Ecological	Effects of inter- or intraspecific interactions among wildlife, and interactions between wildlife and habitats that affect human values	Perception that a wildlife species is in peril Perceptions that a particular ecosystem is being degraded
Cultural	Effects that result from wildlife-related interactions (among wildlife and people, and between people) that influence the ideas important to a social group	Development of local hunting and trapping traditions
Health and safety	Effects on human health and safety	Health benefits associated with wildlife-related recreation Injury from diseases transmitted from wildlife to people
Psychological	Enhancement or diminishment of psychological well being for individuals, stakeholder groups, or society overall	Dread associated with perceived risk of injury from encounters with wildlife
Social	Effects associated with interactions among stakeholders	Formation of cooperative or antagonistic relationships between stakeholder groups
Economic	Monetary effects produced by interactions among people	Tax revenue generated by hunting-related expenditures

ticular species may have exceeded the threshold of tolerance of some stakeholders, whereas other stakeholders would accept more interactions with the same species, in the same geographic area. Therein lie the ingredients for controversy in wildlife damage management (Figure 1.2). This phenomenon is at the center of most contemporary wildlife management issues, leading to the typical questions faced by managers and stakeholders alike.

Typical questions

- » How many interactions of a certain type with a certain species is enough?
- » When are there too few or too many interactions?
- » How does one determine the "right" condition (magnitudes of impacts, number of animals, etc.)?
- » Whose stakes matter in calculating stakeholder acceptance capacity?
- » What mitigation measures are needed to modify WSAC?

These questions are often addressed in impact analyses that include some type of stakeholder engagement process. Cumulatively, these are

Box 1.1 Wildlife Stakeholder Acceptance Capacity (WSAC)

WSAC is the range of wildlife “impacts” acceptable to a given stakeholder, where the term “stakeholder” can be operationalized as an individual, group, or community (Carpenter et al. 2000).

The lower limit of WSAC is the capacity of the stakeholder to accept the absence of positive impacts of wildlife. The upper limit of WSAC is the capacity of the stakeholder to tolerate the presence of negative impacts of wildlife. A perspective relevant in wildlife damage management, Carpenter et al. (2000:10) describe WSAC as the ability of a given stakeholder group to “carry the burden” of a particular wildlife population in a specific geographic area. While this emphasizes the negative attributes of wildlife, the overall idea of WSAC is on optimizing the suite of benefits associated with a sustainable population of wildlife, including social, economic, and cultural benefits.

Several wildlife acceptance capacities, varying among stakeholder groups, can exist in the same location. Farmers who have had their crops damaged by deer, for example, may have a different acceptance capacity than deer hunters (Figure 1.2)

The role of stakeholders in determining WSAC. Wildlife is managed at levels deemed acceptable to society generally. Wildlife managers make judgments about the collective acceptance capacity in a given place

and time based on their understanding of the acceptance capacities of different stakeholder groups. Determining which stakeholders are considered in those judgments, and how their interests are weighed, are two of the central challenges facing wildlife managers. Issues of scale become critical in these professional judgments. For wildlife professionals, determining the relevant scales should follow, not precede, careful articulation of effects and impacts. With an understanding of the effects that matter most to stakeholders, wildlife managers can choose the best scale (e.g., local, regional, national scale) at which to target management intervention. In some cases interventions at multiple scales will be indicated.

Key assumptions. WSAC, a mixture of tolerance of problems and desires for benefits from wildlife, is at the center of most contemporary wildlife management issues. WSAC is a function of human beliefs and attitudes (or values). Addressing these human traits is the central mission of wildlife management. Historically, wildlife professionals have placed heavy emphasis on manipulating wildlife populations. This has had the unintended consequence of elevating population manipulation to the level of primary goal or mission. In fact, population manipulation is but one of many means to achieve the mission of addressing human values impacted by wildlife.

some of the more pressing questions wildlife managers consider regularly in the Northeast and indeed across North America and worldwide.

Operationalizing WSAC differs from economic valuation approaches where “the net value of a wildlife resource can be defined as the sum of all its positive values minus the sum of its negative values” (Conover 1997:298). Wildlife managers and policy makers need to recognize a difference between objectively determined economic values of wildlife for various stakeholders and the importance of the impacts wildlife and management can have on stakeholders’ “sense of well-being, or quality of life” (Conover 1997:298). Economic valuation is a necessary element in the algorithm, but Carpenter et al. (2000) argue that wildlife managers and policy makers should consider the impacts of wildlife and management on society more broadly. The stakeholder acceptance capacity idea reflects the need for weighting to balance the positive and negative aspects of human-wildlife interactions, with emphasis on maximizing net benefits from management, as opposed to minimizing conflicts.

Operationalizing the acceptance capacity concept is complicated because different stakeholders have different acceptance or tolerance capacities for the same population of animals, in the same place, at the same time (Decker and Purdy 1988). That is, the impacts of wildlife (individuals or populations) can differ for different people depending on the nature of their stake. Some stakeholders may benefit and some may be injured by the same animals. The question facing wildlife managers is, “How do we create a management program that appropriately balances these positive and negative impacts of wildlife for various stakeholders?”

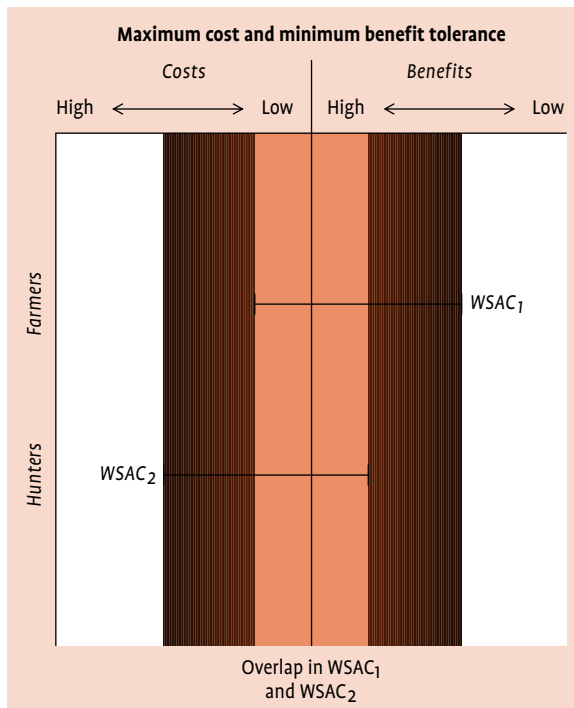


Fig. 1.2 A hypothetical model of upper and lower wildlife stakeholder acceptance capacity (WSAC) for white-tailed deer held by two stakeholder groups (farmers and deer hunters). Farmers are willing to tolerate relatively low benefit levels, but they also tolerate relatively low costs of deer. Hunters are less tolerant of low benefit levels, but have a higher tolerance for deer-related problems. Between these limits is a range of cost-benefit levels (the dark-shaded area) acceptable to both stakeholder groups.



Determining WSAC through stakeholder involvement

The wildlife management community has demonstrated considerable innovation in its attempts to determine WSAC. Decker and Chase (1997) and Chase et al. (2000) described the evolution of agency efforts to seek and use stakeholder input in wildlife management decision making. Today, a variety of forms of citizen task forces and other stakeholder involvement activities are doing the weighting (involvement approaches are discussed in greater detail in Part 3). In essence, most of these stakeholder processes are attempts to have citizens representing various stakeholder perspectives weight impacts of management alternatives through deliberation.

Management: An Adaptive Process

Wildlife management necessarily must be adapting to new situations and new understandings emerging from experience and the supporting biological and social sciences. A new twist on a familiar concept, adaptive impact management (AIM) urges the wildlife manager to focus on impacts and approach management as an adaptive, constantly learning and improving process (Riley et al. 2002).

A premise of AIM, the fourth cornerstone of our philosophical foundation, is that we don't know all that we would like to as managers, but we are willing to admit it and apply enough rigor to our management activities to ensure that we learn and improve through experience. Stakeholders need to understand that a management program must be sufficiently flexible over time to adapt to what is learned as the program unfolds and managers gain experience.

The practitioners of AIM (both professional managers and stakeholders engaged as partners in wildlife damage management) say, "We don't have all the answers needed for developing a management program that will fix this problem with certainty, but we'll apply what we do know, use our best judgment in those things we are less certain about, and will commit to learning from the experience of the specific strategy and tactics we employ. If we discover ways to improve the program, we will adjust it to yield greater benefits to stakeholders." Stakeholders and managers who appreciate the power of this approach embrace it.

Section Summary

Wildlife management is a set of processes and practices that purposefully influences interactions among and between people, wildlife, and habitat to achieve desired *impacts*, defined in terms of human values and objectives. The ultimate goal of wildlife damage management is to increase the net benefit of wildlife for society. This is achieved through purposeful interventions that address the effects of wildlife and wildlife management that matter most to stakeholders. Those important effects are "impacts."

Stakeholder involvement is an essential part of wildlife damage management. Wildlife professionals should consider any individual or group affected by wildlife or wildlife management as a stakeholder in management decisions. The extent and nature of stakeholder engagement will vary across issues and decisions. An idea called wildlife stakeholder acceptance capacity is one conceptual tool to help wildlife managers consider stakeholder interests and concerns identified through citizen participation processes.

To be effective, wildlife management programs must accept uncertainty and adapt to changing circumstances and new understandings developed through experience and research. Wildlife managers are encouraged to focus on impacts and approach management as a process of experimentation, learning, and improvement—an approach called adaptive impact management (AIM; Riley et al. 2002). A premise of AIM is that we don't know all we'd like to as managers, but we are willing to apply enough rigor to our management activities to ensure we learn and improve. Stakeholders need to understand the value of this approach.

Next, we turn our attention to understanding the factors that influence stakeholder acceptance of both wildlife and management actions.

Stakeholders' Tolerance of Wildlife Problems

The Northeast is inundated with wildlife nuisance and damage problems. Along with farmers and forest owners, an array of rural, suburban, and urban stakeholders now regularly contact state agencies and university extension wildlife specialists seeking relief from wildlife-related problems. Many people possess little knowledge about how to resolve such problems on their own. To make matters more challenging, people seldom accurately assess the economic or health and safety risks associated with their situation. Consequently, their reactions may not be commensurate with actual economic or health/safety implications; cases of both overreaction and underreaction are evident.

Wildlife Damage Management— A Community Focus

Negative wildlife interactions in a locale may catalyze community-level concern and eventually become controversial (Minnis and Peyton 1995). Problems with white-tailed deer, Canada geese, beaver, black bear, and other species can emerge simultaneously in many communities across the landscape. Putting out these local “brushfires” consumes considerable agency resources.

Communities with wildlife damage issues tend to

- » expect immediate and undivided attention by their state wildlife agency;
- » desire significant involvement in management planning and decision making; and
- » want effective diminishment of their problems . . .
 - fast,
 - with little cost (i.e., time or money from the community),
 - in a one-shot solution that fixes the problem permanently,
 - with no harm to the wildlife concerned, and
 - no reduction of positive aspects of the animals' presence in their community.

It is difficult or impossible for state wildlife agencies to provide in-depth service to every community with wildlife damage concerns. Expectations of quick, no-cost, permanent solutions to wildlife damage issues are unrealistic. Communities typically must come to grips with this reality before any progress can be made. Often it takes shared responsibility among wildlife managers, individuals, and communities (through local government) to achieve an acceptable outcome. All involved should quickly accept that sustainable management decisions and outcomes typically take more time to reach than initially thought.

Wildlife managers need to identify and understand the impacts that stakeholders commonly associate with wildlife damage. The following section identifies some of those impacts, through a summary of research about how people respond to wildlife damage and to actions taken to address stakeholder concerns about such damage.

Wildlife Problem Tolerance Attitudes

During the late 1980s, Cornell's Human Dimensions Research Unit (HDRU) developed a wildlife attitudes and values scale (WAVS) to assess beliefs about the value of different types of human-wildlife interactions (Purdy and Decker 1989). This scale is useful to wildlife managers in part because it provides an indicator about wildlife problem tolerance. Many applications of the scale in stakeholder studies have indicated that people's orientation toward wildlife can be characterized using four basic sets of beliefs.

Wildlife-related beliefs

- » social benefits—beliefs about the value of wildlife and appreciation of its existence;
- » traditional conservation—beliefs about whether wildlife should be managed to provide benefits associated with hunting and trapping;
- » communication benefits—beliefs in the importance of observing and talking about wildlife; and
- » problem tolerance—beliefs about whether people should accept the risks associated with wildlife.

These findings are pertinent to wildlife damage management because they indicate that people's beliefs about whether they should accept the risks associated with wildlife is one of their basic considerations in how they relate to wildlife. A recent analysis of WAVS databases (Butler et al. 2001) shows that problem tolerance has been declining steadily among both rural and nonrural residents of New York State since the mid-1980s—a fact that, if indicative of a general trend in the Northeast, has implications for designing damage management programs (Figure 2.1).

Risk and Risk Perception

Wildlife poses various risks to people—the risk of disease transmission, the risk of physical injury, the risk of property damage. Tolerance of wildlife depends in part on how people perceive these risks (Knuth et al. 1992).

Two aspects of risk perceptions are of concern: perceptions of the probability of an undesirable outcome and the worry or dread associated with that outcome (Slovic 1987). It is useful to distinguish between these aspects of risk perceptions when working with stakeholders (Slovic 1993). Some risks—such as the risk of a bear attack—may be perceived to have low probability, but be dreaded because of the perceived consequence. Other risks—such as that of deer damage to ornamental shrubs—may be perceived as highly probable, but inspire little dread. Both aspects influence how people respond to risks.

Other generalizations about risk perception provide useful background for wildlife managers:

- *People's tolerance for a risk decreases as their perception of the probability of the risk increases.* In studies of two very different kinds of wildlife problems, the risks of cougar attacks in Montana and the risks of deer-vehicle collisions in New York State, people were more likely to favor population reductions as their perception of risks increased (Riley and Decker 2000a, Stout et al. 1993).
- *Objective risk assessments may help managers predict the likelihood of damage, but risk perceptions are what stimulate stakeholder action.* Often a discrepancy will exist between objective assessments of risk and perceived risk among individuals of a given stakeholder

group (Slovic 1993). Riley and Decker (2000a) reported that many Montana residents perceived the risks of cougar attacks to be orders of magnitude higher than any reasonable objective assessment of risk (Figure 2.2). Inaccurate perceptions are worthy of management attention, in the form of educational communication, because stakeholders' perception of risk precipitates management action.

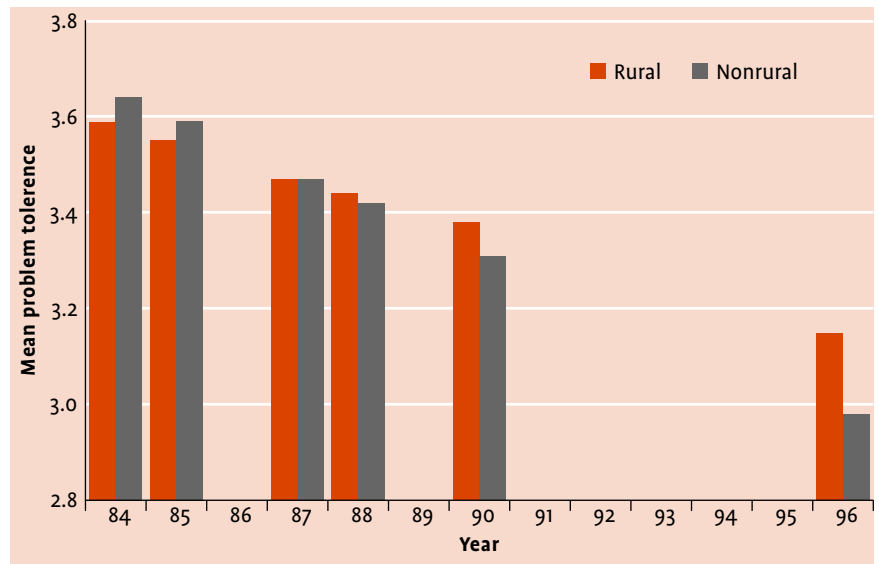
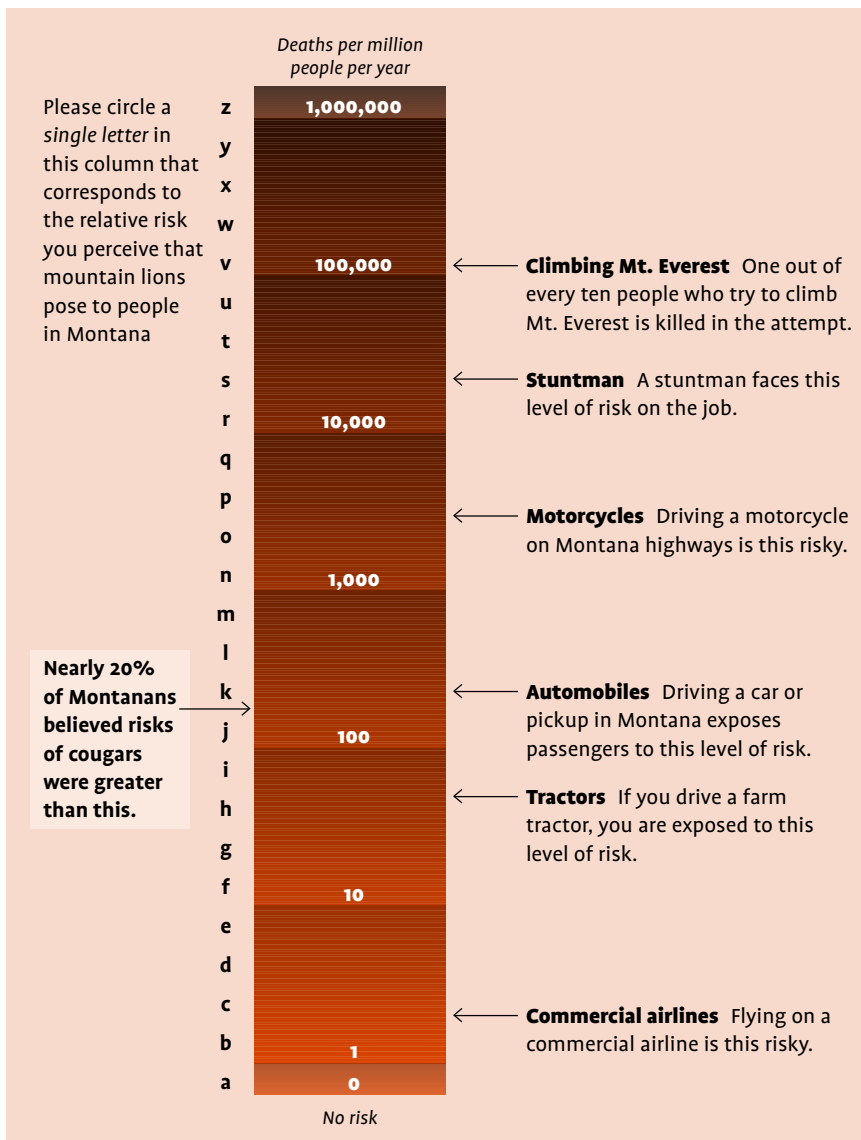


Fig. 2.1 Trend in problem tolerance (on a scale of 1 to 5) of rural and nonrural residents of New York State between 1984 and 1996 (from Butler et al. 2001).

- *People are more willing to accept risks that are assumed voluntarily.* For example, a homeowner who feeds deer may tolerate elevated risks of disease transmission, shrubbery damage, or a deer-car collision. Her neighbor may vigorously protest the same level of risk because she did not assume these risks by choice.
- *Risks with low probability, but severe consequences tend to increase dread and elevate perceived risks.* For example, people camping in wilderness areas might dread bear attacks—a low probability, high consequence event. As a result, they may come to develop a perceived risk that far exceeds the actual probability of such an attack.
- *Risks to children are less tolerable than risks to adults.* Concern about children will be expressed in any wildlife issue that involves a



threat to human health or safety. For example, in suburban areas, goose droppings can become a problem in parks and schoolyards. Fears that the droppings are a health risk often run quite high because children are among those most likely to be exposed. Risks to children may be of greater concern in part because adults recognize that children have less capacity to assess risks accurately and make informed choices about risk exposure.

- *People perceive risks to be higher if they are not distributed equitably.* In the early 1990s, New York State considered restoring moose to northern New York. Many local residents vehemently opposed the restoration because they believed that tourists, who wanted to see moose, would receive most of the benefits, whereas local residents, who lived in the area year round, would have to bear a higher risk of moose-vehicle collisions.
- *Risk perceptions decrease if benefits associated with those risks become clear.* Many farmers, for example, are willing to accept a certain level of deer damage to their crops if they also hunt deer, thereby benefiting from deer.

Fig. 2.2 Risk ladder used to elicit risk perceptions of cougars in Montana, 1997. Nearly 20% of respondents believed risks of cougars were greater than the risks incurred by riding in an automobile (from Riley and Decker 2000a).

Fig. 2.3 Risks to children often are less tolerable than risks to adults.



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Understanding and managing risk perceptions can be a critical component of managing human-wildlife conflicts (Knuth et al. 1992). Influencing risk perceptions to gain greater tolerance may be critical when reducing damage below a certain level is impractical. The findings on risk perception summarized above suggest numerous messages that could be communicated to reduce stakeholders' risk perceptions about wildlife damage *without any change in the size of the wildlife population of concern*. These include messages about the likelihood of risks, actions that may be taken to reduce risks, and benefits associated with problem species.

Tolerance of Problem Species

Knowing the spectrum of attitudes held by the general population is useful as a backdrop for wildlife damage management, but insufficient for explaining how various stakeholders actually respond to specific damage situations. Studies of damage tolerance for *specific* species, in *specific* areas, for *specific* stakeholder groups have helped us generalize about the types of wildlife impacts that concern stakeholders. There are three broad types of impacts.

Types of wildlife damage

- » *Economic impacts* occur when wildlife damage affects stakeholders' incomes. Farmers, orchardists, forest owners, and nursery owners are particularly susceptible to this type of impact.
- » Wildlife cause a variety of *health and safety impacts*, real and perceived. These tend to be of three kinds—disease (e.g., Lyme disease), motor vehicle collisions (e.g., with deer and moose), and physical threat (e.g., bear attacks).
- » *Negative psychological impacts* occur when wildlife disturb stakeholders' normal activities or environment. Deer damage to ornamental plants, goose feces in public areas, and excessive noise from urban crow roosts are examples. Many nuisance problems have associated costs, but the economic effect on stakeholders is less significant than the psychological impacts.

For each type of impact, key questions for managers are (1) how much of the impact will people tolerate and (2) how will stakeholders react when the impacts exceed their tolerance? Here again, studies have provided insights into these questions.

Box 2.1 Case Study: “Something’s Bruin in New Hampshire”

Like their colleagues throughout the Northeast, wildlife managers in the New Hampshire Department of Fish and Game (NHF&G) are witnessing an increase in negative interactions between people and black bears. The black bear population in New Hampshire has not increased markedly in recent years. However, New Hampshire has experienced the fastest rate of human population growth in the Northeast, and new residential development is occurring in prime bear habitat.

The Department entered into an agreement with USDA Wildlife Services in 1986 that led to better monitoring of nuisance bear complaints. Monitoring efforts revealed a relatively constant level of agricultural damage complaints, but a steady increase in nonagricultural property complaints and human-bear interactions that raised human safety concerns. For example, in 2000, officials received 744 requests for assistance with bear problems. Most requests (82%) were from homeowners, campground operators, and nonagricultural businesses. Careful record keeping confirmed that a large proportion of problematic interactions involved bears attracted to garbage and bird feeders.

In 1994, NHF&G formed a Conflict Abatement Team to refine the Department's

ability to address problems associated with big game, including bear. That effort led to creation of a Bear Education Team in 1995. Its goal was to foster a broad appreciation and knowledge of black bears and to promote public acceptance of responsibility for minimizing human-bear conflicts. The Team's educational campaign—“Something’s Bruin in New Hampshire”—was launched in 1996. The campaign included television advertisements, publications, a web site, and a traveling slide show. The primary message of the campaign was that most negative interactions with bears were associated with human behavior. The campaign provided specific, consistent messages about how people could avoid or minimize negative encounters with bears. It also provided information on what to do if one encounters a black bear.

The program was expanded in 1999 with the addition of a toll-free bear education phone service, operated cooperatively by the Department and Wildlife Services. This enhanced information service is designed to increase public access to technical assistance by providing citizens, seasonal residents, and visitors with timely, consistent professional advice and recommendations to deal with site-specific conflicts.

Source: Calvert and Ellingwood 2001

- *People vary in their perceptions of what constitutes intolerable damage.* People suffering the same types and amounts of losses to wildlife may disagree about whether that damage is excessive. Thus, an objective field assessment of the extent of wildlife damage will *not* tell managers whether stakeholders' tolerance has been exceeded.
- *Stakeholders do not respond to all negative impacts in the same way.* Health and safety impacts (e.g., Lyme disease, wildlife-vehicle collisions) often are a greater concern than property damage, even among those who have experienced property damage. However, acceptance of lethal management methods is more closely correlated with concerns about property

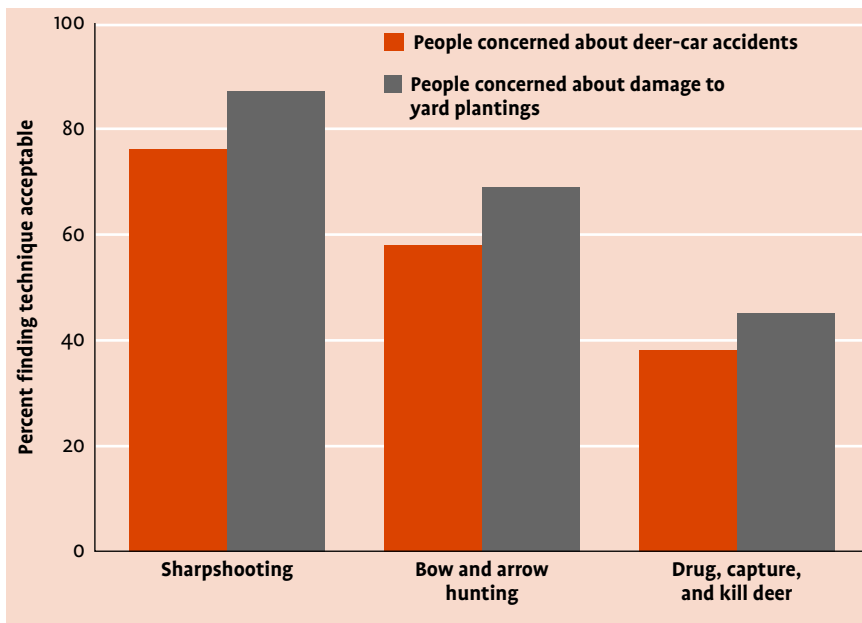


Fig. 2.4 Acceptability of lethal deer management methods in Amherst, New York, by type of deer-related concern. (Data from Loker et al. 1999)

damage than with concerns about health and safety impacts (Figure 2.4).

- *Many stakeholders will take precautions to avoid negative impacts.* Precautionary measures may include farmers applying for permits to kill nuisance deer, homeowners applying repellents to deter damage to ornamental plants, motorists driving cautiously, and people spending less time outdoors to avoid Lyme disease. All these actions involve some modification of people’s behavior in response to wildlife. Costs associated with some actions may be significant (e.g., costs for both deterrents and replacement of damaged ornamental/landscaping plants).
- *History of experience greatly influences problem tolerance.* Comments such as “I’m fed up with...”, “I’ve had it up to here with...” and “I can’t stand anymore of...” are indications of intolerance based on a history of experiences with wildlife problems. Interestingly, this cuts two ways. Some stakeholders become accustomed to the extent of damage experienced and essentially learn to live with it. It does not present an “unknown” risk for them; they have learned to accommodate it.

- *Stakeholders concerned about damage who perceive a rising wildlife population are less tolerant of that damage than those who perceive a stable or declining population.* This relationship seems to hold true regardless of whether stakeholders’ perceptions are correct. Wildlife managers need to understand that the best scientific estimate of risk typically is not the basis of people’s tolerance. A recent surge in wildlife observations may lead people to infer damage has increased whether or not this is the case (Riley and Decker 2000b).
- *Negative impacts influence population and management preferences.* People are more likely to want a population decrease if they believe a high probability of negative impacts exists or if they personally have experienced such impacts. Similarly, people concerned about such impacts are more willing to accept lethal and invasive management actions.

Even in wildlife damage situations stakeholders tend to recognize that wildlife has positive as well as negative impacts. Positive impacts interrelate with the negative ones and influence people’s tolerance overall for wildlife damage:

- *Positive interests in a species tend to increase tolerance for problems associated with the species.* Farmers who hunt are more likely to accept some crop damage. Suburban residents who like to see geese in their local parks are more willing to put up with goose feces on the grass.
- *If costs become great enough, many stakeholders will come to believe that the costs of wildlife exceed the benefits, leading to diminishment of their appreciation of these benefits.* Failure to address the breadth of negative impacts can lead to diminishment of a wildlife resource to pest status among stakeholders whose concerns are ignored.

Acceptance of Management Actions

Wildlife damage management often presents a double challenge because people associated with situations in which problems occur may disagree about how to proceed. As a result, proposed management actions become a source of controversy. Therefore, damage management re-

quires an understanding of both the impacts of wildlife and the *impacts of management actions*. While many people are most concerned with how management actions reduce the problems, effectiveness of actions at reducing wildlife damage is a secondary consideration to those not concerned about the damage in the first place. For such stakeholders, the most important impacts of management actions may be cost, safety, or the pain and suffering of animals.

Acceptance of management actions—some considerations

- » Based in part on stakeholder concerns about impacts of wildlife and in part on concerns about *impacts of wildlife management actions*.
- » Agreement with management outcome objectives does not necessarily indicate agreement with management actions to accomplish objectives.

It is essential to distinguish stakeholder agreement with management objectives from acceptance of management actions. Stakeholder agreement on management objectives is essential, but does not equate to agreement on acceptable actions to accomplish objectives. Agreement on ends is necessary, but not sufficient, to gain agreement on means. A community may generally agree that it is desirable to reduce ornamental plant damage and the incidence of motor vehicle accidents involving deer, but some stakeholders within the community may disagree strongly about how to achieve those ends. Some may favor driver education and the replacement of ornamental plants with species less palatable for deer. Others may favor reduction of the deer population. Among the latter group, some may support lethal control, whereas others reject that approach in favor of nonlethal methods. This basic scenario can exist for geese, beaver, or any other species.

Among stakeholders for whom reducing wildlife damage is paramount, the most cost-effective means of achieving that end is often preferred—many stakeholders will favor hunting in such cases, but others will not (Figure 2.5). Those who place higher importance on other impacts, such as minimizing the pain and suffering of wildlife, may seek different management strategies. Therefore, understanding the impacts

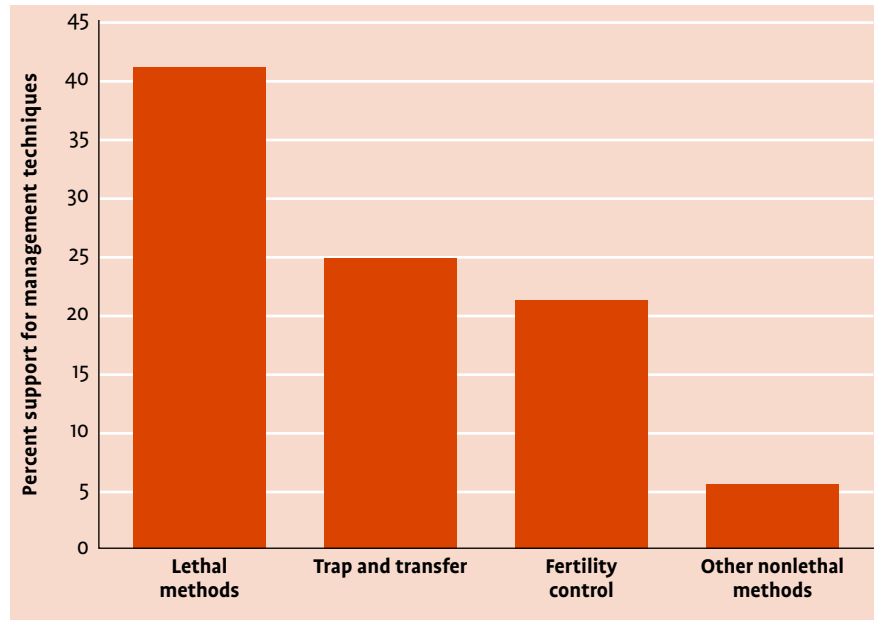


Fig. 2.5 Percent support for different types of deer management techniques among Irondequoit, New York residents who wanted a “large decrease” in the deer population. (Data from Lauber and Knuth 1998)

of management actions that are most important to different stakeholders can aid in the development of acceptable management strategies.

Economic impacts

The chief economic impact of management actions are the costs of implementation. These costs may be borne by individuals (for actions, such as wildlife deterrents, that are implemented by individuals) or by communities (for implementing more broadly targeted management actions, such as selective culling programs carried out by paid shooters). High costs, even if benefits will greatly exceed expenditures, may deter landowners from taking steps to reduce wildlife damage on their properties. Opposition to some community-wide management strategies, such as fertility control and selective culling programs, often is based partially on costs to taxpayers. Despite resistance to pay for solutions at the community level, investments of time and money in wildlife damage control typically are forthcoming if stakeholder acceptance capacity is exceeded.



Fig. 2.6 Many landowners do not allow hunting on their properties because of concerns about hunter behavior.

Health and safety impacts

The safety of hunting and other lethal management strategies is a major concern to some stakeholders. Landowners in rural areas who believe that hunting is necessary for controlling wildlife damage may nevertheless restrict it on their properties because of safety concerns. The concentration of people in urban and suburban areas leads many stakeholders to believe that lethal management strategies are unsafe, even if they feel wildlife populations need to be reduced.

As interest in fertility control has grown, concerns have been raised about the consequences of people eating the meat of animals that have been treated with contraceptive drugs. Because contraceptive technology is still experimental, many questions remain unanswered about whether the meat of treated animals contains drug residues and, if it does, what affects this may have for people who consume it.

Other measures also raise health concerns. People may fear the health effects of using chemical repellents on vegetation to deter wildlife feeding. And even the prospects of genetically

modifying plants to make them less palatable for wildlife has the potential to arouse opposition.

Nuisance impacts

In addition to economic and safety concerns, management actions may negatively affect people in other ways. Many rural landowners are concerned about behavior of hunters (e.g., littering, damaging property) they do not know using their lands (Siemer and Brown 1993, Lauber and Brown 2000). Consequently, landowners willing to allow hunting access to people they know still may prohibit hunting by strangers, thereby possibly limiting the effectiveness of hunting as a management tool.

Lethal strategies implemented in urban and suburban areas, such as selective culling programs, typically require restricting people's activities in certain areas to promote safety. For example, people need to be kept away from bait sites where deer are being shot, and roads near these sites may be closed for this reason. Although the implementation of these strategies usually is timed to interfere the least with people's activities, such restrictions annoy some.

Noise concerns also accompany some actions. Methods involving the discharge of firearms may make enough noise to bother some stakeholders. For this reason, some communities have required the use of silencers on firearms during harvest operations. Noise-making scare devices also present potential noise nuisance.

Recreational impacts

Management strategies also can have recreational impacts. Because some stakeholders are concerned about safety of hunting or other lethal means, they may be less likely to use private or public open spaces for recreation when these strategies are being implemented.

Intangible impacts

Management also may have impacts on the more intangible values people associate with wildlife. Some people may value the presence of a large wildlife population in their area, considering it a sign of ecosystem health. At the same population level that others associate with unacceptable problems, these stakeholders are satisfied. Actions that lower the population from

these levels may, therefore, decrease satisfaction for these stakeholders.

The ethics of lethal techniques and invasive, nonlethal strategies (such as contraception and surgical sterilization) often are a concern for many individuals (Box 2.2). Some stakeholders are concerned primarily with minimizing the suffering of wildlife. Others may believe that human interference with wildlife populations is an unacceptable intrusion into natural systems.

Influences on Acceptance of Management

The discussion thus far has indicated several factors that influence stakeholder acceptance of management objectives and actions. Chief among these are stakeholders' beliefs and attitudes about human-wildlife interactions. Experience and study have shown two other considerations loom large in stakeholder acceptance of management: perception of agency image/credibility and perception of the process followed to develop management strategy and tactics.

Agency credibility and image

Agency image is vital to the success of management. Stakeholder support for agency programs is closely related to the image people hold of an agency (Decker 1985). Image consists of public perception of three basic components (Figure 2.7):

- management function—or the activities an agency carries out;
- agency staff—or the characteristics of personnel who carry out these activities; and
- communication behavior—or agency efforts both to share information with and to seek information from the public.

Meaningful stakeholder involvement is central to improving any of these components. Stakeholder involvement gives the public the opportunity to shape management function. For example, it can help match impact change objectives for problem species with public tolerance. Stakeholder involvement also can improve understanding of the wants and needs among all stakeholders and help people to understand why management objectives and actions may not be perfectly in accord with their own personal de-

Box 2.2 New Jersey's Bear Hunting Debate

Black bear hunting in New Jersey was closed statewide in 1970. Bear numbers increased in northern New Jersey during the 1990s. State wildlife officials estimated the bear population to be 1,000–1,200 in the year 2000 and predicted that the bear population could double by 2006 if unchecked.

The New Jersey Division of Fish and Wildlife received over 1,600 nuisance-bear complaints in 1999 (nearly twice the number of complaints they had received in 1998), including 29 home entries, 25 livestock kills, 40 pet attacks, and 34 incidents involving an aggressive bear. No human injuries occurred, but wildlife officials and others became increasingly concerned about the potential for such injuries.

In March 2000, the New Jersey Fish and Game Council (which sets Division policy) proposed a bear hunting season for fall of 2000 as a means to reduce the bear population and bear-human conflicts. The goal of the proposed hunt was to reduce the bear population by two-thirds within three years, starting with a harvest of 350 bears during the first season.

The hunting proposal generated strong opposition from several sources for several reasons. The Humane Society of the U.S. argued that the state's proposal would not deal specifically with problem bears. They suggested that bear population estimates were inflated and the proposed harvest was too high. They also argued that hunting was inhumane and unnecessary to protect human safety. They suggested that the Division use "negative conditioning" or other nonlethal means to reduce human-bear conflicts. Organized animal welfare groups lobbied state legislators to stop the proposed hunt.

In mid-June, 2000, New Jersey's Senate Environment Committee passed a bill to prohibit the proposed bear hunt. Some state Sena-

tors expressed a lack of confidence in the Division's bear population estimate and Governor Christie Whitman asked the Division to set a more conservative bear harvest goal (175 animals in the first season). Shortly thereafter, the New Jersey Fish and Game Council voted unanimously to approve the proposed bear hunt. However, in light of public criticism, the committee reduced the target bear harvest to 175 and they reduced the proposed hunting season length by six days. By late June, the full Senate had voted to stop the proposed bear hunt, but the bill still needed to be approved by the New Jersey Assembly and signed by the Governor before it would become law. The bill proposed to stop bear hunting for five years and allot \$95,000 to research on alternative means of managing black bears.

By September 2000, 26 towns in New Jersey had adopted resolutions calling for the state to stop the bear hunt. A collective of hunt opponents (e.g., the Sierra Club, The New Jersey Animal Rights Alliance, Humane Society of the U.S.) filed suit in the Superior Court's Appellate Division, asking the judges to review the decision to allow a harvest of 175 bears. The Governor and state legislators received thousands of letters and emails protesting the hunt. Under a rising tide of protest, Governor Whitman directed the New Jersey Division of Fish and Wildlife to call off the hunt for at least one year. In its place, the Governor proposed a \$1 million bear-management program that would lead to more education about living with bears, police training to deal with nuisance bears, and hiring of four new wildlife control officers to respond to nuisance bear complaints. In 2000, State wildlife officials implemented an aggressive public education program and a program that trained police and park officials to implement the state's nuisance bear response protocol.

Source: New Jersey Division of Fish and Wildlife 2000

sires. Because they are particularly effective at promoting this understanding, approaches to stakeholder involvement that allow people to deliberate directly with each other (such as citizen task forces) are often useful.

Stakeholder involvement improves perceptions of agency staff because interaction between the public and agency staff (1) showcases staff

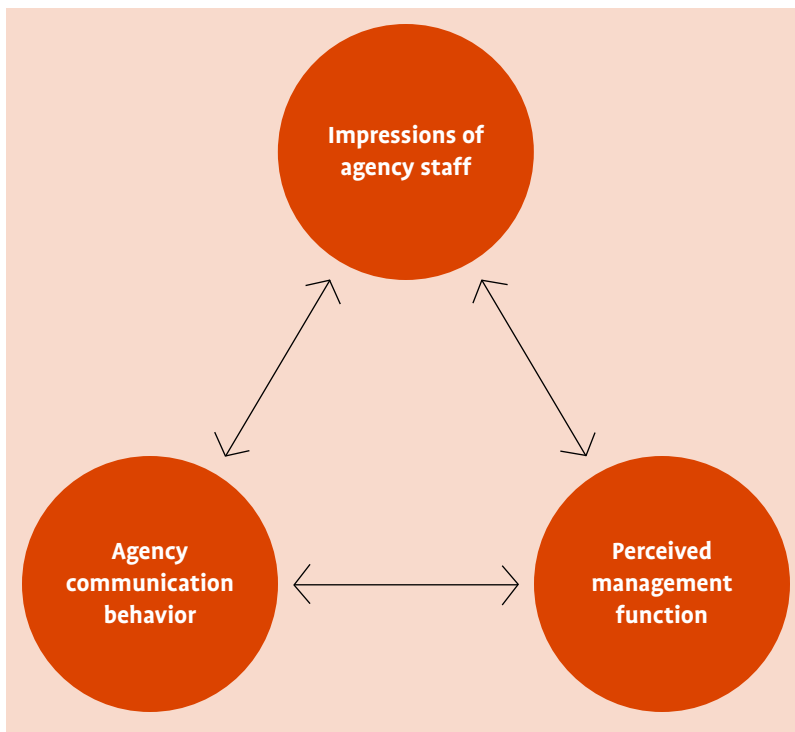


Fig. 2.7 The three components of agency image.

expertise and (2) demonstrates receptivity to stakeholder concerns. Impressions of agency staff may be most improved if the staff are not “caught in the middle,” single-handedly trying to craft agreements that will meet diverse stakeholder needs. Rather, contact with agency staff is most beneficial to agency credibility and image when staff advise and consult with stakeholders, but allow them the opportunity to directly interact with each other about their needs.

Communication behavior is often the weakest component of agency image. People may approve of management function and think highly of agency staff, but still believe that communication is a problem. Communication is often a challenge because of the diversity of stakeholders and their interests relevant to each issue. Agencies are most successful in their communication if they tailor messages for particular stakeholder groups and communicate through channels these groups routinely use.

Because image is so closely related to public support, our take-home message is that effective

public relations is a necessary component of effective wildlife damage management. Public relations has been equated to “performance” plus “recognition.” Agencies must both (1) strive for the highest level of performance and (2) ensure that the public is aware of their good efforts. Stakeholder involvement contributes to both aspects, providing a firm foundation for management.

Process is important

Wildlife managers can be overheard lamenting the “good old days” when they apparently simply sized up a situation, unilaterally decided what was needed, and made it happen! Managers’ patience for process is characteristically thin and acceptance of the value of “process” slow to come. Involving stakeholders in decision-making processes has been resisted strenuously in some quarters. Nevertheless, stakeholder involvement is occurring with greater frequency and becoming the norm in wildlife damage management (Chase et al. 2000).

Process is an important component of sound management. It is a mistake to think that people care only about the substance of management decisions and actions. If managers carefully weigh all available information and make the best decision possible under the circumstances, some assume that people will be satisfied. But this is demonstrably not true in many cases!

Rather, the *process* by which decisions are reached plays a crucial role in shaping impressions of those decisions. A satisfactory decision reached by an unsatisfactory process will leave many stakeholders unhappy. A satisfactory process, on the other hand, can increase the acceptability of a basically good decision.

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Factors that influence satisfaction with decision-making processes

- » adequate opportunity for stakeholders to participate in the process;
- » agency receptivity to stakeholder input;
- » the chance for stakeholders to have a genuine influence on the decision being reached; and
- » the quality of knowledge and reasoning of agency staff.

Despite our continually improving understanding of how people perceive process, designing stakeholder involvement processes tailored to specific situations and stakeholder needs is as much art as analysis. A variety of contextual factors can shape the choice of the “best” process for a situation, including:

- how much people worry about these problems;
- stakeholders’ perceptions of wildlife population size and recent trends;
- acceptable methods of management; and
- opinions about the roles stakeholders should play in management.

Considering how these factors should affect process design is a complex balancing act considered more fully in the next part of this guide.

As the complexity and community specificity of wildlife damage management issues increases, co-management approaches—those in which the responsibilities of management are broadly shared by wildlife agencies and other stakeholders—are being explored more frequently (Decker et al. 2000, Schusler et al. 2000). The role of deliberation in achieving collective purpose, relationship building and commitment to action is a key element in community-based co-management (Schusler 2001). Such interactions often involve professionally designed and executed processes.

We have come to refer to the entire complex of input, involvement, and educational communication processes needed for much contemporary wildlife damage management as “engagement.” Wildlife damage managers are finding that engaging communities by way of multiple processes is required to achieve acceptable and sustainable management programs. This is especially true for co-management, where multiple partners negotiate and assume various roles and responsibilities.

Stakeholder engagement is more than a collection of management activities. Wildlife managers who embrace a philosophy of engagement naturally avoid simply talking at stakeholders, trying to impose their views on stakeholders, or overlooking important impacts. Managers who em-

brace stakeholder engagement gain the ability to approach wildlife damage management as a transactional, interactive, collaborative activity in communities. Stakeholder engagement does not devalue the role of the wildlife management professional. In fact, effective stakeholder engagement creates a better environment for communication between wildlife professionals and management stakeholders, and this means more opportunities for the wildlife professional’s expertise and insight to be considered in community deliberation about a wildlife management issue.

Perfect versus good enough

The full range of impacts is extensive and the interaction between impacts can be complex. However, the important thing to keep in mind is that a wildlife manager doesn’t need exhaustive information about every impact to make good decisions. Decision makers are often unable to reconcile the multiple conflicting desires of stakeholders or to conduct an analysis in a more critical or formal process (e.g., optimization, maximization). He or she proceeds with what may not be the “perfect” decision, but one that is “good enough.” The term “satisficing” sometimes is used to describe the qualitative decision-making techniques used to select acceptable alternatives (Eilon 1995).

The question of what is good enough is generally answered by consensus or prevailing social and professional norms. Whereas satisficing is criticized for a lack of rigor, this mode of decision making often is adequate in wildlife damage management because stakeholders frequently agree that it results in an acceptable range of impacts (Fischhoff et al. 1981). An acceptable alternative generally is more reasonable to identify and implement in a timely fashion than the unattainable “perfect” alternative. We address how to design a process to select a “good enough” alternative in the next part.



Section Summary

This section focused on the factors that influence stakeholder acceptance of impacts caused by both wildlife and management actions. We suggest that tolerance of wildlife actions is a function of the *impacts* of greatest concern to stakeholders. In our judgment, the majority of these concerns fall into three broad areas: economic impacts, health and safety impacts, and nuisance impacts. For each type of impact, key questions for managers are (1) how much of the impact will people tolerate and (2) how will they respond when the impacts exceed their tolerance?

Wildlife management actions often are controversial. Stakeholders can differ widely on their assessments of the most important impacts of management actions. Many people are most concerned with how actions reduce the problems particular wildlife species cause. This, however, is a secondary consideration for those not concerned about the damage in the first place. For these stakeholders, the most important impacts of management actions may be financial cost, safety, or pain and suffering of animals. Stakeholder agreement on management objectives is essential, but this achievement does not equate to agreement on acceptable actions to accomplish objectives. A well-grounded understanding of the impacts of management actions most important to different stakeholders can aid development of acceptable management strategies.

Agency image is vital to successful wildlife damage management. Stakeholder support for damage management programs is closely related to the image people hold of an agency. Image consists of three basic components: management function (the activities an agency carries out); agency staff (the characteristics of personnel who carry out management activities); and communication behavior (agency

efforts to listen to and share information with the public). Improving any of these components contributes to a better overall agency image and, therefore, can help generate support for management programs. Meaningful stakeholder involvement is central to these improvements.

The process by which decisions are made is a critically important component of sound wildlife management. Managers at one time assumed that the substance of management decisions and actions were all that people cared about. Experience has proved otherwise. The *process* by which decisions are reached also plays a crucial role in shaping impressions of those decisions. A satisfactory decision reached by an unsatisfactory process will leave many stakeholders unhappy. A satisfactory process, on the other hand, can increase the acceptability of a basically good decision. Fortunately, the process characteristics that stakeholders' desire are known and within our power to achieve.

The complexity of addressing wildlife impacts can be daunting. The full range of impacts is extensive and the interactions complex. However, the important thing to keep in mind is that you don't need exhaustive information about every impact to make good decisions. You will not need perfect information, nor will you be faced with the challenge of finding a single perfect decision. Using concepts such as wildlife acceptance capacity should allow you to identify a range of management objectives and actions that will be acceptable to stakeholders. Using the concept of impact management will allow you identify suites of actions that could achieve management goals. In Part 3, we suggest a set of practical steps by which you can design wildlife damage management programs that effectively address the impacts of greatest concern to your stakeholders.

Stakeholder Engagement in Wildlife Damage Management

Engaging stakeholders (a.k.a. “citizen” participation) in management is a common goal and often a challenge for wildlife managers. We define stakeholder engagement as *involvement of stakeholders in making, understanding, implementing or evaluating wildlife management decisions.*

Stakeholder engagement simply means that wildlife managers are communicating with and involving people outside of their agency. Members of environmental organizations, homeowners, wildlife damage service providers, farmers, forest owners, hunters, and many others are all potential stakeholders. Local and state government officials are stakeholders, too.

Strategies for effective stakeholder engagement vary by context. No simple recipe can lead you to do it right. However, following a few general steps can help guide an engagement process.

Seven steps to guide design of stakeholder engagement

- » understanding your situation;
- » identifying stakeholders;
- » setting objectives;
- » selecting a stakeholder involvement approach;
- » designing strategies;
- » implementing your strategies; and
- » conducting evaluation.

We discuss these steps generally, as a foundation on which you can build an engagement strategy to suit your specific needs.

Step 1: Understanding your Situation

One’s approach to engaging stakeholders in wildlife damage management depends on how far a wildlife damage issue has developed. A useful framework for this assessment (Figure 3.1; Hahn 1990) describes eight stages through which public issues typically progress. Applying this

model to wildlife damage issues can help you gauge how best to respond to stakeholders.

Stages in evolution of a wildlife damage issue

- » **Concern.** During the concern stage, individuals or groups identify undesirable impacts of wildlife.
- » **Involvement.** In the involvement stage, some people with concerns start to seek support from each other and begin to contact decision makers about their concerns. Residents living adjacent to a natural area may hold an informal meeting to assess how many of them have experienced a problem (i.e., negative impacts). Wildlife managers and local government officials may start to receive letters and telephone calls complaining about negative impacts and asking for relief. In this stage, stakeholders may regard a situation quite differently. Some may believe the problem is “too many animals.” Others may think that people simply have failed to adapt to the wildlife species. Still others may define the problem as a general lack of tolerance for nature.
- » **Issue.** In the issue stage, general agreement will form about the primary impacts. Agreement about the existence and nature of a problem is essential to progress toward resolution.
- » **Alternatives.** People suggest different actions for addressing the impacts of concern (i.e., the issue) during the alternatives stage.
- » **Consequences.** After potential alternative actions have been proposed, the consequences are evaluated from a variety of perspectives. How will they affect the impacts that most concern the community? How much will alternative actions cost? Will these actions themselves have undesirable impacts? Who will benefit? Who will suffer? Stakeholders likely will reach different initial conclusions about the answers to such questions.
- » **Choice.** Stakeholders deliberate about what alternatives to adopt in the choice stage. Individuals or groups may come out in favor of or opposition to a variety of possibilities. Agencies must decide how to respond to stakeholders following thorough assessment of trade-offs. Ideally, stakeholders themselves will resolve differences and settle on a set of acceptable actions.
- » **Implementation.** In the implementation stage, a management action, or more likely a set of management actions, is put into effect.
- » **Evaluation.** The impacts of management actions are assessed during the evaluation stage. Whether or not a formal evaluation takes place, people develop judgments about the actions taken.

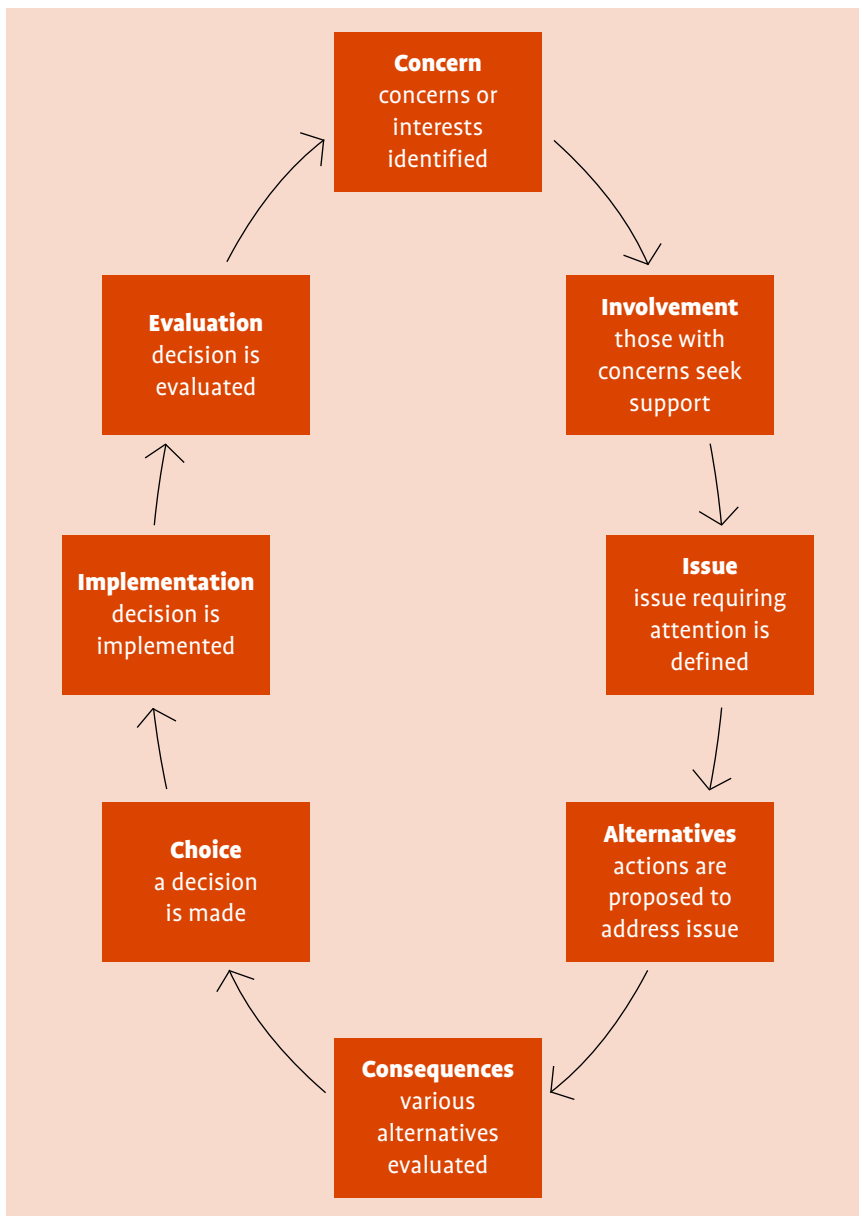


Fig. 3.1 Hahn's (1990) issue evolution model.

The issue development process is rarely as orderly as the stages might suggest. The eight stages are not distinct and linear. An issue may cycle back to earlier stages as events unfold. For example, as the consequences of deer contraception are discussed (consequences stage), new concerns may surface about contraceptive drugs being released into the food web, their impacts on nontarget wildlife, the potential for animals treated to suffer from the physiological effects of the drugs, or many other topics. The issue may cycle back to the concern stage, attract new stakeholders, get reframed, and cause stakeholders to develop new alternatives before an action is chosen.

Also, it is common for different stakeholders to be at different stages of issue evolution at any particular time. Some citizen groups may organize and become active on an issue early. Those groups may develop very clear opinions about what alternatives are worth considering and what the important consequences of those alternatives are before other stakeholders are even aware of the breadth of concerns in the community.

Understanding which stakeholders are at which stage in issue evolution is important because a response that can be helpful and appropriate at one stage may be useless or even harmful at another. For example, if all important stakeholders have a good understanding of possible alternatives, it can be very helpful for an agency to start exploring the consequences of those alternatives and informing stakeholders about them. However, if an agency begins exploring the consequences of alternatives before stakeholders' concerns are well understood by the active community, many important concerns may be missed and the public may be left with the impression that the agency is simply trying to advance its own agenda.

Being proactive about stakeholder engagement allows agencies to

- » make sure all important stakeholders are at the table;
- » establish positive working relationships with stakeholders;
- » develop a positive public image and credibility with stakeholders; and
- » begin stakeholder education early and contribute to the way an issue is defined.

Most literature stresses the importance of early and meaningful stakeholder engagement initiated by agencies. Human dimensions research, a form of stakeholder engagement, can help managers build their understanding of a situation by determining the stage to which an issue has evolved among various stakeholders in a particular community. This information can help managers develop useful stakeholder engagement strategies that correspond to community needs. For example, a study could help to distinguish whether most stakeholders are just beginning to identify negative impacts of wildlife, but have few ideas about how those impacts should be addressed

(concern stage) or whether they have consensus on the impacts of greatest concern and are forming opinions about the most appropriate management actions (alternatives stage). This knowledge should guide agency engagement with stakeholders. For example, in the concern stage, engagement may take the shape of forums for stakeholders to express their concerns, whereas in the alternatives stage stakeholder deliberation about suitable management strategies may be more appropriate.

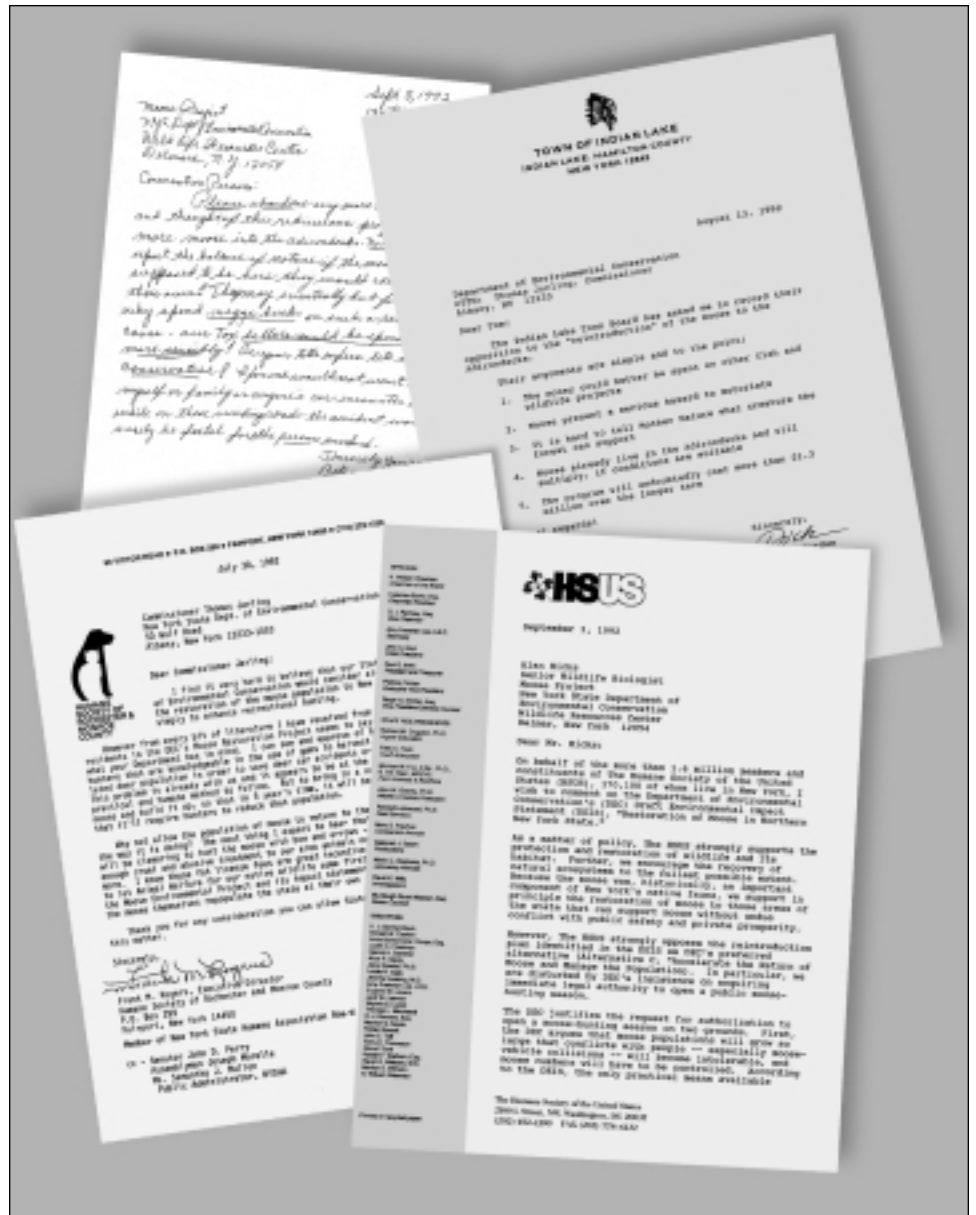
Reliance on studies of stakeholders is growing in wildlife damage management as the value of results for management planning become more widely recognized. To get the most out of such studies, wildlife managers need a basic understanding of human dimensions research methods. Appendix A provides general background on research methods and advice for working effectively with a social scientist or human dimensions specialist in developing a study to meet your needs. The material is intended to help you become more comfortable working in partnership with social scientists.

Step 2: Identifying Stakeholders

A stakeholder is any person who will be affected by, or will affect, wildlife management. Most wildlife management issues involve a wide variety of interested and affected people. You need to know who the stakeholders are for an issue before designing an engagement strategy. A strategy that works with some stakeholders may be inadequate with respect to others.

For example, citizen task forces (CTFs) engage stakeholders in deliberation over damage management issues. CTFs typically are asked to recommend management objectives and/or actions. Many benefits have been attributed to CTFs when a diverse range of stakeholders is represented, including:

- increased understanding of other stakeholders' views;
- consideration of management options from a broad range of perspectives;



- consensus about management recommendations; and
- high level of support for management recommendations.

Fig. 3.2 Agencies begin to receive letters about wildlife damage issues during the involvement stage.

However, CTFs also can fall short by failing to represent some stakes. If task forces exclude some groups—like nonhunters or humane interests—those stakeholders are likely to challenge task force recommendations. Such challenges can impede implementation of task force recommendations. Failure to represent some stakeholders on CTFs, or the tendency to over-represent others, can derail management.



COURTESY OF MARK LOWERY

Fig. 3.3 Protests over wildlife damage management issues often attract participants from outside a community.

Guidelines for identifying stakeholders

A basic rule in identifying stakeholders is that *anyone* who is affected by or who can affect management is a valid stakeholder—hunters and anti-hunters; people concerned about deer-related problems and people concerned about the welfare of deer; supporters and opponents of management agencies. All people have a right to have their voice heard in decisions that affect them. Therefore, it is imperative that managers do not exclude stakeholders with whom they disagree.

Guidelines for identifying stakeholder groups can be couched as three questions:

Who is interested? The stakeholders who are most interested in an issue often are easiest to identify. Some initiate contact with agencies, requesting information or offering opinions. Recording these unsolicited contacts is a good way to identify stakeholders. Periodically, stakeholder groups organize to promote their common interests in a particular issue. These groups may include hunting clubs, wildlife damage committees of homeowner associations, or animal welfare organizations.

Who is affected? Determining who is affected or potentially affected by an issue may require both brainstorming and inquiry. People may be affected either by a wildlife species or by the actions proposed to manage that species. They may experience impacts of several kinds as discussed in Part 2 (e.g., property damage, costs required for management actions, fear of wildlife, recreational benefits, enjoyment of the presence of wildlife, etc.). Thinking broadly about the potential impacts of species and management actions is helpful in determining who might be affected.

Who can influence management? Many individuals and groups able to influence management in a community can be identified by asking “who is affected?” However, some interest groups can influence local

management even though they experience no direct impacts from the wildlife population of concern or from management. For example, local wildlife damage issues in which lethal control measures are pursued may attract the interest of state or national animal welfare organizations that might attempt to influence management in numerous other ways.

Strategies for identifying stakeholders

After the various kinds of stakeholders in an issue are identified, managers need to identify individual stakeholders to participate in planned activities. During this process, it is important to draw a distinction between individuals who *reflect* various stakes and those who *represent* organized interested groups. In many cases, the best strategy is to seek individuals who *reflect* various community interests—people who share certain basic interests and concerns with others in a community but whose views can be expected to progress and evolve as they grapple with management issues as a civic responsibility. Stakeholders chosen to reflect interests are not expected to advocate exclusively for those interests. Instead, they at-

tempt to balance those interests against other interests and seek a reasonable solution.

In politically charged issues, however, choosing stakeholders to *represent* certain groups may be the realistic approach. In such cases, established organizations may have public stances on an issue. To make progress in these cases, managers need to win the support not only of individuals but of organizations. Stakeholders who represent the interests of particular groups assume the responsibility of communicating back to their organization and working with others to craft decisions their organization will support.

Identifying stakeholders to participate in stakeholder processes

- » **Expert Opinion.** People knowledgeable about an issue often are in the best position to suggest stakeholders. Experts may include agency staff, Cooperative Extension staff, and local officials.
- » **Nominations by Stakeholder Groups.** When seeking individuals to *represent* groups, it may be desirable to have groups nominate individuals to represent their interests. This strategy ensures the group trusts the individual and the individual has standing in the organization to generate support for management plans developed.
- » **Snowball Sampling.** Snowball sampling assumes that stakeholders in a given issue know other stakeholders. Therefore, as you identify stakeholders, you can ask them to help you identify others. When contacting individuals, ask questions like: “who else should I be talking to? What other individuals, groups, or types of interests have a stake in this issue?”
- » **Volunteers.** Many agencies will advertise for volunteers to participate in limited stakeholder involvement activities, such as citizen task forces. You then have the opportunity to select from among those who volunteer in an effort to balance participation.
- » **Open Participation.** Certain stakeholder involvement activities typically are open to all interested stakeholders. These activities will not yield a balanced representation of stakeholders, but they ensure that everyone with strong interests in a given issue has a forum through which to participate.

Regardless of how you identify stakeholders, individuals should be willing to participate *constructively*. In some cases, stakeholders who have strongly held and conflicting opinions may nevertheless be willing to work together, listen to each other, and work to promote management objectives and actions that can satisfy community needs. In other cases, stakeholders may be so narrowly focused on their own agenda that they are unwilling to consider what other stakeholders

want or to work cooperatively with them. Such differences often reflect the characteristics of individuals more than interest groups. Involvement mechanisms engaging a small number of stakeholders, such as citizen task forces, should limit participation to stakeholders who are likely to work cooperatively.

Not all stakeholders are equal

Although we strongly recommend extending opportunities for participation to a broad range of stakeholders, not all input is equal in decision making. When considering whether or not to proceed with a wildlife damage management action, managers typically have to (1) judge how to weigh input from people experiencing different types of impacts, (2) balance the wishes of residents living in the problem area with those of other citizens in the state, (3) compare the value some people place on mitigating the problem with the concerns others have about the method or outcome of the action(s), and (4) consider the merit of the wishes of a small segment of the public who know a lot about an issue compared to those of the vast majority who do not. Balancing or weighing these different types of input is not easy. The choice of how to involve different stakeholders will emphasize the perspectives of some over those of others, but this can not be avoided. As you will see in Step 4, weighing stakeholder input is a problem in every approach to stakeholder involvement, though upon whose shoulders that responsibility rests differs depending on the approach used.

Step 3: Setting Objectives

With a thorough understanding of a wildlife damage management issue and stakeholders in the issue, you can turn your attention to deciding what might be accomplished through stakeholder engagement. Setting clear objectives is one of the most frequently overlooked prerequisites for effective stakeholder involvement. To help in this process, we discuss both the roles that stakeholders can play in wildlife damage management and the objectives that may be accomplished.

Stakeholder engagement objectives

- » improving the information about people on which wildlife management decisions are based;
- » improving the judgment on which decisions are based; and
- » improving the social environment in which management occurs.



Fig. 3.4 Citizen task forces are used to improve the quality of judgment in wildlife damage management decisions. Members of a citizen task force study deer damage in the field.

Improving Information

During several stages of the issue evolution cycle, managers may need reliable information about stakeholders' needs, desires, beliefs, values, and/or behaviors. There are numerous ways that such information can contribute to better management decisions. For example, on behalf of the New York State Department of Environmental Conservation, Brown and Decker (1979) tested the validity of wildlife managers' assumptions that deer damage had become intolerable for farmers and found that farmer tolerance for deer damage was higher than expected. Gathering information directly from stakeholders can refine managers' beliefs about stakeholders' needs and wants, thereby improving decisions.

Improving Judgment

Sometimes obtaining more information about stakeholders' perspectives does not ease decision

making for wildlife managers; the added information can reveal the complexity of a situation. Many wildlife damage management scenarios are characterized by a diversity of stakeholders holding strong and contrasting viewpoints. The potential for conflict between stakeholders is often present. Even when a manager is well informed about the diversity of stakeholders' perspectives, using that information to reach a final decision is difficult. Managers are faced with the unenviable task of choosing the degree to which various stakeholders' needs, wants, and desires will be satisfied, and which will not be addressed at all. The likelihood of reaching decisions that are unacceptable to some stakeholder groups is high under these conditions.

During the choice stage of issue evolution, stakeholders may be involved in the process of recommending a decision that balances the needs and concerns of all interested citizens. One model by which this can occur is the citizen task force, in which stakeholders with diverse interests work directly with each other, deliberating trade-offs among policy alternatives as they seek a mutually acceptable management decision. Stakeholders who participate in citizen task forces (as well as managers overseeing the task forces) typically are highly supportive of the decisions they produce.

Improving the Management Environment

Both objectives described above focus on improving management decisions. But stakeholder engagement also contributes to wildlife damage management in less direct ways. Wildlife management depends on a citizenry that supports and contributes to management decisions and actions. Stakeholder engagement throughout the evolution of an issue can improve the social environment in which wildlife damage management occurs by transforming people and their interrelationships. Stakeholder engagement can influence the management environment in four interrelated ways: (1) transforming beliefs and attitudes, (2) changing behaviors, (3) improving relationships among stakeholders, and (4) increasing the

capacity of people and communities to contribute to policy making and management.

These objectives can be achieved in concert with the other engagement objectives already described. For example, when decision makers make a genuine effort to gather and consider citizen input in decision making, stakeholders tend to become more supportive of decisions and more willing to make changes in their personal behavior to help achieve management goals. Relationships and mutual understanding between diverse stakeholders serving on citizen task forces often improve through engagement, improving the climate for meaningful dialogue about management.

Step 4: Selecting a Stakeholder Engagement Approach

The specific stakeholder involvement strategies one might employ depend on the general approach toward stakeholder engagement you want to take for a particular issue. Wildlife damage managers have taken five basic approaches to stakeholder involvement: expert authority, passive-receptive, inquisitive, transactional, and co-managerial (Decker and Chase 1997). These approaches are distinguished by the relative amount of control the agency and other stakeholders have in the management process and by the particular roles that they play (Figure 3.5). On

Box 3.1 Examples of Stakeholder Engagement Objectives

To help you understand the diverse range of stakeholder engagement objectives, we list a series of possible objectives below, using deer as an example.

Objectives for improving information

- » Determine the type of deer-related problems being experienced within a community and how widespread they are.
- » Assess the level of support for reducing the deer population.
- » Assess the level of support for using bow hunting to reduce the deer population

Objectives for improving judgment

- » Identify the negative impacts of deer that must be reduced to satisfy diverse stakeholders.

- » Determine the standards used by different stakeholder groups to judge the suitability of management options.
- » Achieve consensus for management actions among a group of stakeholders reflecting diverse interests.

Objectives for improving the management environment

- » Increase the level of support for using bow hunting to reduce deer populations.
- » Reduce the number of people feeding deer adjacent to major roadways.
- » Establish an advisory board reflecting diverse stakeholder interests to monitor and revise deer management strategies.

one end of the spectrum, the authoritative approach keeps the locus of control squarely within the realm of the management agency. The passive/receptive and inquisitive approaches also keep the locus of control within the management agency, but managers accept or even seek input from stakeholders. In contrast, the locus of control is shared by stakeholders and managers in both transactional and co-managerial approaches. This means that stakeholders and managers both have influence over decisions and actions.

If stakeholders are to have little control, the objectives of citizen participation are relatively

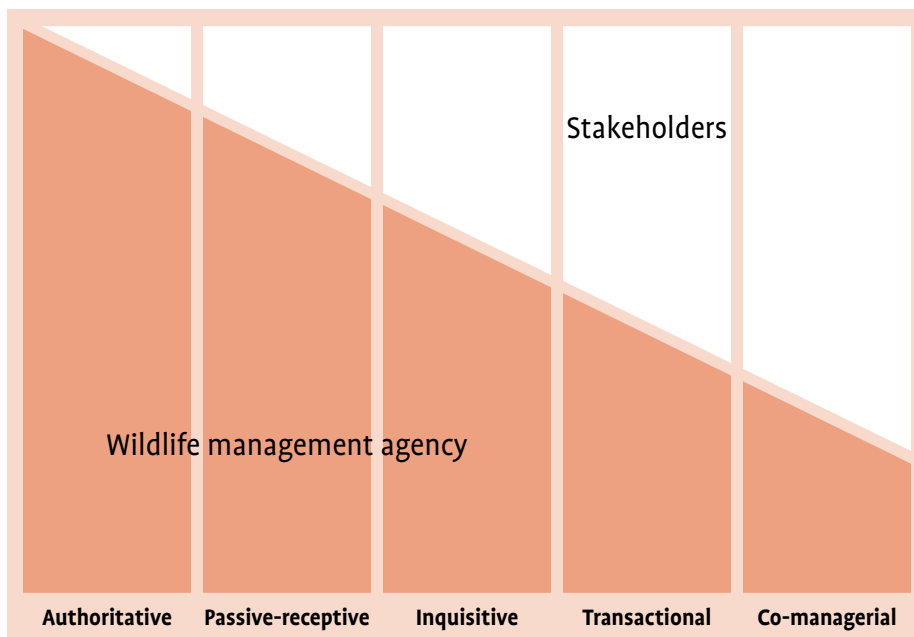


Fig. 3.5 The relative involvement of wildlife agencies and stakeholders in various management approaches (Chase et al. 2000; copyright held by The Wildlife Society).

Table 3.1 Range of approaches to citizen participation

	<i>Objectives</i>	<i>Locus of control</i>	<i>Techniques</i>	<i>Citizen participants</i>
Expert Authority	Improve management climate	Agency	Education through presentations, pamphlets, press releases, etc.	Targeted groups or general population
Passive-Receptive	Improve management climate Provide input	Agency	Unsolicited comments	Citizens who take initiative to contact the agency
Inquisitive	Provide input Improve management climate	Agency	Surveys, public meetings, advisory committees, focus groups, nominal group meetings	May be all citizens, representatives, selected groups or individuals
Transactional	Provide input Evaluate input Improve management climate	Shared by agency and citizens	Task forces, mediation, citizen representatives on policy boards	May be representatives, selected groups or individuals
Co-managerial	Provide input Evaluate input Improve management climate Help with implementation	Shared by agency and citizens	Techniques from all four of the approaches above	May be all citizens, representatives, selected groups or individuals

Adapted from Chase et al. 1999

simple. As stakeholders play a larger role in the management process, however, the stakeholder engagement objectives necessarily expand. The best approach for any wildlife damage issue depends on a variety of factors.

Factors in the selection of an appropriate stakeholder engagement approach

- » the level of conflict over the issue;
- » the number and type of stakeholders affected;
- » stakeholder interest in and awareness of the issue;
- » legal mandates to which an agency must adhere;
- » the existence of other government entities that can influence management;
- » agency resource limitations; and
- » the need for information from stakeholders.

We will review each of the five approaches, describing the objectives that are typically associated with each, and how the locus of control, participants, and engagement techniques vary by approach (Table 3.1).

Expert authority

In this approach managers assume the role of technical experts *and* decision makers. The *locus of control* remains with the wildlife management agency. The *objective* of citizen participation under this approach is to improve the climate for management by building stakeholder support for decisions or actions. The expert authority approach is most appropriate when conflict over an issue is low and an agency has a non-controversial, established approach to damage management.

Press releases, pamphlets, videos, radio announcements, presentations at schools and meetings of community organizations, newsletters, and web pages are all *techniques* that an agency can use to inform stakeholders about wildlife damage management. Depending on the specific objectives, the targeted *participants* will vary. Agencies may attempt to reach the general public, or they may focus their efforts on certain groups of stakeholders such as homeowners.

Passive-receptive approach

Under the passive-receptive approach, managers are open to input about stakeholders' beliefs, attitudes, values, behaviors, and experiences. Stakeholder input to management occurs only if they take the initiative to reach managers. The *locus of control* remains with the agency.

The *objectives* of citizen participation under the passive-receptive approach are to build support for management decisions and actions and to add to the information base on which decisions are made. The *participants* will be stakeholders who take the initiative to communicate their concerns and desires to managers. Citizen participation *techniques* typically include unsolicited telephone calls, letters, and comments during informal conversations between stakeholders and wildlife managers.

The passive-receptive approach is most appropriate in issues where public interest and conflict are low, and the types of stakeholders affected are few and easily identified. These conditions are most likely to occur in early stages of emergent wildlife problems.

Inquisitive approach

Managers taking the inquisitive approach assume that knowledge of stakeholders' perspectives will be essential in wildlife damage management decisions. Seeking this information can have the dual *objectives* of both improving decisions and improving public acceptance of decisions. Wildlife managers acquire this information through scientific inquiry to avoid potential biases of considering the perspectives of only those stakeholders who contact the agency. Marginally important stakes can be over blown by lots of publicity and contacts with the agency. Like the expert authority and passive-receptive approaches, the *locus of control* remains with the agency, which decides whether and how to reflect different perspectives in its final management decisions.

Surveys and public meetings are two common *techniques* used in the inquisitive approach. Surveys include mail-back questionnaires, telephone interviews, and in-person interviews. Depending on the type of information sought, the survey will target different *participants*.

Though less systematic, meetings allow managers and stakeholders to air ideas and perspectives. The *participants* may be specific stakeholder groups or the general public. Other *techniques* useful for the inquisitive approach include advisory committees, focus groups, nominal group meetings, and the solicitation of letters from interested members of the public.

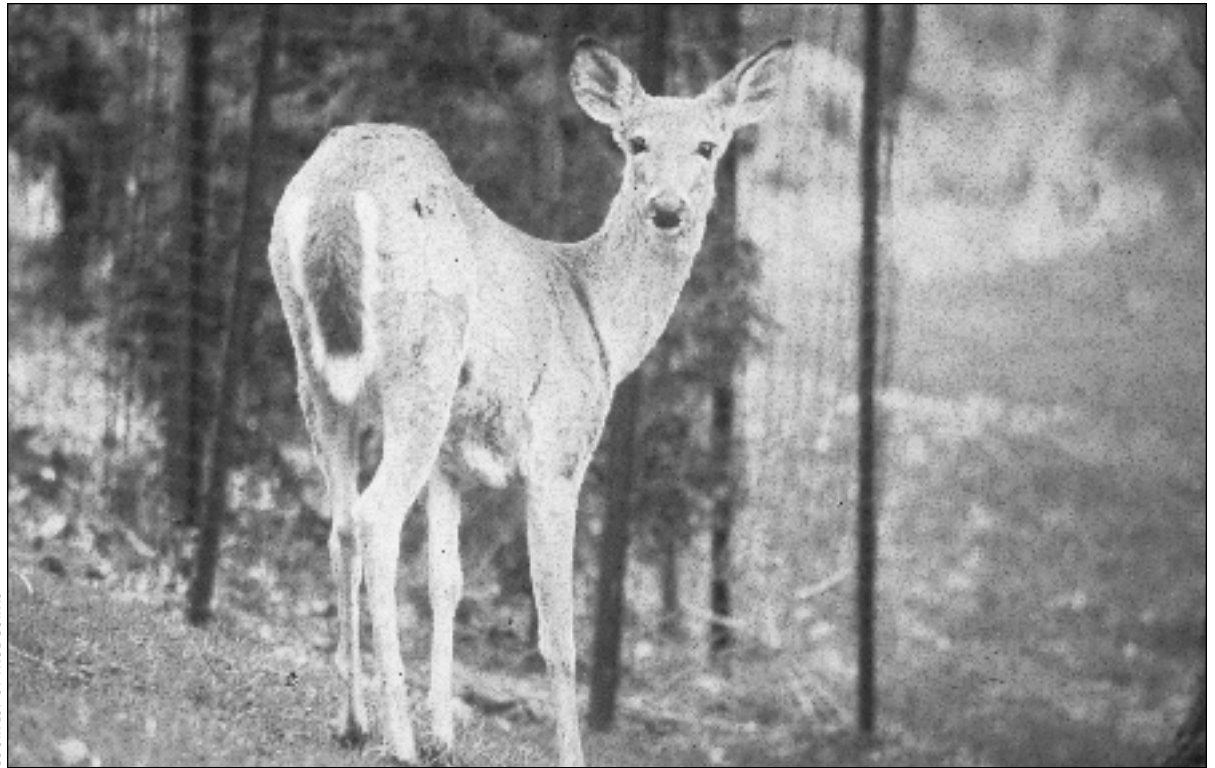
The inquisitive approach can be appropriate when conflict is moderate and managers want to identify and understand perspectives of stakeholders. For example, managers may feel the need to find out what types of farmers are experiencing wildlife damage, particular areas of damage concentration, how much damage they are experiencing, and how willing they are to tolerate this damage. The inquisitive approach requires a greater commitment of agency resources than the preceding approaches.

Transactional approach

Stakeholders frequently have conflicting perspectives, complicating how those perspectives are balanced in management decisions. In politically charged issues involving diverse perspectives or where trust between stakeholders and wildlife managers has not been established, managers often rely on a transactional approach to involve stakeholders. In this approach, stakeholders determine through deliberation the relative importance of stakes and balance of impacts to be reflected in management objectives. Wildlife managers administer the process and provide technical advice. Thus, the *locus of control* is shared. Managers may delegate decisions to stakeholders within some bounds, or may retain the power to reject or approve stakeholders' recommendations.

An important element of the transactional approach is interaction among participants and between them and wildlife managers. In wildlife damage management, task forces are a common transactional *technique*. Due to the importance of face-to-face communication, task forces may be limited to fewer than 20 participants who are expected to reflect various stakes or represent various stakeholder groups. As stakeholders

Fig. 3.6 Plant damage and other deer-related problems have been increasing across the northeast.



COURTESY OF PAUL CURTIS

Box 3.2 Co-managing deer in New York

The co-managerial approach has already been applied by some agencies in a few places. A well-documented case is the deer management situation in Irondequoit, New York. Citizens of the Town of Irondequoit, a suburb of Rochester, were divided over management of the burgeoning deer population. Due to archery and firearm restrictions, the deer population had been growing unchecked for decades. Local citizen groups with different viewpoints on deer management had organized and were vocal in their demands. In the fall of 1991, the state wildlife agency decided to apply a modified version of the Citizen Task Forces (CTFs) they had been using successfully in rural areas. The charge to the CTF was not only to set a deer-population objective, but also to recommend methods for achieving that objective. The success of the modified CTF has been debated (Curtis and Hauber 1997, Baker and Fritsch 1997), but one outcome is clear: the transactional approach of the CTF led the way for increased responsibility on the part of the community and a shift toward the co-managerial approach.

The CTF recommended a combination of culling deer through bait-and-shoot and

bow hunting in designated areas as well as research on contraception as a long-term method of population control. The lead for implementing methods for deer management was taken by an interagency task force composed of 12 members of town, county, and state government. Members included a representative from the state wildlife agency, the Irondequoit town supervisor, one of the town board members, two county legislators, the head of the county transportation office, and a representative from the county park's department. In addition to sharing decision-making and implementation responsibility with the state wildlife agency, the community funded the bait-and-shoot program, and the contraception research was paid for by the NYS legislature.

This story of Irondequoit is still unfolding. Despite the gains made in opening communication through the transactional approach, controversy over deer management continues in Irondequoit and probably will do so for years to come. Nonetheless, this is an example where a community has become involved in many aspects of deer management—all in cooperation with the state wildlife agency.

deliberate to reach consensus, they essentially negotiate how to weight their different perspectives. A more thorough analysis of management problems and a more balanced solution to those problems can result.

The transactional approach can fulfill multiple *objectives*: (1) improve the social information base of decisions by revealing stakeholders' beliefs, attitudes, and preferences; and (2) improve the social climate of management by building ownership in and support for management decisions and actions. Often, participating in activities as part of a transactional approach allows diverse stakeholders to reach agreement about appropriate management actions.

Co-managerial approach

Several trends convince us of the likelihood for further evolution of community-based collaborative wildlife management (co-management) in the Northeast: (1) continued growth of human-wildlife problems (often community specific), (2) greater public expectations for tailored solutions suitable for their communities, and (3) continuing limitations on agency funds and personnel. If these trends continue, wildlife agencies are likely to find more instances where it

makes sense to consider sharing or delegating responsibility for management to stakeholders at the community level. We believe that community-level co-management will become a common approach to dealing with wildlife damage management issues, especially in urban and suburban communities. Stakeholder engagement is the basis for co-management.

In a co-managerial approach, operational guidelines for partners, accountability and evaluation processes, and assignment of responsibility would be negotiated such that the *locus of control* over all aspects of management would be shared among agencies and local communities. This approach calls for educational communication programs for stakeholders on a level seldom seen in wildlife management. Decision-making processes that engage local stakeholders have to incorporate receptive, inquisitive and transactional elements. Therefore, co-management needs to draw on *techniques* from all of the approaches discussed earlier. In addition, governing boards of citizens and managers may be established to oversee decisions and activities.

The role of the wildlife management agency might include providing biological and human dimensions expertise, managing processes, training community participants, approving community wildlife management plans, certifying private consultants, and monitoring management activities. Agency wildlife managers would work more extensively with stakeholders in local communities, collaborating with them to develop guidelines, standards, criteria, and requirements for local community management efforts.

Co-management approaches to stakeholder engagement are not necessary for every situation. However, co-management is appropriate when managers are seeking assistance with both decision-making and decision implementation. This can often be the case with a suburban deer or goose management issue.

Each community has different human and fiscal resources that can be brought to bear on the resolution of a wildlife damage problem. In other words, each community has a unique capacity to participate as a partner in management. Community capacity is a product of factors such as local leadership resources, municipal budgets, and infrastructure. Co-management efforts will

Box 3.3 New Jersey's Community-Based Deer Management Program

During the 1990s, many suburban New Jersey communities witnessed increasing numbers of deer. Representatives of local governments and private parks went to the New Jersey Division of Fish and Wildlife seeking solutions to deer-related problems in areas where traditional forms of hunting were not controlling the populations effectively. In response, the Division developed the Community-Based Deer Management Program (Lund 1997). Under the auspices of the program, the Division partners with federal, state, county, or municipal representatives to share deer management responsibilities.

In each case, a written memorandum of understanding specifies a management plan and the roles of the Division and its management partners. The Division agrees to provide technical assistance with development, implementation, and evaluation of deer control options and to "facilitate and permit" (Lund 1997:489) deer management alternatives, such as modified deer-hunting seasons, deer-culling programs, or deer contraceptive procedures.

The partner organization agrees to pay for all aspects of program implementation, including costs for deer population estimation, use of private contractors to cull deer,

processing of deer meat, and human dimensions research before or after program implementation. It can include costs incurred by the Division for services provided.

The Division decided that it would only take on partners who were willing to agree to several ground rules. Community partners must first come to the Division with evidence that "a majority of residents believe that a deer problem exists" (Lund 1997:490). Cooperators must also agree to "(1) discourage supplemental feeding of deer, (2) support the use of deer hunting as a control option where it can be used, (3) make an effort to ensure that deer taken by means other than public hunting are used appropriately" (Lund 1997:489).

In 1995 and 1996, two county park systems signed memoranda of understanding to begin co-management of deer in their parks. Both eventually went on to hold annual culling operations that resulted in movement toward deer population goals set by the Division and the cooperating park systems.

The Division regards the program as a viable approach to managing deer in many suburban contexts.

Source: Robert C. Lund

have little chance of success if the community does not have the capacity to accept wildlife management responsibilities. Because of this, both managers and communities will find it useful to assess community capacity before making a commitment to share management authority and responsibilities in a given area.

Responding to grassroots initiative

The five approaches discussed above all assume the wildlife management agency decides whether to initiate citizen participation. As Hahn's (1990) issue-evolution model discussed in Step 1 points out, stakeholders themselves will organize and begin to press managers for action as they proceed from the concern to the involvement stage. Grassroots organizations have formed to advocate for everything from restoration of wolves in wildlands to control of white-tailed deer and Canada geese in suburbs. Indeed, stakeholders may be able to move an issue right through the choice

Box 3.4 Citizen Initiatives Related to Trapping in Massachusetts

Massachusetts voters have a long history of direct involvement in furbearer management through the state's ballot referendum process. Proponents of a referendum submit the language of their bill to the Secretary of State and the Attorney General a year before a scheduled election. Bills deemed constitutional become initiative petitions, which the proponents circulate for voter signatures. If they accumulate 75,000 valid signatures from registered voters in five different geographic regions, the initiative petition becomes a bill in the legislature. If the legislature neither acts on the bill nor rejects it, it becomes a ballot referendum in the next statewide election.

In 1930, Massachusetts voters approved a state referendum that outlawed trapping devices that "cause continued suffering" to the trapped animals (Gentile 1987). That legislation, which banned the use of leghold traps, was repealed just a few years later. In 1974, legislation was passed that restricted trap use, this time through a ban on the use of all steel-jawed leghold traps on land.

The Massachusetts Division of Fisheries and Wildlife (MDFW) continued to allow the use of "soft-catch" traps (leghold traps with rubber pads covering the jaws) after 1975. The Humane Society of the United

States (HSUS), a private citizen's group that opposed the use of leghold traps, filed a legal suit against the MDFW to stop that practice. A lower court returned a decision declaring that use of padded traps was not legal. The MDFW appealed the lower court's decision. After six years of litigation, a Massachusetts Supreme Judicial Court overturned the decision and ruled that the padded trap was humane and therefore legal.

The higher court's ruling in the early 1990s prompted the HSUS to pursue its interests through the ballot referendum process. Its initiative petition drive was successful. The ballot referendum appeared on the statewide ballot in November 1996 as "Question 1" (the Wildlife Protection Act). The measure was passed (55% of election participants voted yes; 30% voted no; 15% cast no vote on Question 1; Deblinger et al. 1999).

The legislation eliminated the legal use of leghold and body-gripping traps (snap traps excepted). It also prohibited pursuit of bears and bobcats with hounds, prohibited bear baiting (already prohibited by regulation), and allowed for a change in the composition of the Fisheries and Wildlife Board, which establishes regulations and oversees the operations of the MDFW.

Source: Robert D. Deblinger

and implementation stages by promoting ballot initiatives, litigation, and legislation to influence the authority of wildlife agencies with respect to damage management. Grassroots involvement often arises at the initiative of stakeholders in response to problems that they perceive.

Recognizing grassroots stakeholder activity quickly can be a tremendous advantage to agencies because such activity indicates which damage management issues are in urgent need of attention. Partnering with stakeholders who are initiating grassroots activity can be valuable in the management process. Ignoring grassroots involvement can be perilous. Citizens who do not consider an agency a potential partner to resolve their problems may proceed to achieve their objectives without regard for the agency. When this happens, efforts to circumvent or curtail agency

authority (e.g., through ballot initiatives) may be undertaken or citizens may take illegal "management actions" of their own—sometimes putting a valuable wildlife resource at risk.

Step 5: Designing Stakeholder Engagement Strategies

A basic guideline in designing stakeholder engagement strategies is to select involvement techniques that are consistent with your objectives for stakeholder involvement. The techniques you choose should fit together as a strategy reflecting one of the approaches to stakeholder engagement described in the preceding section. Our discussion of techniques is organized by stakeholder involvement objectives.

Common stakeholder involvement techniques

GATHERING INFORMATION

Several techniques are commonly used to gather first-hand information from or about important stakeholders: public meetings, solicitation of comments, surveys, and focus groups. Each technique has both pros and cons.

Public meetings. Public meetings typically allow managers to present information about a wildlife damage issue and then solicit feedback from stakeholders. Public meetings can reveal the range of concerns and opinions about particular management proposals.

PROS

- Public meetings give managers the opportunity to provide background information that allows attendees to learn something about the issue.
- Public meetings also give participants (including managers) a chance to learn about the perspectives of other stakeholders attending.

CONS

- People attending public meetings tend *not* to be representative of the community of stakeholders interested in a particular issue.
- Meetings attract vocal critics of management objectives or programs who can sometimes dominate meetings out of proportion to their actual numbers or the importance of their stake and gain media exposure through this kind of event.



- Some stakeholders find it inconvenient to attend meetings because of location or timing, making it difficult for managers to gather input from all important stakeholders.
- Sometimes it is difficult to keep attendees focused on the most critical information needs.

Solicited comments. Another technique commonly employed by agencies is to solicit (e.g., via mass media) written comments (e.g., letter, e-mail) on management issues or programs.

PROS

- Submitting written comments is an input vehicle available to all interested stakeholders, and a more convenient form of participation than attending public meetings for many individuals.
- Agency requests for public comment can also be accompanied by background information about an issue to stakeholders—sometimes this background information is in the form of an environmental impact assessment.

CONS

- Soliciting written comments does not provide the opportunity for interaction between diverse stakeholders and the learning such interaction

provides. The quality of input, therefore, may be lower than with some other techniques.

- Solicited comments are seldom representative of all stakeholders for a given issue—interest groups with many members can sometimes generate a flood of letters in response to agency requests for input.
- No opportunity exists for immediate or spontaneous clarification or elaboration of points if the agency does not feel the comment is clear.

Surveys. Surveys are described in the appendix on research methods.

PROS

- Surveys are effective for gathering information from a large, widely dispersed, representative sample of stakeholders.
- Surveys can be designed to gather the most critical information needed.
- Most surveys, particularly mail surveys, can ask numerous questions and, therefore, provide a large quantity of information.

CONS

- Although some background information on an issue can be provided in surveys, the op-

Fig. 3.7 Public meetings are a common tool for learning about stakeholders' perspectives. (Reprinted with permission from the Ithaca Journal, January 18, 2001 edition)



Fig. 3.8 Surveys are a useful way to collect a large quantity of information from a large and representative sample of stakeholders.

portunity to inform respondents before they offer feedback usually is limited.

- Survey respondents do not have a chance to interact with and learn from each other. Consequently, the feedback agencies obtain from surveys can be based on limited knowledge of other stakeholders' concerns.

Focus groups. Focus groups involve gathering eight to twelve individuals to provide feedback on pressing management questions. Typically focus groups are designed to convene stakeholders representing similar interests. To broaden input, a series of focus groups may be used to collect information from separate groups, each representing different stakes, interests, or demographics.

PROS

- Focus groups allow the opportunity for interactions between participants. The learning that occurs through these interactions may yield higher quality feedback.
- Managers often can gather more detailed feedback from each participant in focus groups than with other methods.

CONS

- Only a very limited number of individuals can participate in focus groups, even if a series of them is held. Therefore, interested stakeholders may feel left out of the process and be less supportive of management plans developed based on focus groups alone.

IMPROVING JUDGMENT

As we discussed in the section on stakeholder engagement objectives, sometimes it is important to go beyond gathering information from stakeholders and to have them judge the implications of that information for management. Techniques that allow for stakeholders to deliberate with each

other about management issues are particularly well suited for this purpose.

Citizen task forces. A citizen task force (CTF) typically engages 10–15 diverse stakeholders in a process of trying to reach consensus, or unanimous agreement, on management recommendations (e.g., population objectives for a species causing damage or appropriate actions to achieve these objectives). CTF members are provided detailed background information about the management issue and have the opportunity to request additional information during the course of their discussions. Usually a CTF will require several meetings to accomplish its task.

As stakeholders are selected to participate in a CTF, managers aim to represent a broad array of interests rather than choose a representative

sample. The goal of a CTF is to identify a solution that will satisfy all or most stakeholders.

PROS

- CTFs have been effective at educating participating stakeholders (i.e., those on the CTF) about important management considerations and other stakeholders' perspectives. Indeed, CTF members often increase appreciation of others' interests as a result of their participation.
- Relationships between participants tend to improve, increasing their capacity to work together on management issues.
- If consensus is achieved on CTF recommendations, these recommendations typically have strong support of CTF members, making implementation easier for managers.

CONS

- The benefits of CTFs are limited to the small number of stakeholders who have the opportunity to serve on one. Therefore, even if strong support for the recommendations exists among CTF members, that same support may not be present among the broader populace without additional stakeholder involvement strategies.
- Consensus is not possible in all cases, and, when it is not, some CTF members may become disillusioned with the process and oppose resulting recommendations.

Workshops. Workshops bear some similarities to public meetings. They can be open to all interested participants (but not always). What distinguishes workshops from public meetings is that attendees are often divided into small groups and assigned some specific tasks that will contribute to management needs. Workshops could focus on generating a list of problems that need to be addressed; brainstorming options for addressing problems; identifying advantages and disadvantages of different options; or recommending a package of management options.

Box 3.5 Monitoring Stakeholders for Wildlife Damage Management

The mission of the Wildlife Services Program of the U.S. Department of Agriculture's Animal and Plant Health Inspection Service is to "provide federal leadership in managing damage caused by wildlife," and its vision is to "improve the relationship of people and wildlife by utilizing wildlife damage management strategies that are biologically sound, environmentally safe and socially acceptable" (Clay and Schmidt 1998:216).

Wildlife Services administrators have long recognized the role of values and attitudes in shaping the program's activities. Experiences over three decades clearly identified these stakeholders: Wildlife Services employees; other state and federal agencies that deal with wildlife, health, transportation, and agriculture; agriculturalists; nongovernmental organizations representing recreational, animal protection, or environmental interests; wildlife professionals; and the general public. Development of a cooperative research relationship with Utah State University in 1991 expanded Wildlife Services' ability to learn more about stakeholders and how to incorporate that understanding into decision making. Wildlife Services has used public comment, quantitative surveys, and focus groups to gain insights about stakeholders.

Public comment. In 1994 Wildlife Services analyzed and responded to stakeholders who had provided public comment during a nationwide environmental impact statement process. The process provided qualitative information on stakeholders' concerns. Many states require similar processes, giving Wildlife Services ongoing opportunities to identify new stakeholders and monitor trends in stakeholder interests.

Quantitative surveys. In 1993 and 1995, Wildlife Services surveyed people who received assistance from the agency, revealing high satisfaction with Wildlife Services. In 1995, the agency conducted a national survey to gauge public attitudes toward various aspects of wildlife damage management. The survey identified public preferences for various control techniques and helped reaffirm key public concerns related to public transportation safety, animal suffering, control method efficiency, and relief from agricultural damage.

A 1995 survey of Wildlife Services employees helped the agency compare the atti-

tudes of employees with those of the public. Another 1995 survey collected data on members of The Wildlife Society, which revealed that wildlife professionals are not homogeneous in their views on wildlife damage control. The study found that many professionals had negative views toward traditional wildlife damage tools and techniques.

Focus groups. In 1993, Wildlife Services conducted six focus groups representing three interests: wildlife management, animal protection, and traditional agriculture. Each group was asked to comment on these questions: For what purposes is wildlife damage management appropriate? What techniques are appropriate? What changes are needed in Wildlife Services? The focus groups made these recommendations: (1) improve communication, (2) become more open and accessible, (3) emphasize research-based decisions, (4) improve control tools and techniques, and (5) improve organizational culture and skills.

In 1994 and 1995 Wildlife Services followed up by holding focus groups with its own employees in 17 western states. A key finding was that employees wanted respect and understanding from the public and believed the public wanted them to be compassionate and professional.

Actions. Stakeholder input identified substantial public support for a federal role in wildlife damage management, support for protection of public safety and agricultural interests, and high satisfaction among traditional agency stakeholder groups. Key stakeholder concerns also were identified that, if not addressed, would surely erode public support for the agency.

As a direct result of stakeholder response, Wildlife Services administrators now meet regularly with a range of stakeholders. Information about agency activities is accessible to the public on the World Wide Web and in a newsletter. Research on nonlethal control techniques was increased. Administrators encourage staff members to participate more in professional forums and have formalized their expectations that research staff members would publish their work in peer-reviewed scientific journals.

Source: William H. Clay and Robert Schmidt

PROS

- Like CTFs, workshops can improve relationships between stakeholders by having them work together on common tasks.
- Workshops can engage more stakeholders than CTFs and, therefore, their benefits can extend to more individuals.

CONS

- Workshops are not ideal for complex tasks that require attendees to meet over multiple sessions. With the large number of people that can attend a workshop, it is impossible to ensure that the same individuals will be able to attend multiple sessions. Therefore, workshops must break down tasks into units that can be accomplished in a single session.

IMPROVING THE MANAGEMENT CLIMATE

Improving the management climate has three objectives: (1) informing stakeholders, (2) improving stakeholder relationships, and (3) improving stakeholders' capacity to contribute to management.

Managers have many reasons for wanting to inform stakeholders. These include raising awareness of a problem, increasing understanding of the impacts of various management options, and increasing support for management objectives and actions. A variety of techniques are appropriate for influencing the beliefs and attitudes of the stakeholders within a community. These include issuing press releases, developing educational brochures, and preparing and distributing environmental impact assessments.

These techniques have the advantage of being able to reach a diverse and large number of people. They have the disadvantage of being very limited interventions. Most people pay little attention to educational materials, and, consequently, they need to be exposed to this material repeatedly if it is to have an effect. Therefore, an action such as issuing a press release is likely to have little value by itself. It needs to be part of a much broader strategy employing a set of public outreach techniques.

Of course, beliefs and attitudes can also be influenced by some of the techniques described earlier. Public meetings, CTFs, and workshops all

provide wildlife agencies the opportunity to disseminate information as well as collect it. Indeed, merely the act of soliciting input from the public can improve attitudes toward management decisions, as long as an agency uses such input in decision making and lets people know it.

Improving the management climate also involves pursuing objectives that may yield few benefits in the short term but lay the groundwork for future management. These objectives include (1) improving relationships between stakeholders and (2) increasing the capacity of stakeholders to contribute to management. These objectives are best served by techniques that allow the opportunity for extended interaction between diverse stakeholders, and the learning that such interaction entails. Public meetings, CTFs, and workshops are among the most appropriate techniques. They can develop a solid foundation for management over the long term by increasing the ability of critical stakeholders to work together, increasing their understanding of management issues, and improving their ability to juggle competing considerations in reaching management decisions.

General considerations for design of stakeholder involvement

Several considerations are critical when developing stakeholder involvement strategies. First, regardless of the particular technique selected, what is most important is how that technique is tailored to meet objectives. Public meetings can be designed either to promote agency positions or they can be effective means of educating stakeholders and gathering input. The difference lies in how the meeting is structured. A clear vision of what you want to accomplish is key to tailoring particular techniques to your needs.

A second consideration is that rarely will one technique be adequate to meet all stakeholder engagement objectives. Stakeholder involvement strategies, therefore, involve the artful combination and tailoring of a variety of techniques. For this reason, consultation with a citizen participation specialist will be valuable as you develop a stakeholder engagement strategy.

Finally, the techniques you employ may be less important than the mind-set with which you approach them. Wildlife managers who have been successful at involving stakeholders as a

regular way of doing business often share several key traits.

Key traits of wildlife managers

Receptivity. Be open and receptive to unsolicited input from stakeholders. This input can take many forms—telephone calls, office visits, letters, stakeholder newsletter columns, letters to the editor, editorials, news coverage of all types, posters, graffiti, demonstrations, etc. Such input contributes to understanding the landscape of public opinion surrounding a wildlife damage management issue, but managers must remember that small minority interests are sometimes capable of making large media impacts, often out of proportion with the actual stake of these interests in an issue.

Inquisitiveness. To avoid a limited perspective, the wildlife manager needs to inquire about stakeholder needs and interests. The inquisitive manager asks several questions:

- » What is the range of relevant stakes associated with a particular management issue?
- » Who are the people with this stake?
- » What's the size of this group?
- » What are their relevant beliefs, attitudes, and behaviors?

Seeking answers to these questions can help managers anticipate as well as recognize the potential for problems. This gives the inquisitive manager an important “edge” that can enable him/her to avoid problems more often.

Problem solvers. Effective managers need to be problem solvers, not just process managers. Effective problem solving requires definition of the problem and scoping out its important elements.

- » What are the kinds of management decisions that will inevitably be made?
- » Who should be involved, and to what degree?
- » Is stakeholder input enough for this situation, or will active participation be needed?
- » Is participation sufficient, or will stakeholders expect to be involved in decisions?
- » Is involvement in decisions sufficient, or is it essential for stakeholders to be involved in implementation and evaluation of the management effort?

Decision focused. The principal value of human dimensions insight is to serve management decisions. General human dimensions understanding can aid planning and improve timely response to changing conditions, enabling an agency to be agile as well as adaptable. An ongoing, inquisitive, problem-solving approach to accumulating various kinds of human dimensions knowledge, such as stakeholder attitudes and values, multiple “wildlife acceptance capacities,” influence of experience and risk perception on attitudes, etc., can inform wildlife managers as they make decisions in the daily performance of their duties.

Step 6: Implementing Stakeholder Engagement

In this section we discuss implementing stakeholder engagement strategies. Considerations include challenges to expect when implementing stakeholder engagement, defining the agency's role, and recommendations for how to get the most out of stakeholder involvement efforts.

Challenges to stakeholder engagement

Conducting a successful stakeholder engagement process involves both *internal* (related to the management agency and how it operates) and *external* (related to the public and how the agency interacts with it) challenges. Meeting these challenges successfully determines whether the benefits of stakeholder engagement will be reaped.

Citizen participation is sometimes viewed as threatening to wildlife management agencies because some forms of participation involve sharing control over decision making and implementation. Agencies may be reluctant to let citizens with little biological expertise contribute to wildlife management decisions. They may believe that technical decisions are best left to technical experts. These are attractive justifications for avoiding stakeholder engagement, but don't lose sight of the important role values play in all wildlife management decisions. Decisions about management objectives and about management methods are based in large part on stakeholder values. Determining values that are to guide management is certainly in the domain of stakeholders.

Even agencies that want to engage stakeholders may find it difficult because of historically poor relationships with certain groups. These may range from agricultural organizations that do not believe their situations have been considered adequately to animal welfare organizations who are philosophically opposed to wildlife management, or private property rights advocates who resent the government intrusion. Poor relationships and mutual distrust can thwart attempts to engage citizens productively in wildlife damage management. In these cases, agencies may have to take a long-term view of citizen participation, attempting first to create or restore trusting relationships with certain stakeholder

Box 3.6 Identifying Facilitators

Recognizing the value of good facilitation is one thing, but finding skilled facilitators is another. Fortunately, several means exist to help agencies identify facilitators:

Cooperative Extension offices often have trained facilitators on staff, some of whom are knowledgeable about both wildlife and public policy issues. They have successfully facilitated meetings, workshops, and citizen task forces that address wildlife damage concerns.

Several organizations of facilitators and conflict resolution practitioners may be of

help in either identifying skilled professionals or providing facilitation training for agency staff. These organizations include:

- » U.S. Institute for Environmental Conflict Resolution (Suite 3350, 110 S. Church Avenue, Tucson, AZ 85701; 520 670-5299)
- » Association for Conflict Resolution (1527 New Hampshire Avenue, NW, Third Floor Washington, DC 20036; 202 667-9700)
- » The International Association for Public Participation (P.O. Box 10146, Alexandria, VA 22310; 800 644-4273)

groups before expecting their involvement in management decisions or actions.

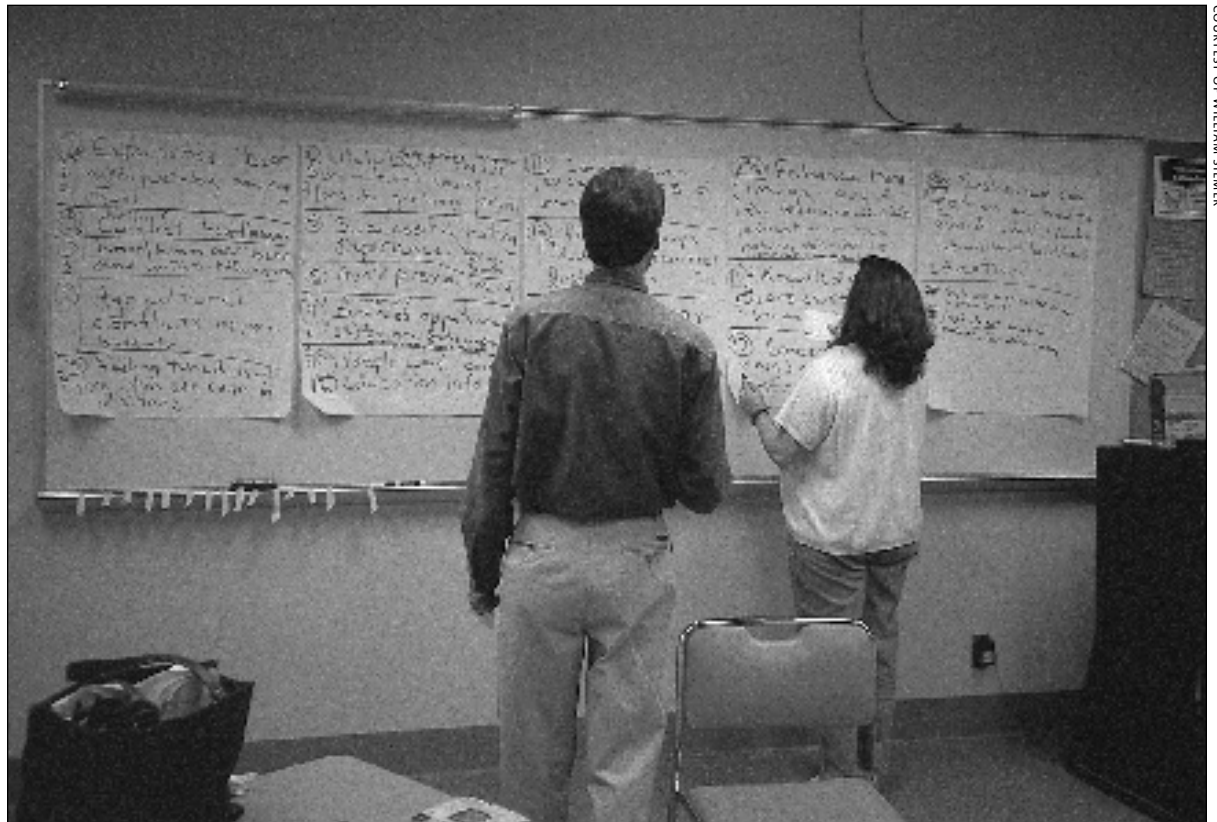
Defining the agency's role

The most appropriate role of agency staff in stakeholder involvement activities is not easy to specify because agencies may wear many differ-

ent hats. If responsibility for management decisions is yielded in part to stakeholders (e.g., citizen task force), agency staff sometimes play the role of expert advisors—educating stakeholders about wildlife biology, ecology, the impacts of species, the effects of alternative management actions, and other important management considerations. Although this can be a valuable role to play, care is needed in exercising it. Some stakeholders will view agencies as biased and not consider the “expertise” they offer as neutral, whether or not this perception is justified. To avoid suspicion, wildlife managers must not blur the distinction between their scientific and ethical judgments when playing the expert advisor role (Decker et al. 1991)

Agency staff may serve as facilitators, concentrating on designing and implementing stakeholder involvement processes. This is a useful role, but many agencies face limitations as they try to fill it. Agency staff may not have sufficient expertise in stakeholder involvement processes to do this well. Also, the importance of a *neutral*

Fig. 3.10 Accurately recording stakeholders' comments at public meetings increases their faith in involvement processes.



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facilitator in stakeholder involvement processes can not be overstated—process facilitators must forego opportunities to advocate their own agenda because their primary job is to allow *others* to express their perspectives. Therefore, having agency staff serve as facilitators may hamstring them in their ability to contribute their perspectives to quality management decisions. Outside facilitators are often hired for this reason.

It is becoming more common for agency staff to play the role of one of many stakeholders in management decision making—this is particularly true in co-managerial approaches. In other words, agencies may advocate particular objectives and actions, but share decision making with others. For example, an agency staff member might sit on an interagency task force with other state and local government representatives to make decisions in a local area about the management of a particular species.

Step 7: Evaluating Stakeholder Engagement

The final step in stakeholder engagement—evaluation—should not be overlooked. Evaluation can be beneficial to agencies and stakeholders alike. We already have articulated the ends that might be sought through stakeholder involvement, and these are the typical foci of evaluation.

Foci of evaluation of stakeholder engagement

- » obtaining good quality information about stakeholders;
- » promoting sound judgment in management decisions;
- » improving relationships between stakeholders;
- » informing stakeholder attitudes, beliefs, or behaviors; and
- » improving the capacity of stakeholders to contribute to management.

Given the resources agencies may spend on stakeholder involvement, it is important to know if the objectives of engagement have been achieved. Did stakeholder involvement result in more public support for a management decision? Did a survey of farmers result in better understanding of how much deer damage they could tolerate? Did the members of a task force fully understand the trade-offs involved in differ-

ent methods of managing suburban geese before they recommended a particular method?

General rules of thumb for evaluating stakeholder engagement

- » **Tie your evaluation to your objectives.** Earlier, we recommended clearly articulating your objectives for stakeholder involvement. Use these objectives as a focus for your evaluation.
- » **Be open to unexpected outcomes.** Although it is important to determine whether you achieved your stated objectives, it is worthwhile to keep in mind that *unexpected* outcomes—both good and bad—also may result.
- » **Use appropriate methods.** Both research and stakeholder involvement methods can be suitable for evaluation purposes. The key consideration is clearly articulating the evaluation questions you are trying to answer in advance and ensuring that the methods are suitable for answering those questions.
- » **Incorporate evaluation throughout stakeholder involvement.** “Evaluation” tends to be an image of an activity undertaken after something is completed—suggesting that you might turn to evaluation only after stakeholder involvement is complete. But evaluation is often most useful during stakeholder involvement activities so that they can be improved. There are at least two advantages to integrating evaluation with stakeholder involvement: (1) it allows you to adapt and improve the stakeholder involvement process as you go and (2) it requires less of an investment of resources if evaluation can be incorporated into activities that are already taking place.
- » **Consult a human dimensions research specialist.** Evaluation is a form of inquiry, and, consequently, it can raise many thorny issues about the best approach to take. Seek advice from a human dimensions specialist.



Section Summary

Stakeholder engagement means involving people in making, understanding, implementing or evaluating wildlife management decisions. Though strategies for effective stakeholder engagement vary by context, it is helpful to consider seven general steps as you design an engagement process. First, it helps to develop a situation analysis, using tools such as Hahn's issue evolution model, to describe the characteristics of the wildlife damage issue you are trying to manage. To effectively design an engagement approach, you also will need to carefully identify stakeholders—the people who will be affected by, or can affect management related to your issue. You will need to establish clear objectives for involving stakeholders in management. Your objectives might include improving the information-base for decision-making, improving the judgments on which decisions are based, or improving the social environment in which wildlife damage management occurs. Having taken these steps, you will be better able to select an overarching stakeholder engagement approach. Wildlife managers have taken five basic approaches to stakeholder involvement: expert authority, passive-receptive, inquisitive, transactional, and co-managerial. Choosing the best approach will depend on a variety of factors, including: the level of conflict over the issue; the number and type of stakeholders affected; stakeholder interest in and awareness of the issue; legal mandates to which an agency must adhere; the existence of other government entities that can influence management; agency resource limi-

tations; and the need for information from stakeholders. Within your overall stakeholder engagement approach, you also will need to carefully select one or more specific strategies, like public meetings, focus groups, or quantitative surveys. Each of these specific strategies have pros and cons you will need to consider. You may face internal and external barriers to stakeholder engagement. You will need to identify and address those barriers to successfully implement the stakeholder engagement approach you select. Finally, you should consider how you will evaluate your process, to determine whether your stakeholder engagement objectives were achieved.

Richer stakeholder engagement facilitates a professional shift toward stakeholder-identified impacts as the primary focus of management. We encourage a deliberative, purposeful effort to define goals of management and specify measurable objectives in terms of impacts that reflect human values. If stakeholder-defined impacts can be articulated clearly in terms of important affected human values, wildlife managers can become more creative in developing a wider range of management interventions to achieve the outcomes people desire.

We believe that society will be well served by wildlife managers who adopt a management perspective that integrates human and ecological dimensions, engages stakeholders in all aspects of the management process, and explicitly seeks impact-focused objectives that reflect operant human values. In many respects, wildlife managers dealing with damage management are leading the way on all these fronts.

Human Dimensions Research Methods

Some Background About Human Dimensions Research Methods

Both quantitative and qualitative research methods are used in human dimensions research. Quantitative methods generally are favored if data are needed from a large representative sample and researchers must rely on measures that can be easily quantified. Often quantitative human dimensions data are collected through some type of survey: face-to-face interviews, telephone interviews, or mail surveys using questionnaires. Each of these approaches to surveys has advantages and disadvantages (Table A.1).

Quantitative methods may have limited utility for certain management needs. Many researchers believe that reducing complex phenomena, such as attitudes, beliefs, and behaviors, to numbers necessarily involves discarding or ignoring a considerable amount of information. Sometimes that information is relevant or even critical for an adequate understanding of the management issue.

Under such circumstances, qualitative research methods are valuable. Qualitative methods generate in-depth understanding of people through their own words or observation of their actions (Table A.2). These methods take three basic forms. In individual or group interviews, respondents are encouraged to respond to questions at length and in their own words. In observation, researchers record detailed written or verbal descriptions based on their direct observation of stakeholder behavior. In document analysis, excerpts from written documents are used to characterize stakeholders.

Many variations of quantitative and qualitative methods exist. A human dimensions study may use both quantitative and qualitative methods to benefit from the strengths and compensate for the weaknesses of each. Sorting out which methods are best suited for meeting the information needs of a particular situation should be undertaken as a partnership between the wildlife man-

Box A.1 Developing Human Dimensions Expertise

Wildlife managers have several avenues to pursue to increase their human dimensions knowledge:

Human dimensions specialists. Individuals with human dimensions expertise, who can aid in the planning and execution of studies, are often found at universities—particularly land-grant universities. They may be on staff in departments of wildlife, natural resources, rural sociology, or related fields. Responsive Management (130 Franklin Street, Harrisonburg, VA, 22801; 540-432-1888), a public opinion polling and survey research firm specializing in wildlife and natural resource issues, is also widely used by wildlife management agencies. Other public opinion polling and survey research firms may also be able to help managers address human dimensions issues. Some state wildlife agencies have hired human dimensions specialists to work within their agencies.

Human dimensions literature. Many widely available texts and journals can in-

crease managers' understanding of human dimensions research. Don Dillman has authored several "how to" texts to guide survey research that are widely used by human dimensions researchers. Many of the prominent wildlife and natural resources journals (e.g., *Wildlife Society Bulletin*, *Society and Natural Resources*, *Human Dimensions of Wildlife*) publish articles on human dimensions topics that can help managers increase their understanding of these issues.

Conferences and workshops. Conferences and workshops provide valuable opportunities to interact with a wide variety of managers and researchers with experience in human dimensions. The Wildlife Society's annual conference (check the program to see if human dimensions papers are to be presented) and the International Symposium on Society and Resource Management are two of the most widely attended conferences.

ager and the human dimensions research specialist. In the next section, we offer general guidance for the wildlife manager.

Questions to Ask When Planning a Stakeholder Study

When managers call on social scientists to develop a stakeholder study, they typically find themselves first asked to articulate the management problem to be addressed. The wildlife manager brings to the study unique knowledge and insight about the context: the history of management actions and public reactions to them, tensions and alliances between stakeholder groups, and information about what the stakeholders need to learn about the issue at hand. Applying those manager insights is critical

Table A.1 Strengths and Weaknesses of Quantitative Methods

Method	Strengths	Weaknesses
Face-to-face interview	<ul style="list-style-type: none"> allows a lengthy instrument to be administered has a high item-response rate, because interviewees usually answer every question can include complex questions can include branching,* depending on the answers to screening questions allows the interviewer to clarify questions and probe for a more complete answer allows for field observation of equipment used, game harvested, and other factors of interest can include people who aren't likely or able to respond to telephone or mail 	<ul style="list-style-type: none"> is expensive because of staff time and travel costs requires highly trained interviewers may require a lot of time to reach potential respondents and complete all interviews has potential for interviewer bias has potential for social desirability bias (when answers are socially acceptable rather than truthful)
Telephone interview	<ul style="list-style-type: none"> can be implemented quickly is highly conducive to branching (with computer-assisted interview instruments) provides more control over who answers questions than a mail survey has a higher cooperation rate than a mail questionnaire (but lower than a face-to-face interview) can be implemented with a geographically dispersed group 	<ul style="list-style-type: none"> must include questions that are brief and easily understood must be short has some potential for social desirability bias requires highly trained interviewers willing to work evenings and weekends
Mail survey	<ul style="list-style-type: none"> can include complex questions can be implemented to a geographically dispersed group allows respondents to reply at their convenience, resulting in better memory recall (they can verify the information) has low potential for social desirability bias 	<ul style="list-style-type: none"> can include only a limited amount of branching raises problems of nonresponse bias takes a long time—usually eight weeks—before all responses are in provides no opportunity to explain questions doesn't provide certainty about who actually completed the questionnaire doesn't give the researcher complete control over the order in which the questions are answered

* "Branching" means that the questions respondents are asked depend on the answers they have given to previous questions.

to shaping a useful study. The social scientist should not develop and implement a study of stakeholders without ongoing involvement of the wildlife manager. Here are some questions you'll want to consider before and after you decide you need a study.

Do we really need a study?

When an issue is particularly contentious, conducting a study is sometimes a tactic used to

create a cooling-off period for the opposing stakeholders or to postpone a decision to a more propitious time. These are the *wrong* reasons for a human dimensions study.

Does the information already exist?

Perhaps the information you want already exists. Perhaps there are secondary data, obtained for another purpose, that could provide adequate insight for the current situation. A literature review or consultation with a human dimensions spe-

Table A.2 Strengths and Weaknesses of Qualitative Methods

Method	Strengths	Weaknesses
Interviews	<ul style="list-style-type: none"> respondents describe their characteristics in their own words entails face-to-face interactions, in which any questions or misunderstandings can be clarified opportunity for researcher to ask follow-up questions to increase relevance of data group interviews offer opportunities for deliberation of points 	<ul style="list-style-type: none"> requires skilled and knowledgeable interviewers different interviewers may collect different data because of choice of follow up questions can be time-consuming and expensive often requires travel to dispersed sites
Behavioral observation	<ul style="list-style-type: none"> is unobtrusive provides direct information about human behaviors of interest researcher often has minimal influence on what is observed 	<ul style="list-style-type: none"> requires field staff that have extensive training different researchers may collect different data because of attention to different details does not allow researchers to ask questions to increase relevance of data can be time-consuming and expensive often requires travel to dispersed sites
Document analysis	<ul style="list-style-type: none"> researcher has no influence on data provides insights about communication and relationships between groups allows for exploration of change over time is unobtrusive and does not interfere with ongoing communication between groups 	<ul style="list-style-type: none"> does not allow researchers to ask questions to increase relevance of data

cialist may uncover a study of a similar situation that can be generalized to your situation.

Is a new study worth the cost?

Sometimes more or better data would be reassuring, but the extra measure of validation or precision does not justify the expense of a study. In fact, many decisions aren't important enough to warrant a study at all.

Will a study build unrealistic expectations?

Wildlife damage managers sometimes want to identify support for an innovative management action and look to a stakeholder study as a way to verify the support. There's nothing wrong with that. However, the decision to undertake such an inquiry needs to be made cautiously; moving ahead with the study may build expectations for follow-through that the agency can't meet if an action is later determined to be biologically, fiscally, or politically unfeasible. That can create a public backlash.

Is there enough time?

Occasionally input is needed too quickly to conduct an inquiry with proper technique; a good study done too late to be used in decision making is a waste of resources. It may be possible to launch a limited, but credible, study on short notice with rapid turnaround time, but more often such studies have limitations that lead to disappointment in the outcome. Don't ask the researcher to compromise on methodology to get the job done on an unreasonable schedule.

Who needs to be involved?

It's absolutely necessary that wildlife agency leaders and staff, as well as key stakeholders, be supportive of the human dimensions inquiry. Frequently the decision-making process can be enhanced significantly simply by including other relevant entities (e.g., other land management agencies and nongovernmental organizations) in

the design and implementation of a study. They can make valuable contributions to study development, and through their involvement they become vested in the study and more comfortable with the application of the results in decision making.

Who should do the study?

Many considerations go into a decision about who should conduct a stakeholder study in a particular situation. Considerations include time constraints, political climate, cost, potential contribution to the knowledge base and theory, internal and external perceptions of bias on the part of the research entity, the effect that the reputation of the research entity may have on peer and stakeholder acceptance of the results, and so on.

One easily can imagine circumstances where a stakeholder study should not be conducted by agency staff. If an agency has already taken a position on a contentious issue, any study it conducts directly would be seen as an attempt to reinforce its position. Similarly, even when a non-governmental organization wants to conduct or sponsor a study simply to enhance the human dimensions knowledge base on an issue, the public may not have faith in such a study if the organization has a particular position on the issue. In such situations you should consider retaining the services of a respected outside researcher.

What decision is to be served by the study; and what kinds of data will be most helpful?

Focus on the decision to be made and the decision makers to ensure the data you collect will be useful. For example, you may be considering a bait-and-shoot program to manage an urban deer problem. A citizen task force in a community may have decided it's the only feasible action, from a population-dynamics viewpoint and in consideration of other factors. What you want to know is whether the residents in the problem area would find that bait-and-shoot program acceptable and why. Seeking less specific information (e.g., general attitudes about wildlife) at this point will not help predict acceptability of the decision.

On the other hand, perhaps your informal assessment of the situation doesn't indicate an obvious action preference, and you're still considering various management alternatives. In that case you may want to generally learn whether residents would find lethal or nonlethal alternatives acceptable.

Should there be an external study advisory team?

Stakeholders usually have little involvement in the design and implementation of human dimensions studies. But there are many situations when it is useful to involve stakeholder representatives as a study advisory team. Interaction among managers, researchers, and an advisory team during the design and implementation of a study can increase public confidence in the study design and public trust in study findings.

Situations when study advisory teams are useful

- » when multiple entities have jurisdictions relevant to the issue (include people from those entities);
- » when the issue is contentious enough that organized factions don't trust the wildlife agency, or any other single organization, to design and implement an unbiased study;
- » when insight from people involved in an issue (both those within the wildlife agency and those external to it) needs to be on tap from beginning to end, and their commitment to an advisory team will help ensure their input;
- » when others will have key roles in making or communicating a management decision, and their involvement on an advisory team will build their knowledge; and
- » when others are paying for the study, and their involvement partly or entirely fills accountability requirements.

In each situation, the purposes of an advisory team must be clear, and the roles and responsibilities of each individual and the team overall must be spelled out and agreed on at the outset to avoid confusion of purpose and mixed expectations. Care must be taken with respect to the process of identifying advisory team members.

What information do you want?

Think carefully about the kind of information you need to inform the decision to be made. Leaving that task to the researcher would be inappropriate. Most researchers wisely will refuse to do your job. You should be able to explain the



kind of information you need and why. *Don't draft a questionnaire*; rather, develop information objectives that the human dimensions specialist can use to design the questionnaire. Distinguish between information that would be interesting for background and that which is essential.

Who will handle the media and how will media relations be coordinated?

Some studies are low-key undertakings that generate little media interest. Other studies are focused on hot topics (e.g., culling deer in a national park) that interest the media. Media relations in the latter case can affect a human dimensions study in several ways. First, high profile coverage before and during implementation can affect the results themselves. Second, the human dimensions researchers and wildlife managers can be distracted dealing with the media; it takes time to answer reporters' questions and those of stakeholders generated by the media coverage. Third, media treatment of a study can create tensions between the agency

and the researcher (e.g., misquotes or even accurate statements from the researcher that aren't in line with agency policy) and between the agency and the stakeholders. These concerns need to be addressed by planning media relations ahead of time.

Do people know enough?

People can be enticed to respond to almost anything. The goal is to be sure you're getting truthful, accurate responses to reasonable questions. Expectations of stakeholders' ability to provide information has to be realistic. Ask appropriate, relevant, and needed questions.

Answers to questions about hypothetical scenarios or potential interactions with species that people haven't experienced will necessarily be superficial, no matter how sophisticated the inquiry is otherwise. Responses to such questions may reveal how a stakeholder would react to a proposal, but they wouldn't reveal the stakeholder's likely response to the actual scenario experience.

Fig. A.1 Media coverage can have a substantial effect on wildlife damage management.

How precise do results need to be?

When designing a sampling strategy, you should anticipate being asked how precise the results need to be. Can you live with fairly broad estimates—say plus or minus 7%—of important population parameters (e.g., level of support for a management program, percentage of public experiencing wildlife damage, etc.)? Or can you tolerate only a 3% error range? Your answer will make a big difference in sample size, which in turn will influence cost and time.

How confident must you be in the results, statistically speaking? Do you need to have only a 1 in 20 chance ($P = 0.05$) of a measure for the stakeholder population falling outside the error range? Or, given the level of uncertainty that exists for other parameters in a decision, could you accept a 1 in 5 ($P = 0.20$) chance that the actual value for a parameter might not be within the error range specified? The more confidence you demand, the greater the sample size required, and the higher the cost and longer the time required for the study.

Sometimes subsets of a population of interest need special attention. For example, for a statewide assessment of farmers' acceptance of deer, a sample of 500 might be adequate. But if you want data from 10 deer management regions that is specific enough to allow you to be responsive to the needs of each region, geographicstrati-

fication of sampling would be needed. Each region would be sampled to give region-by-region data. The total sample size might jump to 5,000, and study costs would rise.

You'll need to consider precision, confidence, and stratification carefully to assure that the study yields information of the right kind and the right quality for decision making. Typically, you'll have to make trade-offs to keep the study within budget. Every case is unique, and it is the wildlife manager, not the advising researcher or statistician, who should make such decisions.

What about nonrespondents?

Unless a response rate is very high, you should be concerned about nonresponse bias. Forget about the justifications you have occasionally read in papers or reports using results from a survey with a low response rate (e.g., "We experienced a 25% response rate, which is good for single-wave mail surveys."). You'll want to know if the people who didn't respond have characteristics markedly different from those who did. If they do, knowledge of those characteristics may influence your interpretation of results and implications (i.e., generalizability). A nonrespondent follow-up is typically a telephone survey of a randomly selected group of nonrespondents to a mail survey, and sometimes even of nonrespondents to a telephone survey.

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- AIM** Adaptive Impact Management—managers focus on impacts and approach management as an adaptive, constantly learning, and improving process.
- Attitude** a person’s favorable or unfavorable evaluation of a person, object, concept, or action; an important component to predicting behavior.
- Behavioral observation** a research method wherein the researcher makes direct but unobtrusive observations of subjects during a sample of time periods or during the course of particular events.
- Citizen participation in wildlife management** agency-initiated involvement of wildlife management stakeholders in making, understanding, implementing, or evaluating management decisions for improved wildlife management.
- Cognitive risk perceptions** perceptions of the probability of an undesirable outcome.
- Co-managerial approach** management by two or more entities, involving shared control and responsibility for a particular wildlife management situation.
- Communication planning** a management activity that normally begins with an evaluation of program goals and an effort to link communication goals to program goals.
- CTF** Citizen Task Force, in which stakeholders are engaged in deliberation over management issues and typically are asked to recommend management objectives and/or actions.
- Economic impact** the change in economic activity, positive or negative, in a defined geographic area, that is associated with an activity or event.
- Expert authority approach** a top-down approach in which wildlife managers make decisions and take actions unilaterally.
- Face-to-face interviews** a research method where trained interviewers complete in-person

interviews, using a carefully designed interview protocol.

Focus group a method wherein a trained moderator poses a prepared set of questions or topics to a small, relatively homogeneous group of people. Reactions from the group are usually recorded for later analysis. Multiple groups may be convened as part of a single study.

Grassroots citizen participation citizen-initiated involvement in wildlife management processes.

Goals (management) broad statements of agency or organizational intent, often based on state and federal policies.

Impacts Countless effects are created through interactions among people, wildlife, and wildlife management agencies. Many effects are largely unnoticed by stakeholders. However, a subset of effects are recognized by people, interpreted as being important, and evaluated as being “good” or “bad.” We call that subset of effects “impacts.” When a particular effect is regarded as important to many people, it becomes an impact having management significance.

Inquisitive approach a management approach that actively seeks information about stakeholders, and their positions, either during a controversy or before an anticipated problem becomes a public issue.

Media planning the process of selecting appropriate channels for messages intended to reach particular stakeholders.

Nominal group technique a qualitative research method in which a trained facilitator convenes a small group of stakeholders or subject matter experts, elicits ideas in writing on a given topic or question, and has group members prioritize the ideas through a voting process.

Objectives (management) statements that provide measurable definition of the part of the agency or organizational goal that is expected within a particular time frame.

Participant observation technique a field research method in which the researcher records observations of subjects in a particular setting.

Passive-receptive approach an approach where wildlife managers are alert to but do not

actively and systematically seek out concerns of stakeholders.

Satisficing is a term used to describe qualitative decision-making techniques (typical for wildlife damage management scenarios) commonly employed by decision makers to select acceptable alternatives. Decision makers are often unable to reconcile the multiple conflicting desires of stakeholders or to conduct an analysis in a more critical or formal process (e.g., optimization, maximization). He or she proceeds with what may not be the “best” decision, but one that is “good enough.”

Secondary data data that already exist, such as the most recent census data.

Stakeholder (wildlife) any person or group who will be affected by, or will affect, a particular type of wildlife management.

Stakeholder involvement engagement of stakeholders in making, understanding, implementing or evaluating wildlife management decisions.

Transactional approach a management approach of obtaining public input in which stakeholders engage each other directly through interactive processes to articulate their values and stakes, rather than expressing those values and stakes indirectly, through the wildlife manager.

Values Desirable end states, modes of conduct, or qualities of life humans individually or collectively hold dear. Values are general mental constructs that define what is important to people.

WAVS Wildlife Attitude and Values Scale—a survey scale used to assess beliefs about the value of different types of human-wildlife interactions.

Wildlife management a set of processes and practices that purposefully influence interactions among and between people, wildlife, and habitat to achieve desired impacts, defined in terms of human values and objectives.

Wildlife stakeholder acceptance capacity (WSAC) The unique capacity of a given stakeholder group to accept the positive and negative impacts associated with a particular type of wildlife or wildlife management program.

Human-Wildlife Conflict Management

Wildlife management calls for skillful integration of social and biological information. This guide is designed to help wildlife managers with biological backgrounds integrate human dimensions considerations into decisions that involve conflicts between people and wildlife. The guide focuses on two components of the human dimension: social assessment and stakeholder engagement.

Part 1 presents a conceptual foundation for the practice of conflict management. Part 2 summarizes key insights about human tolerance of negative interactions with wildlife. Part 3 offers practical guidance on designing, implementing, and evaluating stakeholder engagement processes in support of wildlife management.

Wildlife management professionals, extension educators, and community leaders will find this guide a valuable resource as they work together to address human-wildlife conflicts in their local communities.



*The Northeast Wildlife Damage
Management Research and
Outreach Cooperative*

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MAY 4, 2023

The Doggoned Truth—Domestic Canines Are Not Wildlife’s Best Friends

THE SCIENCE IS CLEAR THAT OUR CANINE FRIENDS ARE SERIOUSLY DISRUPTING WILD ECOSYSTEMS, BUT WHY DO WE KEEP TURNING A BLIND EYE? DO WE WANT WILDLIFE TO PERSIST?

by **Todd Wilkinson**



Famous wildlife artist Sir Edwin Landseer's portrayal of a wounded stag being attacked by two dogs in the water. Image use courtesy Creative Commons license wellcomecollection.org/works/hs965sca CC-BY-4.0

EDITOR'S NOTE: For the record, a majority of *Mountain Journal* staff and board members are, or have been, dog owners. We adore our mutts but we are also pro-wildlife. This is the

by ~~LEAH WILSON~~

Consider the time of year: an afternoon during winter holiday week, between Christmas and New Year’s Day. The place—Blacktail Deer Creek Trail that rises through the hills above the Black Canyon of the Yellowstone River in Yellowstone National Park.

A friend is skiing solo. He hears the huffing sounds of an animal rapidly approaching from behind.

“Its sudden appearance really startled me,” he remembers.

As he turned to face it, the moving form sprinted past. It wasn’t a bison, moose, wolf or coyote, but rather a domestic German shorthair dog. The encounter happened miles from the nearest trailhead in a nature preserve world-renowned for its wildlife.

Soon, the pet’s owners, part of a group of five, came trudging forward on snowshoes, smiling and unaware. The encounter prompted this response from the incredulous skier: “I said to them, ‘You know, don’t you, it’s illegal to have a dog in the Yellowstone backcountry and it’s especially wrong to let it roam off leash. Your dog has no business being here.’”

Tension ensued. Yellowstone, my friend noted, is not a dog park nor a playground for personal pets. Rules exist for a reason.

dog poop immediately if and when the animal relieves itself.

The snowshoers swore that giving their dog exercise “and an enjoyable experience” was allowed in national parks. Becoming defensive, trying to come up with an excuse, they said they saw no signage at the trailhead informing them that bringing their dog or letting it run loose in the Yellowstone backcountry was forbidden.

“Then they asked me, treating me as if I was being obnoxious for calling them out. ‘Well, what harm is it? Our dog needs to get outside and have some fun. It isn’t hurting anything.’”

The problem, their tone suggested, wasn’t the dog. It was my friend pointing out their offense.

According to park personnel in Yellowstone and Grand Teton national parks I’ve spoken with, the above is a common misperception and attitude held by people who live in our corner of the wild West and, of course, among those who visit.



Hikers and a herd of dogs off leash coming down a backcountry trail. Studies show that when people are accompanied by dogs the flight response from wildlife is markedly amplified and in some cases may cause resident wild animals to be permanently uprooted. Screenshot obtained on Facebook

What is it about we dog owners who seem to think dogs and cats are tantamount to raising live human children—and as such, believe pups and kitties ought to be afforded all of the entitled privileges enjoyed by outdoor people? I have a dog. I love dogs. I live in a dog-crazy town, as so many communities are.

A humble observation: children typically don't chase and menace public wildlife and livestock, stress them out, attack them, maul them, kill them and scavenge dead animal carcasses for their meat and bones, as feral and domestic dogs do.

Kids also don't squat and leave behind prolific piles of stinky, unsightly poop in public spaces or the neighbors' yards, nor do they hump other peoples' kids or growl at and bite them. If they did, few adults would find those manners endearing or cute.

"People and their dogs disturb wildlife, and people are not always aware of or willing to acknowledge the significance of their own impacts ... Dogs subject wildlife to physical and temporal displacement from habitat, and dog scent repels wildlife with lingering impacts. Dogs disturb wildlife which can

reproduction. Dogs spread disease to and outright kill wildlife. People with dogs are much more detrimental to wildlife than people alone; off leash dogs are worse; and off-trail impacts are highest.” — scientist Lori Hennings who examined a multitude of studies exploring impacts of dogs on wildlife

Only a few months after the incident in Yellowstone, at Bighorn Canyon National Recreation Area along the Montana-Wyoming state line, my skier friend was out hiking and experienced another incident. This time, bighorn sheep charged toward him along the trail, sprinting past, trying to elude a domestic dog gaining in swift pursuit. The canine’s owners were nowhere in sight. When my friend verbally scolding them, they treated him as if he were a crazy old grouch.

For reasons that defy logic, some members of our species seem clueless about the responsibilities that come with having dogs, no matter where we live, but being dog educated

my friend, who has a graduate degree in natural resource management, has been a long-time dog owner for much of his adult life. He was stunned, not only by the brazen flouting of park regulations, but also the fact that the snowshoers didn't appear to have any inkling why letting dogs roam off leash in Yellowstone (or any wildland home to sensitive wildlife) is a really bad idea.

Last summer, while hiking the Bridger Foothills Trail on the Custer-Gallatin National Forest with a different friend near Bozeman, we were watching a mother mule deer and fawn foraging in a meadow. Suddenly, **three mountain bikers and a pair of dogs running beside them** appeared sending the startled deer scattering with one of the dogs giving chase to the fawn.

Mountain biking alone, **as scientific studies** note, has **negative impacts on wildlife** and they are compounded when riders bring their dogs. In numerous articles that have appeared in bike magazines, writers have encouraged people to bring their dogs. In a story penned by Jeff Barber **for the website *Singletracks***, he writes: "Do train and test your dog to make sure he or she is able to obey your commands." But then, in the very next sentence, he acknowledges and almost seems to blame wildlife if the dog gets distracted: "Many owners are able to keep their dogs under voice control though keep in mind that mountain bike trails pose additional challenges. Wild animals, other trail users and sheer exhaustion can distract dogs that are otherwise very obedient." He admits dogs going rogue is likely to happen but says nothing about the significant consequences of it happening, as opposed to just saying leave the dog at home.



Dog presence, scientific evidence shows overwhelmingly, can causes severe stress to wildlife and displace native critters from areas where those animals need to be. The spatial disruption caused yby dogs is disproportionately higher than when only people move down a trail.

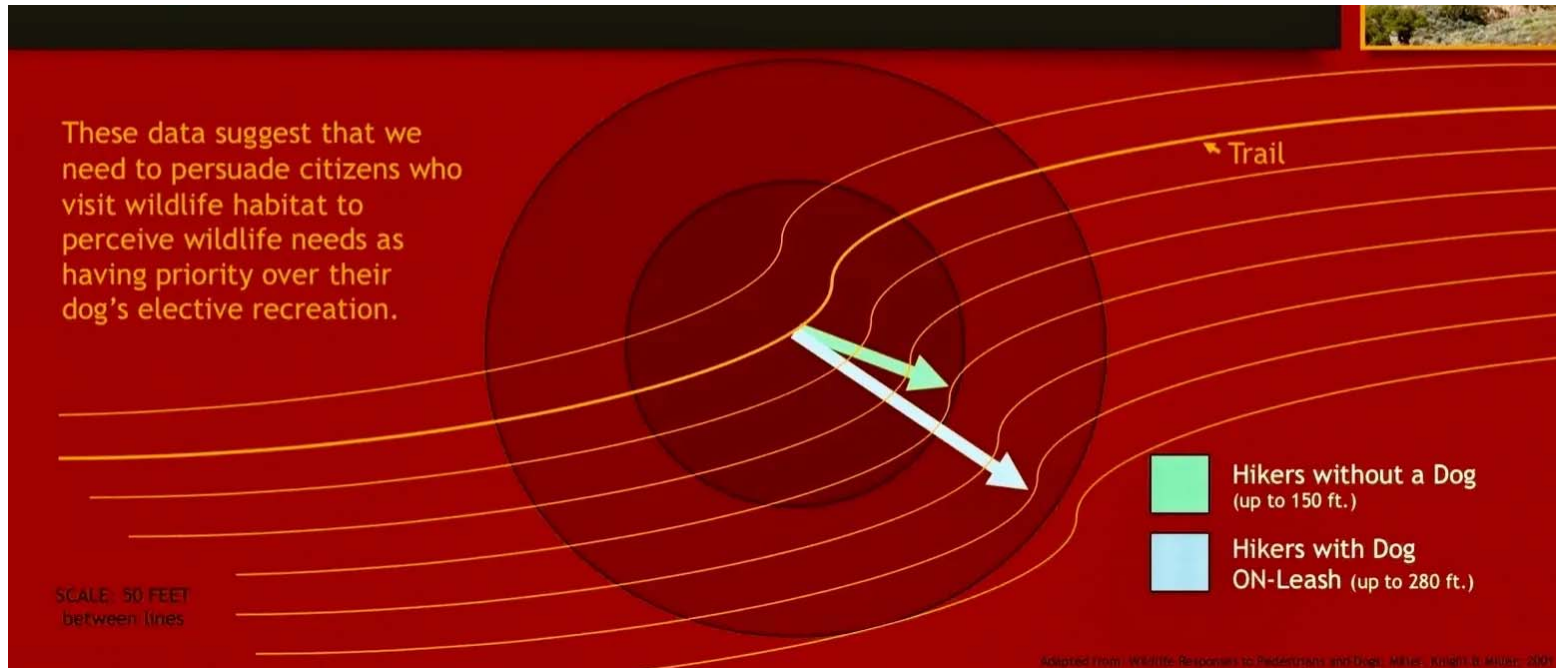
Some dogs, not all, instinctively harass and maim wildlife or run animals to the point of exhaustion—all of which is against the law. Dogs too are notorious for being disruptive in spring and summer to wading and nesting wetland birds. Accompanying hikers to lakes and ponds and then cooling off in the water, dogs can cause parent avians to abandon nests.

~~and killed a greater percentage of birds.~~

Vexing is why so many people have so little dog savvy. Every single day on public land like national forests, wildlife refuges, federal BLM and state lands, untold thousands of us go on hikes with our dogs and many of our friendly pooches (whose owners swear Fido and Fifi wouldn't harm a flea) contribute to a steady erosion of the wild fabric around us.

No one has estimated the cumulative toll of dogs yet, but wildlife biologists say it is significant, on everything from mammals to birds, reptiles and amphibians.

The questions are: why is it allowed to happen? What isn't it being discussed more often? And why aren't the same rules that exist in national parks pertaining to wildlife protection not applied to national forests which in Greater Yellowstone are home to just as many fragile species? The simple reason is it's easier to look the other way than to say no, but when a land manager or wildlife management agency does this, what does it say about their personal and professional ethics?



Zone of canine influence: Graphic courtesy of Dubois, Wyoming ecologist Bruce Thompson who derived it from studies examining how people and dogs displace wildlife in the backcountry.

The lack of awareness about the impacts of dogs extends even to national media, including magazines that cater to the younger adventure set. In a spring 2021 online edition of *Outside* magazine, writer Emily Pennington penned a piece titled “[The Most Dog-Friendly Parks in the U.S.](#)” The piece is subtitled: “From miles of accessible trails to nearby boarding services to dog safety, these are the best (and worst) parks to visit with your best friend.”

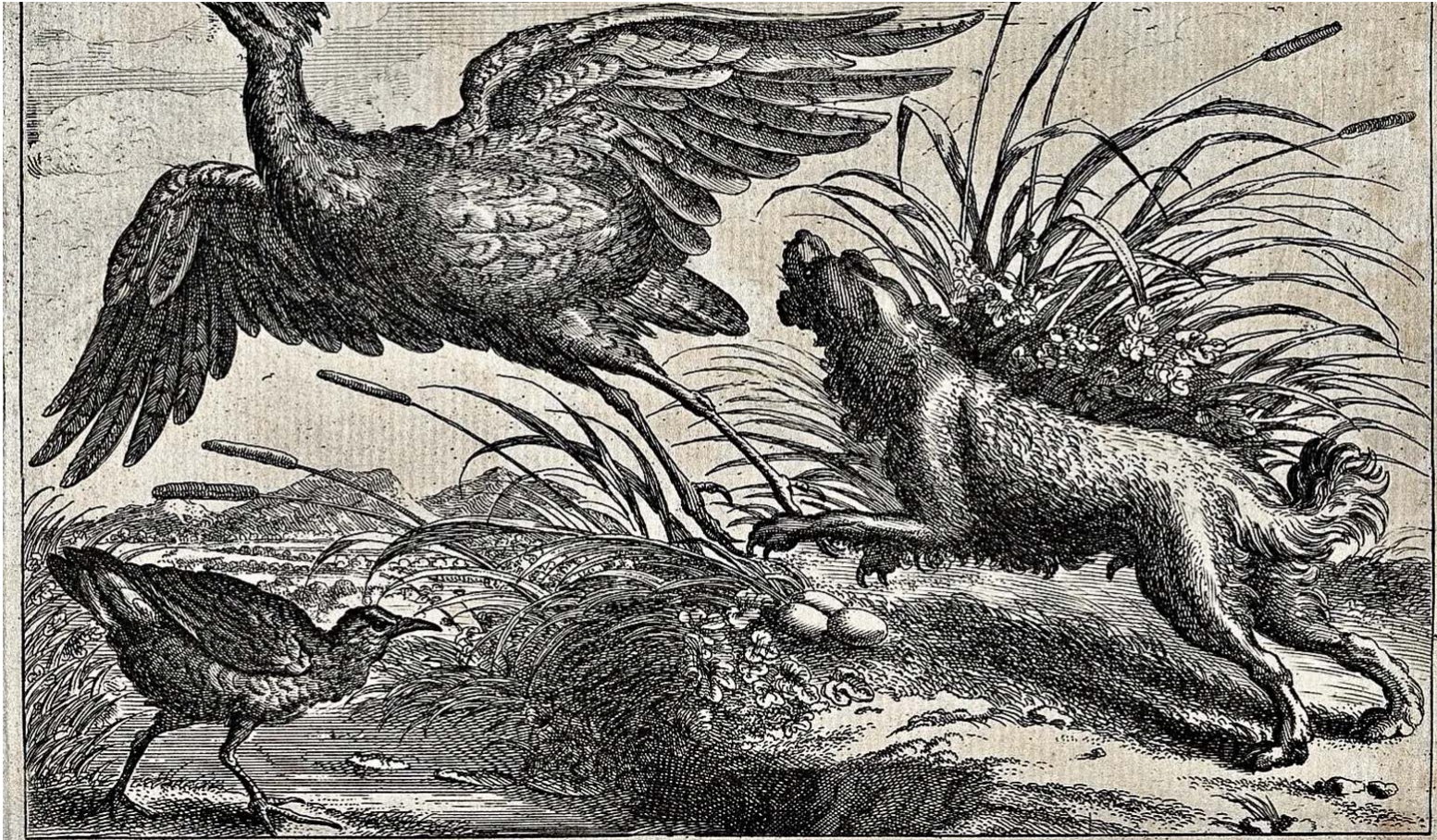
The implication: that if a national park doesn't allow dogs to go on outings then it's bad? She references wildlife in Alaska's national parks, for example, as “hazards” and that

trails, in the backcountry, on multi-use pathways, or along lakeshores. They are, however, allowed to ride inside boats on Jackson Lake. Luckily, there are a wealth of roads with outstanding panoramas of the Tetons that you can drive or walk along with your dog and still get a good sense of the park. We recommend River Road or the road to Lupine Meadows Trailhead for a stroll. We can also bring your dog to all campgrounds, turnouts, and picnic areas.”

Pennington, who makes it sound as if visiting a national park provides special memories that a dog will never forget, lives *in Los Angeles*. The Greater Yellowstone Ecosystem is not LA. We still have a healthy wildlife ecosystem that exists because it has not yet been trampled and trampled by crushing numbers of humans. If we want to maintain our wildlife and pass along as part of our legacy, we have to restrain how we engage wildlands.

Maybe Pennington should have read the National Park Service’s Organic Act before she wrote her piece: “The Organic Act directs the [National Park Service] to promote and regulate the use of the parks by whatever means and measures conform to the fundamental purpose of the parks,” said Stephen P. Martin, a former deputy director of the Park Service **when he gave testimony on the Organic Act** to Congress. “It tells us that this fundamental purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for their enjoyment in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”

...to protect their animals on mountain roads and other areas. At the same time, it is well established that dogs which chase bears can cause very negative and dangerous human-bear encounters. Moreover, dogs in the backcountry can precipitate attacks by wolves and mountain lions—on dogs *and people*.



Dogs harassing wildlife has been a known problem for a long time. Here, an etching dated to 1690 showing a domestic dog chasing a heron off its nest at a wetland. Few dog owners who take their pets to lakes, ponds and rivers for swims ever reflect on why they don't see more nesting birds. Image available through Creative Commons license [Wellcomecollection.org/works/bzfrmdaf](https://wellcomecollection.org/works/bzfrmdaf) CC-BY-4.0

In Montana, dogs can be shot **if observed harassing or chasing livestock**, and game wardens can shoot dogs chasing wildlife on public land and on private property if the landowner consents.

Last month near Teton, Idaho, a state conservation officer shot a dog seen **stalking and killing a mule deer fawn**. This spring, a **Teton County sheriff's deputy shot and killed a domestic husky** observed hounding winter-stressed mule deer just outside the town of Jackson. For 90 minutes the female dog, named Nova, had been running deer with two being mauled before the dog was shot.

Meanwhile, in Teton Village, a 27-year-old woman in March was trampled by a moose after it became agitated by her dog that was let outside to pee. Mark Gocke, spokesperson for Wyoming Game and Fish said it is among a series of incidents in which people have been charged by moose while in the company of their dogs.

◦ ◦ ◦ ◦

The science **is clear and irrefutable**.

Lori Hennings, a senior natural resource scientist based in Portland, Oregon, conducted a literature review on the known impacts of dogs on wildlife. “The evidence that dogs negatively impact wildlife is overwhelming. It is clear that people with dogs—on leash or off—are much more detrimental to wildlife than people without dogs. Dogs (*Canis lupus familiaris*) are considered to be a subspecies of wolves (*Canis lupus*), and wildlife perceive dogs as predators.”

displacement from habitat, and dog scent reports indicate with lingering impacts. Dogs disturb wildlife which can induce long-term stress, impact animals' immune systems and reduce reproduction. Dogs spread disease to and outright kill wildlife. People with dogs are much more detrimental to wildlife than people alone; off leash dogs are worse; and off-trail impacts are highest. Urban wildlife is subject to many human-induced stressors including habitat loss, degraded and fragmented habitat, impacts from a variety of user groups, roads, trails, infrastructure, noise and light pollution.”



376 likes

otherworldly.



Visiting our most spectacular (and sensitive) wild landscapes is on the bucket list of a a lot of people, but should we also treat those places as if they are on the must-see bucket lists of our dogs? An Instagram post from a visitor to Yellowstone ironically showing his dog doing something illegal—being inside a thermal basin off leash.

In another peer-reviewed scientific analysis published [in the journal *Biology Letters*](#), authors Peter Banks and Jessica Bryant write of the impacts of dogs on native birds: “Here we show that dog walking in woodland leads to a 35 percent reduction in bird diversity and 41 percent reduction in abundance, both in areas where dog walking is common and where dogs are prohibited. These results argue against access by dog walkers to sensitive conservation areas.”

While this story is focused on domestic dogs, we would be remiss if not noting the impact of domestic and feral cats on avifauna. The American Bird Conservancy says cats are the number one threat to native birds. In the U.S. alone, cats allowed to wander freely outdoors kill approximately 2.4 billion birds each year. On top of what’s happening nationally, domestic cats brought to the edge of wildland settings by humans building trophy homes astride of public lands, [add to the consequences of habitat loss causing declines in sensitive native birds.](#)

birds. In the US alone, cats allowed to wander freely outdoors kill approximately 2.4 billion birds each year. On top of what's happening nationally, domestic cats brought to the edge of wildland settings by humans building trophy homes astride of public lands, add to the consequences of habitat loss causing declines in sensitive native birds.

Researcher G. Zapata Rios, in the journal *Animal Conservation*, titled his paper, “**Dogs are more than wet kisses and tail wags: domestic dogs as invasive species,**” writes: “Problems with domestic dogs are not new, but many of their impacts as invasive species have been overlooked until fairly recently. As predators, dog populations have significant impacts on

much more far-reaching than previously thought.

Hard as it is to hear, dogs and cats, because of their wandering, vastly expand the human footprint and our zone of negative influence on nature. For those who wish to turn attention onto wolves or other predators, consider there are, combined, perhaps 2,000 grizzlies, wolves and mountain lions in Greater Yellowstone and, on a given summer day, 100 times as many domestic dogs, many given free rein.

In Greater Yellowstone and the larger Rocky Mountain West, mule deer are indicators of how human development, natural resource extraction and outdoor recreation can negatively impact the abundance and persistence of sensitive species. At the southern end of Greater Yellowstone, in Wyoming's Upper Green River Basin near the Wind River Mountains, the footprint of extensive energy development has resulted in habitat disturbance and corresponding serious decline of the mule deer population.

At the northern end of Greater Yellowstone, David Pak, a wildlife researcher some four decades ago, identified how suburban sprawl spilling into the foothills of the Bridger Range near Bozeman was having a deleterious impact on mule deer there. And he warned how increasing development and exploding recreation pressure, of the kind that has come to exist in the Bridgers, did not bode well.

Despite this, the Custer Gallatin National Forest has not only done little to rein in or limit recreation on behalf of wildlife, but since the first years of Pak's analysis, thousands of trail

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A mountain biker rides with dogs in tow down a wildland trail near Fernie, British Columbia. Photo courtesy Shutterstock ID: 1784864246

the Boulder County, Colorado Parks and Open Space Department, might published a study titled [“The Effects of Dogs on Wildlife Communities.”](#) In particular, the analysis showed that people with dogs displace mule deer.

“We found that the presence of dogs correlated with altered patterns of habitat utilization for mule deer, small mammals, prairie dogs, and bobcats. For mule deer and small mammals, the results tease out the role of dogs beyond the cumulative disturbance of recreationists. Even in areas that prohibited dogs, mule deer were less active up to 50 meters from recreational trails. But in areas that allowed dogs, deer showed reduced activity within at least 100 meters of trails.”

They note, “The differences in these distances, when considered along the lengths of these trails, represent areas of otherwise suitable mule deer habitat that are potentially unsuitable because of dogs. Because of this depth of the edge effect associated with dogs along recreational trails, for every protected area that allows dogs off leash, there is a certain percentage of that area that is unsuitable for certain species of wildlife, even though the habitat may be perfectly suitable otherwise. Understanding this effect can be important when planning the location of new trails, closing trails, or implementing restrictions regarding dogs and recreationists.”

In yet another study published in the journal *Biological Conservation*, among many that could be referenced, lead author Arielle Parsons and colleagues used camera traps to investigate how humans, dogs and coyotes used 33 protected areas in eastern North America

“Most dogs were on the trail, and 89 percent of off-trail dogs were accompanied by humans. Prey avoided dogs, humans and coyotes temporally, but did not avoid them spatially or greatly increase vigilance. Our results indicate that humans are perceived as a greater risk than coyotes and this increases when dogs accompany their owners,” they write. “We found that dog management was effective: prohibiting dogs in protected areas reduced their use of an area by a factor of 10 and leash laws increased leashing rates by 21 percent. Although millions of dogs use natural areas in North America each year, regulations enacted by protected areas combined with responsible management of dog behavior greatly reduce the ecological impact of man's best friend.”



A bull elk at Mammoth, the administrative headquarters of Yellowstone National Park, lounges on the grass and closely watches a visitor giving his pooch a walk on leash. Photo courtesy Neal Herbert/NPS

The vast majority of eastern North America, particularly the U.S., does not hold near the diversity of large mammals that Greater Yellowstone does, meaning that here there is much more at stake from dogs. It should be noted that there is a category of dogs—guard dogs—

One of the problems is that conservation-minded citizens, who profess to being concerned about the needs of wildlife, are blind to the impacts of their dogs. How our furry friends behave is an extension of our own values and character. And the dog problem, for wildlife managers, is yet another bold illustration of how outdoor recreation does not equate to wildlife conservation.

At one popular Greater Yellowstone cross-country ski area, which functions as a multi-season outdoor recreation destination, skiers and hikers are encouraged to bring their dogs. Little reflection seems to be given to the fact that the resort resides in the middle of an important wildlife migration corridor, with sensitive species like moose, elk, deer, wolverines and other species—all of which dogs are known to bother if given the chance. There seems to be little reflection on the science and how the resort itself is contributing to rapid exurbanization of a once-wild corner of the region.

At one popular Greater Yellowstone cross country ski area, which functions as a multi-season outdoor recreation destination, skiers and hikers are encouraged to bring their dogs. Little

an important wildlife migration corridor, with sensitive species like moose, elk, deer, bears wolverines and other species—all of which dogs are known to bother if given the chance.

One of the ski area's rules says: "Dogs must be under control at all times—aggressive behavior will not be tolerated." But it fails to mention that it only takes just a few bad dog-wildlife incidents, which quickly add up, that can cause resident wild animals to flee.

In the summer 2022 issue *of Jackson Hole Magazine*, there was a story titled "Dog Heaven: Jackson Hole is as much a playground for dogs as for people." In identifying places for locals and visitors to take their dogs, the story's author disparages the fact that on the National Elk Refuge dogs must be leashed. She writes: "On the National Elk Refuge Road, here it is required that all dogs are leashed and, even though it is on a wildlife refuge, there are rarely many animals on the road."

The author then makes another recommendation for dog hikers: "In East Jackson, the Cache Creek/Snow King trail network includes about 20 miles of single- and double-track trails for hiking, mountain biking, and horseback riding. Due to its proximity to downtown—less than

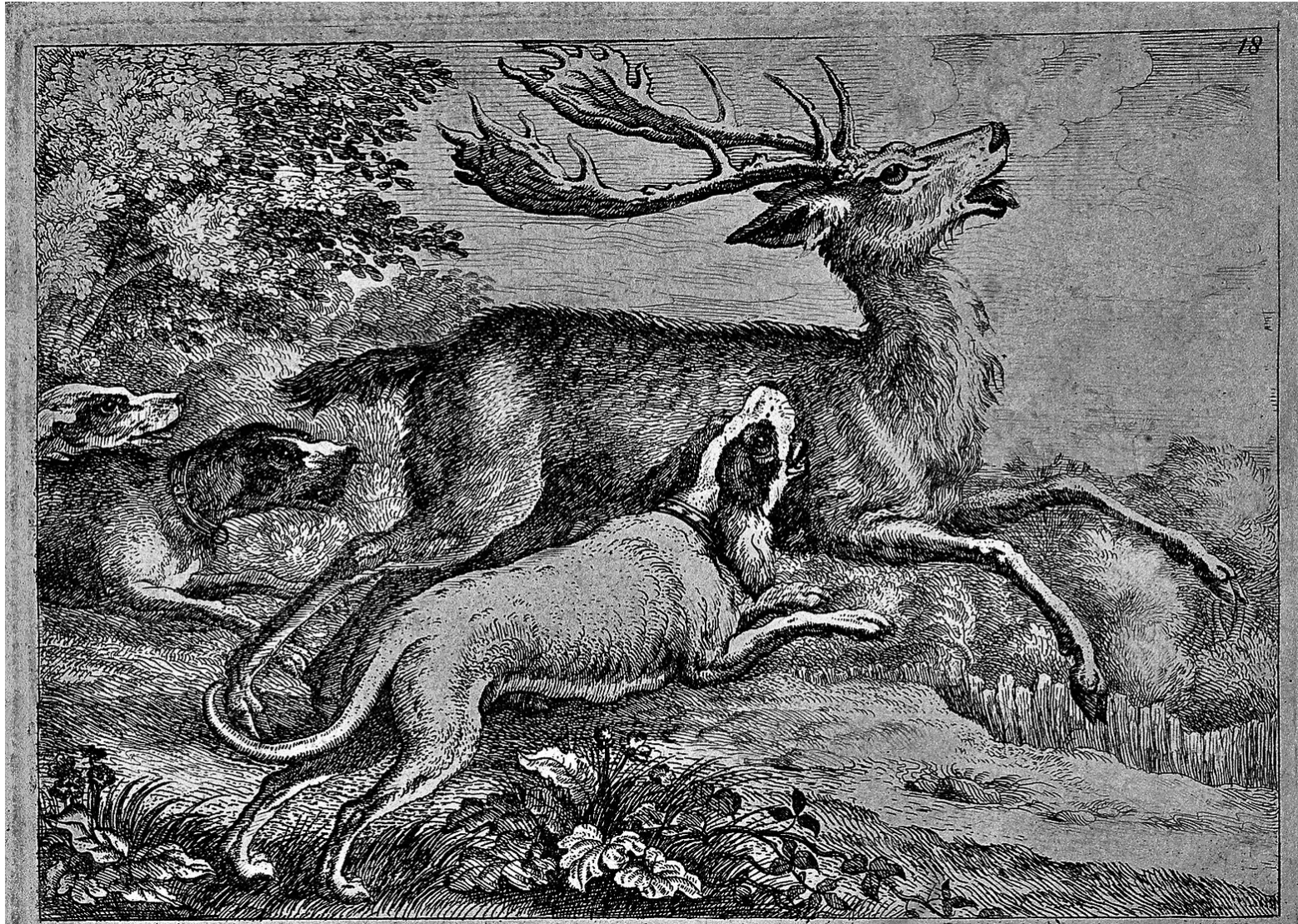
In addition, all of the human activity above has exacted a huge toll on wildlife and the habitat security it used to have in Cache Creek and on the flanks of Snow King mountain. De-wilding is underway and observers say the Bridger-Teton National Forest and Wyoming Game and Fish are to blame.

Dr. Franz Camenzind, an award-winning wildlife cinematographer, wildlife biologist who studied wild canids, and who led the Jackson Hole Conservation Alliance, has had a front-row seat observing human and wildlife interactions along the corridor leading from Snow King to Cache Creek for half a century.

"The wildlife ain't there no more," he says. "If it's there it's just passing through. There's very little resident wild wildlife and, in large part it is due to dogs, no question about it." Some 15 years ago, he was part of a citizen's group that met with the Forest Service, recreation interests, dog owners and state biologists to talk about deepening impacts on wildlife.

Wildlife persistence is being bargained away, decision by decision, all done in the name of achieving "balance" and "compromise" in an area that Camenzind remembers as being a rich area for wildlife that helped cement Jackson Hole's special status as a hub for protection of nature. "So often we frame things according to the current situation and forget about what was there," Camenzind says. "We've gone so far astray in that the debate is now about whether dogs should be allowed to be on or off leash, not whether they should be there at all. If there was the political will, and more rigorous limits were imposed, wildlife would probably re-inhabit that area in a few years but that's probably not going to happen."

people, scientists say, are unaware because incidents involving our beloved pets happen out of sight.



change affecting water availability and habitat at a massive scale, scientists say, then a new way of thinking about human responsibility must be adopted. This is a burden we all shoulder, whether we are sharing our lives with dogs or not.

Many communities are adopting more rigorous regulations but most treat wildlife impacts only as an afterthought. Again, every single day, thousands of negative—often subtle—encounters are happening, and it takes just a single dog to set off negative ripple effects. Even tiny amounts of commotion brought by people can have disastrous consequences when no dogs are present. That's why, in Yellowstone National Park, trails to backcountry ponds and lakes are closed for part of the year so that resident nesting trumpeter swans, whose numbers have dwindled in the park, have a chance at successful reproduction. And it's why areas of Yellowstone that provide important secure habitat for grizzly bear mothers and cubs are under permanent or seasonal closure to normal tourism.

If you want examples closer to home, ask yourself why there isn't a diversity of wildlife present at the local suburban dog park or marsh where you used to see birds like Great Blue herons and other species. Indeed, we take great pleasure in being outside with our dogs but do wildland settings need to become sacrifice zones for canid funhoggery too?

Or maybe, at the end of the day, dogs matter more than wildlife?

When it comes to dogs, Yellowstone, contrary to what snowshoers with the German shorthair said, has made the rules explicit: Here is the advisory that Yellowstone posts to tourists planning their trips. “Bringing a pet to Yellowstone may limit your activities in the park. Protect your pet and park wildlife by observing these regulations:

- Pets may only accompany people in developed areas and must remain within 100 feet (30.5 meters) of roads, parking areas, and campgrounds.
- Pets must be physically controlled at all times: they must be in a car, in a crate, or on a leash no more than six feet long.
- Pets are not allowed on boardwalks, hiking trails, in the backcountry, or in thermal areas.
- Pets may not be left unattended or tied to an object.
- Pets may not be left in a situation where food, water, shade, ventilation, and other basic needs are inadequate. Pets may remain in vehicles for short periods of time, but we recommend that someone stay behind to personally ensure their well-being.
- Owners must bag and dispose of pet waste.”

EDITOR'S NOTE: Next time, we examine a scatological topic that cannot be ignored: the proliferation and menace of dog poop.



author of the book *Ripple Effects: How to Save Yellowstone and America's Most Iconic Wildlife Ecosystem*. Wilkinson has been writing about Greater Yellowstone for 35 years and is a correspondent to publications ranging from *National Geographic* to *The Guardian*. He is

author of several books on topics as diverse as scientific whistleblowers and Ted Turner, and a book about the harrowing story of Jackson Hole grizzly mother 399, the most famous bear in the world which features photographs by Thomas Mangelsen. For more information on Wilkinson, [click here](#). (Photo by David J Swift).

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Greater Yellowstone Ecosystem

The Quandary of Balancing Trails and Wildlife

One small-town fight signals a growing rift



Red deer crossing a sand path in the middle of a forest in a wildlife park. Photo by Laurens Verhoeven

By [Jen Rose Smith \(/sierra/authors/jen-rose-smith\)](/sierra/authors/jen-rose-smith)

May 2, 2023

Vermont is a landscape cloaked in trees. Some [78 percent \(https://fpr.vermont.gov/forest/vermonts-forests\)](https://fpr.vermont.gov/forest/vermonts-forests) of the state is forested, a dense green cover of beech, birch, and maple interspersed with small villages, like the one I live in—Richmond, Vermont. My town is a place where it feels like everyone knows everyone, a tight-knit community of 4,167 people proud of their home's abundant natural beauty.

In recent years, however, a decision-making process about building trails in Richmond's new community forest has grown tense. The 428-acre Andrews Community Forest was created in 2018 but, five years later, plans to build multi-use trails there remain mired in criticism. It is a local issue with implications that go far beyond my own backyard. Richmond's conflict is unfolding amid growing research into the many ways that outdoor recreation—from birding to skiing—impacts wildlife. In one study, when collared Oregon elk were exposed to hikers, equestrians, and mountain bikers, the time animals spent fleeing the disturbances cut into their vital periods of rest.

“There is definitely an increasing awareness of the fact that recreation does have an impact on wildlife, and an increasing desire to understand what that is,” said Ethan Tapper, the forester for Chittenden County, where Richmond is located. Tapper helped create the [management plan \(https://www.richmondvt.gov/fileadmin/files/Archive/2018/04/Andrews-Community-Forest-MPlan-FINAL-adopted-11-19-18-small-file-size.pdf\)](https://www.richmondvt.gov/fileadmin/files/Archive/2018/04/Andrews-Community-Forest-MPlan-FINAL-adopted-11-19-18-small-file-size.pdf) for the community forest, which was established under a conservation easement stipulating natural resource protection and public access in perpetuity. “Prior to very recently, we just assumed that recreation was completely an asset. Now we understand that it’s really important, it’s really an asset—and it’s also something that does have an impact.”

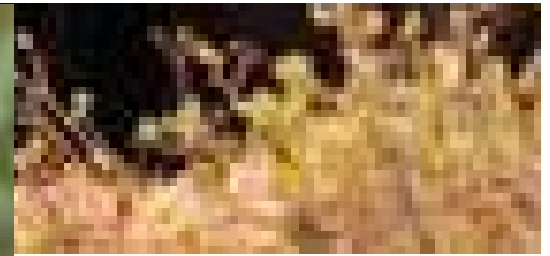
That growing understanding guided the Andrews Community Forest Committee tasked with overseeing the property. Seeking equilibrium, they held an RFP then commissioned a trail proposal by Vermont trail developers [Sinuosity \(https://www.sinuosity.net/about\)](https://www.sinuosity.net/about) and ecological services consulting firm [Arrowwood Environmental \(https://arrowwoodvt.com/\)](https://arrowwoodvt.com/). “We came down in a pretty even balance between protecting the ecological integrity of the property and providing the trail access that was being requested,” said Arrowwood Environmental partner Aaron Worthley. The [initial version \(https://arrowwoodvt.com/wp-content/uploads/2021/05/ACF_Poster-scaled.jpg\)](https://arrowwoodvt.com/wp-content/uploads/2021/05/ACF_Poster-scaled.jpg) outlined 4.3 miles of new trails, designed to limit impact on ecological features like streams, vernal pools, and wetlands.



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Caitlin Littlefield, an ecologist living in Richmond and lead scientist at the nonprofit Conservation Science Partners, joined the Andrews Community Forest Committee (ACFC) when it was founded in 2020. “My motivation was wanting to care for the land here, and get to know my community members—and, yes, apply my conservation and ecology backgrounds,” she said. (Small-town disclosure: I know Littlefield socially, and my husband is on the ACFC. I’m also friends with a member of the group most critical of proposed trails.)

Despite the ecology-minded process, reception to the plan was mixed from the beginning, with meetings turning contentious. “It wasn’t until the rubber was like starting to hit the road, in terms of actually planning, that it became really apparent that this might be kind of spicy,” Littlefield said. Public criticism of the proposed trails, she believes, reflects a mix of explicit and implicit worries.

The explicit worries have to do with issues of trail placement and type, and the possible impact on creatures like deer, amphibians, and birds. The implicit worries are something more sweeping: growing fear that as we seek to enjoy and explore and preserve natural landscapes, an essential equilibrium has been lost. Mountain biking has

become more popular here, a flash point in community dialogues, but cyclists are just the most visible sign of Richmond's growing reputation as a recreation destination. "The expansion of recreation, trails everywhere, and just a big concern that our woods are being taken over across the board," Littlefield said. "That's the underlying, deep-seated fear that I perceive."

Even as participation in outdoor sports has grown in recent years, scientists [have learned more](https://www.sierraclub.org/sierra/green-life/wildlife-hates-hikers-wilderness-disturbance) (<https://www.sierraclub.org/sierra/green-life/wildlife-hates-hikers-wilderness-disturbance>) about how non-motorized recreation affects the well-being of wild animals. [A 2016 systematic review](https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0167259) (<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0167259>) of outdoor recreation's impacts on wildlife found, perhaps counterintuitively, that non-motorized recreation had a greater impact on wildlife health than motorized sports, like snowmobiling.

"We saw that across a broad variety of species of wildlife and types of recreation," said Courtney Larson, the review's lead author, now a conservation scientist for the Nature Conservancy. "The response variables that we looked at, which were species richness and abundance, are really ones that affect the population levels of the species."

The research hints at some best practices to help wildlife, Larson said. Concentrating recreation into one part of the forest can leave other areas undisturbed, while seasonal closures are important during sensitive breeding and nesting periods. There are, however, major holes in our understanding of how the human impacts on wildlife behavior actually play out. "I haven't seen a lot of research studies that go out and test the effect of a management strategy," Larson said. "It's kind of a gap between some of these research results and actually knowing what strategies we can use on the ground to minimize recreation impact."

It's also hard to take data from one piece of land or one population of animals and extrapolate them into a larger conclusion. "You can't really make any broad trends, like 'this type of non-motorized recreation is always going to affect this particular type of species in a certain way,'" said Ashley D'Antonio, an [associate professor](https://directory.forestry.oregonstate.edu/people/dantonio-ashley) (<https://directory.forestry.oregonstate.edu/people/dantonio-ashley>) of nature-based recreation management at Oregon State University's College of Forestry.

Some of the most heavily used conserved land in the United States, such as Yellowstone National Park, are places with pretty healthy wildlife populations, D'Antonio noted. "That doesn't mean there's not behavioral changes for some of these species, but at a population level it seems like they're doing okay," she said. "I do think there needs to be more research heading in that direction, so we can better understand, like: 'Are there population-level impacts? And if so, what are they?'"

That missing information poses a challenge for land managers seeking to strike a balance between healthy wildlife and the access to natural places that's essential to human thriving.

Meanwhile, some residents are questioning a basic premise of the current plan for the land—and of much modern conservation—by asking whether access to the natural world in Richmond and beyond should be considered a conservation value at all. "In many ways, it boils down to what we mean by 'conservation,'" said Ian Stokes, a member of the Friends of the Andrews Community Forest, a group of some eight townspeople who are vocal opponents of the trail plan. Stokes said it's time for VLT and other stakeholders to reconsider their access-friendly approach to conserving land.

Once a trails proponent, he's been swayed by recent research into biodiversity threats and recreation's impact on wildlife, and says that expanding recreation is incompatible with his view of the worldwide goal of preserving 30 percent of lands and waters for wild nature. "Some people interpret that as 'let's keep these areas sort of wild, but let's have them accessible to people,' he said. "And other people say 'no, really conservation means setting aside 30 percent for other species, and humans should just stay out of it.'"

That perspective is hard to square with the ACF charter to ensure “meaningful public access and outdoor recreation opportunities.” Taking expanded access off the table might also pose challenges for any future community-led efforts to conserve land with the promise of local recreation. What’s more, the Vermont Land Trust (VLT), which helped plan and finance the purchase of the land, argues setting aside land for recreation is integral to conserving wild places.

“People would not care to conserve land if they did not have a connection to it,” wrote VLT project director Rebecca Roman in an email. “They cannot develop a connection to the land without access to it.” Ethan Tapper, the county forester, agreed. “That’s how most people develop a relationship with forests and other ecosystems—it’s on a trail,” he said.

While Richmond already has extensive trail networks open to the public, they are largely on private land. This reflects a broader pattern in Vermont: 80 percent of the state’s forests are private, leaving just 20 percent under public ownership. That means places like Andrews Community Forest, a small wood by the highway that was pasture in the 1800s, can become unlikely proxy battlegrounds for larger ideas about land use and beyond.

Many involved think that’s exactly what’s happened. As the fight over trails in Andrews Community Forest has unfolded, positions have seemed to harden. Public meetings still engage with the minutiae of trail plans, but underlying the debate are strong feelings that point to the thorniest issues we face today. In the coming years, communities small and large must decide how they will share resources—with each other, with newcomers, with wild nature—amid a rapidly changing world. Such questions are urgent; there are few easy answers.

Jen Rose Smith is an editor at Sierra magazine. Follow her on Twitter [@jenrosesmithvt](https://twitter.com/jenrosesmithvt) (<https://twitter.com/jenrosesmithvt>).

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KEEP YOUR MULE DEER



UNDERSTANDING MULE DEER AND WINTER FEEDING

Overview

Wild animal starvation is a natural event. Unlike most human populations, virtually all wild animal populations experience significant and dramatic population fluctuations. Humans are compassionate but our limited knowledge and resistance to accept Mother Nature's ways, compel us to "assist" mule deer with winter-feeding programs. Unfortunately, winter-feeding is a complex matter involving numerous issues to be considered before determining a course of action.

Background

Supplemental winter-feeding programs, despite broad social appeal and acceptance, are expensive, can negatively affect mule deer behavior and biology, and save very few deer. Inadequate habitat and severe winter weather with heavy snow accumulation and cold temperatures are the ultimate cause of most winter feeding programs. Prior to initiating winter-feeding, the potential for long-term benefits to mule deer as well as habitat conditions needs to be critically evaluated.

Biology

Several unique aspects of mule deer biology complicate the potential for successful winter-feeding. Unlike elk, mule deer are highly selective foragers due to their specialized digestive system. As "ruminants", mule deer rely on a very complex stomach system to aid in digestion. Ruminants use bacteria to aid in the digestion of their food. Specific types of bacteria are required for specific foods. Because the digestive system can't adapt quickly enough, supplementally fed mule deer die with full stomachs. This is especially true when starving mule deer are fed hay.

Behavior

Animal behavior may also be affected by winter-feeding efforts. Behaviors important to mule deer survival include learned behaviors, such as foraging and migratory habits and are critical to the long-term sustainability of a population. Winter-feeding has the potential to disrupt both. As mule deer learn locations of feeding stations, they continue to visit these sites, sharing this information with each successive year's offspring. As each generation becomes more reliant on artificial foods, they become less familiar with natural foraging areas. Additionally, if feeding continues, they may fail to recognize the need for migration. Fear of humans is another learned behavior important for survival that is often lost during feeding operations.

Disease and Predators

Winter-feeding programs generate artificially high animal densities at feeding sites. This provides an ideal opportunity for the transmission of diseases and/or parasites. Winter-feeding in areas highly populated by humans may create conflicts by attracting predators.

Competition

Mule deer compete with one another when food is scarce. Consequently, the healthiest deer, such as dominant does, exclude the truly “needy” individuals (usually fawns) from food. By placing a resource in a localized area, competition is increased and some deer get no food, while others gorge themselves and get too much. Too much of a “good” thing can jeopardize their survival due to complications from dietary shock.

Sociology

Both proponents and opponents of winter-feeding have the deer’s best interest in mind. However, even well designed and executed winter feeding programs fail to significantly increase the chance of mule deer survival. Given winter feeding saves few deer from starvation, we must consider the biological cost to the habitat, and cost to mule deer in the long-term. We must focus on the sustainability of the mule deer population for generations to come – not just one winter.

Another problem resulting from the initiation of feeding by private citizens, is the desire to continue feeding at times of the year mule deer don’t “need” it but will choose to stay. This further complicates the concerns outlined above and may ultimately kill deer. Uncoordinated feeding efforts result in dozens of different foods being fed, while deer migratory habits, foraging behavior, and fear of humans is negatively affected. Feeding can attract deer into landscaped yards and high traffic areas causing ornamental vegetation damage and vehicle accidents. People who feed deer often do not understand the issue of availability and condition of natural habitats. They believe supplemental feeding can adequately meet mule deer nutritional needs. Feeding programs have repeatedly shown mule deer will often starve to death with full stomachs.

Conclusions - Government agencies in the Western United States have conducted supplemental feeding of wildlife for about 100 years. Some programs, for example elk on the National Elk Refuge, are successful – though there are social and biological costs of that program too. For mule deer, feeding has a limited nutritional benefit often negated by undesirable even catastrophic behavioral and biological effects. Of course we all have wildlife’s best interest in mind. But, we must ensure we understand the biology of the animals we’re concerned about so our actions are truly beneficial to them. This is often the point of debate as society considers winter-feeding mule deer. Our conventional wisdom, experience, and professional consensus is clear - feeding mule deer violates the most basic principle of population regulation within natural systems and is unsuccessful. At best, winter feeding programs for mule deer are only successful in making people who are compassionate about wildlife feel better.



UNDERSTANDING MULE DEER AND WINTER FEEDING

Fact Sheet #2

Starvation of wild animals is part of nature. Virtually all wild animal populations experience significant and dramatic population fluctuations. Human compassion makes people want to help mule deer with winter-feeding programs. Changing nature by winter feeding is a complex matter involving numerous issues to be considered before determining a course of action.



BACKGROUND - Supplemental winter-feeding programs, despite broad social appeal and acceptance, are expensive, can negatively affect mule deer behavior and biology, and save very few deer. Inadequate habitat and severe winter weather with heavy snow accumulation and cold temperatures are the ultimate cause of most winter-feeding programs. Prior to initiating winter feeding, the potential for long-term benefits to mule deer as well as habitat conditions needs to be critically evaluated.

BIOLOGY - Several unique aspects of mule deer biology complicate the potential for successful winter feeding. Unlike elk, mule deer are highly selective foragers, at least in part, due to their specialized digestive system. As “ruminants,” mule deer rely on a very complex stomach system to aid in digestion. Mule deer use bacteria in their rumen to aid in the digestion of their food. Specific types of bacteria are required for specific types of food, therefore the type of food required for winter feeding of mule deer is highly limited, very specific, and must be properly formulated. Because the digestive system can’t adapt quickly enough, supplementally fed mule deer may die with full stomachs. This is especially the situation when starving mule deer are fed alfalfa hay, corn, or other traditional livestock feeds.

BEHAVIOR - Mule deer behavior may also be negatively affected by winter-feeding efforts. Behaviors important to mule deer survival include learned behaviors, such as foraging and migratory habits; both critical to the long-term sustainability of a population. Winter-feeding has the potential to disrupt both winter foraging activities and migratory patterns. As mule deer learn locations of feeding stations, they continue to visit these sites, sharing this information with each successive year’s offspring. As each generation becomes more reliant on artificial food sources, they become less familiar with natural foraging sites and activities. Additionally, mule deer may fail to recognize the need for migration.

DISEASE AND PREDATORS - Winter-feeding programs generate artificially high animal densities at feeding sites. These high densities of animals provide ideal opportunities for the transmission of diseases and parasites. Winter feeding in areas highly populated by humans may create significant liability issues in terms of attracting predatory animals such as mountain lions and domestic dogs.

COMPETITION - Mule deer compete fiercely for food when it is limited. Consequently, the biggest, strongest, healthiest deer, such as dominant does, exclude the truly “needy” individuals (usually fawns) from the food. By placing a resource in a localized area, competition is increased and some deer get little or no food, while others gorge themselves and get too much. Too much of a supposed “good” thing can also jeopardize their survival due to complications from dietary shock.

UNDERSTANDING MULE DEER AND WINTER FEEDING



SOCIOLOGY - Sitting by and watching mule deer die from starvation is not something most of us are willing to do. Both proponents and opponents of winter feeding believe they have the deer's best interest in mind. However, even well designed and executed winter-feeding programs often fail to significantly increase the chance of mule deer survival. Even if winter feeding could save a few deer from starvation, we must consider the biological cost to the habitat, cost to other species, and cost to mule deer in the long term. We must focus on the sustainability of the mule deer population for generations to come – not just one season. Another problem resulting from the initiation of feeding by private citizens is the desire to continue feeding at times of the year mule deer don't "need" it but will choose to stay on it, further complicating the concerns outlined above and often providing food sources that may ultimately kill deer. Uncoordinated or casual feeding efforts result in dozens of different foods being fed, while deer migratory habits, foraging behavior, and fear of humans are also negatively affected. Feeding can attract deer into landscaped yards and high traffic areas, causing damage to gardens and increasing vehicle accidents. People who feed deer often ignore the real issue of availability and condition of natural habitats. They believe supplemental feeding, can adequately meet mule deer nutritional needs.

CONCLUSIONS - Government agencies in western North America have conducted supplemental feeding of wildlife for about 100 years. At best, feeding has a limited nutritional benefit, often negated by undesirable, even catastrophic, behavioral and biological effects. Of course, we all have the best interest of wildlife in mind. However, we must ensure we understand the biology of the animals we're concerned about so our actions are truly beneficial. This is often the point of debate as society considers winter feeding mule deer. Our conventional wisdom, experience, and professional consensus is clear - feeding mule deer violates the most basic principle of population regulation within natural systems. At best, winter feeding for mule deer is only successful in making people who are compassionate about wildlife feel better and seldom are any benefits of winter feeding realized.



Winter feeding of mule deer creates artificially high concentrations of animals, leading to increased risks, including disease transmission and predation.



Winter-fed mule deer often die with full stomachs due to their inability to adapt to rapid changes in type and abundance of feed.

More information on mule deer can be found at www.muledeerworkinggroup.com

*A product of the Mule Deer Working Group - Sponsored by the Western Association of Fish & Wildlife Agencies - Approved July 2013
Produced with support from the Mule Deer Foundation (www.muledeer.org)*



CHRONIC WASTING DISEASE

Fact Sheet #39

CAUSE AND TRANSMISSION

Chronic wasting disease (CWD) is caused by one or more strains of self-propagating proteins called prions (“pree-on”). The prion is transmitted and begins to replicate, first in the tissues of the immune system (lymph nodes and tonsils) and later in the brain, spinal cord and other organs. Infected animals can shed prions in saliva, feces, urine, and possibly after death through their remains. Animals are infected by direct (animal-to-animal) transmission or by indirect transmission from prions deposited in the environment. Once infected, it is always fatal with animals dying, typically within 2-3 years. Individual animal genetics and prion strains play a role in the disease progression.

SPECIES AFFECTED

Chronic wasting disease affects species in the deer family (Family Cervidae). In North America, mule deer, white-tailed deer, elk, and moose have been infected. Caribou should also be considered susceptible because reindeer have tested positive. CWD has occurred in red deer and sika deer on other continents. Species outside the deer family appear to have natural resistance to infection even though some can be infected experimentally.

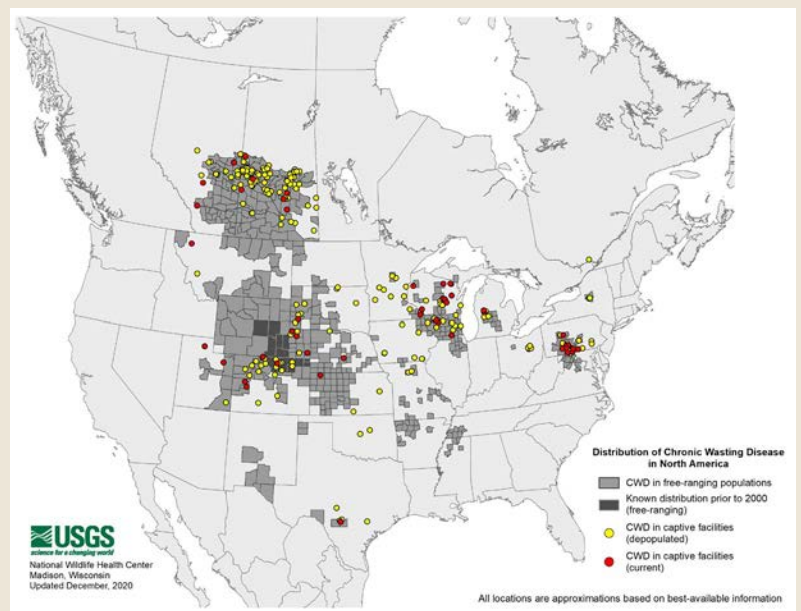
GEOGRAPHIC DISTRIBUTION AND OCCURRENCE

Chronic wasting disease occurs primarily in the USA and Canada, with a smaller number of cases reported in Korea and northern European countries. In North America, CWD has a scattered distribution. Disease focal points differ in size, duration, and connectivity among free-ranging deer species.

Numerous outbreaks have occurred in commercial captive facilities. Changes in geographic distribution and spread are a result of natural and human-assisted movements of infected live animals. The importance of other potential means of spread remains unclear (transport of infected carcass parts, semen, biological material such as urine, and contaminated forage). Within affected areas, rates of infection and levels of prevalence (the percentage of animals infected) differ widely. The length of time that CWD has been present in an area and harvest management practices influence prevalence, which generally runs higher in deer than in elk or moose in the same location.

WHAT TO LOOK FOR

Adult deer, elk, or moose may appear in poor condition, lack awareness or concern, or otherwise behave



Known North American distribution of CWD, as of December 2020

CHRONIC WASTING DISEASE

oddly. Affected animals in later stages of disease may be thin. Note that animals in early stages of infection may not show visible signs of infection and appear normal.

HERD HEALTH IMPLICATIONS

Infection shortens the lifespan of animals. As an outbreak grows, younger animals are exposed and infected. If infection rates become high enough, CWD can affect a herd's ability to sustain itself. Several western jurisdictions report prevalence among harvested bucks exceeding 10% (1 in 10) in multiple herds and rates approaching 50% (1 in 2) in some populations. A growing body of evidence from studies in heavily infected herds suggests that, at high prevalence, CWD will impair the long-term performance and persistence of deer and elk herds and reduce the amount of harvest they can sustain. Deer herds impaired by CWD will find it harder to be resilient to all the other threats they face.



Photo by: L.L. Wolfe

MANAGEMENT

Introductions of CWD in free-ranging populations are very difficult to detect in their earliest stages. Therefore, the majority of “new” CWD areas are well-established when first detected. Increases in disease prevalence and expansion can be slow early on. Individuals genetically predisposed to develop a more rapid form of the disease become less common as prevalence reaches high levels. To date, prevalence has not subsided without active management. Experience suggests CWD can be limited with sustained removal efforts; however, eliminating CWD from the wild is probably not possible with currently available tools. No vaccine or “cure” is available for individual affected animals, so managers rely on hunter harvest or targeted removals to eliminate infected animals, reduce population density and disease prevalence. Data suggest sufficient hunting pressure or removals can suppress CWD prevalence, especially in early stages of the disease progression in a population. Conservative harvest can actually foster growth in disease prevalence and distribution. Measures discouraging deer and elk from artificial congregation in affected populations also may help suppress CWD. Artificial feeding is one of the most likely methods of increasing the prevalence of the disease.

Other measures have been applied – albeit inconsistently – in attempts to prevent further geographic spread of CWD. Stringent rules for monitoring and restricting movements of live deer and elk for commercial and conservation purposes likely help limit new introductions. Controlling the movement and disposal of potentially infectious carcass materials are promoted as important preventive measures. While the role of carcass material in geographic spread remains uncertain, it is important for hunters to follow carcass disposal requirements in areas where they live and hunt. Uneven and inconsistent surveillance in areas where CWD has not been detected hampers assessment of risk, early detection, and preventive measures.

PUBLIC HEALTH CONSIDERATIONS

Minimizing human exposure to CWD seems prudent. Although eating and handling CWD-positive animals has not been associated with any human disease, public health officials advise against consuming meat or any other tissues from infected animals. Hunters should disinfect knives and other equipment, wear gloves when field-dressing animals, avoid handling carcasses of animals that do not appear healthy, and report suspect cases to the responsible state or provincial wildlife management agency so they can be removed from the landscape.

For continually updated information and resources, check out: CWD Alliance (<https://cwd-info.org>) and the USGS National Wildlife Health Center (<https://www.usgs.gov/centers/nwhc/science/chronic-wasting-disease>)

More information on mule deer can be found at muledeerworkinggroup.com



HISTORICAL AND CURRENT MULE DEER ABUNDANCE

Fact Sheet #32

INTRODUCTION

Mule deer and black-tailed deer (a coastal subspecies of mule deer) are the most abundant big game species in the West. Mule deer occupy a broad geographic range and diverse habitats from central Mexico to Canada's Yukon and from the Pacific Coast to the eastern Great Plains. Their populations can fluctuate dramatically through time in response to changes in habitat, environmental conditions, disease, predators, and harvest management. Therefore, when mule deer are declining in different parts of their range, it is usually for different reasons and no single solution will increase mule deer populations everywhere. Because of their popularity and wide distribution, mule deer are one of the most socially and economically important animals in western North America. The public expects wildlife agencies to maintain abundant populations of this charismatic species, with expectations often exceeding what their habitats will sustain.



Photo: Bruce Watkins

PRE-WESTERN SETTLEMENT

Relatively little is known about mule deer populations in the West prior to the arrival of early pioneers in the mid-1800s, but it is generally accepted that mule deer populations prior to written records fluctuated with environmental changes as they do today. Early explorers kept sporadic and incomplete records describing varying and sometimes conflicting assessments of deer populations across the West. Several prominent explorers in different areas of the West or similar areas at different times recorded mule deer in high numbers. Conversely, others described the necessity to kill other game or even their own horses to survive in areas now considered prime mule deer habitat. As western settlement progressed, mule deer populations declined dramatically because of unregulated subsistence and market hunting, and excessive livestock grazing, accelerated by unfavorable weather patterns. Mule deer were hard to find in most areas and sightings became rare by the close of the 1800s.

“THE GOOD OLD DAYS”

Human-induced changes in many areas made the landscape more conducive to supporting large mule deer populations in the early to mid-1900s. Mule deer thrive on disturbed habitats containing ample and diverse assemblages of plant species utilized as forage and browse. As a result of intense livestock grazing and wildfire suppression, the amount of shrubs within grasslands increased, thus increasing year-round browse available to mule deer. Widespread logging also opened canopies of densely forested areas and further promoted growth of beneficial shrubs and leafy forage. These land-use changes, coupled with aggressive predator control measures and increasingly effective harvest restrictions, allowed mule deer populations to rebound throughout the 1920s and 1930s and peak in different areas in the late 1940s through early 1960s. This period is thought of by many as “the good old days” for mule deer.

RECENT FLUCTUATIONS

The second range-wide decline in recorded history started in the late 1960s. By the mid-1970s it was obvious mule deer had declined throughout most areas of the West, but apparently for different reasons. During this period, logging operations slowed and continued wildfire suppression allowed forest communities to mature and expand, thus reducing the amount of forage and browse available to mule deer and resulting in slow population declines in many areas. Weather further impacted mule deer populations as harsh winters in the north reduced some populations, while droughts in the desert regions lowered fawn recruitment. Additional factors cited as having

contributed to localized population declines included: habitat loss to human development, deterioration of nutritious forage, competition with other ungulates, predation, disease, poaching, and increased hunting mortality.

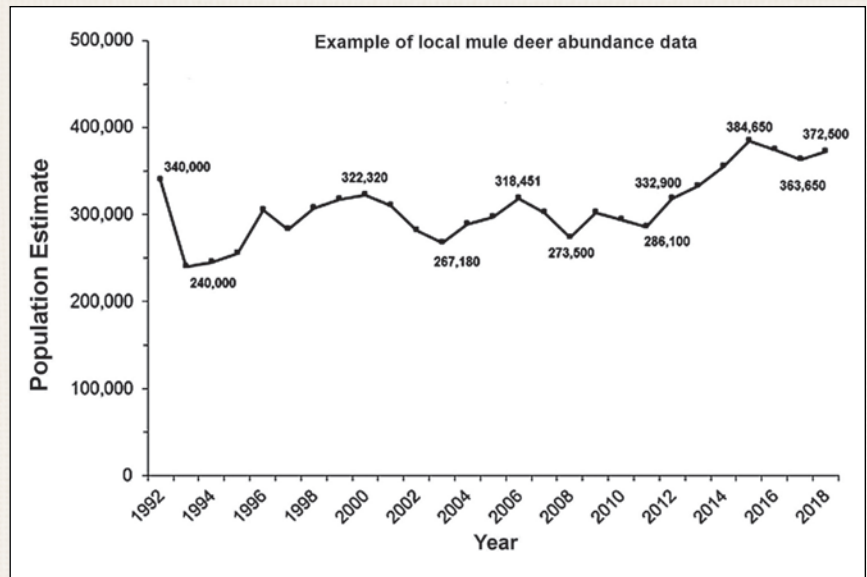
Many mule deer populations increased in the 1980s in response to favorable weather conditions, but a west-wide drought and a few harsh winters in the late 1980s started yet another decline throughout mule deer range. By the mid-1990s and continuing into the early 2000s, it was obvious that mule deer were experiencing another decline not attributable to any single factor.

CURRENT STATUS

Following lows in the late 1990s and early 2000s, most western mule deer populations rebounded, but many remain below most current management objectives. Deer populations undoubtedly fluctuated substantially before western settlement, just as they do today. The precipitous decline in the late 1960s facilitated several meetings where wildlife managers discussed impacts to mule deer populations. These meetings resulted in a period of intensive research focused on mule deer population drivers. The second range-wide decline in the 1990s resulted in the western wildlife agencies establishing the Mule Deer Working Group which is composed of representatives from all western states and provinces that have mule deer. The Mule Deer Working Group is charged with finding solutions to common mule deer management issues and optimizing cooperative research and management across the West.

SUMMARY

The causes of mule deer population fluctuations vary by ecoregion. Therefore, when mule deer are declining everywhere, it is usually for different reasons and often no single solution will improve mule deer populations everywhere. Currently, mule deer population goals and harvest rates cannot be set relative to the numbers some remember in the mid-1900s. That period was influenced by a combination of optimal habitat conditions on a less populated western landscape allowing for unnaturally high mule deer populations that would be difficult to replicate today. The current challenge of deer managers is to conserve and enhance habitat while maintaining populations within modern habitat capacities. Attempting to manage mule deer populations above the capacity of their habitats would facilitate continued long-term decline. Without restoring habitat fragmented by human development and replicating the optimal conditions of the mid-1900s, attaining mule deer abundance of “the good old days” is unlikely and unrealistic.



More information on Mule Deer can be found at www.muledeerworkinggroup.com

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MULE DEER NUTRITION Fact Sheet #19

OVERVIEW

Nutrition affects every aspect of mule deer population biology and ecology. Nutrition influences mule deer body condition, which in turn influences reproduction, recruitment, antler growth, home range size, seasonal movements, longevity, predator avoidance, and the ability to negotiate changing habitats. No other single factor has such an overriding effect on this species.

Mule deer are ruminant animals. Like other deer, mule deer are primarily browsers. Although they will eat forbs and grasses, especially nitrogen-rich new growth, they rely on shrubs and trees for much of their diets. Ruminant animals have

evolved with complex, multi-chambered stomachs to consume and make optimal use of vegetative diets. Their first chamber is the rumen where microbial bacteria break down cellulose following physical mastication (chewing) in the mouth. Microbes (bacteria, protozoans, and fungi) produce volatile fatty acids, which are the major source of energy for ruminants. Ruminants must reduce particle size of consumed forage to smaller than 5 mm in size before it can pass from the rumen into the digestive tract and remaining chambers. Old, decadent forage can be harder to digest due to high lignin content in cell walls, which also makes nutrients less accessible. Although ruminants use microbes to digest cellulose, lignin must be broken down through physical mastication. Consequently, as forage quality decreases, passage rate decreases as well. Very fibrous, lignified forage is not digested, but excreted over a long period of time. In poor rangeland, there may appear to be a great deal of dry forage on the landscape, but mule deer may benefit little from eating this forage because they cannot consume adequate quantities to meet their needs for energy, protein, or other nutrients.



Photo: Jason Loftus-Untamed Images



Ruminant animals can have difficulties adapting to rapid changes in their diet. The rumen microbial community must change with season, intake, and diet as specific types of microbes are associated with different kinds of forage. Rapid changes in diet during a wet spring or following a wildfire can result in short-term gastrointestinal disturbances. More frequently these rapid changes are human induced, such as translocation into new habitat or placement of novel food sources like alfalfa or grain. Grains placed as bait for hunting or trapping may result in over consumption and death from grain toxicity. Historically, well-intentioned emergency winter feeding of high-quality alfalfa to nutritionally stressed ungulates in deep snow

resulted in large numbers dying with full rumens that they were incapable of digesting. Ruminants may starve (or suffer from chronic malnutrition) with a rumen full of food—just food that was not possible to be digested adequately. Microbial communities typically require 2–4 weeks to adapt to changes in diets, and gradual dietary alterations over similar time periods are more favorable than are immediate or rapid changes in their diet.

The relative contribution of reproduction and recruitment are often difficult to separate in free-ranging populations, but both are influenced by the body condition and nutritional plane of the maternal female. Although conception is rarely influenced by nutrition except for does in extremely poor body condition, poor body condition in young females influences the likelihood of carrying fetuses through pregnancy and older does may produce more male fawns. Energy demands for adult females increase dramatically with lactation following the birth of fawns. High quality nutrition is important for fawn growth, maturation rate, and the ability to avoid predators. Summer ranges generally provide higher quality nutrition than do winter ranges and the influence on lactation and fawn survival is greater. Large antler size in male mule deer is related to older population age structure and genetic potential, but the nutritional content of the diet has a substantial influence on annual antler growth. Due to lower quality and quantity of forage on winter ranges and increased energetic demands during winter months with snow and cold temperatures, mule deer often lose body mass throughout the winter. Consequently, the condition in which they enter this period can have an overriding influence on their ability to survive winter demands.



Just as with fawn survival, nutrition plays an important role in adult survival. Animals on a high nutritional plane are generally more physically fit and better able to evade predation. Low-quality diets may predispose mule deer to injury, illness, increased overwinter mortality, or infirmities that may predispose them to predation. Mule deer on a consistently high nutritional plane can survive and reproduce longer than those consuming inadequate forage.

Nutritional demands that change throughout the year drive mule deer distributions and migration patterns. Home ranges for most species in high-quality habitat are smaller in size than those within relatively lower quality habitat; forage quality, quantity, and availability are important factors in determining habitat quality. High quality forage can mitigate factors like disturbance or habitat fragmentation in some situations. Oftentimes, mule deer become habituated or even conditioned to the presence of humans and human developments when high quality forage is available. The enticement of ornamental landscaping and some crops and orchards can result in nuisance or conflict situations with humans when vehicle collisions, aggressive individual deer, agricultural depredation, or unwanted foraging behavior develops.

Because nutrition affects every aspect of the mule deer life cycle, managers must consider these effects in virtually every management strategy. Harvest regulations, translocations, predation management, and habitat manipulation are only a few of the management actions in which nutrition must be carefully considered. High quality diets and good nutritional status provides for robust mule deer populations that all citizens can enjoy.

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Mule Deer
Working Group

Fact Sheet

DISEASE AND PARASITE OF MULE DEER

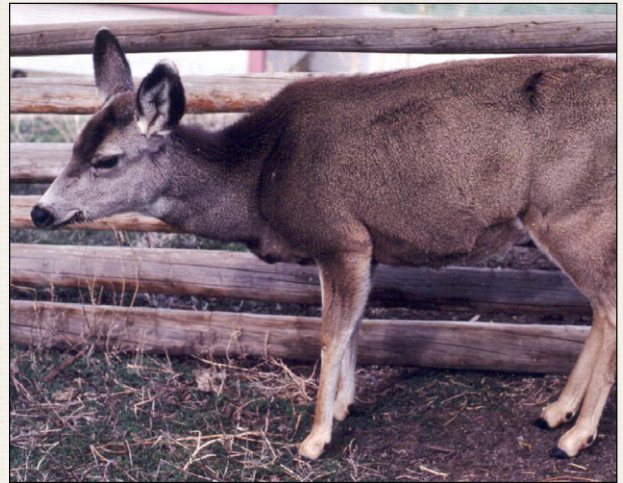
Fact Sheet #11

OVERVIEW

Long-term declines in mule deer populations have been largely attributed to changes in habitat, loss of migration corridors, and predator-prey relationships; however disease places additional pressure on waning populations. Disease and parasites influence overall population health, numbers, distribution, and sex and age composition. This fact sheet discusses several important diseases and parasites of mule deer and their control, treatment, and management in free-ranging populations.

BACKGROUND

Disease and parasites in wildlife may influence the individual or population. Pathogens such as bacteria, viruses, fungi or parasitic species can be transmitted among mule deer populations, to other wildlife species, domestic animals, or humans. Diseases affecting deer can lead to substantial economic impacts to state wildlife agencies and communities that depend on hunters and other wildlife enthusiasts.



Pathogens may be naturally occurring or introduced by moving wildlife. Factors affecting disease transmission and emergence include weather conditions, changes in pathogen virulence, deer distribution and population fluctuations, environmental changes affecting habitat, land-use change, increasing urban deer interactions with humans and domestic animals, deer farming, and feeding and baiting of wild deer.

DISEASES IN MULE DEER

Disease by itself generally does not determine mule deer abundance. However, when a disease occurs with other stressors on populations, wildlife managers must consider its significance for developing management strategies. An example of this relationship includes physiological stress from nutritional or mineral imbalances which may lead to increased herd susceptibility to disease. Monitoring an established disease documents its effect on a population, its spread, and how it relates to other factors that may be limiting populations. Rarely do disease outbreaks cause rapid or large-scale mortality in mule deer; most occur as smaller-scale die-offs or reduce productivity.

Chronic Wasting Disease (CWD)

Over the last decade, CWD has been a leading cause for concern among mule deer managers. This infectious protein or prion causes fatal neurological disease in deer, elk and moose. Currently, CWD occurs in mule deer populations in Colorado, Wyoming, Utah, Nebraska, North and South Dakota, New Mexico, Texas, Alberta, and Saskatchewan. Infected local populations can experience high prevalence with up to 50% of the deer carrying the deadly prion. Population declines may occur in some regions over time; however, many affected areas have exhibited limited or no population effects due to CWD.

Bacterial Diseases

Bacterial diseases tend to be sporadic and rare throughout mule deer range. Rain Rot, often spread by ticks and flies, results in a skin infection with thick scabs on the head and back of infected mule deer. Other bacteria occurring in the environment can enter through wounds in the skin or mouth and cause a disease called necrobacillosis, or foot rot or lumpy jaw. Infections may spread systemically or stay localized in oral or hoof lesions. Clostridium bacteria occur in the environment and the gastrointestinal tract of healthy mule deer. Environmental Clostridium spores can enter wounds causing gas gangrene or blackleg. When mule deer are provided supplemental feed such as grains/corn in winter, an overgrowth of intestinal bacteria can lead to severe illness and death. Mule deer are also afflicted with infectious keratoconjunctivitis, spread by flies, which affects the tissues surrounding the eye. Less common bacterial infections of free-ranging mule deer include plague, leptospirosis, John's disease, and bacterial pneumonia.

Viral Diseases

Two important late summer and early fall viruses, blue-tongue virus (BTV) and epizootic hemorrhagic disease viruses (EHD), are transmitted by midges and cause similar hemorrhagic disease in mule deer. Acute infection results in swelling of the head and neck, respiratory disease, or sudden death. Deer may recover with resulting lameness due to viral damaged blood vessels of the hooves. Cervid adenoviral hemorrhagic disease (AHD) is transmitted by direct contact between mule deer and can cause illness similar to BTV and EHD with symptoms of respiratory distress and internal hemorrhaging. Mule deer can also be seen with fibroma tumors caused by a relatively common papillomavirus, transmitted from direct contact between deer or through biting insects. The warty growths, though unsightly, are usually self-limiting and rarely cause death.



Ectoparasites

An exotic chewing louse of western Eurasian fallow deer occurs in mule deer populations in several western states. Infestations cause irritation and excessive grooming leading to barbering and declining body condition. Various native ticks, lice, fleas, and keds occur on mule deer but do not cause population declines. However, tick-carried blood parasites and pathogens can be carried by deer and cause disease in humans and other host animal species.



Endoparasites

Nose and throat bots occur when adult female bot flies deposit larvae in the nose of deer. The larvae migrate to the sinuses to mature and cause the animal discomfort but are rarely more than a nuisance. Other internal parasites such as adult lungworms can cause respiratory disease in mule deer. On the eastern edge of mule deer range, the meningeal worm occurs naturally in unaffected white-tailed deer; however, mule deer develop neurological signs due to migrating worms in the brain and spinal cord. The arterial worm, transmitted by horse flies, occurs in the carotid arteries of unaffected mule deer, its definitive host. In other ungulate species it can lead to blindness and death. Many other round worms, tapeworms, flat worms and protozoan parasites can occur in mule deer.

CONTROL, TREATMENT, AND MANAGEMENT OF DISEASE IN FREE-RANGING POPULATIONS

Nearly all diseases occurring in mule deer are not transmissible to humans and those that can be transmitted, such as plague, are very rare. However, diseases in wildlife populations are difficult to manage. Broad disease management goals include no management action, some level of disease control, or attempted eradication. Economic and social values must also be considered with disease management alternatives. Preventing disease introduction into susceptible populations is the most efficient and cost effective method of disease management. Preventative management actions in mule deer include import and transport restrictions, disease surveillance programs, decontamination and sanitation protocols, development of physical barriers, and restrictions on baiting and feeding. Medical treatments or population interventions are costly, difficult, and unlikely to be effective.

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Mule Deer Working Group **Fact Sheet**

WINTER RANGE DISTURBANCE Fact Sheet #17

OVERVIEW

Mule deer attempt to minimize their energy expenditures in winter because of reduced available habitat and low quality forage. Winter disturbance by humans can require deer to expend unnecessary energy, which can affect survival and reproduction. Lower survival and reproduction can ultimately reduce the number of deer available for hunting and viewing.

BACKGROUND

Outdoor recreation and energy development are increasing throughout the West. These activities can disturb mule deer and prevent them from using preferred habitats. For example, activity and traffic associated with energy development have been shown to displace mule deer from higher quality range to lower quality habitat. Recreational activities such as hiking, running, mountain biking, skiing, snowshoeing, snowmobiling, and shed-antler hunting can also be a source of stress and avoidance behavior in mule deer. The predictability, consistency, and level of threat associated with a disturbance will influence the avoidance response. Research has shown that people recreating off-trail can cause greater avoidance behavior by mule deer than on-trail activities. Additionally, recreating with dogs can further increase stress on mule deer because they often react more strongly to the perceived threat from dogs.



Photo: Bruce Stirlings

EFFECTS

Even under favorable conditions, mule deer typically eat less and lose weight during winter months. During severe winters, mule deer limit their physical activity to conserve energy which increases their chances of survival until vegetation green-up in the spring. Human disturbance forces mule deer to use more energy and can reduce their body condition to levels that influence survival or reproduction. In addition to increased energy use, reacting to human disturbance also diverts time away from important behaviors such as feeding and resting. Finally, females in

poor condition may have smaller fawns that are less likely to survive than fawns born to females in good body condition.

Land managers are encouraged to promote practices that protect mule deer and their habitats. On federal lands, this protection is often accomplished through land management planning. Minimizing disturbance to mule deer should be a high priority when balancing energy development, recreation, and other uses on mule deer winter ranges.

Photo: Andy Holland



RECOMMENDATIONS FOR RESPONSIBLE RECREATION

- Keep your distance from mule deer and other wildlife – winter is the most crucial time for many mule deer populations.
- Recreate responsibly and legally by only using open roads and trails.
- Focus winter recreation in areas without wintering big game animals.
- Keep dogs leashed.
- If you see people harassing mule deer, report it to state or provincial wildlife officers.
- If deer are moving away from you, you are too close!



Photo: David Thompson

ENERGY DEVELOPMENT RECOMMENDATIONS

- Critical winter ranges on federal lands should be accurately mapped so they can be considered and if possible avoided in leasing decisions.
- Develop a comprehensive energy development plan that considers the needs of wintering mule deer. Avoiding crucial habitats, consolidating facilities, and minimizing the amount of vehicular traffic needed for project maintenance and operations are strategies that can reduce the effects of energy development on wintering mule deer.
- At a minimum, land management agencies should coordinate closely with state or provincial fish and wildlife agencies regarding limiting energy development activities during critical winter mule deer survival periods (Nov 30 – April 30), including management of vehicle access that may affect important mule deer habitat.
- If avoiding and minimizing disturbances are not possible, effects should be mitigated with habitat enhancement projects.
- Limit traffic to the extent possible during periods of mule deer activity (within 3 hours of sunrise and sunset).
- Recommend energy companies train staff on how to minimize disturbance on winter range.

Photo: Andy Holland



CONCLUSIONS

Our activities can affect the reproduction and survival of the animals we care about. Actions that disturb wintering mule deer should be avoided. Recreational travel on winter range should be managed through close coordination with the state or provincial fish and wildlife agency to reduce disturbance when deemed harmful to mule deer. The collaborative development of best management practices that reduce disturbance will benefit mule deer populations and conserve this important species for future generations.

More information on mule deer can be found at www.muledeerworkinggroup.com

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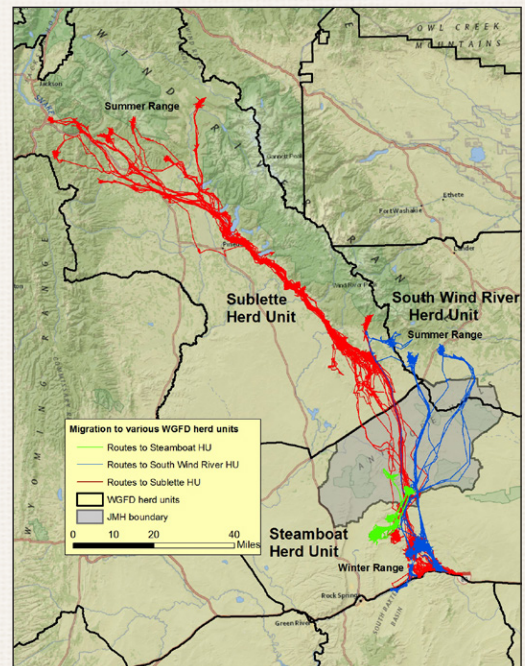
UNDERSTANDING MULE DEER MIGRATION Fact Sheet #12

OVERVIEW

The ability to migrate is essential for mule deer to travel to, and access, important seasonal habitats. Throughout the range of mule deer, migrations occur in the fall and spring as animals travel between winter and summer ranges. Migration allows mule deer to avoid deep snow and other harsh conditions during winter and take advantage of high quality forage during summer. Because migration corridors serve as the critical link between summer and winter ranges, they must be unimpeded by physical barriers (e.g., game-proof fences, roads, etc.) and protected from various forms of development and human disturbance (e.g., housing and energy development).

CONSIDERATIONS

Recent advances in Global Positioning System (GPS) technology have allowed wildlife researchers to obtain frequent and detailed movement data to identify migration routes of individual mule deer. Individual routes are combined to identify “migration corridors” for mule deer populations. This detailed information has highlighted the complexities of migratory populations and the importance of conserving the key migration corridors that connect winter and summer ranges. For example, managers learned migrating mule deer may spend 2–4 months migrating and most of that time is spent in distinct “stopover” areas where mule deer follow the vegetation “green-up” and maximize use of nutritious vegetation. Also, migrating mule deer may move greater than 150 miles, across diverse landscapes, and encounter a variety of obstacles and challenges along their journey. Because migratory mule deer far outnumber non-migratory deer, maintaining these migrations is critical to sustaining mule deer numbers throughout much of their range. By observing movements of individual deer over time, researchers determined mule deer use the same route year after year. This consistent use of the same routes annually highlights the importance of conserving migratory corridors. Not all mule deer populations migrate along



well-defined corridors. There are many instances where deer move along many different and scattered routes between seasonal ranges, making the conservation of each of those routes more difficult.

POTENTIAL RISKS TO MIGRATING DEER AND THEIR CORRIDORS

Energy Development - Recent mule deer research indicated energy development affects migratory patterns of mule deer. Specifically, mule deer move more quickly through developed gas fields and sometimes attempt to detour around them. When mule deer have to speed up their migration, they may not be able to track the vegetation “green-up” or access critical “stopover” sites. Also, once mule deer arrive on winter ranges with developed gas fields they avoid infrastructure (e.g., roads and well pads), which effectively reduces the size of usable winter range and could result in population decline.



A common misperception is mule deer “acclimate” or “habituate” to energy development, but long-term studies show deer continue to avoid infrastructure more than 10 years after development.



Vehicle Collisions - Vehicle collisions can be a major source of mortality for migrating mule deer and a hazard for motorists. Tall (8-foot) fencing can be used to keep deer off roadways and eliminate road crossings, but such fencing also blocks migration routes. Road crossing structures (e.g., underpasses and overpasses) have been constructed to maintain and reestablish migration corridors in many areas of the West. Underpasses and overpasses constructed in Wyoming are used by thousands of deer each year, allowing them to reach important seasonal habitats and improving highway safety for motorists.

Fences - Fences that block migration corridors are a source of mortality to migrating mule deer. Removing or modifying fences to accommodate deer crossing can be an effective means to offset such impacts.

Rural and Urban Expansion – As people continue to expand into rural settings, impacts to mule deer migration corridors and seasonal habitats will increase. With the expansion of residential development, comes more fencing, higher levels of human disturbance, and an assortment of and other obstacles mule deer must avoid or cope with. In some cases, residential development has been so extensive and restrictive that mule deer have simply stopped migrating through those areas.



CONCLUSIONS

Efforts to conserve migration corridors are an important component of overall conservation of mule deer in the West because the largest and most productive mule deer herds are migratory. As awareness of the importance of migration corridors grows, conservation efforts to maintain these corridors and incorporate them into land-use planning processes are imperative. Similar to critical winter ranges, migration corridors need to be considered in local, state, and federal land-use planning in order to sustain current mule deer populations. Common sources of risk to migrating mule deer and their corridors include fences, road crossings, energy development, and residential development. With specific maps of migration routes now available, we can identify and prioritize where conservation efforts should be focused to reduce risks to migrating mule deer and migration corridors. Effective conservation measures may include road crossing structures, fence alterations or removal, modifications to proposed industrial developments, conservation easements, leasing stipulations, and state, provincial, or federal protections available through land-use planning. Mule deer migration corridors are essential to the long-term conservation of this iconic species. Many corridors are more than 100 miles in length and cross through many different land ownerships and agency jurisdictions. This situation complicates conservation efforts and requires people work together to develop site-specific measures to ensure migrations continue into the future.

More information on mule deer can be found at www.muledeerworkinggroup.com



Mule Deer
Working Group

Fact Sheet

URBAN MULE DEER ISSUES Fact Sheet #9

OVERVIEW

Increased urbanization has reduced, fragmented, and in some cases, eliminated critical mule deer habitat. These overall changes in mule deer habitat affect deer populations, generally leading to declines. However, in many cases, mule deer have adapted to life in urban areas, leading to conflicts with humans. Urban areas include heavily-developed urban centers along with outlying suburban and exurban areas. Mule deer population can increase rapidly in these areas as deer take advantage of the abundant forage and water sources provided by humans as well as protection from hunting and other types of predation. Habituation to humans in close settings allows mule deer to exist at densities above what is generally seen in the wild. How urban mule deer impact people is often dependent on human tolerance levels, which can vary by community.



NEGATIVE IMPACTS

Mule deer are browsers: preferring leaves, stems, and buds of woody plants, as well as forbs (weeds). Like many other wildlife species, mule deer are opportunistic and in some cases will eat and damage ornamental plants, hedges, vegetables, flowers, and lawns. Bucks can damage shrubs and saplings by rubbing the bark with their antlers. This damage to personal and commercial-grown vegetation is not well-tolerated and can make people view mule deer as a nuisance.

Urban areas rarely allow hunting. Deer repeatedly exposed to humans without negative consequences will eventually become habituated or show little fear of humans. Habituated mule deer may become aggressive and pose a danger to human residents. There are reports of mule deer bluff-charging people, chasing joggers, attacking postal workers, and killing small pets. Large mule deer numbers in urban areas can also lead to more deer on roads and increase the potential for deer-vehicle collisions. Mule deer populations attract predators to urban areas, creating a possible hazard for local residents and pets. The urban environment can have a negative impact on deer as well. Busy streets, railways, fences, parking garages, and bridges are hazards for urban deer. There are many reports of deer-vehicle collisions, fatal jumps from parking garages and bridges, and entanglement in fences. The potential for disease transmission is also greater due to the high densities of deer in urban areas.

MANAGING URBAN MULE DEER ISSUES

Prohibiting Supplemental Feeding

Supplemental feeding of mule deer in urban areas can greatly increase fawn production and may affect overall deer survival. Residents of urban areas often feed mule deer by hand or through a feeder because they enjoy having the deer in close proximity or feel that the deer need the supplement to survive. Inadvertent feeding also occurs such as through bird or squirrel feeders. Working with local governments to enact regulations prohibiting supplemental feeding is an important step in managing an urban deer problem. Prohibiting feeding also reduces the attractants that draw deer into the urban areas to begin with. Individuals should also consider placing bird or squirrel feeders out of reach to eliminate use by deer.

Chemical Repellents and Scare Devices

Several techniques are available to deter urban deer. Deterrents are modestly effective when deer densities are relatively low and often lose effectiveness as deer abundance and problems grow. A variety of chemical deer repellents are commercially available. Repellents rarely work and require constant application, especially after rain or snow. Scare devices can sometimes be effective at deterring urban deer. Some scare devices are commercially available, but contact state wildlife officials for the use of noise-making scare devices such as Zon-guns (propane cannons), crackershells, and M-80s. Be sure to consult local laws before using pyrotechnic devices.

Deer-resistant plants and fencing

Certain ornamental plants are unpalatable to deer and are less likely to be browsed. Using these plants in landscaping instead of more-desirable browse species can reduce deer conflicts. To determine which plants are deer-resistant and adapted to the local area contact a local nursery or state wildlife official. A variety of reference books and internet resources are also available on the subject.

Fencing deer out is the most effective and permanent method. A wide variety of fence designs will keep problem deer out. Fences should be at least 8 feet tall with no gaps greater than 8 inches. Electric fencing also works to deter deer on a more temporary basis, such as winter browsing. A hybrid approach of installing two strands of electric wire on top of an existing fence can also be an effective approach. Surrounding individual plants with wire cages can prevent browsing. Also, wire mesh or pipe placed directly around tree trunks will reduce damage by bucks rubbing their antlers.



Hunting

Wildlife agencies are successfully using regulated hunting in urban areas to address urban deer issues. Carefully regulated archery hunts in restricted hunting areas can be particularly effective and efficient. Some agencies have used professional shooters to kill deer with the meat donated to charitable groups. Hunting in and around urban areas requires close coordination with local governments and citizens, but where possible, it is a cost-effective solution.

Relocation and contraception

Some wildlife agencies are capturing and relocating urban deer to more remote, suitable habitat on a limited basis. This approach is labor- and cost-intensive, with uncertain effectiveness. Moving deer is dependent on the availability of release sites, which have to be carefully evaluated to ensure that the habitat can support more deer. Given these constraints, moving deer is unlikely to be a common solution for widespread urban deer issues in the West. Contraception is often proposed as a method to reduce overabundant deer populations, but it is not currently feasible in free-ranging deer populations.

PUBLIC OPINION AND EDUCATION

Public input is the most important aspect of managing urban deer. There are a wide range of opinions regarding deer in urban areas. Some enjoy seeing deer in their backyards and tolerate the damage, while others see urban deer as a hazard and nuisance. Prudent consideration of all factors involved and proper public education is critically important when managing urban mule deer.



Photo: Coburn Peterson

More information on mule deer can be found at www.muledeerworkinggroup.com

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Research Article

Effects of Distribution, Behavior, and Climate on Mule Deer Survival

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ABSTRACT Mule deer (*Odocoileus hemionus hemionus*) populations in North America are a valuable economic wildlife resource, with the managed harvest of this species reflecting societal values and recreational opportunities in many parts of the western United States. Managing mule deer populations while allowing for harvest requires an understanding of the species' population dynamics, including the specific factors associated with population change. We conducted a 7-year (2005–2012) study designed to investigate habitat use and survival of mule deer in eastern Oregon, USA. We used known-fate data for 408 adult female radio-collared mule deer to estimate monthly survival rates and to investigate factors that might affect these rates, including seasonal distribution, temporal effects (seasonal, annual, and trends across season and year), movement behavior, and local weather and regional climatic covariates. Variation in survival rates of female mule deer was best explained by an additive effect of migration behavior, differences in survival during the fall migration period compared to the rest of the annual cycle, and precipitation levels on winter ranges of individual deer. Estimates of annual survival were higher for migrants (0.81–0.82), compared to residents (0.76–0.77). Survival was lower for migrants and residents during fall migration (Oct–Nov) and higher amounts of winter precipitation increased survival of both groups. The results of our study suggest that migrating to potentially higher quality summer foraging areas outweighed the cost of traveling through unfamiliar habitats and energy expenditure associated with migration. © 2018 The Wildlife Society.

KEY WORDS migration, mule deer, *Odocoileus hemionus*, Oregon, population dynamics, survival, winter precipitation.

To sustainably manage mule deer (*Odocoileus hemionus hemionus*) populations while allowing for harvest requires an understanding of the species' population dynamics (Gordon et al. 2004), including the specific factors influencing population change. For ungulates in general, juvenile (<1 yr old) survival is highly variable and is the vital rate most commonly attributed to fluctuations in population size (White and Bartmann 1998, Gaillard et al. 1998). In contrast, adult female survival rates are generally characterized as high, exhibiting little temporal variation (Gaillard et al. 1998), and mule deer populations may rely more on high stable adult survival rates than other ungulate populations to prevent long-term population fluctuations (Forrester and Whittmer 2013). However, where survival rates for adult female mule deer have been quantified, they can vary temporally and spatially between populations (Nicholson et al. 1997, Unsworth et al. 1999, Bishop et al. 2005), and small changes in adult female survival of mule deer can have

major effects on the overall population growth rate (Morris and Doak 2002). Thus, biotic and abiotic factors that increase variation in adult female survival rates can decrease mule deer population stability (Gaillard et al. 1998).

Specific factors associated with temporal and spatial variation in adult mule deer survival rates include migration behavior (Nicholson et al. 1997), location of seasonal ranges (Bishop et al. 2005), and regional climate and local weather patterns (Monteith et al. 2011, Lendrum et al. 2014). Mule deer populations across the West contain individuals that migrate between seasonal ranges and those that do not, with migratory individuals typically more common in a population than those that do not migrate (Garrott et al. 1987, Brown 1992, Nicholson et al. 1997). The benefits of migration can include seasonal escape from predation or insect harassment (Fryxell et al. 1988, Hebblewhite and Merrill 2007) and the advantage of following seasonal food availability (Pettorelli et al. 2005, Lendrum et al. 2014) or other limiting resources (e.g., water; Murray 1995). However, mule deer that migrate must travel longer distances, and can be exposed to greater risks, such as predation or vehicle collisions associated with crossing highways (Nicholson et al. 1997).

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In addition, the seasonal movement of individuals between summer and winter ranges can subject an ungulate population to varying climate or weather stresses during different parts of the annual cycle (Post and Stenseth 1999). In particular, winter precipitation (Bishop et al. 2005), winter severity (DeLgiudice et al. 2002), and midsummer drought (Brown et al. 2006) can be associated with variation in mule deer survival. Climate change models for the Pacific Northwest predict drier summers, and wetter autumns and winters (Mote and Salathé 2010) and this may increase the risk for large-scale wildfire in the western United States (Westerling et al. 2006); these are all changes that could affect mule deer at different stages of their life cycle (Post and Stenseth 1999).

The objective of our study was to estimate monthly survival rates for adult female mule deer in south-central Oregon and determine the spatial and temporal factors that affected mule deer survival. We hypothesized that survival rates for mule deer on our study area would vary in relation to 4 general factors: individual migration behavior, location and characteristics of seasonal ranges, winter weather patterns, and disturbance on seasonal ranges and during the hunting season. Specifically, we predicted decreased survival as the distance traveled between seasonal ranges increased because of an increase in migration costs (i.e., energy expenditure, risk of predation, or vehicle collision), particularly as migration routes generally included crossing between 1–3 highways. We predicted that survival rates would be negatively affected by higher winter severity because severe winter weather can make mule deer more susceptible to predation and starvation as temperatures decrease and precipitation increases (Nelson and Mech 1986, DeLgiudice et al. 2002). We predicted that deer with ranges that included the expanding urban area would have lower survival than deer with ranges outside because of higher exposure of human disturbance (Nicholson et al. 1997, Oliver and Kline 2012). Finally, we predicted that the disturbance of hunting (hunters on foot, sounds of firearms, increased vehicle use) would negatively affect females by increasing flight response time (Stankowich 2008), which could decrease time spent foraging or increase interactions with vehicles.

STUDY AREA

The study area was located in south-central Oregon near the eastern slopes of the Cascade Range and extended into the High Lava Plains and the Basin and Range provinces (Franklin and Dyrness 1973). The study area (~44,000 km²) primarily included lands under federal ownership administered by the United States Department of Agriculture Forest Service and United States Department of Interior Bureau of Land Management, with private land dispersed throughout. Although plant communities differed across the study area because of elevation and soil type (Franklin and Dyrness 1973), vegetation for a large portion of study area was typical of shrub-steppe ecosystems (low rainfall, natural grassland primarily composed of sagebrush [*Artemisia* spp.]) with forested ecosystems at higher elevation. Shrub-steppe ecosystems are characterized by plant communities that

include sagebrush, antelope bitterbrush (*Purshia tridentata*), snowbrush (*Ceanothus velutinus*), rabbitbrush (*Chrysothamnus* sp.), fescue (*Festuca* spp.), and blue bunch wheatgrass (*Agropyron spicatum*). Forested ecosystems are characterized by plant communities that include ponderosa pine (*Pinus ponderosa*), western juniper (*Juniperus occidentalis*), Douglas fir (*Pseudotsuga menziesii*), quaking aspen (*Populus tremuloides*), and lodgepole pine (*Pinus contorta*).

In addition to mule deer, the study areas supported wild populations of elk (*Cervus canadensis nelsoni*), pronghorn (*Antilocapra americana*), cougar (*Puma concolor*), black bear (*Ursus americanus*), and coyote (*Canis latrans*). Widespread livestock grazing (cattle) on private lands and through permit on federal lands administered by the Bureau of Land Management also occurred.

The climate in this region is described as having dry warm summers (Jun–Aug) with average July maximum temperatures of 27°C to 31°C, and cold winters (Dec–Feb) with average minimum January temperatures of –7°C to –11°C (PRISM Climate Group 2010). Annual precipitation ranged from 38 cm to 89 cm, usually in the form of snow (Franklin and Dyrness 1973), and the topography was relatively flat with gently rolling hills ranging in elevation from 587 m to 2,192 m. Soil types varied widely throughout the study area, mostly composed of pumice and ash, from the eruption of Mount Mazama over 8,000 years ago (Franklin and Dyrness 1973). Most of the area was administered by the Bureau of Land Management (24%) or the United States Forest Service (44%) and the rest was privately owned (particularly at lower elevations). The human estimated population for the area was 254,000 people (U.S. Census Bureau 2010).

Oregon Department of Fish and Wildlife (ODFW) managed ungulate populations within the context of discretely bounded areas known as Wildlife Management Units (WMUs). The WMUs were created in 1958 to facilitate distribution of wildlife harvest levels across the state (Mace et al. 1995). State administrative boundaries within the study area included Klamath, Lake, and Deschutes counties (Fig. 1), and the Fort Rock, Interstate, Klamath Falls, Paulina, Metolius, Silver Lake, Sprague, Upper Deschutes, and Wagontire WMUs (ODFW 2003). The core study area included the Fort Rock, Sprague, Silver Lake, and portions of Paulina, Wagontire, and Upper Deschutes WMUs. During the winter, some mule deer also occurred in Maury and Warner WMUs, north-central California, and west of the Cascade Mountain crest in McKenzie, Indigo, and Santiam WMUs.

METHODS

Capture and Handling

Research personnel from ODFW captured and radio-collared adult female mule deer from June 2005 to September 2011 ($n = 456$). Most deer were captured using helicopter net guns (75%; Barrett et al. 1982) with the rest captured via chemical immobilization with a rifle-fired dart (23%) or using panel or clover traps (2%; Clover 1954). We used a combination of Telazol (Zoetis, Kalamazoo, MI,

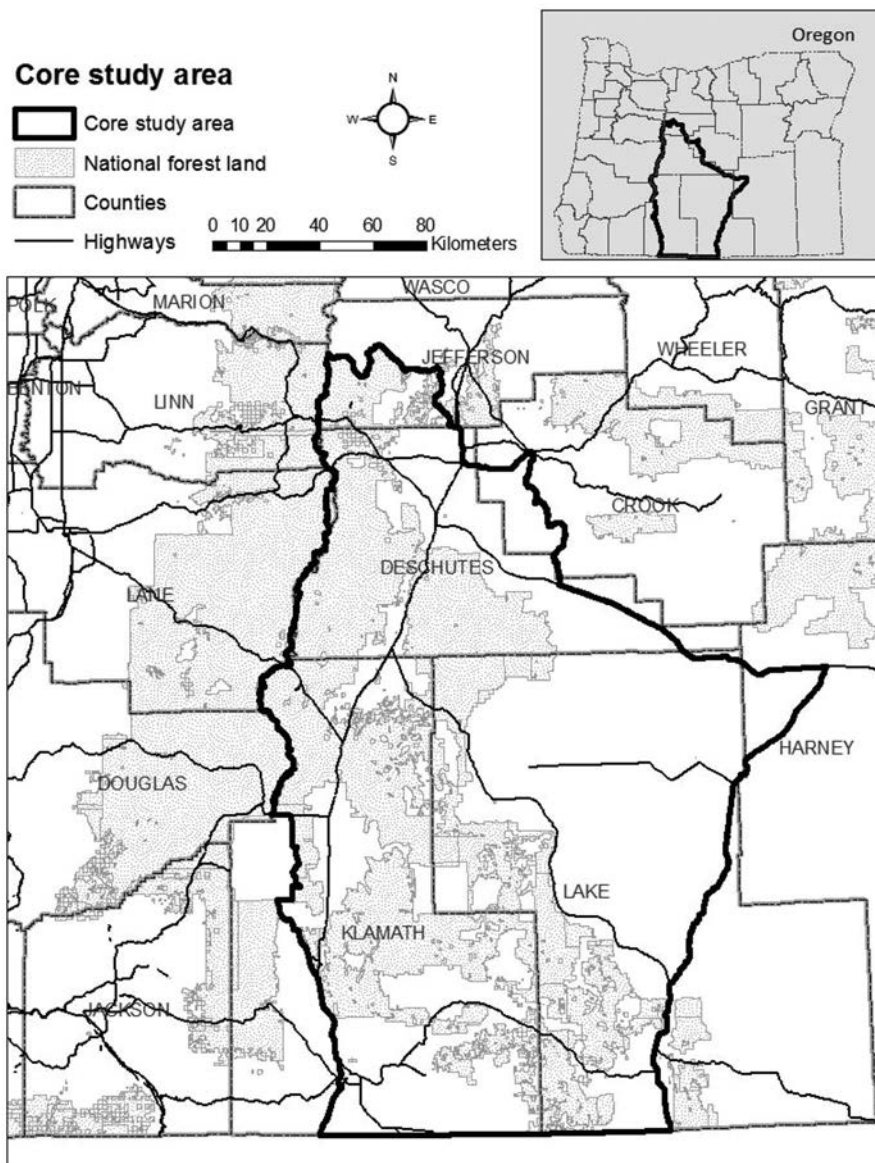


Figure 1. Location and core study area of the 408 adult female mule deer used in the known-fate survival analysis in south-central Oregon, USA, August 2005 to May 2012.

USA), xylazine, (Lloyd, Shenandoah, IA, USA), and ketamine (Bionichepharma, Galway, Ireland) to chemically immobilize deer, with Tolazoline (Wildlife Pharmaceuticals, Windsor, CO, USA) used as an antagonist (Monteith et al. 2012). We aged (through dental examination; Erickson et al. 1970), ear-tagged, and sexed all deer captured (fawns, yearlings, adults), and radio-collared adult females. We handled all deer in accordance with protocols approved by ODFW for safe capture and handling and following recommendations of the American Society of Mammalogists (Sikes et al. 2011).

We attached global positioning system (GPS) radio-collars to adult females, with data either stored on board (3300S, Lotek, Newmarket, ON, Canada; $n = 401$), or downloaded remotely (4400S, Lotek; $n = 55$). We programmed GPS radio-collars to obtain locations every 4 hours except during

fall and spring migration periods when we increased programmed location frequency to obtain a location every 90 minutes. The comprehensive location data stored on collars became available when the deer died, or once the radio-collar automatically detached from the deer 17 months after attachment. The GPS collars had a motion-sensitive sensor that caused a change in the transmitter's pulse rate if the transmitter was motionless for >4 hours (i.e., mortality signal). We investigated these mortality signals within 24–72 hours of detection and conducted necropsies if the carcass was present. We assigned each deer mortality to 1 of 8 cause-of-death categories: cougar predation, coyote, illegal harvest, harvest, vehicle collision, disease, other (e.g., fence collisions, malnutrition or starvation, death during fawning), and unknown. We used a standardized protocol developed by ODFW to evaluate cause of death for every necropsy. We

determined the cause of death by observing predator-specific wounds, concealment and location of the carcass, and consumption habits (Henne 1975, Wade and Bowns 1982). If it appeared that predation had occurred, we required a complete checklist of descriptive indications (i.e., bite marks, scat, tracks) at each site for a carcass to be assigned to a potential predator (cougar, coyote); otherwise we classified it as predator unknown. After we investigated a deer mortality, we collected the GPS collar and downloaded the collar location data into a geographic information system (GIS) database (ArcMap version 10.0, Environmental Systems Research Institute, Redlands, CA, USA).

Explanatory Variables for Survival

We estimated monthly survival rates for adult female mule deer from August 2005 through May 2012. We defined the mule deer annual cycle in terms of their biology with each year starting on 1 June, when most fawns are born (Speten 2014), and ending 12 months later on 31 May. We defined 4 seasons that reflected different stages of the mule deer life cycle: summer (1 Jun–30 Aug), fall (1 Sep–30 Nov), winter (1 Dec–28 Feb), and spring (1 Mar–31 May). We also identified spring (Apr and May) and fall (Oct and Nov) migration periods (Coe et al. 2015), and the hunting season (Aug–Oct) as potentially important sources of temporal variation in survival.

We plotted the GPS data for each individual deer to determine summer and winter ranges. We categorized locations as those that delineated seasonal ranges or those that reflected migration routes by examining distances and direction of sequential movements (Cupples and Jackson 2014). Each seasonal range was characterized by short movements (<3 km within 4 hr) conducted between winter and summer. We defined the beginning of the migration movement by the first movement (>3 km) outside the seasonal ranges without returning, and ended once the individual reached the new seasonal range (Thomas and Irby 1990). Once we determined each summer and winter location cluster and removed migration locations, we used spatial statistics in ArcMap version 10.0 to obtain the mean center of the seasonal range. We considered a deer to be migrating when the direction of movement was away from the mean center of one seasonal range in the direction of the other mean center seasonal range, outside of the cluster (Brown 1992). We also assigned each seasonal range center a WMU number associated with the WMU where it occurred. If a deer remained in one area the entire year then we categorized it as a resident deer and calculated a mean center using all location data. Because management and harvest pressure varied by WMU, we predicted that variation in survival could be explained by differences in WMUs where summer and winter seasonal ranges were located.

Oregon Department of Fish and Wildlife estimated mule deer herd composition annually for population trend information and hunting tag allocation (ODFW 2003). We identified groups of deer in our study based on fine-scale temporal location data from GPS collars (Cupples and Jackson 2014). We determined mule deer groups identified

as herds by similarities in winter location, angle and distance of travel from winter location, and migration pathways (J. B. Cupples, ODFW, personal communication). We assigned each individual deer in our analysis to a herd group based on this characterization (Cupples and Jackson 2014).

To index human development in proximity to the seasonal ranges and migration pathways of mule deer, we used Wildland Urban Interface (WUI) geospatial data from Oregon Department of Forestry (<http://www.oregon.gov/odf/pages/fire/sb360/sb360.aspx>, 27 May 2014). The WUI delineated areas where houses (urban, suburban, and sometimes rural areas) and undeveloped natural areas interface (Radeloff et al. 2005). We assigned each individual deer a binary value for each seasonal range depending on whether that range was inside (1) or outside (0) the WUI.

We considered an individual deer migratory if its seasonal ranges did not overlap (Brown 1992), whereas we categorized deer that had both winter and summer ranges in the same location as resident deer. If a deer died before we could determine its migratory status, we categorized it as unknown, so we had 3 categories associated with migration behavior and 2 dummy variables to code these categories (migratory: migrant = 1 and unknown = 0; unknown: migrant = 0 and unknown = 1; resident: migrant = 0 and unknown = 0). We estimated distance migrated by measuring the distance (km) between the seasonal range centers following the actual migration path.

We also compared our method of categorizing migration behavior with the results from a net squared displacement analysis to identify movement patterns of yearly trajectories of individual deer (Cagnacci et al. 2016). We derived migration parameters corresponding to resident, migrant, and nomadic (distance, timing, and duration of seasonal movements are random) behavior from a fixed effects model by fitting nonlinear models to each individual trajectory separately following Bunnefeld et al. (2011) and using the *nls* function in R (Cagnacci et al. 2016).

Deer-vehicle highway collisions are a concern to state agencies nationwide (Romin and Bissonette 1996, Coe et al. 2015). We used a Oregon state highways GIS layer from Oregon Department of Transportation land use development zones (2009) (<http://www.oregon.gov/ODOT/TD/TDATA/pages/gis/odotmaps.aspx>, accessed 17 Aug 2014) to calculate the number of highways an individual deer must cross during fall or spring migration (range = 0–3) to reach its seasonal range (average traffic volume = 15,200 Annual Average Daily Traffic of all vehicles for 3 highways in study area from 2005–2012). In addition, we also calculated a third covariate combining the number of times a deer crossed a highway (i.e., number of highway crossings) during spring and fall migration (range = 0–6). We predicted that survival rates would decrease as the number of highways crossed or highway crossings increased because the risk of collision with a vehicle would be increased the more often a deer crossed a highway.

We obtained mean temperature and precipitation data for 2005–2012 from the PRISM maps for our study areas (PRISM Climate Group 2010). We calculated a winter

precipitation value (mm) by averaging the mean monthly precipitation (mm) for December, January, and February at 2 spatial scales: the individual's winter range and across the entire WMU assigned to each individual's winter range. The resolution of the PRISM data were similar in size to the winter seasonal ranges, so we used the precipitation value taken at the mean center point of the individual's winter range to determine the winter precipitation at the individual level. Because of the expansive area within each WMU (>5,000 km²), we used zonal statistic in ArcMap version 10.0 to calculate the mean monthly winter precipitation across each WMU for each year. We chose 2 different spatial scales (WMU and individual home range) to be able to detect different weather patterns and variability, while trying to eliminate bias of perceived ecological importance (Levin 1992). Deep snow can make deer more susceptible to predation and starvation; therefore, we predicted that winter survival rates would be negatively affected by higher winter precipitation at the WMU level and individual home range.

We used geospatial winter severity data developed by ODFW to index winter range conditions during December through February (Johnson et al. 2013). We calculated this index using precipitation from December to February and the average monthly minimum temperature and then standardized into a single metric (WSI = standardized precipitation—standardized temperature; Johnson et al. 2013) using PRISM models (PRISM Climate Group 2010). We calculated winter severity at 2 spatial scales: the individual's winter range and across the entire WMU assigned to each individual's winter range.

We used Palmer Drought Severity Index (PDSI; Palmer 1965) data (<http://www.wrcc.dri.edu/wwdt/about.html>, accessed 07 Jul 2014) to compare an index to soil moisture conditions across years on deer summer ranges. This standardized index is widely used to measure long-term drought intensity, and is based on evaporation, soil moisture, and temperature in past and current weather patterns (Palmer 1965). The PDSI values range from -6 to +6, with negative values indicating drier conditions (Palmer 1965). Ungulate survival was positively related to PDSI in other systems (Lawrence et al. 2004, Brown et al. 2006), suggesting that drought during summer can negatively affect female ungulate survival. We used the PDSI for August to determine if summer drought directly influenced summer survival, or if there were lag effects of drought that influenced fall survival at the individual summer range level (Table 1).

Adult Female Survival Analysis

We generated monthly survival estimates for adult female mule deer using known-fate models, with estimates and model selection statistics generated in Program MARK (White and Burnham 1999). This approach allowed for a staggered entry of marked deer, and the modeling of temporal variation and individual-specific covariates that we predicted would affect survival within a standardized model selection and multi-model inference framework (Murray 1995). We excluded from analysis deer whose collars failed prior to the data download process or that died within

14 days of capture because of the likelihood of capture myopathy (Chalmers and Barrett 1982).

We used an information-theoretic approach to evaluate models using Akaike's Information Criterion (AIC_c); we considered models within 2 Δ AIC_c to be competitive with the top model (Burnham and Anderson 2003). We also examined the 95% confidence intervals for slope coefficients (betas) and used the degree of interval overlap with zero to evaluate the direction and strength of model covariates.

To avoid a large *a priori* model set that would result from running every possible combination of all covariates, we used a sequential modeling approach that allowed us to evaluate covariate effects for specific types of covariates in single-factor models and in combination with competitive models retained from a previous modeling stage. At each modeling stage, we also evaluated models that excluded covariates from the previous stage to be sure all the covariates in our top models were informative (Arnold 2010). This sequential approach generally results in the same model selection outcome as an all-possible combinations modeling approach, with the benefits of a much smaller model set and fewer models with uninformative parameters (Arnold 2010, Doherty et al. 2012). We began by building models that examined temporal covariates including year, season, migration period, and hunting season. We then tested the location covariates associated with individuals, including WMU location during the summer and winter, herd group membership, and proximity to human development (winter range present within WUI). We tested these first as single factor models and then combined them in models with temporal covariates from competitive models identified from the first modeling stage. We then tested movement parameters, including migration behavior, distance migrated, and number of highways crossed, singly and in conjunction with competitive models from the first 2 modeling stages. Finally, we tested whether monthly survival was associated with winter precipitation or winter severity at the WMU scale and also at the individual home range scale through the process outlined above. We included the most general model including separate estimates of survival for each month and year and the model with no effects for comparison at all modeling stages.

Causes of Mortality

We documented 157 female deaths over the course of the study, but because of logistical difficulties associated with recovering mortalities (inaccessible locations and limited personnel) a portion of the carcasses could not be investigated to determine cause of death; thus, we had 54% categorized as unknowns. Therefore, we present the proportion of mortalities assigned to various known-cause categories relative to proportion known to have died to provide some basic information on the causes of mortality and relative frequency of these events when cause of death was known for mule deer in our study. During this study, Oregon did not issue hunting tags for females in our study area and only 1 deer management permit was given to a landowner with a nuisance deer. We defined illegal harvest as

any deer that we found mortally wounded from an arrow or firearm inside and outside the hunting season. There was a small possibility that some legal harvest of female deer on tribal lands could have occurred within Oregon's archery and rifle season, and outside this season, so there is a potential that some of the females were unclaimed legal tribal harvest. However, considering that the locations of these mortalities fell outside tribal hunting areas (all but 2 were >48 km away), it was unlikely these deer represented legal tribal harvest. Therefore, we considered all female deer that were killed by archery or rifle to be illegal harvest.

RESULTS

We used GPS collar data for 408 adult female mule deer over 82 months (Aug 2005 to May 2012) to estimate monthly survival. Adult female survival was best modeled by the effect of migration behavior (did a deer migrate or not), the additive effect of the fall migration period (Oct–Nov), and the additive effect of winter precipitation at the level of the individual's winter range (Table 2). Only models including migration behavior had any model weight, and survival was positively associated with migration ($\beta_{\text{migrant}} = 0.556$, SE = 0.252, 95% CI = 0.060 to 1.052) compared to deer that remained resident year-round, and resident deer had higher survival than unknowns ($\hat{\beta}_{\text{unknown}} = -1.719$, SE = 0.325, 95% CI = -2.375 to -1.080). Survival decreased during fall migration for all deer ($\hat{\beta}_{\text{fall migration}} = -0.413$, SE = 0.244, 95% CI = -0.892 to -0.064) compared to monthly survival during the rest of the year (Mar–Sep; Fig. 2). Contrary to

predictions, increased precipitation on an individual's winter range (Iwp) was associated with increased survival ($\hat{\beta}_{\text{Iwp}} = 0.014$, SE = 0.008, 95% CI = -0.002 to 0.031) during winter (Dec–Feb; Fig. 2). However, the effect of winter precipitation was weaker because 95% confidence intervals on the covariate coefficient slightly overlapped zero (<10% of the interval overlapped zero; Forsman et al. 2011; Fig. 3). Two other models were competitive ($\leq 2 \Delta\text{AIC}_c$), but model weights were influenced primarily by the inclusion of either migration behavior or individual winter precipitation (Table 2).

We calculated annual survival rates from the best model including the effect of migration behavior, migration period, and winter precipitation (β value across all deer each year) as the product of migratory months (Oct–Nov), winter months (Dec–Feb), and the rest of the year (Mar–Sep). We used a first-order Taylor expansion (i.e., the delta method; Cooch and White 2015:appendix B) to estimate standard errors for these estimates. Annual estimates of survival based on monthly estimates from the best model were approximately 0.82 for female migrants and 0.76 for residents (Fig. 4).

We characterized 75% of our individual deer as migratory, 16% as residents, and 9% with unknown migratory behavior. Our classification of deer migration behavior was consistent with results from the net squared displacement analysis, which characterized 73% of our individuals as migratory, 14% as resident, and 12% as nomadic. The estimated mean distance of migration between ranges for migratory deer from the net square displacement analysis was 38 ± 9.9 (SD)

Table 1. Covariate categories, models run within each category, and the predicted direction of the effect associated with monthly survival rates of female mule deer in south-central Oregon, USA, 2005–2012.

Covariate category	Model and covariate acronyms	Description and predicted effects
Temporal effects	YR×Mon	Survival (<i>S</i>) is fully time-dependent varying by month (Mon) and year (YR; biological year: Jun–May 2005–2012).
	YR+Mon	<i>S</i> varies by month with an additive effect of year.
	Mon	<i>S</i> varies between all monthly intervals within a year.
	.	<i>S</i> is fixed through time (i.e., monthly interval estimates are equal).
	YR	<i>S</i> varies by year.
	T, Ln T, or TT	Monthly survival exhibits a linear (T), log-linear (LnT), or quadratic (TT) time trend within biological year.
	SEAS	<i>S</i> varies as a function of season (SEAS).
	YR+SEAS	<i>S</i> varies with an additive effect of year in addition to seasonal variation.
	SMig	<i>S</i> is negatively affected during the spring migration period only (spring: Apr–May).
	FMig	<i>S</i> is negatively affected during the fall migration period only (fall: Oct–Nov).
	FSMig	<i>S</i> is negatively affected during both migration periods.
	FSMig+YR	<i>S</i> is negatively affected during both migration periods with an additive effect of year.
	FSMig×YR	<i>S</i> is negatively affected during both migration periods with an interaction of year.
	Individual	sumWMU
winWMU		<i>S</i> varies as a function of winter Wildlife Management Unit.
H		<i>S</i> varies as a function of herd group.
WUI		<i>S</i> is negatively affected when ranges fall within the Wildland Urban Interface.
Movement	MU	<i>S</i> varies as a function of migratory behavior with 3 levels (migrant, resident, unknown),
	D	<i>S</i> is negatively associated with the distance migrated between seasonal ranges.
	HC	<i>S</i> is negatively associated with the number of highways crossed during migration.
	TC	<i>S</i> is negatively associated with the times highways are crossed during migration.
Environmental	Wpp	<i>S</i> is negatively associated with an increase in winter precipitation at the WMU scale.
	Iwp	<i>S</i> is negatively associated with an increase in winter precipitation at the individual winter range scale.
	Iws	<i>S</i> is negatively associated with an increase in winter severity at the individual winter range scale.
	Wws	<i>S</i> is negatively associated with an increase in winter severity at the WMU scale.
	Dr	<i>S</i> is negatively associated with an increase in drought severity during August.

Table 2. Model selection results for the top 10 *a priori* models investigating survival probability (S) of radio-collared mule deer in south-central Oregon, USA, 2005–2012, relative to time effects, individual covariates, environmental covariates, and movement behavior. Models are ranked according to Akaike's Information Criterion adjusted for small sample sizes (AIC_c). Difference in AIC_c (ΔAIC_c), Akaike weight (w_i), number of parameters (K), and deviance are also listed for each model. Model set includes the intercept-only (null) model of constant survival over time, $S(\cdot)$, and the most general model with survival variation by season and year, $S(t)$.

Model ^a	AIC_c	ΔAIC_c	w_i	K	Deviance
$S(MU+FMig+Iwp)$	1,018.84	0.00	0.31	5	1,008.83
$S(MU+Iwp)$	1,019.52	0.68	0.22	4	1,011.51
$S(MU+FMig)$	1,020.22	1.38	0.16	4	1,012.21
$S(MU+FSprM)$	1,021.33	2.49	0.09	5	1,011.31
$S(MU+SprM+Iwp)$	1,021.52	2.68	0.08	5	1,011.51
$S(MU)$	1,022.13	3.29	0.06	3	1,016.12
$S(MU \times FMig)$	1,023.39	4.55	0.03	6	1,011.37
$S(MU+SprM)$	1,023.94	5.10	0.02	4	1,015.93
$S(MU \times SprM)$	1,025.74	6.90	0.01	6	1,013.72
$S(MU \times FSprM)$	1,026.46	7.62	0.01	9	1,008.43
$S(\cdot)$	1,072.32	53.48	0.00	1	1,070.32
$S(t)$	1,134.15	115.31	0.00	82	967.54

^aModel notation: migration behavior (MU), migration season, fall only (FMig), individual home range precipitation (Iwp), migration season (FSprM), and migration season, spring only (SprM).

km and the mean residence time on summer range for these individuals was 159 ± 38 days.

We determined cause of mortality for 73 of 157 radio-collared female mule deer that died during the study and the deaths of 84 other deer (54%) were categorized as unknown. The causes of mortality identified for females included predation, anthropogenic mortality (vehicle collision or fencing entanglement), illegal harvest, and natural mortality (fawning, disease, and starvation or malnutrition). Relative to the number that died, following unknown, the highest proportion of females died as a result of predation (18%), followed by anthropogenic mortality (14%), illegal harvest (11%), and natural mortality (3%; Table 3).

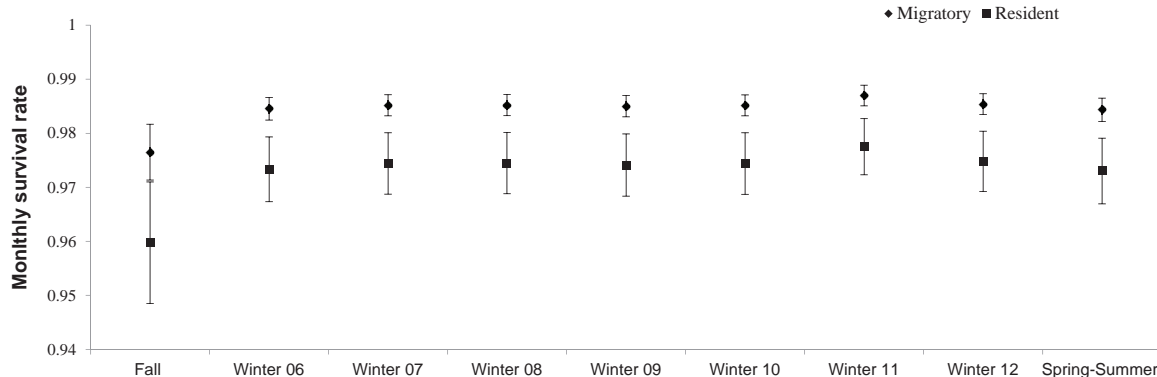


Figure 2. Seasonal survival rate estimates and 95% confidence intervals for migratory and resident adult female radio-collared mule deer in south-central Oregon, USA, 2005–2012. Fall (Sep–Nov) had the lowest monthly survival and was constant across years. Each winter (Dec–Feb) had a different seasonal estimate because the individual winter precipitation was a time varying covariate (noted by last 2 digits of year). Spring and summer (Mar–Aug) also had constant survival across all years. We derived estimates from the best approximating known-fate model including the additive effect of migration (migrants, residents, and unknown), the fall migration period, and individual winter range precipitation (Dec–Feb, \bar{x} across all individuals each year).

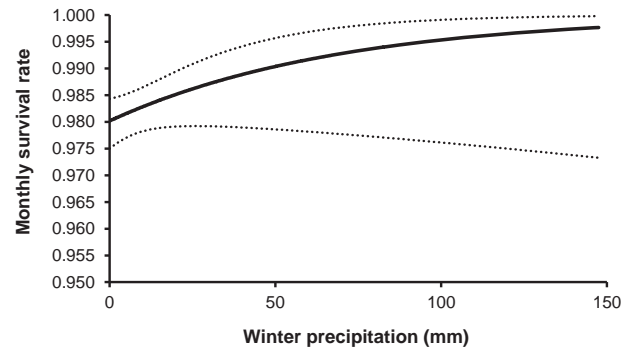


Figure 3. Estimates of monthly survival during winter, December–February (with 95% confidence limits) plotted against mean monthly winter precipitation for adult female mule deer in south-central Oregon, USA, 2005–2012. We derived survival estimates from the best approximating known-fate model including the additive effect of migration (\bar{x} across all migration categories, migrants, residents, and unknown), the fall migration time period, and individual total winter range precipitation (Dec–Feb).

DISCUSSION

We observed differences in monthly survival rates between migratory deer and resident deer and on average, migratory deer had 6% higher annual survival rate compared to residents. However, consistent with predictions regarding temporal variation in annual survival of adult females, we found very little model support for year-to-year variation in female survival rates within migration behavior categories. Annual survival rates for females in this study were lower for resident deer (0.76) than survival rates reported for adult females in other populations (0.85, Unsworth et al. 1999; 0.86, Bleich and Taylor 1998; 0.81, Bender et al. 2007; 0.91, Bishop et al. 2009). However, the weighted mean annual survival rate for adult females from values reported in the literature ($n=21$) over 30 years was 0.84 ($CV=0.06$; Forrester and Wittmer 2013), which was very similar to our annual estimates for migratory deer (0.82). The mean annual survival estimate for all females (residents, migrants, and unknowns) in this study across all years was 0.79 ± 0.02 (SE),

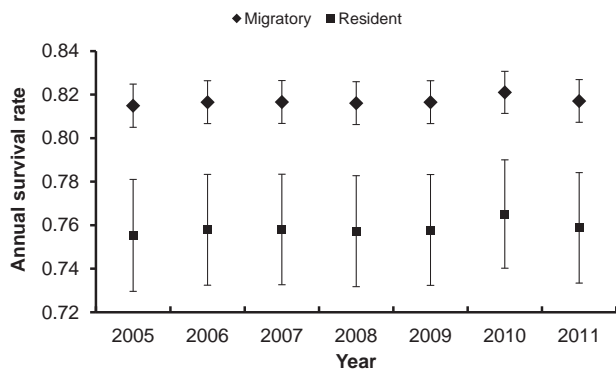


Figure 4. Annual survival rate estimates and 95% confidence intervals for migratory and resident adult female radio-collared mule deer in south-central Oregon, USA, 2005–2012. We derived estimates from the best known-fate model including the additive effect of migration (migrants, residents, and unknown), the fall migration, and individual winter range precipitation (Dec–Feb; \bar{x} across all individuals each year).

which is still slightly lower than values reported for other populations (see Fig. S1, available online in Supporting Information).

Migration behavior represents a trade-off between the benefits of moving to higher quality habitat, which can ultimately increase reproductive success, compared to the potentially greater risk of predation or vehicle collision during the migration process while passing through unknown areas (Nicholson et al. 1997). Mule deer generally migrate from low elevations to a higher summer elevation for better foraging (D'Eon and Serrouya 2005, Monteith et al. 2011). Ranges used by mule deer in the summer can offer higher nutritional benefits in terms of quantity and quality than ranges at lower elevations used during the winter (Wallmo et al. 1977) and can be partly responsible for herd productivity (Julander et al. 1961). Deer that do not move to a different summer range (but remain on the same range year-round) make a risk-forage tradeoff, particularly if forage growing conditions are poor that year (Hebblewhite and Merrill 2009). One mechanism for partial migration (some individuals migrate; some stay on winter range year-round) in a population could be due to balancing density-dependence when resources are limited (Lundberg 1988). In addition, there can be a wide range of individual migration

Table 3. Proportion of female radio-collared mule deer attributed to cause of death from the full sample of deer and from a sample of deer for which cause of death was known in south-central Oregon, USA, 2005–2012. The sources of mortality include predation (cougar and coyote), anthropogenic (vehicle or fence), illegal harvest, natural (disease, malnutrition, fawning), and unknown (cause of mortality could not be determined).

Mortality source	Proportion of deaths	Proportion of deaths where cause was known
Predation	0.18 (29/157)	0.40 (29/73)
Anthropogenic	0.14 (22/157)	0.30 (22/73)
Illegal harvest	0.11 (17/157)	0.23 (17/73)
Natural	0.03 (5/157)	0.07 (5/73)
Unknown	0.54 (84/157)	

distances within a partially migratory mule deer population (Sawyer et al. 2006, Monteith et al. 2011, Sawyer and Kauffman 2011, Middleton et al. 2013, Jones et al. 2014), and the distance a deer migrates may therefore, influence an individual's overall fitness (Sawyer et al. 2016). For example, long-distance migrants (>150 km) can spend almost a third of their annual cycle on migration grounds, potentially increasing overall carrying capacity of the system as they take advantage of resources outside winter or summer ranges (Sawyer et al. 2016). The average distance migrated by mule deer in our study would classify our entire migratory population as short distance migrants following Sawyer et al. (2016; <50 km), and the time spent migrating averaged 26 days during fall and spring migration combined (Cupples and Jackson 2014). Thus, benefits gained from increased forage availability or quality on migration areas between seasonal ranges might be lower for deer in our study compared to longer-distance migrants, but they might also experience less travel-related anthropogenic mortality risk (road and fence crossings (Sawyer et al. 2016). In this study, the benefits of moving to a different seasonal range appeared to be worth the risk in terms of increased survival for our deer and was also evident in the high number of migratory ($n = 316$) compared to resident deer ($n = 69$) observed in the sample population.

Human disturbance as perceived by wildlife is difficult to quantify, and the parameter we developed specifically to quantify the effect of human disturbance on individual deer survival was not strongly supported. However, it may not have accurately represented the effect of development, land conversion, or vehicle traffic other studies have reported for large ungulates (Sawyer et al. 2006, Olson et al. 2014, Johnson et al. 2013). A recent study reported that the substantial increase in human development (resorts, homes, roads) led to an increase in habitat loss, disruption of migratory routes, and potentially increased stress on the mule deer population in the Bend, Oregon area (Coe et al. 2015). The continuous sprawling urbanization could also decrease habitat quality or overall carrying capacity, resulting in decreased survival for resident deer because of a lack of sufficient resources necessary for mule deer to meet their life-history needs (i.e., forage, cover, water).

In addition to a consistent difference in monthly survival throughout the year related to migration behavior, we also observed an additional difference in monthly survival during fall migration relative to other months in the year, consistent with observations for mule deer in southern California (Nicholson et al. 1997). However, the negative effect observed in this study was consistent for both migrants and residents (no support for an interaction), and only occurred during fall migration rather than both fall and spring migrations. There are 2 hypotheses that independently or in synergy might explain this finding. First, although female mule deer could not be legally harvested under the regulations in effect during this study, illegal harvest, or disturbance from legal harvest activities could negatively affect survival rates, and we might expect residents and short-distance migrants to be affected similarly (Sawyer et al.

2016). In addition, competition for forage and changes in forest structure (Peek et al. 2002) on summer ranges may mean food resources are becoming limiting during October and November (Baker and Hobbs 1982). Food limitation at this time may increase the energetic challenge for females who are still nursing fawns (Wallmo 1981), thereby negatively affecting their survival regardless of migration behavior. In Rocky Mountain elk (*Cervus canadensis nelsoni*) the energetic demands of lactation, especially during summer and autumn, negatively affect mothers and calves (Cook et al. 2004). In northeastern Oregon, female Rocky Mountain elk will choose birthing site locations that favor nutritional quality and availability over predation risk because of the high energetic demands of parturition (Rearden et al. 2011). In addition, red deer (*Cervus elaphus hispanicus*) will metabolize body reserves while lactating if food availability is low (Landete-Castillejos et al. 2003), and Sika deer (*Cervus nippon centralis*) will not enter estrus unless there are enough resources for the energetic demands of parturition and rearing (Minami et al. 2012).

The positive relationship we observed between winter survival and precipitation (snow or rain) during winter was also consistent regardless of migration strategy (i.e., additive) and was contrary to our prediction. At lower elevations (~1,525 m), annual snowfall averages 90 cm (Franklin and Dryness 1973), which likely is not detrimental to mule deer survival (Hobbs 1989). We did not have a measure of snowfall included in the analysis, but annual winter precipitation during 2005–2012 was similar to the long-term average (1970–2004; see Fig. S2a, available online in Supporting Information). Average winter temperature for each year was near but often higher than freezing, suggesting that precipitation was mainly in the form of rain and not snow, and if it was in the form of snow it would not persist as long with warmer temperatures (see Fig. S2b, available online in Supporting Information). In New Mexico, a positive relationship between adult female survival and total precipitation from January to June was reported (Bender et al. 2007). An increase in precipitation led to better forage and in turn, to an increase in nutrition, and ultimately increased mule deer survival (Bender et al. 2007). It could be that forage is limited during winter on our study area, and that the increase in precipitation allowed for more forbs and grasses, which are preferred by mule deer (Bender et al. 2007). In ungulates, adult survival is the last demographic affected by resource limitations (Gaillard et al. 1998) and therefore it is difficult to observe differences year to year. However, survival was highest in winter 2010–2011 and it is apparent that the mean winter precipitation for 2010–2011 was above average compared to the 30-year average (see Fig. S1, available online in Supporting Information). In a shrub-steppe ecosystem, winters with higher precipitation likely result in more productive plant growth because plants use most of the available water earlier in the year (Mata-González et al. 2014).

Predation was the leading cause of known mortality for female mule deer in this study (40%), which is consistent with findings for other mule deer populations (Bleich and

Taylor 1998, Robinson et al. 2002). However, the proportion of known mortalities attributed to anthropogenic (mainly vehicle collision) causes was second (30%), and illegal harvest (23%) the third leading cause of female mortality (Table 3). This is unexpected because Oregon hunting regulations did not allow for female deer harvest during this study. Competing risks like illegal harvest are often grouped together with other sources of mortality that are not significant enough to stand on their own as a separate category (Forrester and Wittmer 2013). Thus, it is unclear how prevalent illegal harvest is for females in other populations, but presumably it is low given it is rarely reported separately.

MANAGEMENT IMPLICATIONS

It is important to maintain corridors and pathways for future mule deer movements given the current benefits of migration to annual female survival. Resident deer that had summer ranges in more urbanized areas had lower survival than the migrant deer that moved out of urban areas during the summer. If maintaining or increasing mule deer populations by increasing survival rates of resident female mule deer throughout the year is an important objective, then it is important for future development in this part of Oregon to consider avoiding deer migration routes and winter ranges.

In addition, our research suggests that female mule deer have lower survival during fall migration, a time when we documented mortality from illegal harvest and other human-related causes. More research is needed to confirm the sources of mortality important during this time period. However, if human activities are associated with these survival patterns, there is the potential for management, hunter education, and law enforcement actions to decrease these negative effects to the benefit of resident and migratory female mule deer populations.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.



TRANSLOCATION OF MULE DEER

Fact Sheet #10

OVERVIEW

Translocation is used by wildlife managers to restore wildlife in historical ranges, augment populations at low densities, and reduce local overpopulation issues. Capturing and moving large mammals is expensive and labor intensive as well as potentially stressful for the animals. For mule deer, data and detailed analyses on translocation efforts are few compared to species such as elk and bighorn sheep. Recently, mule deer translocation programs in the western US have focused on reducing densities in habitats where harvesting animals is not practical or possible. In some cases translocations have been done to determine if low density populations can be increased. Wildlife agencies need to carefully consider the goals, costs, and potential outcomes and should include a monitoring component when planning to implement deer translocation programs.

BACKGROUND

Translocation of big game species has been part of wildlife restoration efforts for decades. Because of the ubiquitous distribution of mule deer, many agencies have historically not translocated mule deer. Some wildlife agencies have moved mule deer and other deer species in the past and observed low survival compared with other big game translocations. High mortality associated with capture stress or injury during transport, poor post-release survival, and high rates of predation have been observed.



Photo: Teresa Griffin

Photo: David Smedley



The reasons mule deer translocations had limited success in past efforts are not fully understood due to poor or nonexistent post-release monitoring. However, casual reports and observations have indicated such outcomes as not seeing translocated deer frequently after the release and no noticeable increase in deer abundance in that area. To identify limiting factors associated with mule deer translocations, wildlife agencies in Utah and New Mexico have recently initiated mule deer translocations with robust post-release monitoring. After 1 year, survival rates were 50-70% for translocated adult deer compared to about 85% for resident adult deer. Deer were moved from high density areas where lethal removal was not socially acceptable (state parks and urban areas) and from an over-populated winter range to an area where the deer density was considered below carrying capacity. These investigations will help determine if mule deer translocations are a useful strategy to reduce deer density in a nonlethal manner or boost indigenous populations.

COSTS AND OTHER CONSIDERATIONS

Deer translocation is an expensive and time-intensive management activity. Costs have ranged from \$100 to \$1,000 per animal, varying with the process, number of animals translocated, capture and handling methods, and duration of the project. Wildlife agencies have used in-house staff or hired additional personnel to plan and coordinate capture processes, collect health samples, move deer, and monitor success.

Additional costs include radio collars, as well as vehicles and equipment. Agencies may partner with local governments, conservation groups, and other interested parties to fund and perform mule deer translocations. Communities must agree in advance on a suite of proactive practices to reduce deer/human conflicts and address the problem from many directions. The following items are some of the most important considerations to address the societal issues when translocation efforts are being planned: educational outreach on type of fencing and other deterrents available, deer-resistant landscaping, bylaws or regulations to prevent supplemental feeding, vehicle speed restrictions and additional signage.

Migratory populations of mule deer have high fidelity to summer and winter home ranges. It is important to consider what effect innate migratory behavior might have on the survival of mule deer released in non-migratory herds (and vice versa). In addition, translocation must consider the high risk of introducing serious infectious diseases and parasites (such as Chronic Wasting Disease and exotic lice).

PLANNING

When translocation of mule deer is being considered, an important first step is to clearly define the goals, objectives, and criteria for determining the success or failure of the project. Release sites and recipient deer populations should be evaluated well ahead of time. Sites must be historical for mule deer, provide suitable habitat with adequate forage quantity and quality, water, and cover, and have deer densities that can absorb additional animals. Releases will likely be more successful in areas with low predator abundance since released animals will take time to become familiar with the new area. Additionally, release sites should exclude areas that will create future depredation problems in agricultural or developed areas. Wildlife managers must be aware that the genetic composition of the recipient population may be affected by the introduction of additional animals from elsewhere. These changes may be beneficial or detrimental, but should be considered. Perhaps most importantly, animals moved may also move infectious agents and a disease risk assessment should be performed. Disease and parasite exposure in both source and recipient herds should be assessed as part of that risk assessment before any translocation effort is undertaken, and under no circumstances should mule deer be moved from areas endemic with Chronic Wasting Disease.

ANIMAL WELFARE AND CAPTURE

Animal welfare must be considered when selecting the capture technique, method of handling and care and transport. Capture options include dropnets, clover traps, aerial or ground-based chemical immobilization, aerial net gun operations, and drive nets. Handling must be done by trained and experienced personnel with thought given to using tranquilizers or sedatives for transport, as well as providing a method of humane euthanasia should it be required. All existing animal welfare policies of the various agencies involved should be consulted. Regardless of the options used, every effort must be made to reduce handling time and stress on animals, and to use professionally recommended methods. Consulting an experienced wildlife veterinarian during the planning process may help with the success of the translocation.

MONITORING

To evaluate the success of a translocation, a post-release monitoring plan must be incorporated into the program. Radio collars are the only effective way to estimate survival rates, cause-specific mortality, and track movements. Managers should plan for adequate finances, time and personnel to properly conduct telemetry-based monitoring and subsequent data analysis. All information gathered should be shared with cooperators and the public to facilitate and inform future management decisions.

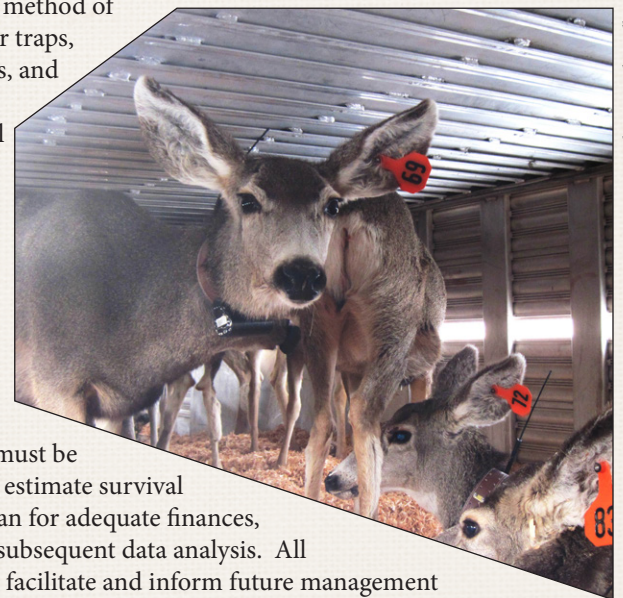


Photo: David Smedley

More information on mule deer can be found at www.muledeerworkinggroup.com

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CARRYING CAPACITY - HOW MANY DEER CAN WE HAVE? Fact Sheet #5

BACKGROUND

The land can only support a limited number of animals before resources are depleted. Exceeding the land's resources results in poor animal body condition, fewer fawns surviving to adulthood, and eventual damage to the habitat. Therefore, understanding relationships between mule deer and their habitats is necessary for understanding deer themselves.

Most livestock operators understand the concept of carrying capacity, which is the number of animals a given amount of land can support sustainably. A pasture or allotment can only feed a certain number of cattle in a given year.



This concept also applies to wildlife. As animal density increases, or habitat quality or quantity decreases, deer productivity and survival decline. The number of deer the land can sustain over the long term ultimately is determined by the available habitat – food, water, and space. It is important to note that carrying capacity varies seasonally, annually, and over time in accordance with changing habitat conditions.

THE INFLUENCE OF HABITAT

Mule deer habitat is affected by a combination of many factors, including fire suppression, oil-gas-mineral mining, habitat fragmentation, spread of invasive plants, drought, competition between species, livestock management, and other human factors such as urban development. Many of these changes to deer habitat reduce carrying capacity.

Mule deer occur in a diverse set of environmental and climatic conditions and limiting factors to population size vary by habitat type. In much of their southern ranges, desert-like conditions prevail and precipitation is a key limiting factor to populations. In other climates, mule deer can be limited by winter range and snow accumulation. Mule deer thrive in young habitats, where forbs, grasses, and shrubs dominate the landscape. As forests age, less nutrients, light, and water are available for the forage plants deer prefer, so forage quality declines. Although the acres of habitat may not change, mule deer carrying capacity can vary significantly.

Quality habitat increases fawn survival. This results in a productive population and more buck hunting opportunity because half of the fawns that survive to adulthood are bucks.

MONITORING

Because carrying capacity is always changing, it is difficult and expensive to measure over the entire landscape. Therefore, we monitor deer population performance in several ways that tell us whether the size of the population is appropriate for the amount and quality of available forage.

CARRYING CAPACITY - HOW MANY DEER CAN WE HAVE?



Key indicators include density, survival, body condition (fat deposition), reproduction, and recruitment (juvenile survival to adulthood). In locally dense populations or high population years, it also is important to measure habitat conditions to prevent over-grazing of preferred forage plants.

THE SCIENCE OF HABITAT LIMITATION

Several studies have shown that deer populations are limited by available habitat.

- In Colorado, experimentally increasing deer nutrition increased fawn and adult survival by reducing predation and malnutrition rates.
- Another Colorado study showed that fawns wintering in habitat treatments that removed trees and weeds had significantly higher survival than fawns in untreated areas.
- In the Desert Southwest, research documented low precipitation is directly related to poor body condition and high mortality of adult deer due to malnutrition.
- Several studies and experiments have demonstrated that poor body condition also reduces pregnancy rates and fawn survival.

MANAGEMENT IMPLICATIONS

Managers use all of this information to align deer populations with the available habitat. These studies emphasize the importance of setting realistic population objectives to help prevent large-scale die-offs during drought or severe winters. Managers seek to achieve population objectives in several important ways:

- If a population is above its population objective, doe harvest can reduce the population to levels appropriate for the habitat.
- In winter-stressed herds, travel and recreation closures are used to reduce disturbance and increase survival.
- Managers can increase habitat quality through the use of prescribed fire or mechanical treatments to reduce tree cover and by making sure grazing levels are appropriate.
- Habitat conservation is critical for the future of mule deer.

More information on mule deer can be found at www.muledeerworkinggroup.com



UNDERSTANDING MULE DEER AND WINTER FEEDING

Fact Sheet #2

Starvation of wild animals is part of nature. Virtually all wild animal populations experience significant and dramatic population fluctuations. Human compassion makes people want to help mule deer with winter-feeding programs. Changing nature by winter feeding is a complex matter involving numerous issues to be considered before determining a course of action.



BACKGROUND - Supplemental winter-feeding programs, despite broad social appeal and acceptance, are expensive, can negatively affect mule deer behavior and biology, and save very few deer. Inadequate habitat and severe winter weather with heavy snow accumulation and cold temperatures are the ultimate cause of most winter-feeding programs. Prior to initiating winter feeding, the potential for long-term benefits to mule deer as well as habitat conditions needs to be critically evaluated.

BIOLOGY - Several unique aspects of mule deer biology complicate the potential for successful winter feeding. Unlike elk, mule deer are highly selective foragers, at least in part, due to their specialized digestive system. As “ruminants,” mule deer rely on a very complex stomach system to aid in digestion. Mule deer use bacteria in their rumen to aid in the digestion of their food. Specific types of bacteria are required for specific types of food, therefore the type of food required for winter feeding of mule deer is highly limited, very specific, and must be properly formulated. Because the digestive system can’t adapt quickly enough, supplementally fed mule deer may die with full stomachs. This is especially the situation when starving mule deer are fed alfalfa hay, corn, or other traditional livestock feeds.

BEHAVIOR - Mule deer behavior may also be negatively affected by winter-feeding efforts. Behaviors important to mule deer survival include learned behaviors, such as foraging and migratory habits; both critical to the long-term sustainability of a population. Winter-feeding has the potential to disrupt both winter foraging activities and migratory patterns. As mule deer learn locations of feeding stations, they continue to visit these sites, sharing this information with each successive year’s offspring. As each generation becomes more reliant on artificial food sources, they become less familiar with natural foraging sites and activities. Additionally, mule deer may fail to recognize the need for migration.

DISEASE AND PREDATORS - Winter-feeding programs generate artificially high animal densities at feeding sites. These high densities of animals provide ideal opportunities for the transmission of diseases and parasites. Winter feeding in areas highly populated by humans may create significant liability issues in terms of attracting predatory animals such as mountain lions and domestic dogs.

COMPETITION - Mule deer compete fiercely for food when it is limited. Consequently, the biggest, strongest, healthiest deer, such as dominant does, exclude the truly “needy” individuals (usually fawns) from the food. By placing a resource in a localized area, competition is increased and some deer get little or no food, while others gorge themselves and get too much. Too much of a supposed “good” thing can also jeopardize their survival due to complications from dietary shock.

UNDERSTANDING MULE DEER AND WINTER FEEDING



SOCIOLOGY - Sitting by and watching mule deer die from starvation is not something most of us are willing to do. Both proponents and opponents of winter feeding believe they have the deer's best interest in mind. However, even well designed and executed winter-feeding programs often fail to significantly increase the chance of mule deer survival. Even if winter feeding could save a few deer from starvation, we must consider the biological cost to the habitat, cost to other species, and cost to mule deer in the long term. We must focus on the sustainability of the mule deer population for generations to come – not just one season. Another problem resulting from the initiation of feeding by private citizens is the desire to continue feeding at times of the year mule deer don't "need" it but will choose to stay on it, further complicating the concerns outlined above and often providing food sources that may ultimately kill deer. Uncoordinated or casual feeding efforts result in dozens of different foods being fed, while deer migratory habits, foraging behavior, and fear of humans are also negatively affected. Feeding can attract deer into landscaped yards and high traffic areas, causing damage to gardens and increasing vehicle accidents. People who feed deer often ignore the real issue of availability and condition of natural habitats. They believe supplemental feeding, can adequately meet mule deer nutritional needs.

CONCLUSIONS - Government agencies in western North America have conducted supplemental feeding of wildlife for about 100 years. At best, feeding has a limited nutritional benefit, often negated by undesirable, even catastrophic, behavioral and biological effects. Of course, we all have the best interest of wildlife in mind. However, we must ensure we understand the biology of the animals we're concerned about so our actions are truly beneficial. This is often the point of debate as society considers winter feeding mule deer. Our conventional wisdom, experience, and professional consensus is clear - feeding mule deer violates the most basic principle of population regulation within natural systems. At best, winter feeding for mule deer is only successful in making people who are compassionate about wildlife feel better and seldom are any benefits of winter feeding realized.



Winter feeding of mule deer creates artificially high concentrations of animals, leading to increased risks, including disease transmission and predation.



Winter-fed mule deer often die with full stomachs due to their inability to adapt to rapid changes in type and abundance of feed.

More information on mule deer can be found at www.muledeerworkinggroup.com

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"Produced with support from Federal Premium Ammunition and the Mule Deer Foundation (www.muledeer.org)"*



RELATIONSHIPS AMONG MULE DEER AND THEIR PREDATORS

Fact Sheet #1

OVERVIEW

Relationships between predator and prey abundance are complex and not easily described. Under certain conditions, predators may influence fluctuations in mule deer populations and affect the goals that managers set for a specific population. Only by understanding the complexity of predator and prey relationships will it be possible to determine if or when management of predators will be effective in helping mule deer populations.

BACKGROUND

Mule deer are prey for many large predators of western North America. In the western U.S. and Canada, those predators are primarily mountain lions, coyotes, and bobcats, although black bears, wolves, grizzly bears, and feral dogs will also take mule deer. Predators can have a limiting or regulating effect on mule deer populations. However, many factors interact to influence mule deer abundance, and predation is only one part of the equation. Predator control is simply the removal of predators. Predation management is any activity that may influence the relationship between predators and their prey, including habitat enhancement to increase prey security and lethal removal of predators. In most cases, reducing the number of predators to increase mule deer populations is inefficient and cost prohibitive. Therefore, predator control should only be instituted when circumstances indicate a high likelihood of management success, and where specific and measurable objectives can be applied and carefully monitored.

THE INFLUENCE OF PREDATORS

The influence of predators on mule deer populations is variable and based on several factors that include:

- 1) Relationship of the mule deer population to the carrying capacity of the habitat,
- 2) Overall habitat condition,
- 3) Abundance and distribution of alternate prey populations, and
- 4) Number, abundance, and distribution of predator species that inhabit mule deer range.

When mule deer populations are close to carrying capacity, predation tends to have less influence on the population, and reductions in predator numbers are unlikely to result in an increase in the mule deer population. When habitat conditions are favorable, mule deer have better nutrition and more cover, which reduce susceptibility to predation. Likewise, winter habitats with deep snow can limit mobility and increase vulnerability to predation. When alternate prey species occupy the same habitats as mule deer, predator populations have more prey from which to select. In those instances when mule deer numbers decline, predators may switch to other prey, thereby reducing effects of predation on remaining mule deer. Conversely, this ability to switch prey may maintain stable or high predator numbers, which can in turn limit mule deer population growth when below their carrying capacity. In mule deer range with multiple predators, those predators may compete with one another, which may influence predator abundance (e.g., increased coyote numbers may result in decreased bobcat numbers). In short, the relationships between predator and prey are complex, difficult to isolate and characterize, and rarely result in simple management solutions.



RELATIONSHIPS AMONG MULE DEER AND THEIR PREDATORS



Kim Morton

Society places varying values on predators and the role that they play in an ecological setting. Wildlife management agencies typically develop outreach plans that include media releases, public meetings, and educational campaigns to help people understand not only predator-prey relationships, but also differing views about predator-management programs. A common misperception among hunters is that simply removing some predators will lead to increased mule deer numbers. In practice, predator removal to benefit mule deer populations is only effective under a few specific conditions.

USING SCIENCE TO GUIDE MANAGEMENT

In reviewing scientific research on predator control, there were similarities in cases where predator control was effective at improving deer populations. In general, predator control has been effective when:

- 1) Predation was identified as a limiting factor,
- 2) Predator control was implemented when deer populations were below habitat carrying capacity,
- 3) Control efforts reduced predator populations sufficiently across the landscape to yield results (e.g., expected to be about 70% of a local coyote population),
- 4) Control efforts were timed to be most effective (just prior to predator or prey reproduction),
- 5) Control occurred at a focused scale (generally <250 mi²).

Many factors must be considered prior to implementing a predation management program, including:

- 1) Development of a management plan that identifies:
 - a. Current status of mule deer populations relative to carrying capacity,
 - b. Factors that may be playing a role in reducing mule deer populations,
 - c. Deer population objectives desired through predation management,
 - d. Desired population reduction goals for the predator species,
 - e. Scale of the predator control effort,
 - f. Timing, method, and budget for predation management efforts,
 - g. Public outreach plan.
- 2) An adaptive-management plan should include how predator and prey populations will be monitored to determine when goals have been achieved or how management programs can be adjusted.

More information on mule deer can be found at www.muledeerworkinggroup.com

Ballard, W. B., D. Lutz, T. W. Keegan, L. H. Carpenter, and J. C. deVos, Jr. 2001. Deer-predator relationships: a review of recent North American studies with an emphasis on mule and black-tailed deer. *Wildlife Society Bulletin* 29:99-115.

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When Mary Franzel saw a cow moose lying directly outside her window last winter, her first thought was, “It’s really weird that the mom decided to take a snooze against the house.”

The moose and her large male calf had been hanging around Franzel’s home in Clark Fork, Idaho, for a few days, resisting all efforts to shoo them away. Franzel assumed they were looking for a handout. Many of her neighbors feed deer, a practice strongly discouraged by Idaho Fish and Game, but mostly legal in that state. Other than not being afraid of her, Franzel says, the cow and calf in her driveway appeared normal. “You see some moose that are shedding and look kind of grayish. But these had beautiful coats, and they had good weight.”

But soon Franzel, a retired RN, realized the cow wasn’t napping. The moose lay motionless, head in the snow; her calf stood beside her. In a video Franzel filmed from inside the house, the agitated calf nibbles and paws at the cow’s face, his hoof making an audible clunk against her muzzle. But this moose would never wake up again. And within days, the young moose—the big, strong-looking calf with the beautiful coat—would be dead as well.

They weren’t killed by winter ticks, brain worm, or any of the other usual suspects. Instead, according to T.J. Ross, regional

Julie Lue is a writer in Florence.

communications manager for Idaho Fish and Game, the moose were likely victims of a most innocuous-sounding substance: food.

The wrong food, at the wrong time of year, can prove deadly for big game.

Here in Montana, unlike Idaho, it’s illegal to intentionally feed big game. But according to officials with Montana Fish, Wildlife & Parks, wildlife are still fed—usually by well-meaning people who don’t realize they could be responsible for animals suffering and even dying, or that they might be putting entire populations at risk. “People think they are helping wildlife,” says FWP veterinarian Dr. Jennifer Ramsey, who heads the department’s Wildlife Health Program in Bozeman. “But actually they can cause enormous harm.”

NATURAL DIETARY CHANGES

All members of the deer family, called cervids, change diets with the seasons. In summer, the animals eat mostly high-carbohydrate leaves and forbs (flowering plants) to build and store fat for winter. As the days shorten and green foods become scarce, they eat less overall and transition to low-carb “browse”—shrubs, twigs, and tree bark. They also start burning more body fat for energy.

“Ultimately, this is what they’re adapted for,” says Rebecca Mowry, an FWP wildlife biologist in Hamilton. “It’s natural for them to lose weight in winter. It’s also natural for some of the weaker animals to die, especially calves and fawns entering winter



TOXIC “TREATS” Corn and other high-carbohydrate foods put out by well-meaning homeowners can disrupt the natural digestive systems of deer, elk, and other cervids, leading to an agonizing death.

PHOTO BY DONALD M. JONES



DEATH BY FEEDING

The unintended—and sometimes fatal—consequences of providing food to deer, elk, moose, and other wildlife in winter. **BY JULIE LUE**

in poor body condition.”

The weeding out of weaker individuals may ultimately strengthen the population while helping vegetation recover from over-browsing. But that’s the cold, scientific perspective. Most people not trained in wildlife biology find it hard to watch animals struggle through the lean months of winter. It seems to make sense that providing food for

a hungry deer, elk, or moose will ease its suffering, or even save its life. But the opposite can be true, says Ramsey. “Feeding can actually decrease an animal’s chance of survival.”

BAD CARBS

Strangely enough, some of the most devastating effects are due to the animals’ gut

microbes. Like cows, sheep, and goats, cervids are ruminants. A cervid’s digestive system allows it to extract enough nutrients from plants to sustain a 1,000-pound moose or a 200-pound mule deer. But the success of this process relies on a finely tuned mix of bacteria, protozoa, and fungi in the largest stomach chamber, the rumen, where partially chewed food is fermented before being regurgitated as “cud” and chewed again.

A cervid’s gut microbes gradually adapt to different food sources over the seasons. In late fall they begin to accommodate the animal’s increasingly sparse winter diet of low-carbohydrate, high-fiber browse. Then in early spring, the balance of microbes slowly changes again as other natural foods become available. But sudden changes spell trouble.

A mismatch of meals to microbes can lead to digestive diseases, including rumen acidosis (known as “grain overload” in cattle), which Ross says the Idaho wildlife department “strongly suspects” is responsible for the deaths of the two moose in Clark Fork.

Ramsey says that acidosis is something she considers “when we have a really rapid



It’s natural for them to be losing weight in winter. It’s also natural for some of the weaker animals to die.”

RUMEN READJUSTMENT During winter, the stomachs of deer, elk, and moose undergo complex biological and chemical changes that allow the animals to survive on evergreens, willows, and other woody browse.



LEFT TO RIGHT: DONALD M. JONES; RON HOFFE; ILLUSTRATION BY LIZ BRADFORD

death,” particularly in big game animals in otherwise decent condition with access to unnatural food sources. She explains that a high-carb meal of corn or other grain, birdseed, apples, or rich hay can set in motion a dangerous cycle—especially if the animal is not accustomed to that diet. The carbs trigger an explosion of stomach bacteria that produce lactic acid, which eventually kills healthy bacteria and causes inflammation and ulcers. “When it’s angry and inflamed, the rumen [stomach] wall is unable to absorb nutrients, so the animal can’t take advantage of the food,” says Ramsey. “The animal can actually be starving with a full stomach.”

The buildup of lactic acid also causes fluid to accumulate in the rumen. “In a necropsy we’ll see the rumen full of sloshy fluid and food, but the animal itself is dehydrated because all their fluid is being sucked into the rumen rather than hydrating the cells of their body,” Ramsey adds. To top things off, the lactic acid eventually reaches the bloodstream at dangerous levels.

At this point, most animals may look healthy, but “often they’ll die of acidosis within 24, maybe 48 hours,” says Ramsey. “And it’s a really painful way for an animal to die.”

Artificially fed deer, elk, and moose can also succumb to enterotoxemia, a deadly disease caused by the overgrowth of *Clostridium* bacteria in the stomach. And they can die simply because they gorge on a large quantity of food they are unable to process. Ramsey says that when a skinny, starving deer in late winter or early spring comes across a haystack stored for cattle, “rather than going out and looking for browse to eat, which their stomach has adapted to process, they zero in on this really nice big green pile of hay their body can’t handle and end up standing there and starving to death.”

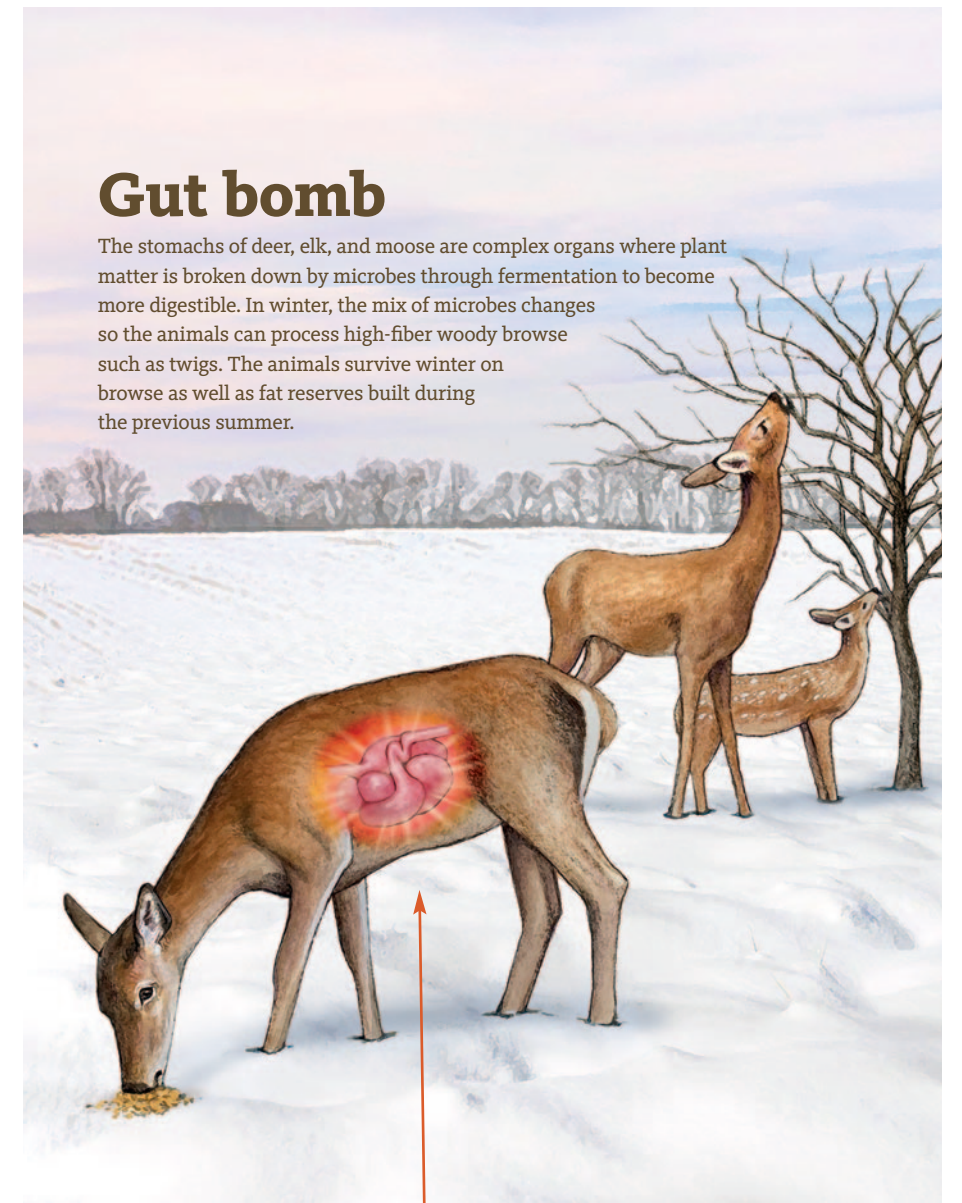
That’s not to throw blame at ranchers. “They don’t want deer or elk eating food meant for horses or cattle, but it can be hard to keep determined wildlife away from haystacks,” Ramsey adds.

FATAL ATTRACTION

Digestive diseases aren’t killing cervids at levels that affect entire herds. But illegal feeding does

Gut bomb

The stomachs of deer, elk, and moose are complex organs where plant matter is broken down by microbes through fermentation to become more digestible. In winter, the mix of microbes changes so the animals can process high-fiber woody browse such as twigs. The animals survive winter on browse as well as fat reserves built during the previous summer.



But when people feed big game animals corn and other grain, birdseed, hay, or apples:

- ▶ The high-carb foods can cause an overgrowth of bacteria in the stomach that produces lactic acid, which leads to inflammation, abscesses, and ulcers in the stomach wall.
- ▶ The inflamed wall can no longer absorb nutrients, and the lactic acid leaks from the rumen into the bloodstream, destroying cells and tissues and eventually causing death.

cause wildlife to congregate and spread parasites and diseases. The biggest concern is chronic wasting disease (CWD), an always-fatal neurological malady that affects members of the deer family. Transmitted through an animal’s urine, blood, feces, saliva, and body tissues, CWD has spread across much of Montana. In these areas, anything that unnaturally concentrates deer, elk, or moose has the potential to turn a spark into a flame.

The town of Libby is one such hot spot, with both a large deer population and a high rate of CWD infection, says Neil Anderson, FWP’s regional wildlife manager in Kalispell.

“You’ve got a highly concentrated density of deer on the landscape in areas where they are lingering and sharing food sources,” he says. “That can result in a higher transmission rate for diseases like CWD.” Prevalence of the disease declines outside of Libby, Anderson says, where deer are more dispersed and less likely to be fed by people.

Animals that contract CWD don’t drop dead immediately; they may look normal for months or even years before showing symptoms. But once they are infected, Anderson says, “It’s a death sentence.” The disease can affect large numbers of animals; mule



NATURAL SHELTER Rather than feed big game animals in winter, which is illegal and harmful, Montanans can support conservation groups that protect and restore dense conifer stands and other vital winter habitat.



NEITHER WAY Some big game feeding is intentional, like setting out apples for deer. Some is accidental, like placing bird feeders where deer can get to the seeds and grains. But both can do lasting harm to the very animals that many people want to help during the cold winter months.

deer populations in Colorado and Wyoming have declined where CWD has been present for decades.

Feel-good feeding can also make wild animals lose their fear of humans, causing them to venture too close to people and homes. Mowry has received complaints from Bitterroot Valley residents about aggressive mule deer. Deer, elk, and moose can mow down costly landscaping plants. And while on the hunt for easy neighborhood meals, the big animals cross roads repeatedly, increasing



the odds of collisions. One orphaned moose calf fed by Hamilton residents during January 2021 was hit by a car and had to be put down by FWP game wardens.

Backyard feeding also attracts grizzlies, black bears, and smaller animals like rodents, foxes, skunks, coyotes, and raccoons. “If you’re consistently feeding big game, you’ll eventually end up with a raccoon that sets up shop under your porch,” says Torrey Ritter, FWP nongame wildlife biologist in Missoula. “And bird feeders can draw grizzlies and black bears before and after hibernation.” Unnatural concentrations of deer also attract mountain lions, creating stress especially for parents and pet owners.

“Bird feeders can draw grizzly and black bears before and after hibernation.”

“WELCOME” SIGN Any accessible foods—including birdseed—are an open invitation for grizzlies and black bears to venture dangerously close to where people live.

“Healthy habitat can do wonders to ease wildlife suffering in winter”

HOW TO HELP

Feeding big game animals is illegal, says Anderson, the FWP regional wildlife manager, because the state wants to prevent disease and other health problems caused by food handouts. What wildlife really need, he says, is more high-quality habitat. That’s where animals can find the natural foods they have traditionally eaten, as well as winter cover to help conserve body fat. Federal wildlife refuges, state wildlife areas and easements, other public lands, and properties of conservation-minded landowners can all provide these healthy natural environments.

Conversely, feeding wildlife corn or apples is “definitely not helping in the way people want to believe they’re helping,” Anderson says. He and other FWP officials suggest that those who want to assist wildlife consider joining a conservation group that

funds habitat protection and restoration. “Healthy habitat can do wonders to ease wildlife suffering in winter.”

Homeowners with larger lots can protect or plant more native vegetation on their land, and landowners can conserve winter cover like dense conifer stands and cattail marshes. They can also modify fencing so that wildlife can reach natural habitats.

During the critical period in late winter

and early spring when cervids’ energy stores are at their lowest, hikers, cross-country skiers, and antler hunters can avoid disturbing wildlife as much as possible—and ensure their dogs do the same—so the animals don’t burn up the last of their fat reserves.

But one of the most important ways to help big game is also the easiest. “If you’re feeding, just stop,” Anderson says. “And if you’re not feeding, please don’t start.”

Yew don’t want these shrubs in your yard



Native Pacific yew



Ornamental Hick’s yew

Deer and other wildlife have no problems eating native Pacific yews found in northwestern Montana. But many non-native ornamental yews sold at nurseries, like the Japanese yew and the hybrid Hick’s yew—popular evergreen shrubs or trees with red berries and flattened, needlelike leaves—can be fatal to wildlife and pets. “Our Pacific yew is not toxic to deer, which is probably why they may be fooled into eating the introduced varieties that are,” says Rebecca Mowry, FWP wildlife biologist in Hamilton. “Deer and elk learn what to eat from their parents, and thus probably avoid anything unfamiliar. But a toxic plant that looks just like a ‘safe’ plant they’re accustomed to eating? That’s trouble.”

What about birds?

Feeding wild birds is generally legal in Montana as long as you do it in a way that doesn’t attract big game, bears, or mountain lions.

But is feeding birds good for them?

According to Torrey Ritter, an FWP nongame wildlife biologist in Missoula, feeding can be beneficial “during winter and migration, because people have replaced so much habitat that birds need with homes and pavement.”

But you should think twice about attracting birds to a feeder where they are vulnerable to free-roaming cats and window strikes, or even avian predators like Cooper’s hawks, sharp-shinned hawks, or northern pygmy owls. And bird feeders, especially when not kept clean, can help accelerate the spread of disease. For the past three summers, FWP has recommended no artificial bird feeding due to the risk of spreading conjunctivitis, salmonella, and avian flu. In bear country, homeowners should not be feeding in summer anyway; bird feeders should be taken down before bears leave hibernation in the spring.

One way to help wild birds is to plant native shrubs, trees, and wildflowers that winged wildlife can use for food and shelter. ■



Black-capped chickadee in native habitat.

CLOCKWISE FROM TOP LEFT: DONALD W. JONES; DONALD W. JONES; TED CLUWICK; BOB MARTINKA; USDA; WIKIPEDIA; ROD SCHECHT



How to Create a Community-based Deer Management Plan



Developing a deer management plan is a challenging task. This guide can help make it simpler.

The Human Dimensions Research Unit (HDRU) in the Department of Natural Resources at Cornell University studies the social and economic aspects of natural resources and the environment and the application of social and economic insights in management planning and policy.

<https://hdru.dnr.cornell.edu/>

This guide, developed by Cornell University's Department of Natural Resources' Human Dimensions Research Unit, and Natural Resources Extension is intended to help community leaders, as well as wildlife professionals and educators, recognize the important components of a community-based deer management plan. If you are planning on writing a community-based deer management plan, then this guide is intended to provide you with the information you need to do so effectively. At the end of this guide, it is our intent that you will be able to:

- ✓ Identify and describe the main elements of a community-based deer management plan
- ✓ Evaluate deer management plans
- ✓ Feel confident that you may apply what you've learned for developing a plan of your own

If you have reviewed deer management plans before, such as the examples included on the Community Deer Advisor website (deeradvisor.org) you will find that they often do not follow a standard format. Some plans are hundreds of pages long with many appendices, whereas others are simple 10-page documents. Some states may require that communities undergo an environmental impact assessment process prior to implementing a program, which may affect the length and components of a plan. The components discussed in this guide reflect the minimum core elements that a deer management plan should include.

Throughout this guide, you will see that we provide examples for each plan component drawn from different community plans. If you would like to view more plans in their entirety, please visit the resources page on the Community Deer Advisor. The website also includes in-depth case examples where communities have contributed information about how they progressed through the CBDM cycle, which you may find useful as you progress through your own management process. Much of our advice is also drawn from an analysis of existing community-based deer management plans; the report for that analysis is available on the Human Dimensions Research Unit publications page (<https://hdru.dnr.cornell.edu/>).

You may have noticed that we have referenced the Community Deer Advisor website a number of times already. The Community Deer Advisor website, a collaboration between Cornell University's Department of Natural Resources (Human Dimensions Research Unit and Natural Resources Extension) and The Nature Conservancy, is our sister site, the purpose of which is to help provide guidance as communities progress through the CBDM cycle. The purpose of this guide is complementary—to help communities understand the components of a community-based deer management plan. So, this is not a “how-to” guide for progressing through the CBDM cycle, although in describing elements of a deer management plan we do provide rationale as to why those elements should be included. So, ideally, if you are beginning a CBDM process in your community soon, check out the Community Deer Advisor first, then come back here to learn more about writing a CBDM plan. For more on the CBDM cycle and for resources related to the CBDM process, please visit the Community Deer Advisor.

This guide is organized according to the different components which should be included in a deer management plan. While the elements of a community-based deer management plan are presented in what we believe to be a logical manner, the particular order of the elements in your plan is less important than the fact that you have included or addressed these elements in some manner. If you find a different order works better for your situation, please organize your plan accordingly!

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Introduction to Community-Based Deer Management Planning

Community-based deer management (CBDM), a guided process for addressing deer-related problems, reflects the cycle that communities progress through in making and implementing decisions around deer overabundance. The website Community Deer Advisor (www.deeradvisor.org), with which this module is affiliated, provides support to community leaders, wildlife professionals, and educators to help communities navigate the cycle successfully. The CBDM cycle has four phases:

Phase 1, Problem Definition, is when community leaders task someone or some group of people, often in the form of a deer management committee, to determine the scope of the problem the community is facing to better understand the kinds of impacts that are occurring, who is experiencing those impacts, and to what degree.

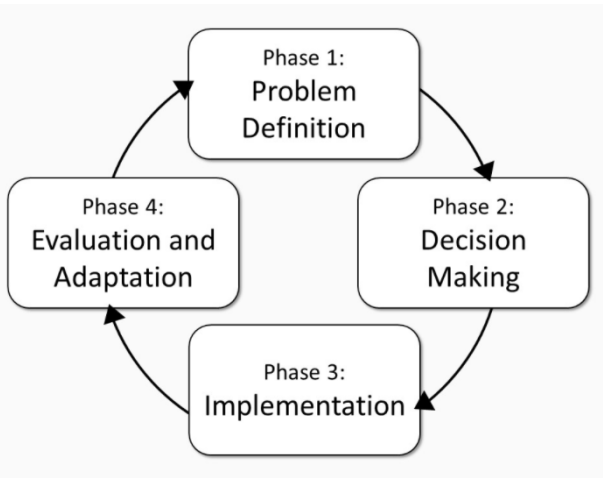
Phase 2, Decision Making, is when deer program goals and objectives are determined, and actions to address those objectives are considered.

Phase 3, Implementation, is when a community carries out the actions of their program.

Phase 4, Evaluation and Adaptation, is when communities assess progress towards their deer management goals and objectives, making changes when certain actions are not meeting their objectives. While this process is presented as a cycle with clear phases, it's important to recognize that progression through this process isn't always linear, and communities may move back and forth through phases as they deal with issues such as controversy over their recommended course of action, changes in municipal personnel, changing legal constraints, and more. Therefore, the process is not as straightforward and non-controversial as the structure of this guide may suggest. For more detailed information the CBDM process, please visit the Community Deer Advisor.

The deer management plan that this guide will help you develop will likely include descriptions of the work already done and the work your community plans to do as it progresses through all four CBDM phases. However, the development of a deer management plan begins at the start of Phase 3 (Implementation) before communities implement the actions decided upon during Phase 2 (Decision

Making). Not every community develops a formal deer management plan, but choosing to do so is one way not only to organize decisions made in Phase 2, but also to easily communicate to your community what actions will be taken with respect to deer, why those actions were selected, how those actions meet goals and objectives for your community's approach to management, and how progress on program goals will be tracked and evaluated. It is also a good way keep track of your timeline and budget.



Introduction to Community-Based Deer Management Planning, continued...

Some communities may be legally required to develop some type of deer management plan, for instance if they are required to go through a state environmental impact planning process. Often, a mayor or town board of trustees will ask a deer task force or committee specifically to develop a deer plan; they may ask a committee to recommend a specific course of action, but sometimes they may only ask them to describe and evaluate a number of potential options without recommending a particular action or set of actions. If the plan you are developing is serving as a point of discussion for potential options from which a municipal leader will be selecting, you may be developing the plan during the decision-making phase of the cycle instead of after. Besides deer committees, sometimes the responsibility for writing a deer management plan will fall to a municipal administrator, staff member (e.g., environmental planner), or even an outside consultant. For example, two city administrators authored the deer plan for Ann Arbor, Michigan, but a deer task force authored the plan for Rockville, Maryland.

Sometimes, communities may seek outside assistance from people, agencies, and organizations that have experience and knowledge useful in plan development. In addition, drawing on expert assistance is one way to support the legitimacy of your plan. Communities may often find that assistance from entities such as your state's wildlife or environmental agencies may be helpful, as they may have some guiding, state-level deer management objectives that may link to your own, municipal-level objectives. Some states may even have statewide programs specifically aimed at helping communities address their deer management needs. These programs may provide guidance necessary for helping communities develop a plan. For instance, New Jersey's Division of Fish and Wildlife has developed a Community-Based Deer Management Permit program and an associated manual for municipalities that communities may turn to in order to help guide their own plan development. Communities may also find assistance from some of their own departments, such as the police department (for instance, if your plan is being motivated by excessive deer-vehicle collisions). Other types of assistance we've observed communities relying upon include:

- City planning departments (e.g., Amherst, NY)
- Nonprofit organizations
- Federal land management agencies, for instance if you reside in a gateway community adjacent to a national park that is also dealing with deer overabundance issues, you may find some collaboration useful to aid in both your and the park's capacity to meet deer management objectives (e.g., Harpers Ferry, WV)
- Private consultants, if your community has the budget to account for this kind of assistance. (e.g., Cayuga Heights, NY)

This guide is a PDF version of the course, "How to Create a Community-based Deer Management Plan."

If you'd like to enroll in the course, you can do so at: <https://canvas.instructure.com/enroll/MJ3YWN>

Introduction to Community-Based Deer Management Planning, continued...

Finally, a note about controversy. There's usually no way to avoid the controversy that arises with deer management decision making. Controversy—and active opposition—can come from individuals or organized groups. Controversy typically arises around two issues: (1) whether or not deer impacts should be managed at all and (2) which methods of deer management are acceptable. Try and separate these two types of controversy. The first issue, whether or not deer impacts should even be managed, should be resolved before you tackle the acceptability of the approach taken to address those impacts. If you're at the stage where you're writing a deer management plan, you've hopefully already resolved the first issue. Engaging in well-designed stakeholder involvement efforts and informative communication can help communities constructively deal with these two sources of controversy. A well-reasoned plan that clearly articulates the rationale for selecting particular actions (supported with data or other sources of information) can help address the second source of controversy as well. But, expect controversy—and even legal challenges from those who may be opposed to the actions you've selected (especially if it includes a controlled deer hunt).

Plan Summary and Background

Many plans begin with an executive summary to serve as a helpful, quick reference for readers. You may include a brief description of the community-based deer management plan, such as actions selected and a general timeline for implementation. Some plans may be quite lengthy (especially if your plan is part of a larger environmental impact planning process; sometimes those plans are many hundreds of pages long), and a plan summary is a good idea for distilling the content of your plan.

In addition to a summary, many plans include a bit of background regarding the community as an introduction to the plan, such as a description of the area targeted for management (location, size, land ownership type, for instance). Including these kinds of simple details help readers better understand the area being managed. Background information may also include the history of the community's relationship with deer and how the development of a plan came to be needed. If a deer committee was convened to help create the deer management plan, include some information about:

- how committee members were selected (process, by whom, criteria for selection, etc.)
- committee members names and affiliations
- important dates or milestones
- the decision-making process used to create the deer management plan.

Some plans may also include the community's overall purpose in creating their deer management plan. Do you know your community's purpose? Some communities may describe their purpose as to mitigate some general deer impacts, or to provide planning guidance. In our review of deer management plans, we found that communities frequently focus their purpose on mitigating impacts of overabundant deer, addressing guidance and planning generally.

We do not recommend that your plan purpose focus on particular actions for deer management; jumping to actions is a common pitfall for CBDM planning—i.e., jumping to actions prior to identifying goals and objectives (see following sections on goals and objectives). The purpose of your plan should be a mirror of your goals. Often, a purpose statement may be quite broad. For example, Ann Arbor, Michigan's deer management plan includes the following broad purpose: "Determine the goal of the deer management program, the deer management area, and the preferred deer management methods." In reading this statement, we would expect the plan to therefore cover three main topics: deer program goals, the area that will be targeted for addressing those goals, and the management methods preferred to meet those goals.

After completing this module, you should be able to...

- ✓ Identify the components of a comprehensive background section
- ✓ Recognize an effective plan purpose

Plan Summary and Background, continued...

Beginning on the next page, you will find an excerpt of the executive summary from the Amherst, New York deer management plan, “Deer-Vehicle Accident Management Plan.” Read through this summary, and see if you can identify elements of the summary that make it effective. We believe this eight-page executive summary and background is a good example because it includes the following:

1. A comprehensive summary of a lengthy plan (74 pages total) that includes many of the major components of the deer plan, as we describe in this guide
2. A description of the area targeted for the plan, which you will find on the third page of the excerpt
3. A description of the history of deer in Amherst and the development of a plan
4. An example of a purpose, which they label a “mission statement”, found on the very first page: “The Town of Amherst Deer-Vehicle Accident Management Plan provides a practical, systematic, integrated, and adaptive approach for managing deer-vehicle accidents (DVAs) at levels reflecting public involvement through the New York State Environmental Quality Review process”

When crafting your own plan, including a summary will help ensure a comprehensive review of your plan that is easily understandable to readers who just want the “highlights.” However, if your plan is very short, you may find it repetitive to include a lengthy summary—a brief outline of the contents of the plan may suffice. After your plan's summary—whether it's long or short—make sure you are able to include at least a bit of background information to introduce your plan, including some important information about the area targeted for management, and maybe a few important points about the history of the plan and its purpose.

While the summary and background section will come at the start of your plan, you may choose to write the summary component last. When you've reviewed your plan in its entirety, you may have a better sense of whether or not you need a longer or shorter summary. We would like to emphasize that a summary of some kind and the inclusion of a purpose are important components of any plan.

Amherst, New York's
complete deer
management plan can be
found at:
<http://www.amherst.ny.us/pdf/planning/deer/appa.pdf>

Example Summary: Pages 8 through 15

EXECUTIVE SUMMARY

Town of Amherst Deer-Vehicle Accident Management Plan

Cite As: Premo, Dean B. Premo and Elizabeth I. Rogers. 2001. Town of Amherst Deer-Vehicle Accident Management Plan. White Water Associates, Inc., Amasa, Michigan (<http://www.white-water-associates.com>).

Each year in New York, an estimated 60,000 to 70,000 deer related accidents occur with upwards of \$50 million in vehicle property damage. It is reported that an average of two people die and approximately 1,000 people are injured in New York each year in accidents involving deer. DVAs are a particular problem in Western New York, and Erie County (which contains the Town of Amherst) is among counties in the State with high DVA counts. For several years in the Town of Amherst, the Town Board, Planning Department, community stakeholders, university scientists, and consultants have confronted issues of white-tailed deer in the community. The stakeholders agree that the problem of deer-vehicle accidents (DVAs) is reason for concern and justification for action. White Water Associates, Inc. was contracted by the Town Planning Department to create a plan for DVA management.

This plan's focus is reducing DVAs. The primary measures of concern are the numbers of DVAs and the patterns of their distribution in the Amherst landscape. The plan relies on careful collection and analysis of data to understand the complex causes and solutions for DVAs.

Technically, the "action" to be taken by the Amherst Town Board is the adoption of the Deer-Vehicle Accident Management Plan and its implementation. Since this is a Type 1 action under the New York State Environmental Quality Review Act (SEQRA), the Town, as Lead Agency, has prepared an Environmental Assessment Form, has issued a "Positive Declaration" and must prepare a Generic Environmental Impact Statement (GEIS).

Through a public participation process, a mission statement was formulated to guide the development of the plan and provide focus for implementation:

The Town of Amherst Deer-Vehicle Accident Management Plan provides a practical, systematic, integrated, and adaptive approach for managing deer-vehicle accidents (DVAs) at levels reflecting public involvement through the New York State Environmental Quality Review process.

For the past decade, Amherst has compiled records of DVAs and the population of white-tailed deer. Evidence of DVAs (reported accidents and pick-ups of road-kill deer) shows that, although numbers of DVAs varied over the past ten years, the annual total always exceeded 250 and on occasion has climbed above 400. The average cost of vehicle damage from hitting a deer

is high and the total deer-vehicle collision costs for vehicle damage could approach \$750,000 annually in Amherst (estimates obtained from Technical Working Committee). The potential for human injury or death also exists with DVAs and adds associated costs. There is also an annual cost for removing deer carcasses from roadsides.

The Town of Amherst Deer-Vehicle Accident Management Plan defines a program of actions designed to provide control over DVAs. Its overarching goal is to reduce the number of DVAs given the many variables that influence when, where, and why they occur. Because numerous variables affect DVAs, establishing a discrete target number of DVAs is not reasonable. Nevertheless, DVAs can be readily counted and are the basis for setting goals and monitoring success of the plan.

Analysis of Amherst data shows that concentrated deer population control efforts (including bait and shoot and nuisance permits) in Amherst during the mid-1990s were associated with a statistically measurable decrease in DVAs in the last half of the decade. There is a likelihood that both numbers of deer and numbers of drivers will increase in Amherst. Development, another variable linked to Amherst DVAs, is also continuing. For these reasons, it can be predicted that Amherst DVAs will increase.

The DVA Management Plan establishes its initial goal at two spatial scales, whole town and hotspots. These scales are a natural division and useful since different DVA management tools can be applied at each scale. Tangible goals for each scale are defined as follows:

1. At the whole town scale, reduce DVA numbers to the lower levels experienced in the years after significant lethal control was conducted and an associated decrease in DVAs was experienced (1997-2000). If this goal is attained, more rigorous goals can be established through the adaptive planning process if this is deemed desirable.
2. At the hotspot scale, select specific DVA hotspots and diminish these with targeted approaches. Progress toward the hotspot goal will be measured with parameters such as intensity and extent of hotspots and DVA counts within the hotspots. Lessons learned from successfully treated hotspots could be applied to other hotspots through the adaptive management process.

Establishing numeric goals for DVAs requires this caveat: It is not the position or endorsement of the Town of Amherst or the plan writers that this, or any number of DVAs, is acceptable. It is simply a realistic view and a starting point for this adaptive plan. Through the public process in the creation of this plan and through the adaptive nature of the plan itself,

Amherst residents will influence the goals, implementation, tools, and outcomes by their direct participation and through their elected officials and Town administrators.

The geographic area to be encompassed by the plan is the Town of Amherst, New York. The total area is 54.2 square miles and is composed of a wide range of urban, suburban, and rural land uses. There is also deer habitat and a population of white-tailed deer. The town varies widely from one area to another in attributes such as land use/cover, deer habitat, the amount of development, and vehicle traffic patterns.

In 1997, the Amherst Supervisor's Deer Management Task Force (comprised of citizens, business people, and Town staff) proposed that the town be divided into seven management zones. For purposes of the DVA Management Plan, these seven zones were coalesced into six zones that provide a helpful way to examine landscape patterns relevant to DVAs. The zones are also useful in designing and implementing an adaptive DVA management program.

Twenty years ago it was rare to see deer in Amherst. Starting about 1987, however, people began to observe more deer and increases in DVAs and deer-related damage to agricultural crops (food and ornamental) and landscaping. Based on field observations and surveys conducted by the New York State Department of Environmental Conservation (NYSDEC), the current Amherst deer population does not appear to have exceeded a level where limitations of food or disease in the herd have become problematic. Some areas of the Town, however, show significant evidence of over-browsing. The trend of more deer and more deer-human interactions in Amherst, especially in the form of DVAs, has been commonly observed and publicized.

The Amherst Planning, Police, and Computer Services Departments have compiled historic DVA data dating back to January 1991. Primary data include DVAs reported to the Police Department and counts of dead deer carcasses removed from roadsides by an independent contractor. The Town has incorporated this information into its geographical information system (GIS) and as of December 31, 2000, about 3,300 reported DVAs and 3,320 carcass pick-up reports had been entered. Probing analyses have been possible with this database using DVA data, deer population estimates, land use, and other variables.

The analyses show that Amherst DVAs are influenced by multiple factors. Deer population density plays a significant role in DVA numbers and patterns. In the period after concentrated lethal control, DVAs decreased over the town as a whole and also in management zones closest to lethal control efforts. In addition, hot spot patterns of DVAs changed, with less intense (lower density DVAs) and less extensive (smaller affected area) hot spots occurring after lethal control. This change in patterns was most dramatic in Management Zone (MZ) 5 (northwest part of the

Town). Other hot spots persisted in spite of lethal control (even if reduced in intensity). These hot spots may result from traditional deer movement patterns. Other hot spots may occur because of a combination of increasing deer populations and development. Displacement of deer by development of previously vacant land may account for increased intensity of hot spots in MZ 2 (southeast part of Town) and the southern part of MZ 4 (eastern-central part of Town). MZ 6 (in the northeast corner of the Town) currently has high deer numbers and abundant vacant land. If development accelerates in this zone, displacing deer and increasing human use of the area, it is predicted that DVAs would increase.

The analysis of Amherst deer and DVA data support the contention that fewer deer would mean fewer DVAs. Nevertheless, controlling deer population size is a challenge, especially where urban and suburban areas are mixed with agriculture, forests, and wetlands. The plan emphasizes that the goal is not to manage the Amherst deer population, but to reduce the number of DVAs (relative to the many factors that influence them). Deer population control tools can play a part in accomplishing this goal, but it is not the number of deer in Amherst that is of principal importance to this plan, but the number of DVAs.

This DVA Management Plan describes twenty-eight tools for controlling deer-vehicle accidents. It evaluates the tools relative to their possible use in Amherst, placing the tools in three categories: good potential, intermediate potential, and little or no potential. Those with good potential include: eliminating artificial feeding, warning signs, limiting speed, driver education, public awareness, nuisance permits, and bait and shoot. Those with intermediate potential include: fencing, right-of-way clearing, and considerations of right-of-way vegetation/width. Those with little or no potential for current application in Amherst include: highway lighting, automotive technology, pass structures, deer guards and gates, reflectors, road salt use, agricultural/forestry activities, habitat modification, biological/chemical repellents, highway routing, deer whistles and sonics, lure crops, trap and transfer, bow hunting, poisons, parasites or disease introduction, predator introduction, and fertility control. The assessment of techniques was based on the effectiveness of currently available technology.

The Amherst DVA Management Plan has relied on carefully organized and analyzed data that is specific to Amherst DVAs. The plan rests on this foundation and integrates a variety of suitable tools applied in appropriate settings. The plan outlines four management alternatives, each applying a distinct combination of DVA management tools toward the whole town and hotspot goals. The alternatives include: (1) a No Action Alternative that calls for no targeted effort to be taken to reduce DVAs, (2) a Human Behavior Focus Alternative where emphasis is

placed on actions that affect human behavior, (3) a Deer Behavior and Population Focus Alternative that applies efforts to change deer behavior and reduce deer population, and (4) the recommended alternative - an Integrated Human–Deer Focus Alternative that combines DVA management actions from the Human Behavior Focus Alternative and the Deer Behavior and Population Focus Alternative. The recommended alternative is described in this executive summary.

The Integrated Human–Deer Focus Alternative combines promising DVA management tools in an integrated “adaptive” management plan. Adaptive management uses findings from planned monitoring activities to inform future management actions and periodic refinement of the plan. In Amherst, this allows for a staged approach to managing DVAs so that application of techniques in specific areas is influenced by specific findings. An integrated adaptive management plan minimizes potential environmental impacts by proceeding in a systematic way with ongoing monitoring designed to identify if the approach is effective and if undesirable outcomes develop.

In the integrated alternative, specific actions address both the “whole town” and “hot spot” goals. There is likely some overlap between the effects of these actions and some can be considered optional depending on budget, implementation strategy, and calendar.

Actions that support the “whole town” goal include:

1. Conduct a program of general public education via press releases, posters, pamphlets on the DVA Management Plan, DVAs in Amherst, and how to avoid DVAs.
2. Integrate a DVA component into Driver’s Education materials.
3. Publicize and enforce the no deer feeding law.
4. Work with the NYSDEC to encourage use of nuisance permits in targeted areas. Continue this use for 3-4 years with monitoring to determine effect on DVAs.
5. If after 3-4 years of aggressive nuisance permit deer harvest, DVA numbers do not meet the goal, then implement a three-year program of deer harvest using bait and shoot with a professional wildlife management service. Management zones with sufficient blocks of park and open land should be targeted (e.g., management zones 4, 5, and 6). After this, nuisance permit harvest may maintain deer numbers for a period of time in some areas.

Actions that support the “hot spot” goal:

1. Deploy special deer signs from October-January at selected “hot spot” locations.
2. Facilitate press coverage of special signs that advises people to lower speed and increase awareness and encourages them to assist in implementing the plan.
3. Encourage strict enforcement of existing speed limits in the vicinity of the hot spots and assign more traffic officer presence in these areas.

4. Install lit signs that instantaneously report driver speed to the driver at selected site(s).
5. Run TV and/or radio ads (or Public Service Announcements) that describe the DVA hotspot areas and alert people to take special care.
6. Select two hot spots where strategic application of fencing might influence the ability of deer to enter the roadway.

The potential environmental impacts of this alternative are small. Through both nuisance permit use and bait and shoot practices, the deer population of Amherst would be reduced. Since white-tailed deer is not a species at risk of regional extinction, adverse impacts to the species do not result from lethal control. If lethal methods are used, appropriate carcass use is required. If bait and shoot actions are implemented, the Town would suspend its firearms ordinance (Part II Chapter 198 Sections 1-9 of the Amherst Town Code) to accommodate this action.

The potential environmental advantages of this alternative include control of DVAs in Amherst and the associated advantages to Amherst residents and visitors. Increased drivers' awareness may not only avoid DVAs, but in the event of a DVA, may reduce severity of property damage and human health risk. Overall reduction in deer numbers in Amherst as a result of this alternative may provide a secondary benefit in the form of reduced pressure on native plants and animals in woods and parks where deer herbivory appears high. Similar benefit may be realized by agricultural and landscape interests.

A social benefit derived from use of bait and shoot is the donation of deer meat (venison) to the Western New York Food Pantry Organization. This organization provides food for poor and destitute people in the City of Buffalo area. If it is determined through the adaptive implementation of the DVA Management Plan, that deer need to be killed through bait and shoot, then every effort will be made to ensure that maximum public benefit is realized. Part and parcel of this process includes appropriate care of the killed deer (including proper field dressing, disposal of waste parts, and hygienic handling of venison). In addition, nuisance permit holders will also be informed of the option of venison donation to the Food Pantry.

Implementation of the DVA Management Plan does not require mitigation actions in a conventional sense, but will require careful planning and implementation. It will require appropriate permits and safeguards whenever tools such as nuisance permit or bait and shoot programs are used. This includes protection and enforcement for bait and shoot locations so that the process is not inadvertently or deliberately disrupted and the safety of the public and professional contractors is ensured.

The Integrated Human–Deer Focus Alternative requires monitoring to support adaptive management. Monitoring in support of the “whole town” goal should include DVA record

keeping that allows efficient analysis of data. In general, three years of data should be assembled during and after the implementation of actions and compared to the target data set using appropriate statistical tests. For example, in the case of nuisance permit use, the plan recommends that DVA data be collected for a minimum of three years and compared to target data set (years 1997-2000). If the “whole town” goal is not met, then the Town may choose to suspend its firearms ordinance and institute bait and shoot in appropriate areas. After at least three years, comparison of the DVA data set to the target data set will provide information necessary to determine if additional bait and shoot is required.

In support of the “hot spot” goal, the integrated alternative recommends DVA record keeping in a form suitable to efficient analysis of data. Again, a minimum of three years of data should be assembled in the GIS database and analyzed to view extent and intensity of each targeted hot spot. In addition to the visual-based analysis, the integrated alternative recommends that data for each hotspot be compared to the previous years of data for each hot spot using appropriate simple statistical tests.

The integrated alternative recommends that deer counts by NYSDEC be continued as an index of deer population. As another deer population index and a method of estimating herbivory effects of deer, it is recommended that native vegetation plots be established in various natural areas, including use of small fenced exclosures to demonstrate potential vegetation in absence of deer. This will also serve the purpose of an educational tool. It is recommended that records of number, location, time, approximate age, and gender be databased for deer harvested through nuisance permits and bait and shoot (if used) so that effects of these programs can be thoroughly understood.

Implementation of the integrated alternative lends itself readily to the DVA management zones that have been established and used for much of the analysis. The plan recommends specific actions in each zone.

The work of reducing DVAs in Amherst begins with the adoption of this plan. The plan lays out a specific approach, but implementation will require both existing information and new information gathered during monitoring. The phenomenon of DVAs in Amherst is dynamic and the plan must adapt to the changing environment.

The public will play an essential role in plan implementation. The successes of actions that target human behavior are fundamentally in the hands of Amherst residents. Actions that address deer behavior and population must be administered by public officials and with public acceptance. The SEQRA process recognizes the role of the public in protection of the

environment, and encourages communication between agencies, project sponsors, and the public. The plan recommends establishment of an Adaptive Management Committee whose membership includes representatives from the Planning Department and the public. This committee would ensure that ongoing management decisions are consistent with the plan.

The DVA Management Plan focuses on reducing DVAs through an integrated approach that adopts methods aimed at the desired outcomes. It attempts to minimize environmental impacts and be mindful of financial cost. It fosters public acceptance by providing scientific and practical rationale for the recommended actions.

The integrated plan is sensitive to the animal welfare perspective of some Amherst residents for whom lethal control of deer may be acceptable only as a last resort. It establishes human and deer behavior actions to reduce DVAs first, along with the existing program of nuisance permits. These actions will be monitored for a period of at least three years, prior to a decision to do more extensive lethal control of deer (bait and shoot).

The Integrated Human-Deer Focus Alternative rests on the premise that DVAs should be addressed and that the diversity of public concerns and viewpoints regarding deer and DVAs must be considered. For that reason, the integrated alternative begins with conservative approaches matched with careful monitoring of results. It does not recommend bait and shoot at the outset, but only after other means have been tried. If bait and shoot is implemented, this alternative recommends a cautious approach with suggested numbers of deer to kill based on statistical analyses of existing data from Amherst.

The plan recommends guidelines for implementation, but an adaptive plan allows for modifications based in economic and political reality. Reducing DVAs has large economic benefit, but one not directly realized by the Town government. Nevertheless, other benefits such as reduced risk from injury or inconvenience from a disabled vehicle would be realized. Outside funding sources for plan implementation should be explored.

The DVA Management Plan is unique in that it was designed using information about Amherst DVAs and environment. Adaptive management allows reasoned decisions regarding future plan refinements and implementation. The foundation for monitoring is the long-term DVA record and related information that has been analyzed in this effort. Although DVAs have long been a concern of the public throughout North America and Europe, an integrated and adaptive approach to managing DVAs is a new phenomenon.

Problem Definition

It is important to have a place in your plan to describe the deer management problem that your community is facing. While some communities may take some time to come to an agreement as to what the problem is (Phase 1 of the CBDM cycle), if your community is at the stage where you are ready to develop a deer management plan, there should be collective agreement that a problem is occurring. You've likely already begun the process of developing goals, objectives, action alternatives, and perhaps even selected or recommended an action (or set of actions) your community would like to pursue.

This part of your deer management plan is the place where you write down what your community found as it progressed through Phase 1 of the CDM cycle, "Problem Definition." As described on the CBDM site, in this phase of the process your community will try to answer the following questions:

- What kinds of deer-related problems are occurring?
- Where and when are these problems occurring?
- Who is experiencing these problems?
- How severe are the problems?

These problems can often be thought of as impacts. When we use the term "impact", we are referring to what Decker, Riley, and Siemer in their textbook, "Human Dimensions of Wildlife", define as "the important effects of wildlife interactions, those that cause strong stakeholder interest and draw management attention" (p. 3). By "stakeholder," the authors are referring to "any person who is significantly affected by, or significantly affects, wildlife or wildlife management decisions or actions" (p. 5). In the case of your plan, you are likely considering all of your community residents as stakeholders.

Impacts might be positive and negative, which is important to keep in mind; your community might be interested in ensuring opportunities for viewing deer along with mitigating deer-vehicle accidents, for instance. Please also note the emphasis in this definition of those effects that stakeholders are interested in. There may be a number of effects of deer overabundance in your community, but your plan is likely going to focus on those effects that are meaningful to the residents of your community; i.e., impacts. It is those impacts that your goals, objectives, and actions are going to be aimed at addressing.

After completing this module, you should...

- ✓ Understand what an "impact" is
- ✓ Know how to comprehensively describe the deer impacts occurring in your community
- ✓ Be able to evaluate plans' impact descriptions

Problem Definition, continued...

Describing the impacts that are driving the problem in your community will help readers of your plan understand the links between the management actions your committee selected or recommended, the objectives those actions help meet, and the impacts those objectives address. Therefore, it is important to include in your plan a discussion of the primary impacts that are driving the problem. These might include impacts to habitat, impacts to ornamental plantings around residences, or perhaps public health and safety impacts such as deer-vehicle collisions or increased Lyme disease cases. You may also want to start thinking about how to measure those impacts, or how you might measure changes in those impacts over time. We'll talk about this some more when we discuss measurable objectives as well as monitoring program effectiveness, but since the goals, objectives, and actions you select are all intended to address these impacts, starting to think about how you might measure changes in impact levels over time will be a useful exercise.

You may find it useful to organize your impacts by type, for instance human health and safety impacts, ecological impacts, economic impacts, and others (in our review of CBDM plans, we found that these four impact categories tend to receive a lot of attention). In addition, it can be helpful to identify *where* or *to whom* the impacts are occurring, *how severe they are*, and *if they have changed over time*.

Consider including the sources you relied upon to identify the impacts, if possible. For instance:

- Did you acquire numbers about rising deer-vehicle collisions from your local police department?
- Did you implement a resident survey to understand the impacts people are experiencing or the ones that they prioritize for management attention?
- Was there a deer population survey or forest monitoring project that helped to elucidate the ecological impact or deer health impacts occurring in your community?
- Did you do multiple surveys to help better understand impact change over time?

Including the information used to help you better understand the impacts in your community is important, as it demonstrates to readers how you determined that these impacts warrant attention in your plan. Citing sources may also provide useful information for other communities that perhaps haven't determined how they will understand impacts in their community—your approach may provide helpful guidance to others! For more information about developing a resident survey, see the section in this guide on supporting documents.

Problem Definition, continued...

Here we describe examples of well-described impacts from two plans. Excerpts from these two plans begin on the next page.

(Example #1). This is an example of thoroughly documented impacts excerpted from Hopewell Valley, New Jersey's Deer Management Plan. In reviewing this section of the plan, you'll note the section heading, "Deer Impacts in the Hopewell Valley"—so, it's very clear what we expect to find here! You'll also notice that the section begins with an explanation of the sources used to describe the impacts in their community: a public survey, interviews with farmers, data on Lyme disease, data on deer-vehicle collisions, and forest health monitoring data. You'll also see that they've determined there are three major categories in which their impacts fall: Human Health Impacts, Economic Impacts, and Ecological Impacts. After reading this section, do you think—as we did when we read it—that you have a good grasp of the impacts affecting this community?

(Example #2). For this example, we have an excerpt from Harpers Ferry, West Virginia's Urban White-Tailed Deer Management Plan. In discussing impacts, they do so in a section called "Current Assessment." They organize not by impact category, but rather by source for collecting information about the existing problem: a wildlife camera survey, a community survey, a deer plant preference assessment, and impacts on forests. From reading this assessment, you should be able to understand the impacts driving this plan: Lyme disease, deer-vehicle accidents, deer browse on gardens and plants, residents' fears of being hit by running deer, and heavy browsing in forested areas.

Finally, a note on the heading, "Problem Definition." You're probably not going to include this as a header in your plan, as understanding the meaning of the phrase likely depends on having some familiarity with the CBDM cycle, which you wouldn't expect most readers of your plan to have. More often, and as you've seen in the three examples included here, you'll include this information about impacts as part of the background section of your plan. You might even have a section header titled "Deer Impacts in My Community," like Hopewell Valley did for their plan.

In sum, here are some key points to remember:

- Early in your plan, be sure to outline the impacts that are occurring in your community; i.e., the important effects of overabundant deer that residents are interested in addressing
- Be sure to identify where or to whom impacts are occurring, how severe they are, and if they've changed over time
- Cite your sources

Example #1: Pages 19 through 28

Example #2: Pages 29 through 36

Hopewell Valley's full plan can be found at:

<http://hopewellwp.org/DocumentCenter/Home/View/501>

Harpers Ferry's full plan can be found at:

<http://harpersferrywv.us/misc/deermgmtfinal.pdf>

III. Deer Impacts in the Hopewell Valley

Introduction

The impacts of deer in the Hopewell Valley were determined through a public survey, interviews with local farmers and review of existing data on Lyme disease, deer-vehicle collisions and ecological monitoring of forest health. Public survey methods are described below. A brief literature review of impacts, along with Hopewell Valley data, is provided in three categories: Human Health Impacts, Economic Impacts and Ecological Impacts.

A recently completed, comprehensive study of the costs of deer impacts in Fairfield County can be found at <http://www.deeralliance.com/index.php?pageID=3&articleID=154>. Although this level of analysis has not been performed in Hopewell Valley, estimates for individual municipalities within Fairfield County ranged from \$1.9 to \$17 million per year (included Lyme disease, tick control efforts, deer vehicle collisions and vegetation damage).

Public Questionnaire Methods and Results Summary

The Task Force prepared a questionnaire to determine the impacts of deer to the general public (See Appendix A for a complete list of questions and responses and Appendix B for results presented as charts). An open-ended comment section was also provided with the questionnaire (See Appendix C for a complete set of comments). Particular sets of questions were specifically designed for farmers (impacts and issues related to agriculture) and hunters (hunting activity and constraints). A total of 5,000 questionnaires were printed by Hopewell Township and Task Force members made them available through several venues including Pennington Quality Market, Mercer County Library - Hopewell Branch, Rosedale Mills, and Pennington Farmer's Market. The questionnaire was also made available on-line through the Hopewell Township website (<http://www.hopewelltp.org/current-topics.html>).

The questionnaire results cannot be considered a statistically valid representation of the entire Hopewell Valley because the questionnaires were not randomly assigned to recipients. In all cases, interpretation of the results is confined to respondents (e.g., 'a certain percentage of *respondents* have reported Lyme disease' as opposed to extrapolating the results by saying 'a certain percentage of *Hopewell Valley residents* have reported Lyme disease'). A total of 575 questionnaires were submitted to the Task Force between June 1 and July 10, 2010. Complete questionnaire responses are detailed in Appendices A and B and key results are categorized within this and subsequent plan sections. The majority of responses were received from Hopewell Township (74%), followed by Pennington Borough (19%) and Hopewell Borough (7%).

Overall, deer impacts were considered significant – 71% of respondents felt that “deer cause many problems and solutions are needed.” It is important to note that while the overwhelming majority of respondents are looking for action to reduce deer impacts, a minority of respondents were strongly opposed to hunting (See discussion of population control methods under Section IV).

Responding households reported deer impacts including Lyme disease (26%), deer-vehicle collisions (28%), landscape damage (24% reported severe damage and 31% reported moderate damage), and bird feeder damage (17%).

Households with hunters constituted 11% of the respondents. The majority of hunting households (80%) harvest less than four deer per year. The single largest factor restricting an increased harvest was “more places to hunt in Hopewell Valley, including public lands” (22%). An increased availability for venison

donation was also significantly limiting (18%), while increased time to hunt was least important (10% of responding hunting households).

Households with farmers constituted 12% of the respondents (60 responses), but only 8% of all questionnaire respondents were currently farming - 39 farming households). Ten percent of responding farmers stopped because of deer predation, while 25% stopped farming for other reasons. Crop losses from deer were common (52%). The majority of damage was less than \$5,000 per year (73%). Nineteen percent of damage cost between \$5,000 and \$25,000 per year. Approximately 8% of damage was greater than \$25,000 per year. Other impacts included stopping the production of particular crops due to deer damage (37%), planting of sacrificial crops that are used to deter deer from feeding on higher value crops (8%), and utilization of fencing (51% of responding farmers). The use of hunting on farmland may be impacted by land ownership / lease arrangements (11% of responding farmers do not own any land). Fifty eight percent of farmers that own their own land allow hunting. Sixty four percent of respondents that lease land have landowners that do not allow hunting on any of their leases – an additional 16% lease some lands where hunting is not allowed. Agricultural depredation permits are utilized by 17% of responding farmers (88% of these permits are utilized on lands owned by farmers).

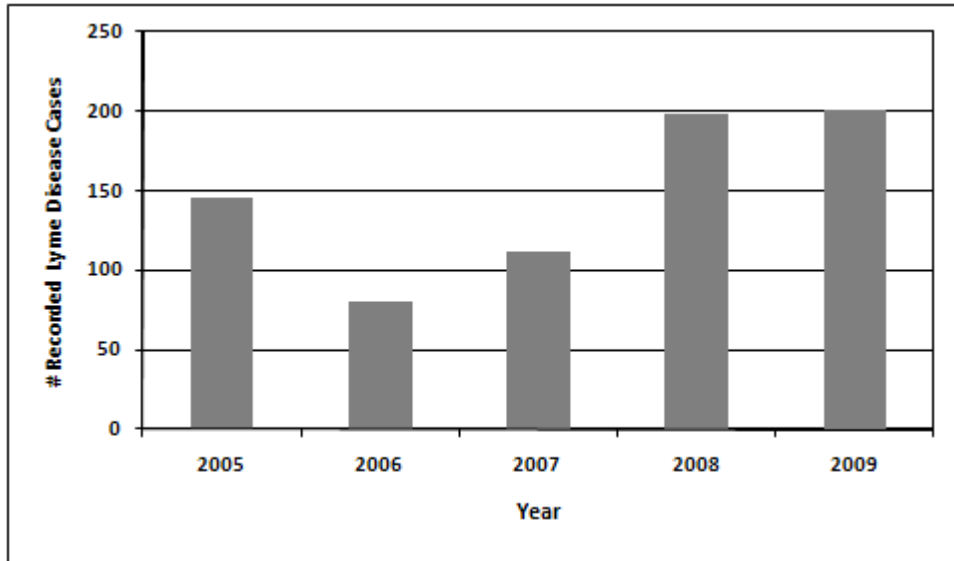
Human Health Impacts

Lyme Disease

Lyme disease has become a significant problem across the United States and is particularly prevalent in the Northeast (Centers for Disease Control 2010). New Jersey ranks fourth in the nation with over 35,000 reported cases between 1990 and 2007 (NY, PA, and CT reported the three highest number of cases). According to a study reported from Connecticut (Stafford 2007), deer population size is linked to incidences of Lyme disease. This relationship is dependent upon a threshold deer population size, requiring a population size of 10-12 deer per square mile to show substantial reduction in human cases of Lyme disease. Although deer do not directly transmit the disease bacteria (*Borellia burgdorferi*), they support large populations of the deer tick (*Ixodes scapularis*) that perpetuates the disease primarily through their other important host, white-footed mice (*Peromyscus leucopus*). In essence, deer act as an incubator to support tick population growth, which then become infected through contact with mice and subsequently transmit the disease to humans. Readers may refer to various sources for additional information on Lyme disease – See Fairfield County Deer Alliance, www.deeralliance.org or the Centers for Disease Control and Prevention, www.cdc.gov.

Hopewell Valley Lyme Disease data is reported in Figure 6. These cases include all residents from Hopewell Township, Hopewell Borough and Pennington Borough that were diagnosed with Lyme disease by their physician (and confirmed through blood testing). The average number of annual cases since 2005 was 147. It is important to note that many cases are unreported because physicians often diagnose and treat the disease without the blood testing required for formal tracking purposes. The public questionnaire results indicated that 26% of responding households had at least one case of Lyme disease over the last three years.

Figure 6. Reported Lyme Disease Cases in the Hopewell Valley
Source: Hopewell Township Health Department



Economic Impacts

Deer Vehicle Collisions

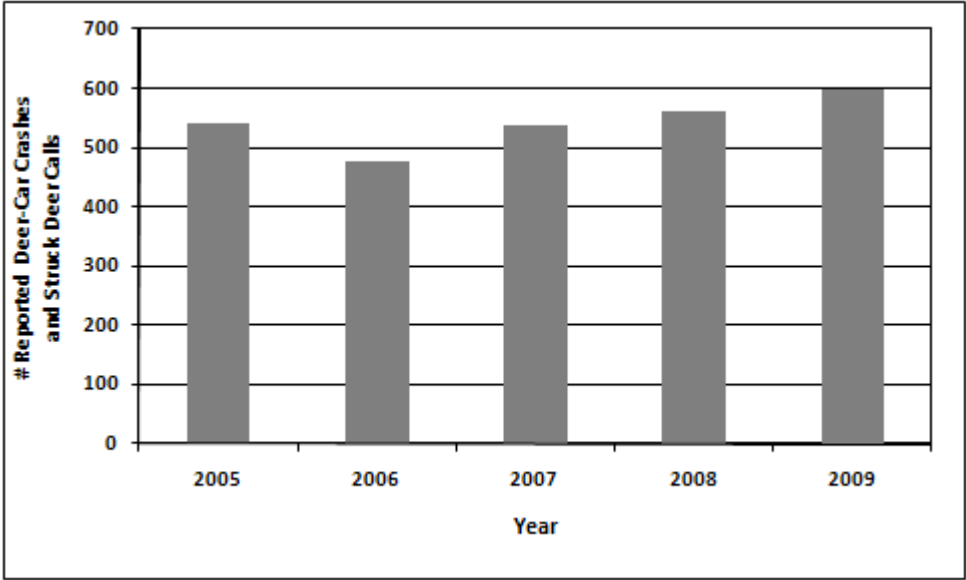
Deer Vehicle Collisions (DVC) occurred at the rate of 100,000 per month nationwide (State Farm Life Insurance Company 2009). Although New Jersey does not rank in the top ten for total DVC's, the state had a 54% increase in collisions over the last five years (highest in the nation). New Jersey has approximately 15,000 collisions per year at an approximate cost of \$3,050 per collision – total annual statewide cost is \$45,750,000 (J. Baldino, State Farm Life Insurance Company, personal communication).

DeNicola and Williams (2008) report a one-to-one reduction in DVC's with reductions in deer density. Through the use of sharpshooting, deer herd size reductions led to DVC reductions in Iowa City, IA (76% population reduction, 78% DVC reduction), Princeton, NJ (72% and 75%, respectively), and Solon, OH (54% and 49%, respectively). In Princeton Township, the pre- and post-culling deer density was 114 and 32 per square mile, respectively (Culling activities were conducted from 2000 - 2006). Additional information on DVC's can be found at Deer Crash (<http://www.deercrash.com/index.htm>).

Hopewell Township tracks DVC's through two methods – reported deer-car crashes and struck deer calls. The average number of reported deer-car crashes over the last five years is 159 crashes per year. It is important to note that all deer-car crashes do not result in a formal police report (see discussion on 'Struck Deer Calls' below). In all years, reported deer-car crashes represent approximately 20% of the total number of reported car crashes (G. Meyer, Hopewell Township Police Chief, personal communication). The number of struck deer calls is drawn from dispatch records. A struck deer entry is made whenever a dispatcher receives a call for a struck deer on or near the roadway and there is no striking vehicle present. A struck deer entry is also made when a motorist comes to police headquarters and reports that they struck a deer (in such cases a police crash report is NOT filed, so they are not double counted). These people are provided with a State of New Jersey form so they can file their own report. This is done because there was no police response to the accident scene. The average number of struck deer calls is 375 over the last five years. It is reasonable to assume that the reported deer-car crashes and struck deer

calls can be added to better estimate the total number of deer car collisions in the Hopewell Valley. The combined average is 531 deer-car collisions per year since 2005 (Figure 7).

Figure 7. Sum of Reported Deer-Car Crashes and Struck Deer Calls for Hopewell Township
Source: Hopewell Township Police Department



Agricultural Losses

Deer overabundance impacts include direct annual crop losses, land abandonment (permanent loss of productivity), crop switching (reduction in profit by planting less palatable crops that are not as profitable as more palatable crops), sacrificial crops (loss of productivity by planting crops to attract deer without the intention of harvesting to avoid damage on more valuable nearby crops), and fencing costs. The Rutgers University Cooperative Extension conducted a statewide survey in 1998 (<http://njaes.rutgers.edu/pubs/deerdamage/>), which reported information on the impacts noted above.

Information on impacts collected from Hopewell Valley farmers through the public questionnaire are summarized in Section II.

Landscape Planting Losses

Residential landscapes are also subject to significant damage. Lists of deer resistant plants, deer repellants and fencing requirements are common topics among gardeners. Although deer impacts can be characterized as a quality of life issue, cost estimates for residential landscape damage are not available.

Persistent deer damage has led many gardeners to utilize unpalatable invasive species such as Callery Pear, Japanese Barberry and Chinese Silvergrass. These species, and many others, cause significant damage to natural areas in the Hopewell Valley.

Information on impacts collected from Hopewell Valley residents through the public questionnaire are summarized in Section II.

Ecological Impacts

Stewardship of Natural Lands

The broader view of ecological impacts must consider that direct human uses (e.g., homes, farms) have consumed about 50% of New Jersey's land area. Obviously, these human uses directly destroy natural systems and continued development remains the greatest statewide threat. The other 50% of New Jersey's land exists in a natural state. However, severe impacts on our remaining natural areas are indirect - i.e., they do not involve outright destruction, but are consequences of human activities. Examples include overabundant deer and invasive species. The goal of land stewardship is to restore ecological health by reducing human impacts. The ultimate desired outcome for our remaining natural areas is to maximize ecological health and natural functions to resist continuing human impacts.

Effective stewardship strategies are guided by science and are carefully formulated to maximize ecological health of plant communities that serve both rare and common species. Broad stewardship strategies involve the following prioritized list: 1) Deer herd reduction to facilitate robust native plant communities that exert ecological control over less palatable invasive species, 2) Early Detection & Rapid Response (ED/RR) to prevent establishment of newly emerging invasive species, and 3) Protection of sites with high conservation values by a) eradicating small, outlier populations of all invasive species, and b) intense, long-term control programs to reverse larger infestations. For some rare species, it may be necessary to formulate strategies on a species- and site-specific basis with the goal of promoting long-term, self-perpetuating survival of populations. Direct restoration of degraded lands is an important strategy that is employed on a case-by-case basis and can be considered after (or during) commitment to the stewardship activities outlined above.

Figure 8. Stewardship Philosophy

'Nature manages itself' is commonly heard from those that feel stewardship of natural resources is inappropriate. In some cases, this is based upon a simplistic understanding of natural systems and the forces that create or maintain them. Some proponents of this view fail to acknowledge that there are many indirect impacts of human activities on natural systems (e.g., introductions of non-native species, irreversible fragmentation of natural areas that support deer population growth, profound alteration of soils from past agricultural use, etc.). Other proponents of this view suggest that nature will have to balance itself within the framework established by human activities and that we should not intervene further. Finally, there are well-qualified experts including some experienced natural historians and research professors that understand that our knowledge of natural systems is incomplete and suggest that stewardship should not be practiced until we learn more about natural systems and how they will react to particular management regimes.

In contrast, proponents of stewardship proceed from the viewpoint that human activities directly and indirectly shape the remainder of our natural world and that there is an obligation to intervene to promote ecological health and avoid further losses to biodiversity. In short, stewardship may be defined as 'the mitigation of human impacts on natural systems'.

Stewards feel that action is required when human impacts severely threaten ecological health, thereby consciously reducing human impacts through management strategies and actions.

In most cases, stewards strive for short-term interventions that correct natural systems with declining trajectories. Examples of short-term interventions include significant reductions of the white-tailed deer population (i.e., culling) and control of nascent populations of invasive species. In other cases, the continuing needs of the human population require that active management be perpetual (e.g., creation and maintenance of early successional habitats because catastrophic wildfires must be suppressed or a continuing Deer Management Programs to maintain a smaller deer herd).

In general, there are relatively few compromises available to proponents of the extremes of these two opposing viewpoints.

However, most individuals realize that a balance is possible, especially when stewardship is coupled with careful monitoring or designed research experiments that provide greater insights to practice adaptive management. Overall, stewardship strategies should seek to utilize minimal human intervention to foster ecological health and stimulate research to provide a better understanding of the natural world.

Forest Health Degradation

Numerous studies and reviews have been conducted on the impacts of white-tailed deer on forest ecosystems. A comprehensive review was conducted in Pennsylvania (Latham et al. 2005, http://pa.audubon.org/deer_report.html); an overview of impacts throughout the Northeast is provided by Rawinski (2008), http://na.fs.fed.us/fhp/special_interests/white_tailed_deer.pdf. Other comprehensive sources include Warren 1997 and McShea et al. 1997.

In general, native species diversity / abundance and overall forest health drop significantly with increasing deer herd size. An often cited research project that provides quantitative guidance on deer population levels associated with ecological damage was performed by David deCalesta, based at the US Forest Service in Pennsylvania (deCalesta 1994, deCalesta 1997). Over the course of a 10-year study using forest enclosures with known densities of deer, deCalesta determined that native forest herbs and tree seedlings became less abundant with deer densities between 10 and 20 per square mile. At densities exceeding 20 per square mile, palatable native plant species disappear and forest shrub-nesting song birds drop in abundance with the loss of the shrub layer. Starvation of deer occurred when densities exceeded 65 per square mile. This study suggests that deer densities exceeding 10 per square mile have negative ecological impacts (Note: Independent historical studies determined that pre-European colonization deer densities were approximately 10 per square mile and breakage – McCabe and McCabe 1984 and breakage of the Lyme disease transmission cycle may occur at 8 deer per square mile – Stafford 2007).

Hopewell Valley forest health data has been collected by the Friends of Hopewell Valley Open Space utilizing the methodology established as part of a statewide ‘New Jersey Forest Health Monitoring System’ designed by Michael Van Clef (See Figure 11). This system for measuring deer browse on experimentally planted tree seedlings (“Sentinel Seedlings”) and current density of woody understory plants (“Forest Secchi”) has been utilized by 15 organizations at 38 sites since 2006.

A total of 16 sites in the Hopewell Valley were tested from 2006 - 2009 (data from an additional 13 sites in Northern New Jersey tested within the same time period are provided for comparison) (See Figure 9 and Table 1). The desired threshold value of 10% seedling browse over a 6-month period (December to June) has not been recorded at any site. The average deer browse measurement is 59% over a six month period. Because tree seedlings require at least several years to grow above the typical maximum deer browse height (ca. 4.5 feet), forests at all tested sites are not expected to be able to regenerate following the death of existing canopy trees.

The understory of most mature forests should be filled with tree saplings and shrubs that provide habitat for wildlife (Note: A forest begins to mature at 50-75 years old) (See Figures 12 & 13). This concept is expressed as the desired threshold of 70% native plant cover utilizing the “Forest Secchi” methodology. The average site measured in the Hopewell Valley has 21% native cover, which mimics the statewide average (See Figure 10 and Table 2). The cover of non-native invasive plants is 31% in Hopewell Valley (15% higher than the statewide average). The reason for the low levels of native understory plants (and relatively high levels of invasive plants) may be attributed to deer overabundance over a prolonged period of time.

Figure 9. New Jersey Forest Health Monitoring System - “Sentinel Seedlings”
 Source: Michael Van Clef, Ph.D., Friends of Hopewell Valley Open Space

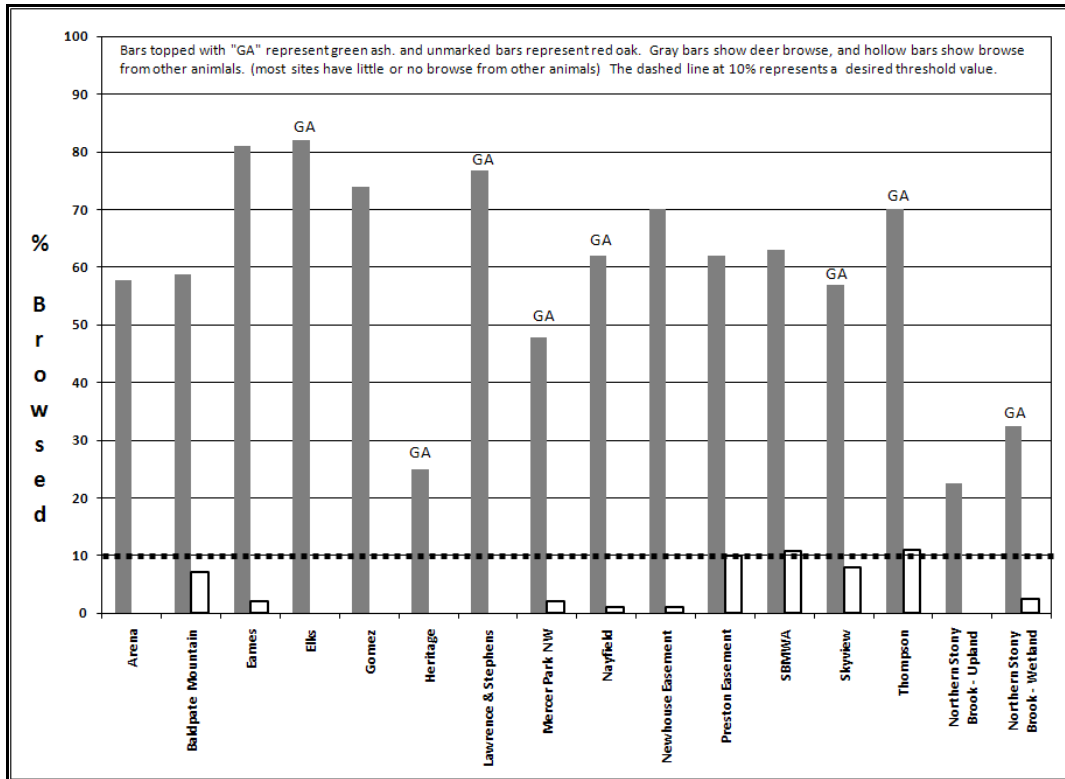


Table 1. Summary of Experimental Seedling Browse Measurements (“Sentinel Seedlings”)

Area	Average Deer Seedling Browse (%)	Range of Deer Seedling Browse (%)	Average Other Animal Seedling Browse (%)	Average Other Animal Seedling Browse (%)
Hopewell Valley Sites (16 sites)	59	23-82	3	0-11
Other New Jersey Sites (13 sites)	59	33-82	1	0-6
Combined Statewide Sites (29 sites)	59	23-82	3	0-11

Figure 10. New Jersey Forest Health Monitoring System - “Forest Secchi”
 Source: Michael Van Clef, Ph.D., Friends of Hopewell Valley Open Space

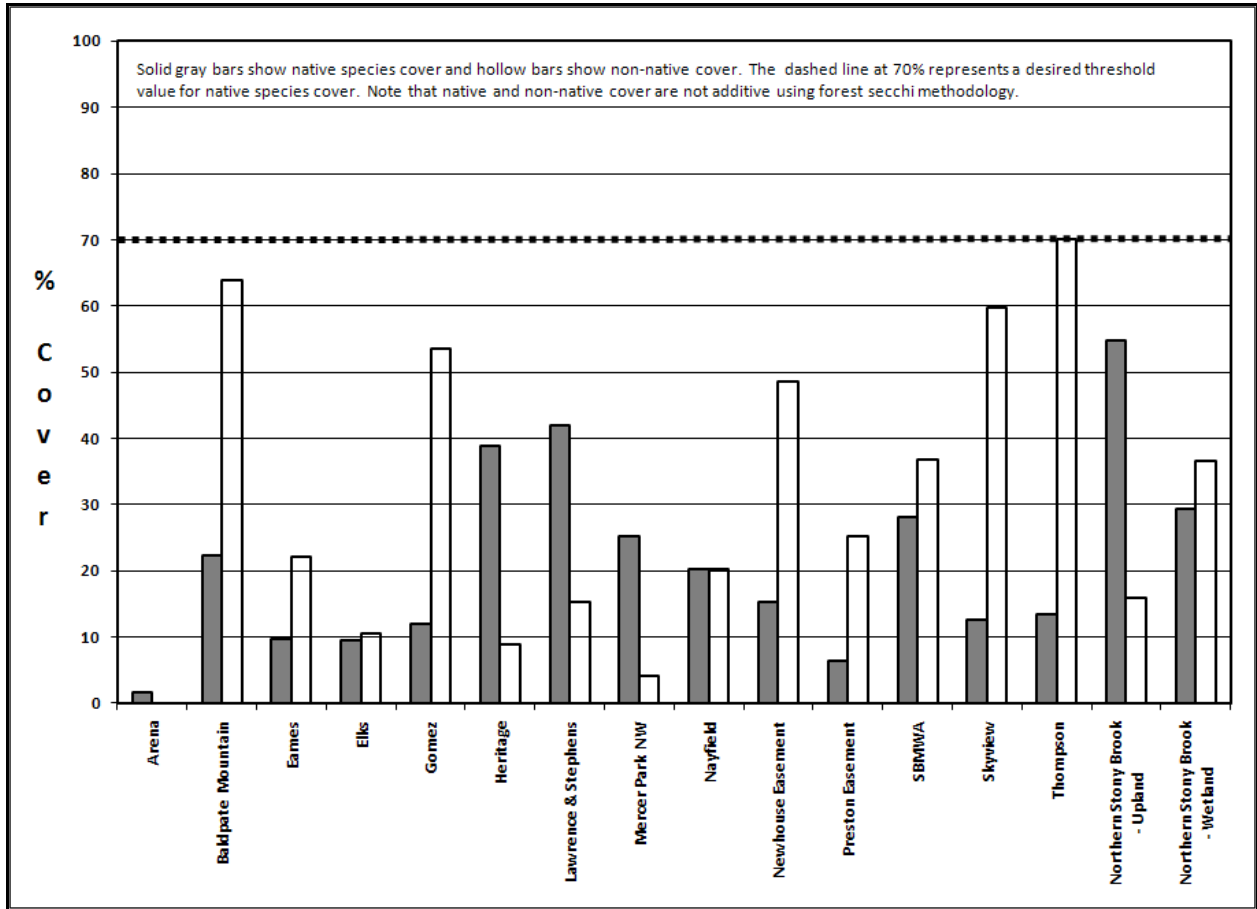


Table 2. Summary of Forest Understory & Canopy Measurements (“Forest Secchi”)

Area	Average Native Cover	Range of Native Cover	Average Non-Native Cover	Range of Non-Native Cover	Average Total Cover	Range of Total Cover	Average Canopy Cover	Range of Canopy Cover
Hopewell Valley Sites (16 sites)	21	2-55	31	0-70	47	2-80	93	82-98
Other New Jersey Sites (15 sites)	21	6-52	16	0-46	33	12-61	89	69-98
Combined Statewide Sites (31 sites)	21	2-55	24	0-70	40	2-80	92	69-98

Figure 11. New Jersey Forest Monitoring System Protocol Design

Left: Browse on planted oak seedling, note unbrowsed Japanese Stiltgrass (an invasive species) in background,
 Center: Sentinel Seedling Plot Design, Top Right: Forest secchi board – the number of grid cells with vegetation are counted to estimate understory cover, Bottom Right: Unbrowsed invasive Japanese Barberry at a site with very high deer density (photo taken adjacent to the browsed oak seedling at left).



Figure 12. Forest Degradation Series Photographs

Top: Healthy forest containing dense understory growth, Middle: Understory browsed away by deer, Bottom: Canopy gaps fill with unpalatable invasive species and native trees cannot grow because of excessive deer browse



Figure 13. Forest Recovery at Ted Stiles Preserve at Baldpate Mountain

Left: Photo of native spicebush thicket within the core of the Preserve – this area harbors forest birds such as Kentucky and Hooded Warblers not found in most places in the Hopewell Valley, Right: Close-up photo of thicket showing spicebush (larger leaves) overtopping the invasive Japanese barberry. This is an example of “ecological control” of invasive species by native species. Although the Deer Management Program at Baldpate has produced significant improvements within the core of the Preserve, additional deer herd reduction is required to restore large portions of the site.



PART II

Current Assessment

Part 2 documents the problems associated with the current deer population levels within the town of Harpers Ferry.

A. Study Area

The study area includes the town limits of Harpers Ferry, as well as the unincorporated area of Bolivar Heights. Harpers Ferry is a small community of about 285 residents on a peninsula bordered by the Potomac River to the north and the Shenandoah River to the south. It is 0.6 square miles in land area. The Harpers Ferry National Historical Park takes up part of the incorporated area of Harpers Ferry.

The adjoining town of Bolivar, West Virginia, did not elect to participate in the study or current assessment program. However, the town is currently seeking property owners who would consider participating in an Urban Archery Hunt.



Study Area Map

Red line: Incorporated areas of Bolivar to left, Harpers Ferry to right.

Light green area: Harpers Ferry National Historical Park land.

#1-#8: Wildlife Camera Survey positions.

B. Wildlife Camera Survey

Procedure Description

The study area map shows the 8 camera positions on the Potomac River or north side of town where six volunteers set out wildlife cameras April 6-8, 2012. Human interaction with deer is widespread throughout the community, but the north side of town has more notable damage reports.

These camera positions were selected after consulting with local hunters for purposes of this study and to assess potential hunt sites. The author visited each site, took GPS coordinates, and noted adjacent property and proximity to housing and public buildings. Site selection was excellent and coverage of the peninsula was good.



No sites were located on the south side of town or around Boundary Street or Union Street. The housing density in this area is tight and the hunters did not consider this an appropriate potential hunt site. The community survey shows that Union Street has vehicle “near misses” turning off the main highway, and Washington Street has deer trails and movement from one side of town to the other.

Equipment was donated by the local hunters and included both video style and movement sensitive style cameras. Corn bait from a local grower (to avoid inadvertent contamination) was used to bait the camera positions on the afternoon of April 6. The cameras were in use until the afternoon of June 8. Cameras were removed on June 8 and 9.

Ideal study conditions would have been during the fall months, with antlered deer, and when the deer are most active. But, the program got underway during the spring months, and to facilitate a program being implemented in 2012, the camera survey was done in April.

Results

Volunteers and the author reviewed hundreds of photos. A spreadsheet, set up with the time and date and camera position for each photo, showed simultaneous hits, and deer movement from one position to another. Within the first hours of the cameras being placed, six of the seven camera positions had simultaneous hits with a total count 26 deer at the six cameras. Five camera positions typically had six deer photographed at one time during the 3-day period. Position 6, off Putnam Street, showed nine deer bedded down the afternoon of June 7.

Of interest were deer that were undersized or in poor condition (pictured below). With many of the pictures at night or at a distance it was hard to determine the number of bucks. Two bucks in antlerless phase could be identified.



Also of interest and some concern, were people walking through the photographed areas. The deer, comfortably bedded down for the afternoon, suddenly ran off, a person appeared and left. Within 10 minutes, the deer were back and bedded down. The author later learned that a dog had gone missing in this area and several residents were involved in the hunt for the missing dog. This likely accounts for the high foot traffic.

Other wildlife photographed included raccoon, fox, squirrels, turkey vultures and a possible bear cub.

Details of the camera survey by camera position are found in Attachment B. This attachment also includes volunteers and property owner information. Results for Bolivar Heights sites, positions 1 and 2, were combined because of their close proximity.



In summary, while not used to obtain an accurate deer count, the Wildlife Camera Survey conducted by the volunteers, demonstrates that deer exist in significant numbers and are comfortable bedding down within the town limits. Given the high cost of thermal imaging, the author believes it is not warranted since the wildlife cameras showed deer population numbers well in excess of a healthy deer to land area ratio. The high deer numbers were also evident in the data received in the Community Survey.

C. Community Survey

Description

A community survey form was distributed to the members of the community in April and May of 2012. The survey form was published in the Harpers Ferry town newsletter distributed online, left on the desk at the town hall reception window and on the post office table. A total of 33 voluntary responses were obtained. In 2010, the Town of Bolivar had 23 residents report deer problems on their complaint form. Using Water Department household service accounts (812 for Bolivar and Harpers Ferry and immediately adjoining unincorporated area) as a base, the combined total (56) answering the surveys indicates a rate of response as high as 7%.

A copy of the Survey form is found in Attachment C. This survey is not a representative sample because it was a voluntary submission, and because of the low sample size, but nevertheless has good information provided by community members.

Results: Incidence of Lyme Disease

Eleven households reported 13 cases of Lyme disease within the last two years on the 2012 Community Survey. In other words, 33% of the households participating in the survey have been treated for Lyme disease.

The Center for Disease Control publishes data on confirmed cases that are reported to them. For 2010, there were 7.3 confirmed cases per 100,000 population nationally. The local health department does not have data on Lyme disease.

In 2011, the Center for Disease Control came to Harpers Ferry National Historical Park and collected and tested 13 ticks in six different parts of the Park. None of the ticks tested positive for Lyme. It is not possible to determine where our residents are contracting Lyme. But, the incidence rate is high in our community, and we do have a public health issue in Harpers Ferry.

The Center for Disease Control's website shows the White Tailed Deer as a host of the tick that carries Lyme disease and states that the risk of greatest human infection is in late spring and summer, prime outdoor times for humans in this area.

Results – Deer in Yards

All 33 of the Survey respondents reported having deer in their yards. A summary of where the deer are concentrated is as follows:

Location	Average Number of Deer in Yard	Number of Households Reporting
Church Street	5.0	2
Washington Street	6.0	8
East Ridge	4.5	4
Union Street	13.0	3
West Ridge	11.0	2
All other	7.7	6

This information was consistent with the Camera Survey data obtained in April 2012. We had an average of 6 deer in the cameras, but there may have been more due to the limited range of the photographs. The table also shows the risk of having a collision with a deer on Union Street.

Results – Automobile Encounters

The Survey asked about encounters with deer while in an automobile. Drivers going the posted speed limit of 25 (or 15) miles per hour will likely have time to stop in most cases. Of the respondents, six reported having no incidents, while 26 did. One resident reported a vehicle-deer collision on State Highway 340 (which passes Harpers Ferry) resulting in \$4,000 in damages, and a Harpers Ferry police cruiser was in a collision with a deer in 2010.

State Farm Insurance reports on deer-vehicle collisions annually. As headlined on their website (www.statefarm.com) in October, 2011, "U.S. Deer-Vehicle Collisions Fall 7 Percent; Mishaps Most Likely in November And in West Virginia." West Virginia, according to their report, leads the nation for the fifth year in a row, for where an individual driver is most likely to run into a deer.

Lastly, Survey comments on automobile encounters in this area included the following:

- “Deer stand in road and face cars down.”
- “Ran in front of me and glanced off bumper.”
- “Dodged them running across Washington Street.”
- “Two near misses on Washington Street.”
- “We observe many close calls on Union Street.”

Results – General Comments

The Survey form included blank lines at the bottom for open comments. The possibility of having a hunt to reduce the herd was not mentioned, but 7 of 33 respondents said specifically that they were in favor of such a program, while one was not. Generally, the following comments summarize the current culture regarding deer in Harpers Ferry:

- “The deer are a part of the charm of our community.”
- “As much as I like to see the deer, there are too many for the area.”

There are a few individuals who spoke to the author against an urban hunt program, and there are also residents who are angry and frustrated over the loss of expensive and carefully tended gardens to hungry deer. One resident, after learning of another resident being knocked out by a spooked deer in his yard, said she no longer walked after dark on West Ridge Street for fear of being hit by a running deer.

D. Deer Plant Preference Assessment

The community reported 62 varieties of urban plants being browsed by deer. Rutgers University and the New Jersey Agricultural Experimental Station have developed a Deer Browsing Desirability Rating Chart to indicate plant preference by browsing deer. Plants range from A, least desirable and rarely damaged by deer browsing, to D, most desirable and most often damaged by deer browsing.



Deer browse line on yews at 900 Fillmore Street

Plants Most Reported Damaged by Deer in the Survey

Plant Type	Rutgers Rating	Responses
Hostas	D	14
Tulips	D	8
Roses	C	8
Hydrangeas	C	7
Impatiens	C	6
Azaleas	D	5
Day Lilly	D	5

In addition to the plants with desirability rated by Rutgers, seven survey respondents reported damage on garden vegetable plants which are not rated. (See Attachment D for more details on plant species and browsing desirability rating.) The following plants with the low desirable rating of B were reported by two or more households as being browsed by deer: 3 households reported Black-Eyed Susan and Forsythia; 2 households reported Columbine, Crocus and Witch Hazel.

The deer are browsing the most desirable plants, but also are starting to take B-rated or Seldom Browsed plants. While it is possible some reported damage may have been caused by other species (groundhogs and rabbits are common in town), many residents witnessed the deer actually browsing the plants reported.

Increasingly, fencing is going up around gardens in the community. This may keep the deer out, but the fencing can also make for a less appealing urban landscape, as well as being costly to install.



Newly Fenced Garden on Washington Street

E. Impact on Forested Areas

Harpers Ferry has within its town limits natural forested areas including private property, paper streets and flood zones. Heavy browsing in these areas is adversely impacting the health of the forests as young seedlings are browsed and non native species move in. The picture below shows the browse line found throughout the area and a forest floor covered with invasive garlic mustard with no forest regeneration occurring.



Forested Area near Cedar Hill Cemetery

Goals

Up to this point in your deer management plan, you've mostly been writing up content that reflects Phase 1 of the CBDM cycle, "Problem Definition." Now, we're going to move on to content that covers Phase 2 of the cycle, "Decision Making." During this phase, your community will be developing goals for your deer management program, developing objectives, exploring action alternatives to address those objectives, and determining which action or actions to take.

The development of broad goals that you hope to achieve with your deer management program is important for establishing a vision for your community's deer situation. Unfortunately, goals are often missing from plans, which is a problem because goals help drive the rationale for the actions selected to address a community's deer problem. This oversight is not surprising, given that many communities (for many public issues!) tend to focus on actions right away, leaving goals and objectives unspoken.

Readiness to take action to address a problem is a great condition to be in, but it is important that your plan provides clarity as to why you're taking a particular action. So, this is an important caveat to the note about order earlier. While the order of elements of your plan is not as important as the fact that you have included these plan elements, discussing your goals (and objectives) prior to discussing actions really is important for making clear the rationale for your plan.

Goals might be expressed as a list of general outcomes or reflect a desired future condition. Often, goals and objectives may be confused, because colloquially we use them interchangeably. However, when writing your deer management plan, distinguishing between goals and objectives is meaningful. Goals, as we just defined, reflect a *vision for desired future conditions*—they are not inherently measurable without a connection to objectives. You may feel that goals were already described in the purpose or mission statement of your plan—and that's fine. If not, including them clearly in a "Goals" or "Goals and Objectives" section can be very helpful to readers. *Objectives*, in contrast to goals, reflect the *specific outcomes needed to achieve goals*. Objectives are *measurable* and have a *time element*. But, more on objectives in the next section.

So, what kinds of goals might you include in your plan? In our review of CBDM plans, we found that many communities included goals related to decreasing deer-related problems, community outreach and education, deer reduction, or managing deer. Specifically, some example goals might be:

- Maintaining a socially-acceptable level for the deer population
- Preserving healthy, local forests
- Supporting a community that is well-educated on how to live with deer while reducing human-deer conflicts

Your goals should be *realistic* and *achievable*. Some communities may find it helpful to connect their community-level goals to statewide goals established for deer management (i.e., does your state wildlife agency have a deer management plan you may review to help refine your own community's goals?).

After completing this module, you should...

- ✓ Know the attributes of good goals
- ✓ Understand why including goals is important
- ✓ Know the difference between goals and objectives

Goals, continued...

To better understand how you might write up clear goals for your plan, let's look at a few examples.

(Example #1). This first example is an excerpt from Burnsville, Minnesota's deer management program overview.

5.0 MANAGEMENT OPTIONS

A citywide Deer Management Program should start with the identification of a goal and objectives as well as a summary of the problems. Then the management strategies or options can be tailored to fit the specific needs of the city and its residents.

5.1 Goals and Objectives

The following goal, objectives and problems have been revised from the DNR's long range plan for the management of white-tailed deer in the metro region (DNR 1996) to fit the expected needs of Burnsville.

Goal

Manage white-tailed deer populations within the city at socially acceptable levels that provide recreational and educational opportunities as well as provide opportunity for maintaining healthy (natural regeneration) woodland habitat.

Before discussing potential management options, the plan identifies the goals and objectives of their program. Burnsville has very clearly defined the goal of their program, which includes both social and ecological components. They've also noted that they have developed their goal by first considering the state's Department of Natural Resources' goals for managing white-tailed deer in metropolitan areas.

Burnsville, Minnesota's complete deer management plan can be found at:
<http://www.burnsville.org/DocumentCenter/Home/View/1338>

Goals, continued...

(Example #2). This next example is an excerpt from Amherst, New York's plan.

2.4. The Goals of the Plan

This plan defines a program of actions designed to provide control over DVAs in Amherst. Its overarching goal is to reduce the number of DVAs given the many variables that influence when, where, and why they occur. Because numerous variables influence the number of DVAs in Amherst, establishing a *discrete target number* of DVAs in Amherst is not reasonable. Nevertheless, DVAs are what we can, and do, most readily count and are the basis for setting goals and monitoring success of the plan.

Analysis of Amherst data (described later) shows that population control efforts on deer in the mid-1990s were associated with a statistically measurable decrease in DVAs in the last half of the decade. There is a likelihood that both numbers of deer and numbers of drivers will increase in Amherst. Development, another variable linked to Amherst DVAs, is also continuing. For these reasons, it can be forecast that Amherst DVAs are on the verge of increasing. This plan establishes the initial goal at two spatial scales, *whole town* and *hotspots*. These scales represent a natural division and are useful since different DVA management tools can be applied at each scale. Tangible goals for each scale are defined as follows:

1. At the *whole town* scale, reduce DVA numbers to the lower levels experienced in the years after significant lethal control was conducted and an associated decrease in DVAs was experienced (1997-2000). If this goal is attained, more rigorous goals can be established through the adaptive planning process if this is deemed desirable (see section on Monitoring and Adaptive Management).
2. At the *hotspot* scale, select specific DVA hotspots and diminish these with targeted approaches. Progress toward the hotspot goal will be measured with parameters such as intensity and extent of hotspots and DVA counts within the hotspots. Lessons learned from successfully treated hotspots can be applied to other hotspots through the adaptive management process.

Goals, continued...

The focus of the plan in Amherst, obvious from the plan's title, "Town of Amherst Deer-Vehicle Accident Management Plan" is on deer-vehicle collisions. So, it makes sense that their overarching goal, highlighted in the excerpt above, is to "reduce the number of DVAs [deer-vehicle accidents] given the many variables that influence when, where, and why they occur." We would say that what Amherst describes as an "overall goal" is what we mean by goal in this guide, and when they proceed to discuss tangible goals (at the town level and hotspot level), they are discussing what we would call measurable objectives. When you read the next section on objectives, look at this excerpt again and see if you agree.

In sum, here are some key points to remember:

- Goals reflect a desired future condition, whereas objectives are specific, measurable outcomes needed to achieve goals
- Goals and objectives should be identified prior to actions
- Goals need to be realistic and achievable

Amherst, New York's
complete deer management
plan can be found at:
<http://www.amherst.ny.us/pdf/planning/deer/appa.pdf>

Objectives

The objectives your plan seeks to achieve are arguably the most important aspect of your plan, as your objectives should be the major driver of the actions taken. Outlining your objectives clearly in your deer management plan is important, as your community will go back and revisit them many times to track progress towards achieving them. When outlining your objectives, it is most important that those objectives be measurable and have a time component. Basically an objective needs to communicate what you hope to achieve and state an explicit deadline for doing so. Otherwise, how are you supposed to know if you've achieved your objective(s)? The Community Deer Advisor provides some advice on what makes a good objective. It provides a handy acronym to help you remember the attributes of good objectives: "S.M.A.R.T."—

After completing this module, you should...

- ✓ Know the attributes of good objectives
- ✓ Be able to describe the importance of including objectives
- ✓ Understand how to develop measurable objectives

- Specific—Are your objectives focused?
- Measurable—Are there indicators that will confirm whether they have been achieved?
- Attainable—Are they realistic given available resources?
- Relevant—Are they a good fit for your community's situation?
- Time-related—By when will the results be achieved?

When describing your objectives in your deer management plan, it is important that you ensure that these five elements of objectives are included in your plan. The Community Deer Advisor also includes some references for helping you to develop goals and objectives.

It may be helpful to think about your objectives in terms of categories, such as: objectives directed towards the number/behavior of deer, objectives directed towards increasing community knowledge about deer/deer management, and objectives intended to change individuals' behaviors that influence impacts from deer (e.g., driving behavior, deer-resistant plantings, etc.). Example objectives might be:

- To reduce the number of deer-vehicle collisions to a certain amount per year
- To reduce deer damage to ornamental plantings around homes to a certain amount
- To increase or maintain stems of certain forest plant species to some density

Whatever objectives you have identified, as we stated before it is important that they be measurable and have a time component (a target date for achievement), meaning that there is a way for you to track progress towards meeting these objectives. Your objectives should also be related to your goal, as objectives reflect the specific outcomes needed to achieve goals.

For example: if you have a goal of preserving healthy forestland, your community might have an objective linked to that goal, such as seeing a 25% increase in native plants in four city parks over the next five years. Now, important to measuring this objective—which we'll discuss when we get to monitoring later in the guide—is having some baseline measurement of what your community means by native plants and their current understory cover in your city parks.

Objectives, continued...

In the following sections of your deer plan, you will identify your selected management actions as well as selected indicators for monitoring progress on your plan, both of which need to reflect these objectives. As you identify your objectives, be aware of the kinds of actions you might need to take to make progress towards these objectives as well as the kinds of data that you might need to collect to evaluate that progress. Including measurable objectives that are tied to indicators and actions is the most important component of your plan. It is critical to know *what you are making progress towards* so you can judge success of your program. It is also important that you start with identifying objectives, not with actions. Actions selected should be matched to goals and objectives, not the reverse.

Measurable objectives are often missing from plans, though plans that do address them tend to focus on reduction of Lyme disease cases, deer vehicle collisions, crop loss, and landscape damage; herd size or density goals (deer per square mile); or wildlife acceptance capacity. Most commonly, if objectives are reported, they tend to focus on deer population objectives or deer-vehicle collision reduction objectives.

One strategy you may consider in helping you developing your objectives (and goals, for that matter) is to take a look at the impacts people care about and determine how your plan might help directly address those impacts. The main reason for developing a deer management plan is that your community has identified some problem with respect to the interaction between deer and people; those problems take the form of impacts, so it is logical for your objectives to address those impacts.

As discussed earlier in the “goals” section of this guide, there is a difference between goals and objectives, so it’s important to be aware of that difference when outlining goals and objectives in your plan. Sometimes, in other community’s plans you might see an action labeled as an objective. Hypothetically, a statement such as “Develop an educational program to provide residents with information about deer biology and methods to minimize wildlife conflicts on their property” may be reported as an objective in a plan, *but it’s really an action*—not an objective or goal. Let’s say this action was selected to mitigate impacts such as deer damage on residential property. A goal related to this impact might be something like, “To support a community well-educated about how to live with deer while reducing deer-human conflicts”—a desired future condition. An associated objective might be, “To ensure that 75% of residents report being highly knowledgeable about methods to reduce deer damage on their property by 2020”, which could be measured by a resident survey. Therefore, the action initially described in this hypothetical example—developing an educational program—would be carried out in support of this objective.

Objectives, continued...

So, what do some well-developed, measurable objectives look like? Below you'll find three examples from different community plans.

(Example #1). The first example is an excerpt from Hopewell Valley, New Jersey's Deer Management Plan.

Recommended Goals

Goal #1: Reduce Lyme Disease Cases

There has been had an average of 170 reportable cases of Lyme disease from 2007-2009. The Task Force recommends a 25% reduction goal by 2013 (128 cases) and a 75% reduction goal by 2019 (43 cases).

Stafford (2007) reviewed studies exploring the link between deer / tick abundance and human cases of Lyme disease. It is suggested that deer densities lower than 8 per square mile could interrupt the life cycle of the Lyme disease organism and nearly eliminate transmission to humans. However, reductions in Lyme disease could be expected at higher deer densities – for example, there was a 90% reduction in Lyme disease at Bluff Point Coastal Preserve in Connecticut when deer densities were reduced from 200 to 30 per square mile (85% reduction).

Goal #2: Reduce Deer Vehicle Collisions

There has been an average of 567 deer-vehicle collisions from 2007-2009. The Task Force recommends a 25% reduction goal by 2013 (425 collisions) and a 75% reduction goal by 2019 (142 collisions).

Data linking deer herd reduction with reduced deer vehicle collisions is sparse. However, Princeton Township experienced a 75% reduction in deer vehicle collisions (from 342 to 85 per year) following a six-year deer management program that resulted in a 72% reduction of the deer population (from 114 to 32 deer per square mile) (DeNicola and Williams 2008).

Goal #3: Reduce Agricultural Losses

The public questionnaire results suggested that 27% of respondents had crop losses exceeding \$5,000 per year. The Task Force recommends a 25% reduction goal by 2013 (20% of respondents) and a 75% reduction goal by 2019 (7% of respondents).

Agricultural losses are a significant concern in the Hopewell Valley and complete results of the public questionnaire are provided in Section III and Appendix A. There are no published guidelines linking particular deer densities with agricultural losses, but continual tracking of the above stated goal is expected to act as a proxy for the variety of deer impacts to agricultural viability in the Hopewell Valley.

Goal #4: Reduce Landscape Planting Losses

The public questionnaire results suggested that 55% of respondents had severe or moderate landscape damage. The Task Force recommends a 25% reduction goal by 2013 (41% of respondents) and a 75% reduction goal by 2019 (14% of respondents).

Landscape planting losses are a quality of life issue in the Hopewell Valley. There are no published guidelines linking particular deer densities with landscape planting losses, but continual tracking of the above stated goal is expected to act as a proxy for a range of deer-related impacts within planted landscapes.

Objectives, continued...

You see that that these objectives are labeled according to their overarching goals, and you don't see the word "objective" as a heading. But let's look at their first recommended goal: "Reduce Lyme Disease Cases." If you read the paragraph that follows, you'll see two measurable objectives in support of that goal: a 25% reduction in Lyme disease cases by 2013, a 75% reduction in cases by 2019. You'll also see a statement about reducing deer densities and their link to reduced Lyme cases. We'll talk about this more when we get to actions, but these data are presented as support for the actions taken in their community—the lethal control of deer. But, as they state within the plan, "...success should be measured by stated impact reduction goals and not based upon measured deer population size" (p. 24). This statement emphasizes that what they are interested in measuring is reduced Lyme disease cases—the success of their program is not based on number of deer taken (their actions implemented), but on the reduction of the impact they care about (Lyme).

Before we get to the next two examples, let's briefly discuss deer population reduction objectives. The most common type of measurable objective we see in plans tends to be related to reducing the deer population to a certain amount on a certain timeframe. The two examples we are about to show you do just that—they describe a deer population objective that is specific, measurable, time-related, and likely achievable. However, when selecting your management objectives, think about whether or not your objectives are tied directly to your impacts. Do you have data on the relationship between the impacts your community members care about and what the deer population has to be in order to see a decrease in those impacts? If not, reducing the deer population to a specific number might not solve your community's problems—and you may want to reconsider whether or not a deer population objective is right for your program. Focusing your objectives on reducing impacts (rather than deer numbers) might be more appropriate. If you do know the relationship between deer population reduction and the impacts you care about, you might consider nesting objectives—first, identify your desired impact management outcomes and then identify the appropriate amount of change in the deer population you'd like to see in order to achieve those impact outcomes.

Hopewell Valley's full
plan can be found at:
[http://hopewelltp.org/
DocumentCenter/Home/
View/501](http://hopewelltp.org/DocumentCenter/Home/View/501)

Objectives, continued...

(Example #2). The second example is from Greenwich, Connecticut's "Report on Managing Greenwich's Deer population."

Greenwich Conservation Commission's Recommendations

Subsequent to presentations by Kilpatrick to the Conservation Commission, and after additional research and discussion, the Conservation Commission reached a consensus to support the preliminary recommendations made by Kilpatrick. The Commission firmly believes that for reasons of public health and safety and for the retention of the town's ecological heritage and biodiversity, the town's deer population must be drastically reduced in size and that a long-range deer management plan should be implemented which includes population management, monitoring and assessment, and education/outreach. It is the Conservation Commission's belief that the most cost-effective, morally defensible, and operationally practical population management program would involve two phases: 1) immediate herd reduction by increased hunting within the hunting regulations and/or culling of the herd by means of managed sharp shooting on both public and private lands; and 2) long-term population management through hunting (and/or birth-control when and if it gets state and federal approval). Specifically, the first phase would begin this year, with a goal of reaching a deer herd size of less than 26/mi² across Town within three to five years. The second phase would begin once an acceptable herd size is realized.

This example provides a measurable objective with a clear timeline (*highlighted above*): A herd size/density goal of less than 26 per square mile, to be achieved within the next three to five years from the time of plan publication.

(Example #3). The last example (*highlighted below*) is from Helena, Montana's "Urban Deer Management Environmental Assessment", which provides a measurable objective: 25 deer per square mile in the city, to be achieved through the removal of 350 deer

In 2007, the City of Helena's Urban Wildlife Task Force developed an Urban Deer Management Plan. The Task Force confirmed the findings of the Plan that the predominate urban wildlife problem in the City of Helena was an overpopulation of mule deer due to the ample forage, water, and general habitat conditions. After extensive meetings that included city officials, members of the public, and wildlife specialists who reviewed existing urban wildlife plans, the Task Force presented its recommendations to the City Commission. This Plan was adopted by the City Commission and included the following actions to address increasing public health and safety, real and personal property damage, and wildlife welfare: 1) public education, 2) review of zoning ordinances and laws, 3) promotion of deer resistant landscaping and barriers, and 4) reduction of the existing mule deer population from within the city limits. The deer reduction plan proposed an initial removal of 350 deer to reduce the resident population's growth rate. The recommended deer population density for the City was 25 deer/mi² based on information from other cities that have established an urban deer density objective. As reported in the City of Helena's 2007 Urban Deer Management Plan, the deer density as of 2007 was estimated at an average 33 deer/mi² throughout the city.

Objectives, continued...

In sum, good objectives should be:

- Specific, not general (in contrast with goals)
- Tied to your plan's goals and the impacts those goals are meant to address (i.e., relevant)
- Measurable
- Have a target date for achievement
- And of course, attainable. If your community can't achieve the objectives you've set—if they're not realistic—you're setting your community up for disappointment. While community-based deer management is a long-term process, it's important to still be able to achieve objectives in a timely fashion.

Greenwich, CT's deer plan
can be found at:

[http://www.greenwichct.org/
upload/medialibrary/b8e/cc
DeerReport2004finalcorrecte
dl.pdf](http://www.greenwichct.org/upload/medialibrary/b8e/ccDeerReport2004finalcorrectedl.pdf)

Helena, MT's deer plan be
found at:

[http://www.ci.missoula.mt.us/
DocumentCenter/Home/View/
18805](http://www.ci.missoula.mt.us/DocumentCenter/Home/View/18805)

Actions Recommended

Likely the section of the plan that readers are most interested in will be your outline of the various management actions recommended or selected for your community-based deer management program. These actions may include strategies for population control; strategies directed at deer behavior; strategies directed at human behavior, public outreach, education or communication; local ordinance changes; or perhaps others. Your plan will probably include a suite of management actions, so you may choose to organize them according to type (such as deer population control, deer-feeding ordinances, etc.).

For each action selected, it is important that you explain:

- How this action will contribute towards meeting your objectives
- Identify who will carry out the action and on what timeline
- Describe the site targeted for management, if applicable

For instance, if you will be installing deer-proof fencing around various natural areas in your community, which natural areas will be protected and if not all at once, then in what order? And who will be doing the installation? Indicating how actions contribute to objectives is also important, as this forms part of the rationale for selecting a particular action or set of actions. It is likely that multiple actions will contribute to meeting your objectives, so if there's some reason such as effectiveness, public support, feasibility, cost, or timing that also contributed to your selection of a particular action it's important to say so.

It is also important to support your rationale for selecting actions, be it by citing studies, resident surveys, budget estimates, or expert opinion. Whatever data, input, or logic you've used to select an action or set of actions needs to be clearly outlined. You may find resources to help guide the selection of actions in a number of places: your state wildlife agency will provide guidance as to rules and regulations that may limit what actions are possible in your community (e.g., see [Pennsylvania's Guide to Deer Management](#); New Jersey's [Community Based Deer Management Manual for Municipalities](#); and the Community Deer Advisor website has a resources section on management actions and alternatives as well). You may also be interested in reviewing [An Integrated Approach For Managing White-Tailed Deer In Suburban Environments](#), developed by Cornell University Cooperative Extension and the Northeastern Wildlife Damage Management Cooperative—you'll find some good recommendations for landowners, residents, and policy-makers, as well as an overview of options for deer population control. Similarly, the technical guide, [Managing White-Tailed Deer In Suburban Environments](#), developed by Cornell University Cooperative Extension, the Wildlife Society's Wildlife Damage Management Working Group, and the Northeast Wildlife Damage Research and Outreach Cooperative. In this guide you'll find useful information on deer biology, ecology, and management, guidance on how to develop an integrated deer management strategy, as well as an overview of nonlethal and lethal management options, and contacts for state wildlife agencies.

After completing this module, you should...

- ✓ Understand how to comprehensively describe the actions recommended
- ✓ Understand how to provide rationale for the actions recommended

Actions Recommended, continued...

It is essential that this section is complete and clear, as controversy around deer management in communities is often focused on management actions. As we described at the beginning of the course, controversy—and active opposition—can come from individuals or organized groups, and often around which methods of deer management are acceptable. Sometimes communities will only produce a short document outlining the actions in their plans. We do not recommend this “bare bones” approach, unless it is paired with other easily accessible documents, perhaps on your community’s website, that give an overview of reasons why those actions were selected.

As we’ve discussed before, jumping to actions is a common impulse, and if residents are going to be most interested in the actions you select, then it is understandable why you may want to just list the actions and be done, as writing up a complete plan requires a lot of time. However, for the actions you’ve selected to be understood as reasonable and defensible (and to inform community leaders in the future), linking them to specific objectives and their associated impacts is crucial. Otherwise, you may be inviting even more controversy than you may have anticipated, now or in the future.

Let’s review three examples of how communities have outlined their recommended actions.

(Example #1). This first example is from Hopewell Valley, New Jersey. The excerpt from this plan begins on the next page. First, you’ll see that prior to discussing actions, this plan outlines the goals of the plan and its associated objectives (e.g., goal to reduce Lyme disease cases, objective to reduce by 25% by 2013).

On the second page of the excerpt, you’ll see they identify the data sources that provided the rationale for selecting the subsequent recommendations, organized into three categories: Strategy 1: Improving Hunting Access, Strategy 2: Improving Hunting Efficacy, and Strategy 3: Avoiding Deer Impacts. Each of these three strategies include a number of associated actions, many of which indicate responsible parties for these actions.

Example #1: Pages 49 through 53

Hopewell Valley’s full plan can be found at:
<http://hopewelltp.org/DocumentCenter/Home/View/501>

Recommended Goals

Goal #1: Reduce Lyme Disease Cases

There has been had an average of 170 reportable cases of Lyme disease from 2007-2009. The Task Force recommends a 25% reduction goal by 2013 (128 cases) and a 75% reduction goal by 2019 (43 cases).

Stafford (2007) reviewed studies exploring the link between deer / tick abundance and human cases of Lyme disease. It is suggested that deer densities lower than 8 per square mile could interrupt the life cycle of the Lyme disease organism and nearly eliminate transmission to humans. However, reductions in Lyme disease could be expected at higher deer densities – for example, there was a 90% reduction in Lyme disease at Bluff Point Coastal Preserve in Connecticut when deer densities were reduced from 200 to 30 per square mile (85% reduction).

Goal #2: Reduce Deer Vehicle Collisions

There has been an average of 567 deer-vehicle collisions from 2007-2009. The Task Force recommends a 25% reduction goal by 2013 (425 collisions) and a 75% reduction goal by 2019 (142 collisions).

Data linking deer herd reduction with reduced deer vehicle collisions is sparse. However, Princeton Township experienced a 75% reduction in deer vehicle collisions (from 342 to 85 per year) following a six-year deer management program that resulted in a 72% reduction of the deer population (from 114 to 32 deer per square mile) (DeNicola and Williams 2008).

Goal #3: Reduce Agricultural Losses

The public questionnaire results suggested that 27% of respondents had crop losses exceeding \$5,000 per year. The Task Force recommends a 25% reduction goal by 2013 (20% of respondents) and a 75% reduction goal by 2019 (7% of respondents).

Agricultural losses are a significant concern in the Hopewell Valley and complete results of the public questionnaire are provided in Section III and Appendix A. There are no published guidelines linking particular deer densities with agricultural losses, but continual tracking of the above stated goal is expected to act as a proxy for the variety of deer impacts to agricultural viability in the Hopewell Valley.

Goal #4: Reduce Landscape Planting Losses

The public questionnaire results suggested that 55% of respondents had severe or moderate landscape damage. The Task Force recommends a 25% reduction goal by 2013 (41% of respondents) and a 75% reduction goal by 2019 (14% of respondents).

Landscape planting losses are a quality of life issue in the Hopewell Valley. There are no published guidelines linking particular deer densities with landscape planting losses, but continual tracking of the above stated goal is expected to act as a proxy for a range of deer-related impacts within planted landscapes.

Goal #5: Reduce Ecological Damage

Forest health has been monitored through two science-based protocols called the ‘sentinel seedlings’ (measuring deer browse on planted tree seedlings) and ‘forest secchi’ (measuring the density of forest understory vegetation). The average browse on planted tree seedlings has been 59%. The average amount of native understory vegetation was 21%. The Task Force recommends a 25% improvement by 2013 (44% browse on planted seedlings & 26% native understory cover) and a 75% improvement by 2019 (14% browse on planted seedlings & 37% native understory cover).

The ultimate forest health goals using the above protocols are subjectively set at 10% seedling browse and 70% native understory cover. Additional work is planned to set forest health goals that are tied to habitat use by sensitive forest birds (i.e., Kentucky Warbler, Hooded Warbler). Reference sites for this work will be located within the Hopewell Valley and measurements will include understory cover and abundance of native herbs. This information can be used to refine forest health guidelines in the future. Literature suggests that pre-European deer densities were approximately 10 per square mile (McCabe and McCabe 1984) and modern studies suggest that densities above 10 deer per square mile are associated with degradation of forest health (deCalesta 1994).

Recommended Strategies for Goal Implementation

The Task Force recommends three sets of proposed strategies to reach stated goals: 1) Improvement of Hunting Access, 2) Improvement of Hunting Efficacy, and 3) Avoidance of Deer Impacts. Brief explanations of control options and avoidance methods are provided in Section IV.

A comprehensive review of many ecological and social issues regarding hunting is provided by McShea et al. 1997, Warren 1997, Drake 2000, and Latham et al. 2005. These documents are especially relevant to meeting ecological goals, which are the most sensitive to deer overabundance (i.e., human health and economic impact reduction goals are likely to be met prior to reaching ecological goals). Quality Deer Management (QDM) is a critical, overarching concept with associated strategies that are necessary to meet all stated goals within the context of recreational hunter satisfaction, which will be required to avoid the need to hire costly professional deer managers. Adherence to QDM principles by Hopewell Valley hunters would result in a smaller, healthier herd featuring large bucks. Multiple documents published by the Quality Deer Management Association (www.qdma.com) explore QDM and should be reviewed by those implementing this plan.

Based upon the 2010 Hopewell Valley deer survey, population growth scenarios were estimated by using a methodology established by Duke Farms in Hillsborough Township (T. Almendinger, personal communication). This method is periodically vetted by wildlife biologists including A. DeNicola of White Buffalo, Inc. and L. Wolgast of the NJ Fish & Game Council. The measured deer density in Hopewell Valley was 37 deer per square mile (total population size approximately 2,300 deer). Based upon population growth calculations, the post-birthing deer density is 54 per square mile (approximately 3,400 deer). A 25% and 75% population reduction goal would result in post-winter deer densities of 28 and 9 deer per square mile, respectively. This is equivalent to deer populations of 1,750 and 560 deer throughout the Hopewell Valley (post-birthing / pre-hunting season deer populations would be approximately 2,600 and 830, respectively). Recent statewide deer population reduction was associated with harvesting greater than 40% of the deer population with greater than 60% of the harvest being antlerless deer (See Figure 2). In order to achieve stated goals within the defined timeframes, Hopewell Valley harvests must exceed these figures. The Task Force should devise annual harvest goals necessary to meet stated goals in consultation with wildlife biologists (e.g., NJ Division of Fish & Wildlife or other wildlife professionals).

Strategy Set #1: Improvement of Hunting Access

1A) Encourage and facilitate hunting access on public and private lands

There are several large public and corporate properties that do not allow hunting access or have limited hunting access. The Task Force, supported by municipal officials and staff, should conduct outreach to support deer management programs on these parcels and any parcels (including private lands) that do not allow hunting access (See Figure 15).

Hopewell Township owns approximately 200 acres of open space that require hunting access to help meet stated goals. Deer Management Programs utilized by other Hopewell Valley land managers, including Mercer County, Friends of Hopewell Valley Open Space, and D&R Greenway Land Trust should be considered models for a program implemented by Hopewell Township (See Section IV). Ideally, Hopewell Township should develop and implement deer management programs on their owned lands as soon as possible to serve as an example for other land owners that do not currently have hunting access.

A possible strategy to pursue is participation from the Hopewell Township Police Department, which could conduct training (e.g., review firearm regulations, test shooting accuracy for bow and firearms) and provide background checks (e.g., verify license, safety record) for interested hunters that could participate in deer management programs on both public and private lands. This effort could ease concerns of neighbors / residents that are hesitant about hunting near or on their properties and provide structure to the program. The cost of such a program would be approximately \$500 per training event to pay for police officer overtime (G. Meyer, personal communication) and costs would be assumed by hunters participating in the program (e.g., 25 hunters pay \$20 each). A similar program has been utilized in Fairfield County, Connecticut (www.deeralliance.org) to match hunters with prospective property owners and Mendham Township, New Jersey. At a minimum, hunters that may manage deer on Hopewell Township properties could be required to participate in the program.

1B) Develop strategies to access “pocket deer” in residential areas

One of the more challenging aspects of deer management in the Hopewell Valley will be obtaining access to “pocket” or “yard” deer. Some municipalities have utilized contracted professionals under special state permits to reduce deer populations where typical recreational hunting is not feasible (e.g., Princeton Township, Millburn Township). These methods can be expensive and should not be considered the first option in Hopewell Valley. The expected passage of legislation that will increase hunting land near structures may ease this problem (bow hunting will be allowed within 150 feet as opposed to the previous 450 feet safety zone that will continue to apply to firearm hunting). Additionally, lands accessible to hunters that are adjacent to residential developments may consider cooperative efforts to either ‘push’ (i.e., coordinated deer drives) or ‘pull’ (i.e., baiting strategies) deer from areas inaccessible to hunting (Strategy Set #2). If these efforts appear inadequate, then municipalities of the Hopewell Valley should consider hiring professional contractors to reduce the deer herd in order to meet stated goals.

Strategy Set #2: Improvement of Hunting Efficacy

2A) Encourage and facilitate coordinated hunting activities among neighboring landowners

The ‘pushing’ of deer from one parcel to another is a perennial problem in Hopewell Valley. This occurs when one parcel is hunted, but a neighboring parcel does not allow hunting access. It also occurs when hunting occurs at different times on two adjacent parcels that are both hunted. Coordination is critical to meeting stated goals. Land owners that do not allow hunting should be approached by the Task Force and asked to consider hunting access that is coordinated with neighboring parcels. If hunting access is still not acceptable, then the land owners could be asked whether they would allow hunters without weapons to drive deer onto neighboring parcels that allow hunting access. When adjacent parcels both have hunting access, the respective hunters could consider hunting simultaneously – this would increase deer movements and potentially increase harvest numbers for all hunters.

The use of coordinated drives toward strategic culling locations should be developed at multiple locations throughout the Hopewell Valley. Drives could be conducted by individuals passing Hopewell Township Police Department safety training (see above) and be registered for each particular drive before it is initiated. Drive ‘teams’ should provide a written plan including a map and date/time that drives will

occur. The map should include an indication of safety zones (or have written permission from appropriate landowners if conducted within safety zones).

The strategic use of baiting and deer food plots could also be considered as a means of pulling deer off of lands that are not hunted and/or concentrating deer in areas where they can be hunted. As with coordinated deer drives, spatially explicit planning among local hunters will be critical to success of this effort. The Task Force should facilitate both coordination and baiting/food plot among local hunters. As necessary, consultations with wildlife biologists should also be considered.

2B) Encourage and facilitate use of Agricultural Depredation Permits by farmers

The use of agricultural depredation permits should be increased in Hopewell Valley (See Appendix A – Public Questionnaire questions 10F, 10G & 10H). Although it is unclear why use of depredation permits is not more extensive, reasons may include lack of permission on leased farmlands and issues with nuisance complaints from neighbors because of off-season gunfire. Other factors such as use of deer exclosure fencing or crop type (e.g., hay isn't generally over browsed by deer) may also have a bearing the use of depredation permits. A more extensive utilization of this permit can be beneficial toward reducing the deer population in the Hopewell Valley. The Task Force, supported by municipal officials and staff, should work with the agricultural community to increase the use of Agricultural Depredation Permits.

2C) Encourage and facilitate Deer Management Programs that focus harvests on female deer

Deer Management Programs (DMP) are utilized locally by Mercer County Parks, D&R Greenway Land Trust and Friends of Hopewell Valley Open Space (See <http://deerinbalance.org/deer-management-program-resources/>). The implementation of DMP's by all land managers / property owners that provide access to hunters would significantly reduce the Hopewell Valley deer population. The incorporation of Quality Deer Management (QDM) principles into DMP's should be encouraged to produce a healthier herd structure in addition to reducing the overall herd size. The Task Force should provide outreach to public and private land owners that allow hunting access to increase the use of DMP's containing QDM principles.

2D) Encourage and facilitate program for venison donation to local food banks

The Task Force should assist with a creation of a Hopewell Valley venison donation program. This would include transportation, processing and distribution with a network of hunters, butchers, and food banks. Hopewell Valley hunters that responded to the public questionnaire cited a lack of outlets for venison restricted their harvesting of deer (See Appendix A – Question 9b). The Task Force recommends that Hopewell Valley municipalities contribute \$5,000 annually to the program. This amount would accommodate the donation of approximately 50 deer, which translates to 5,000 pounds of venison or 20,000 meals. The Task Force should seek additional contributions from the public and private sector to enhance the program once the program is established with a recurring annual contribution from the municipalities.

A partnership could be formed with Hunters Helping the Hungry (HHH) - www.huntershelpingthehungry.org. HHH is a non-profit organization that facilitates venison donations. In 2009, HHH was able to process 15,000 pounds of venison (ca. 60,000 meals) utilizing \$15,000 of funding (ca. \$1 per pound of venison). Jack Chellew and John Person are HHH contacts.

The Task Force (via Morton Rosenthal) has conducted research toward establishing a relationship with local food banks, butchers and HHH. The closest food bank to the Hopewell Valley is the Trenton Soup

Kitchen (Denis Micai, CEO). The butcher that provides meat to the Trenton Soup Kitchen is City Beef. Unfortunately, USDA regulations do not allow City Beef to process game in the same building as agriculturally-produced meats and they would be unable to participate in any future program. [Note: Butchers of venison must meet the following standards: 1) Walk-in cooler with temperatures of 38 degrees or lower, 2) Two tracks or other ways to segregate venison from other meats, 3) Freezer that is at zero degrees, and 4) Pass sanitary inspections by State Board of Health.] HHH lists eight participating butchers in New Jersey. The closest participating butcher is John Person, located on State Highway 31 South in Lebanon, NJ (ca. 30 minutes north of Hopewell Valley). Mr. Person is capable of processing venison that could be supplied to the Trenton Soup Kitchen.

An additional avenue to explore might involve coordination of private landowners and hunters. Research should be conducted to determine the feasibility of allowing private residents that would like to consume venison and hunters that might otherwise limit their hunting activity because they do not have an outlet for harvested deer. As an example, private residents might pay for butchering costs and keep processed venison that a hunter drops off with a participating butcher. The Task Force should work with the Fish & Game Council and Division of Fish & Wildlife to determine whether this strategy is acceptable under current game code and explore options toward modifying the code to allow this strategy in the future.

2E) Consult with the NJ Division of Fish & Wildlife to conduct strategies listed above

The Fish and Game Council and NJ Division of Fish & Wildlife are critical partners in all efforts regarding deer management. Their Community Based Deer Management Program (CBDMP) can allow strategies such as season extensions in particular high deer density areas to increase harvests and special rules to access pocket deer.

A request for changes to the game code for Deer Management Zones in the Hopewell Valley that facilitate Quality Deer Management is seen as critical toward attainment of all stated goals. The Task Force, along with interested Hopewell Valley hunters, has begun to discuss QDM concepts and plan to approach the Division of Fish & Wildlife in fall 2010. Potential changes could include requirements for antlerless deer harvest through licensing incentives and restrictions on buck harvests (e.g., allowance of only one buck per hunter per year, prohibiting the harvest of bucks with less than 6 antler points).

Strategy Set #3: Avoidance of Deer Impacts

3A) Improve awareness of methods that reduce Deer Vehicle Collisions

Research on road-related countermeasures does not suggest any effective methods that could be utilized in the Hopewell Valley. However, increased outreach via public service announcements or other methods should be conducted during the fall to coincide with the deer breeding season when animal movement is generally at its peak and deer vehicle collisions are most likely to occur. For example, electronic traffic message boards can be placed along roadways with the highest risk for collisions during the fall deer mating season. The Task Force should work with Hopewell Valley municipalities to increase outreach and education about deer vehicle collisions.

3B) Improve awareness of methods that reduce Lyme disease

There are multiple strategies that can be carried out by individuals to reduce their risk of contracting the disease. Awareness of ticks and the need to search for ticks following likely exposure activities is critical. The use of repellents, wearing socks over the bottom of pants, wearing of light clothing to detect ticks, etc. are all useful prevention strategies. The Task Force should work with Hopewell Valley municipalities to increase outreach and education about Lyme disease prevention.

Actions Recommended, continued...

Excerpts from these next two examples begin on the next page.

(Example #2). This excerpt is from Amherst, New York. In reviewing this document, you'll see that it's organized a bit differently. The recommended action begins at the bottom of the first page of the PDF, and is included as the last potential action alternative after a discussion of a variety of potential approaches. The full plan is available [here](#).

First, the plan gives a quick summary of the approach. Then, it lists all of the actions included in this approach, organized by which actions are in support of the whole-town goal or the more focused hot-spot goal. As a reminder, here are the goals Amherst identified for their plan:

The DVA Management Plan establishes its initial goal at two spatial scales, whole town and hotspots. These scales are a natural division and useful since different DVA management tools can be applied at each scale. Tangible goals for each scale are defined as follows:

1. At the whole town scale, reduce DVA numbers to the lower levels experienced in the years after significant lethal control was conducted and an associated decrease in DVAs was experienced (1997-2000). If this goal is attained, more rigorous goals can be established through the adaptive planning process if this is deemed desirable.
2. At the hotspot scale, select specific DVA hotspots and diminish these with targeted approaches. Progress toward the hotspot goal will be measured with parameters such as intensity and extent of hotspots and DVA counts within the hotspots. Lessons learned from successfully treated hotspots could be applied to other hotspots through the adaptive management process.

The plan then reviews environmental impacts and advantages of this approach, how monitoring the effectiveness of this approach could be carried out, as well as the associated costs with implementing this approach. Finally, it concludes with a discussion of how the recommended set of actions would support the plan's goals.

(Example #3). This last example is from Burnsville, Minnesota. This plan has organized its actions by whether or not they support monitoring, education, ordinances, or deer population control. It presents citywide approaches, as well as recommended actions for specific management units within the city. For example, Table 9 identifies the objective (purpose) for managing the Northwest Management Unit of the city, some information about the unit, and unit-specific management actions. The full plan is available [here](#).

In sum, when listing your plan's recommended actions:

- Be sure to link the actions to objectives
- Identify who is responsible for carrying out those actions and when
- Identify the area targeted by particular actions
- Cite sources to support your rationale for selecting particular actions

Example #2: Pages 55 through 59

Example #3: Pages 60 through 64

Records of number, location, time, approximate age, and gender should be kept by contractors or volunteers for deer harvested through nuisance permits and bait and shoot so that effects of these programs can be more thoroughly understood. These should be databased in a way that permits efficient and accurate analysis.

5.4.6. Costs - Cost categories for this alternative include (note, some of these can be considered optional):

1. Fencing
2. Monitoring
3. Nuisance permit
4. Bait and shoot
5. Vegetation control
6. Vegetation plots and exclosures (could be done with graduate student assistance)
7. Contractual Deer Counts
8. Consulting assistance for analysis of data
9. Public awareness materials that inform the public regarding various DVA management actions.

5.4.7. Support of the Goal - This alternative would support the “whole town” goal through deer population reduction. It would support the hot spot goal in areas where hot spots are close to the area of population control.

5.5. Integrated Human – Deer Focus Alternative (Recommended Alternative)

A practical approach to reducing DVAs in Amherst combines the techniques from the previously described alternatives in an integrated adaptive management plan. Adaptive management uses findings from planned monitoring to trigger specific management actions and inform the periodic refinement of the plan. In Amherst, this would allow for a staged approach to managing DVAs so that application of techniques in specific areas is influenced by carefully

collected and analyzed information. An adaptive plan minimizes potential environmental impacts by proceeding in a systematic way with ongoing monitoring designed to identify both whether the approach is working and if any unanticipated or undesirable outcomes develop.

5.5.1. Actions - Specific actions can be used to address both the “whole town” and the “hot spot” goals. There is likely some overlap between the effects of these actions and some can be considered optional depending on budget, implementation strategy, and calendar.

Actions that support the “*whole town*” goal include:

1. Conduct a program of general public education via press releases, posters, pamphlets on the DVA Management Plan, DVAs in Amherst, and how to avoid DVAs.
2. Integrate a DVA component into Driver’s Education materials.
3. Publicize and enforce the no deer feeding law.
4. Work with the NYSDEC to encourage use of nuisance permits in targeted areas. Continue this use for 3-4 years with monitoring to determine effect on DVAs.
5. If after 3-4 years of aggressive nuisance permit deer harvest, DVA numbers do not meet the goal, then suspend the firearms ordinance and implement a three-year program of deer harvest by suspending the firearms ordinance and using bait and shoot with a professional wildlife management service. Management zones with sufficient blocks of park and open land should be targeted (e.g., management zones 4, 5, and 6). After this, nuisance permit harvest may maintain lower deer numbers for a period of time in some areas.

Actions that support the “*hot spot*” goal:

1. Deploy special deer signs from October-January at selected “hot spot” locations.
2. Facilitate press coverage of special signs that advises people to lower speed and increase awareness and encourages them to assist in implementing the plan.
3. Encourage strict enforcement of existing speed limits in the vicinity of the hot spots and assign more traffic officer presence in these areas.
4. Install lit signs that instantaneously report speed to the driver at selected site(s).
5. Run TV and/or radio ads (or Public Service Announcements) that describe the DVA hotspot areas and alert people to take special care.

6. Select two hot spots where strategic application of fencing might influence the ability of deer to enter the roadway.

5.5.2. Potential Environmental Impacts - Through both nuisance permit use and bait and shoot practices, the deer population of Amherst would be somewhat reduced. Since white-tailed deer is not a species at risk of regional extinction, adverse impacts to the species do not result from lethal control. There will be some reduction of local subpopulations. If lethal methods are used, appropriate carcass use is required.

5.5.3. Potential Environmental Advantages - More aware drivers may reduce DVAs or severity of property damage and human health risk. A considerable reduction of the Amherst deer population carried out through nuisance permits and bait and shoot in the early 1990s had a demonstrable effect on DVAs. A similar response is forecast in this case. Overall reduction of deer numbers would benefit native biota in woods and parks where deer herbivory is quite high. Similar benefit would be realized by agricultural and landscape interests.

A social benefit derived from use of bait and shoot is the donation of deer meat (venison) to the Western New York Food Pantry Organization. This organization provides food for poor and destitute people in the City of Buffalo area. If it is determined through the adaptive implementation of the DVA Management Plan, that deer need to be killed through bait and shoot, then every effort will be made to ensure that maximum public benefit is realized. Part and parcel of this process includes appropriate care of the killed deer (including proper field dressing, disposal of waste parts, and hygienic handling of venison). In addition, nuisance permit holders will also be informed of the option of venison donation to the Food Pantry.

5.5.4. Mitigation - Carefully researched and planned nuisance permit and bait and shoot programs with appropriate safeguards must be used. This includes protection and enforcement for bait and shoot locations so that the process is not inadvertently or deliberately disrupted and the safety of the public and professional contractors is ensured. Deer fencing areas should be carefully selected.

5.5.5. Monitoring and Adaptive Management - In support of “whole town” goal, the plan recommends that monitoring efforts include DVA record keeping in a form suitable to efficient

analysis of data. Three years of data should be assembled during/after the implementation of specific actions. These data should be compared to target data set using appropriate statistical tests. In the case of aggressive nuisance permit application, DVA data should be evaluated after a minimum of three years. These data should be compared to target data set (years 1997-2000) using appropriate statistical tests. If “whole town” goal is not met, the plan recommends that bait and shoot harvest of deer be implemented in areas where appropriate. After three years, monitoring should compare the DVA data set to the target data set using appropriate simple statistical tests to decide whether more bait and shoot is required or if nuisance permit use can maintain the lower deer population.

In support of “hot spot” goal, monitoring efforts should include DVA record keeping in a form suitable to efficient analysis of data. Three years of data should be assembled in the GIS database and analyzed to view extent and intensity of each targeted hot spot. In addition to the visual-based analysis, data for each hotspot should be compared to the previous years of data for each hot spot using appropriate statistical tests.

Contractual deer counts by NYSDEC should be continued as an index of deer population. If possible, this should be done on an annual basis, as it allows for a more rapid determination of change. If for budgetary reasons the counts are done on a two or three year basis, population changes cannot be statistically detected as quickly. As another deer population index and a method of estimating herbivory effects of deer, it is recommended that native vegetation plots be established in various natural areas, including use of small fenced exclosures to demonstrate potential vegetation in absence of deer. This would also serve the purpose of an educational tool, informing the public of deer effects.

Records of number, location, time, approximate age, and gender should be kept by contractors or volunteers for deer harvested through nuisance permits and bait and shoot so that effects of these programs can be more thoroughly understood. These should be databased in a way that permits efficient and accurate analysis.

The Town Board might consider establishing an *Adaptive Management Committee* whose membership includes representatives from Amherst Planning Department and the public. The committee’s role would be to implement the management plan and make ongoing decisions.

5.5.6. Costs - Cost categories for this alternative include (note, some of these can be considered optional):

1. Program of general public education via press releases, posters, pamphlets on the DVA Management Plan, DVAs in Amherst, and how to avoid DVAs.
2. Integrating a DVA component into Driver's Education materials.
3. Publicizing and enforcing the no deer feeding law.
4. Special "hot spot signs" (design, manufacture, deployment/retrieval, and storage).
5. "Hot spot" press releases and public education information.
6. Special lit signs that instantaneously report driver speed to the driver.
7. Increased police effort to manage speed in hot spot areas.
8. Monitoring "whole town" efforts (including some professional assistance).
9. Monitoring "hot spot" efforts (including some professional assistance).
10. Fencing
11. Monitoring
12. Nuisance permit
13. Bait and shoot
14. Vegetation control
15. Vegetation plots and exclosures (could be done with graduate student assistance)
16. Contractual Deer Counts
17. Consulting assistance for analysis of data

5.5.7. Support of the Goal – This integrated alternative is the most likely to support both "whole town" and "hot spot" goals. Although it is potentially more complex and costly, it also has the greatest opportunity to reduce DVAs that at average cost of \$2,500 (estimates obtained from Technical Working Committee). This integrated alternative also is likely to enjoy broader public support than the other alternatives.

The integrated alternative also lends itself readily to the management zones that have been established and used for much of the DVA analysis. Given the diversity of the town and variety of factors involved with DVAs, use of management zones facilitate plan implementation.

5.6. Environmental Consequences of Alternatives and Mitigation Measures

The Amherst Town Board (Lead Agency) and the Planning Department (SEQRA Coordinators) identified potentially significant adverse impacts of a DVA management plan in a

7.0 RECOMMENDATIONS

Based on the information collected regarding the various management strategies, city regulations, and safety considerations, a comprehensive Deer Management Program is being recommended for the City of Burnsville. The components recommended to be included in the Program are outlined in the following sections.

Citywide Management Strategies

Monitoring

- The city will continue to use the DNR annual aerial survey to document annual population size.
- The city has created a Deer Monitoring Report Form (Attachment A) that will be made available to residents to aid in monitoring of deer.
- Coordination of crash data will be initiated with other agencies to improve data tracking.
- In conjunction with the removal options described later in this section, age and sex information will be collected on harvested deer.
- The City will partner with the STOP group to implement a deer enclosure demonstration project in Terrace Oaks Park.

Education

- Inform residents, especially in problem areas, regarding the impact of deer feeding on deer and on adjacent parcels. This can be achieved through news articles, use of local cable program, and neighborhood workshops.
- Educate residents about the available methods to protect their property from deer damage including repellents, fencing and unpalatable plants. This can be achieved through news articles, cable programming and neighborhood workshops.
- Inform residents of deer management needs and goals (density trends, crash rates, complaints, habitat impacts).
- Inform residents of designated areas, times, special provisions and restrictions when special archery hunts are utilized. Specific participant orientation and proficiency tests will also be part of any hunting removal option.
- Install signage along city roadway segments where car/deer crashes are concentrated, which warn motorists of potential for deer crossings, and recommend sign locations to the state and county for roads in their jurisdiction.

Ordinances

- Implement a Feeding Ban Ordinance

The purpose of a feeding ban is to discourage residents from placing corn or other grains in amounts and locations that would attract deer to the area. Deer are opportunistic foragers, meaning they don't do all their eating in one place. However, they can also be very routine in their travel and eating patterns. What this means with regard to residential feeding areas is that generally deer will have a travel pattern they will use for foraging and will eat vegetation along the way, they won't just limit their feeding to feeding sites left by residents. It also explains why one neighborhood can have a high number of deer damage complaints and others may rarely see deer.

The purpose of the feeding ban is to eliminate these deer attractions, which should reduce, over time, the depredation impacts to adjacent residents. The following language was recommended and approved September 17, 2001, for a Feeding Ban Ordinance (See Attachment B for complete ordinance):

Prohibition. No person may place or permit to be placed on the ground, or within five (5) feet of the ground surface, any grain, fodder, salt licks, fruit, vegetables, nuts, hay or other edible material (including feed for birds), which may reasonably be expected to intentionally result in deer feeding, unless such items are screened or protected in a manner that prevents deer from feeding on them. Living fruit trees and other live vegetation shall not be considered as deer feeding.

- Revise the Current Firearms Discharge Ordinance

The City of Burnsville will consider amending this ordinance to facilitate revised distance requirements (200' rather than the current 500') for private landowners operating outside of a "special hunt", and to require a permit to discharge a firearm, so deer removal information can be collected by the City. This revision should occur prior to the fall 2003 archery hunting season.

Population Control Strategies

- Sharpshooting will be utilized as the initial method for controlling the deer population in the first two years of the Program (2001/2002 and 2002/2003). It will be phased in over a two-year period, starting in winter of 2001/2002 in the East Central, Northeast and Northwest Units. During the second year of sharpshooting, the West Central, Southwest and Southeast Units would be added as necessary to meet density goals. Sharpshooting will primarily occur on public lands in management units with high deer density. Initially, the deer population will be reduced to the upper end of the established population range (25 deer per square mile of deer habitat), however additional removal will be conducted down to the lower end of the range (15 deer per square mile) in special cases where a resident demonstrates a hardship due to problem deer, or in priority habitat areas as deemed necessary by the Director of Natural Resources.
- Archery hunting will be utilized to maintain the management goals after they are achieved through sharpshooting. Archery hunting would be allowed on commercial and private lands as outlined in Attachment G. This strategy would not be employed until the fall of 2003, after evaluating the effectiveness of the sharpshooting program. In the event that archery hunting alone is not able to maintain the goals identified in the Management program (goals are exceeded by 20 percent), sharpshooting will be used as a supplemental control method, as needed.

A review and evaluation of new population control strategies would be conducted annually by the PNRC along with the other parts of the program. The PNRC would recommend any changes to the population control strategies for City Council consideration following that

review.

Specific program recommendations for each management unit are described in Tables 9-14 in the following pages. The management units are illustrated in Figures 5 through 10.

[Figure 5: Northwest Management Unit \(73 KB\)](#)

Table 9: Northwest Management Unit Recommendations

Purpose: Manage for a population density of 15 to 25 deer per square mile of preferred habitat within the Northwest Management Unit.	
Problems/Issues	Recommended Management Option
<p><u>Land Use</u>: primarily commercial development.</p> <p><u>Preferred Habitat</u>: is concentrated in wooded area along the river corridor.</p> <p><u>NRMP priority</u>¹: lowland forest areas in this unit identified as high priority.</p> <p><u>Unit Population Goal</u>:</p> <ul style="list-style-type: none"> 12 to 19 deer <p><u>2001 Unit Statistics</u>²:</p> <ul style="list-style-type: none"> January Deer Count: 68 deer within unit. Projected December Deer Numbers: 82 deer Crashes: 6, with all but one occurring on TH 13 and I-35W Complaints: 0. Removal Needed: 63 to 70 deer 	<ul style="list-style-type: none"> Investigate potential removal options with landowners along the river. The recommended management goal would be 15 to 25 deer per square mile of preferred habitat, however a lower goal may be more appropriate for the high priority floodplain forest areas identified in the NRMP. The potential for an enclosure device should be discussed with the landowners in the area of question to determine how deer populations are affecting the high priority woodland. Inform landowners of ordinance that allows archery hunting, during the regular DNR archery season under the special provisions designated by the city, as well as inform them of availability of Deer Management and Intensive Harvest Permits. Coordinate with private landowners to implement sharpshooting option to reduce the population density in this area to a long-term density of 15 to 25 deer per square mile, as needed to meet goal.

Notes: ¹ NRMP refers to the Burnsville Natural Resource Master Plan

² Complaint and crash data totals are from 1998 through 2000. Deer Numbers and Removal Needed are based on 2001 DNR aerial counts, projections and the density goal range proposed for each unit.

[Figure 6: West Central Management Unit \(251 KB\)](#)

Table 10: West Central Management Unit Strategies

Purpose: Manage for a population density of 15 to 25 deer per square mile of preferred habitat within the West Central Management Unit.	
Problems/Issues	Recommended Management Option
<p><u>Land Use</u>: primarily residential, except for the commercial strips along the north and south unit boundaries.</p> <p><u>Preferred Habitat</u>: is associated with the Kraemer Nature Preserve</p> <p><u>NRMP priority</u>¹: willow swamp within the nature preserve identified as high priority.</p> <p><u>Unit Population Goal</u>:</p> <ul style="list-style-type: none"> • 4 to 6 deer <p><u>2001 Statistics</u>²:</p> <ul style="list-style-type: none"> • January Deer Count: 17 deer within unit. • Projected December Deer Numbers: 20 deer • Crashes: 21 with highest numbers along TH 13 and county road 5. • Complaints: 1. • Removal Needed: 14 to 16 	<ul style="list-style-type: none"> • Implement sharpshooting option to reduce the winter population in this area to a long-term density of 15 to 25 deer per square mile, as needed. • Archery hunting in this unit is not likely feasible due to the sparse tree cover within Kraemer park. Modified hunting provisions for this area along with coordination with adjacent residents and businesses would be required to accommodate archery hunting in this unit.

Notes: ¹ NRMP refers to the Burnsville Natural Resource Master Plan

² Complaint and crash data totals are from 1998 through 2000. Deer Numbers and Removal Needed are based on 2001 DNR aerial counts, projections and the density goal range proposed for each unit.

[Figure 7: Southwest Management Unit \(296 KB\)](#)

Table 11: Southwest Management Unit Strategies

Purpose: Manage for a population density of 15 to 25 deer per square mile of preferred habitat within the Southwest Management Unit.	
Problems/Issues	Recommended Management Option
<p><u>Land Use</u>: primarily residential development near the preferred habitat, with commercial development concentrated along the north and east unit boundary.</p> <p><u>Preferred Habitat</u>: is associated with Murphy-Hanrehan and CamRam parks as well as the large lot residential areas</p>	<ul style="list-style-type: none"> • Remove deer within this management unit to maintain a winter population density of approximately 15 to 25 deer per square mile with focus on Murphy-Hanrehan, CamRam and Judicial parks and residential areas as needed. • A lower goal may be more appropriate for the high priority

<p>to the east.</p> <p><u>NRMP priority</u>¹: woodland within Judicial park is identified as high priority.</p> <p><u>Unit Population Goal</u>:</p> <ul style="list-style-type: none"> • 25 to 42 deer <p><u>2001 Statistics</u>²:</p> <ul style="list-style-type: none"> • January Deer Count: 89 deer within unit. • Projected December Deer Numbers: 107 deer • Crashes: 22 with many occurring on county road 5. • Complaints: 5. • Removal Needed: 65 to 82 	<p>areas as identified in the NRMP.</p> <ul style="list-style-type: none"> • Implement sharpshooting option to reduce the population density in this area to a long-term density of 15 to 25 deer per square mile, as needed to meet goal (January-March). Efforts would be concentrated initially in Cam Ram and Judicial Parks. • Allow expansion of Hennepin Parks sponsored archery removal program into Cam Ram Park from adjacent Murphy-Hanrehan park. Use opportunity to coordinate with Capable Partners and Metro Bowhunters Resource Base for participation. • Inform neighborhood of ordinance that allows archery hunting, during the regular DNR archery season under the special hunting provisions designated by the city (September-December), as well as inform them of availability of Deer Management and Intensive Harvest Permits.
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Notes: ¹ NRMP refers to the Burnsville Natural Resource Master Plan

² Complaint and crash data totals are from 1998 through 2000. Deer Numbers and Removal Needed are based on 2001 DNR aerial counts, projections and the density goal range proposed for each unit.

[Figure 8: Northeast Management Unit \(347 KB\)](#)

Table 12: Northeast Management Unit Strategies

Purpose: Manage for a population density of 15 to 25 deer per square mile of preferred habitat within the Northeast Management Unit, in cooperation with MVNWR.	
Problems/Issues	Recommended Management Option

Actions Considered

It is likely that your community reviewed a variety of potential action alternatives prior to recommending a specific course of action. If so, an explanation of which actions were considered and why they were not recommended provides an important part of the rationale for your implementation plan. Be as specific as possible. For example, if deer immunocontraception was a popular choice among residents but the deer committee found it not to be feasible in your community, make sure you clearly explain why. Was it cost? Effectiveness? Time expected for results? If a management action was considered and rejected, the reasons why should be communicated in this part of your plan. You may consider supporting your choices with data from scientific studies, recommendations from your state wildlife agency, or examples from other communities.

Including these kinds of considerations is an important part of communicating the rationale for your plan; as mentioned earlier, controversy around deer management is often focused on the actions selected. Presenting a clear rationale as to why particular actions were not suitable for your community is an important part of developing a sound, acceptable deer plan.

Sometimes communities may describe all the potential lethal and nonlethal problems for addressing their deer management concerns in their plan prior to indicating which they have selected, reviewing all of the potential costs and benefits as well as opportunities and constraints to implementing those options. This can be effective ordering technique as well, as long as when the selected actions are described the rationale for selecting that particular action in contrast to the other action alternatives is clear.

You may find some guidance regarding the feasibility of particular deer management action alternatives in consulting your state wildlife agency. For example, Pennsylvania's Game Commission has produced a [guide to community deer management](#) that outlines some of the advantages and disadvantages of particular actions communities might take, as well as the state guidelines and regulations applicable to those actions.

After completing this module, you should...

- ✓ Understand why it is important to include the actions your community considered but did not select
- ✓ Know how to provide rationale for why actions were not suitable

Actions Considered, continued...

Amherst's full plan can be found at:
<https://deeradvisor.dnr.cornell.edu/resource/amherst-new-york-deer-vehicle-accident-management-plan>

Table 8. Alternatives, Environmental Impacts, Information Sources, and Mitigation

Alternative	Potential Environmental Impacts	Information Sources	Mitigation
<i>No Action</i>	DVAs continue at high numbers Disposal of carcasses (from DVAs) Deer-related property/resource damage would continue or increase	Available information from Amherst database Available information from resource agencies and scientific literature	None possible
<i>Human Behavior Focus</i>	No adverse environmental impacts	None required	None necessary
<i>Deer Behavior & Population Focus</i>	Very limited adverse environmental impacts from tools that affect deer behavior. If fencing is used, potential impacts involve interruption or relocation of deer or other mammal movement patterns Since white-tailed deer is not at risk of regional extinction, no adverse impacts to the species result from population control. Deer carcasses from lethal control (Note: If immunocontraception (IC) or other fertility control is considered in the future, additional information required.)	Available literature on devices and ecological literature to predict and address effects Secondary measures of deer population (e.g., native vegetation) might be useful (Literature on IC and results from research)	Well-planned placement of devices Carefully researched and planned programs with appropriate precautions and safeguards Proper use of deer carcasses
<i>Integrated Human – Deer Focus</i>	Since this alternative draws from the human behavior focus and the deer behavior/population focus alternatives, potential impacts are same as above	Same as information sources listed in cells above	Same as listed in cells above

5. PLAN ALTERNATIVES

5.1. Introduction

This plan's focus is reducing DVAs and the primary metrics are the numbers of DVAs and the patterns of their distribution in the landscape. The scientific rationale for management plans has been criticized for being founded on dogma rather than data (Rutberg 1997). In contrast, the Amherst DVA Management Plan has relied on carefully organized and analyzed data that is specific to Amherst DVAs. The plan rests on this foundation and integrates a variety of suitable tools applied in appropriate settings. As discussed in earlier sections of this plan, the causes and solutions for DVAs are complex. The previous section discussed available tools for addressing DVAs. This section of the plan outlines four plan alternatives, each applying a distinct combination of DVA management tools toward the *whole town* and *hotspot* goals. In each alternative, tools are applied that are judged as having the best chance of success in Amherst. The description of each alternative contains seven subheadings (*Actions, Potential Environmental Impacts, Potential Environmental Advantages, Mitigation, Monitoring and Adaptive Management, Costs, and Support of Goal*) that characterize the alternative and facilitate comparisons between alternatives. Following this introduction, the next subsection presents a *No Action Alternative* that calls for no targeted effort to be taken to reduce DVAs. The next subsection presents a *Human Behavior Focus Alternative* where emphasis is placed on actions that affect human behavior. The next subsection presents a *Deer Behavior and Population Focus Alternative* that applies efforts to change deer behavior and reduce deer population. The final subsection presents the recommended alternative: an *Integrated Human-Deer Focus Alternative* that combines DVA management actions from the *Human Behavior Focus Alternative* and the *Deer Behavior and Population Focus Alternative*. Some details of implementation of any of the alternatives will need further development by Town Planning Staff during the implementation phase.

5.2. No Action Alternative

The “No Action Alternative” implies that no steps would be taken to influence the number of DVAs in Amherst. DVAs would continue to be influenced by deer population size and distribution, traffic distribution and speed, and other related variables.

5.2.1. Actions - No actions toward DVA management would be established and implemented in this alternative.

5.2.2. Potential Environmental Impacts - Number of DVAs is likely to increase as deer population, numbers of drivers, and development all increase. Deer population may increase and place greater stress on agricultural lands, landscaping, and native vegetation.

5.2.3. Potential Environmental Advantages - No advantages to the environment.

5.2.4. Mitigation - No mitigation is necessary.

5.2.5. Monitoring and Adaptive Management - No monitoring is necessary, unless the Town sees reason to continue to monitor DVAs and/or deer counts. Other monitoring could include measures of herbivory on native vegetation as an indicator of deer impacts on habitat.

5.2.6. Costs - No additional costs of implementing a plan, but DVA costs will continue and may rise because of inflation and likely increase in numbers of deer and traffic (and therefore, DVAs). Currently, costs per DVA are estimated at \$2,500 and total annual costs approach \$750,000 to \$1,000,000 (estimates obtained from Technical Working Committee).

5.2.7. Support of the Goal - Unless unforeseen events causes a large reduction in the deer herd (such as disease or diminished habitat quantity or quality), this alternative is extremely unlikely to support the goal of the plan.

5.3. Human Behavior Focus Alternative

Although it is recognized that DVAs result from a variety of causes, in this alternative, the emphasis is placed on actions that will affect human behaviors.

5.3.1. Actions – In this alternative, specific actions can be used to address both the “whole town” goal and the “hot spot” goal.

Actions that support the “whole town” goal include:

1. Conduct a program of general public education via press releases, posters, pamphlets on DVA Management Plan, Amherst DVAs, and how to avoid DVAs.
2. Integrate a DVA component into Driver’s Education materials.
3. Publicize and enforce the no deer feeding law.

Actions that support the “hot spot” goal include:

1. Deploy special deer signs during October, November, December, and January at selected hot spot locations.
2. Facilitate press coverage of these special signs that advises people to lower speed and increase awareness and encourages them to assist in implementing the DVA management plan.
3. Encourage strict enforcement of existing speed limits in the vicinity of the selected hot spots.
4. Install lit signs that instantaneously report driver speed to the driver in selected hot spots.
5. Run TV and/or radio ads (or Public Service Announcements) that describe the DVA hotspot areas and alert people to take special care.

5.3.2. Potential Environmental Impacts - Deer population may increase, placing greater stress on agricultural lands, landscaping, and native vegetation (as opposed to alternatives where some population control may occur).

5.3.3. Potential Environmental Advantages – Increased drivers’ awareness may reduce number of DVAs or severity of property damage and human health risk.

5.3.4. Mitigation - No mitigation is necessary.

5.3.5. Monitoring and Adaptive Management - In support of the “whole town” goal, the plan recommends that monitoring include DVA record keeping in a form suitable to efficient data analysis. It may benefit accuracy if the reporting police officer or the deer carcass pick-up contractor marked DVAs with a hand-held GPS unit (global positioning system). A minimum of three years of data should be assembled during/after the implementation of specific Actions. These data should be compared to the target data set (years 1997-2000) using appropriate statistical tests. (Note: Rationale for this target is provided in Sections 2.4 and 3.4.) In support of “hot spot” goal, monitoring efforts should include DVA record keeping in a form suitable to efficient data analysis. As with the “whole town” goals, a minimum of three years of data should be assembled in the GIS database and analyzed to view extent and intensity of each targeted hot spot and any changes it displays. In addition to the visual-based analysis, data for each hotspot should be compared to previous years of data for each hot spot using appropriate statistical tests.

5.3.6. Costs - Cost categories for this alternative include:

1. Program of general public education via press releases, posters, pamphlets on the DVA Management Plan, DVAs in Amherst, and how to avoid DVAs.
2. Integrating a DVA component into Driver’s Education materials.
3. Publicizing and enforcing the no deer feeding law.
4. Special “hot spot signs” (design, manufacture, deployment/retrieval, and storage).
5. “Hot spot” press releases and public education information.
6. Special lit signs that instantaneously report driver speed to the driver.
7. Increased police effort to manage speed in hot spot areas.
8. Monitoring “whole town” efforts.
9. Monitoring “hot spot” efforts.

5.3.7. Support of the Goal - Since analysis has shown that deer behavior and population sizes play a role in DVA numbers, relying solely on altering human behaviors may not have as great an effect as a more integrated approach (that also includes deer behavior and population management tools). This is perhaps especially true at the “whole town” scale as deer populations may have a more significant influence overall. At the “hot spot” level, targeted education and human behavior modification may be able to show an effect.

5.4. Deer Behavior and Population Focus Alternative

As has been previously described, deer behavior and population are important factors in the numbers and distribution (in time and space) of DVAs. This alternative emphasizes actions that will influence deer behavior and population.

5.4.1. Actions - Specific actions can be used to address both the “whole town” goal and the “hot spot” goal. There is likely some overlap between the effects of these actions.

Actions that support the “whole town” goal include:

1. Work with the NYSDEC to encourage use of nuisance permits in targeted areas. Continue this use for 3-4 years with monitoring to determine effect on the number of DVAs and support of goals.
2. If after 3-4 years of aggressive nuisance permit deer harvest, DVA numbers do not meet the goal, then suspend the firearms ordinance and implement a 3-year program of bait and shoot with professional wildlife management service. Approximately 200 deer per year should be taken during this period. This would approximate the number of deer taken during the bait and shoot and nuisance permit programs of the mid-1990s (1994, 1995, and 1996) that resulted in a reduced number of DVAs in subsequent years (1997-2000). After this kind of population reduction, nuisance permit harvest may maintain lower deer numbers

for a period of time in some areas. The recommendation represents a conservative approach that is sensitive to community concerns regarding a bait and shoot action. Two hundred is a minimal number of deer taken that would predictably demonstrate a significant reduction in DVAs. In addition, establishing a recommended number allows accurate estimation of cost.

Actions that support the “hot spot” goal include:

1. Select hot spots where strategic application of fencing might influence the ability of deer to enter the roadway.

5.4.2. Potential Environmental Impacts - Through both nuisance permit use and bait and shoot practices, the deer population of Amherst would be somewhat reduced. Since white-tailed deer is not a species at risk of regional extinction, adverse impacts to the species do not result from lethal control. There will be some reduction of local subpopulations. If lethal methods are used, appropriate carcass use is required.

5.4.3. Potential Environmental Advantages - A considerable reduction of the Amherst deer population carried out through nuisance permits and bait and shoot in the early 1990s had a demonstrable effect on DVA numbers. A similar response is expected in this case. An overall reduction of the deer herd would benefit native flora and fauna in woods and parks where deer herbivory is currently high.

A social benefit derived from use of bait and shoot is the donation of deer meat (venison) to the Western New York Food Pantry Organization. This organization provides food for poor and destitute people in the City of Buffalo area. If it is determined through the adaptive implementation of the DVA Management Plan, that deer need to be killed through bait and shoot, then every effort will be made to ensure that maximum public benefit is realized. Part and parcel of this process includes appropriate care of the killed deer (including proper field dressing, disposal of waste parts, and hygienic handling of venison). In addition, nuisance permit holders will also be informed of the option of venison donation to the Food Pantry.

5.4.4. Mitigation - Carefully researched and planned nuisance permit and bait and shoot programs with appropriate precautions and safeguards. This includes protection and enforcement for bait and shoot locations so that the process is not inadvertently or deliberately disrupted and the safety of the public and professional contractors is ensured. Make certain that deer fencing is not detrimental to other wildlife movement patterns.

5.4.5. Monitoring and Adaptive Management - In support of “whole town” goal, the plan recommends that monitoring efforts include DVA record keeping in a form suitable to efficient analysis of data. DVA data should be assembled after 3-4 years of aggressive nuisance permit use. These data should be compared to target data set (years 1997-2000) using appropriate statistical tests. If “whole town” goal is not met, the plan recommends that bait and shoot harvest of deer be implemented in areas where appropriate. After three years, monitoring efforts should compare the DVA data set to the target data set using appropriate statistical simple tests to decide whether more bait and shoot is required or if nuisance permit use can maintain the deer population numbers.

In support of “hot spot” goal, the plan recommends that monitoring efforts include DVA record keeping in a form suitable to efficient analysis of data. Three years of data should be assembled in the GIS database and analyzed to view extent and intensity of each targeted hot spot. In addition to the visual-based analysis, data for each hotspot should be compared to the previous years of data for each hot spot using appropriate statistical tests.

Contractual deer counts by NYSDEC should be continued as an index of deer population. If possible, this should be done on an annual basis, as it allows for a more rapid determination of change. If budget or time constraints dictate that counts are done on a two or three year basis, population changes cannot be statistically detected as quickly.

As another deer population index and a method of estimating herbivory effects of deer, it is recommended that native vegetation plots be established in various natural areas, including use of small fenced exclosures to demonstrate potential vegetation in absence of deer. This would also serve the purpose of an educational tool, informing the public of deer effects.

Records of number, location, time, approximate age, and gender should be kept by contractors or volunteers for deer harvested through nuisance permits and bait and shoot so that effects of these programs can be more thoroughly understood. These should be databased in a way that permits efficient and accurate analysis.

5.4.6. Costs - Cost categories for this alternative include (note, some of these can be considered optional):

1. Fencing
2. Monitoring
3. Nuisance permit
4. Bait and shoot
5. Vegetation control
6. Vegetation plots and exclosures (could be done with graduate student assistance)
7. Contractual Deer Counts
8. Consulting assistance for analysis of data
9. Public awareness materials that inform the public regarding various DVA management actions.

5.4.7. Support of the Goal - This alternative would support the “whole town” goal through deer population reduction. It would support the hot spot goal in areas where hot spots are close to the area of population control.

5.5. Integrated Human – Deer Focus Alternative (Recommended Alternative)

A practical approach to reducing DVAs in Amherst combines the techniques from the previously described alternatives in an integrated adaptive management plan. Adaptive management uses findings from planned monitoring to trigger specific management actions and inform the periodic refinement of the plan. In Amherst, this would allow for a staged approach to managing DVAs so that application of techniques in specific areas is influenced by carefully

collected and analyzed information. An adaptive plan minimizes potential environmental impacts by proceeding in a systematic way with ongoing monitoring designed to identify both whether the approach is working and if any unanticipated or undesirable outcomes develop.

5.5.1. Actions - Specific actions can be used to address both the “whole town” and the “hot spot” goals. There is likely some overlap between the effects of these actions and some can be considered optional depending on budget, implementation strategy, and calendar.

Actions that support the “*whole town*” goal include:

1. Conduct a program of general public education via press releases, posters, pamphlets on the DVA Management Plan, DVAs in Amherst, and how to avoid DVAs.
2. Integrate a DVA component into Driver’s Education materials.
3. Publicize and enforce the no deer feeding law.
4. Work with the NYSDEC to encourage use of nuisance permits in targeted areas. Continue this use for 3-4 years with monitoring to determine effect on DVAs.
5. If after 3-4 years of aggressive nuisance permit deer harvest, DVA numbers do not meet the goal, then suspend the firearms ordinance and implement a three-year program of deer harvest by suspending the firearms ordinance and using bait and shoot with a professional wildlife management service. Management zones with sufficient blocks of park and open land should be targeted (e.g., management zones 4, 5, and 6). After this, nuisance permit harvest may maintain lower deer numbers for a period of time in some areas.

Actions that support the “*hot spot*” goal:

1. Deploy special deer signs from October-January at selected “hot spot” locations.
2. Facilitate press coverage of special signs that advises people to lower speed and increase awareness and encourages them to assist in implementing the plan.
3. Encourage strict enforcement of existing speed limits in the vicinity of the hot spots and assign more traffic officer presence in these areas.
4. Install lit signs that instantaneously report speed to the driver at selected site(s).
5. Run TV and/or radio ads (or Public Service Announcements) that describe the DVA hotspot areas and alert people to take special care.

6. Select two hot spots where strategic application of fencing might influence the ability of deer to enter the roadway.

5.5.2. Potential Environmental Impacts - Through both nuisance permit use and bait and shoot practices, the deer population of Amherst would be somewhat reduced. Since white-tailed deer is not a species at risk of regional extinction, adverse impacts to the species do not result from lethal control. There will be some reduction of local subpopulations. If lethal methods are used, appropriate carcass use is required.

5.5.3. Potential Environmental Advantages - More aware drivers may reduce DVAs or severity of property damage and human health risk. A considerable reduction of the Amherst deer population carried out through nuisance permits and bait and shoot in the early 1990s had a demonstrable effect on DVAs. A similar response is forecast in this case. Overall reduction of deer numbers would benefit native biota in woods and parks where deer herbivory is quite high. Similar benefit would be realized by agricultural and landscape interests.

A social benefit derived from use of bait and shoot is the donation of deer meat (venison) to the Western New York Food Pantry Organization. This organization provides food for poor and destitute people in the City of Buffalo area. If it is determined through the adaptive implementation of the DVA Management Plan, that deer need to be killed through bait and shoot, then every effort will be made to ensure that maximum public benefit is realized. Part and parcel of this process includes appropriate care of the killed deer (including proper field dressing, disposal of waste parts, and hygienic handling of venison). In addition, nuisance permit holders will also be informed of the option of venison donation to the Food Pantry.

5.5.4. Mitigation - Carefully researched and planned nuisance permit and bait and shoot programs with appropriate safeguards must be used. This includes protection and enforcement for bait and shoot locations so that the process is not inadvertently or deliberately disrupted and the safety of the public and professional contractors is ensured. Deer fencing areas should be carefully selected.

5.5.5. Monitoring and Adaptive Management - In support of “whole town” goal, the plan recommends that monitoring efforts include DVA record keeping in a form suitable to efficient

analysis of data. Three years of data should be assembled during/after the implementation of specific actions. These data should be compared to target data set using appropriate statistical tests. In the case of aggressive nuisance permit application, DVA data should be evaluated after a minimum of three years. These data should be compared to target data set (years 1997-2000) using appropriate statistical tests. If “whole town” goal is not met, the plan recommends that bait and shoot harvest of deer be implemented in areas where appropriate. After three years, monitoring should compare the DVA data set to the target data set using appropriate simple statistical tests to decide whether more bait and shoot is required or if nuisance permit use can maintain the lower deer population.

In support of “hot spot” goal, monitoring efforts should include DVA record keeping in a form suitable to efficient analysis of data. Three years of data should be assembled in the GIS database and analyzed to view extent and intensity of each targeted hot spot. In addition to the visual-based analysis, data for each hotspot should be compared to the previous years of data for each hot spot using appropriate statistical tests.

Contractual deer counts by NYSDEC should be continued as an index of deer population. If possible, this should be done on an annual basis, as it allows for a more rapid determination of change. If for budgetary reasons the counts are done on a two or three year basis, population changes cannot be statistically detected as quickly. As another deer population index and a method of estimating herbivory effects of deer, it is recommended that native vegetation plots be established in various natural areas, including use of small fenced exclosures to demonstrate potential vegetation in absence of deer. This would also serve the purpose of an educational tool, informing the public of deer effects.

Records of number, location, time, approximate age, and gender should be kept by contractors or volunteers for deer harvested through nuisance permits and bait and shoot so that effects of these programs can be more thoroughly understood. These should be databased in a way that permits efficient and accurate analysis.

The Town Board might consider establishing an *Adaptive Management Committee* whose membership includes representatives from Amherst Planning Department and the public. The committee’s role would be to implement the management plan and make ongoing decisions.

5.5.6. Costs - Cost categories for this alternative include (note, some of these can be considered optional):

1. Program of general public education via press releases, posters, pamphlets on the DVA Management Plan, DVAs in Amherst, and how to avoid DVAs.
2. Integrating a DVA component into Driver's Education materials.
3. Publicizing and enforcing the no deer feeding law.
4. Special "hot spot signs" (design, manufacture, deployment/retrieval, and storage).
5. "Hot spot" press releases and public education information.
6. Special lit signs that instantaneously report driver speed to the driver.
7. Increased police effort to manage speed in hot spot areas.
8. Monitoring "whole town" efforts (including some professional assistance).
9. Monitoring "hot spot" efforts (including some professional assistance).
10. Fencing
11. Monitoring
12. Nuisance permit
13. Bait and shoot
14. Vegetation control
15. Vegetation plots and exclosures (could be done with graduate student assistance)
16. Contractual Deer Counts
17. Consulting assistance for analysis of data

5.5.7. Support of the Goal – This integrated alternative is the most likely to support both "whole town" and "hot spot" goals. Although it is potentially more complex and costly, it also has the greatest opportunity to reduce DVAs that at average cost of \$2,500 (estimates obtained from Technical Working Committee). This integrated alternative also is likely to enjoy broader public support than the other alternatives.

The integrated alternative also lends itself readily to the management zones that have been established and used for much of the DVA analysis. Given the diversity of the town and variety of factors involved with DVAs, use of management zones facilitate plan implementation.

5.6. Environmental Consequences of Alternatives and Mitigation Measures

The Amherst Town Board (Lead Agency) and the Planning Department (SEQRA Coordinators) identified potentially significant adverse impacts of a DVA management plan in a

positive declaration and through consultation with involved agencies and the public. Table 8 identifies aspects of the environmental setting that may be impacted. Table 8 addresses information sources and possible mitigation relating to potential adverse environmental impacts.

Table 8. Alternatives, Environmental Impacts, Information Sources, and Mitigation			
Alternative	Potential Environmental Impacts	Information Sources	Mitigation
<i>No Action</i>	DVAs continue at high numbers Disposal of carcasses (from DVAs) Deer-related property/resource damage would continue or increase	Available information from Amherst database Available information from resource agencies and scientific literature	None possible
<i>Human Behavior Focus</i>	No adverse environmental impacts	None required	None necessary
<i>Deer Behavior & Population Focus</i>	Very limited adverse environmental impacts from tools that affect deer behavior. If fencing is used, potential impacts involve interruption or relocation of deer or other mammal movement patterns Since white-tailed deer is not at risk of regional extinction, no adverse impacts to the species result from population control. Deer carcasses from lethal control (Note: If immunocontraception (IC) or other fertility control is considered in the future, additional information required.)	Available literature on devices and ecological literature to predict and address effects Secondary measures of deer population (e.g., native vegetation) might be useful (Literature on IC and results from research)	Well-planned placement of devices Carefully researched and planned programs with appropriate precautions and safeguards Proper use of deer carcasses
<i>Integrated Human – Deer Focus</i>	Since this alternative draws from the human behavior focus and the deer behavior/population focus alternatives, potential impacts are same as above	Same as information sources listed in cells above	Same as listed in cells above

The preponderance of environmental effects of a DVA management plan will be positive. For example, deer population reduction has positive outcomes of a smaller deer herd including fewer DVAs, less ecological damage by deer (for example, impacts on wildflowers and shrubs), and reduced agricultural and ornamental damage.

The DVA Management Plan is in itself a mitigation plan. It seeks to mitigate the economic, social, and human health impacts of DVAs in Amherst. In a conventional sense of

“mitigation” for an action (e.g., mitigation for filling of a wetland by a development project), it is more difficult to identify specific mitigation that might be necessary as part of the implementation of the plan. The plan is designed to minimize potential environmental impacts by proceeding in a systematic, staged approach with monitoring designed to identify not only if the approach is working, but if any unanticipated or undesirable outcomes develop. If such a circumstance is realized, the adaptive management approach allows for refinement or change in direction.

The Integrated Human-Deer Focus Alternative rests on the premise that DVAs should be addressed and that the diversity of public concerns and viewpoints regarding deer and DVAs must be considered. For that reason, the integrated alternative begins with conservative approaches matched with careful monitoring of results. It does not recommend bait and shoot at the outset, but only after other means have been tried. If bait and shoot is implemented, this alternative recommends a cautious approach with suggested numbers of deer to kill based on statistical analyses of existing data from Amherst.

Actions Considered, continued...

Excerpts from the next two examples begin on the next page.

(Example #2). This next example comes from Montgomery County, Maryland. The last two pages of the excerpt include a table reviewing the expected results of a particular action, the cost of implementing that action, time required to get to results, what area the action would cover, and some evaluative comments regarding that action.

(Example #3). This last example is from Burnsville, Minnesota. This section of their plan called "Management Options" outlines the goals and objectives of their plan prior to reviewing potential management strategies. The plan includes options for monitoring, education, ordinances, and population control. After looking at the first three pages of the excerpt, skip down to the bottom of the page 93. Beginning here and through the remainder of the excerpt, you'll see that the plan revisits in more detail the population control action alternatives outlined earlier. It reviews the costs and benefits of various actions, the legal feasibility of those actions, associated costs, and then identifies whether or not that action is recommended in the plan. The plan supports their evaluation of action alternatives by citing a variety of studies.

With respect to the CBDM cycle, once you've weighed your action alternatives and selected among them during the decision-making phase, you'll probably write your CBDM plan. The next two major sections of this course—a plan for monitoring and public engagement—reflect steps you're likely intending to implement but have not yet. To learn more about the next phase of the CBDM Cycle, Implementation, see the Community Deer Advisor's discussion of Phase 3.

In sum, when listing the actions your plan considered but ultimately rejected, be sure to:

- Outline the reasons why certain actions were deemed unsuitable: cost, effectiveness, time for expected results, or others
- Cite sources to support your rationale for rejecting certain action alternatives

Example #2: Pages 82 through 87

Example #3: Pages 88 through 99

Montgomery County's full plan can be found at:
<http://www.montgomeryparks.org/caring-for-our-parks/wildlife/deer-management/>

Burnsville's full plan can be found at:
<http://www.ci.burnsville.mn.us/index.aspx?nid=379>

Part III

Deer Management Alternatives and Implementation

There is no single alternative that will resolve the various impacts of deer being experienced throughout the county. One alternative may work well in one situation and be ineffective or inappropriate in another. For example, certain types of fencing and the use of repellents, are appropriate for homeowners protecting small gardens but might be ineffective or prohibitively expensive if applied to agricultural crops. Other alternatives that involve population controls are most appropriate on large parcels of land including farms and parks.

Management Alternatives

The Task Force described eleven management alternatives, discussing both existing and potential means of managing deer impacts in Montgomery County. Some of these techniques are traditional and are known to produce measurable effects. Others are experimental and have unknown consequences. Some are not considered viable alternatives at all under the present circumstances, but are included and discussed to document their having been considered. It will often be the case that no single alternative eases or resolves a problem and that a combination of management alternatives may be required.

The alternatives are listed and described below. Following the descriptions an alternatives matrix is presented that identifies the practicability of implementing alternatives, identifies general magnitude of costs, and describes the likely consequences of implementing each alternative.

- Maintain Status Quo
- Repellents/Scare Devices
- Fencing/Physical Exclusion
- Habitat Management
- Supplemental Feeding
- Restoration of Predators
- Modify Legal Harvest
- Agricultural Depredation Permits
- Direct Reduction
- Contraception
- Trapping and Removal/Relocation

Maintain Status Quo - This alternative implies that no change occurs in current management strategies or actions involving deer. No active manipulation of deer habitat or populations would be undertaken. No changes in hunting limits or the permitted area in which hunts are allowed would occur. All current data collection, inventory, and monitoring activities would continue.

Repellents or Scare Devices - A variety of chemical (taste, odor) and mechanical (noise or visual alarm) devices have been tested and under some conditions proven effective in repelling deer from areas in which they are undesired. A fairly extensive literature exists on this subject and many products are readily available. Consumer information exists and could be readily tailored to meet specific requirements and timing considerations in Montgomery County. Restrictions would exist on some products and devices (e.g. incendiary noise-makers). Repellents are not effective in all situations, can be costly, may require frequent reapplication, and may diminish in effectiveness as deer adapt to them.

Fencing or Physical Exclusion - Fencing or other barriers can be highly effective in providing permanent protection to resources threatened by deer or by excluding deer from access to areas

where they are not desired. Small screens can be effective where protection of individual plants is needed. In natural areas, small fenced plots could protect rare plant species and encourage their reproduction, but would have to be permanently installed unless deer density decreased. Fencing to prevent deer access to roadways has been documented as an effective strategy, provided that design is adequate and that maintenance is routinely performed. Application of fencing is restricted primarily by the varying cost of installation and maintenance and by aesthetic drawbacks. However, it should be noted that over the long term this alternative can be cost-effective depending on the size of the area treated and the value of the product being protected.

Habitat Management - This alternative could involve any of a number of as yet incompletely understood actions to conserve, improve, remove, or otherwise manipulate existing or potential deer habitat to cause populations or behaviors to change in ways that might mitigate human-deer conflicts. The goal of habitat management could be either to raise or to lower the capability of given areas to sustain deer populations (i.e. to change biological carrying capacity), or to alter specific landscape elements, such as roadside vegetation, to produce desired changes.

Specific habitat requirements of deer must be identified before this alternative could be applied. Changes in land use must be planned, programmed, and assessed in a context which allows effect on deer populations to be estimated. Comprehensive, area-wide planning and development impacts on deer populations must be conducted within a context that recognizes that many different objectives will occur as regards land use, some of which can conflict with deer management objectives.

Supplemental Feeding - Supplemental feeding would involve either the private (homeowner) or corporate (agency, County government, interest group) use of acceptable deer foods (e.g. whole corn) to provision deer at problem sites or selected locations within the County, either on a year-round basis or during certain annual periods when browsing activities might be anticipated to have the most severe

impacts on natural plant communities, landscape plantings, or agricultural crops. Artificial feeding would maintain deer population levels and might even promote increases. No long-term decrease in deer impacts to natural plant communities or landscape plantings would be guaranteed, and conflicts, such as deer-vehicle accidents, likely would increase. In addition, once implemented, feeding would probably be required continuously as the deer populations remained at a high level.

Modify Legal Harvest - This option involves making changes to the number of deer that hunters can harvest during the legal deer hunting season. Such changes might allow for the taking of more does in an effort to reduce population growth. This is effective only where problem areas are open to legal hunting or may be open to hunting in the future. This alternative will probably not be an effective tool in most problem areas of the county because these areas are in general closed to hunting. Bag limits for deer are set by DNR and are evaluated and adjusted annually in response to harvest data and public input.

Deer depredation permits - These permits are issued by DNR to land owners experiencing excessive deer damage to crops or other plantings. The permit allows for the landowner to kill a specified number of deer outside of the regular hunting season. The effectiveness of this alternative is limited to the extent that the taking of deer is permitted or possible by private landowners.

Direct Reduction - This alternative involves the use of specially tested and permitted shooters through a controlled hunt or other management action to remove deer from areas where hunting is presently not allowed or permitted. Due to differences in cost, and application, this plan will consider direct reduction as two separate options:

- 1) Direct reduction using special or managed hunts - This option involves taking land that has been closed to hunting and holding a managed hunt under strict guidelines (Appendix IV) and for limited duration. Hunters participating in these managed hunts must pass special training and marksmanship tests. The goal is to reduce the deer population in the most cost effective and safest manner possible, with minimal disruption to the primary land-use of the area. This method has proven to be a very effective tool in reducing deer numbers in areas where regular hunting is not permitted. It is most appropriate where fairly large parcels of land, such as parks, are found. Deer taken under this management action could be donated to charitable food bank programs such as the local "Hunter Harvest" if the hunter chooses not to keep it.
- 2) Direct Reduction using Sharpshooters - Under this option specially tested sharpshooters are hired to shoot deer, often over bait, and usually from elevated platforms. In this way, a high level of safety can be assured even in densely populated areas. This option can be effective in reducing deer numbers where the above mentioned methods are not possible do to close proximity to housing or other safety concerns. The drawback to this method is the relatively high cost involved. Deer taken under this management action could be donated to charitable food bank programs such as the local "Hunter Harvest".

Implementation of either option would require coordination and cooperation with natural resource as well as law enforcement agencies for the State of Maryland as well as the County. While similar programs are underway and have been successfully applied in other parts of the country, the use of this technique in Montgomery County would require careful analysis and implementation. Deer taken under this management action could be donated to charitable food bank programs such as the local "Hunter Harvest".

Initiate Use of Contraceptives - The use of contraceptives falls into four basic categories: oral contraception, implantation of microencapsulated hormones, surgical sterilization, and immunosterilization (the use of contraceptive vaccines). These methods have proven to be generally successful with captive deer, but currently present significant complications when dealing with deer that are free-ranging. Use of contraceptives in free-ranging deer herds would require approval from the State DNR - Wildlife Division after the necessary approvals had been obtained from the U.S. Food and Drug Administration.

These complications (depending upon method used) include the need for frequent application to achieve physiological effectiveness, the requirement to capture and handle animals, the need for precise annual timing in administering contraceptives, the current cost of contraceptive programs, and the potential for liability relating to consumption of meat from animals treated with contraceptives or exposure of the public to unrecovered delivery devices (e.g. darts which miss their target and contain viable product). Other concerns involve the as yet unproven system for delivery of sterilants to wild, free-ranging deer, developing adequate monitoring and assessment techniques to determine program effectiveness, and the unknown behavioral (and ecological) effects of sterilization relative to altering natural deer regimens and ecosystem roles. Under controlled

conditions current contraceptive technologies may be successfully applied. Rapid developments in this field suggest broader potential for application in the future.

Trapping and Removal/Relocation - This alternative would provide for the live capture and relocation of deer out of areas in which they pose problems to other predetermined locations. Live capture and relocation would be labor intensive, would in all likelihood have to be undertaken annually in order to be effective, and would be costly (\$400/animal). Deer populations elsewhere are high, and finding suitable habitat into which deer could be relocated without affecting established herds would at this time be unlikely. Physiological trauma and deer mortality in capture and handling would be unavoidable, and predicted loss of transported animals after relocation would be high.

Restore Predators - Restoration of the predators that once were native, such as the eastern cougar, would occur as an attempt to restore ecological balance where altered by the activities of man. Where taking place, restorations have usually occurred in relatively large undisturbed or isolated areas that are not experiencing significant use or adjacent land development pressures. Most deer predators require both suitable habitat as well as large natural areas in which to establish viable populations. These conditions would not be satisfied within Montgomery County.

Alternative Matrix

The following matrix is presented to give the reader a brief encapsulation of alternatives in comparison with one another, and is not intended to comprehensively represent or suggest all possible consequences of doing so.

Deer Management Alternatives Matrix

Deer Management Alternative	Likely Result	Cost of Implementing	Time Required to Get Results	Area of Coverage	Comments
Maintain Status Quo	Unknown.	None to County, costs borne by county residents that experience garden damage and crop losses, auto damage, and loss of natural resources.	Unknown.	County-Wide.	If deer population decreases from natural causes deer-human conflicts will decrease; if population remains stable or increases conflicts will remain or increase.
Repellents	Limited, restricted to small areas.	None, but material may be costly to user. \$12 - \$100 per acre per application	Possibly immediate; requires frequent reapplication.	Specific problem areas.	Displaces but does not decrease deer.
Fencing	May achieve some results in limited areas.	Varying initial and yearly maintenance costs. \$185 - \$5,000 per acre plus \$0 - \$200 annual repairs	Possibly immediate	Specific problem areas.	Restricts/excludes deer in specific areas. May increase impacts in other areas.
Habitat Alterations	Alter deer behavior.	Low/high depending on scope. highly variable	Long term.	Most likely site-specific.	Useful in limited area. Would impact wildlife other than deer.
Supplemental Feeding	In absence of other actions can increase number of deer locally.	Costly, depending on scope. approx. \$6.50 per deer per month	No result in terms of reducing numbers of deer.	Few, if any areas where it would be desirable.	Does not reduce number of deer. May concentrate deer, creating disease or parasite problems.
Modify Legal Harvest	Lower deer density: extent and rate depends on State regulation of bag limits, season lengths, sex restrictions, areas open.	Minor if any costs, since process is already accommodated in system.	Immediate and long term, if conducted regularly.	County-wide on lands open to hunting	Minor beneficial impact on closed to hunting. Major elsewhere.
Agricultural Damage Permits	Can reduce deer depredation on agricultural lands.	None to Montgomery County. Cost borne by MD-DNR.	Immediate and long term, if conducted regularly.	County-wide on lands where operators participate.	Deals mainly with deer caused damage problems

Actions Considered
Example: Montgomery County, MD

Deer Management Alternative	Likely Result	Cost of Implementing	Time Required to Get Results	Area of Coverage	Comments
Direct Reduction	Reduced numbers of deer in specific areas.	Costly, depending on manpower and methods used. special hunt - \$43 - \$60 per deer selective culling - \$74 - \$235 per deer	Immediate and long term, if conducted regularly. Will require periodic use.	County-wide on lands where operators participate.	Effective in specific problem areas.
Contraception	May achieve some results in limited areas.	Currently costly in materials and manpower. \$150 - \$1000 per deer	Long term.	Small Problem areas with confined animals.	Techniques/materials not standardized. Still in research/experimental stages. Requires Federal and State approval.
Trapping/relocating	Potentially can reduce deer.	Very high. \$113 - \$570 per deer	Immediate and long term with continuing removal.	Problem areas and problem animals.	Unsatisfactory and costly on broad scale. Requires State approval. Few/no release sites available.
Restore Predators	Unknown.	Costly, physically & socially.	Long term.	Unknown.	Require Federal/State approval. Difficult, likely impossible to implement given urbanized nature of most of the County.

Actions Considered
Example: Montgomery County, MD

5.0 MANAGEMENT OPTIONS

A citywide Deer Management Program should start with the identification of a goal and objectives as well as a summary of the problems. Then the management strategies or options can be tailored to fit the specific needs of the city and its residents.

5.1 Goals and Objectives

The following goal, objectives and problems have been revised from the DNR's long range plan for the management of white-tailed deer in the metro region (DNR 1996) to fit the expected needs of Burnsville.

Goal

Manage white-tailed deer populations within the city at socially acceptable levels that provide recreational and educational opportunities as well as provide opportunity for maintaining healthy (natural regeneration) woodland habitat.

Objectives

- Maintain breeding populations within biologically and/or socially desired limits within each deer management unit;
- Where feasible utilize public hunting to maintain populations within acceptable limits;
- Reduce the number of car/deer crashes to acceptable levels;
- Reduce the number of deer depredation complaints;
- Develop a framework for an operational management program to be implemented by the city in cooperation with the DNR, Hennepin Parks, and USFWS; and
- Educate residents as to the value of deer and deer habitat as a resource, as well as to ways to minimize nuisance deer problems through plantings and fencing.

Problems

- Unplanned feeding often causes deer concentrations which develop into depredation or public safety problems;
- Depredation of garden crops and landscaping plants is increasing as deer habitat decreases and deer populations increase;
- Woodland plant communities can change as a result of high deer populations,
- Increased car/deer crashes raise public safety concerns; and
- Data collection needs to be refined to more effectively manage the population.

5.2 Management Strategies

There are a variety of strategy options that can be used for controlling deer populations. Not all options can be implemented in every area due to certain physical and sociological parameters. For example, the option of re-introduction of timber wolves or mountain lions is not a feasible option in Burnsville due to a lack of appropriate habitat for these predators. However, there are several options available that can help manage the local deer herd. It may be best to use a combination of several options depending on the situation, or to prioritize options, so that if the first option does not achieve the density goal, another option can be implemented to

supplement the initial results.

The following management tools have been considered thoroughly to come up with the best management strategies possible:

Monitoring Options

1. Continue to conduct yearly winter aerial counts to maintain a status of the population, measure program progress and calibrate models.
2. Require uniform reporting of complaints from residents regarding deer. This would include creating a form with spaces for all information to be recorded, as well as identifying a single point person or coordinator to track/record the complaints. See Attachment A for proposed Deer Monitoring Report Form.
3. Require uniform reporting of car/deer crashes that occur within the city limits. This would include identifying a consistent process for data collection and tracking with the City, County and State data, as well as a monitoring coordinator.
4. Under any removal and/or reporting program, require documentation of sex and age of individuals removed. Also determine pregnancy status of females when feasible.
5. Collect browse data in preferred habitat areas to assess habitat condition. This option is only necessary if habitat restoration is a specific objective of the program. Surveys would be needed annually, conducted in spring prior to new growth, for a period not less than three years.
6. Create exclosure areas with fencing to keep deer from feeding in specific areas. This option is to be used around habitat restoration areas identified in the City Natural Resource Management Plan or to demonstrate habitat changes to be expected with reduce deer populations.

Ordinance Options

1. Pass ordinance to restrict deer feeding by residents.
2. Modify existing firearms discharge ordinance (Attachment D) to allow expanded opportunity for archery hunting within the city and to allow for the city to collect harvest data through implementation of a city archery hunting permit.

Education Options

1. Inform residents, especially in problem areas, regarding the impact of deer feeding on deer and on adjacent parcels. This can be achieved through news articles, use of local cable program, and neighborhood workshops.
2. Educate residents about the available methods to protect their property from deer damage including repellents, fencing and unpalatable plants. This can be achieved through news articles, cable programming and neighborhood workshops.
3. Inform residents of deer management needs and goals (density trends, crash rates, complaints, habitat impacts).
4. Inform residents of designated areas, times, special provisions and restrictions if special hunts are used in the overall program. Specific participant orientation and proficiency tests would also be part of a hunting removal option.
5. Install signage along city roadway segments where car/deer crashes are concentrated, which warn motorists of potential for deer crossings, and recommend sign locations to the state and county for roads in their jurisdiction.

Population Control Options

1. Regulated hunting – This option, when possible within existing regulations can be an effective deer population management tool. It is probably the most efficient and least expensive management technique. Due to local ordinances and safety concerns, this would need to be done on a very regulated basis. In Burnsville the hunting method would be limited to archery only, for public safety reasons.
2. Allow nature to take its course – This option takes no action to reduce local deer numbers. This option depends on car collisions, poaching, emigration and natural mortality to control population size.
3. Trap and transfer – This option is generally labor intensive and expensive due to efforts needed to trap and then relocate/release deer in a new area. It may seem like the humane thing to do but research has shown otherwise. Many captured deer are released in sites that appear to be ideal only to die a short time later due to stress related issues. Also, most areas have their own deer problems and release sites would be difficult to delineate.
4. Birth Control – The intent of fertility control agents is to reduce the reproductive output so that it is equal to or less than the mortality rate. In urban deer populations the mortality rates are generally very low, requiring that 70 to 90 percent of the does be treated to effectively reduce population growth (Rudolph et al. 2000). Additionally, a significant amount of population data is necessary to effectively manage long-term population growth using contraceptives (Rudolph et al. 2000, Hobbs et al. 2000).
5. Trap and dispatch – Trapping and then killing deer has been used in the cities of North Oaks, Edina and Minnetonka and appears to be an effective method of population control in fully developed areas. However, it may not be as efficient as sharpshooting, as trapping is more labor intensive and can be more expensive. The trap and dispatch option can be most effective in areas where other options cannot feasibly be employed or where individual deer are identified as the problem.
6. Sharpshooting – Sharpshooting has been used in Bloomington since 1991. It is an effective method of population control in areas where hunting is not feasible. Safety is a primary consideration. This method can be implemented through private contractor or through volunteers trained under the program. It has been successfully implemented both ways in neighboring areas including Bloomington and the MVNWR (volunteers) as well as Minnetonka and Eden Prairie (contractors).
7. Introduce Natural Predators – This option is intended to restore natural deer predators to an area to cause a reduction in the population due to predator mortality.
8. Increase Size of Habitat – This option is intended to add additional deer habitat to an area to decrease the overall deer density. Without corresponding population controls however, this method would be effective only short-term and that effectiveness would be dependent on the amount of additional habitat added.
9. Provide Supplemental Feeding – This option is intended to deter deer from sensitive feeding areas to other less sensitive areas through provision of designated feeding stations.
10. Install deer-proof fencing around city natural areas – This option also is intended to deter deer from sensitive areas, however, this option uses fencing to keep deer out of large natural areas.

Any single option or combination of options for population control, must include monitoring options. Deer populations in areas adjacent to Burnsville are also high and

growing, and deer do not observe artificial boundaries. Therefore, monitoring is required to determine when management goals and population stability are achieved.

5.3 Current Management Actions in Neighboring Areas

There are a number of areas adjacent to Burnsville that are currently managing deer populations within their jurisdiction using some of the options described above. It should be noted that these adjacent management programs could have both positive and negative impacts on Burnsville’s deer populations. To some degree, management in the adjacent areas will reduce the number of deer that may potentially migrate into the city. However, during the actual removal programs that occur in other areas, deer may use areas in Burnsville as a refuge, thereby making the removal efforts of adjacent areas potentially less effective. The following is a brief description of a few of the adjacent programs.

Murphy-Hanrehan Regional Park Reserve

Hennepin Parks has been conducting special archery hunts within Murphy-Hanrehan Park since the early 1980’s. They have also sponsored shotgun hunts, but only on a periodic basis, and are used only when additional deer removals are necessary to maintain density goals. The density goal for the park as a whole is 30 to 35 deer for the winter population. Shotgun hunts have occurred in 1993, 1994, 1996 and 2000. Both the archery and shotgun hunts are administered and coordinated by park staff and are conducted within the regulatory framework of the DNR.

A portion of Murphy-Hanrehan Park is located in Burnsville’s Southwest Management Unit. Since about 1990, the park hunts have included the 116-acre portion of Murphy-Hanrehan Park that lies within the Burnsville City limits. However, the adjoining 160-acre CamRam Park has not been included in any of the hunts conducted to date.

Even with the population management occurring in Murphy-Hanrehan Park, the deer population in the residential area of Burnsville east of the park continues to grow at a steady rate. Hennepin Parks has counted deer in this residential area for the past eight years. These counts are shown in Table 7.

Table 7: Deer Counts in Southwest Unit excluding M-H and CamRam Parks

Year of Count	Deer Observed	Year of Count ^a	Deer Observed
1992	15	1996	75
1993	13	1997	39
1994	33	1999	76
1995	54	2000	60

^a No snow in 1998 precluded aerial surveys in that year.

Minnesota Valley National Wildlife Refuge and Fort Snelling State Park

A portion of the Minnesota Valley National Wildlife Refuge (MVNWR) lies within the city limits of Burnsville, within the city’s Northeast Management Unit. Fort Snelling State

Park (FSSP) lies to the northeast of the city's northeastern boundary. The US Fish and Wildlife Service (USFWS) in cooperation with the DNR, have conducted deer removal with both archery hunting and sharpshooting methods within the MVNWR and FSSP in the past. Their current removal program has been limited to sharpshooting. Within the Black Dog Lake Unit of the Refuge, up to four removal sites have been used. The current deer population density in the MVNWR and FSSP is 23 to 28 deer per square mile. Their goal has been to maintain the deer population in the range of 15 to 25 deer per square mile. In 2001, 17 deer were removed from the Black Dog Lake unit of the MVNWR, 26 deer removed in 2000, 10 in 1999, and 23 in 1998.

Lebanon Hills Regional Park

Lebanon Hills Regional Park (LHRP) is a 2,000 acre park located in the cities of Eagan and Apple Valley, approximately 1.5 to 2.0 miles due east of Burnsville's Terrace Oaks Park. Dakota County, in cooperation with the DNR, has conducted deer removal via archery hunting within the park as part of their deer management program. Since 1995, the Metro Bowhunters Resource Base (MBRB) has participated in the removal program and administered the logistics of training and identifying competent and responsible bowhunters for the hunts. MBRB is an organization that provides a framework for a number of bowhunting groups in the metro area to demonstrate their proficiency and ethics commitment (See Attachment E). The park has effectively used this method of deer control since 1995. The goal of the park is to maintain a population of 15 to 25 deer per square mile.

Deer Management Plans in Other Communities/Areas

Population reduction methods for deer management have been used by numerous cities and agencies within the metropolitan area. Plans have been implemented in these various areas as each city recognized the problems associated with high deer densities. All of these programs have been successful in lowering population sizes, even though some may not have yet achieved their management goals. Table 8 shows a summary of many of the different cities that currently have an active Deer Management Program approved by the DNR.

Table 8: Deer Management Plans in Other Areas

Community	Area Managed	Started	Methods used
Blaine	Airport	1997	Archery with MBRB
Bloomington	City (in cooperation with USFWS)	1991 1994	Trap and Dispatch Supplement w/ Sharpshooting
Cottage Grove	Bailey Nursery		Regular hunting season
Dakota County Parks	Lebanon Hills, Spring Lake, and Miesville Ravine	1995	Archery with MBRB

Deephaven	City	2000	Trap and Dispatch
Eden Prairie	City	1993	Sharpshooting
Edina	City	1994	Trap and Dispatch; Sharpshooting
Fridley	Springbrook Nature Center	1993	Trap and Dispatch; Sharpshooting
Gem Lake	City		Regular hunting season
Hennepin Parks	Several regional parks	1980's	Archery with MBRB and regular season
Maple Grove	City		Regular hunting season
Maplewood	Pigs Eye Island		Archery with MBRB
Mendota Heights	City	1995	Archery with MBRB
Mn Valley NWR	Refuge	1990's	Sharpshooting
Minnetonka	City	1994	Trap and Dispatch; Sharpshooting
North Oaks	City	1984	Trap and Dispatch; Sharpshooting
St. Louis Park	Westwood Nature Center	1994	Trap and Dispatch
St. Paul	Hyland Bluffs	1995	Trap and Dispatch
Wayzata	City	1995	Trap and Dispatch; Sharpshooting

Source: DNR Urban Wildlife Specialist

5.4 Considerations for Building a Management Plan

A good management program must utilize a comprehensive approach to managing deer including the education of the public regarding deer ecology, deterrents to

minimize conflicts with deer, monitoring of the deer population for changes and trends, regulating the feeding of deer within the city limits, and methods to control the size of the deer herd.

Deterrent versus control

This management plan should include tools for residents to use that will help deter conflicts with deer and help minimize deer damage. Deterrents can include things such as fences, repellents, noise makers, and other gadgets that are intended to keep deer out of landscaped areas and gardens. Deterrents work best in problem areas when deer densities are low to moderate; they direct deer away from areas that will clash with human uses. However, deterrents do nothing to control the number of deer.

As the number of residents that use deterrents increases they may become less effective if the deer population stays the same size or increases. This results because if the deer cannot physically get to one garden they will move to another area until they find enough food. Many residents have reported that they used to feed the deer because they liked seeing wildlife in their backyard. However, deer consume landscaping and gardens as well. Some started deterring deer from landscaping and gardens by planting plants deer typically prefer less. As the deer started to eat those plants too, repellents were applied. In some cases fences were constructed around yards or gardens to keep deer out, forcing deer to other neighbor's yards, only shifting the problem to a new location. If this continues to a large scale entire neighborhoods could be fenced-off limiting not only the mobility of deer, but also that of other wildlife species and residents. Forcing deer out of neighborhood habitat will increase browsing/grazing pressure on public spaces with higher densities.

Reflectors for public roadways are another form of deterrent that may minimize the potential of conflicts between deer and cars. According to DNR Research at Madelia, deer reflectors have had mixed results. Their understanding of reflector effectiveness is that they are generally effective initially (1st year), but they become virtually ineffective after that, probably due to habituation by the deer and maintenance issues (very expensive and time consuming to maintain, because they have to be regularly repositioned and cleaned). As with other deterrent methods, it cannot be expected that reflectors will provide long-term results.

MnDOT has started a two-year trial period, at three rural locations, to test a new deer alert system that includes motion sensors and an amber beacon mounted on top of the traditional deer crossing caution signs. The system is designed to provide drivers a visual warning when it detects deer or other large animals approaching the roadway. If the system is proven to be effective in reducing the number of car/deer crashes, it could be tried in other locations.

Deterrents can treat some of the symptoms of high deer densities, however, they do not address all of the problems associated with too many deer (e.g. impact on natural areas). Therefore, a comprehensive plan also includes options for managing deer numbers or density.

Population Control Strategies

Each of the population control options described in Section 5.2 were thoroughly discussed as part of the review process. Following are some of the key considerations utilized in formulating the population control portion of the program.

1. Archery Hunting

The City of Burnsville lies within the DNR's deer hunting permit area 337. This permit area allows a person with a regular archery license to purchase a Deer Management Permit for one additional antlerless deer and up to three additional Intensive Harvest Permits for antlerless deer during the regular deer season, each at one-half the cost of a regular license. Permits are available from the DNR for archery hunting under the regular archery season (typically mid-September to late December). Archery hunting within the City of Burnsville is allowed under current city ordinance "by any person shooting a bow and pointed-tip arrows who is the private landowner or with the written private landowner approval on their person; provided, however, that no arrow passes beyond the boundaries of the that property; and provided further that the shooting occurs at least five hundred feet (500') from any land or building not owned by that landowner and that no one is endangered. (Ord.319, 6-20-88)". The number of participants that partake in this hunting option is essentially limited to residents, with most opportunity likely in the Northwest and Southwest Management Units.

A special archery hunting option is available through the use of a "management group" such as the Metro Bowhunters Resource Base (MBRB) and Capable Partners (CP). MBRB is open to membership from the city and the general public. The purpose of the MBRB group is to train and test potential participants for special archery hunts to ensure their competency and ethics prior to granting membership and eligibility. For urban hunting programs, the MBRB or similar group is essential in providing and managing a safe, efficient and successful removal program. The CP group also has similar safety assurances, while also providing hunting opportunities to the physically handicapped where they otherwise may not have access to such opportunities; pairing able-bodied partners with each participant provides these opportunities. See Attachments E and F for further information on these two organizations. All special hunts, using MBRB and/or CP, would occur on public lands within the city unless residents adjacent to the parks volunteer access from their property as well.

Archery hunting in limited areas over limited timeframes can take a number of years to reduce a large deer population as compared to sharpshooting. Based on the number of deer to be removed to meet the density goals and the timeframe in which the city wanted to meet those goals, archery hunting was not identified to be implemented initially, however, it was recommended to be used as a long-term management strategy. Therefore, archery hunting was recommended to begin in the fall of 2003, after two years of sharpshooting, as the strategy to maintain deer densities at goal levels.

Details of the locations (specific parks), special provisions and potential timing of each special hunt would be defined annually. Attachment G describes in more detail suggested special provisions and guidelines for archery hunting on public and private lands within the city.

2. Do Nothing to address population size

By not taking any action to control the deer population size, the city runs the risk of having a larger deer population problem in the future. The current deer population within the city is at relatively high densities which is currently resulting in impacts to the native woodland vegetation, complaints by residents and collisions with cars. By limiting the city's actions to only using education, monitoring and feeding bans to educate the public and collect information, there would be no effect on the number of deer within the city (deer density)

and some of the impacts would not be addressed.

If deer are left to control themselves, then unnatural alterations of associated plant and animal communities would likely occur (Warren 1991). If the city's goal is to ensure the natural functioning of both plant and animal communities, the city needs to set a density threshold consistent with that goal. This in turn would then require the inclusion of a method for controlling the deer population size as part of the Deer Management Plan.

Without a deer management program that addresses the population size and growth, the only factors left to affect the mortality rate other than natural death will be through poaching, car collisions or emigration to other communities. If the population size gets large enough, the natural death rate will increase due to starvation and increased disease. This was not considered a feasible plan of action, as it does not address current concerns, or the goals or objectives of the overall program.

3. Trap and Transfer

Current DNR policy does not allow this method of population reduction for several reasons. First, there are heightened concerns among state health and wildlife agencies regarding the transfer of animal diseases across state lines. The Minnesota DNR is not aware of any state agency accepting or transporting deer. Additionally, the trap and transfer method has been demonstrated to be impractical, stressful to the deer handled, and can have high post-release mortality rates with near 80 percent mortality of translocated deer in the first year. The costs for this method have been recorded in the range from \$400 to nearly \$3,000 per deer (DeNicola et al. 2000). The cost is dependent on a number of factors such as the number of deer to be moved and the distance to the release site. This method also requires release sites that are appropriate and willing to accept the deer to be released. Such sites are scarce due to the abundance of deer statewide and across the country. Without the DNR's support, the lack of potential release sites, the high mortality rates and the potential high costs, this option was not recommended.

4. Birth control

The treatment of deer with contraceptive drugs is only being implemented by universities, wildlife agencies and the Humane Society of the United States as part of approved research projects (DeNicola et al, 2000). After 40 years of research on fertility control, there have been no practical and effective fertility control methods identified for free ranging deer populations. Free ranging populations, such as is the case in Burnsville, pose distinct challenges to the use of contraceptive drugs since treated deer should be marked for identification purposes and the use of anti-fertility drugs must be approved by the U.S. Food and Drug Administration (FDA). Another critical need to effectively use contraceptives for population management is detailed fertility data on the population and individual females within the herd. Without details on individual fertility rates within the population, the number of individuals that require treatment annually to manage population growth cannot effectively be determined. There is also significant risk involved with using fertility control to manage a population due to the unknown long-term effects of current anti-fertility drugs and the potential loss of genetic viability of the population with only a very small portion of the population reproducing in a given year. While fertility control may not affect the survival of the individual it can potentially be

lethal to the population (Hobbs et al. 2000).

A study in New York, one of the few conducted on a free ranging deer population, estimated the minimal annual time commitment per deer for fertility control was approximately 20 hours (Rudolph et al. 2000). This can compute to a cost range of \$1,000 to \$2,000 per deer assuming a contractor rate of \$50 to \$100 per hour. The overall cost of implementing an anti-fertility method to control population growth is dependent on the number of deer that need to be treated, with larger numbers requiring significantly more effort and cost (Rudolph et al. 2000; Nielson et al. 1997).

It should also be noted that current data on anti-fertility control methods show that it does not have immediate population reduction results (DeNicola et al. 2000). The greatest efficiency in population reduction and long-term management may be with the use of culling to reduce the population to target size and then a contraception method to maintain the herd size (Hobbs et al. 2000, Nielson et al. 1997). However, it may be several years before adequate contraceptive drugs are developed and available for use in free-ranging herds that can be applied in a manner as cost-effective as culling methods.

The DNR currently does not, and cannot, promote the use of contraceptives for population control at this time because approved anti-fertility drugs are not available for use and effective applications are only experimental. Therefore, this option is not recommended at this time, however, as technology advances this option may be considered in the future.

5. Trap and dispatch

This method is generally used in areas where hunting or sharpshooting would not be viable options for removing deer due to proximity to buildings. Clover traps would typically be used with bait to lure deer to the trap. These traps would only be set during the nighttime hours and monitored in late evening and early morning, generally following the procedures used in North Oaks (Jordan et al 1995). The traps would be located away from disturbances from dogs or humans to minimize stress to the captured deer. Traps would only be used on private residential lots, per landowner request, providing they are not adjacent to anyone opposed to the trapping of deer, the trap can be screened from potential disturbances, there are documented deer problems in the area, and the removal numbers were compatible with the overall Plan removal goals. The deer removed by this method would be processed and requested to be donated to food shelves for human consumption.

This option is not being recommended at this time because it tends to be more time intensive than other options when used on a broad scale.

6. Sharpshooting

This is the selected method to initially reduce the deer population to the recommended density goals. This method would only use qualified contractors to select sites, bait and remove deer. All sites selected for baiting and removal operations would be reviewed and approved by the police department and city staff prior to implementation. This method would primarily be used on public property. Sharpshooting could be used on private property, however, it would only be used if approved by the landowner provided that the adjacent landowners are not opposed, the site provides for safe removal, there are

documented deer problems in the area, and the removal numbers were compatible with the overall Plan removal goals.

Deer harvested outside of the regular hunting season via sharpshooting become the property of the state, as these methods require a "special management permit" from the state. The bulk of these deer are accepted by local food shelves or other charitable organizations and processed for human consumption. The City would recommend that the hides be donated to the Minnesota Deer Hunter Association for their Hides for Habitat program.

7. Reintroduction of natural predators

Wolves, cougars, black bears and to some extent coyotes are the common predators of white-tailed deer in Minnesota. Restoring these predators into an urban environment is not generally regarded as a viable option for urban deer population control because of the lack of suitable habitat and the high human densities (Coffey and Johnston 1997). It may sound like an attractive ecological method that would restore the balance of the ecosystem, however it is not an option that would be accepted by many and it would not be biologically feasible to establish the habitat needed for these predators. Both ecological and social constraints would prohibit any meaningful, long-term population reductions from this method.

8. Create more deer habitat within the city to support growing population

The city of Burnsville is approximately 97 percent built-out according to city planning staff. The amount of identified preferred deer habitat is about 6 square miles or nearly 4,000 acres. This comprises about twenty percent of the city's total area. Deer in the city are already using areas outside of their preferred habitat, meaning they are sharing space with their human neighbors. In this urban setting, creating additional habitat for deer could theoretically reduce the number of human-deer conflicts by providing deer more space. However, to reduce conflicts by this method, you would need to reduce human use in areas that would be labeled deer habitat (convert development into woodland cover). Based on the current level of development, this option would be very expensive and would have little impact on the number of conflicts unless the size of new deer habitat was very large. "Very large" would be on the order of 6 to 7 square miles, which is the amount needed in order to create enough habitat to reduce the average deer density to 20 deer per square mile. This option is not realistic given the amount of habitat that would need to be created to be effective in reducing deer density. Additionally, this option would not manage future population growth.

9. Conduct citywide deer feeding program

Providing urban deer with a supplemental food supply to alleviate conflicts with humans has been tried with little success (Schlick and Gillette 2000). The intent of supplemental feeding in urban areas is to draw deer away from specific problem areas (roads or residential yards). However, if alternate food sources are widely available within the problem areas, the draw of supplemental food sources can have little effect on deer foraging movements (Schlick and Gillette 2000). If the supplemental source does draw deer, it needs to be located far enough away from the problem area to remove the conflict. However, it also needs to be located such that the feeding location does not create a new concentration of deer that will create conflicts in a new

location (DeNicola et. al. 2000). Shifting deer conflicts from one neighborhood to another would not address the problem; it would only relocate it. Shifting higher densities to public lands is also opposite to the goal of the city to protect the integrity of its natural areas.

This option does not address the issues of population size and growth and is contradictory to the feeding ban ordinance proposed, therefore it has not been recommended to be included in the program.

10. Install deer-proof fencing around city natural areas

In some city parks it has been identified that high deer density has changed the forest structure. Deer could be fenced out of these areas to allow for natural regeneration of the forest community. Deer-proof fencing is expensive, especially in large-scale applications, and requires regular monitoring and maintenance to keep deer on their intended side. For example, an estimate for installing a 10 foot woven wire fence around Terrace Oaks Park (about 4,400 lineal feet) would be roughly \$9,000 for materials and an additional \$ 35,000 for installation. Yearly maintenance costs would vary depending on the amount of vandalism, damage from falling trees or branches, erosion and other factors that could allow deer access.

This option does not address the issues of population size and growth (deer density) outside of the natural areas.

Plan for Monitoring

Your plan for monitoring reflects activities that occur in Phase 4 of the CBDM cycle, Evaluation and Adaptation. Evaluation is a critical component of any deer management program, as it is in this phase that you will track progress towards your goals and objectives, making necessary adjustments to your plan as you learn about what works and what doesn't. For a more thorough discussion of Phase 4, please visit the [Community Deer Advisor](#).

Despite the importance of monitoring, a plan for doing so often tends to be left out of community-based deer management plans. This does not necessarily mean that communities do not undertake monitoring and evaluation efforts, but perhaps indicates that communities may not see the continual evaluation of the program as part their CBDM plan. You should not consider monitoring as an afterthought, but view it as just as important as selecting objectives and actions for your program. When developing a monitoring plan, you may want to reach out to experts for guidance depending on the objectives you've identified for your plan. While some types of monitoring may be straightforward (e.g., if you're tracking deer-vehicle collisions) other kinds of monitoring may be more challenging (e.g., if you want to design a forest monitoring project).

It is critical for any monitoring plan to identify indicators you will be examining to assess progress towards achieving your objectives. What do we mean by "indicator"? We are referring to whatever you are going measure and observe to understand current conditions and track progress towards achieving your objectives. In fact, it's best to measure your indicators prior to implementing actions so you know what your current conditions are (your baseline), because monitoring involves tracking those indicators over time—so, you need to know your starting condition to evaluate whether your actions are having their intended effect.

It is important to identify for each indicator what specific data you are going to collect, who is going to collect those data, and how they will do so. For instance, will your community be conducting aerial counts of deer each year to monitor changes in population? Will you be monitoring regeneration of certain forest plants? Tracking deer-vehicle collisions?

Whatever your community will be doing to evaluate your deer management program's progress towards addressing important impacts, it is critical that the indicators you have selected are clearly identified and are tied to measurable objectives. Make sure it is clear in your timeline when you are going to be assessing indicators, who is going to be a part of that assessment (a university or NGO partner? volunteers? city officials?), and identify in your plan how you might account for changing needs within your community. Do you have a process in place in the event that you are not seeing anticipated changes in your indicators? It is also important to account for what you will do if when you achieve your objectives. In other words, how do you intend to maintain deer population and impact levels?

After completing this module, you should...

- ✓ Be able to describe the importance of monitoring
- ✓ Know what an "indicator" is
- ✓ Know how to comprehensively describe indicators for your plan

Plan for Monitoring, continued...

For more on selecting indicators, we draw your attention to this excerpt from the [Community Deer Advisor](#).

Selecting a set of meaningful indicators is a challenge for many communities. Think about how best to evaluate progress toward desired outcomes. What sorts of indicators will you use, and what will they tell you about your community's progress? For example, tracking the number of deer harvested is straightforward and can feel satisfying, but does not give much insight into whether deer-related impacts are lessening. At the other extreme, many communities assume it is important to quantify the local deer population with precision. However, accurate population counts are costly, can be difficult to obtain, and do not necessarily help determine whether desired outcomes are being achieved. It may be more important instead to track the number and nature of deer-related complaints to city hall (e-mails, phone-calls, etc.), a low-cost way to assess how well the program is perceived to be working. Keep it simple. It is better to have a small set of metrics you can collect consistently than an elaborate monitoring plan that cannot be sustained.

Hopewell Valley's full plan can be found at: <http://hopewelltpw.org/DocumentCenter/Home/View/501>

In selecting indicators, it is important to consider:

- Whether or not you can link your selected indicators to your objectives
- What resources your community has at its disposal for monitoring. Do you have the capacity to understand what the data your community collects means, or do you have access to those who do?

Let's look at a few example monitoring plans and selected indicators.

(Example #1). This first example comes from Hopewell Valley, New Jersey. In reading this excerpt you'll note that the plan includes timelines for monitoring as well as identifies responsible parties for carrying out monitoring activities. The plan also identifies to whom the data should be relayed.

For all goals and strategies, the Task Force strongly recommends a tracking system that sets an agenda with timelines for completion, quantifies progress and allows effective communication with all stakeholders. Lyme disease and deer vehicle collisions are tracked continuously through existing mechanisms by the Hopewell Township Health and Police Departments, respectively. It is recommended that public questionnaires, as performed in 2010, be repeated every three years to track landscape and agricultural impact reduction goals and overall public opinion. Ecological health is tracked annually on various private and public parcels by the Friends of Hopewell Valley Open Space – summaries of these activities should be provided to the Task Force annually and a report should be provided every three years. The tracking of the deer population should also be repeated every three years using the same seasonal timing and methodology utilized in 2010. Brief but effective tracking / reporting should also be included within each listed strategy to assure effective communication and evaluation of their effectiveness toward meeting stated goals. Specific strategy measures should be developed by Task Force members that are assigned to implementing them.

Plan for Monitoring, continued...

(Example #2). This second excerpt comes from Oxford, Mississippi's Deer Management Plan. You'll see that this plan includes three approaches for monitoring progress. While the subheading for this plan is "Population Determination," you can see that they are measuring a number indicators. One is deer population and density, measured by a survey implemented twice a year to get a sense of the deer population. To identify hot spots in the community, they will be tracking two different indicators: deer sighting reports and property damage reports. Finally, to monitor deer-vehicle collisions, they are implementing a tracking program to report these incidents.

Oxford's full plan can be found at:
<http://www.oxfordms.net/documents/departments/deer/deer-plan.pdf>

Montgomery County's full plan can be found at:
http://www.montgomeryparks.org/uploads/docs/deerplan_update_aug2004.pdf

III. Metrics and Measurements

Population Determination

The deer population within the city limits will be surveyed twice a year, one fall survey, and one spring survey. Each survey will be conducted over a ten day period of time to help determine deer population and density. The survey will be conducted by driving three established routes, twice a day. The data gathered from the survey will be compiled and submitted to DWFP and the USDA for analysis and recommendations.

The City of Oxford will also solicit deer sighting and property damage reports from the general public and residents of Oxford. The data from these reports will be compiled and utilized to identify problem areas within the city.

The City of Oxford will implement a tracking program for reported deer versus vehicle incidents. This data will be utilized with the above gathered data to evaluate the effectiveness of the deer management program.

(Example #3). This excerpt is from Montgomery County, Maryland. For this excerpt, you'll see they start with identifying the objective with which these indicators are linked (reducing deer-vehicle collisions), and then identifies three indicators for tracking progress for this objective, what data they will collect, and who will be responsible for collecting that data. (Excerpt on following page).

Plan for Monitoring, continued...

a) Deer-vehicle Collisions

Deer-vehicle collisions (DVCs) represent important safety concerns including the potential for personal injury and death. For this reason reducing deer-vehicle collisions is a primary objective of the County's Deer Management Plan. Data on DVCs are collected from the following sources.

1. The Montgomery County Police Department (MCPD) keeps records on deer collisions on county roads that require police response as well as dead deer seen on roads by police officers and reported to the Division of Animal Control (Animal Control) for pick-up. The MCPD data, because it includes data on collisions in which the deer are not necessarily recovered, includes the most complete numbers for county roads but does not include all deer collisions on state roads or the many DVCs that go unreported. The data is analyzed by the MCPD and an annual report is issued. A copy of this report is sent to the DMWG and included in the appendix of this report.
2. Animal Control is responsible for picking up dead deer on county roads. Detailed location information on each pick-up is provided to the DMWG in an annual summary report. This data is mapped to determine the distribution of deer-vehicle collisions on county roads.
3. Road-killed deer on state roads within the county are picked up by the State Highway Administration (SHA). This data was not available for 2002 due to changes in collection protocol but will be provided to the DMWG and mapped in the future.

The data provided by the above agencies in some cases is complementary and in other cases overlaps considerably. Due to the detailed location information provided, the flexibility of the database, and in order to eliminate overlap, only Animal Control and SHA data is used for mapping. The distribution of deer-vehicle collision locations is used to help delineate hotspots of high deer density and activity in the county.

In addition, this data is shared with the Department of Public Works and Transportation (DPWT). Where appropriate, recommendations are made to implement measures to attempt to reduce the numbers of DVCs along identified stretches of road.

(Example #4). This last example comes from Metroparks Toledo, Ohio's Deer Management Plan. This excerpt begins by reiterating an objective for deer density, and notes that that will be assessed by aerial surveys conducted by Metroparks staff. You'll also see an explanation of how they will monitor deer browse impacts, and specific indicators are described, such as lupine and trillium population levels.

G. PROGRAM EVALUATION

Following 2017 culling operations, aerial deer surveys will continue to be used by Metroparks staff to monitor population levels at OOPM, SCPM, and other parks throughout the district. The target for both OOPM and SCPM is a reduction in the population index to less than 25 deer per mile². The Metroparks deer browse monitoring program (see Section I.C.1) will be the primary evaluation tool to determine whether the 2017 culling program successfully reduces deer numbers to acceptable levels. Metroparks staff and volunteers will continue to evaluate deer browse damage to at-risk populations of endangered and threatened plant species at OOPM. Lupine browse monitoring will also continue to be conducted at OOPM. Trillium research plots will be used at SCPM to evaluate recovery of spring ephemeral wildflower populations after culling. If noticeable reductions in deer browse are not detected after initial population targets have been reached, deer population targets may need to be reevaluated.

Metroparks Toledo's full plan can be found at:
<https://metroparkstoledo.com/media/2567/2016-17-deer-mgmt-plan-final.pdf>

Plan for Monitoring, continued...

In sum, your monitoring plan should include:

- Indicators identified for tracking progress towards your objectives
- Specific data you are going to collect for each indicator, who is going to collect those data, and how they will do so

Public Outreach & Engagement

It is important that your plan includes a discussion of your approach for public outreach regarding the deer management program. For a more in-depth discussion of public engagement, see the [Community Deer Advisor](#) website. You likely already have some experience engaging the public in the early phases of your deer management planning—perhaps to understand the impacts that are occurring your community via a survey or public meeting, for instance. Or, you may have engaged residents on your deer committee as part of the decision-making process. Describing the ways you already have engaged in public outreach, education, or engagement—probably in the background section of your plan—is important. You may have also included outreach strategies as part of your selected management actions to meet education-related objectives (holding neighborhood workshops on landscaping with deer-resistant plantings, for example). But if there are additional steps that will be taken towards engaging community members, here is the place to describe those steps.

For instance, do you plan on holding annual or semi-annual public meetings to update the community on progress towards your plan? Will you be maintaining a page on your community's municipal website regarding the deer management program? Keeping the public apprised of changes to your deer management program or progress towards goals and objectives—and even actively involved in the program (for example, are you using resident volunteers to help with monitoring?)—is an important aspect of effective CBDM efforts, and having a place in your plan where you can explicitly identify how you will do so is one way to stay accountable.

Many communities include a strategy for public engagement within the body of the CBDM plan. Next you will find a couple examples of what that looks like and how it is described in two communities.

After completing this module, you should....

- ✓ Recognize the diversity of activities that can be considered outreach and engagement

Public Outreach & Engagement, continued...

Excerpts from these two examples begin on the next page.

(Example #1). This first example is from Montgomery County, Maryland. Starting at the bottom of the first page of the excerpt, you'll see the header "Public Information/Education." The section begins by identifying which entities are responsible for carrying out actions related to public information and education, as well as why it is important that these actions are implemented. A total of eight actions are listed, and they reflect a diversity of approaches to public engagement, such as developing educational materials, developing educational programs, developing a media plan, making sure the library has resources on deer, and creating a newsletter about deer management issues within the county. If you haven't yet decided how you might engage the public within your community, this example might give you some ideas.

(Example #2). This second example is from Howard County, Maryland. Similar to the Montgomery County example, this list of actions related to public information and education is quite diverse.

In sum, public engagement is an important aspect of community-based deer management, to inform the planning process itself, keep the community apprised of progress, and even to involve community members in helping to achieve some of your goals and objectives. Thus, providing an outline of the intended approach for public engagement within your plan is advisable. There may be a variety of activities related to public engagement, so be sure to consider all of the ways you might be reaching out to the public, from public meetings to simply making your plan available on a website.

Example #1: Pages 107 through 108

Example #2: Pages 109 through 110

Montgomery County's full plan can be found at:

http://www.montgomeryparks.org/uploads/docs/deerplan_update_aug2004.pdf

Howard County's full plan can be found at:

<https://www.howardcountymd.gov/wildlife>

Action 6. Establish a monitoring program to qualify and quantify the impacts of deer on native plants, plant communities, wildlife, rare, threatened and endangered species and natural areas in the county park system (see Appendix III).

Urban/Suburban Deer Ecology and Population Dynamics

Lead agency M-NCPPC; participating agencies - NBS-CUE, DNR

Little information currently exists on the population dynamics of deer in urban and suburban settings in Maryland. Yearly harvest data is collected by DNR on a county level but represents only deer populations in areas open to hunting. Information on deer ecology and population dynamics specific to Montgomery County is vital to a responsible deer management program.

Action 7. Develop and establish a program to monitor relative changes in deer population density and habitat usage within targeted parks (Appendix III).

Use of Geographic Information System (GIS)

Lead agency M-NCPPC; participating agencies - NBS-CUE, DNR

The use of GIS can greatly facilitate the manipulation and graphical representation of data used in the natural resources management process. Geographic and thematic data bases developed within GIS can be used to address both ecological and environmental factors related to deer presence, abundance, and mobility throughout the county, as well as for mapping and analyzing important data on deer-human conflicts.

Action 8. Utilize a Geographic Information System (GIS) in the collection and interpretation of data for The Deer Management Plan. This will include mapping of land use types, habitat types, deer-auto accident locations, sites of deer depredation on agricultural and private lands, conservation and environmentally sensitive areas, rare, threatened and endangered species site locations, telemetry data, deer exclosures and other vegetation monitoring points.

Part II

Public Information/Education

Lead Agency M-NCPPC; participating agencies - DNR, Montgomery County Library System, Montgomery County Extension Service

All too often the problems caused by deer are augmented by a lack of understanding on the part of the humans affected. Public information and education is therefore a critical part of this plan. The following actions are designed to better inform and educate the public and to address commonly expressed concerns related to deer.

Action 9. Develop an informational brochure on white-tailed deer in Montgomery County, including information on deer biology, ecology, deer related problems and their prevention. This brochure will be developed in cooperation with M-NCPPC interpretive staff and Montgomery County Cooperative Extension Service and distributed throughout the county.

Action 10. Encourage the use of the Nuisance Animal Information Line as a source of public information on deer problems and ways to prevent them. This State wide program, available through an 800 number is operated by the USDA Animal and Plant Safety Service (APHIS) and DNR. The Hotline provides information to homeowners and farmers on preventing deer damage to yards and crops.

Action 11. Offer educational programs, through the Montgomery County Cooperative Extension Service and M-NCPPC Montgomery County Nature Centers, on deer in Montgomery County. These programs will include information on deer biology, ecology, deer related problems and their prevention as well as information on Montgomery County's Deer Management Plan. Nature Centers will also use bulletin boards and other displays/exhibits to further educate the public on deer related topics.

Action 12. Develop and maintain a current media plan in order to provide timely and relevant information on deer, including seasonal bulletins advising of increased risk of deer/auto accidents (i.e. during breeding season, hunting season, seasonal dispersal), as well as background and other relevant information (i.e. spring fawning season and info on deer ticks). These public notices will include multimedia public service announcements (PSA's) utilizing local newspapers, radio and TV stations as well as special productions on cable TV.

Action 13. Pursue appropriate action to insure that the County Library System purchases and has available throughout the county, books on white-tailed deer biology and management, as recommended by the Task Force Report.

Action 14. Develop a traveling bulletin board exhibit including information on deer biology, ecology, deer-related problems and their prevention as well as information on Montgomery County's Deer Management Plan. This exhibit will rotate between County Public Libraries, County office buildings and other public locations and will act as dispersal sites for the Deer Brochure.

Action 15. Develop a multimedia presentation including information on deer biology, ecology, deer-related problems and their prevention as well as information on Montgomery County's Deer Management Plan. This program will be presented by MNCPPC staff to local civic groups, environmental groups, County Park Commission, Department of Parks, Montgomery County in-service training etc.

Action 16. Develop an annual newsletter on deer management issues in Montgomery County that will be distributed to interested citizens groups. The purpose of this publication will be to keep citizens informed on the implementation of the Deer Management plan as well as provide additional and updated general information on deer in Montgomery County.

- Action 6.** Establish protocols and procedures for monitoring deer populations and their impact on the environment. Stay abreast of new technologies and procedures for estimating deer populations. Keep up to date records of populations of plants and wildlife most susceptible to negative impacts from over-abundant deer. Monitor levels of browse damage as it impacts biodiversity and forest structure. Perform periodic surveys of deer health - as indicative of herd health and carrying capacity - by studying internal and external parasites, fat levels and reproductive system health.

PUBLIC INFORMATION AND EDUCATION

The Task Force Report makes clear that public information is an important part of the management of deer-human conflicts in the County. A lack of understanding of deer biology and ecology appears to be compounded by ignorance, misinformation and misconception regarding the available management options. The following actions are intended to better inform and educate the public and to address commonly expressed concerns related to deer.

- Action 7.** Develop an informational brochure on white-tailed deer in Howard County including information on deer biology, ecology, deer-human conflicts and the management options that may reduce or end those conflicts. This brochure should provide a list of agencies and organizations involved in the issue, and how they may be contacted. It should be distributed throughout the County, in libraries, schools, and government office buildings, and to the Columbia Association and other homeowner's associations. Make it a page of the County's website.
- Action 8.** Publicize the Nuisance Animal Information Line, a toll-free number (1-877-463-6497) operated by APHIS and DNR, which provides information to homeowners, businesses and farmers on preventing animal damage on their properties.
- Action 9.** Offer educational programs through Cooperative Extension, the Department of Recreation and Parks, Columbia Association, homeowner's associations and interested organizations such as garden clubs. These programs would include information similar to the brochure, and would also serve as a forum for exchange of new ideas and opinions.
- Action 10.** Develop and maintain, through the Public Information Office, a media plan to provide timely and relevant information on deer, suited to the needs of the season. These press releases and broadcast segments would be distributed to local newspapers, television and radio outlets, and through the government access cable channel (Cable 15).

- Action 11.** Develop and produce an exhibit display on deer issues and the management plan. This display could be rotated around the library system, public schools and other public buildings, and other locations if requested.
- Action 12.** Hold informational meetings for Government officials so that they will know the scope of the management plan and the proper directions in which to steer public inquiries they may receive.
- Action 13.** Produce and distribute an annual update on deer management activities and information for all interested parties. Note all significant accomplishments and milestones reached during the preceding year.
- Action 14.** Develop a deer management website, with appropriate links, to disseminate information through the increasingly popular medium of the Internet.
- Action 15.** Implement a Deer Management Info-line Number that people can call to learn the latest management activities and policies, and to learn about other resources and information regarding deer and deer-related issues. The recorded message on such a phone line could be updated as necessary, and comments and inquiries from callers could also be recorded.

MANAGEMENT OPTIONS FOR DEER-PEOPLE IMPACTS

Just as there is a variety of ways in which deer impact their surroundings, there is a variety of ways in which these impacts may be addressed. Some alternatives may be more effective in some situations, while other ones may be impossible in certain circumstances. Often, a combination of several management techniques may be necessary. Ten management alternatives were presented in the Task Force Report. This part of the plan will present an overview of these alternatives with their drawbacks and assets. An additional technique - habitat management - will also be presented.

Management options fall into two broad categories. First, population control options are those that actually impact the number of deer in a given area. These methods may be lethal or non-lethal, and have varying degrees of effectiveness and differing time frames within which desired results may be expected. Various ecological, legal and societal factors determine which options may be feasible in any given situation. All population control methods require some amount of long-term maintenance, since deer will continue to reproduce.

Secondly, there are management options do not involve population control. Some of these are means of managing deer behavior or preventing access to certain places by deer. These options are intended to reduce the level of conflict between deer and people without reducing herd size or productivity. The rest of these management practices do more to modify human behavior and perception of the impact of deer.

Budget

The budget is an important piece of any deer management plan, and surprisingly, we've found that it is often missing from plans. Commonly, a cost estimate is provided for just a few actions throughout the body of the plan. Sometimes plans have budget elements nested within actions selected (e.g., if a plan notes that they will be hiring sharpshooters, it may place an estimate of cost in the text). While this approach is okay, it can be more helpful as a reference for readers to include a separate, traditional budget as a component of your plan.

Your budget should include estimated costs for each element of your community's plan for each year that the effort is funded (given the duration of the plan). For the budget for your CBDM plan, identify both one-time costs as well as ongoing costs. Accounting for recurring costs is important, as community-based deer management is not a one-time effort—it often takes a long time horizon to work towards the changes in impacts your community desires. Ideally, communities should consider a 10+ year time horizon for their process, if possible. Experts have noticed that the most successful communities often have an annual line item for deer management in their community's municipal budget. Doing something for a few years then stopping is usually not a great use of your community's resources, and is a common flaw in most community-based deer management plans.

Be as comprehensive as possible. Costs such as hiring a firm to conduct sharpshooting for deer population control, for instance, may be easy to identify. However, do not forget about other potential costs such as those associated with outreach and education. In addition, monitoring and evaluation should be an ongoing part of any deer management plan, so estimating a budget for that aspect of your plan shouldn't be overlooked.

Why is the budget so important? Well, one reason is that if your deer management plan is serving as a proposal to your community's board of trustees or mayor, considering the costs of the elements you've laid out will be an important factor in determining the feasibility of the plan. In fact, you may even consider describing some of the potential savings that may accrue (e.g., from reduced deer-vehicle collisions), especially if your plan is serving as a proposal. Including a budget can also be helpful for other communities to get a sense of what might be feasible in their situations, given their own municipal budgets.

It's understandable that you might be reluctant to include a budget—cost for some aspects of your plan may be difficult to estimate. Start by identifying which elements you can find a cost estimate for most easily. For other estimating other costs, reaching out to deer management experts or other communities that have selected similar actions (see the [Community Deer Advisor](#) for case examples) might be helpful.

After completing this module, you should...

- ✓ Understand why including a budget is important
- ✓ Recognize the elements of a complete budget, including one-time and recurring costs
- ✓ Understand the variability in program costs

Budget, continued...

Keep in mind that there may be dramatic differences in the cost of programs from one community to another. For instance, the [Village of Trumansburg](#) in New York estimated that their only costs were associated with an aerial deer flyover survey, on which they spent \$4,000. Their program relied on volunteers to carry out most of their activities, which made for a program that was doable with their small community's resources. Compare that cost with the nearby [Village of Cayuga Heights](#), which spent significantly more money implementing their plan. While some of the cost was attributed to hiring a private firm to carry out deer population control activities, some of that cost was attributed to an expensive lawsuit brought by citizens opposed to the plan. This unexpected legal cost is something to keep in mind when determining your budget. You may not be able to anticipate all components of your budget, so be sure to go back and adjust when you know more about what your community will need to spend to be effective.

Make sure you are realistic when developing your plan: you'll likely need to strike a balance between actions needed to achieve your objectives coupled with an honest evaluation of what costs are affordable for your community. If your plan is a proposal presenting a few options instead of advocating for one particular option, it may be helpful to include example budgets for each option.

There are many kinds of line items that communities might include in their budgets, such as:

- Data collection costs
- As many communities tend to take specific population-control actions, population control costs are a common element of budget
- Monitoring costs (an example of recurring cost)
- Costs for other actions such as putting up fencing, or materials for education and outreach efforts
- Does a new position need to be created in order for your community to carry out your proposed actions? If so, you may find it helpful to include those personnel costs in your budget.

To get a sense of how some communities are doing accounting for their plans, let's look at two example budgets.

(Example #1). This first example is from Ann Arbor, Michigan. This is a straightforward budget, identifying initial costs and ongoing costs. It reports both estimated dollar amounts as well as staff time needed to implement the plan. (Example #1 excerpt on next page).

Ann Arbor's full plan can be found at:

<https://www.a2gov.org/departments/community-services/Pages/Deer-Management-Project.aspx>

Budget, continued...



Estimated Cost of Recommendations

Estimated costs for recommendations include:

1. Culling in Wards 1 and 2 (including culling contractor, permitting and staff time costs)
 - 1st year cost = \$25,000 to \$35,000
 - 2nd year onwards cost is \$25,000 - \$30,000
2. Annual flyover = \$3,000
3. Measure impact of deer on City's natural area:
 - 1st year cost = \$30,000-\$40,000
 - 2nd year onwards = \$15,000-\$25,000
4. Development of deer management materials and resources for website = 80 staff hours

Recommendations for Deer Management in Ann Arbor
May 7, 2015

(Example #2). This next example is a very thorough budget from Burnsville, Minnesota (excerpt from this example begins on the next page). This is one of the best examples of an informative budget we have seen. It provides estimated costs for both the first and second year of the program, noting that the budget will need to be adjusted annually, with a revised cost projection occurring after the initial program is evaluated. The budget clearly breaks down the costs of activities related to education, monitoring, ordinance establishment, and population control. It's also clear what the cost estimates for each of these activities entails; e.g., education costs are related to enclosure monitoring as well as newspaper articles, cable programs, and an annual workshop. What do you think of this budget? Are there any other kinds of costs you plan on outlining in your own community's budget?

In sum, a budget is a critical piece of any community-based deer management plan, especially if your plan is outlining a suite of potential approaches for a board or a mayor to select from. Be sure to include:

- Recurring costs
- One-time costs
- Example budgets for multiple options, if you are not recommending one particular action

Example #2: Pages 114 through 116

Burnsville's full plan can be found at:

<http://www.burnsville.org/DocumentCenter/Home/View/1338>

9.0 ESTIMATED COSTS

The following table provides an estimate of costs for the implementation of the various options recommended in the previous section. The citywide recommendations are identified first and a subtotal provided. Specific unit recommendation costs follow in subsequent sections.

Two costs are provided for each item, one based on the implementation cost for the remainder of 2001 to get the program organized and initiated, and the second is for the first full year of implementation (2002). Each year the annual budget should be adjusted based on the estimated deer density and removal needs, and the goals of the overall program.

Table 15: Estimated Cost to Implement Recommendations

Recommendation	Unit Cost	2001 Costs June - December	2002 Costs January - December
<i>Education</i>			
Exclosure Monitoring	\$ 50 / hour	\$ 0	\$ 2000
Newsletter articles, Cable Programs, Annual Workshop	\$ 500 / year \$ 25 / hour	\$ 0	\$ 500 \$2000
Subtotal		\$ 0	\$ 4,500
<i>Monitoring</i>			
Aerial Counts	\$ 200 / hour	\$ 0 *	\$ 1,250
Monitoring Coordination	\$ 25 / hour \$115 / hour	\$ 0 \$ 3000	\$ 4,000 \$0

Budget Example:
Burnsville, MN

Statistics and Figures update	\$ 4,000 / year	\$ 0	\$ 4,000
Subtotal		\$3,000	\$ 9,250
Ordinance			
Feeding Ban	\$ 115 / hour	\$ 1,500	\$ 0
Subtotal		\$1,500	\$ 0
Population Control			
Sharpshooting	\$ 200 / hour	\$ 5,000	\$ 30,000
Coordination, Permits and Orientation	\$ 115 / hour \$ 25 / hour	\$ 1,000 \$ 0	\$ 1,200 \$ 6,000
Subtotal		\$6,000	\$ 37,200
TOTAL		\$ 10,500	\$ 50,950

a Aerial counts completed in January 2001

Assumptions

For the purposes of this estimate, it was assumed that a portion of the work would be completed by outside consultants rather than city staff to give the maximum cost range. Other assumptions used to prepare these preliminary costs are described below.

- Population Control cost estimate for 2001 is based on removal to the 25 deer per square mile goal for the East Central Unit, whereas for 2002 it is based on removal of up to 150 deer from all six units to meet the 25 deer per square mile density goal.
- An annual evening workshop would be organized for residents of the city to provide information on fencing, repellents, plants, and potential vendors of these items. Expert speakers on these topics would be invited to present information, as well as local vendors.
- Consultant would work with city staff and attorney to draft proposed feeding ban ordinance.
- The statistics and figures for data collected in subsequent years of monitoring would be updated annually to illustrate current data on car/deer crashes, complaints, and aerial counts. A consultant would work with the city to compile the crash data from various sources, and create updated graphics for the crash and complaint sites and aerial counts, as well as update the projection and removal tables.
- Archery coordination will consist of consultant working on behalf of the City to develop guidelines and

restrictions for hunting times and locations by the Metro Bowhunters Resource Base and Capable Partners groups.

- Monitoring of the enclosure fence, the enclosed area, and an adjacent unrestricted area would be completed a minimum of three times per year. Any repairs would be made as necessary. Enclosures were installed September 2001 in Terrace Oaks Park in partnership with STOP group.

On-going Costs

It is expected that after the first 2 years of implementation that the annual cost of the Deer Management Program will decrease as the total number of deer to be removed annually should decrease. A revised annual cost projection will be made after March of 2003, once the effect of sharpshooting is evaluated.

Timeline

It is important to develop an anticipated timeline for the various components of your deer management plan. When are different management actions scheduled to be completed? When do you intend to collect data for monitoring and evaluation, and over what time horizon? Do you have any annual public meetings scheduled where progress on your deer management program might be shared with the community?

You may include a variety of aspects of your plan on your timeline, such as when specific recommended actions may be implemented, when outreach or education efforts might take place, any monitoring actions, when you might be updating your plan, or when your deer committee may be convening again, for instance. As with the budget, timing may be noted in the text of your plan with respect to particular objectives or actions. However, it can be helpful as a reference for readers to include a separate timeline as a component of your plan—and we recommend doing so.

Including a timeline is important for a variety of reasons. One, it can help your community with budgeting, so you have a sense of what particular activities or services are going to be required in the future. A clear timeline is also important for noting progress towards goals. The more detailed the timeline, the better, especially if you can include who is responsible for achieving certain tasks on the timeline.

You should think about including both long-term deadlines and short-term milestones. Your short-term milestones might include steps such as hiring a private firm to control deer, or convening a public meeting to discuss your selected actions. An example of a long-term objective might be to carry out a resident survey in five years to track experiences with deer impacts, for instance. Many of your longer-term deadlines may likely be related to monitoring and evaluation. It should not be surprising if you're able to more easily identify specific deadlines for your short-term milestones as opposed to long-term ones.

You should plan to include a timeline even if it can't be as detailed or precise as you'd like. If you have delays or unanticipated obstacles, be sure to go back to your plan (especially if it's available online for residents to review) and update your timetable accordingly. It's okay (and normal!) to have to adapt a timetable. For instance, if you have to change an ordinance to take the actions recommended in your plan, it may be difficult to anticipate exactly when that might happen. It's understandable to be concerned about failing to achieve deadlines you've set for yourself—but you don't want to be stuck in a situation where residents are expecting a certain action to take place when it needs to be delayed. So remember the remedy: if changes are made to your program, revise, update, and upload your plan again.

After completing this module, you should be able to...

- ✓ Recognize the elements of a complete timeline, including short-term and long-term deadlines
- ✓ Understand the importance of updating your timeline

Timeline, continued...

In developing your timeline, you may find it helpful to note that certain deadlines in your timeline may be tentative, if necessary. Including rationale for why dates have shifted in your revised timeline may also be advisable, so residents know not only that a change has been made but also why that change was made—and that it wasn't for arbitrary reasons.

So, what do some timelines look like? Let's review a couple.

(Example #1). This first example is from Solon, Ohio's Deer Management Plan. This timeline (which they call a "Schedule of Events") includes a nice introduction that states the length of time the plan is expected to cover—10 years. It also clearly states that the plan may vary as necessary. A "Schedule of Events" may include data collection actions, as well as report when specific components of the plan might be updated and when citizen input would be collected.

Solon's full plan can be found at:

<http://oh-solon.civicplus.com/DocumentCenter/Home/View/790>

D. SCHEDULE OF EVENTS

As stated previously in this work, this Management Plan is meant to have a life span of approximately ten years. It is expected that normal deer reduction activities will continue for that period. However, the Plan does allow for some variation to this schedule, based on input from all sources. In addition, the City will be reviewing other methods and strategies (including non-lethal) with a goal of reducing the level of human/deer conflict with the City.

It is the City's intent to proceed with the Program based upon the schedule in the following list of goals:

- 1) Inventory and analyze the locations of existing deer crossing signs within the City. Are these signs appropriately located? Are they effective? Are fewer signs warranted? Are additional signs warranted? Are other types of warning signs appropriate? (Winter of 2015)
- 2) Review the location of DVA within the City. Specific analysis must be placed on those locations where excessive DVA are occurring. (Winter of 2015)
- 3) Examine fencing along the US Route 422 corridor to determine if it is adequately preventing DVA. As part of this examination, look at other areas of the City to determine if fencing would help control issues in site specific areas. (Spring and Summer of 2015)
- 4) Annually document the number of DVA in the City. The goal is 35 DVA a year.
- 5) On an annual basis, update the information in Table 1-A to reflect the latest year's information on deer counts, DVA, and number of deer removed as part of the Program.
- 6) Based on survey information provided by residents and businesses, establish a baseline for the WAC of deer in each section of the City. It is intended that citizens input will be requested at all times during the life of this Management Plan. This information will be monitored and analyzed at least every two years starting in the fall of 2014. It is generally accepted that the immediate goal will be to attain responses of light or no impact to questions 3 and 4 of the survey from at least 80% of the respondents.
- 7) Establish at least ten locations in wooded areas (at least two per section of the city) where deer browse damage can be monitored. Annually monitor these same sections, take photographs, and provide appropriate narrative on the amount of damage (if any) is observed. Begin this effort in the summer of 2015.
- 8) Update Deer Management information on the City's website every two years starting in the winter/spring of 2015. The City will provide updated information on all aspects of the program including non-lethal control options.

Timeline, continued...

(Example #2). This second example is an excerpt from the City of Oxford, Mississippi's Deer Management Plan. This excerpt very clearly states how frequently the plan will be reviewed and updated—annually. This timeline item is also helpful because it assigns responsibility for who will carry out this task: city officials, the state wildlife agency, and the US Department of Agriculture.

Plan Updates and Changes

The City of Oxford Deer Management will be reviewed and updated on an annual basis by officials from the City of Oxford, the MS DWFP, and the USDA. This review will include a determination on the effectiveness of the above listed population management techniques and tools, and data gathered from population surveys. The review and update process will allow the city to more effectively manage the deer population and to identify any deficiencies in the plan.

(Example #3). This last example is from Burnsville, Minnesota. This example covers three years of the program, and includes planning activities (e.g., finding a contractor for sharpshooting), implementation activities, and monitoring activities.

The sequence in which the program will be implemented is expected to generally proceed as follows:

Sept. – November 2001	Identify contractor and specific locations for sharpshooting.
Nov. – December 2001	Conduct sharpshooting
January 2002	Conduct aerial deer counts and adjust removal numbers as needed
Jan. – August 2002	Monitor complaints, crashes and review sharpshooting results.
Sept. – November 2002	Identify specific locations for sharpshooting
Nov. – December 2002	Conduct sharpshooting
January 2003	Conduct aerial deer counts and adjust removal numbers as needed.
Jan. – August 2003	Monitor complaints, crashes and review sharpshooting results. Review and update archery hunting provisions and locations, if necessary.
Sept. – December 2003	Initiate archery hunting as outlined by special provisions to maintain deer density. Identify contractor and specific locations for sharpshooting, if necessary.

Timeline, continued...

In sum, a good timeline:

- Includes long-term and short-term deadlines
- Identifies who is responsible with achieving tasks on the timeline
- Is updated when delays or obstacles arise, with reasons for changes explained

Oxford's full plan can be found at:

<http://www.oxfordms.net/documents/departments/deer/deer-plan.pdf>

Burnsville's full plan can be found at:

<http://www.burnsville.org/DocumentCenter/Home/View/1338>

Responsibilities

For each activity included in your deer management plan, someone or some entity should be identified as the responsible party for carrying out that activity. Of course, they should be aware of and have agreed to that responsibility (e.g., who is responsible for collecting monitoring data?). Parties need to acknowledge that they are responsible for an aspect(s) of the plan, especially if they weren't involved in the development of the plan.

There might be roles in your plan for local government employees, staff of state and federal wildlife agencies, landowners, hunters, private consultants, residents, staff of a local parks department, municipal police, local or university Cooperative Extension specialists, or members of a deer task force or committee, to name a few. Identify who in your decision-making group needs to reach out to specific individuals, organizations, or departments to ensure that someone is responsible for carrying out all components of your plan.

You may identify the responsible party or entity in the corresponding section for activities of the plan (actions, monitoring, outreach, etc.), or you may simply outline those responsibilities in your plan and then work on identifying specific individuals to work on them. You may also list responsibilities as part of a timeline, which may be the most convenient place to do so, because an important part of identifying responsible parties for your plan is identifying the timeline for which those activities need to be carried out. Be sure to include the affiliations of the responsible parties. This does not necessarily involve listing a specific individual, as municipal leaders may change, for instance, but rather their role: e.g., a particular action is the responsibility of a deer committee, a mayor, a "Friends of" group, etc. However, the more specific you can be, the better. If, at the initial development of the plan it is unclear who the responsible party might be beyond "the municipality," for instance, it is advisable to go back and update the plan when responsibilities have been assigned.

After completing this module, you should...

- ✓ Be able to recognize the diversity of roles and responsibilities for carrying out activities in your plan
- ✓ Know where in your plan you might identify responsible parties or entities

Responsibilities, continued...

Here are a few ways different communities have identified responsible parties for their plan.

(Example #1). This first example is from Rochester Hills, Michigan. As you can see from the following three excerpts, responsible parties were identified within the plan's section on recommended actions. We see a variety of entities identified: Oakland County Sheriff Department, the Mayor, City Council, County Road Commission, the Department of Public Service, the Engineering Division, Oakland University, as well as local landowners. Are the roles clear to you? Are there any actions where it is not clear who is responsible?

2012 Action Plan Recommendations

Engineering Division should cooperate with the Oakland County Road Commission to bring in portable signs and determine the best locations for placement based on the most recent deer/vehicle crash data. These movable signs will warn motorists during the fall rut to be on the lookout for increased deer activity and to remind them to be cautious and to drive with care. The city should continue to work with Oakland University and other landowners to identify and modify areas of excessive brush along major roads to increase visibility and reduce deer/vehicle crashes.

2012 Action Plan Recommendations

An article should be placed in the Fall Edition of the Hills Herald, information on the ban should be shown on Cable Channels 10, 20 and 99 and placed on the city's website, and a note should continue to be put on water bills to remind residents of the city's deer feeding ban. Any reports of deer feeding within the city should be investigated and enforced by Ordinance Enforcement and Oakland County Sheriff Department.

2012 Action Plan Recommendations

The Mayor and City Council should designate October as "Deer Awareness Month." The Ranger/Naturalist has compiled a master list of volunteers that could assist him in talking with homeowners that call with deer complaints. After appropriate city training, these volunteers can provide information, suggestions, and samples of repellents to those residents who are having problems with deer in their yards. All resident calls on deer (nuisance deer and dead deer) should be documented on the City's Lucity System. Dead deer on county roadways should be forwarded to the Oakland County Road Commission for resolution. Dead deer on private property remain the responsibility of the property owner, while dead deer on city roadways should be forwarded to and handled by the Department of Public Service.

Responsibilities, continued...

(Example #2). This next example comes from Hopewell Valley, New Jersey. Their plan has outlined responsibilities in two main ways. First, at the beginning of the plan, the authors of the plan (the Task Force), request that two main entities are held accountable for carrying out aspects of the plan. They ask for a permanent Deer Management Task Force and outline some of the responsibilities they would retain; they also ask for the Township Committee to take on a number of responsibilities as well. Here they also suggest that public and private stakeholders will also be responsible for implementing some portions of the plan, which are made clearer later in the plan when specific actions are recommended.

Rochester Hills' full plan can be found at:

<http://rochesterhills.org/DocumentCenter/View/1752>

Hopewell Valley's full plan can be found at:

<http://hopewelltp.org/DocumentCenter/Home/View/501>

The Task Force requests approval from the Hopewell Township Committee for the following:

- 1) The assignment of a permanent Deer Management Task Force to implement the plan. This body would meet periodically and have ongoing responsibility to implement strategies that achieve stated goals with assistance from Hopewell Valley municipalities and other stakeholders from public and private sectors.**
- 2) The ongoing commitment of the Township Committee and staff to implement the plan. Examples include initiation of a Township-led deer management program on municipal lands and utilization of the Township website for public outreach/communication. Most recommendations are 'budget neutral', but all require commitment from elected officials and municipal staff.**
- 3) Provide an annual contribution of \$5,000 as seed money to establish a venison donation program. This would allow the donation of 50 deer (equivalent to 5,000 pounds of venison or 20,000 meals). The Task Force would seek additional funding from public and private sources to grow the program.**

In this second excerpt from Hopewell, in strategy 2D, "Encourage and facilitate program for venison donation to local food banks," some specifics regarding those public and private stakeholders are identified. In reading the recommendation for this strategy, you will see the task force has identified roles for local municipalities in contributing money to a venison donation program as well as a role for a nonprofit organization, even noting two specific individuals who will serve as contacts to this nonprofit.

2D) Encourage and facilitate program for venison donation to local food banks

The Task Force should assist with a creation of a Hopewell Valley venison donation program. This would include transportation, processing and distribution with a network of hunters, butchers, and food banks. Hopewell Valley hunters that responded to the public questionnaire cited a lack of outlets for venison restricted their harvesting of deer (See Appendix A – Question 9b). The Task Force recommends that Hopewell Valley municipalities contribute \$5,000 annually to the program. This amount would accommodate the donation of approximately 50 deer, which translates to 5,000 pounds of venison or 20,000 meals. The Task Force should seek additional contributions from the public and private sector to enhance the program once the program is established with a recurring annual contribution from the municipalities.

A partnership could be formed with Hunters Helping the Hungry (HHH) - www.huntershelpingthehungry.org. HHH is a non-profit organization that facilitates venison donations. In 2009, HHH was able to process 15,000 pounds of venison (ca. 60,000 meals) utilizing \$15,000 of funding (ca. \$1 per pound of venison). Jack Chellew and John Person are HHH contacts.

Responsibilities, continued...

(Example #3). This last example is from Montgomery County, Maryland. The excerpt begins on the next page. At the bottom of the first page of the excerpt, you'll see the start of a section called "Principal Agency Roles." In reading through this example, you'll see that specific tasks aren't necessarily identified, but that the general responsibilities for each of the main actors necessary for implementing this plan are outlined.

In sum, parties responsible for carrying out all activities in your plan need to be identified, and those parties need to know that they are responsible. It should also be clear on what timeline these responsible parties need to carry out their designated activities.

Example #3: Pages 125 through 126

Montgomery County's full plan can be found at:

<http://www.montgomeryparks.org/caring-for-our-parks/wildlife/deer-management/>

What follows is a comprehensive White-tailed Deer Management Plan for Montgomery County, MD. Guided by the Task Force's recommendations, this plan establishes goals and objectives for managing deer in the County, develops a plan of action for each of the problem issues identified in the Task Force Report and sets a time table for the implementation of those actions.

This management plan is divided into four parts. Part I addresses the collection, centralization and use of accurate data on white-tailed deer and their impacts in Montgomery County, and forms the foundation on which sound management decisions must be based. Part II outlines the implementation of a comprehensive public awareness and education program to better inform citizens about deer-human conflicts and their prevention. Part III describes the various management alternatives that are available to reduce deer impacts and outlines the implementation of population management alternatives to reduce deer populations in areas where this is deemed necessary. Part IV outlines the current status of the plan's implementation and the work program for the current fiscal year. This section of the plan will be updated annually and will reflect any modifications or additions to the plan.

Goal and Objectives

Goal

To reduce deer-human conflicts to a level that is compatible with human priorities and land uses.

Objectives

1. Reduce on a county-wide basis the number of deer-vehicle collisions.
2. Reduce depredation on agricultural crops and ornamental shrubs and gardens to levels acceptable to the community.
3. Reduce the negative impacts of deer on natural communities in order to preserve the natural diversity of flora and fauna within the county.
4. Develop a county-wide education program to provide residents with information on deer, deer problems and how to minimize or prevent deer-human conflicts.

Principal Agency Roles

The deer related problems that exist in Montgomery County and the actions called for to address these problems cross responsibility boundaries of a number of different agencies. As part of a cooperative planning process, the Montgomery County Deer Management Group (DMG) was established through a memorandum of understanding (Appendix II). The group is made up of representatives from the Maryland Department of Natural Resources Wildlife Division (DNR); the Maryland-National Capital Park and Planning Commission, Department of Parks, Montgomery County Natural Resources Management Group (M-NCPPC); and The National Biological Service (NBS). This core group will work with other agencies as necessary to accomplish the actions described in this Plan. Below are brief descriptions of the roles and responsibilities for each of these agencies. Under each heading in part I and II of the plan we have listed a lead agency and participating agencies. The lead agency is one of the agencies listed above that will assume primary responsibility for the actions to be taken under that section. The participating agencies will work cooperatively with the lead agency to accomplish those actions.

The Maryland Department of Natural Resources Wildlife Division

The Maryland Department of Natural Resources Wildlife division has the legal mandate and legislated authority to manage deer populations throughout the state of Maryland (Maryland Annotated Code: 10-202 & 10-205). DNR will provide input into development of the comprehensive management plan for white-tailed deer in Montgomery County through recommendations and providing technical guidance toward the implementation of specific deer management alternatives. The Division's objective is to work with representatives of Montgomery County - M-NCPPC and the NBS-CUE in resolving deer-human conflicts in Montgomery County.

M-NCPPC Department of Parks, Montgomery County

"The mission of the Department of Parks, Montgomery County, Maryland, is to provide for the acquisition, conservation, development, maintenance, and management of a park system which, in harmony with the environment and in partnership with the community and other public agencies protects, conserves, enhances, and interprets our natural and cultural resources; identifies and offers a variety of leisure opportunities; and is safe, accessible, and enjoyable for all. Our commitment is to be receptive, progressive, equitable, and adaptive in observing and fulfilling this mission for current and future generations."

-Adopted July 1994

The M-NCPPC Department of Parks, Montgomery County currently maintains 27,763 acres of parkland (approximately 8 percent of the county) in 325 different park and open space areas. The Department, through the enabling legislation that established the Maryland-National Capital Park and Planning Commission (Article 28 of the Annotated Code of Maryland), is responsible for protecting, preserving, and managing natural resources including streams, wetlands, forests and wildlife in County parks and consequently must play a critical role in the management of deer on a county wide basis.

The Department of Parks is a designated agency of Montgomery County charged with identifying and initiating actions to resolve deer related problems pursuant to the published findings of the Task Force Report. Within the Department of Parks, the Natural Resources Management Group is responsible for addressing wildlife management issues on park property and works cooperatively with DNR in the development and implementation of wildlife management initiatives.

U.S. National Biological Service

The NBS maintains technical expertise and experience in addressing deer management concerns, particularly in urban environments. Their primary role is that of consultant and technical advisor.

Public Participation

DNR

The Maryland Wildlife Division offers public participation and citizen involvement in the decision making process through:

Supporting Documents

Many plans may include as appendices to their main document additional supporting documents. For instance, if some data were collected early on in your process (such as an aerial deer population count, a survey of community member attitudes, etc.), you might include that information and results as an attachment. Likely you will have referenced the findings from these supporting documents somewhere in the body of your plan if they contribute materially to the rationale for the actions your plan outlines.

When deciding what to include, consider whether or not having the documents available as an attachment will be useful to those reading your plan. If you've already included all of the information from those supporting documents within the body of your plan, try to determine if adding more content as an appendix is repetitious or not.

We commonly see communities including the following kinds of supporting documentation, to give you an idea of what you might be interested in including in your own plan:

- Ordinances and resolutions
- Deer population counts
- Public education materials
- Resident survey
- Deer incident reports
- Minutes from public meetings or hearings
- Data or reports from previous program implementations, particularly if you are updating an existing deer management plan

(Example #1). For an example, on page 129 of the [Joint City of Bloomington-Monroe County, Indiana's Deer Task Force recommendations](#) you'll find the start of the plan's Appendices. The Appendices are 70 pages long, so we have not included an excerpt here. But if you click the link to their plan, you'll see four appendices that include a resolution creating the task force, a data sheet from the Indiana Department of Natural Resources about deer, responses to questions from community outreach meetings, and results of a public opinion survey.

After completing this module, you should be able to...

- ✓ Recognize the different kinds of documents you might include in appendices

Bloomington-Monroe County's full plan can be found at:
https://issuu.com/bloomingtonparks/docs/common_ground

Supporting Documents, continued...

A number of communities have conducted a resident survey, which can be helpful for a number of reasons. A survey might help you during the problem definition phase of the CBDM cycle by providing a sense of: the impacts that residents are experiencing, the priority for management of impacts, and how residents in your community weigh the costs and benefits of living with deer. A resident survey might also be helpful during the decision-making phase, if you need to get a sense of the desirability of certain management approaches. A survey may be useful during the evaluation phase of the CBDM cycle, as you may wish to get a sense of whether or not residents are reporting lower levels of impacts, and whether or not they are satisfied with how the program is progressing.

The Community Deer Advisor points out that if you are interested in carrying out a resident survey, it's important to recognize that doing so often requires a significant time commitment coupled with funds for developing a survey instrument. It might be necessary to consult experts along the way, such as private companies that specialize in survey design or local universities. You can find some example surveys on the [resources](#) page of the Community Deer Advisor.

In sum, there are many different kinds of supporting documentation that you might include as appendices to your plan. You should have a sense of what this supporting documentation might be, based on the sources you've cited within the body of your plan. It's often a good idea to include results of studies that your community has conducted if you're citing them as a source, because there may be no other place where readers of your plan can find them (in contrast with academic references, for instance). But, don't just add appendices for the sake of adding them! Be mindful of what's helpful additional information, what's superfluous, and what's repetitious.

References

Throughout the development of the plan, you may have referenced a variety of sources, from state wildlife agency reports to academic journal articles. It may be especially helpful for other communities if you identify references that may be useful to them. In addition, including references for your plan helps provide the rationale for your plan. For instance, if one of your considered actions was use of immunocontraception and your deer committee decided it wasn't right for your community based on relevant scientific research effectiveness, you should cite that research. As we discussed earlier, controversy in deer management processes tends to bubble around the selection of particular actions. Explaining why the committee chose what it chose and providing support for the decisions is what makes your choices defensible. Whether you choose to list the documents you referenced in the development of your plan at the end or in the main text is up to you.

Some plans may include in-text citations of journal articles, Cooperative Extension resources, state agency resources and reports, as well as other deer management plans. Other plans may just include a reference list or suggested readings. Whatever sources you consult while developing the plan should be acknowledged. A good rule of thumb for listing out your references is to ask yourself, based on the information included in my reference list, would somebody else be able to easily find my source? So, while you may find it useful to rely on a formal style for your references (e.g., MLA, APA, Chicago Style) what is most important is that your source is clear to those who may want to reference similar material.

Here is a brief list of the kinds of references communities have used in the development of their plans:

- Academic journals, conference proceedings, university reports, and books may be particularly useful for citing data in support of your decisions
- Reports provided by your municipality, insurance reports highlighting deer collision data, state or federal wildlife agency reports (on deer management practices, the state of the deer herd)
- Extension documents and practitioner's guides may be particularly useful for planning your outreach and education approach
- Communication with experts
- Field guides, magazine articles, or newspaper articles, which may be especially useful if your plan is providing a background about deer generally or about deer in your community specifically
- Other deer management plans

In our review of existing deer management plans, we found that few plans include references in their supporting documentation (around 10%). This does not necessarily mean that few plans consulted references in the development of a plan, but more likely chose not to include those references in the text of the plan. If you consulted a source, we recommend that you note it.

After completing this module, you should be able to...

- ✓ Recognize the different kinds of sources you might cite in your plan
- ✓ Understand the importance of including references

References, continued...

Let's look at an example from a plan that *did* include references, both in-text and at the end of the plan.

(Example #1). For an example of in-text references, here are two excerpts from the recommendations of the Joint City of Bloomington-Monroe County Deer Task Force in Indiana. The first excerpt demonstrates the use of academic studies as they described the implications for using one potential action alternative, the use of contraception. In the second excerpt, when describing Lyme disease as an impact residents in Bloomington and Monroe County are concerned about, they draw not only on academic citations, but also on data from the Indiana State Department of Health.

Bloomington-Monroe County's full plan can be found at:

https://issuu.com/bloomingtonparks/docs/common_ground

CONTRACEPTION

(Not supported by IDNR in free-ranging contexts.)

Two primary forms of contraception have been utilized to stem the growth of deer herds: PZP and GnRH.

The first method of inducing infertility in deer is by immunocontraception using a vaccine extracted from the ovaries of pigs, called *porcine zona pellucida* (PZP), in which the deer is immunized against a protein or hormone needed for reproduction (Miller and Killian 2000). When this vaccine is injected into a doe, her immune system forms antibodies against the vaccine. After the doe ovulates, the vaccine antibodies attach to her ovum and block fertilization, which causes the female to experience multiple estrous cycles and extends the breeding season (Warren 2000). An extended breeding season will increase deer activity at a time of year when conservation of calories is important and may result in increased winter mortality. Lengthened breeding activity of bucks may also lead to an increase in the number of deer-vehicle collisions. At this time, the use of PZP for fertility control in deer is experimental.

Unlike PZP, GnRH prevents eggs from being released from the ovaries, thereby eliminating multiple estrus cycles. GonaCon™ is the only commercially-available approved GnRH vaccine. Long-term field efficacy data does not exist; however pen studies (wherein animals are confined and excluded from other deer) indicate that a single-shot GnRH vaccine can last for up to four years (Miller et al. 2004). The EPA has approved the use of GonaCon™ as a "pesticide." However, the Office of the Indiana State Chemist has not approved this pesticide for use in Indiana. At this point, there are no known dangers to humans or wildlife from eating deer vaccinated with GonaCon™. However, the long-term bioaccumulative effects of the pesticide are still being studied.

References, continued...

(in-text example re: Lyme disease)

The problem is that reducing the deer herd doesn't translate into reduced exposure to Lyme disease. First, adult black-legged deer ticks feed on raccoons, skunks, opossums, and other medium-sized mammals. When deer are scarce, ticks don't necessarily become scarce, because they have alternative hosts. Indeed, several studies on mainland sites in New York and New Jersey found no correlation between deer and ticks. Second, ticks and Lyme disease are rare or absent in parts of the United States (the Southeast, most of the Midwest) where deer are abundant. Third, ticks are only dangerous if they are infected, and deer are hosts to the ticks, but play no role in infecting ticks - that's the role of the white-footed mouse (as well as chipmunks and shrews) (Jordan et al. 2005; Jordan et al. 2007 and Ostfeld 1997).

Model simulations of the relationship between deer and ticks show that a reduction in deer density results in a small reduction of the black-legged deer tick population. In order to drastically reduce the host tick numbers, deer would need to be almost entirely removed from the landscape, since one deer serves as a host for many ticks. Experiments on island deer populations indicate that with a drastic reduction of deer numbers, the host tick numbers will also decline. In a free-ranging population, where deer are not constrained to one geographic area, it is unlikely that reduction of deer numbers would decrease the presence of black-legged deer ticks, thereby decreasing the risk of Lyme disease (Ostfeld 1997).

Another important point to consider is that the population-level risk of Lyme disease in Monroe County is relatively low. Based on data from the Indiana State Department of Health, the number of confirmed cases in Monroe County has held steady at "less than five" per year over the last several years.⁴ Indeed, from 1990 to 2003, only four cases of Lyme disease were reported in Monroe County. From 2003 to 2004 (the last year for which data is available), one Monroe County resident was confirmed to have Lyme disease. To be fair, various factors confuse the diagnosis and reporting of the disease, and there are strong arguments that the disease is either highly under-reported or over-reported (misdiagnosed).

The in-text citations provided in the body of the report are linked to a thorough reference list included at the end of the deer management plan, an excerpt of which is provided below. In looking at just the first page of the plan's reference list, you can see the diversity of sources cited, including journal articles, city reports, books, and conference proceedings. The reference list is clear, and if someone wanted, they could easily track down and review the sources for themselves. (The reference list excerpt begins on the next page).

LITERATURE CITED

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If you visit the Community Deer Advisor, you will find a resource library with some references that your community may find useful, in categories such as [deer ecology](#), [deer impacts](#), [facilitation and communication](#), [management actions and alternatives](#), [setting goals](#), and [measuring progress](#), to name a few.

In sum, whether you do so in-text, at the end of your plan, or both, it's important that readers are able to find your sources. References are a critical legitimizing component of your plan, so be sure to include them.

Making Your Plan Available: Template and Checklist

Communication is important at all stages of your deer management process, as discussed [here](#) on the Community Deer Advisor. However, when you've developed your deer management plan, likely after the decision-making phase of your community's process, it's especially important for you to make clear to your community the details of your plan. Many communities make their plan available on a municipal website, so it is easily accessible to the public. However, some communities may find it beneficial to develop a specific, separate communication plan.

Here are some key elements of a communication plan:

- Objectives and desired outcomes (public awareness, increased knowledge, behaviors); i.e., the purpose of the communication plan and how it helps meet the goals of the deer management program
- Strategies to achieve objectives
- Tactics to communicate; e.g., using social media, public workshops, etc.
- Key audiences: who's important to reach?
- Messages: how do you want to talk about your plan?

If you are interested in creating a communication plan for your own community, on the [Community Deer Advisor](#) you will find some instructions on how to do so, a template for a communication plan, and an example plan.

Before you upload your plan to your website, be sure to include a table of contents, the date of the plan's publication, the author or authors of the plan, and an acknowledgement of any outside assistance with respect to the plan. Other communities, especially those in your state, may look to your plan to help guide the development of their own plan. For instance, if you received outside assistance from a wildlife biologist, that person may be a good resource for other nearby communities. If this plan reflects a revision to an earlier plan, it might be helpful to note, either on the website or at the beginning of the plan, why revisions were needed.

That's it! Thank you for completing this course on how to create a community-based deer management plan. A template for developing a plan of your own begins on the next page. After the template you'll also find a brief checklist for you to review when you've completed your plan.

Community-Based Deer Management Plan Template for

[City, State]

This is a template to help you recognize the important components of a deer management plan. As you browse the example deer management plans included on this website, you will find that they do not follow a standard format. Some plans are hundreds of pages long with many appendices, whereas others are simple 10-page documents. Some states may require that communities undergo an environmental impact assessment process prior to implementing a program, which may affect the length of a plan and the components of that plan. However, what we have included in this template are the core elements that a deer management plan should include no matter the length.

Be sure to include a date of plan publication, identify the author of the plan, and if you received any outside assistance it may be helpful to note that as well. Other communities, especially those in your state, may look to your plan to help guide the development of their own plan. For instance, if you received outside assistance from a wildlife biologist, that person may be a good resource for other nearby communities.

PLAN SUMMARY AND BACKGROUND

Here is where you might provide a brief summary of the content of your deer management plan, e.g., actions selected and a general timeline for implementation. You may also provide some background regarding your community or a description of the area targeted for management, e.g., location, size, land ownership type, etc. If a deer committee was convened to help create the deer management plan, include some information about a) how committee were selected (process, by whom, criteria for selection, etc.); b) committee members names and affiliations; c) important dates or milestones; d) the decision-making process used to create the deer management plan. Some plans may also include a purpose: what is your community's overall purpose in creating this deer management plan? Some communities may describe their purpose as to mitigate some general deer impacts, or to provide planning guidance.

PROBLEM DEFINITION

Here is the place to describe the deer management problem that your community is facing. Include a discussion of the primary impacts that are driving the problem; these might include impacts to habitat, impacts to ornamental plantings around residences, or perhaps public health and safety impacts such as deer-vehicle collisions or increased Lyme disease cases. Describing the impacts that are driving the problem in your community will help readers of your plan understand the links between the management actions your committee selected, the objectives those actions help meet,

and the impacts those objectives help address. You may find it helpful to organize your impacts by type, e.g., human health impacts, ecological impacts, etc. In addition, it can be helpful to identify where or to whom the impacts are occurring, how severe they are, and if they have changed over time. It may also be helpful to include the sources you relied upon to identify the impacts, if possible. For instance, did you acquire numbers about rising deer vehicle collisions from your local police department? Did you implement a resident survey? Was there a deer population survey or forest monitoring project that helped to elucidate your community's impacts, or impact change over time?

GOALS

Include here some broad goals that you hope to achieve with your deer management program. These goals might be expressed as a list of general outcomes or reflect a desired future condition. Example goals might be maintaining a socially-acceptable level for the deer population; preserving healthy, local forestland; supporting a community that is well-educated on how to live with deer while reducing human-deer conflicts, etc. These goals should be realistic and achievable. Some communities may find it helpful to connect their community-level goals to any statewide goals for deer management, if applicable (i.e., does your state wildlife agency have a deer management plan you may look to in order to help refine your own community's goals?)

MEASUREABLE OBJECTIVES

Here is where you include your measurable objectives, the achievement of which collectively allow accomplishment of your goals for deer management in your community. It may be helpful to think about your objectives in terms of categories, such as: objectives directed towards the number/behavior of deer, objectives directed towards increasing community knowledge about deer/deer management (e.g., driving behavior, deer-resistant plantings, etc.). Example objectives might be to reduce the number of deer-vehicle collisions to a certain amount per year, to eliminate deer damage to ornamental plantings around homes, to increase or maintain stems of certain forest plant species to some density, etc. Whatever objectives you have identified, it is important that they be measurable and have a time component (target date for achievement), meaning that there is a way for you to track progress towards meeting these objectives. In the following sections, you will identify your selected management actions as well as selected indicators for monitoring progress on your plan, both of which need to reflect these objectives. As you identify your objectives, be aware of the kinds of actions you might need to take to make progress towards these objectives as well as the kinds of data that you might need to collect in order to evaluate that progress. Including measurable objectives that are tied to indicators and actions is arguable the most important component of your plan. It is critical to know what you are making progress towards in order to have some way to judge success of

your program. It is also important that you start with identify objectives, not with actions. Actions selected should be matched to goals and objectives, not the reverse.

MANAGEMENT ACTIONS RECOMMENDED

Here is where you outline the various management actions recommended or selected for your community-based deer management program. These actions may include strategies for population control, strategies directed at deer behavior, strategies directed at human behavior, public outreach, education or communication strategies, local ordinance changes or others. Likely your plan will include a suite of management actions, so you may choose to organize them according to type (e.g., deer population control, ordinances, etc.) For each action selected, it is important that you explain how this action will contribute towards meeting your objectives, identify who will carry out the action and on what timeline, and describe the site targeted for management, if applicable. For instance, if you will be installing deer-proof fencing around various natural areas in your community, which natural areas will be protected and if not all at once, then in what order? And who will be doing the installation? It is important that this section is complete and clear, as controversy around deer management in communities is often focused on management actions. It is also critical that you identify why particular actions were selected or recommended; this forms the rationale for your plan.

MANAGEMENT ACTIONS CONSIDERED

Were there actions that your community considered prior to selecting the management actions outlined above? If so, an explanation of which actions were considered and why they were ultimately not recommended provides an important part of the rationale for your implementation plan. Be as specific as possible. For example, if deer immunocontraception was a popular choice among residents but the deer committee found it not to be feasible in your community, make sure you clearly explain why. Was it cost? Effectiveness? Time expected for results? If a management action was considered and rejected, the reasons why should be communicated here. Including these kinds of considerations is an important part of communicating the rationale for your plan; as mentioned earlier, controversy around deer management is often focused on the actions selected. Presenting a clear rationale as to why particular actions were not suitable for you community is an important part of developing a sound, acceptable deer plan.

PLAN FOR MONITORING

Here is where you should include a list of the indicators you will be monitoring to assess progress towards achieving your objectives. It is important to identify for each indicator what specific data you are going to collect, who is going to collect those data, and how they will do so. For instance, will your community be conducting aerial counts

of deer each year to monitor changes in population? Will you be monitoring regeneration of certain forest plants? Tracking deer-vehicle collisions? Whatever your community will be doing to evaluate your deer management program's progress towards addressing important impacts, it is critical that the indicators you have selected are clearly identified and are tied to measureable objectives.

PLAN FOR PUBLIC ENGAGEMENT

Here is the place to include plans for public outreach regarding your deer management program. You may have included outreach strategies as part of your selected management actions to meet education-related objectives (e.g., holding neighborhood workshops on landscaping with deer-resistant plantings), but if there are additional steps that will be taken towards engaging community members, here is the place to describe those steps. For instance, do you plan on holding annual or semi-annual public meetings to update the community on progress towards your plan? Will you be maintaining a page on your community's municipal website regarding the deer management program? Keeping the public apprised of changes to your deer management program or progress towards goals and objectives is an important aspect of effective CBDM efforts, and having a place in your plan where you can explicitly identify how you will do so is one way to stay accountable.

BUDGET

Include here the estimated costs of each element of your community's plan for each year that the effort is funded. Identify both one-time costs as well as ongoing costs. Be sure to be as comprehensive as possible; costs such as hiring a firm to conduct sharpshooting for deer population control, for instance, may be easy to identify. However, do not forget about other potential costs such as those associated with outreach and education. Sometimes you will see plans that have budget elements nested within actions selected (e.g., if a plan notes that they will be hiring sharpshooters, it may place an estimate of cost in the text). While this is a fine approach, it can be helpful as a reference for readers to include a separate, traditional budget as a component of your plan.

TIMETABLE

Include here an anticipated timetable for the various components of your deer management plan. When are different management actions scheduled to be completed? When do you intend to collect data for monitoring and evaluation, and over what time horizon? Do you have any annual public meetings scheduled where progress on your deer management program might be shared with the community? Remember, it is important that if changes are made to your program, you revise your

timeline accordingly. As with the budget, timing may be noted in the text of your plan with respect to particular objectives or actions. However, it can be helpful as a reference for readers to include a separate timeline as a component of your plan.

RESPONSIBILITIES

For each activity included in your deer management plan, someone or some entity should be identified as the responsible party for carrying out that activity. Of course, they should be aware of and have agreed to that responsibility (e.g., who is responsible for collecting monitoring data?). You may identify that person or entity in the corresponding section of the plan, or you may use this space to outline those responsibilities. You may also list responsibilities as part of a timeline. Be sure to include the affiliations of the responsible party. This does not necessarily involve listing a specific individual, as municipal leaders may change, for instance, but rather their role: e.g., is this particular action the responsibility of a deer committee, a mayor, a “Friends of” group, etc.

ADDITIONAL SUPPORTING DOCUMENTS

Here is where you might attach any additional supporting documents for your plan. For instance, if some data were collected early on in your process (e.g., aerial deer population counts, a survey of community member attitudes, etc.), you might include that information and results as an attachment.

REFERENCES

Here is where you may list documents you referenced in the development of your plan. Some plans may include in-text citations of journal articles, Cooperative Extension resources, state agency resources and reports, other deer management plans, etc. Other plans may just include the reference list or suggested readings. Whatever sources you may have consulted to inform your development of the plan may be included.

Community-Based Deer Management Plan Checklist

- Have you included on your plan's cover page...?**
 - ✓ Date of plan publication
 - ✓ Plan authors and affiliations
 - ✓ Any outside assistance received
- Have you included a summary of your plan?**
- Have you included a description of the area targeted for management, including...?**
 - ✓ Size
 - ✓ Location
 - ✓ Land management type
- Was a committee convened to help create a plan? Have you included information about...?**
 - ✓ How committee members were selected
 - ✓ Members' names and affiliations
 - ✓ The decision-making process used to create the plan
- Have you included a purpose for your plan?**
- Have you described the impacts that are driving your deer management problem, including...?**
 - ✓ Where or to whom the impacts are occurring
 - ✓ How severe the impacts are
 - ✓ If the impacts have changed over time
 - ✓ Sources for impact data
- Have you included goals for your program?**

- Have you identified objectives for your program, and are they...?**
 - ✓ Specific
 - ✓ Measurable
 - ✓ Attainable
 - ✓ Relevant
 - ✓ Time-related

- Have you described the actions recommended for your program, including...?**
 - ✓ How the actions meet your objectives
 - ✓ Who will carry out the actions and on what timeline

- Have you described the actions you considered but did not select, including...?**
 - ✓ Rationale for why those actions were not chosen

- Do you have a plan for monitoring, including...?**
 - ✓ The data you will collect for each indicator

- Have you described all of the ways you will involve the public, including outreach and engagement strategies?**

- Do you have a budget that includes both one-time and ongoing costs?**

- Do you have a timeline for all the components of your plan?**

- Are the responsible parties for each activity identified?**

- Have you included additional supporting documents?**

- Have you cited your sources and included a reference list?**

Compilation of Articles on Mule Deer

1. <https://novascotia.ca/natr/wildlife/conserva/feed-deer.asp> - Article covers the disadvantages of feeding deer, explains that they are wild and they are very adept at surviving in Winter. Interestingly, the article does cover safe feeding practices. Highlights:

- Deer have problems with many diets that livestock consume easily. Deer depend on a variety of bacteria and microorganisms in their rumen (stomach) to break down food. A change in diet requires a change in the population of these microorganisms to process the new food properly. Other problems such as "acidosis" (excess acid buildup in the rumen) and scours (diarrhea) may occur if they are given cereal grains. It is therefore important to gradually introduce artificial feed in an area where natural food is also available.
- First we must ask ourselves, "If we are successful in feeding deer properly, and as a result more deer survive the winter in good shape and give birth to healthy and strong fawns, what will the situation be next winter?" Eventually deer numbers will exceed the carrying capacity of the natural habitat and more deer will be dependent on our handouts. Can we keep the feeding program going at greater capacity each year?
- Even though fed, deer will continue to browse on nearby natural foods. Eventually most natural browse in the area will be eliminated. The same site will have very little natural food to offer the following year.
- Concentrating deer around feeders near our homes, may cause a number of problems. Property damage in the area may increase by their browsing on ornamental shrubs and trees. They may become a hazard to local traffic as they move to and from the feeding site. Domestic dogs will begin chasing and even killing deer.
- Deer are more vulnerable to coyotes during deep snow periods. If deer concentrate at a supplementary feeding site that is not associated with adequate cover and opportunities to escape predators, they may be more easily taken by coyotes.
- Deer that are concentrated, regardless of snow depth, are more susceptible to disease.
- Improper diets are often fed. These lead to digestive upset and potentially death.
- If not enough food is provided or if it is not distributed properly, aggression and fighting will occur at the feeding site. Most often it will be the deer that need the feed most that will get the least.
- For these reasons, feeding deer in winter is generally not accepted as a good management practice. The Department of Lands and Forestry generally discourages feeding deer except in special circumstances, and then it must be done properly if our efforts are to actually be of overall benefit to the deer.

2. <https://wgfd.wyo.gov/Habitat/Statewide-Mule-Deer-Initiatives/Keep-Your-Mule-Deer-WILD> -

Mule deer will likely still starve when fed in the winter. Mule deer are highly selective foragers, at least in part due to their specialized digestive system. Specific types of bacteria in their rumen are required to aid in the digestion of naturally occurring foods. Often, because their digestive system can't adapt quickly enough, supplementally fed mule deer die with stomachs full of undigested feed. *Supplemental feeding programs have been effective for other species like elk because their digestive systems are more adaptable to different kinds of forage.*

- Unpalatable foods include hay, corn, apples, birdseed, pumpkins, pelletized deer feed and any other foods that are not naturally in their browse diet this time of year.
- **Supplemental feeding may increase predation and prevalence of disease and parasites.** Winter feeding programs create artificially high concentrations of mule deer at feeding stations or locations, creating ideal conditions for increased loss due to predation, diseases, and parasites.
- **Supplemental feeding can reduce the winter range's carrying capacity.** If mule deer numbers remain artificially high through supplemental feeding, it can result in habitat degradation where feeding occurs creating a situation where these habitats support fewer wildlife.

Both proponents and opponents of winter feeding have the deer's best interest in mind. However, even well designed and executed winter feeding programs do not significantly increase mule deer survival. It's necessary to consider the biological impacts to the habitat, to other species, and to mule deer in the long-term. We must focus on the sustainability of the mule deer population for generations to come – not just one winter.

3. <https://cpw.state.co.us/learn/Pages/do-not-feed-wildlife.aspx> - Covers why it is illegal in Colorado to feed wildlife and the risks associated with that for the animals and the humans, major points below:

- **Disease**
- Concentrating deer by feeding them can also increase stress on the deer and hasten the spread of disease. Diseases can spread between wildlife and livestock, as well as to domestic animals and people. CPW is most concerned about devastating diseases, such as brucellosis and tuberculosis, which can be transmitted to humans.
- **Health**
- We all know junk food is bad for people, but it's even worse for wild animals. Deer, elk, and pronghorn are ruminants. That means they have a four-chambered stomach that serves as a 'fermentation vat'. They can eat lots of vegetation and digest it very thoroughly.
- "Habituation to artificial feeds that do not meet their nutritional needs often results in deer that are in poor condition," explains Bob Davies, a wildlife biologist in Colorado Springs. Unlike natural foods, treats from people often cannot be digested properly by big game. In fact, "human food" can stop a wild animal's digestive system, causing it to get sick and die.
- Big game depend entirely on native vegetation, such as grasses, forbs, and shrubs. Those plants provide all the nutritional requirements the animals need to survive in Colorado, even through winter. Eating non-natural kinds of foods can result in nutritional problems for wildlife, or even death.
- Although commercial feeds are available at many stores, Colorado Parks and Wildlife biologists warn against using them. "Some of these products may indicate they will attract certain wildlife species, including deer," says Davies. "People should be aware that if they place feed out and deer consume it, they may be breaking the law. Fortunately, once people learn about the negative impacts that occur when deer are fed, most stop doing it," he says.

4. <https://wildlife.utah.gov/md-feeding.html> -

- [Disease can spread when deer congregate](#)

Deer herds that are concentrated by feeding efforts are more likely to pass along diseases, like tuberculosis and chronic wasting disease, from one animal to the next.

- [The wrong food at the wrong time can kill deer](#)

Deer are *ruminants* with four-part stomachs. Each stomach chamber progressively breaks down woody, leafy and grassy foods into smaller particles. These stomach chambers contain microbes that are essential to digesting food. The type of microbes in deer digestive systems gradually change throughout the year and are very specific to the available food. Suddenly changing a deer's diet can easily lead to the deer eating food that it cannot readily digest. In these situations deer often die with full stomachs.

- [Concentrated numbers of deer can damage rangelands](#)

Supplemental feeding concentrates animals into a small areas close to their meals. Because their nutritional needs can't be entirely met at the feeding station, deer continue to forage on surrounding rangelands. The animals quickly overuse the available natural forage, which may never adequately recover.

- [Easy food can cause long-term effects on behavior](#)

Wild animals tend to lose their fear of people when they're fed. This loss of wariness can lead to increased encounters between people and deer that don't always turn out well — either for the deer or the people involved. Also deer are creatures of habit, and fed animals tend to return to the same areas the following year. If no supplemental food is there, the animals can suffer more than if they had traveled to their traditional feeding areas. This disruption of traditional migratory patterns can mean long-term consequences on the entire herd.

- [Concentrated deer attract predators](#)

When deer are grouped together, they are magnets for predators. A deer herd crowded into a relative small feeding area is also a feeding ground for the predators that prey on deer and fawns.

- [Landowner issues and disagreements](#)

When deer and elk are fed, their numbers may increase on neighboring properties where they're not wanted. The DWR often becomes involved in disputes between neighbors when one wants wildlife and the other doesn't. In many cases, one neighbor claims depredation damages to their crops or haystacks while the other feeds animals nearby. Reimbursements from the DWR to these landowners for these damages could have been better spent improving range lands to increase the carrying capacity.

- **It's expensive to feed enough deer to make a difference**

Feeding deer is not cheap, and not a one-time event. Because of digestive issues, supplemental food must be specially mixed, and once feeding begins, it must continue for several weeks. This cost, depending on the extent of the program, can easily cost many tens of thousands of dollars. Keep in mind that this is money that could have been used to improve deer habitat that provided a long-term solution instead of an emergency fix.

- **Public safety is important**

Feeding areas, out of necessity, are often near highways and towns. Concentrating deer near these areas can sometimes result in increased traffic accidents and other human/wildlife conflicts.

- **Social issues always play a part**

As snow depths increase, a well-intentioned public starts requesting supplemental feeding. As a public agency, the DWR must consider these requests. Sometimes public pressure is the determining factor that decides whether or not to feed. In following years, the public's memory of past winter feeding leads to more calls for additional winter feeding. Over time, public expectations for winter feeding can drain agency resources on inappropriate feeding programs that may actually do more harm than good.

5. https://eyeonsunvalley.com/Mobile/Mobile_Story_Reader/10160/Keep-the-Birdfeed-and-Snicker-Bars-Away-from-Deer/

BY MIKE DEMICK/Idaho Fish and Game Biologist

The hardship of winter motivates some well-meaning people to set out food for deer. The truth is, they're wild animals adapted to winter, and feeding them can quickly create a variety of problems significantly affecting their health and survival.

Despite good intentions, supplemental feeding of deer often harms them, frequently resulting in their death. Although some deer have adapted to live in urban environments and feed on non-native foods, this change in behavior doesn't necessarily mean it is a healthy environment for them.

Idaho Fish and Game receives numerous reports of sick deer in the town of Salmon and in many other urban and suburban areas of the state, especially during the fall and winter months. The occurrence of sick deer in towns has been a long-standing issue common among urban deer populations. More often than not, this illness is related to their nutrition.

A Little Deer Biology

Poor nutritional condition in mule deer is caused by disruptions to their highly specialized digestive system. Specifically, human introduced foods such as bird seed, alfalfa cubes, deer blocks and livestock feed can disrupt the delicate balance of their stomach microbiome.

A mule deer's digestive system is like other ruminants, consisting of four stomach compartments, rather than a single stomach. Deer are dependent on a healthy balance of bacteria, protozoa and fungi to break down their food. As their diets change throughout the year, so do the gut microbes, slowly adapting to differences in diet composition and forage quality.

This change in bacterial composition can take several weeks, making deer poorly adapted to sudden changes in diet. Consequently, even foods with high nutritional value may become difficult or impossible to digest, and animals will often starve to death with full stomachs.

Fish and Game often hears "but deer live in corn fields all over the U.S. You can't tell me that corn is bad for them." The difference is that deer in corn fields are also consuming other plant matter rather than just the starchy seeds. This helps maintain a balanced gut health.

Deer in mountainous habitats have a digestive microbiome that is best suited for living off browse, such as shrubs. Feeding them high-starch feeds (aka sugar) like corn would be like a human trying to survive solely off Snickers candy bars. As great as it sounds, the long-term outcome would be very bad for your health.

Fawns are particularly susceptible to dying from an unhealthy or suddenly changed diet. As rapidly growing juveniles, they lack the body fat reserves to compensate for the additional digestive stress. When their stomach microbiota is disrupted by unnatural foods, they are forced to try and maintain their energy levels by digesting internal fat. With little fat reserves, they quickly resort to the next available source of energy.

Unfortunately, this means they begin to metabolize their bone marrow and even muscle. Frequently this leads to organ failure and death. This is particularly true in urban environments where deer consistently find unnatural foods, many of which well-meaning people purposefully provide them. Non-migratory local deer, especially fawns, often suffer from things like chronic bloat which is an enteric disease that can lead to an extremely slow, suffering death as a result of being fed.

Although urban deer can bring enjoyment for some, it comes with many challenges and conflicts that can be exacerbated by feeding. Some well-intentioned people think that if they supply a different food source, it will prevent animals from damaging their ornamental plants. Unfortunately, supplemental feeding usually encourages wildlife to congregate in higher numbers, resulting in greater damage and a host of problems for people, their pets and sadly, the animals themselves.

Unintended Consequences

Feeding a few deer can very quickly lead to many more looking for handouts, concentrating unnaturally high numbers in small areas, which increases the chances of diseases and parasites spreading among the population. Malnourished animals and crowding-stress create conditions ideal for disease outbreaks, which is a serious concern.

Feeding deer can also attract predatory animals that homeowners and their household pets don't want around. Mountain lions are common in the forests of Idaho, and are sometimes attracted to cities' confines where deer and elk congregate when fed.

Additionally, concentrating big game in communities and neighborhoods can lead to increased numbers of wildlife-vehicle collisions. Accidentally hitting a deer or a much larger elk can cause serious personal injury or death, not to mention vehicle damage and injury or death to the animal. More importantly, fed deer may lose their fear of humans, which can lead to injuries and sometimes death to the animal, pets and even people. While deer may look harmless, it is important to remember they are wild animals that can be unpredictable and aggressive.

To prevent sick deer, the most important action is to not allow deer the opportunity to forage on unnatural foods. Supplemental feed such as: bird seed, alfalfa cubes, deer blocks and livestock feed are not natural and are unhealthy for deer. Although it can be tempting to “help” wildlife by feeding them, these good intentions aren't always what is best for wildlife. In the long run, wild animals are usually better off without human interference, whether intentional or not.

6. <https://extension.unh.edu/resource/more-harm-good-why-you-shouldnt-feed-deer>

“I fed deer one winter, but have since stopped because the bigger deer kicked at the smaller ones. I know people care about deer, but wild animals are supposed to live on wild food. If deer depend on us for food, then they are no longer wild.” Harmony Anderson Strafford landowner

Supplemental Feeding Can Harm Deer

Feed sites congregate deer into unnaturally high densities. These high deer densities can:

- attract predators and increase risk of death by coyotes or domestic dogs.
- spread disease among deer.
- cause aggression, wasting vital energy reserves and leading to injury or death.
- reduce fat reserves as deer use energy traveling to and from the feed site.
- result in over-browsing of local vegetation and ornamental plants.
- deny access to food, because subordinate deer are kept away from feeding stations, and over-browsing by larger deer removes food available to fawns.
- increase deer-vehicle collisions. Vehicle-killed deer near feed sites can outnumber those that would naturally succumb to winter mortality.

Other Problems Associated with Feed Sites:

- Tamer Deer Feed sites cause deer to depend less on their natural environment and more on humans. Deer may lose their fear of humans and become habituated to feed sites.

- Transition from Browse to Feed Deer receive little nutritional value from a new food source for about two weeks of feeding, since stomach microorganisms must adjust to the diet change. Ironically, while well-intentioned people try to help the deer by feeding, they may be harming them due to the time and energy needed to convert the microorganisms.
- Inferior Habitat and Traveling Energy Feed sites lure deer away from natural wintering areas. This attraction can trap deer in inferior winter habitat and increase the chance of malnutrition and predation.
- Unintended Impacts on Good Winter Cover Timber companies and other landowners alter cutting practices to protect good deer yards. If deer go to feed sites instead of protected deer yards, then the timber companies will see little value in continuing to protect the wintering areas. Further, young deer that associate feeding sites with winter habitat may never learn to occupy natural winter habitat. Thus, feeding may produce long-term habitat loss and critical behavioral change. The New Hampshire Fish and Game Department's Position The New Hampshire Fish and Game Department recognizes the long-term viability of the deer herd is not dependent on supplemental winter feeding anywhere in the state.

The Fish and Game Department does not advocate the supplemental feeding of deer, will not participate in winter feeding efforts and urges landowners to not provide supplemental feed to deer.

How You Can Help Deer

For the long-term health of deer, the best management strategy is to keep deer dependent on their natural food and cover. A healthy deer population will be sustained if New Hampshire maintains mature softwood wintering areas, young hardwood stands, nut-producing trees (like oak and beech) and forest openings.

Landowners can help by developing a management plan that uses wildlife and its habitat as guiding objectives. Sustainable timber harvesting is compatible with protecting winter deer yards and other deer habitat features. Also, landowners can recognize the role of hunters as the primary tool for wildlife biologists to regulate deer densities. Allowing hunter access to huntable lands is an effective way to maintain a healthy balance between deer and their habitat.

7. <https://muledeer.org/> - I wanted this site to have so much, they are partnered with a lot of groups (both government and nonprofit) for the conservation of habitat, migration, and healthy longevity of the deer populations. I was unable to find, other than some blogs, any real facts on the website. It might be worth reaching out to them.

- The Mule Deer Foundation is the only conservation group in North America dedicated to restoring, improving, and protecting mule deer and black-tailed deer and their habitat, with a focus on science and program efficiency. Our [conservation programs](#) combined with our grassroots support are the foundation of who we are as an organization. We are committed to sustaining our western deer populations by ensuring quality habitat in the areas deer need on a daily, seasonal, and yearly basis. Our conservation efforts are delivered through efforts by [MDF staff](#) and in partnership with state and federal agencies as well as other non-profit organizations.

8. <https://today.oregonstate.edu/archives/2005/oct/osu-researchers-hair-loss-can-jump-mule-deer-populations> - Article by a professor and graduate student at Oregon State University regarding a study they conducted about how contagious Asian and African lice are in deer populations. Really just discusses how easily the lice travel from deer to deer.

9. Methods for Managing Deer in Populated Areas - PRODUCT OF THE HUMAN WILDLIFE CONFLICTS WORKING GROUP, SPONSORED BY THE ASSOCIATION OF FISH AND WILDLIFE AGENCIES -

https://www.fishwildlife.org/application/files/7315/3745/9637/AFWA_Deer_Mngmt_Pop_Areas_August_31_2018_version.pdf - Comprehensive Plan for managing deer in populated areas.

Discusses monitoring, management, and mitigation options. Summary below:

History of deer management

North America is inhabited by white-tailed, mule, and black-tailed deer. While all species have seen their populations fluctuate with changes in anthropogenic management, deer are a flagship success story. It is estimated that the white-tailed deer population in the U.S. was only about 300,000 in the 1930s. Today, that population has grown to an estimated 30 million; a 1,000 fold increase in less than 100 years. Deer are managed under the North American model of wildlife conservation and they provide many societal benefits. Deer are the most sought-after game animal on the North American continent and all North American deer species are enjoyed as a healthy and nutritious table fare. Prior to European settlement, white-tailed deer were common

throughout most of North America providing meat and hides to the native Americans.

City Challenges with Urban Deer

In many parts of the United States and Canada, deer populations have increased in urban environments. Elected city officials are often asked and expected to solve urban deer-related issues, but there are a variety of challenges that must be overcome to address issues and reduce conflicts. The first challenge is to identify the problem and set clear objectives to achieve success. This can be difficult because social tolerance of deer in municipalities varies, with some residents viewing deer as a benefit to the community and others viewing deer as a detriment. This lack of consensus among residents has increasingly become a source of controversy for elected officials, as their polarized constituents propose fundamentally different solutions to address urban deer-related challenges. Residents in favor of having deer in town

promote the philosophy that local citizens need to learn to live and co-exist with wildlife. Those opposed to urban deer often call for strategies to decrease deer densities in an effort to reduce deer-vehicle collisions, address zoonotic diseases risks to humans, alleviate material damage to lawns and gardens, and address public safety concerns.

Wildlife Agency Challenges with Urban Deer

State and provincial wildlife agencies also have challenges to solving urban deer issues. Similar to most cities, many wildlife agencies have limited funds that are primarily generated through license sales, and they may not have a dedicated budget to address urban deer issues.

Limitations exist on using federal funds raised through excise taxes (i.e., Wildlife Restoration Funds) to address nuisance wildlife. Agencies have not been able to hire and support staff in urban settings at the same rate at which urban deer problems have developed. Another set of challenges for state and provincial wildlife agencies is prioritizing which communities to help and how many resources to devote to the problems. Some wildlife agencies have well defined

plans or policies outlining the processes they will take to help communities manage urban deer conflicts. These plans may set criteria, provide direction and consistency, and define management options when working with elected city officials. In the absence of urban deer plans or policies, objectively prioritizing which cities to help and allocating resources may be difficult.

Defining Success in Urban Deer Management

Identifying the challenges of cities and wildlife agencies is an important first step in addressing urban deer issues. Cities and wildlife agencies need to work together to identify the challenges of urban deer and jointly craft solutions that are acceptable to all. Urban deer management has three main components:

1) determining where we are, 2) identifying where we want to be, and 3) bridging the gap between the two places.

Determining “where we are” often involves an understanding of the densities and growth rates of deer in a given area, the number of deer/vehicle collisions, the amount of property damage that is occurring, and the social tolerance of citizens towards deer.

Biology of Deer in Populated Areas

Wildlife populations residing in human populated areas face stresses that differ from their counterparts in rural settings (Ditchkoff et al. 2006). Due to these stresses, wildlife living in populated areas may modify their behavior or life-history strategies to successfully avoid or cope with the different stresses. For deer, behavioral modifications may include shifts in habitat use, diets, feeding behavior, movement patterns, and home range sizes while life-histories may differ in reproductive rates, survival, and disease transmission rates.

Behavioral Adaptations

Although deer appear to avoid human disturbance when possible, they easily habituate to human development and readily use residential areas that contain sufficient cover (Swihart et al. 1995, Kilpatrick and Spohr 2000). Compared to their wildland counterparts, deer in human populated areas make use of vastly different habitat types such as golf courses, lawns, and ornamental shrub rows. With the human development, anthropogenic food sources (e.g., wildlife feeders, gardens, ornamental plants) are introduced on the landscape and deer modify their

behavior and movements to exploit these artificial food sources. For example, suburban deer in Connecticut browsed more heavily near houses, which was attributed to the anthropogenic food

sources found near the human dwellings (Swihart et al. 1995). In general, size of deer home ranges decrease as development and human dwellings increase (Kilpatrick and Spohr 2000, Grund et al. 2002, Storm et al. 2007, Hygnstrom et al. 2011). This could be a result of habitat composition and configuration across the rural-urban gradient and an increase in movement barriers (e.g., highways, railroads, housing developments, and fences) as human development increases (Grund and Woolf 2002, Storm et al. 2007, Wakeling et al. 2015). Wildlife living among developed areas may be forced into smaller home ranges due to limited access to

smaller patches of suitable habitat (Ditchkoff et al. 2006). Alternatively, deer living in developed areas may be able to exploit higher concentrations of food and other resources which allow them to decrease their home range sizes while meeting their annual needs (Tufto et al. 1996, Kie et al. 2002, Saïd and Servanty 2005). Similar to deer in rural settings, movement of deer in developed areas varies by season. During the non-growing season (fall, winter), deer move more than they do during the growing seasons (spring, summer) (Storm et al. 2007, Walter et al. 2010). As food becomes scarcer during the non-growing season, deer increase their movements. Difference in movement may be greater for deer in developed areas as they travel further distances to find suitable resources during the non-growing season. Additionally, deer in populated areas tend to shift their movements toward dwellings in the winter (Vogel 1989, Cornicelli et al. 1996, Kilpatrick and Spohr 2000, Grund et al. 2002, Storm et al. 2007); this can be partially explained by the supplemental food sources and the radiant heat and wind breaks provided by homes (Swihart et al. 1995, Grund et al. 2002).

Biological Adaptations

Densities of deer in areas with higher human densities are typically greater than densities in undeveloped landscapes and areas can become overpopulated due to a lack of natural predators, reduced hunting pressure, increased recruitment, and favorable habitat conditions. Due to the anthropogenic food sources, resources may be less limiting for deer in populated areas and individuals may be in good health despite high population densities (Etter et al. 2002, DeNicola et al. 2008). Further, urban landscaping often provides a constant source of food for the deer and deer within urban areas, especially when at medium-low deer densities, tend to be in optimal health. As nutrition improves, wildlife reproductive rates increase and result in higher offspring survival, and ultimately greater densities (Robbins 1993). Because of the favorable conditions, deer may experience higher reproduction in urban settings than in rural populations (Etter et al. 2002). This could be attributed to the artificially abundant food sources which allow females to reproduce without the density dependent effects experienced in nonurban

landscapes. However, barriers to movement and other stresses may affect deer breeding success and offspring survival (Wakeling et al. 2015). Ditchkoff et al. (2006) documented a high rate of fawn abandonment near populated areas, possibly as a result of human disturbance. Because of differences in hunting pressure, road densities, and predator ecology, deer experience different rates of mortality in rural, exurban, and suburban areas. Deer survival in populated areas is typically higher than rates in rural landscapes due to lack of hunting and natural predators (Bateman and Fleming 2012, Etter et al. 2002). This difference in survival rate is greater for male than female deer because male deer are generally hunted by humans to a larger extent.

Deer in human populated areas are often buffered from natural limiting factors that their counterparts experience in rural and wilderness landscapes. In developed areas, deer often face less pressure from predators and have ample food. However, deer near human populated areas face a different suite of stresses, predators, and obstacles.

Anthropogenic factors such as deer-vehicle collisions, entanglement in lawn structures, drowning in pools, and attacks by domestic dogs may account for alternate mortality for deer in populated areas (Harveson et al. 2007). Deer-vehicle collisions are the principle cause of mortality in areas where deer and humans coexist (Etter et al. 2002, Wakeling et al. 2015). As

road density increase, deer vehicle collisions make up a larger portion of deer mortalities (Forman and Alexander 1998). Although does are killed by vehicles in proportion to their availability on the landscape, bucks are killed at a higher rate than their availability because of the increased buck movements associated with breeding seasons (Olson et al. 2014, Wakeling et al. 2015). Although natural predator densities may be lower in human dominated areas than in rural habitats, human pets may prey on wildlife at rates similar to natural predators (Ditchkoff et al. 2006). Additionally, Ditchkoff et al. (2006) found that coyote predation on white-tailed deer neonates in urban areas exceeds rates found in rural areas. In deer populations that artificially or naturally exceed carrying capacity, abundant deer can reduce hiding cover for neonates and increase their predation risk, which may lower fawn survival (Piccolo et al. 2010). For fawns in one overpopulated area, the primary cause of mortality from birth to 14 days was emaciation, whereas coyote predation was the primary cause in older fawns

(Sams et al. 1996). Low fawn survival may explain why some high density populations in developed areas do not experience growth despite high adult survival and fecundity (Etter et al. 2002). Disease and Environmental Differences Land use and land cover alterations have changed the amount and configuration of habitat available to wildlife. In the West, much human development occurred on deer winter range where deer congregate seasonally; development restricts the available habitat in these seasonal areas with high deer densities and further concentrates deer into smaller areas. Local factors such as gardens, desired ornamental shrubs, and artificial feeding around residences can also concentrate deer at relatively few locations on the landscape and result in smaller home ranges for local populations. Large numbers of animals in close proximity for extended periods of time increases the likelihood of exposure to any diseases that individual deer may carry. The landscape changes in developed areas may accelerate contact rates with infectious agents and influence the dynamics of disease transmission (Ditchkoff et al. 2006, Joly et al. 2006, Miller et al. 2007). As a result, deer disease prevalence in human populated areas can be greater than that found in rural landscapes and can become a major source of mortality (Ricca et al. 2002, Ditchkoff et al. 2006). Because deer survival is typically higher in populated areas where hunting pressure is low and predator populations are reduced, infected deer may live 10 longer, allowing more time to shed infectious agent. Additionally, infected carcasses may last longer on the landscape allowing the disease more time for transmission. Prevalence of chronic wasting disease (CWD) was almost twice as high in developed areas than in undeveloped landscapes (Farnsworth et al. 2005). Because development tends to reduce hunting pressure and increase survival, adult deer, particularly adult males, tend to live longer in human developed areas. Because of this, males were 2–2.5 times more likely to test positive for CWD in human populated versus rural landscapes while the difference in CWD prevalence was relatively insignificant for females. High deer densities and concentration areas, such as that resulting from human development and supplemental feeding, are factors that most likely resulted in the establishment of self-sustaining bovine tuberculosis (TB) in a free-ranging deer population in Michigan (Schmitts et al. 1997). The unnatural concentrations and close contact that results from human development and artificial baiting provides ideal conditions for the transmission of bovine TB through inhalation of infectious aerosols and ingestion of contaminated feed (Whipple and Palmer 2000).

Role of Wildlife Agencies in Managing Deer

The basic tenet of North American wildlife law is the Public Trust Doctrine which affirms that, while natural resources, such as wildlife, belong to the public, government is the entity entrusted to manage wildlife for the conservation and sustainability of that renewable resource and for the benefit of current and future generations. State fish and wildlife boards and commissions set laws and regulations to manage deer as trustees according to this doctrine, and employ the experts that collect the data and provide recommendations pertinent to each state's deer population as trust managers. State fish and wildlife agencies are the best resource for providing biological data, local effects of deer on the environment, laws pertaining to wildlife, advice on how to determine if there is a deer overabundance issue, and the options to address issues. State agencies also monitor the health and disease status of the deer herd, and issue any permits necessary for various management activities such as contraception and sterilization, capture and tagging, translocation, culling, and hunting. However, the public is entitled to hold the trustee responsible for its efforts in managing wildlife and may redress against management actions

The Northeast Section of The Wildlife Society, in their position statement entitled Managing Chronically Overabundant Deer, suggests the following steps to formulating a deer management plan in developed areas:

1. Identify positive and negative deer impacts
2. Define objectives to measure progress towards alleviating or eliminating negative impacts and continuing or enhancing positive impacts
3. Collect data on problematic deer impacts
4. Review management options
5. Invoke decision-making process – legal, social, logistical, and economic
6. Develop and implement a communication plan
7. Ensure state wildlife agency and local government agencies have the ability to authorize regulated harvest where special local hunts may be needed and enhance management authority where possible
8. Identify permitting requirements
9. Implement management actions
10. Monitor changes in deer impact levels
11. Review and modify management actions

Urban Wildlife Task Force

Study Session

**Wildlife Feeding Ordinance
Proposal for the City of
Pocatello**

April 12, 2018

What is the Urban Wildlife Task Force?

- ▣ Dedicated Community Volunteers
- ▣ Varying perspectives, experiences, and interests
- ▣ Address challenges associated with urban wildlife.

Urban Wildlife Task Force Mission

- ▣ To reduce potential safety concerns for humans, pets, and wildlife themselves as well as reducing damage to private property while maintaining the aesthetic and social benefits that wildlife provide.



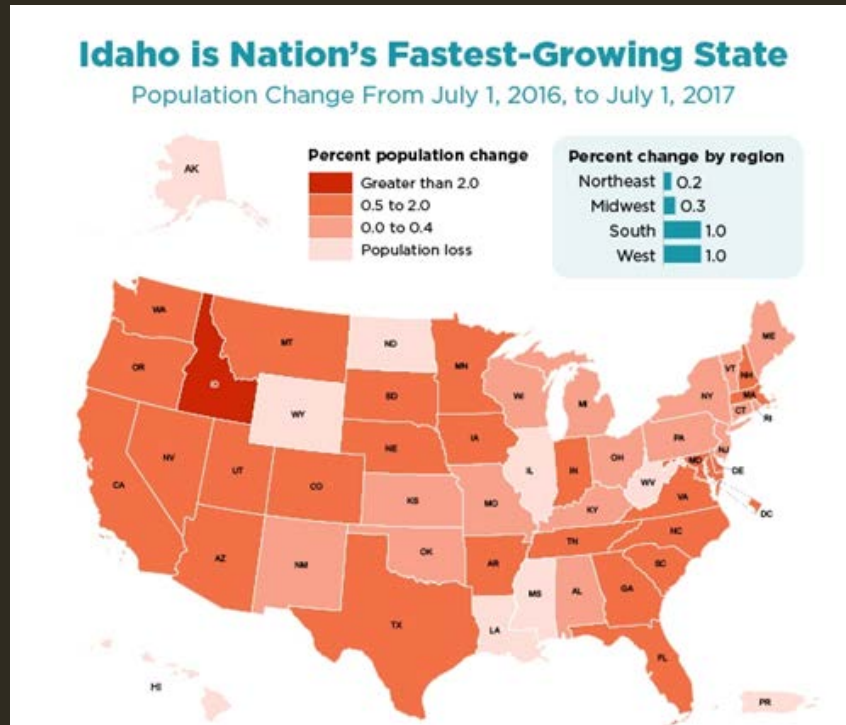
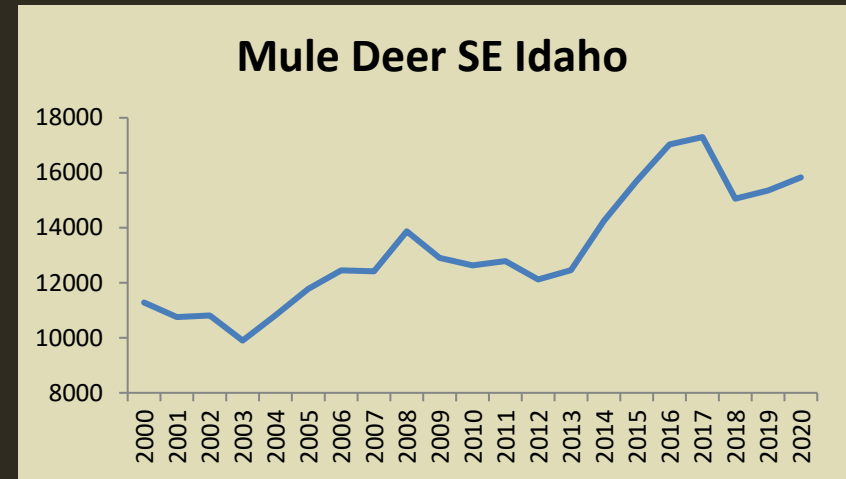


Components of the Ordinance

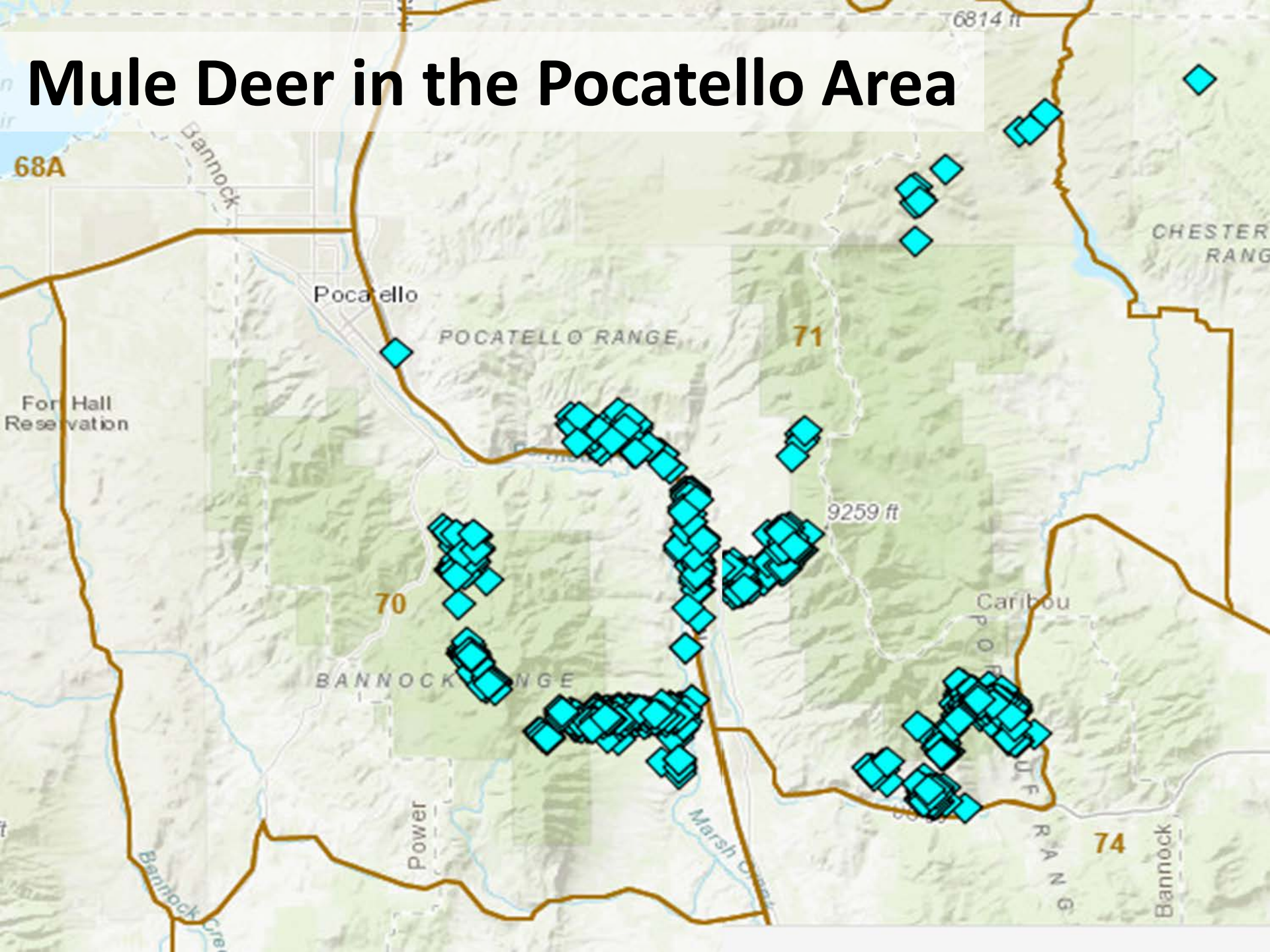
- ▣ **Unlawful for any person to intentionally, knowingly, or recklessly feed or attract Wildlife**
 - **Exceptions:**
 - ▣ **Birds (except wild turkey and waterfowl), Tree Squirrels, livestock/pets**
- ▣ **Seeds, nectar, or other materials in feeders - \geq 5 ft above ground**
- ▣ **Applies to all areas within Pocatello City Limits**
- ▣ **Violations**
 - **1st - Written Warning or Notice of Violations**
 - **Progressive fines/penalties from \$75 - \$750 and any other penalties authorized by law for subsequent violations**
- ▣ **Education will be Paramount**

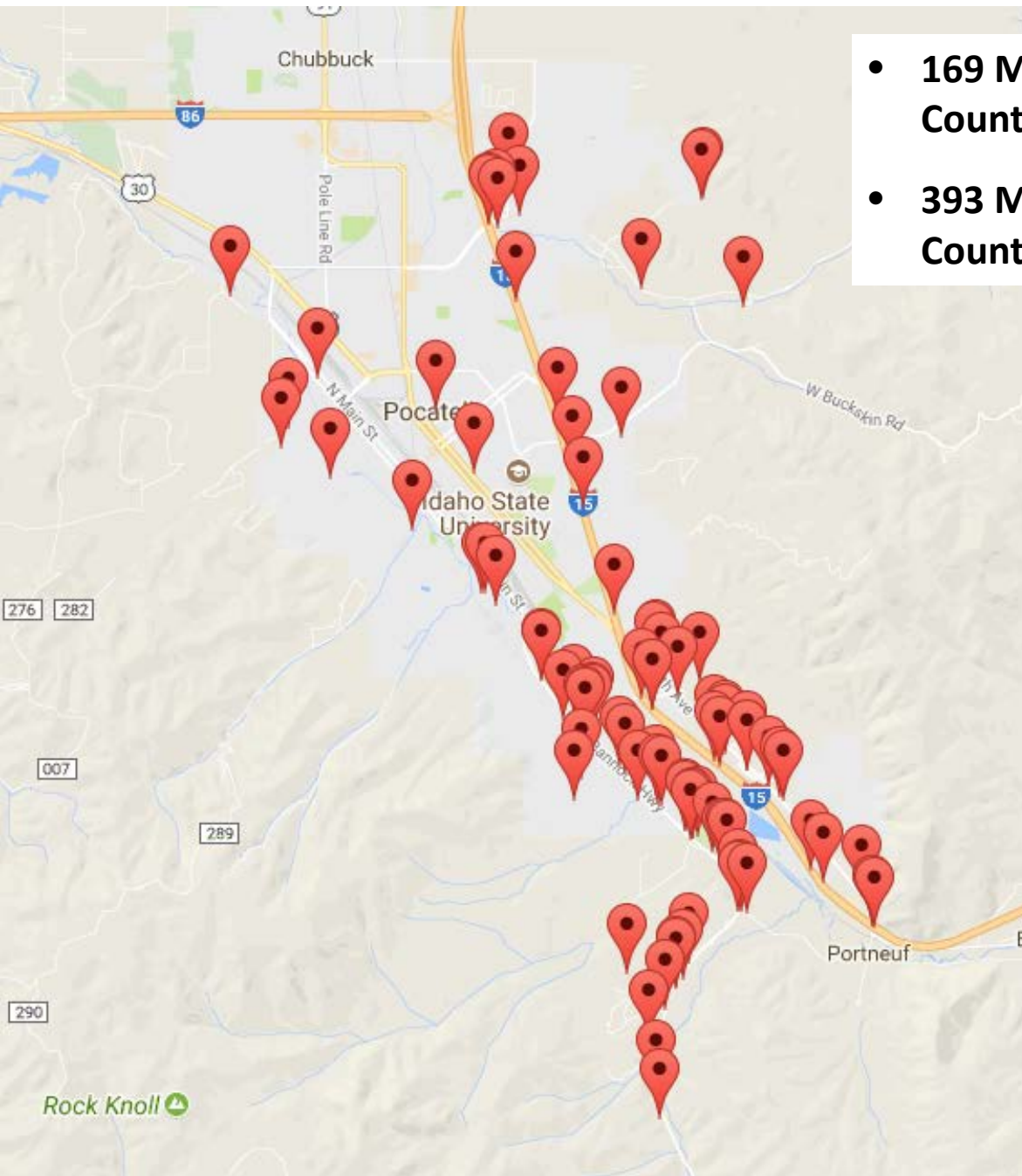
How we got here

- ▣ **Wildlife populations (in general) are thriving (e.g. Mule Deer, Turkey, Geese)**
- ▣ **Human population is increasing and urban centers are expanding**



Mule Deer in the Pocatello Area





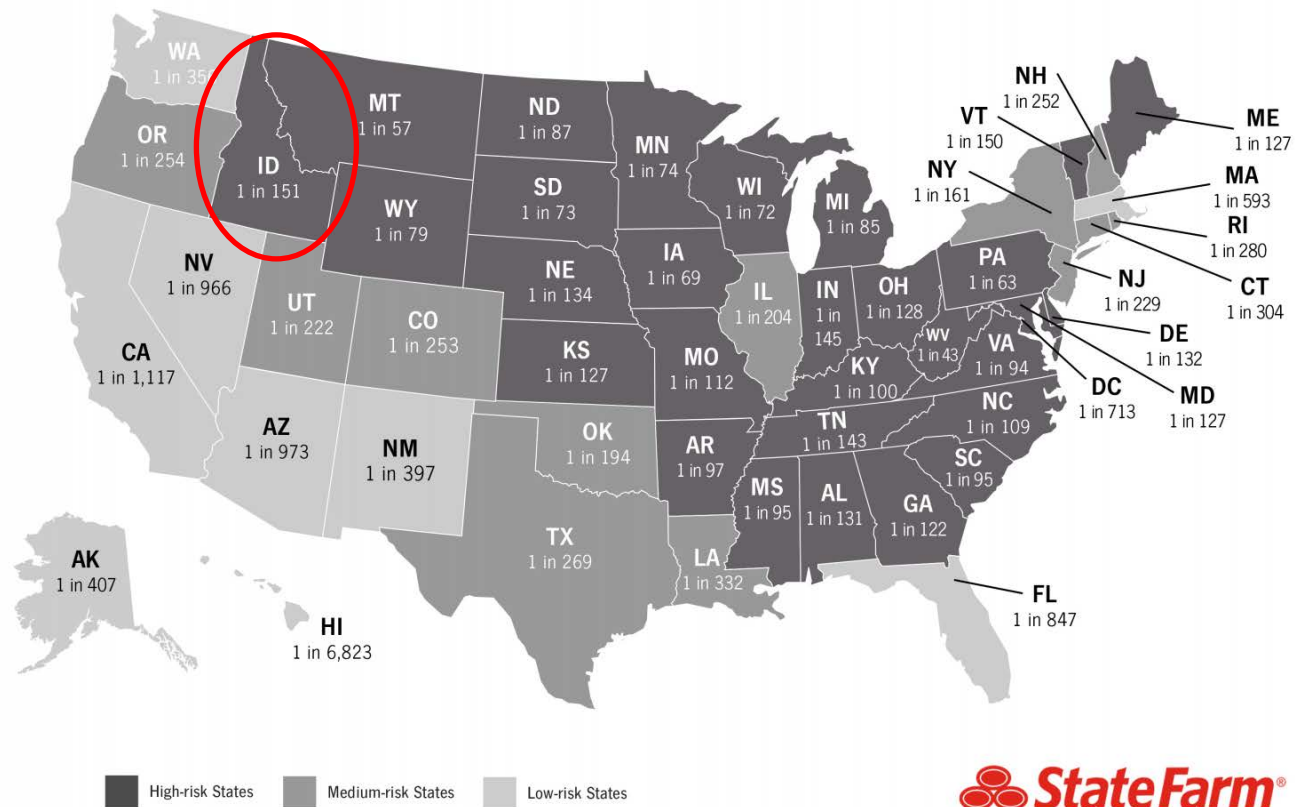
- **169 Mule Deer killed in Bannock County in 2019**
- **393 Mule Deer killed in Bannock County 2015-2017 (3 yrs)**





Chances of Hitting a Deer in My State

July 1, 2016 to June 30, 2017



- 1 out of every 151 drivers hits a deer in Idaho

The national cost per claim average from July 1, 2016 through June 30, 2017 was \$4,179 - up from \$3,995 (2015-16). (for 2017 that's over \$500,000)

Turkey

- Pocatello Creek, Johnny Creek, Gibson Jack

- 35 Turkeys transplanted from Pocatello Creek in 2013 and 2017.
- Transplanted over 150 turkeys winter 2017-2018

- 20+ Turkey Depredations/Kill Permits in 2017 - 2018



Waterfowl SE Idaho (2013 – 2017)

- ▣ USDA Wildlife Services Action
 - 98 geese lethally removed
 - 1,034 translocated
 - Destroyed 525 eggs & 243 nests
 - Over \$8,000 in damages to golf courses, recreational areas, and residential private property



Mountain Lion

- ▣ Primary prey are mule deer
- ▣ Inexperienced, old, injured, or individuals who are inept at catching deer resort to smaller prey such as small pets
- ▣ Feed sites create predictable travel routes and feeding locations for deer that can attract mountain lions



Others



Problems with Feeding

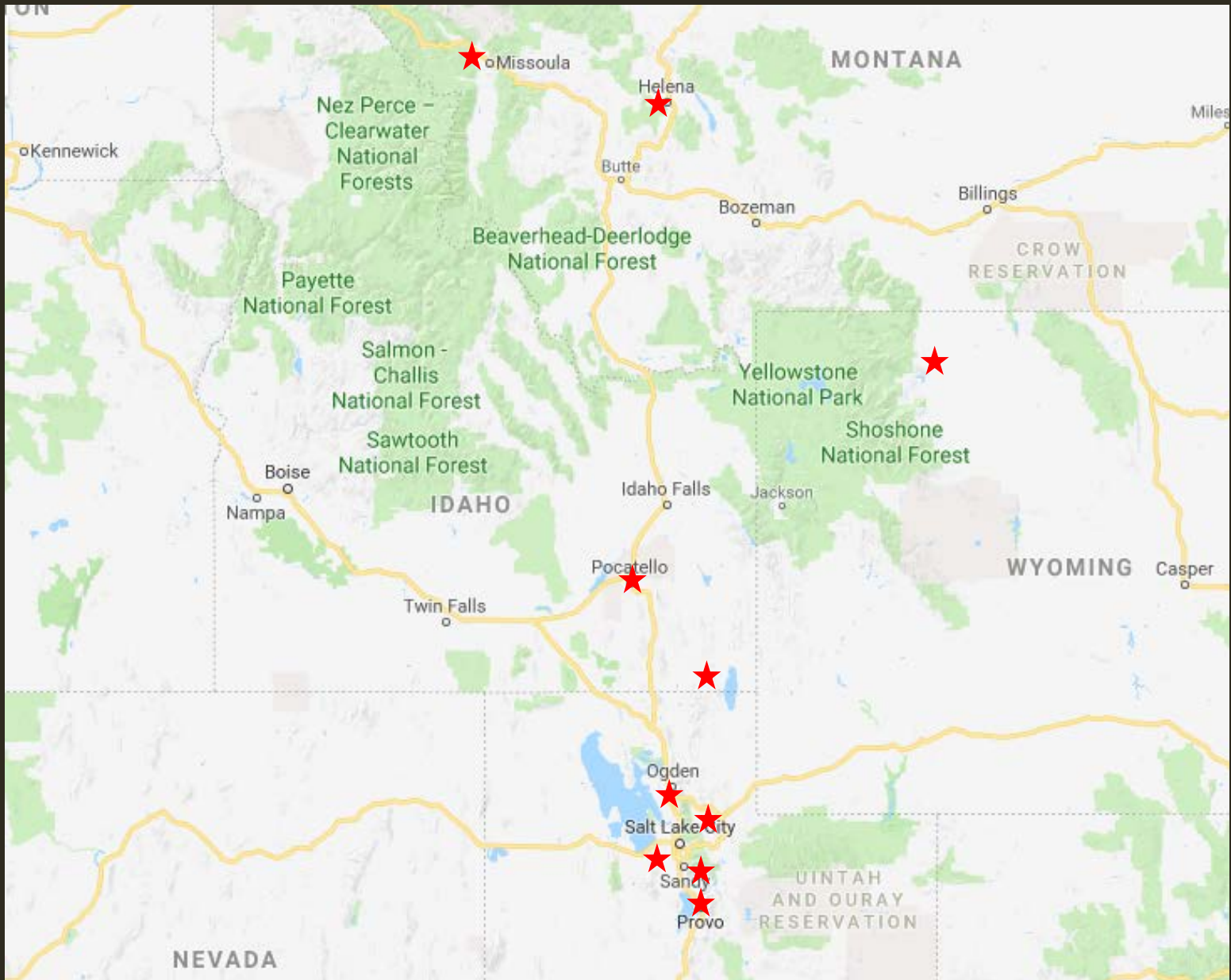
- ▣ Animals become habituated
- ▣ Artificial feeding changes behavior
- ▣ Increases disease risk
- ▣ Can attract unwanted species
- ▣ Feed is often not good for the wildlife and can result in nutritional imbalances
- ▣ Indirect impacts to neighbors



What would a Feeding Ordinance Do?

- ▣ It will NOT ELIMINATE urban wildlife or conflicts
- ▣ It WILL REDUCE potential for human safety risk and property damage
- ▣ It will force animals to adopt more natural behaviors
 - Reduce
 - ▣ road kill/public safety concerns
 - ▣ private property damage
 - ▣ aggressive/abnormal behavior
 - ▣ attracting unwanted species such as mountain lions

Pocatello is Not Alone



Feeding Ordinance Summary

- ▣ Reduce Habituation
- ▣ Reduce Conflict & Safety Concerns
- ▣ Better for wildlife
- ▣ Ultimately – reduce abundance and frequency of animals living in City Limits
- ▣ Wildlife will ALWAYS be part of Pocatello

Thank You



City of Helena

Urban Deer Management Plan

FINDINGS AND RECOMMENDATIONS OF THE HELENA URBAN WILDLIFE TASK FORCE



City of Helena

Final Plan

April 9, 2007

ACKNOWLEDGEMENTS

The Helena Urban Wildlife Task Force acknowledges the following people whose contributions and hard work made the development of this Plan possible:

Helena Urban Wildlife Task Force Members

Matthew Cohn, Co-Chair, representing Helena Citizens' Council
Virginia Niccolucci, Co-Chair, representing community at large
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Helena Citizens

Thank you for your comments!

EXECUTIVE SUMMARY

Over the past decade, the city of Helena has experienced an increase in the urban deer population that has threatened public health and safety, real and personal property, and welfare of the deer. In order to address urban deer issues, the Helena City Commission (Commission) passed a resolution to create the Helena Urban Wildlife Task Force (Task Force). The Task Force was charged with determining whether an urban deer problem exists and with identifying possible management options to be included in an urban deer management program (Program).

The Task Force compiled the *“City of Helena Urban Deer Management Plan - Findings and Recommendations of the Helena Urban Wildlife Task Force”* (Plan) that summarizes the administrative process, technical information, and management options used to recommend specific management and administrative actions to the Commission. The intended use of the Plan is to provide the Commission with a starting point to move forward in adopting and implementing urban deer management actions through a Program.

The Plan summarizes the following about urban deer in Helena:

- They are a natural and permanent part of the Helena community;
- They are currently a public health and safety problem in Helena;
- Lethal and non-lethal management actions are currently necessary;
- The population should be reduced and maintained through management actions;
- Management actions must be (1) safe, (2) humane, and (3) achievable;
- Management actions must build upon city ordinances and work to complement Helena’s values and quality of life; and
- Annual evaluation of management actions must include considerations for human health and safety, cost to implement, biological integrity, conflict resolution, and social / political realities.

The Task Force recommends the Commission take the following actions:

- Establish a permanent Urban Wildlife Advisory Committee;
- Create an administrative process to ensure the Plan remains current; and
- Implement immediate management actions to include a combination of: (1) conducting public education / outreach; (2) reviewing zoning / ordinances / laws; (3) promoting landscaping / repellents / barriers; and (4) hiring professional wildlife removers. Other management actions to evaluate over time include (1) fertility / sterility; (2) capture and euthanize; (3) certified public hunting; and (4) deer tracking & aversive conditioning. Future urban deer management actions will be determined following a full review of previous actions taken using the Adaptive Management Strategy.

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1.0 INTRODUCTION

1.1 Background

Over the last ten years, the city of Helena and surrounding area has experienced an increase in numbers of urban deer and associated human-deer conflicts. These issues often result in public safety concerns, property damage, and concerns for the welfare of the deer. As the urban deer population in Helena continues to grow, resident tolerance for deer damage has sharply declined. Unfortunately, some interactions resulted in a negative public perception of urban deer leading to demands for urban deer management actions.

In response to the statewide urban deer issue, the 2003 Legislature enacted HB 249 authorizing local governments, in cooperation with the state Fish, Wildlife, and Parks (FWP), to adopt and implement plans to control, remove, and restrict game animals within local boundaries for public health and safety purposes. It was later amended by SB 410 in the 2005 Legislature. This legislation is codified as 7-31-4110, MCA - Restriction of Wildlife. The statute provides an opportunity for FWP to work with Helena in a cooperative manner to address urban wildlife concerns.

As provided in 7-31-4110 MCA, the Helena City Commission (Commission) pursued the urban deer issue. On February 13, 2006, the Commission passed Resolution #19318 that created the Helena Urban Wildlife Task Force (Task Force). The Commission charged the Task Force with evaluating the current condition of Helena's urban deer population and with recommending urban deer management actions. Resolution #19318, recruitment of Task Force members, membership contact information, and charge to Task Force members are included as Appendix A.

Managing urban deer as a resource, rather than merely pests, requires community collaboration on option selection and implementation. Human-deer issues are primarily characterized as (1) health and safety issues for humans, pets, and deer; and (2) property damage. FWP and City Animal Control customarily respond to urban deer issues by prioritizing health and safety issues and addressing property damage with educational materials. Currently, FWP works cooperatively with City Animal Control to respond to complaints and offers suggestions on how to minimize conflicts.

The Task Force compiled the *"City of Helena Urban Deer Management Plan - Findings and Recommendations of the Helena Urban Wildlife Task Force"* (Plan) that summarizes the process, technical information, and management options the Task Force used to recommend urban deer management and administrative actions to the Commission. The Plan is Helena's first attempt at recommending management actions to address urban deer within Helena. The Plan may be used as guidance when implementing the Program. The success or failure of urban deer management will ultimately depend upon active and conscious public participation in the development and implementation of urban deer management actions.

1.2 Scope and Applicability

The Task Force was charged with determining whether urban wildlife problems exist within the city limits of Helena (City limits). If so, the Task Force was required to recommend actions to manage urban wildlife within City limits, with a primary emphasis on mule deer. From the onset, the Task Force determined urban deer issues were the principal focus of community dialog and the Plan development timeline could not accommodate discussion of other wildlife species. Consequently, the Plan is only applicable to the management of urban deer within City limits. However, the Task Force did consider the effects of urban deer management actions on habitats, species, and residents residing outside City limits.

1.3 Purpose

The purpose of the Plan is to (1) identify the appropriate number of urban deer within City limits that will be tolerated at our community's social acceptance level, and (2) identify urban deer management actions for attaining that balance. The Commission may find it necessary to strike a balance between the aesthetic and sentimental value some residents place on urban deer and the unwelcome interactions and/or costly property damage they cause.

The Task Force recognizes that urban growth and loss of wildlife habitat is the basis for a geographically expanding conflict between the community and deer, as well as other wildlife. This issue requires urban growth planning processes to consider a variety of wildlife issues and deliberate Commission action.

The Task Force believes urban deer populations, left unchecked, will continue to increase as deer readily adapt to our expanding urban habitat. Thus, the growing urban deer population within City limits will continue to result in human-deer conflict. The concept of managing urban deer is based, not solely on the biological carrying capacity, but principally on the social carrying capacity of Helena. Successful implementation of urban deer management actions should maximize the benefits to both residents and deer.

Additionally, the Plan provides the Commission with recommended urban deer management actions that address the roles for the state, city, and residents. The Plan also demonstrates an appropriate level of community involvement necessary for option development and decision-making processes.

2.0 COMMUNITY DEER MANAGEMENT PLANS

Several Montana communities such as Colstrip, Fort Peck, and Missoula have pursued or are currently pursuing urban deer management plans. Rapid City, South Dakota and Iowa City, Iowa also have progressive urban deer management programs. Generally, these communities have organized work groups to investigate the extent of the problem and to determine the number of urban deer their community prefers to sustain. Additionally, these work groups seek to implement urban deer management actions that were determined acceptable by their community.

All community deer management plans have pros and cons. However, communities should understand their own urban environment and allow community participation in identifying sustainable deer population numbers and development of urban deer management options.

The following summarizes several community deer management plans:

2.1 Colstrip

Large deer populations around the Colstrip area was determined to threaten human health and safety, damage property, and were considered not conducive to the long-term health of the herd or their habitat. Residents of Colstrip formed the Colstrip Deer Management Working Group. In April 1997, the Working Group developed the Colstrip Deer Management Action Plan (Colstrip Plan). Following the passage of SB 410 in 2005, the Colstrip Plan was updated and revised to its current form.

The purpose of the Colstrip Plan is to reduce the negative impacts to people caused by the deer in and near the city. The goal of Colstrip Plan is to eliminate individual deer that threaten human health and safety and to reduce damage to property by reducing deer numbers in the city. The Colstrip Plan is included as Appendix B.

2.2 Fort Peck

The City of Fort Peck (Fort Peck) urban deer management plan is a joint effort among Fort Peck, US Army Corp of Engineers (COE) and Montana Fish, Wildlife and Parks (FWP) to cooperatively resolve urban deer management issues within the Fort Peck city limits. Parties review with other law enforcement agencies legal issues and any lethal action which may be taken pursuant to this plan.

Fort Peck discourages feeding activities and may consider making feeding and other attractants illegal in town. Fort Peck contacts FWP when deer issues reach critical levels beyond the capacity of city officials to adequately respond. Fort Peck authorizes hunting in specific areas. Fort Peck develops possible funding sources to minimize expenses. Under extreme conditions, Fort Peck authorizes shotgun, muzzleloader and handguns in approved places. Fort Peck authorizes removal of aggressive deer within COE boundaries with consensus of FWP.

All of the property outside and adjacent to the Fort Peck boundary is controlled by the COE. The COE develops and/or maintains access for hunters to legally harvest deer around the town boundary. COE has allowed some disabled hunters to hunt with restrictions within an adjacent campground.

FWP provides educational materials on deer populations and feeding concerns. FWP verifies Fort Peck complaints of nuisance and/or aggressive deer and develops consensus in resolving the issue. FWP develops a list of hunters to harvest deer if and when necessary and reviews safety concerns and legal issues with hunters. FWP issues "Kill Permits" or "Game Damage" permits within Fort Peck. The animal carcasses are delivered to local meat processors. The County Food Bank sometimes bears the expense of processing these animals. The Fort Peck proposed plan is included as Appendix C.

2.3 Missoula

The Missoula Urban Wildlife Subcommittee (Subcommittee) is composed of City Council members, FWP biologists and game wardens, and citizens from the general public. The Subcommittee has worked to develop an ordinance prohibiting the feeding and attracting of certain wildlife.

The Subcommittee seeks to develop an Urban Wildlife Management Plan in 2007, relying heavily on assistance from FWP. In Fall 2006, the subcommittee conducted a survey of Missoula residents to receive comments and suggestions. This information, in part, will be used to develop and implement the wildlife management plan. To date, the subcommittee has not recommended any specific management actions. The Missoula ordinance prohibiting the feeding and attracting of certain wildlife is contained in Appendix D.

2.4 Rapid City, South Dakota

Rapid City, South Dakota (City) began their urban deer management program in 1998 in response to issues caused by urban deer. Since that time, the program has succeeded in its objective of reducing and maintaining the urban deer population. In fact, from 2002 – 2004 when program funding was unavailable, the community witnessed a 25 percent increase in urban deer.

Annual Evaluation of Urban Deer Population

Each year, the City works with the South Dakota Game and Fish agency to conduct an urban deer survey within the City limits. If the annual population survey indicates more deer than in the previous survey, the City notifies the City Council and recommends taking action to reduce deer.

With direction from the City Council, the City applies to the state Game and Fish agency for a number of urban deer licenses. In 2006, the state issued 300 urban deer

licenses and in 2005 they issued 200 licenses. The increase in urban deer licenses indicates the urban deer population continues to grow.

How Urban Deer Are Removed

The City does not allow archery shooting due to the liability, but did approve of sharp shooting. Sharp shooting was deemed safe because of the areas of the hunt and the direction of the bullet. Each shooting site has sufficient backdrops, i.e. is located in front of a hill or no houses behind. Contractors are also required to track and account for each bullet.

The City currently contracts with two City employees that have taken a sharp shooting course sponsored by the city police. The contractors charge about \$65 / per deer plus expenses which amounts to about \$75 / deer. The contractors can harvest about 300 deer in 3 weeks using a city truck with a lift. Harvesting occurs in December and January.

The City has designated safe shooting sites around the City. These shooting sites generally correspond to areas within the City that have the greatest number of urban deer as indicated by the annual survey. The shooting sites are typically located in City parks, golf courses or on private land of more than five acres and use bait to lure the deer into position.

Contractors alert police dispatch when they are in the field. They typically operate between 11:00 p.m. and 5:00 a.m. so as not to conflict with the public. Contractors use a spotlight and most shots are taken within 20 yards using a .22 long rifle.

How the Meat is Distributed

Following a kill, contractors take the carcasses to a remote site for field dressing and then transport them to a City warehouse. State Game and Fish officials remove the heads for testing of chronic wasting disease. The City used to process the meat for distribution. However, that option has been discontinued due to the high cost. Today, the City maintains a public distribution list that involves more than 400 people. Approximately 60-70 percent of these residents are considered low income. Residents may claim a deer following a transfer of hunting license to their name. Most residents take it to a butcher shop and get it packaged or process the meat themselves. Some public assistance organizations claim deer to feed their clients.

Other Program Considerations

The urban deer program is funded by the City Park Department budget and costs approximately \$20,000 per year. Most residents are unaware when the program begins or ends except for when to get on the meat distribution waiting list. The City has only had one minor complaint in the last four years. The City considers its liability to be low due to the advance planning and training.

The Rapid City South Dakota 2001 deer herd management program is contained in Appendix E.

2.4 Iowa City, Iowa

Iowa City (City) determined that to prevent irreparable damage to the ecosystems and to prevent significant injury or damage to persons or property, the City Council set the maximum deer population density to be twenty-five (25) per square mile per City-designated management district.

The City conducts urban deer population control through the use of special deer management areas as designated by the City Council. The City is allowed to kill as many deer as the City determines necessary to reach its desired goal. Killing occurs between September 1 and February 28. The City is allowed to utilize sharpshooting with centerfire rifles and rimfire rifles for the lethal removal of deer. Bait may be used to attract deer to the sites. The City must determine the locations, training, and all other conditions for the sharpshooting activities. The City also complies with all applicable state laws.

All deer killed by sharpshooting are processed for human consumption and distributed free of charge. Processing lockers participating in the plan are allowed to keep and utilize the deer hide. No licenses will be required for the City and no fees will be charged. The City uses sharpshooting over bait to reduce the number of deer in each management district to the population limit.

The Iowa City Urban Deer Task Force (Task Force) convenes each spring to review educational material, deer population numbers (current and projected), management options, and to recommend methods to kill urban deer. Any or all legal lethal methods available (including sharpshooting and bow and arrow hunting) may be utilized after the initial reduction plan if the method(s) meet the following criteria: (1) public safety, (2) community acceptance, and (3) effectiveness in maintaining the desired number of deer.

The urban deer management program also includes educational materials that provide residents with information on urban deer habits and guidelines for limiting localized deer damage through the use of screening, alternative plantings, and other techniques. Educational materials are distributed through a variety of methods including public informational meetings, pamphlets, and government television programs.

The City also evaluates the need for additional roadway signage and / or reflectors that may reduce the likelihood of vehicle deer accidents. This strategy is reviewed annually to track effectiveness. Additionally, thoughtful consideration is given to deer migratory paths as transportation improvement projects are approved by the City Council.

To aid in the implementation of the Long Term Deer Management Plan, the Task Force submits an annual plan to be adopted by the City Council following public hearing. Annual plans as approved by the Council are forwarded to the state Department of Natural Resources and, if necessary, the Natural Resources Council for authorization to implement. The Iowa City, Iowa 2005-2006 urban deer annual report is contained in Appendix F.

3.0 STATE AND CITY DEER REGULATIONS AND RESPONSE

The state of Montana has wild animal control and management regulations. These regulations are generally located under Title 87 – Fish and Wildlife and Title 7 – Local Government, MCA. These regulations, in part, allow municipal governments to adopt community wildlife management plans to address wildlife that managed by the state.

The City of Helena (City) also has wild animal regulations as part of city code. These regulations are located under Title 5 – Police Regulations, Chapter 2 – Animal Control; and Chapter 3 – Animals. These regulations, in part, seek to limit the control and feeding of deer within City limits.

Applicable sections of Helena city code are outlined below:

3.1 5-2-21: Wild Animals; Permits and Exceptions

It shall be unlawful for any person to keep or maintain, or cause to be kept or maintained, any wild animal without first applying for and receiving a permit from the animal control officer except that no permit is required to keep or maintain the following wild animals: canaries, parakeets, chinchillas, chipmunks, gophers, finches, guinea pigs, hamsters, marmoset monkeys, parrot-type birds, rabbits, squirrel monkeys, turtles, tropical fish (except caribe), nonpoisonous reptiles (where permitted by state and federal law), white mice and white rats. The provisions of this section shall not prohibit the keeping or maintaining of the following wild animals:

- A. Any wild animals which are kept confined in zoos, museums or any other place where they are kept as live specimens for the public to view.
- B. Any wild animals which are kept confined and placed on exhibit in a circus, carnival or any other type of exhibit or show.
- C. Wild animals in bona fide, licensed veterinary hospitals for treatment. (Ord. 2193, 8-10-1981)

3.2 5-3-6: Feeding of Deer

Except for deer allowed to be kept as wild animals under section 5-2-21 of this title, a person may not purposely or knowingly provide supplemental feed to deer. (Ord. 3046, 12-5-2005)

State code applicable to municipal wildlife management plans is outlined below:

3.3 7-31-4110: Restriction of Wildlife

(1) A city or town may adopt a plan to control, remove, and restrict game animals, as defined in 87-2-101, within the boundaries of the city or town limits for public health and safety purposes. Upon adoption of a plan, the city or town shall notify the department of fish, wildlife, and parks of the plan. If the department of fish, wildlife, and parks approves the plan or approves the plan with conditions, the city or town may implement the plan as approved or as approved with conditions.

(2) The plan may allow the hunting of game animals and provide restrictions on the feeding of game animals. History: En. Sec. 1, Ch. 466, L. 2003; amd. Sec. 3, Ch. 261, L. 2005.

3.4 Current Urban Deer Management Response

Helena and FWP currently respond to urban deer reports. Both agencies use established protocols to evaluate each report prior to taking action. Below are summaries of both Helena and FWP response protocols with a summary of reports to date. Response reports are included as Appendix G.

Helena Police Department:

The Animal Control Officer (ACO) responds to a variety of calls pertaining to wildlife. The majority of wild animal calls consist of deer and skunks, but the ACO also responds to a variety of other wild animal calls due to reports of bites or contact with a rabies vector animal such as a bat, or the animal is injured or dead. Other responses are for calls regarding potentially dangerous animals such as bears and mountain lions and are referred to FWP.

The ACO responds to citizens who report property damage by wildlife. For many of these reports, citizens are referred to the FWP web site for information. When the ACO is not available, a police officer responds to calls of injured animals. Injured deer are only dispatched when they are unable to stand. FWP may be called if police officers are unable to respond.

Police officers also respond to calls of aggressive deer. If there are merits to the complaint, then FWP is called to respond. FWP then makes the determination for the outcome of the incident. Dead deer are removed by the ACO, FWP, or city sanitation and transported to the city transfer station. FWP notifies Helena when they dispatch an animal, within the city, due to injuries or aggressiveness.

A summary of Helena urban deer reports is outlined in Table 1 below:

**TABLE 1
SUMMARY OF HELENA URBAN DEER REPORTS¹**

Year	Dead or Injured	Other Problems	Total	Vehicle Accidents²
2003	86	17	103	16
2004	77	22	99	30
2005	127	55	182	31
2006	193	48	241	30

¹ Includes both Mule and White-tailed deer. If responded, reports may also be accounted for by FWP.

² These records are not exclusive of "Dead or Injured" and "Other Problems" reports. Therefore, cannot be included in the total.

Montana Fish, Wildlife, and Parks Department:

The Helena Area Resource Office currently responds to public reports involving urban deer. However, public reports also include, but are not limited to a variety of other animal species such as antelope, eagles, owls, bats, bears, beavers, coyotes, crows, dogs, ducks, elk, falcons, geese, herons, fox, snakes, squirrels, hawks, moose, magpies, marmots, muskrats, prairie dogs, pelicans, rabbits, raccoons, turkeys, woodpeckers, and skunks.

Regarding urban deer reports, FWP adheres to an established procedure when receiving public reports. The disposition of every call is tracked. Primarily, FWP staff provides the public with information outlining strategies for how to live with deer and the report is documented in an agency database. If the individual requests specific information or requests a site visit by a warden or biologist, FWP responds accordingly.

When a site visit is deemed necessary, FWP personnel proceed to assess the situation. Deer are evaluated on a number of criteria. Generally, if deer are observed to be in a physical condition that doesn't allow movement, they are dispatched. If animals are ambulatory, even if injured, they are not dispatched. If the animal is determined to be aggressive and a danger to human safety, it is dispatched. If a young fawn (unable to survive on its own) would be orphaned through this action, the fawn is also dispatched. Within City limits, if an animal is reported dead, then it is picked up and delivered to the city landfill.

FWP has also revised existing hunting districts and approaches to address deer populations. In the Helena area, Hunting District (HD) 388 was created to consolidate the greater Helena valley, and thus more appropriately address suburban deer density, reduce deer densities, address the threat of public safety and property damage, and provide the possibility of hunting options within city open space. This re-districting approach has allowed consolidation of the Helena Valley into one smaller hunting district. Previously, the boundaries of four large hunting districts occurred along highways that ran through Helena. Redistricting of hunting districts has resulted in consolidation of areas of higher human density; the hunting methods allowed within

HD 388 reflect human safety concerns. Hunters are restricted in the western portion of HD 388 to taking deer by means of archery, shotgun, handgun, and traditional muzzleloader. The use of high powered rifles is not allowed in the western two-thirds of the more densely populated hunting district. FWP Hunting District 388 proposal that is currently in effect is included as Appendix H.

A summary of FWP urban deer reports is outlined in Table 2 below:

**TABLE 2
SUMMARY OF FWP URBAN DEER REPORTS¹**

Year	Dead or Injured	Other Problems	Total
2004	58	15	73
2005	73	76	149
2006	96	66	162

¹ Includes both Mule and White-tailed deer. If responded, reports may also be accounted for by the City.

4.0 RESEARCH INFORMATION ON HELENA URBAN DEER

4.1 Resident Telephone Survey

The Task Force was awarded a \$7,000 'Living with Wildlife' grant from FWP. This grant was used, in part, to fund a Helena resident telephone survey on urban deer. The total cost of the public telephone survey was \$10,000. During the Month of December 2006, the University of Montana Bureau of Business & Economic Research secured over 418 surveys from Helena city residents. The completion rate was 63.1 percent with 110 refusals. Typical Montana polls have approximately 50 percent completion rate. The sampling error was + or – five percent and results were broken down by the seven Helena Citizens' Council (HCC) Districts. A map outlining the seven HCC District boundaries is included as Figure 1.0 (page 49). A map outlining the current city of Helena open lands is included as Figure 2.0 (page 50).

Survey interviewers found that the topic of urban deer was of interest to respondents. Questions generally asked whether respondents found urban deer to be a problem within the city of Helena and to rate their level of tolerance for both lethal and non-lethal deer management control techniques. The survey also asked about deer management program funding mechanisms and the potential for health and safety issues. The survey questions and results are included as Appendix I.

4.2 Urban Deer Inventory

Helena awarded a \$6,000 contract to conduct an urban deer inventory. The purpose of the Helena Urban Deer Inventory (Inventory) was to provide the Task Force with an accurate estimate and distribution of the deer population within City limits. Secondly, the Inventory provided sex and age ratios of the estimated urban deer population. Establishing urban deer numbers is a critical prerequisite for the Task Force when determining both the social and biological tolerance for urban deer.

The Inventory employed a method of direct observation of urban deer while driving in a passenger vehicle street-by-street and alley-by-alley. This method is preferred because it may be repeated in future years and the survey data would remain comparable. To ensure survey data accuracy, the city was divided into geographic units that generally follow HCC District boundaries. Each sampling area could be inventoried within 2.5 - 3.0 hours, resulting in approximately 18 to 20 survey events.

Vehicle driving speeds were kept to 25 mph or less. Vehicle stops were made only long enough to verify deer characteristics for recording. A minimum of two observers conducted each survey event. Deer were recorded by street and block. Sex and age of deer were also recorded, i.e. buck, doe, fawn. Survey data was consolidated and reported by the seven HCC Districts.

Survey events were consistently conducted approximately three hours before sunset and/or three hours after sunrise. Each sampling area was inventoried at least twice to further validate the observations. If a sampling area required further validation, a third survey event was conducted. A copy of the Inventory proposal is included as Appendix J.

4.3 1973 Wildlife Study – Helena South Hills Area

The Task Force was provided a 1973 document titled “Wildlife Study” prepared by Karen Zackheim for The Diehl Company. The area studied covered 20 square miles southeast of Helena. The study was concerned with the land located from the south City limits on the upper eastside of Helena, south along I-15 to the Montana City area of Jackson Creek and Clark’s Creek, west to Dry Gulch (Davis Street) back to the City limits bordering the area south of Helena. The area today is considered The South Hills.

This Southeast area was used primarily for sheep grazing prior to 1946 and cattle grazing between 1946 and 1982. At the time of the study, it was still being used from June to October for grazing cattle. Since 1982 there have been no cattle on the land. The area was overgrazed especially during the earlier period. Over 50 species of birds and mammals have been observed. Several species of fish, snakes and amphibians inhabit the area. Among Montana game animals found are mule deer, white-tailed deer, pronghorn antelope, elk and black bear. Several mountain lions also lived in the area.

The wildlife study was undertaken in 1972 to January 1973 by wildlife biologist Forest Tevebaugh of the University of Montana. Field cards were recorded for each wildlife sighting and kept on file at the University of Montana. Tevebaugh made most of the observations but cards were also distributed to area residents and to other personnel working on a land-use capability study.

The results of the study were, in part:

Mule Deer: Mule deer were the most abundant big game species in the study area. According to the report: “...*Fish and Game officials estimate approximately 50 mule deer inhabit the Southeast Helena hills*”. “*No deer were observed in the northern part of the Southeast Helena Study area within a mile of the city of Helena, probably due to the off-road vehicle use this area receives.*” The deer were observed more in the Clark Gulch-Jackson Creek drainages and the Martinez and Holmes Gulch area.

White-tailed Deer: White-tailed deer were seen regularly along Jackson Creek. No numbers were estimated.

In general the study concluded the increased human activity would cause the wildlife to diminish. The author felt that the pronghorn antelope would be seriously impacted. A copy of the 1973 South Hills area wildlife study is included as Appendix K.

4.4 Town Hall Meetings

The Task force hosted two Town Hall meetings. These meetings were used to gather public comments about the telephone survey and the proposed suite of deer management options. The Town Hall meetings were recorded by the Helena Civic Television and were re-broadcasted. Meeting minutes and the video were used by Task Force members to further evaluate potential control options. A summary of the Town Hall minutes and DVD are included as Appendix L.

4.5 Public Comment

The citizens of Helena offered the Task Force comments regarding the proposed urban deer management actions and draft Plan. A majority of written comments were compiled by the Task Force and used as a reference. However, many public comments were received verbally and could not be included in the Plan. Written public comments are included as Appendix M.

4.6 Task Force Timeline / Meetings / Local Newspaper Articles

The Task Force developed a master planning timeline that outlined meeting dates and activities accomplished. The timeline was also used to forecast future activities and identify deadlines. The timeline was continually revised to reflect the changing schedules and to summarize past meetings and work sessions. Task Force meetings were generally held every two weeks in room 326 of the City-County building, 326 N. Park. Meetings were publicly advertised and members of the public regularly attended. Agendas and minutes were kept by the City Parks and Recreation Department. Public comment was solicited at the end of every meeting.

The master planning timeline and a compendium of agendas and minutes are included as Appendices N and O, respectively. Articles by the Independent Record newspaper regarding Task Force meetings and urban deer are included as Appendix P.

4.7 Helena Citizens' Council Quality of Life Survey

HCC administered a 'Quality of Life' (QOL) survey in response to concerns voiced by residents. The QOL committee distributed and collected the surveys from July to September 2006 and received 216 responses back, out of about 2,000 surveys distributed.

HCC made an effort to make the survey accessible through distribution at the Farmers Market, Alive at Five, Library, City-County Building and in both of Helena's local newspapers. Although HCC received back 216 responses, it believes this reflects the thinking of a larger segment of the population. All areas of town, including outlying areas were included in the responses. Participation was not limited to residents.

The survey asked five open-ended questions such as *“What are your concerns (if any) regarding the quality of life issues in Helena?”* and *“What do you see changing in our community that could jeopardize the quality of life in Helena?”*

The survey cost about \$300 to conduct, plus the time and energy of the committee volunteers. Sixteen survey respondents mentioned urban deer. These comments are included as Appendix Q.

4.8 HB 249 & SB 410 – State Legislation

In response to the statewide urban deer issue, the 2003 Legislature enacted HB 249 authorizing local governments, in cooperation with FWP to adopt and implement plans to control, remove, and restrict game animals within local boundaries for public health and safety purposes. It was later amended by SB 410 in the 2005 Legislature. This legislation is codified as 7-31-4110, MCA - Restriction of Wildlife. The statute provides an opportunity for FWP to work with Helena in a cooperative manner to address urban wildlife concerns.

Bill language, public testimony, and HB 249 fiscal note are included as Appendix R.

5.0 FINDINGS ON HELENA URBAN DEER

The Task Force was charged with determining whether urban deer problems exist within City limits. If so, the Task Force was required to recommend actions to managing urban deer within City limits. The purpose of the Plan is to (1) identify the appropriate number of urban deer within Helena that will be tolerated at our community's social acceptance level, and (2) identify urban deer management actions for attaining that balance.

Following a nine-month information gathering process, the Task Force began internal deliberations to answer five core questions: (1) Are the health and/or safety risks to people and urban deer significant enough to be considered a problem, or not? (2) Are urban deer management actions necessary, or not? (3) Has Helena reached its' social carrying capacity of urban deer, or not? (4) Should Helena reduce its urban deer population, or not? and (5) Should Helena establish a permanent Urban Wildlife Advisory Committee, or not?

5.1 Five Core Questions

A planning tool was used to guide Task Force members into answering either "Yes" or "No" to each of the five core questions. Group consensus was achieved to answer each question and references to the appendices were provided. Partial results are outlined below. A summary of full results is included as Appendix S.

Q1. Are the health and / or safety risks to people and urban deer significant enough to be considered a problem, or not?

A1. Group Consensus = YES

Q2. Are urban deer management actions necessary, or not?

A2. Group Consensus = YES

Q3. Has Helena reached its' social carrying capacity for urban deer, or not?

A3. Group Consensus = YES

Q4. Should Helena reduce its urban deer population, or not?

A4. Group Consensus = YES

Q5. Should Helena establish a permanent Urban Wildlife Advisory Committee?

A5. Group Consensus = YES

6.0 URBAN DEER MANAGEMENT OPTIONS FOR HELENA

The Task Force identified the universe of urban deer management options available for immediate and future use within City limits. However, these management options are not necessarily those that may be determined to be the most appropriate. The Task Force advanced these management options for immediate and future consideration with the resulting list being intentionally broad.

The Task Force identified urban deer management options based upon a diverse and extensive evaluation of technical information, literature review, expert testimony, and professional judgment. The Task Force fully examined the economies of scale, effects on deer, budgeting, legality, and logistics of all deer management options. The Task Force recognized certain management actions may be suitable in one situation / location, but impractical in another.

Urban deer management options were categorized as either “lethal” or “non-lethal.” When occasional deer damage is a problem, simple, non-lethal management actions should be available to appropriately address the situation. When sheer numbers of deer become a problem, lethal management actions should also be available to appropriately address the situation.

The Task Force favored an integrated approach that would allow management actions to address both minor damage abatement and larger issues of population control. The Task Force determined the Plan must be effective, but flexible enough to allow for lethal, non-lethal, and/or a combination of management options.

The following are general descriptions of each urban deer management option identified for immediate or future use within City limits. Table 3 (page 25) compares each management option by process, cost, advantage, and disadvantage.

6.1 Maintain Current Management Actions

This management option is considered non-lethal and requires no new action to address urban deer. This management option relies on the continued implementation of Helena city codes that prohibit the supplemental feeding of deer and restricts wild animal ownership. This management option also continues the City Animal Control Officers' and FWP representatives' responses to urban deer issues. With no additional control actions in place, the urban deer population is likely to grow. An increase in deer density brings associated risks of disease, vehicle accidents, property damage, and predation.

The direct costs associated with implementing this management option will increase in proportion to deer population growth. However, the indirect costs will include continued property damage repair and increased collective liability / insurance costs.

6.2 Public Education / Outreach

This management option is considered non-lethal and informs residents of the issues involving urban deer. Educational materials would include information on the illegality and adverse consequences of providing supplemental feed and the risk of attracting increased predator populations. This option may also inform residential / commercial property owners regarding non-lethal management options such as repellents, fencing, unpalatable plants, and human behavior modification, among others.

Education / outreach efforts should effectively communicate the goals of managing deer populations, including information on density trends, automobile collision probabilities and costs, property damage, and habitat impacts. If lethal management options are adopted, educational materials should inform residents of designated areas, times, special provisions, and/or any possible weapons restrictions. Public education / outreach may be accomplished through news articles, PSAs, community access television (HCTV), and neighborhood meetings.

The direct costs associated with implementing this management option are considered minimal and include printing brochures, pamphlets, and advertising.

6.3 Landscaping / Repellents / Barriers

This management option is considered non-lethal and allows residents to take individual, direct, albeit sometimes costly and time-consuming, action to mitigate negative effects of urban deer.

Landscaping choices allow residents to select tree, shrub, and flower species proven to be more deer resistant. However, this strategy may result in site-shifting as deer are simply displaced to another area to feed. Local nurseries are prepared to guide residents in selecting plant species that will deter deer-damage to residential landscaping.

Spray repellents are used to discourage foraging when applied directly to specific plants / sites. To be effective, repellents should be applied prior to anticipated periods of deer browsing. Contact repellents are placed directly on the plant and discourage feeding by producing an unpleasant taste. Many repellents must be reapplied after rain showers and periodically as the plants grow. Changing repellents every few years on each site improves repellent effectiveness. The potency of repellents may vary from year to year and from site to site. When deer numbers approach biological carrying capacity, repellents may be ineffective.

Residents may also restrict areas through mechanical devices such as fencing. An effective deer fence may be an eight foot-tall-barrier or a smaller, electric system. Other fencing options include woven plastic netting installed around specific areas. Regular inspection and maintenance of fences increases their effectiveness. As an example, other deterrents to intrusion may include devices such as motion detectors

that emit high intensity water jets. Some deer deterrents may be hazardous to humans and other animals.

The direct costs to individual residents associated with implementing this management option is considered moderate to high.

6.4 Zoning / Ordinances / Laws

This management option is considered non-lethal and requires local governments to consider ordinances that restrict land-use and/or personal behavior. Land-use ordinances may require developers to include wildlife corridors through subdivisions and/or limit the type and amount of certain landscaping plants. Land-use ordinances may also include city-sponsored drinking water projects for wildlife on open space.

Personal behavior ordinances may restrict the feeding and sheltering of deer within City limits. Another type of ordinance may modify existing firearm ordinances to allow expanded opportunity for hunting (archery or firearms) within City limits. This may also include expanding hunting districts surrounding Helena or modified hunting seasons.

In the future, Montana communities may seek Legislative solutions to managing urban wildlife. Helena may choose to initiate legislation creating or revising state law to further enable both Helena and FWP to better manage urban deer. Helena may also seek to strengthen the policies to profile aggressive and /or injured urban deer subject to dispatch.

The direct costs associated with implementing this management option are considered minimal. Volunteer and city staff time and minor administrative materials are the primary costs.

6.5 Capture and Transfer

This management option is considered non-lethal, although high incidental losses of subject deer often occur. Deer may be trapped, netted, and/or remotely immobilized with tranquilizers (darted) and relocated to non-urban areas.

While this management option may initially appear to be the least objectionable for reducing urban deer, capturing and transferring deer can be expensive and efforts to capture and transfer urban deer have met with little success.

Deer are always subjected to a great deal of stress during capture and transfer activities. Immobilization drugs inhibit the animal's ability to control body temperature and the animal should only be tranquilized for a short period under certain weather conditions. Even in moderate weather, if the animal is allowed to run for some time before successful darting, hyperthermia may cause body temperatures to rise to dangerous levels and can cause death. Because this option is stressful to deer, this

option may result in high deer mortality rates. One study showed only a 15 percent survival rate following relocation.

Information from experiments associated with deer population management in northern Virginia shows capture and transfer leads to high initial mortality (up to 85 percent) in relocated deer. Additionally, the release of deer into other areas will disrupt native wild deer herds, and may increase the incidence of disease in native deer population or initiate / exacerbate other land-use conflicts.

Translocated urban deer are known to gravitate to rural human dwellings and hay stacks or crops, resulting in agricultural game damage. Deer are capable of migrating at least 100 miles. There is no guarantee that transplanted deer will not return to an urban setting. Additionally, FWP is required to respond to incidents of agricultural game damage.

Transplanted deer that have been captured by chemical immobilization cannot be consumed for several months, depending on the immobilization chemical used, so every deer would also have to be ear-tagged to denote that this animal is not suitable for human consumption before a specified date.

The direct costs associated with implementing this management option are considered high. Capture and transfer may be cost-prohibitive. Deer control activity in Wisconsin resulted in capture costs of \$412 per deer. Similar work conducted in New York, New Hampshire, and California varied between \$431 and \$800 per deer. Studies done in the mid-80s and early 1990s also proved very costly, ranging from \$261 - \$567 per deer. In New Jersey it was found that using portable paddock traps, to trap and transfer deer would cost up to \$20,000, not including additional handling fees.

6.6 Capture and Euthanize

This management option is considered lethal because deer are captured and subsequently euthanized. The trap and euthanize option may be most effective in areas where other options cannot feasibly be employed, where deer numbers overwhelm other options, or where individual deer are identified as dangerous. Baited box traps, rocket nets, or drop nets can be used to capture deer, which may then be quickly euthanized using a firearm or bolt gun.

Darting and euthanizing involves authorized professionals with proper equipment. Tranquilizer darts can be fired by air guns and the dart can be tracked electronically. It takes 4-6 minutes for the tranquilizer to take effect, during which time the animal may travel. Deer frequently do not realize that they have been darted and may continue to feed. If the deer moves, it is tracked to where it becomes immobile. The deer is then killed humanely with a captive bolt and then removed.

The meat of a tranquilized animal cannot be consumed and the shooter has little control over where the deer loses consciousness. Additionally, Helena may need to

secure permission of a property owner to retrieve a tranquilized animal. As an alternative, urban deer may be lured by bait to a central area where a net is shot over the animals. The immobilized deer may be quickly dispatched using various means.

Meat from non-tranquilized animals may be donated to local food banks. However, this process would require additional coordination to address appropriate field dressing location, carcass transportation, meat / hide processing agreements, food bank storage and distribution, etc.

The direct costs associated with implementing this management option are considered moderate. Total costs for this kind of management option varies from \$100 to as much as \$600 per deer (including transportation and processing), depending upon the contractor. Capture and euthanize is significantly less costly than capture and transfer (Section 6.5).

6.7 Fertility / Sterilization

This management option is considered non-lethal and reduces the reproductive output of deer consistent with the identified acceptable number of deer and could be considered as a maintenance activity, but it would not measurably reduce population density. Chemical fertility / sterilization control generally requires the need to handle all individual animals and also requires annual treatment to be effective. Fertility, or 'contraceptive' control methods can be categorized as either (1) contraception (i.e., preventing pregnancy) or (2) contragestation (i.e., ending pregnancy). These two contraceptive control methods utilize either supplemental steroid hormones or vaccines and have successfully prevented conception in individually treated deer. Recently, prostaglandin hormones have been used to induce abortions in individually treated deer.

Most fertility control methods available today require two treatments the first year, then annual re-treatment of individual deer every year thereafter, which reduces potential cost effectiveness. Furthermore, the time and effort required to treat a sufficient number of individual deer to achieve control over the population greatly reduces the cost efficiency of fertility control methods.

Current technology enables the successful control of fertility in individually treated animals. However, most of these methods are still experimental and unproven at the population level for use in deer control. To date, fertility control substances have not been approved by the U.S. Food and Drug Administration (FDA). Site-specific "experimental" approval from the FDA is required before fertility control methods can be applied in a deer population. Thus, fertility control methods are not available today for routine, managerial application in deer control programs. These methods have potential for use in deer population control; future research and development may improve their applicability.

Fertility / Sterilization options do not effectively reduce an overpopulation of urban deer, but merely slows the growth of the herd. The direct costs associated with

implementing this management option are considered high. Fertility control and/or sterilization may be cost-prohibitive. Actual cost estimates per deer may be as low as \$70 per deer per year. Successful fertility control is contingent on repeated annual treatment of virtually every deer.

6.8 Professional Wildlife Removal

This management option is considered lethal because it euthanizes deer through the use of professional experienced wildlife removers (contractors). Contractors are typically insured and bonded and may employ any means to remove deer, but typically use small caliber rifles or bolt-guns. In all situations, contracted urban deer services has been applied safely with little disturbance to residents. Contractors may selectively remove females to more effectively reduce future numbers of urban deer. This option is considered the quickest method for deer reduction.

Typically, contractors will target deer over bait sites or in confined spaces. Attracting deer to bait stations, especially during winter, allows more deer to be removed than if baiting is not used. Bait stations focus contractors to specific sites so that warning signs can be posted and public access closed. To ensure safety, contractors usually orient themselves relative to the bait station so shooting occurs from an elevated position (e.g., a tree stand or other high blind), directing the bullet in a downward trajectory. With a well-aimed shot, death of the deer is instant.

Meat from the animals may be donated to local food banks or to individuals on a registry list. This process would require additional coordination to address appropriate field dressing location, carcass transportation, meat / hide processing agreements, food bank storage and distribution, etc.

The direct costs associated with implementing this management option are considered moderate. Total costs for this kind of management option varies from \$100 to as much as \$600 per deer (including transportation and processing), depending upon the contractor.

6.9 Certified Urban Hunting

This management option is considered lethal because it allows residents who have completed training and certification to dispatch deer. Certification would include coursework focusing on the safety and methods of removing deer in an urban setting, shooting proficiency, and field training sponsored by FWP. A shooting proficiency test would also be required.

A limited number of certified urban hunters would remove deer according to specifications for location and dates in their permits. Specifications could be restricted or liberalized to influence the effect on urban deer population or to address public safety concerns. The meat from urban deer may be consumed and/or donated to local food banks.

The techniques of urban hunting include the use of bows, shotguns, or muzzleloaders, while traditional hunting typically involves the use of high-power rifles. Archery has the advantage of being safe and non-disruptive, but has the disadvantage of being less efficient at reducing urban deer density than firearm hunting. Therefore, an archery hunt may need to be longer than a firearm hunt.

Some may object to the term "hunting" as used with this management option. However, the term recognizes urban deer removal as a particular form of hunting. The Task Force recognizes the Plan's primary objective is the reduction of urban deer populations, not the satisfaction of fair chase elements generally associated with a hunting experience in a non-urban environment.

In the vernacular of hunters, killing an animal is a "harvest" because the hunter utilizes the animal (similar to harvesting a renewable crop) -- when contractors are used, the term "cull" is usually used, reflecting the act of removing a specific animal, in a specific place, to meet a specific objective (change the composition of the population, alter numbers to a specified level, etc.). The distinction between the terms "harvesting" and "culling" is important.

Harvesting is designed to take the sustainable harvestable surplus, while culling intimates reduction of a population. Harvesting is a maintenance activity, while culling is a more deliberate effort to reduce numbers when circumstances merit a response.

According to the FWP 2004 Urban Wildlife Working Group, the use of certified urban hunters is both safe and effective when properly managed. Data shows the likelihood of injury or death to humans as a result of urban deer hunting is considerably less than the likelihood of being injured or killed in a car/deer collision. However, there are instances when hunters themselves have occasionally been injured when falling out of tree stands.

Compared to any other sport, hunting is one of the safest activities. Certified Urban Hunting would be especially safe in an urban setting with special class-room and field proficiency training, as well as limitations on equipment, specified hunting locations and timing restrictions. Research from published studies indicate no other method of urban deer population control is as effective, efficient, and acceptable when circumstances merit. There have been no human safety incidents reported in any of the urban deer hunts that have occurred in dozens of U.S. cities, since urban deer hunts have been established.

The direct costs associated with implementing this management option are considered minimal. Costs for conducting controlled removal are primarily administrative and may be offset by requiring special licenses / permits.

6.10 Deer Tracking & Aversive Conditioning

A method to quantify deer movements and at the same time potentially alter behavior of urban deer (induce wariness), would involve a program that would utilize selected, trained individuals from the community to remotely mark urban deer.

This option has three aspects: (1) gathering information on deer movements, (2) potential to induce deer to avoid or become more wary of people, and (3) provide interactive involvement and education to residents.

The Task Force recognizes that this option is a new concept as it is applied to deer and offers it as a way to involve and educate the public while at the same time gathering useful information about deer movements and seasonal use areas within the community.

The “aversive conditioning” aspect of this option is based on the ‘hard-wired’ behavior of prey species such as deer that have evolved with predators. Prey species are acutely sensitive to the act of stalking by predators. Stalking involves slow stealthy movement that brings the predator into close proximity to its prey. It is the Task Force’s belief that this option may induce deer to become less comfortable and thus more wary of humans as they are stalked and then hit and marked with paintballs. But the stalking aspect of this option is secondary to the fact that deer would be marked with a distinctive color of paint in each HCC District.

Applying the concept of stalking by trained and certified individuals who would color-mark deer in each HCC District with a unique color of paint, could have at least 3 benefits:

- (1) Movement of deer between HCC Districts could be tracked using an interactive, on-line database, as people throughout the city enter information about where they are seeing color-marked deer. Movement information would provide a much better understanding about where deer tend to concentrate at different seasons of the year. Better knowledge of seasonal distribution and local concentration areas would lead to customized application of various options of the Plan to local neighborhoods.
- (2) Deer may be inclined to change their behavior and may try to avoid people when they associate people with the act of stalking; and
- (3) People of the community would become more aware of urban deer, and awareness would lead to active involvement and learning opportunities for the community including: how to successfully live with deer, how to successfully landscape, how to recognize assertive behavior in deer and take proper precautions, and understand the basic biological elements of population change. This could be an effective method to distribute information about the Plan. All Helena citizens would have the opportunity to contribute to the understanding of deer in our community through participation in this program by helping to gather information about the seasonal movements and local

concentrations of deer. Such an understanding of movements and seasonal concentration areas would aid in appropriately customizing management of urban deer for specific neighborhoods.

Because paint will wear off in a matter of weeks or days, deer marking events might occur for a week-long period every month. Regular marking would be necessary to gain timely information about seasonal use areas and movement into other areas of the city. For example, fifty deer marked in July with green paint in HCC District 6 would be entered in the data base, then in late August residents might enter information indicating that they have seen three “green” deer in HCC District 1 where deer were marked in June with yellow paint.

Perhaps several different “colors” of deer are observed in one HCC District during a specific month, thus indicating that this area is a destination location for deer from several areas of the city, during that season. It would also be helpful to determine whether deer are moving in and out of the human population areas and into more rural settings on the fringes of town where lethal methods of control might be more readily implemented. Such information could have practical implications for residents of each city council district as well as consideration for which urban deer management actions might be applicable during different seasons.

Residents who participate in this marking program would have to have had pre-requisite hunter education training as well as urban certification that would include shooting proficiency, and historical perspective about wildlife conservation in North America and why wildlife is a part of our culture and heritage. Certification would involve additional training on safe and responsible use of paintball guns or slingshots in an urban setting, strict rules about asking permission to mark deer on any private property, clean-up of errant water-based paint, recording location, date, time, and number of all deer marked, and submitting all information to a centralized on-line database. Participants would have to be at least a certain minimum age and if a minor, parental approval would be required.

This option is considered non-lethal but with potential to alter deer behavior so they tend to avoid humans and it would have direct practical implications for application of all other deer management options with respect to information that would be gathered about seasonal distribution and concentrations of deer throughout City limits.

TABLE 3

COMPARISON OF URBAN DEER MANAGEMENT OPTIONS

OPTION	PROCESS	COST	ADVANTAGES	DISADVANTAGES
<p>Maintain Current Management Actions</p>	<ul style="list-style-type: none"> • Non-lethal • Maintain compliance with existing city ordinance restricting deer feeding or possession 	<ul style="list-style-type: none"> • Additional costs as deer population increases (for individuals and government actions) • Indirect or future costs include property damage repair to affected residents, potential increase liability / insurance costs to all Helena residents 	<ul style="list-style-type: none"> • Gradual escalation of controversy • Gradual increase in costs 	<ul style="list-style-type: none"> • No reduction in deer population • Property damage increases • Risk of accident / injury, disease, and predation increases • Residents left to deal with deer control on their own • Potential high costs to residents
<p>Public Education / Outreach</p>	<ul style="list-style-type: none"> • Non-lethal • How-to publications for deer-proofing property • Disseminating statistics regarding deer numbers, costs, other impacts • Issuing notice prior to the use of 	<ul style="list-style-type: none"> • Costs associated with publication, copying, mailing brochures or letters • Costs associated with TV, radio, or newspaper ads 	<ul style="list-style-type: none"> • Does not add to controversy • Minimal cost 	<ul style="list-style-type: none"> • No reduction in deer population • Residents left to deal with deer control on their own

OPTION	PROCESS	COST	ADVANTAGES	DISADVANTAGES
<p style="text-align: center;">Landscaping / Repellents / Barriers</p>	lethal methods			
	<ul style="list-style-type: none"> • Non-lethal • Planting appropriate yard and garden plants • Erecting fencing • Applying repellents to plants 	<ul style="list-style-type: none"> • Costs of plants and labor • Costs of fencing materials and labor • Costs of repellents 	<ul style="list-style-type: none"> • Gradual increase in controversy • Moderate cost 	<ul style="list-style-type: none"> • No reduction in deer population • Residents left to deal with deer control on their own • High Cost for some • Unsightly • Marginal effectiveness • May cause site-shifting
<p style="text-align: center;">Zoning / Ordinances / Laws</p>	<ul style="list-style-type: none"> • Non-lethal: Restricting land-use • Non-lethal: Restricting behavior • Lethal: Authorizing special hunting districts/seasons 	<ul style="list-style-type: none"> • No direct or additional costs 	<ul style="list-style-type: none"> • Hunting would help keep populations from increasing • Minimal Cost 	<ul style="list-style-type: none"> • May Impose additional burden on property owners • Enforcement may be problematic. • Without lethal component, may cause site-shifting effect. • May generate controversy. In some cases, More work for City and FWP, but in long term possibly less work.

OPTION	PROCESS	COST	ADVANTAGES	DISADVANTAGES
<p align="center">Fertility / Sterilization</p>	<ul style="list-style-type: none"> • Non-lethal • Inoculate deer with contraceptive or abortifacient agents using dart guns 	<ul style="list-style-type: none"> • Cost of specialized shooters • Cost of contraceptive or abortifacient agents • Costs of dart guns, other equipment 	<ul style="list-style-type: none"> • Deer birth rate reduced • Popular concept in public mind • Humane method 	<ul style="list-style-type: none"> • High cost • Requires 'experimental' approval from FDA • Requires comprehensive darting of herd • Requires annual maintenance • Urban deer population reduction takes several years
<p align="center">Capture and Transfer</p>	<ul style="list-style-type: none"> • Considered non-lethal, but losses of subject deer occurs • Net or tranquilize deer • Transfer to non-urban environment 	<ul style="list-style-type: none"> • Cost of specialized shooters • Costs of tranquilizers, guns, traps, other equipment • Cost of pens or trailers • Costs of transportation to transplant site 	<ul style="list-style-type: none"> • Reduction in deer population • May instill more wariness in deer • Popular concept in public mind 	<ul style="list-style-type: none"> • High cost • Least humane option • May shift impacts • May increase incidence of disease in wild deer populations • May disrupt ecosystem or private land use where translocated • High incidental

OPTION	PROCESS	COST	ADVANTAGES	DISADVANTAGES
				losses of subject deer often occur
Capture and Euthanize	<ul style="list-style-type: none"> • Lethal • Net or tranquilize deer • Euthanize with bolt gun or firearm 	<ul style="list-style-type: none"> • Cost of specialized shooters • Costs of tranquilizers, guns, traps, other equipment • Costs of disposal 	<ul style="list-style-type: none"> • Reduction in deer population • Instill more wariness in deer • Moderate Cost 	<ul style="list-style-type: none"> • May generate controversy • May require property owner permission for capturing or carcass retrieval • Tranquilized deer meat may not be consumed • Legal constraints of seasonality
Professional Wildlife Removal	<ul style="list-style-type: none"> • Lethal • Sites selected and baited • Deer shot over bait sites by contractors • Use in select districts and times • Contractual oversight to ensure proficiency, public health and safety. • Contractual 	<ul style="list-style-type: none"> • Costs of hiring contractors • Costs of bait • Costs of carcass disposal 	<ul style="list-style-type: none"> • Reduction in deer population • Humane method • Expedient method • Safe method • May instill more wariness in deer • Meat may be consumed • Moderate cost 	<ul style="list-style-type: none"> • May generate controversy • May shift impacts • Legal constraints of seasonality

OPTION	PROCESS	COST	ADVANTAGES	DISADVANTAGES
	oversight to ensure proficiency, public health and safety			
Certified Urban Hunting	<ul style="list-style-type: none"> • Lethal • FWP trains selected residents in the safety and proficiency of urban deer hunting • Special districts and times for deer removal are identified 	<ul style="list-style-type: none"> • Costs of training – to be paid for by participant fees or sponsoring organization 	<ul style="list-style-type: none"> • Reduction in deer population • Expedient method • Safe method • May instill more wariness in deer • Meat may be consumed • Minimal cost – use of participant fees 	<ul style="list-style-type: none"> • May be unpopular concept in public mind • May generate controversy • May not be practical or safe in residential areas • May not be allowed or legal on some properties • May shift impacts • Legal constraints of seasonality
Deer Tracking & Aversive Conditioning	<ul style="list-style-type: none"> • Non-lethal • Selected residents are trained in safety and proficiency of urban deer marking • Marking of deer would occur using paintball guns 	<ul style="list-style-type: none"> • Costs of training – to be paid for by participant fees or sponsoring organization 	<ul style="list-style-type: none"> • Deer may become wary of people • Information can be gathered on seasonal use areas and movements of deer • Minimal cost – use of participant fees 	<ul style="list-style-type: none"> • May be unpopular to some people • May generate controversy • Some people may not be willing to grant permission to enter property • May shift impacts • Potential legal

OPTION	PROCESS	COST	ADVANTAGES	DISADVANTAGES
	with specified paint color for each Council District, at specified times by a certified team assigned to a specific HCC District		<ul style="list-style-type: none"> • Increased awareness of both people and deer to each other • May be quite popular among some segments of the population 	constraints with respect to paintball gun use

7.0 EVALUATION OF URBAN DEER MANAGEMENT OPTIONS

When evaluating urban deer management options, the Task Force incorporated a process that fully captured Task Force member and public opinion and assured sufficient input into the final recommendation. The Task Force incorporated an “evaluation criteria” tool to assist in comparing and contrasting each management option.

The Task Force defined evaluation criteria as basic questions that should be addressed for each management option. These questions also considered both the immediate and future consequences of each management option.

The Task Force agreed upon five major evaluation criteria with associated questions:

- Social / Political;
- Human Health and Safety;
- Cost to Implement;
- Conflict Reduction; and
- Biological Integrity.

It is acknowledged there is not a criterion representing the perspective of the individual deer. The Task Force discussed this at great length and determined that deer and habitat health are addressed in the “Biological Integrity” section of the evaluation process.

The following describes the evaluation criteria used to compare / contrast urban deer management options:

7.1 Social / Political

This evaluation criterion focuses on how Helena residents and elected officials may respond to management options in terms of public sentiment and political or legal obstacles.

Social / political questions include:

1. Is this lethal or non-lethal option socially acceptable?
2. Are there political obstacles to implementing this lethal or non-lethal option?
3. Can this lethal or non-lethal option be immediately implemented without changes in law?
4. Is this option consistent with the public survey?
5. Is this option flexible to address city expansion?
6. Are there immediate and future ramifications?
7. Other questions?

7.2 Human Health and Safety

This evaluation criterion focuses on the general health and safety of Helena residents and management personnel.

Human health and safety questions include:

1. Does this option endanger residents?
2. Is this option dangerous to management personnel?
3. Does this option displace health and safety issues?
4. Does this option impact habitat / residents external to the city?
5. Does this option impact habitat / residents internal to the city?
6. Are there immediate and future ramifications?
7. Other questions?

7.3 Cost to Implement

This evaluation criterion focuses on the cost of implementation along with the associated risks and liabilities.

Cost to implement questions include:

1. Does this option require new public expenditures?
2. Does this option require new personal expenditures?
3. Are there sources of program funding? i.e. grants, mill levy, impact fees, other.
4. Does this option have high personal or public risk / liability?
5. Does the cost justify the benefit of this option?
6. Are there immediate and future ramifications?
7. Other questions?

7.4 Conflict Reduction

This evaluation criterion focuses on the ease of implementation and the level of effort to reduce human/wildlife conflicts.

Conflict reduction questions include:

1. How does this option influence human/wildlife interactions?
2. Is the level of effort commensurate with the outcome?
3. Are there immediate and future ramifications?
4. Other questions?

7.5 Biological Integrity

This evaluation criterion focuses on the well-being of the deer through analysis of the impacts to deer herd and individual health.

Biological integrity questions include:

1. Does this option destroy habitat?
2. Is this option supportive of healthy deer and habitat inside & outside Helena?
3. Does this option support the health of the Helena deer population?
4. Are there immediate and future ramifications?
5. Other questions?

8.0 COMPARISON OF URBAN DEER MANAGEMENT OPTIONS

When attempting to select appropriate urban deer management options, Task Force members understood the need to balance concerns of Helena residents while protecting the welfare of deer. Task Force members openly shared their views with one another during a series of open meetings and public forums and reached consensus where possible. Task Force members sought to recommend urban deer management actions as a group, rather than using a "majority rules" approach.

As outlined in Section 6.0 of the Plan, there are a variety of lethal and non-lethal urban deer management options identified as being available for implementation within City limits. The Task Force believed it was best to first compare each management option in order to recommend only those that are most appropriate for Helena. To this end, each evaluation criterion was assigned a scale by which Task Force members used to compare and contrast management options.

Evaluation Criteria Scaling

In order to understand the importance of a particular management option, Task Force members had to be able to evaluate and convey the intensity of their position relative to each other. It was critical to have an accurate measure of opinion when evaluating management options. This was especially true where the opinions of Task Force members and those of the public diverged.

The Task Force compared and contrasted each management option through a relative scoring system. The management option scoring results are summarized in Table 4 (page 34). The strength of conviction for any given management option was estimated by the difference in the sums of the relative scaling for each evaluation criterion. Management options with high total scores were not automatically considered for recommendation, but simply were identified for further analysis and discussion.

Evaluation criteria scaling is summarized as follows:

8.1 Social / Political

This evaluation criterion focuses on how Helena residents and elected officials may respond to management options both in terms of emotional response and economic reality.

Social / political scaling:

- High = 5: Option is not controversial.
- Med = 3: Option is somewhat controversial.
- Low = 1: Option is controversial.

8.2 Human Health and Safety

This evaluation criterion focuses on the general health and safety of Helena residents and management personnel.

Human health and safety scaling:

- High = 5: Option supports health and safety.
- Med = 3: Option somewhat supports health and safety.
- Low = 1: Option compromises health and safety.

8.3 Cost to Implement

This evaluation criterion focuses on the cost of implementation along with the associated risks and liabilities.

Cost to implement scaling:

- High = 5: Option is cost effective.
- Med = 3: Option is somewhat cost effective.
- Low = 1: Option is not cost effective.

8.4 Conflict Resolution

This evaluation criterion focuses on the ease of implementation and the level of effort to reduce human / wildlife conflicts.

Conflict resolution scaling:

- High = 5: Option reduces conflict.
- Med = 3: Option partially reduces conflict.
- Low = 1: Option does not reduce conflict.

8.5 Biological Integrity

This evaluation criterion focuses on the well-being of the deer through analysis of the impacts to herd and habitat health.

Biological integrity scaling:

- High = 5: Option supports healthy deer and habitat.
- Med = 3: Option somewhat supports healthy deer and habitat.
- Low = 1: Option compromises healthy deer and habitat.

TABLE 4
COMPARISON OF URBAN DEER MANAGEMENT OPTIONS

POTENTIAL DEER MANAGEMENT OPTIONS ¹	EVALUATION CRITERIA ²					
	SOCIO-POLITICAL	HEALTH & SAFETY	COST	CONFLICT RESOLUTION	BIOLOGICAL INTERGRITY	TOTAL - RANK ³
1 – Maintain Current Actions	111111311 = 11	111133133 = 17	333333313 = 25	111111113 = 11	111313113 = 15	79 – 10
2 – Public Ed. / Outreach	553555555 = 43	533533555 = 37	553333553 = 35	331353353 = 29	333333335 = 29	173 - 2
3 – Land. / Repel. / Barriers	353333533 = 31	353555333 = 35	333331355 = 29	313311333 = 21	313335313 = 25	141 - 6
4 – Zoning / Ordin. / Laws	333311313 = 21	553553335 = 37	553531313 = 29	333331313 = 23	335553335 = 35	145 - 5
5 – Capture and Transfer	153111531 = 21	553113513 = 27	133111113 = 15	555133533 = 33	131113511 = 17	113 - 9
6 – Capture and Euthanize	313131131 = 17	555133555 = 37	113133131 = 17	535353535 = 37	535353355 = 37	145 - 5
7 – Fertility / Sterilization	331313515 = 25	313313535 = 27	111111313 = 13	333313335 = 27	513313335 = 27	119 - 8
8 – Prof. Wildlife Removal	333311333 = 23	555533535 = 39	555351555 = 39	555555553 = 43	555553355 = 43	187 - 1
9 - Certified Urban Hunting	311111131 = 13	511533135 = 30	55553155 = 39	553553353 = 37	533553355 = 37	156 - 3
10 – Track. / Adver. Condit.	111333355 = 25	331333335 = 27	551333155 = 31	111111133 = 13	331353135 = 27	123 - 7
TOTAL - RANK	230 - 5	313 - 1	272 - 4	274 - 3	292 - 2	

¹ Management options determined to be appropriate for Helena.
² Evaluation criteria used to compare and contrast management options.
³ Evaluation criteria scaling is outlined below:

Social / Political

High = 5: Option is not controversial.
 Med = 3: Option is somewhat controversial.
 Low = 1: Option is controversial.

Human Health and Safety

High = 5: Option supports health / safety.
 Med = 3: Option somewhat supports Health / safety.
 Low = 1: Option comp's health / safety.

Cost to Implement

High = 5: Option is cost effective.
 Med = 3: Option is somewhat cost effective.
 Low = 1: Option not cost effective.

Conflict Resolution

High = 5: Option reduces conflict.
 Med = 3: Option partially reduces conflict.
 Low = 1: Option does not reduce conflict.

Biological Integrity

High = 5: Option supports healthy deer and habitat.
 Med = 3: Option somewhat supports healthy deer and habitat.
 Low = 1: Option compromises healthy deer and habitat.

9.0 RECOMMENDED URBAN DEER MANAGEMENT ACTIONS

The Task Force proceeded with the understanding that successful implementation of urban deer management actions should maximize benefits to both residents and deer.

The Task Force considered costs associated with implementing immediate and future management actions. Level of effort required to implement each action was also considered. Management actions with a history of success in other communities were not always deemed practical or acceptable for Helena. Ultimately, the Task Force selected management actions that were (1) safe, (2) humane, and (3) achievable.

The Task Force recognized that unless aggressive management actions are immediately implemented, the whole urban deer management program may fail. Urban deer management is historically conducted in two phases: (1) the aggressive initial first-year reduction phase, and (2) the maintenance phase. Although the initial reduction phase is costly, if done effectively, costs in the following years are manageable. The Task Force recommends the Commission vigorously enforce the current ordinances relating to feeding urban deer and add other non-lethal options to a deer management plan.

With that in mind, the Task Force recommended the following urban deer management actions: (1) conducting public education / outreach; (2) reviewing zoning / ordinances / laws; (3) promoting landscaping / repellents / barriers; (4) hiring professional wildlife removers; (5) monitoring the effectiveness of fertility / sterility; (6) monitoring use for capture and euthanize; (7) establishing a deer tracking and aversive conditioning research study; and (8) evaluating certified urban hunting. Future management actions will be determined following a review of previous actions taken using the Adaptive Management Strategy (Section 12.0).

The following is a summary of findings for each urban deer management option:

9.1 Maintain Current Management Actions

The Task Force did NOT recommend this management option.

The Task Force found this option to be inappropriate for Helena. The Task Force determined the population growth rate of urban deer and associated wildlife response calls pose too great of a safety threat to humans and deer. However, it was agreed the City must commit to enforcing current no-feeding ordinances.

Reasonable Cost Estimate: NA
Potential Revenue Sources: NA
Role of Agencies: NA

9.2 Public Education / Outreach

The Task Force recommended this management option.

The Task Force found this option to be appropriate for Helena. The Task Force determined that on-going education and outreach was an appropriate means to disseminate information about urban deer management techniques and strategies. The primary form of education and outreach is through brochures, handouts, electronic information, seminars, home visits, etc.

Reasonable Cost Estimate: \$3,000 / year.
Potential Revenue Sources: City general fund, FWP Living with Wildlife Grant, Future Legislative Initiatives, etc.
Role of Agencies: Contributing text / editing / existing public information.

9.3 Landscaping / Repellents / Barriers

The Task Force recommended this management option.

The Task Force found this option to be appropriate for Helena. The Task Force determined that residents have access to deer-resistant landscaping, repellents, and barriers. The cost of these items to protect private property is solely borne by residents. It is not anticipated the City will need any new landscaping, barriers, or repellents other than what it may currently use. The Task Force deemed residential costs to be reasonable.

Landscaping, repellents, and barriers are recommended as being the major topic targeted through public education and outreach activities. Cost to City is included in the estimate for public education and outreach listed above.

Reasonable Cost Estimate: \$0 Residential purchases.
Potential Revenue Sources: NA
Role of Agencies: Contributing text / editing / existing public information.

9.4 Zoning / Ordinances / Laws

The Task Force recommended this management option.

The Task Force found this option to be appropriate for Helena. The Task Force determined that current City subdivision ordinances have the ability to incorporate several provisions that consider urban deer management strategies. This may include provisions for wildlife corridors, cluster development, riparian protection zones, etc. Additionally, the current ordinance addressing the feeding of wildlife may be reviewed and re-evaluated for potential revisions. This also includes City and FWP review of the dispatch criteria policy. Proposed revisions to existing ordinances would result from

future work sessions between city planning staff and the Urban Wildlife Advisory Committee. Legislative initiatives may be needed to revise current county planning laws and requirements. Hunting District 388 may be reviewed to expand opportunities to harvest deer in the areas surrounding Helena.

Reasonable Cost Estimate: \$0
Potential Revenue Sources: NA
Role of Agencies: Contributing text / editing / existing public information.

9.5 Capture and Transfer

The Task Force did NOT recommend this management option.

The Task Force found this option to be inappropriate for Helena. The Task Force determined the various forms of capture and transfer are very stressful and often result in high mortality rates in the relocated deer. The cost of trapping and transferring deer was also found to be high. Efforts to trap and transfer deer have met with varied success and are labor intensive.

Reasonable Cost Estimate: NA
Potential Revenue Sources: NA
Role of Agencies: NA

9.6 Fertility / Sterilization

The Task Force recommended this management option.

The Task Force found this option to be appropriate for Helena. However, the Task Force determined the processes involved and cost to be prohibitive at this time. The Task Force reaffirms its interest in the progress and results of tests using immunocontraception and recommends the future Urban Wildlife Advisory Committee investigate the feasibility of a pilot project in Helena and seek approval from the Commission and FWP prior to implementation.

Reasonable Cost Estimate: \$ unknown
Potential Revenue Sources: Potential public / private grants.
Role of Agencies: Appropriate agency participation.

9.7 Capture and Euthanize

The Task Force recommended this management option.

The Task Force found this option to be appropriate for Helena. The Task Force determined the capture and euthanize option to be most effective in areas where other lethal options cannot feasibly be employed or where individual deer are identified as the problem. Capture and euthanize methods generally are considered less humane than sharpshooting or in some instances, hunting. Baited box traps or rocket nets can be used to capture deer, which can then be euthanized by head shots using a firearm or bolt gun.

Reasonable Cost Estimate: Variable - \$400 - \$800 per deer.
Potential Revenue Sources: City general fund, FWP Living with Wildlife Grant, Future Legislative Initiatives, etc.
Role of Agencies: Appropriate agency participation.

9.8 Professional Wildlife Removal

The Task Force recommended this management option.

The Task Force found this option to be appropriate for Helena. The Task Force determined professional wildlife removal to be the quickest way to safely reduce urban deer. This option can be safely used in many residential areas and city parks using bait sites and stationary marksmen. The deer can be then donated to individuals and / or local food banks. Professional wildlife removers may include either national or local companies. Shooting proficiency tests would be required of both national and local contractors. A roster of residential landowners willing to participate with the management option would also be included.

Reasonable Cost Estimate: Variable - \$65 - \$75 per deer (local business)
\$100 - \$600 per deer (national business).
Potential Revenue Sources: City general fund, FWP Living with Wildlife Grant, Future Legislative Initiatives, etc.
Role of Agencies: Appropriate agency participation.

9.9 Certified Public Hunting

The Task Force recommended this management option.

The Task Force found this option to be appropriate for Helena. The Task Force determined certified public hunting will effectively reduce urban deer. It is understood this option may be controversial. Therefore, the appropriate coordination with the public and media is an integral part of this option. Safety and proficiency tests will be required before hunters are allowed to participate. Costs for conducting certified public hunting are primarily administrative and

could be recuperated through user fees. Recommended areas surrounding Helena would be clearly defined, such as isolated city open spaces. Hunting District 388 regulations would be in effect that limit the use of weapons to shotguns, archery, and muzzleloading. Approval from the Commission and FWP is necessary prior to implementation.

Reasonable Cost Estimate: \$0
Potential Revenue Sources: Participant user fees.
Role of Agencies: Appropriate agency participation.

9.10 Deer Tracking & Aversive Conditioning

The Task Force recommended this management option.

The Task Force found this option to be appropriate for Helena. However, the Task Force determined the program must first be fully evaluated for safety and research study design. The Task Force encourages the future Urban Wildlife Advisory Committee to work with FWP to define this option and seek approval from the Commission and FWP prior to implementation.

Reasonable Cost Estimate: \$ unknown
Potential Revenue Sources: City and FWP cost share.
Role of Agencies: Appropriate agency and community participation.

10.0 RECOMMENDED URBAN DEER POPULATION OBJECTIVE

Population dynamics for any wildlife species are complex and unique. Most urban deer discussions in North America revolve around white-tailed deer because urban communities are often established in riparian zones along the courses of rivers. In the case of Helena, the city was established in the mountain-foothill ecotone that favors mule deer, although white-tailed deer occur in the north portion of the city where streams and riparian habitat exists. Virtually all concerns voiced about deer within Helena pertain to mule deer. However most of the issues relevant to mule deer also pertain to white-tailed deer, with the exception that mule deer may be more aggressive when in close proximity to humans.

Mule deer population dynamics are distinctly different from white-tailed deer and must be addressed separately. Population parameters provided here (natality, mortality, recruitment rates) represent the mountain-foothill habitat of the Bridger Mountains between Bozeman and Townsend, and about 60 miles southeast of Helena. Data has been compiled on mule deer of the Bridger Mountains for more than 50 years, and represents a long-term data set (*Ecology and Management of Mule Deer and White-tailed Deer in Montana*¹).

An inventory of mule deer was conducted in Helena from the middle of December 2006 to the middle of January 2007, and provides the ratios of adult females, adult males, and fawns that are used to initiate the growth model that is applied to the Helena urban mule deer population. The results of the Helena urban deer inventory are included as Appendix J.

10.1 Urban Deer Population Estimate Methodology

Determining a population objective for urban deer in Helena will require reliance on four factors and a small amount of professional judgment. The four factors include:

1. Application of established wildlife management methodology;
2. Utilization of population dynamics information from the mountain-foothill habitats of western Montana;
3. A starting population estimate based upon the Helena Urban Deer Inventory study that involves extrapolation to the entirety of each of the seven HCC Districts; and
4. An assumption that mortality rates of urban deer are less than mortality rates in the wild.

The complete methodology that was applied for each of three scenarios to achieve possible mule deer population objectives is included as Appendix S.

¹ Mackie, Richard, David F. Pac, Kenneth L. Hamlin, and Gary L. Dusek. Montana Fish, Wildlife & Parks Wildlife Division. Helena, MT. Fed. Aid Proj. W-120-R. 180 pp.

Terminology:

Reproductive rate: Means the number of fawns produced per doe at birth.

Mortality rate: Means the number of deer that die within one year in relation to the number of deer present at the beginning of the year.

Recruitment: Means the number of fawns that survive to their first birthday.

Productivity:

The following figures are provided for mule deer in high quality habitats. The female component of the population determines growth of the population. Efficient population management focuses on managing the female component.

Females

- Do not breed as fawns.
- Yearlings breed but at a lower rate than adults – production highly variable.
- Productivity rate of approximately 160 fawns born per 100 adult females for prime age classes (3-9 yrs); less for young/old).
- Ninety percent of females give birth every year.

Males

- Do not breed as fawns.
- Yearlings will breed but at a lower rate than adults.
- A dominant, mature (4 years of age and older) male will breed with dozens of females.

Average Annual Mortality:

- Average annual fawn mortality varied from 60% (Missouri River Breaks) to 73% (Bridger Mountains).
- Adult female = 15% (hunting accounts for less than 1/4 of total mortality).
- Adult male = 55% (hunting accounts for 1/2 to 3/4 of total mortality of adult males and natural causes accounted for the remainder).

Longevity:

- Adult females can live about 12 years and some up to 16 years.
- In most hunted populations, few males live more than 4 years. However, some individuals manage to survive to 7-8 years in light to moderately hunted populations and rarely up to 10-12 years in un-hunted situations.

Early Winter Population Composition:

- In natural populations, adult females generally outnumber adult males by more than 2:1, even where no hunting occurs.
- Long-term average population parameters from the Bridger Mountains were used to provide the basis of population composition in early winter.
- Post season buck:doe ratio = 20:100.
- Fawn:doe ratio (early winter) = 50:100.
- Fawn:adult ratio (early winter) = 41:100.
- This translates into 41 fawns/120 adults = 34% of population are fawns.
- Adult males = 20/120 = 16% of population are males.
- For calculation purposes, the following fawn/male/female percentages are used: 35%, 15% and 50% in early winter.

Home Range:

- Movements and home range size decrease as distances between food, cover, and water sources decrease, as well as with increasing complexity or diversity of habitats.
- Water – free water seldom dictates broad mule deer distribution since they are adapted to live in arid environments; mule deer generally can obtain adequate moisture from succulent vegetation. During severe drought, open water sources may influence local deer distribution when vegetation becomes extremely desiccated.
- On the West Slope of the Bridger Mountains, summer home ranges for adult females with adjacent seasonal ranges varied from 220-395 acres. Winter home ranges for these deer varied from 215-515 acres.
- Home ranges for adult males on the West Slope averaged 595 acres in summer and 615 acres during winter.

Density:

- Density is not uniform across environments.
- Deer densities in the Bridger Mountains varied from 3-15 deer/square mile of year-long habitat during low populations.
- During peak populations, densities varied from 6-22 deer/sq. mile of yearlong habitat in the Bridger Mountains.
- Winter concentrations during peak populations varied from 27 to 117 deer/square mile across the spectrum of occupied habitat.
- Density of Helena urban deer varies widely between HCC Districts, and may vary from 8.9 to 82.1 and may average 31.3 deer/sq. mile during winter.

Observation:

- Under the very best of survey conditions, an observation rate of 80% can be expected. Maximum observation occurs when deer surveys are conducted from a helicopter and when conditions are excellent: light is good, weather is cold, winds are calm. Even from a helicopter, observation can often be as low as 60% if conditions are not optimum.
- A thorough ground survey conducted from a vehicle might be expected to result in an observation rate ranging from 50 to 70%. Only an extremely efficient survey would result in 80% observation.

10.2 Helena Urban Deer Population Extrapolation

These parameters, as applied to the urban setting, are as accurate as current information allows, and are based on established population parameters for mule deer in mountain-foothill habitat and on an inventory of mule deer within City limits.

From the Helena urban Deer Inventory conducted in Helena between mid December 2006 and mid January 2007, the following statements and assumptions can be made:

- The long-term average population composition of mule deer in the mountain-foothill habitat of the Bridger Mountains correlates very well with the first census of mule deer (two replications) that was conducted by vehicle in Helena during the one month period from December 17, 2006 through January 13, 2007.
- The Helena mule deer population approximates a closed system: limited immigration, emigration, and mortality are believed to be occurring.
- Winter population estimates are used in traditional wildlife management to establish harvest objectives.
- The Helena deer inventory was conducted *early* in the winter, therefore the percentage of fawns in the population will be less than indicated, due to over-winter and spring mortality that will occur.
- Actual fawn mortality is unknown but is estimated to be half the mortality that is occurring in the wild, therefore assumed to be approximately 35% (includes vehicle collisions and mortality from natural attrition such as poor health, but does not include predation or hunting season mortality).
- At very high population levels, social regulators within the mule deer population will begin setting a social carrying capacity for the deer themselves, so the population will not continue to grow exponentially. At high numbers, deer will eventually begin to defend their space so some density regulation will occur. But, human social tolerance levels will be met long before deer density dependent factors begin to operate.
- Portions of each HCC District that have roads were surveyed.
- Road coverage of each HCC District ranged from 30% to 100%.
- Ground survey efficiency is generally relatively low at 50% to 70%.

- If we assume a *very high* ground survey efficiency rate of 80%, and extrapolate the number of deer observed to 100% of the area, a more realistic population estimate can be achieved. But an 80% observation rate still provides a conservative population estimate.
- Given: (1) the population parameters that exist for mule deer in the mountain-foothill habitats of the Helena area, (2) a ground observation rate of between 70% and 80%, and (3) extrapolation of deer numbers in surveyed area to non-surveyed area -- existing Helena mule deer population can be estimated to be 500. Five hundred deer provide the basis for projecting population changes over the next three years.

Formula: Estimation for Number of Deer in Each HCC District =

$$(N \times 100 / P) / R$$

Where: N = Number of deer observed during survey;
P = Percent of HCC District that was inventoried; and
R = Observation Rate, in this case 80% or 0.8.

Formula application involves the following two steps:

STEP #1 Extrapolation of deer inventory to entire HCC District = Number of deer observed X 100 / Percentage of HCC District inventoried; and

STEP #2 Dividing by 0.8 expands the 80% observation rate to 100%.

Table 5 outlines the Helena urban deer population estimate based on 2006-07 winter inventory:

**TABLE 5
HELENA URBAN DEER POPULATION ESTIMATE BASED ON
2006-2007 WINTER INVENTORY**

HCC Dist.	Sq. Mi.	% of HCC District Inventoried by Road (P)	High No. Deer Observed Winter ¹ (N)	Extrapolated Inventory to 100% of HCC District	Pop. Level IF 80% Observed (R)	Pop. Level IF 70% Observed	Pop. Level IF 60% Observed	Density - extrap. from 80% observed
1	2.46	30	28	93	116	132	155	47.2
2	1.35	80	23	29	36	41	48	26.6
3	1.75	60	15	25	31	36	42	17.7
4	1.04	75	20	27	34	39	45	32.7
5	5.25	70	27	39	49	56	65	9.3
6	1.35	100	34	34	43	49	57	31.9
7	2.29	70	110	157	196	224	262	85.5
Total	15.49		257	404	505	577	674	32.6
					500 Begin Population Progression			

¹ Winter inventory conducted in December 2006-January 2007.

Population Objective:

At the current average density of more than 32.6 mule deer per square mile, the human social tolerance for urban deer appears to be declining (see Five Core Questions - Appendix S). Based on information from other cities that have established an urban deer density objective, the Task Force concluded that an urban deer density objective should be initially set at 25 deer per square mile. As additional urban deer inventory information is collected, this objective may be revised through the Adaptive Management Approach (Section 12.0). Similar density objectives have been established for urban white-tailed deer in Iowa City, Iowa, and Chicago. In Pennsylvania and Virginia, studies indicate that when deer exceed 15 to 20 per square mile, ecosystems begin to degrade.

At a density of 25 deer per square mile, Helena's urban deer population would remain constant at approximately 380 deer. This current population estimate is considered conservative. If the observation rate of urban deer during the 2006-2007 urban deer inventory was actually less than 80%, or if reproductive rates are greater than 1.6 fawns born to adult females per year; or if mortality rates of females, males or fawns is less than 7.5, 27.5, and 17 percent, respectively, then the population will be growing at a faster rate than what has been calculated. Table 6 outlines Helena urban deer projected population growth rates using different parameters and mortality rates.

**TABLE 6
HELENA URBAN DEER PROJECTED POPULATION GROWTH USING
DIFFERENT PARAMETERS AND MORTALITY RATES**

	SCENARIO A	SCENARIO B	SCENARIO C
	Mountain-Foothill Population Parameters & Mortality Rates (50 yrs of information)	Helena Inventory Population Parameters & Mtn- Foothills Mort. Rate (1 yr of information)	Helena Inventory Population Parameters & Mortality Rates that are 50% of Mortality Rates in the Wild ³
December 2006	500 ¹	500 ²	500 ³
December 2007	647	617	714
December 2008	785	751	990
December 2009	954	908	1,353
December 2010	-----	-----	1,832

¹ Yr 1 - Mountain-Foothill Population Parameters = 50% adult female, 15% adult male, 35% fawns; Mortality Rate used = death rates that occur in the wild of all population segments.

² Yr 1 - Helena Population Parameters = 45% adult females, 14% adult male, 41% fawns; Mortality Rate used = death rates that occur in the wild of all population segments.

³ Yr 1 - Helena Population Parameters = 45% adult females, 14% adult male, 41% fawns; Mortality Rate = one-half the death rate that occurs in the wild of all population segments. This Scenario may best approximate circumstances in the urban setting of Helena.

10.3 Urban Deer Population Density Objective

Helena Urban Deer Population Density Objective = 25 deer per square mile.

Using Scenario C, and depending on when the first year of plan implementation occurs, Table 7 indicates the number of urban deer required to be removed to achieve the 25 deer per square mile density, or a population objective of 380 urban deer.

Once the 25 deer per square mile density objective is reached, annual removal of urban deer to keep the population at the 380 population objective would be 166 deer. Detailed calculations on the annual removal formula is included as Appendix T.

**TABLE 7
Total Urban Deer to be Removed to Achieve Density of
25 Deer per Square Mile***

Management Year	Scenario C	Deer to be Removed	Final Deer Population
If Year 1 = Winter 2007-08	714	334	380
If Year 1 = Winter 2008-09	990	610	380
If Year 1 = Winter 2009-10	1,353	973	380
If Year 1 = Winter 2010-11	1,832	1,452	380

* Helena Area = 15.5 sq. miles

11.0 RECOMMENDED ACTIONS BY NEIGHBORHOOD

The Task Force understands that one urban deer management action may be appropriate in one situation / neighborhood, but inappropriate in another. Therefore, the Task Force evaluated each recommended management action from Section 9.0 by each of the seven HCC Districts (neighborhoods). This spatial evaluation of management actions is necessary to ensure success to both urban deer and Helena residents. Figure 1.0 outlines the seven HCC District boundaries (page 49). Figure 2.0 outlines the current city of Helena open lands (page 50).

Based upon research information that includes the public telephone survey, urban deer inventory, professional presentations, literature review, Task Force evaluation criteria, Town Hall meetings, and public comment (Section 4.0), the Task Force recommends immediate management actions by neighborhood as outlined in Table 8. The term 'immediate' is defined as those management actions that can be implemented within a one-year timeframe.

The Task Force recommends that management actions be re-evaluated annually by the Urban Wildlife Advisory Committee as directed by the Commission using an Adaptive Management Strategy (Section 12.0). In addition to immediate management actions, Table 9 outlines recommendations for future management actions.

11.1 Management Action Strategy

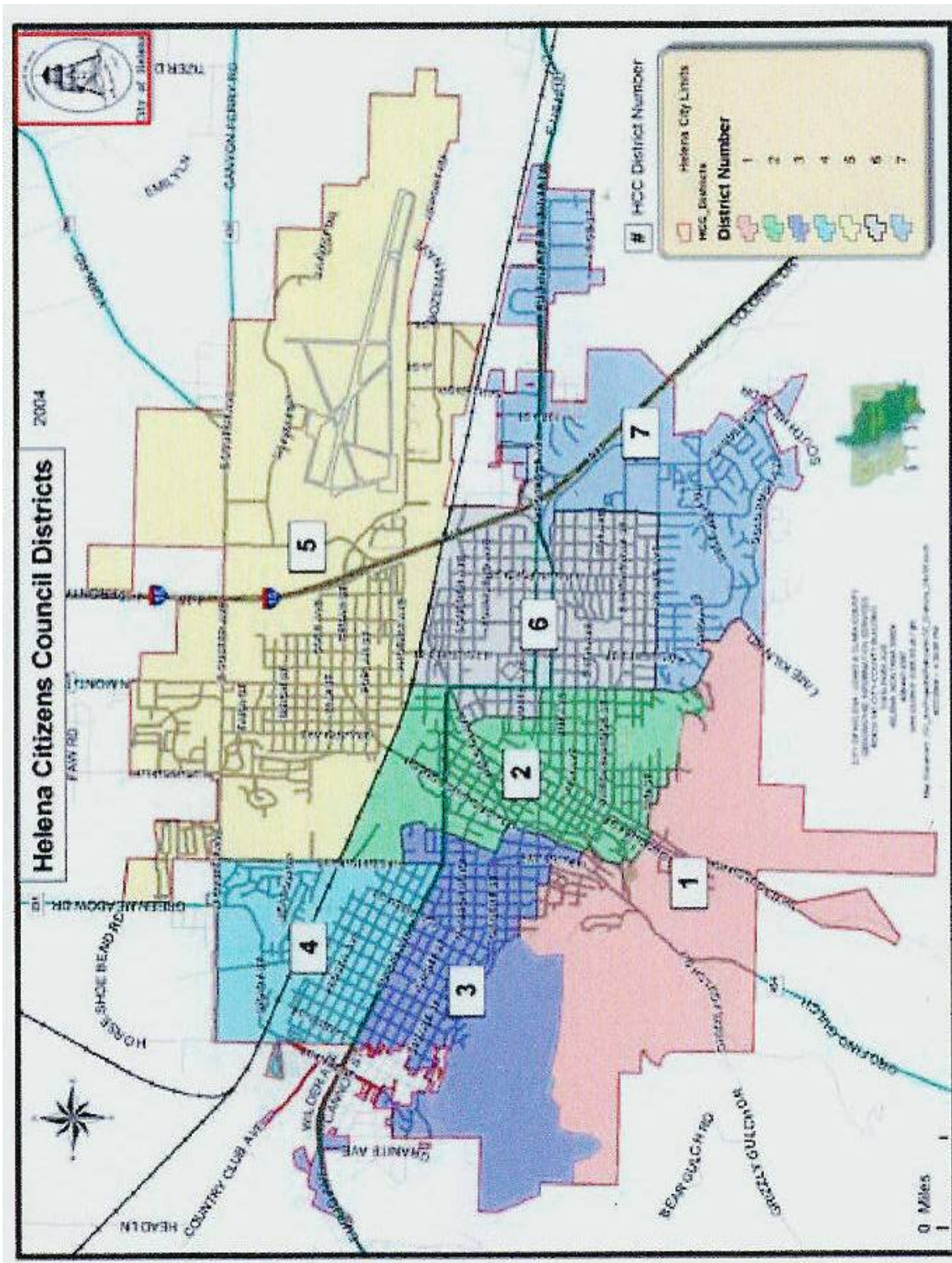
Tables 8 and 9 outline Task Force recommendations for immediate and future management actions. The Task Force believed only those management actions listed in Table 8 were appropriate for immediate implementation. This strategy will ensure urban deer management program success and social acceptability.

Following initial implementation, the future Urban Wildlife Advisory Committee would evaluate the potential use of alternative management actions based upon annual data collection such as an urban deer inventory by neighborhood and measurement of public attitude toward urban deer by neighborhood. A method of gauging social acceptability for the urban deer management program would be to perform an annual water bill survey. Results could then be summarized by HCC District.

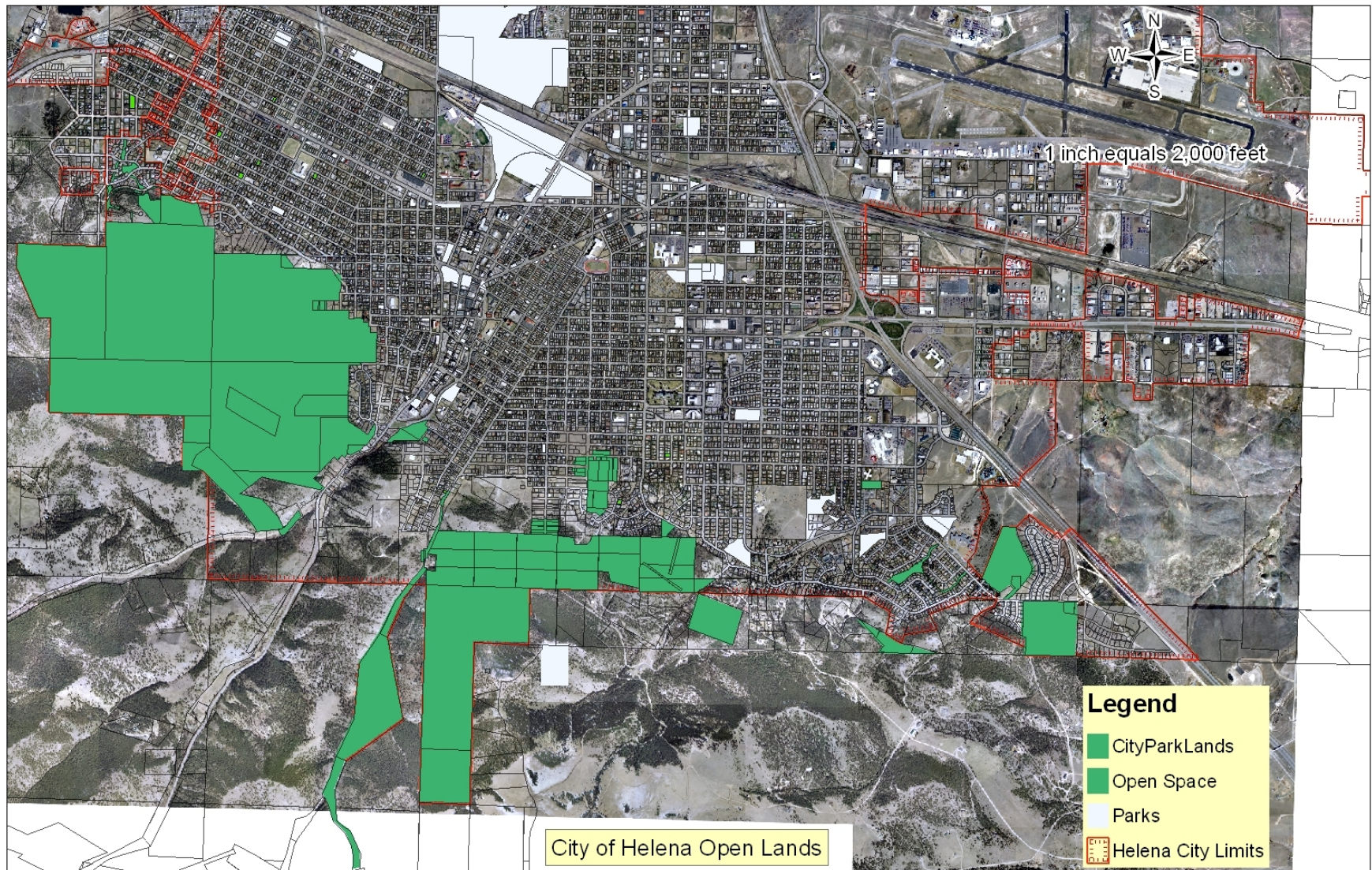
Table 9 illustrates the future inclusion of two additional management actions of Deer Tracking and Adverse Conditioning and Capture / Euthanize. The Task Force agreed the Fertility / Sterility management action should be continually evaluated for its potential use in the future. As outlined in Section 9.0, the Task

Force determined the Maintain Current Actions and Capture & Transfer management actions were not appropriate for Helena and recommend these not be considered for future implementation.

Tables 8 and 9 include an average score of Task Force member evaluation of which management actions are most appropriate by HCC District. Management action average scores of 3.0 or greater are recommended for that neighborhood. As illustrated by Tables 8 and 9, the Task Force recommends that management actions be adaptive and flexible both over time and by neighborhood. For example, the Certified Urban Hunting management action demonstrates how the urban deer management program has the ability to expand or contract over time by using the Adaptive Management Strategy (Section 12.0).



**HELENA CITIZENS' COUNCIL DISTRICT BOUNDARIES
 FIGURE 1.0**



**CITY OF HELENA OPEN LANDS
FIGURE 2.0**

TABLE 8
YEAR 1: IMMEDIATE URBAN DEER MANAGEMENT ACTIONS BY HCC DISTRICT
“Management Matrix”

HCC District ^a	2006-2007 RESULTS		URBAN DEER MANAGEMENT ACTIONS ^d				
	#Deer / Mile Surveyed ^b	Support Lethal Actions ^c	Education / Outreach	Landscape / Repellents / Barriers	Zoning / Ordinances / Laws	Professional Wildlife Removal	Certified Urban Hunting
1	0.78	67.4%	555555555 = 5.0	555555555 = 5.0	555353555 = 4.6	555353555 = 4.6	115351531 = 2.8
2	0.43	53.9%	555555555 = 5.0	555555555 = 5.0	315353555 = 3.9	155153111 = 2.6	113111111 = 1.2
3	0.43	50.0%	555555555 = 5.0	555555555 = 5.0	335353555 = 4.1	355353535 = 4.1	115331511 = 2.3
4	0.82	62.8%	555555555 = 5.0	555555555 = 5.0	335353555 = 4.1	155353135 = 3.4	113311111 = 1.4
5	0.65	51.2%	555555555 = 5.0	555555555 = 5.0	335353555 = 4.1	355351555 = 4.1	115331311 = 2.1
6	0.75	44.9%	555555555 = 5.0	555555555 = 5.0	335353555 = 4.1	155151111 = 2.3	111111111 = 1.0
7	3.00	59.2%	555555555 = 5.0	555555555 = 5.0	355353555 = 4.3	355353555 = 4.3	115351531 = 2.8

^a Appropriate areas for culling deer include the Helena Open Lands System adjacent to HCC Districts 1, 3, and 7. The Nature Park / Golf Course area may also be appropriate during the winter in HCC District 5.

^b From Urban Deer Population Inventory, Winter 2006-2007.

^c From Resident Telephone Survey on Urban Deer in Helena, Fall 2006. Percentages are based from the question “Do you support or oppose using LETHAL actions to manage urban deer”. Percentages display public’s support in each HCC District for use of lethal action to manage urban deer. Note: Data is not 95% significant when broken into HCC Districts.

^d Final numbers for each management action within each HCC District are based on the average of total Task Force Member scoring.

High = 5: Strongly support management action in this HCC District.

Med = 3: Support management action in this HCC District.

Low = 1: Do not support management action in this HCC District.

= Average scores of 3.0 or higher are recommended as management actions by HCC District.

TABLE 9
YEAR 2: FUTURE URBAN DEER MANAGEMENT ACTIONS BY HCC DISTRICT
“Management Matrix”

HCC District ^a	2006-2007 RESULTS		URBAN DEER MANAGEMENT ACTIONS ^d						
	#Deer / Mile Surveyed ^b	Support Lethal Actions ^c	Education / Outreach	Landscape / Repellents / Barriers	Zoning / Ordinances / Laws	Behavior Modify	Capture / Euthanize	Profession. Wildlife Removal	Certified Urban Hunting
1	0.78	67.4%	555555555 = 5.0	555555555 = 5.0	355535555 = 4.6	153515555 = 3.9	311111155 = 2.1	353535555 = 4.3	151515551 = 3.2
2	0.43	53.9%	555555555 = 5.0	555555555 = 5.0	355535551 = 4.1	153515351 = 3.2	311311351 = 2.1	155531135 = 3.2	133111111 = 1.4
3	0.43	50.0%	555555555 = 5.0	555555555 = 5.0	355535553 = 4.3	153515355 = 3.7	311111155 = 2.1	353535555 = 4.3	151315551 = 3.0
4	0.82	62.8%	555555555 = 5.0	555555555 = 5.0	355535553 = 4.3	153515355 = 3.7	311111155 = 2.1	153531555 = 3.7	153111511 = 2.1
5	0.65	51.2%	555555555 = 5.0	555555555 = 5.0	355535553 = 4.3	153515355 = 3.7	311111155 = 2.1	353515555 = 4.1	153313511 = 2.6
6	0.75	44.9%	555555555 = 5.0	555555555 = 5.0	355535553 = 4.3	153515355 = 3.7	311311351 = 2.1	155511135 = 3.0	113111111 = 1.2
7	3.00	59.2%	555555555 = 5.0	555555555 = 5.0	355535555 = 4.6	153515555 = 3.9	311111155 = 2.1	353535555 = 4.3	151515551 = 3.2

^a Appropriate areas for culling deer include the Helena Open Lands System adjacent to HCC Districts 1, 3, and 7. The Nature Park/Golf Course area may also be appropriate during the winter in HCC District 5.

^b From Urban Deer Population Inventory, Winter 2006-2007.


^c From Resident Telephone Survey on Urban Deer in Helena, Fall 2006. Percentages are based from the question “Do you support or oppose using LETHAL actions to manage urban deer”. Percentages display public’s support in each HCC for use of lethal action to manage urban deer. Note: Data is not 95% significant when broken into HCC Districts.

^d Final numbers for each management action within each HCC District are based on the average of total Task Force Member’s scoring.

High = 5: Strongly support management action in this HCC District

Med = 3: Support management action in this HCC District

Low = 1: Do not support management action in this HCC District

 = Average scores of 3.0 or higher are recommended as management actions by HCC District.

12.0 MONITORING AND ADAPTIVE MANAGEMENT STRATEGY

Some management actions are considered complex, on-going activities that require greater technical and / or administrative timeframes. Therefore, future deer management actions are those that require more than one year to implement. These management actions must be reviewed and evaluated for continued implementation. The Urban Wildlife Advisory Committee shall use an Adaptive Management Strategy to annually evaluate effectiveness of existing management actions and to consider future inclusion / exclusion / transition of all appropriate management actions.

12.1 Adaptive Management Strategy

An Adaptive Management Strategy is an approach that adjusts future actions based upon previously learned experience, experimentation, and monitoring. Adaptive management should focus on accelerated learning and through partnerships with city officials, residents and potentially county and state officials, learn together to manage urban deer populations that support both humans and deer.

The primary objective of the Plan is to reduce human-deer conflict, thus increasing public health and safety. Regardless of the management actions implemented, the urban deer management program will require ongoing monitoring to (1) determine whether the Plan is achieving its stated objectives, and (2) evaluate the assumptions for urban deer in Tables 6 and 7.

The urban deer inventory measured the presence of urban deer in winter 2006 – 2007 and provides a beginning snapshot of current conditions prior to initiating management actions. The Task Force recommends an annual urban deer inventory to gain population trend information within City limits. By monitoring population numbers, the acceptable density of urban deer can be established in Helena through social and biological criteria.

The Task Force recommends the urban deer management program establish a conservative urban deer density goal of 25 deer/square mile (Section 10.3). Through biological monitoring and public opinion, this number is flexible to meet urban deer management objectives. Plan revisions should be made based on the relative success rates of implemented management actions as demonstrated by the monitoring data.

The Adaptive Management Strategy process for the Urban Wildlife Advisory Committee is established. The process should always involve both the public and current biological information. Evaluation criteria outlined in Section 7.0 should be consulted throughout the process.

12.2 Program Considerations

Annual Collection of Social and Biological Data:

Future Adaptive Management Strategies should rely on the annual collection of social data such as resident complaint reports from urban deer, including type of damage and a description of the urban deer prompting the complaint. Social data may also include the occurrence of deer / automobile collisions. Collecting social data must include City Police and FWP response records or other relevant information that may be compared to baseline information to establish trends.

Collection of biological data primarily involves the urban deer inventory by neighborhood. However, this may also include data collected from the City Police and FWP response records or special research projects such as those established with the Deer Tracking and Aversive Conditioning management action.

Evaluation of Operating Costs:

Operating costs to implement the urban deer management program must also be considered through the Adaptive Management Strategy. Operating costs should also be adaptable and flexible. For example, the HCC may be involved in the annual urban deer inventory. Another consideration includes evaluating the economic benefits to using professional or non-professional wildlife removers.

Distribution of Harvested Meat:

The Urban Wildlife Management Committee must determine a cost-efficient method to distribute the harvested meat. Options may include a public registry based upon an economic means-test. This registry would be implemented to pick up harvested meat. Donation to charitable organizations may also be available. The feasibility and logistics of distributing harvested meat should also use the Adaptive Management Strategy approach.

APPENDICES

APPENDIX A	Task Force Resolution / Recruitment / Membership / Charge
APPENDIX B	Colstrip Deer Management Action Plan
APPENDIX C	Town of Fort Peck – Draft Deer Management Plan
APPENDIX D	Missoula - Prohibition of Feeding Wildlife Ordinance
APPENDIX E	Rapid City South Dakota Deer Herd Management Program
APPENDIX F	Iowa City, Iowa Urban Deer Annual Report
APPENDIX G	Police and FWP Wildlife Calls
APPENDIX H	Hunting District 388
APPENDIX I	Resident Telephone Survey on Urban Deer
APPENDIX J	Urban Deer Population Inventory
APPENDIX K	1973 Wildlife Study – Helena South Hills Area
APPENDIX L	Town Hall Meetings Materials
APPENDIX M	Public Comments
APPENDIX N	Task Force Master Planning Timeline
APPENDIX O	Task Force Meeting Agendas and Approved Minutes
APPENDIX P	Independent Record News Articles
APPENDIX Q	HCC Quality of Life Survey
APPENDIX R	HB 249 & SB 410 – State Legislation
APPENDIX S	Five Core Questions Results
APPENDIX T	Urban Deer Population Objective Scenarios

END OF DOCUMENT

**McCALL CITY COUNCIL
AGENDA BILL**

216 East Park Street
McCall, Idaho 83638

**Number AB 23-120
Meeting Date June 9, 2023**

AGENDA ITEM INFORMATION				
SUBJECT:		<i>Department Approvals</i>	<i>Initials</i>	<i>Originator or Supporter</i>
Request to Adopt Resolution 23-10 Establishing the Revised Lake Shore Disposal Rates for the City of McCall		Mayor / Council		
		City Manager		
		Clerk	<i>FW</i>	Originator
		Treasurer		
		Community Development		
		Police Department		
		Public Works		
		Golf Course		
COST IMPACT:	+8% CPI Adjustment	Parks and Recreation		
FUNDING SOURCE:		Airport		
		Library		
TIMELINE:	July 1, 2023	Information Systems		
		Grant Coordinator		
SUMMARY STATEMENT:				
<p>Pursuant to Section 8B. of the Exclusive Agreement for Collection and Disposal of Solid Waste, Lake Shore Disposal is requesting Council approval of rates for service effective July 1, 2023. The rate increase is equal to the annual CPI-All Items for State of Idaho during the most recent 12-month period. The CPI adjustment is 8%. The last time Council approved a Lake Shore Disposal rate adjustment was June 30, 2022.</p> <p>Mark Fulwiler of Lake Shore Disposal will be present to answer any questions.</p> <p>Attachments:</p> <ul style="list-style-type: none"> • Lakeshore Letter Requesting the Increase • A comparison rate chart – current vs proposed • Resolution 23-10 Adopting the proposed new rates 				
RECOMMENDED ACTION:				
Adopt Resolution 23-10 establishing the revised Lake Shore Disposal Rates for the City of McCall and authorize the Mayor to sign all necessary documents.				
RECORD OF COUNCIL ACTION				
MEETING DATE	ACTION			



May 16, 2023

City of McCall
216 East Park Street
McCall, ID 83638

RE: Request for Solid Waste Rate Adjustment CPI (8%) from Lake Shore Disposal

Dear Mayor Giles and City Council:

We would like to be placed on the City Council's agenda June 8th, to request an 8% price increase for both Commercial and Residential service, effective July 1, 2023. The proposed adjustment is based on the Consumer Price Index for the State of Idaho. This adjustment equates to an additional \$1.46/month for our most frequently utilized service level. We are requesting the Solid Waste rates be adjusted per our contract/franchise agreement (pg.8 sec C.) that states:

In addition to the adjustment contemplated in Section 8.B., the rates specified herein shall be reasonably adjusted upon a request from Contractor demonstrating that Contractor's direct cost of performing its obligations under this Agreement have increased (e.g., cost of fuel, insurance, labor, equipment, tipping fee, materials, changes in existing, or adoption of new, laws, rules or regulations, etc.). Only those costs resulting from normal increases in the cost of doing business and those costs beyond Contractor's control will be eligible for consideration. All rate adjustments shall become effective immediately upon approval by the Council whose approval, in either of the above cases, shall not be unreasonably withheld, delayed or conditioned.

Over the course of providing many years of service to the citizens of the City of McCall, we have actively sought out new cost-effective ways to provide a high level of service to our customers. We have invested over \$750k in our operations over the last year to assure that level of service to the City of McCall. Lake Shore Disposal and our employees are committed to "Doing Good in our Communities".

We look forward to meeting with the Council to answer any questions you may have. Thank you in advance for your time and please let us know if you need any additional information.

Respectfully Submitted,

Mark Fulwiler

District Manager
Lake Shore Disposal

CITY OF MCCALL- PROPOSED RATES 2023

Weekly Residential Service	Old Rate, Lakeshore Cart	New Rate, Lakeshore Cart	Old Rate, Personal Cart	New Rate, Personal Cart
96 Gallon Bear Proof	\$18.24	\$19.70	\$16.42	\$17.73
65 Gallon Bear Proof	\$17.91	\$19.34	\$16.06	\$17.34
32 Gallon Beart proof	\$17.79	\$19.21	\$15.94	\$17.22
Second 96 Gallon Bear Proof	\$9.58	\$10.35	\$7.76	\$8.38
Second 65 Gallon Bear Proof	\$9.24	\$9.98	\$7.41	\$8.00
Second 32 Gallon Bear Proof	\$9.13	\$9.86	\$7.28	\$7.86
EOW Residential Service	Old Rate, Lakeshore Cart	New Rate, Lakeshore cart	Old Rate, Personal Cart	New Rate, Personal Cart
96 Gallon Bear Proof	\$13.75	\$14.85	\$11.95	\$12.91
65 Gallon Bear Proof	\$13.41	\$14.48	\$11.59	\$12.52
32 Gallon Bear Proof	\$13.30	\$14.37	\$11.47	\$12.39
Second 96 Gallon Bear Proof	\$9.86	\$10.65	\$8.06	\$8.70
Second 65 Gallon Bear Proof	\$9.52	\$10.28	\$7.70	\$8.32
Second 32 Gallon Bear proof	\$9.42	\$10.17	\$7.58	\$8.19
Monthly Residential Service	Old Rate, Lakeshore Cart	New Rate, Lakeshore Cart	Old Rate, Personal Cart	New Rate, Personal Cart
96 Gallon Bear Proof	\$11.62	\$12.55	\$9.85	\$10.64
65 Gallon Bear Proof	\$11.28	\$12.18	\$9.49	\$10.25
32 Gallon Bear Proof	\$11.17	\$12.06	\$9.37	\$10.12
Second 96 Gallon Bear Proof	\$10.43	\$11.26	\$8.66	\$9.35
Second 65 Gallon Bear Proof	\$10.09	\$10.90	\$8.31	\$8.97
Second 32 Gallon Bear Proof	\$9.98	\$10.78	\$8.18	\$8.83
On Call Residential Service	Old Rate, Lakeshore Cart	New Rate Lakeshore Cart	Old Rate, Personal Cart	New Rate, Personal Cart
96 Gallon Bear Proof	\$14.55	\$15.71	\$8.35	\$9.02
65 Gallon Bear Proof	\$14.22	\$15.36	\$8.35	\$9.02
32 Gallon Bear Proof	\$14.10	\$15.23	\$8.35	\$9.02
Second 96 Gallon Bear	\$11.19	\$12.09	\$4.98	\$5.38
Second 65 Gallon Bear Proof	\$10.84	\$11.71	\$4.98	\$5.38
Second 32 Gallon Bear Proof	\$10.73	\$11.59	\$4.98	\$5.38
Commercial Service	Old Rate	New Rate		
96 Gallon Bear Proof	\$25.16	\$27.17		
2 Yard	\$69.80	\$75.38		
3 Yard	\$98.52	\$106.40		
4 Yard	\$125.97	\$136.05		
6 Yard	\$184.08	\$198.81		
8Yard	\$237.39	\$256.38		





City of McCall

RESOLUTION NO. 23-10

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF McCALL, IDAHO, MAKING CERTAIN FINDINGS; ADOPTING REVISED LAKE SHORE DISPOSAL RATES FOR THE CITY OF McCALL; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, City is charged by law with the duty of providing for the preservation and protection of the health and welfare of its inhabitants, and has the power and authority to regulate, control and provide for solid waste disposal under powers conferred by the laws of the State of Idaho;

WHEREAS, City entered into an Exclusive Contract with Lake Shore Disposal in May 2013 to provide solid waste collection within the City of McCall, Idaho;

WHEREAS, per the Exclusive Contract with Lake Shore Disposal the rates specified shall be reasonably adjusted upon a request from Lake Shore Disposal demonstrating that Lake Shore Disposal’s direct cost of performing its obligations under this Agreement have increased;

WHEREAS, per the Exclusive Contract with Lake Shore Disposal all rate adjustments shall become effective immediately upon approval by the Council whose approval, shall not be unreasonably withheld, delayed, or conditioned

WHEREAS, at the June 9, 2023 Council Meeting Lake Shore Disposal demonstrated that direct costs of performing its obligations under this Agreement have increased;

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND THE CITY COUNCIL OF THE CITY OF McCALL, IDAHO:

Section 1: Approval of Rate Schedule for Lake Shore Disposal showing an 8% CPI adjustment will be as follows:

Weekly Residential Service	Rate with Cart Provided	Rate with Personal Cart
96 Gallon Bear Proof	\$19.70	\$17.73
65 Gallon Bear Proof	\$19.34	\$17.34
32 Gallon Bear Proof	\$19.21	\$17.22
Second 96 Gallon Bear Proof	\$10.35	\$8.38
Second 65 Gallon Bear Proof	\$9.98	\$8.00
Second 32 Gallon Bear Proof	\$9.86	\$7.86

EOW Residential Service	Rate with Cart Provided	Rate with Personal Cart
96 Gallon Bear Proof	\$14.85	\$12.91
65 Gallon Bear Proof	\$14.48	\$12.52

32 Gallon Bear Proof	\$14.37	\$12.39
Second 96 Gallon Bear Proof	\$10.65	\$8.70
Second 65 Gallon Bear Proof	\$10.28	\$8.32
Second 32 Gallon Bear Proof	\$10.17	\$8.19

Monthly Residential Service	Rate with Cart Provided	Rate with Personal Cart
96 Gallon Bear Proof	\$12.55	\$10.64
65 Gallon Bear Proof	\$12.18	\$10.25
32 Gallon Bear Proof	\$12.06	\$10.12
Second 96 Gallon Bear Proof	\$11.26	\$9.35
Second 65 Gallon Bear Proof	\$10.90	\$8.97
Second 32 Gallon Bear Proof	\$10.78	\$8.83

On Call Residential Service	Rate with Cart Provided	Rate with Personal Cart
96 Gallon Bear Proof	\$15.71	\$9.02
65 Gallon Bear Proof	\$15.36	\$9.02
32 Gallon Bear Proof	\$15.23	\$9.02
Second 96 Gallon Bear Proof	\$12.09	\$5.38
Second 65 Gallon Bear Proof	\$11.71	\$5.38
Second 32 Gallon Bear Proof	\$11.59	\$5.38

Commercial Service	Rate
96 Gallon Bear Proof Roll Cart	\$27.17
2 Yard	\$75.38
3 Yard	\$106.40
4 Yard	\$136.05
6 Yard	\$198.81
8 Yard	\$256.38

Section 3: Effective Date: The above rates are effective immediately upon adoption and shall remain in effect until further action by the City Council.

Passed and approved this 9 day of June 2023.

CITY OF MCCALL
Valley County, Idaho

Robert S. Giles, Mayor

ATTEST:

BessieJo Wagner, City Clerk

**McCALL CITY COUNCIL
AGENDA BILL**

216 East Park Street
McCall, Idaho 83638

**Number AB 23-118
Meeting Date June 9, 2023**

AGENDA ITEM INFORMATION

SUBJECT: <i>Request to Adopt Resolution 23-09 Consenting to Participate in the Proposed Ambulance Service District and upon Voter Approval Consenting to the Board of Valley County Commissioners dissolving the existing Valley County Emergency Service District</i>		<i>Department Approvals</i>	<i>Initials</i>	<i>Originator or Supporter</i>
		Mayor / Council		
		City Manager		
		Clerk	<i>HW</i>	Originator
		Treasurer		
		Community Development		
		Police Department		
		Public Works		
		Golf Course		
		Parks and Recreation		
COST IMPACT:	n/a	Airport		
FUNDING SOURCE:	n/a	Library		
TIMELINE:	June 2023	Information Systems		
		Grant Coordinator		

SUMMARY STATEMENT:

The Fire Districts in Valley County have been working with The Valley County Commissioners and their attorney from White Peterson (Bill Gigray) on coming up with funding solutions for the ambulance services. The plan is to submit a petition to the Valley County Board of Commissioners (BOCC) to form a new EMS District “Valley Countywide EMS District”. To submit a petition that meets the statute requirements, The Fire Districts need to submit fifty electors’ signatures on the petition, and resolutions from the three cities indicating that they would be included in the new district. Attached is a copy of the petition and a draft resolution for the City of McCall. The Fire Districts would like to submit the petition to the BOCC by mid-June.

RECOMMENDED ACTION:

Adopt Resolution 23-09 Consenting to Participate in the Proposed Ambulance Service District and upon Voter Approval Consenting to the Board of Valley County Commissioners dissolving the existing Valley County Emergency Service District and authorize the Mayor to sign all necessary documents.

RECORD OF COUNCIL ACTION

MEETING DATE	ACTION



City of McCall
VALLEY COUNTY, STATE OF
IDAHO RESOLUTION No. 23-09

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF McCALL:

- **Making findings; and**
- **Consenting to participate in a new proposed ambulance service district; and**
- **Directing the City Clerk; and**
- **Setting an Effective Date.**

Section 1. Findings: The City Council makes the following findings:

- 1.1 The Mayor and the City Council have been presented with the *Petition to Form an Ambulance Service District Pursuant to Idaho Code § 31-3911 and to Dissolve the Valley County Emergency Service District pursuant to Idaho Code Section 31-3908(1)(f)*. A true and correct copy of this petition is attached hereto marked “Exhibit A” (the “Petition”); and
- 1.2 That the City of McCall is an incorporated city within the boundaries of the proposed ambulance service district as stated in the Petition; and
- 1.3 It is required by Idaho Code § 31-3911(2) that certified copies of all city council resolutions, by any incorporated city that lies within the proposed boundaries of the proposed ambulance service district, consenting to participate in the ambulance service district, must be filed by the petitioners together with the Petition; and
- 1.4 The Mayor and the City Council find that it is in the best interests of the residents and persons found within the boundaries of the City, that the City Council support the Petition and agree to participate in the proposed new ambulance service district as set forth in the Petition.

NOW, THEREFORE, BE IT RESOLVED by the City Council as follows:

Section 2. Action:

- 2.1 The Mayor and City Council of the City of McCall do hereby consent to participate in the proposed ambulance service district as stated in the Petition; and
- 2.2 If the voters approve the formation of a new countywide service district, consent to the Board of County Commissioners dissolving the existing Valley County Emergency Service District.

Section 3. Directing the Clerk:

3.1 The Clerk is hereby directed to file this Resolution forthwith in the official records of this City; and to certify this resolution to the Petitioners of the Petition for filing with the Valley County Clerk together with the Petition.

SECTION 4. Effective Date:

4.1 This resolution shall be in full force and effect after its passage and approval

PASSED BY THE CITY COUNCIL of the City of McCall this 9 day of June 2023.

Signed: _____
Robert S. Giles, *Mayor*

ATTEST:

I certify that the above Resolution was duly adopted by the City Council of the City of McCall on the 9day of June, 2023 by the following vote:

Ayes: _____
Nos: _____
Absent: _____

By: _____
BessieJo Wagner, *City Clerk*

Western boundary. Thence westerly and southerly along the said divide and the divide between Payette and Weiser rivers, to the line between townships thirteen (13) and fourteen (14) north; thence east to the southwest corner of township fourteen (14) north, range three (3) east; thence south twelve (12) miles to the southwest corner of township twelve (12) north, range three (3) east; thence west three (3) miles to the northwest corner of section three (3), township eleven (11) north, range two (2) east; thence south twelve (12) miles, to the place of beginning.

2. The name of the proposed ambulance service district is as follows: *Valley Countywide EMS District.*

3. A map of the proposed ambulance service district is attached and marked Exhibit A and by this reference incorporated herein.

4. The City of McCall, the City of Donnelly, and the City of Cascade all lie within and are the only incorporated cities that lie within the boundaries of the proposed ambulance service district.

5. Certified copies of the resolutions of the City Councils of the City of McCall, City of Donnelly, and the City of Cascade, each consenting to participate in the proposed ambulance service district and consenting to the dissolution of the Valley County Emergency Service District, will be filed with the Valley County Clerk by the Petitioners at the same time as the filing of this Petition.

6. The Petitioners will deposit with the County Clerk a sufficient sum of money to cover the costs of publication of this Petition and all necessary notices required by Idaho Code §§ 31-3911 and 31-3908 (1) (f) and (c).

WHEREFORE, Petitioners pray as follows:

1. That pursuant to Idaho Code § 31-3911(1), upon the filing of this Petition with the County Clerk and Recorder, that the County Clerk examine this Petition and certify that the required number of Petitioners have signed this Petition; and

2. That pursuant to Idaho Code § 31-3911(4), the County Clerk transmit this Petition and the City Resolutions to the Board of County Commissioners; and
3. That pursuant to Idaho Code § 31-3908(1)(f), the Board of County Commissioners approve a resolution of their intent to consider subject to conditions and process required by law the dissolution of the Valley County Emergency Service District with the plan of dissolution which includes that all debts and expenses of the Valley County Emergency Service District be paid and any remaining assets of the said District to be transferred to the Valley Countywide EMS District subject to and contingent upon the following:
 - The County Commissioners granting the petition to create a new ambulance service district and call for a special election on the question; and
 - a majority of the electors at the special election voting “yes” to the creation of a new ambulance service district.
4. That the Board of County Commissioners cause the texts of this Petition and their resolution of intent to consider, subject to conditions and process required by law, the dissolution of the Valley County Emergency Service District be published once a week for at least three (3) consecutive weeks in the newspaper of general circulation within the County together with a notice of the time of the meeting of the Board of County Commissioners when this Petition and their resolution of intent will be heard together with a statement that all persons interested may appear and be heard as provided in Idaho Code §§ 31-3911(4) and 31-3908(1)(f); and

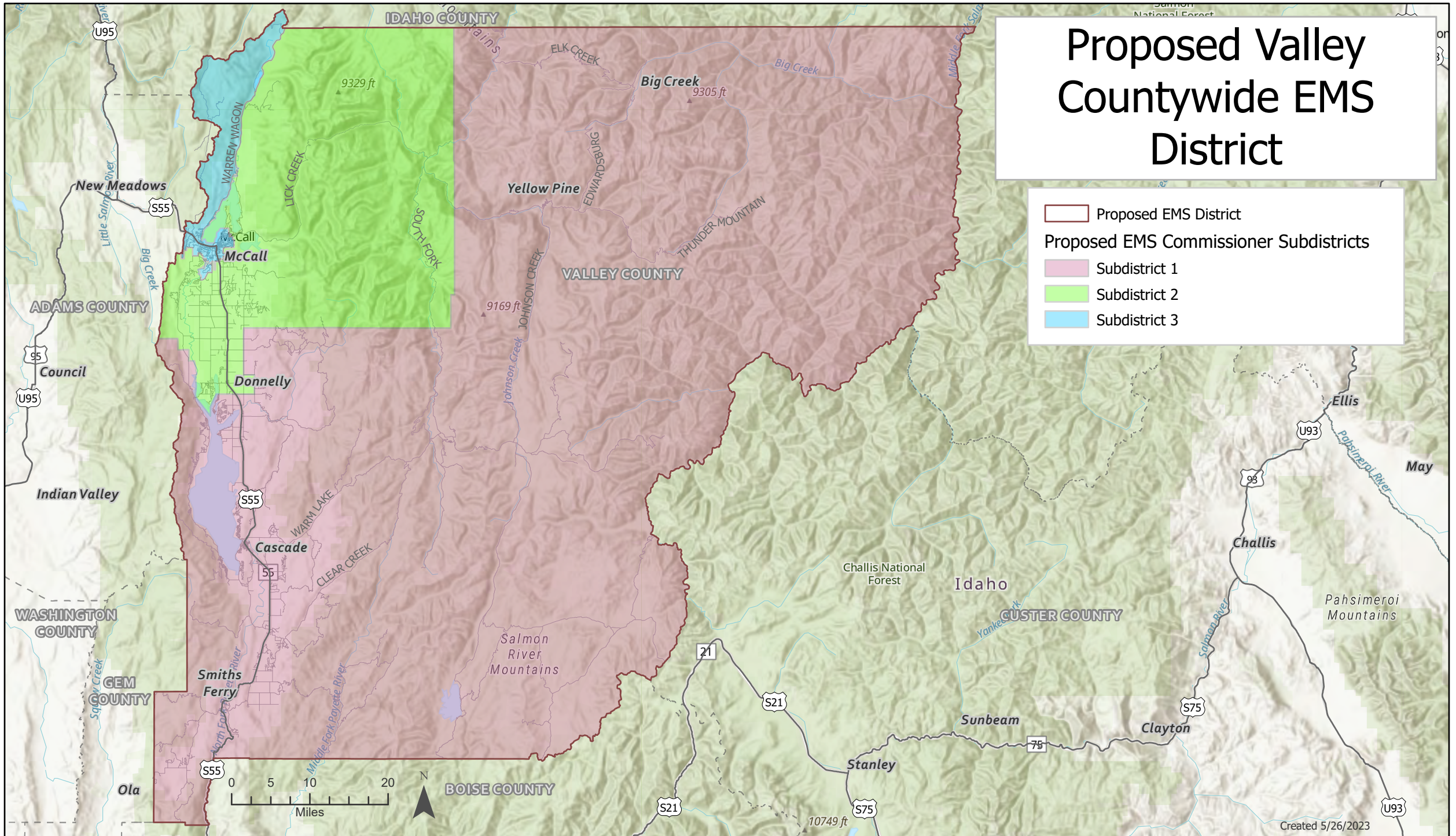
5. That after the conduct of the public hearings, the Board of Commissioners enter an order granting this Petition fixing the name and boundaries of the proposed district as petitioned and as provided in Idaho Code § 31-3911(5); and
6. That following the Board of County Commissioners entering the order granting this Petition, that the County Clerk publish notice of an election to be held at the next election date as authorized by law for the purpose of determining whether or not the proposed ambulance service district shall be organized as provided in Idaho Code § 31-3911(6); and
7. If at the special election more than one-half (1/2) of the votes cast are in favor of creating the new ambulance service district, the County Commissioners convene a meeting and:
 - Order the territory as petitioned is duly organized as an ambulance service district under the name designated in the ballot; and
 - Divide the new ambulance service district into three (3) subdivisions and appoint the first three (3) commissioners of the new ambulance service district; and
 - Adopt a resolution to dissolve the Current Ambulance District, pay its debts and expenses and transfer the remaining assets to the new ambulance service district; and
 - Certify a copy of the order, creating the ambulance service district and the resolution dissolving the Current Ambulance District, and cause the same to be filed for record in the office of the county recorder, the state tax commission and with the governor.

Proposed Valley Countywide EMS District

Proposed EMS District

Proposed EMS Commissioner Subdistricts

- Subdistrict 1
- Subdistrict 2
- Subdistrict 3



**McCALL CITY COUNCIL
AGENDA BILL**

216 East Park Street
McCall, Idaho 83638

**Number AB 23-124
Meeting Date June 8, 2023**

AGENDA ITEM INFORMATION				
SUBJECT:		<i>Department Approvals</i>	<i>Initials</i>	<i>Originator or Supporter</i>
<i>Request to Approve Letter of Support for Valley County’s Application for an Idaho CPF (Capital Projects Fund) ARPA (American Rescue Plan Act) Broadband Infrastructure Grant application</i>		Mayor / Council		
		City Manager		
		Clerk	<i>AW</i>	
		Treasurer		
		Community Development		
		Police Department		
		Public Works		
		Golf Course		
		Parks and Recreation		
COST IMPACT:	N/A	Airport		
FUNDING SOURCE:	Dept of Commerce grant	Library		
TIMELINE:	12-18 months	Information Systems	CC	Originator
		Grant Coordinator		
SUMMARY STATEMENT:				
<p>The RAPID consortium is working with Valley County to apply for a grant to install fiber infrastructure in an area bounded by Elo Rd (North), Farm to Market (East), Lake Fork Rd (South) and Norwood (West) encompassing approximately 1100 homes and businesses. This area would be served internet services through the open access model and would be the first step toward extending this model throughout the entirety of Valley County. This project expects to connect to the middle mile IRON project that extends from Grangeville to Star. The grant is expected to make a request for \$10-12 million and will serve homes in that area which are classified in the grant guidelines as “unserved” given the lack of service providers and/or the speeds that are achievable.</p>				
RECOMMENDED ACTION:				
<p>Approve letter of Support for Valley County’s Application for an Idaho CPF (Capital Projects Fund) ARPA (American Rescue Plan Act) Broadband Infrastructure Grant application and authorize the Mayor to sign on behalf of Council.</p>				
RECORD OF COUNCIL ACTION				
MEETING DATE	ACTION			



City of McCall

www.mccall.id.us

216 East Park Street
McCall, Idaho 83638

Phone 208-634-7142
Fax 208-634-3038

Idaho Broadband Advisory Board
c/o Ramón S. Hobdey-Sánchez, J.D.
State Broadband Program Manager
Idaho Department of Commerce
700 W. State Street
Boise, Idaho 83702

Re: Support for Idaho CPF ARPA Broadband Infrastructure Grant

Dear Idaho Broadband Advisory Board,

This letter is to affirm support for the Valley County's application for an Idaho CPF ARPA Broadband Infrastructure Grant. It supports Idaho's 2027 broadband strategic goal of providing 100% of Idaho with accessible, reliable, and affordable high-speed internet. This grant will prepare Central Idaho communities for access to affordable internet access. The area encompassed in this grant application contains over 1000 homes and is considered "unserved" (locations without access to reliable broadband service of 25/3Mbps). This area will greatly benefit from improved fiber to the home internet and meets the states commitment to "improving broadband infrastructure to underserved and unserved locations in Idaho." Internet service in the grant footprint will be provided through a public\private partnership.

The City of McCall is part of the Valley County consortium working toward installation of a community owned public\private open-access fiber to the home network to address the internet access challenges faced by most of the County. Additionally, this consortium will take advantage of the proposed IRON North-South Middle Mile Network will help address this with a Public\Private partnership that benefits the entire region.

The City of McCall is in complete support of Valley County's application for an Idaho CPF ARPA Broadband Infrastructure Grant as proposed and asks the Idaho Department of Commerce Broadband Advisory Board to fund this project. Thank you for your consideration of this request.

Sincerely,

Robert Giles
Mayor – City of McCall

**McCALL CITY COUNCIL
AGENDA BILL**

216 East Park Street
McCall, Idaho 83638

**Number AB 23-117
Meeting Date June 9, 2023**

AGENDA ITEM INFORMATION				
SUBJECT:		<i>Department Approvals</i>	<i>Initials</i>	<i>Originator or Supporter</i>
Deinhard Lane, SH-55 to Samson Trail: Recommendation to Award Change Order for Water Main Upgrade		Mayor / Council		
		City Manager		
		Clerk	JSU	
		Treasurer		
		Community Development		
		Police Department		
		Public Works	MS	Originator
		Golf Course		
COST IMPACT:	Engineers Estimate: \$700,000	Parks and Recreation		
FUNDING SOURCE:	Water Distribution	Airport		
		Library		
TIMELINE:	Immediately - Summer 2023	Information Systems		
		Grant Coordinator		
SUMMARY STATEMENT:				
<p>On May 8, Granite Excavation commenced work on the <i>Deinhard Lane, SH-55 to Samson Trail</i> construction project. During the first day of construction, it was discovered that the city’s water main (located within Deinhard Lane between Samson Trail and SH-55) was an 8-inch iron pipe more than 40 years old rather than a 12-inch or larger plastic pipe, as was assumed based on previous planning documents.</p> <p>The importance of replacing this water main was described in an email from Nathan Stewart to the City Council on May 14, 2023. Horrocks Engineers has quickly prepared the design plans (in accordance with DEQ requirements) for incorporating this water main replacement into the project. The contractor (Granite Excavation) has been working with our engineering team to negotiate a reasonable change order price.</p> <p>Pricing negotiations are still ongoing, and the project management team will present the final change order price to the Council for consideration at the meeting.</p>				
RECOMMENDED ACTION:				
Pending recommendation from staff, approve water main change order, Increasing the overall contract price accordingly and authorize the Mayor to sign all necessary documents.				
RECORD OF COUNCIL ACTION				
MEETING DATE	ACTION			
November 3, 2022	Contract Awarded to Granite for Deinhard Lane, SH-55 to Samson Trail project			

From: [Nathan Stewart](#)
To: [City Council](#)
Cc: [Erin Greaves](#); [Anette Spickard](#); [Sabrina Sims](#); [Morgan Stroud](#)
Subject: Deinhard Lane and SH-55 Reconstruction Project - Update on water main discovery/upgrade
Date: Saturday, May 13, 2023 12:26:24 PM

Hello City Council,

I wanted to provide you a brief update on our Deinhard Lane-SH-55 project. Granite Excavation commenced construction on Monday, 5/8. During their initial pothole excavation to confirm location and depth of underground utilities, they exposed the City's water main that runs under Deinhard (from Samson Trail to SH-55) and confirmed that it was an 8-inch steel pipe. This was an unexpected surprise, because the Water Department's hydraulic model assumed that this main was larger (12-inch). Review of old paper maps confirmed this pipe was installed in the early/mid-80s.

Project engineers, City staff, and our water modeling consultant (Bowen-Collins) spent the early part of the week re-running the water model to evaluate the necessity of upsizing this 8-inch main (while the road was under construction) given how important this east-west trunk line is in supplying water pressure and flows to the City's distribution system (specifically the central part of the City from SH-55 to the north and west where some of our greatest demands occur). From this evaluation, we determined it was critical (to meet future system demands) that this main be upsized to a minimum of 12-inch, but preferably 16-inch. We could delay this upsizing, but it would dramatically increase the construction cost and require digging up the newly reconstructed Deinhard Lane in the future (not a viable option). If a 16-inch upgrade could be achieved, the urgency of additional future E-W trunk line upgrades could be eliminated or delayed.

Accordingly, we met with Granite Excavation toward the end of the week to discuss their capability to incorporate the water main replacement into the project schedule, availability of pipe materials, and estimated costs (of 12-inch vs. 16-inch). Based on pricing information provided on Friday, we determined replacing the existing main with a new 16-inch pvc main provided the greatest economic benefit to the system (estimated cost of ~\$700K).

So, over the next two weeks, Horrocks Engineers will complete the final design on the water main replacement, coordinating with DEQ get their concurrence, and Granite will be finalizing their total cost to complete the water main work. I plan to present the final pricing as a change order to the Council at your 6/8/23 regular meeting.

The discovery of the undersized existing main is a minor setback for the implementation of the water system's CIP. However, it is fortunate that we have a proactive engineering team, staff, and mobilized/capable contractor that were able to complete a thorough analysis of the situation (over a very short time span) and provide a solution that can be incorporated into the existing road construction project. In the short term, completing this water main upgrade in as part of the roadway project will save significantly on construction costs (vs a stand alone project). Over the long term, incorporating this new 16-main will also save money on reduced pumping demand for the system (energy savings) and overall system efficiency (wear and tear) over the lifespan of the new pvc main (50-100 years). Lastly, the new main will provide immediate benefits to the community by

enhancing system pressures and fire flow capabilities once it is completed and connected into the existing distribution system.

I look forward to discussing this more with you at your 6/8/23 meeting.

Best regards,

Nathan T. Stewart, P.E.
McCall Public Works Director, City Engineer
216 E. Park Street, McCall, ID 83638
Ph.: 208-634-8943 | Cell: 208-315-3304

City of McCall

Deinhard Lane, SH-55 to Samson Trail Improvements

Cover Page Change Order #2 June 8th, 2023

1. A separate copy of the 16" Water Line Plans. Additional traffic control sheets.
2. A new version of the bid manual will not be provided.

Summary of changes in this change order: Plans and Specifications:

1. Items Added
 - a. 16" Water Line design.
 - b. Traffic Control phasing additions for the 16" water line construction.
2. Revisions to the Article 4
 - a. Project Mile Stone Date Revisions.
 - b. Substantial Completion date revisions.
3. Added SP-12 Pipe Bollard

Plan Sheets:

1. Add 16" Waterline design plans as a separate document.
2. Add traffic control sheet plans.

ESTIMATED CHANGE IN CONTRACT TIME

There will be a 31-day increase in Contract Time associated with this Change Order. This increase includes 31 days for the delays associated with the time that it took to design the 16" water line and get it QLPE reviewed and approved. This also includes time to construct the 16" water line and incorporate it into the project staging and schedule. This will push back the

original Substantial Completion Date by 31 working days and result in a total of 121 working days to conclude on October 23, 2023. This extension will affect the Milestones as specified in Article 4.01 of the Contract as amended in subsequent Change Orders and revised below. Final completion date is set for October 30, 2023 with the additional working days.

Article 4 is revised as noted in red below.

ARTICLE 4. CONTRACT TIMES/LIMITATIONS

4.01 *Milestones*

Completion of CRABS reconstruction and final paving east of Sta 57+00 on Deinhard Lane by **June 30th**.

Completion of south side of Deinhard Lane/SH-55 intersection by **October 13th, 2023** with paved travel way and signal installation.

Completion of north side of Deinhard Lane/SH-55 intersection by **October 13th, 2023** with paved travel way, sidewalks and pedestrian ramps.

Final paving by October 18th, 2023.

4.02 *Substantial Completion*

The CONTRACTOR shall begin work in conformance with the Contract Documents and shall complete the Work prior to the date of completion. The project site will be available to the CONTRACTOR for project implementation on or around **May 8th, 2023** or when weather conditions permit, and only after approval of the Project Engineer. The work to be performed pursuant to this Contract shall be substantially complete within **121** working days after Notice to Proceed.

The project will be considered "Substantially Complete" when all storm drain facilities, hardscape features, electrical, signal and illumination, irrigation facilities, plantings, landscape repair areas, paving, striping and signing within the project limits are complete, fully functional, and open for public use.

4.03 *Final Completion*

The Work shall be finally complete and ready for final payment, in accordance with Paragraph 14.07 of the ISPWC General Conditions, within ten (10) working days of the date of Substantial Completion Certification.

4.04 *Working Hours*

Work can be performed five (5) days a week (Monday through Friday) for a period of twelve (12) hours (7:00 am to 7:00 PM) per day. Adjustment of the Contract Time can be made in accordance with the provisions of the Contract Documents as directed by the Project Engineer, Public Works Director, or the OWNER. Requests to perform work

outside of these hours should be submitted to the Resident Project Representative, for approval, at least 3 days in advance.

All work within ITD right-of-way is only permitted Monday through noon Friday.

4.05 *Liquidated Damages*

- A. CONTRACTOR and OWNER recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in paragraphs 4.01 and 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the ISPWC Section 100 General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty), CONTRACTOR shall pay OWNER \$1200.00 for each day that expires after the time specified in paragraph 4.01 Milestones and 4.02 for Substantial Completion until the Work is substantially complete and in paragraph 4.03 for Final Completion until the Work has been approved as complete by the Engineer.

SP-14 INSTALL PERMANENT BOLLARD

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This item consists of furnishing all labor, equipment and material necessary for providing and installing permanent bollards and foundations where indicated on the plans or as directed by the Engineer.

PART 2 MATERIALS

2.1 GENERAL

- A. Foundations and bollards are to be constructed of materials outlined in the project plans, or as directed by the Engineer. Foundation concrete shall meet the requirements of ISPWC Section 703. Reflective tape shall be 4" white vinyl and paint shall be safety yellow per ANSI Z535.1.

PART 3 WORKMANSHIP

3.1 GENERAL

- A. Bollards shall be placed at the locations shown on the plans. Refer to the project plan details for additional information.

PART 4 MEASUREMENT AND PAYMENT

4.1 Use the following unit price option as designated on the Bid Schedule.

A. Permanent Bollard: By the each, to include compensation for all material, labor, and appurtenances necessary for complete placement of one permanent bollard each, complete in place.

1. Bid Schedule Payment References: SP-14
2. Bid Schedule Description: Install Permanent Bollard...each (EA).

Change Order

No. 02

Date of Issuance: 6/8/2023

Effective Date: 6/8/2023

Project: Deinhard Lane, SH-55 to Samson Trail	Owners: City of McCall	Owner's Contract No.: NA
Contract: Deinhard Lane, SH-55 to Samson Trail		Date of Contract: 12/20/2022
Contractor: Granite Excavation, Inc.		Engineer's Project No.: 22007

Contractor is directed to proceed promptly with the following change(s):

<i>Item No.</i>	<i>Description</i>
64	Valve Box, Gate, Adjust to Grade – Reduction to 2 units from original quantity due to existing valves no longer needing to be collared as they are being replaced with new valves.
65	Miscellaneous Utility, Adjust to Grade, Water Meter – Bid item removed. Item no longer needed due to existing water meters being replaced.
92	Removal of Asphalt (Includes Millings Backhaul & 4" Thick Placement) – Creation of new bid item for water main replacement work.
93	Removal of Asphalt – Creation of new bid item for water main replacement work.
94	Removal of Concrete Pavers/Pedestrian Ramp – Creation of new bid item for water main replacement work.
95	Removal of Concrete Curb – Creation of new bid item for water main replacement work.
96	REMOVAL OF WATER VALVE/FITTING, SALVAGE TO CITY – Creation of new bid item for water main replacement work.
97	REMOVAL OF HYDRANT, SALVAGE TO CITY - – Creation of new bid item for water main replacement work.
98	REMOVAL OF WATER METER – Creation of new bid item for water main replacement work.
99	ABANDON EXISTING WATER MAIN IN-PLACE – Creation of new bid item for water main replacement work.
100	Dust Abatement Water – Creation of new bid item for water main replacement work.
101	Water Main Pipe - Size 4" - Type C900 – Creation of new bid item for water main replacement work.
102	Water Main Pipe - Size 6" - Type C900 – Creation of new bid item for water main replacement work.
103	Water Main Pipe - Size 8" - Type C900 – Creation of new bid item for water main replacement work.
104	Water Main Pipe - Size 16" - Type C900 – Creation of new bid item for water main replacement work.
105	Water Main Fitting (Tee)- Size 16" to 8" (FL x FL)- Type C900 – Creation of new bid item for water main replacement work.

106	Water Main Fitting (Tee)- Size 16" to 6" (FL x FL)- Type C900 – Creation of new bid item for water main replacement work.
107	Water Main Fitting (Tee)- Size 8" to 16" (FL x FL)- Type C900 -- Creation of new bid item for water main replacement work.
108	WATER MAIN FITTING (11.25 DEGREE ELBOW) - SIZE 16" (MJ X MJ) - TYPE C900 -- Creation of new bid item for water main replacement work.
109	Water Main Fitting (Tee)- Size 16" to 4" (FL x FL)- Type C900 – Creation of new bid item for water main replacement work.
110	4" Coupler – Creation of new bid item for water main replacement work.
111	6" Coupler – Creation of new bid item for water main replacement work.
112	8" Coupler – Creation of new bid item for water main replacement work.
113	Water Main Fitting (Vertical)- Size 8" (MJ x MJ)- Type C900 – Creation of new bid item for water main replacement work.
114	Water Main Fitting (Reducer)- Size 16" to 8" - Type C900 – Creation of new bid item for water main replacement work.
115	Water Main Fitting (Vertical)- Size 6" (MJ x MJ)- Type C900 – Creation of new bid item for water main replacement work.
116	Air/vacuum combination Air Valve- 3", (Includes 3" Sched 40 galvanized vent pipe) – Creation of new bid item for water main replacement work.
117	Valve - 4" - Gate Valve – Creation of new bid item for water main replacement work.
118	Valve - 6" - Gate Valve – Creation of new bid item for water main replacement work.
119	Valve - 8" - Gate Valve – Creation of new bid item for water main replacement work.
120	Valve - 16" - Gate Valve – Creation of new bid item for water main replacement
121	Hydrant – Creation of new bid item for water main replacement work.
122	Water Service Connection, Size 1" – Creation of new bid item for water main
123	Water Service Connection, Size 2" – Creation of new bid item for water main
124	Standard 6" inch Vertical Curb and Gutter – Creation of new bid item for water main replacement work.
125	Concrete Sidewalks – Creation of new bid item for water main replacement work.
126	Pedestrian Ramp with Detectable Warning Domes (Cast Iron), Type A – Creation of new bid item for water main replacement work.
127	Crushed Aggregate For Base Type I – Creation of new bid item for water main replacement work.
128	Crushed Aggregate for Base Type II – Creation of new bid item for water main replacement work.
129	Diluted Emulsified Asphalt for Tack Coat – Creation of new bid item for water main replacement work.
130	1/2" Plant Mix Pavement (SP 3) PG 64-34 – Creation of new bid item for water main replacement work.
131	Construction Traffic Control – Creation of new bid item for water main replacement work.
132	Mobilization – Creation of new bid item for water main replacement work.
133	Surveying – Creation of new bid item for water main replacement work.
134	Pipe Bollard – Creation of new bid item for water main replacement work.

Attachments (list documents supporting change)


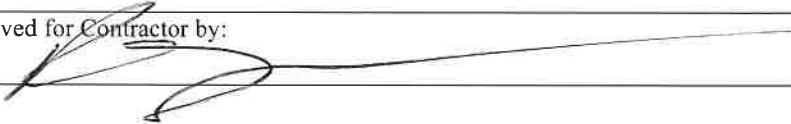
Contract Tabulation Summary Dated 6/8/2023
Deinhard Lane 16" Water Line Plan Set Dated 5/25/2023
Contractor's Change Order Pricing Proposal Dated 6/2/2023
Plan Sheets 72A, 72B, 101A, & 101B of 102, Traffic Control Sheets
Cover Letter from Horrocks Engineers Dated 6/8/2023
SP-14 Install Permanent Bollard Specification

Estimated change in Contract Price and Contract Times:

Contract Price \$960,020.96 Increase

Contract Time 31 Days Increase

If the change involves an increase, the estimated amount is not to be exceeded without further authorization.

Recommended for Approval by Engineer:		Date	06/08/2023
Authorized for Owner (City of McCall) by:		Date	
Received for Contractor by:		Date	6/08/2023

SPECIFICATIONS

ESTIMATED CHANGE IN CONTRACT AMOUNT

The estimated cost to complete the work associated with this change order includes:

*See attached Contract Tabulation Bid Summary Dated 6/8/2023

ESTIMATED CHANGE IN CONTRACT TIME

See attached Cover Letter from Horrocks Engineers Dated 6/8/2023 addressing Article 4 Contract Time Changes.

City of McCall
Deinhard Lane, SH-55 to Samson Trail
Changes to Contract Price Due To Change Order #1

Crestline Engineers

Contract Tabulation Summary 6/8/2023

Granite Excavation, Inc.

BID MANUAL ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
1	Removal of Asphalt	SY	5848	\$ 6.23	\$ 36,433.04
2	Removal of Sidewalk	SY	212	\$ 30.54	\$ 6,474.48
3	Removal of Landscaping	SY	1857	\$ 8.06	\$ 14,967.42
4	Removal of Concrete	LF	99	\$ 34.74	\$ 3,439.26
5	Removal of Manhole or Inlet	EA	7	\$ 1,618.90	\$ 11,332.30
6	Removal of Tree (6"+)	EA	14	\$ 699.57	\$ 9,793.98
7	Removal of Roadside Sign (Salvage to McCall Public Works)	EA	7	\$ 77.02	\$ 539.14
8	Removal of Hydrant	EA	4	\$ 3,546.50	\$ 14,186.00
9	Removal of Water Meter	EA	2	\$ 1,157.24	\$ 2,314.48
10	Removal of Junction Box	EA	1	\$ 1,701.40	\$ 1,701.40
11	Excavation	CY	5247	\$ 37.11	\$ 194,716.17
12	Dust Abatement Water	MG	233	\$ 78.58	\$ 18,309.14
13	Dewatering	LS	1	\$ 0.01	\$ 0.01
14	Erosion Blanket	AC	0	\$ 33,086.44	\$ 3,308.64
15	Loose Riprap	CY	10	\$ 246.97	\$ 2,469.70
16	Infiltration Facility (Infiltration Trench)	LF	335	\$ 50.53	\$ 16,927.55
17	Removal of Pipe (Existing Stormwater)	LF	544	\$ 24.60	\$ 13,382.40
18	Exploratory Excavation (Non-Groundwater)	EA	2	\$ 1,430.52	\$ 2,861.04
19	Hydrant	EA	4	\$ 10,051.79	\$ 40,207.16
20	Water Service Connection, 1"	EA	2	\$ 4,925.87	\$ 9,851.74
21	15" Storm Drain Pipe, Class SDR 35 PVC	LF	424	\$ 122.76	\$ 52,050.24
22	16" Storm Drain Pipe, Class C905	LF	603	\$ 165.57	\$ 99,838.71
23	18" Storm Drain Pipe, Class SDR 35 PVC	LF	121	\$ 154.18	\$ 18,655.78
24	24" Storm Drain Pipe, Class C905	LF	91	\$ 292.34	\$ 26,602.94

25	24" Storm Drain Pipe, SDR 35 PVC	LF	149	\$ 207.16	\$ 30,866.84
26	12" Culvert Pipe, ADS HP Storm	LF	87	\$ 93.61	\$ 8,144.07
27	36" Culvert Pipe, ADS HP Storm	LF	99	\$ 253.76	\$ 25,122.24
28	48" Storm Drain Catch Manhole	EA	5	\$ 10,357.40	\$ 51,787.00
29	Curb Opening Inlet	EA	4	\$ 2,577.25	\$ 10,309.00
30	6" inch Vertical Curb (No Gutter)	LF	16	\$ 117.50	\$ 1,880.00
31	Standard 6" inch Vertical Curb and Gutter	LF	1025	\$ 77.56	\$ 79,499.00
32	Concrete Valley Gutter	LF	265	\$ 104.95	\$ 27,811.75
33	Concrete Sidewalks	SY	497	\$ 130.86	\$ 65,037.42
34	Concrete Repair	SY	10	\$ 226.53	\$ 2,265.30
35	Pedestrian Ramp with Detectable Warning Domes (Cast Iron), Type A	EA	5	\$ 4,756.68	\$ 23,783.40
36	Pedestrian Ramp with Detectable Warning Domes (Cast Iron), Modified Type F	EA	2	\$ 4,709.69	\$ 9,419.38
37	Crushed Aggregate For Base Type I	TN	2564	\$ 60.54	\$ 155,224.56
38	Crushed Aggregate for Base Type II	TN	5148	\$ 56.77	\$ 292,251.96
39	Diluted Emulsified Asphalt for Tack Coat	GAL	4163	\$ 0.01	\$ 41.63
40	Seal Coat	SY	2528	\$ 4.18	\$ 10,567.04
41	1/2" Plant Mix Pavement (SP 3) PG 64-34	TN	4435	\$ 187.49	\$ 831,518.15
42	1/2" Plant Mix Pavement (SP 2) PG 64-34	SY	949	\$ 47.37	\$ 44,954.13
43	Seeding	SY	868	\$ 4.18	\$ 3,628.24
44	Topsoiling	SY	868	\$ 13.93	\$ 12,091.24
45	Relocate Street Light	EA	1	\$ 12,773.64	\$ 12,773.64
46	Conduit, 3-1 1/4" HDPE	LF	199	\$ 21.28	\$ 4,234.72
47	40"X44" Junction Box	EA	2	\$ 6,364.40	\$ 12,728.80
48	Construction Traffic Control	LS	1	\$ 51,184.18	\$ 51,184.18
49	Temporary Striping Tape (Yellow)	LF	3940	\$ 3.48	\$ 13,711.20
50	Temporary Striping Tape (White)	LF	50	\$ 3.48	\$ 174.00
51	Traffic Control Barricades Type III	EA	18	\$ 278.62	\$ 5,015.16
52	Traffic Control Barricades Type I	EA	7	\$ 104.48	\$ 731.36
53	Traffic Control Flaggers	MH	100	\$ 83.59	\$ 8,359.00
54	Traffic Control Maintenance	MH	288	\$ 69.66	\$ 20,062.08
55	Pavement Line Paint or Painted Pavement Markings	SF	9321	\$ 2.27	\$ 21,158.67
56	Permanent Signing	SF	25	\$ 41.79	\$ 1,044.75
57	Steel Sign Posts	LB	134	\$ 5.57	\$ 746.38
58	Anchor Assembly	EA	5	\$ 292.55	\$ 1,462.75
59	Mobilization (15%)	LS	1	\$ 288,781.24	\$ 288,781.24

60	Reference and Reset Monuments -Survey Monuments	EA	8	\$ 1,393.11	\$ 11,144.88
61	Manhole, Sanitary Sewer, Adjust to Grade	EA	9	\$ 3,278.65	\$ 29,507.85
62	Sanitary Sewer Cone Section	EA	1	\$ 5,566.41	\$ 5,566.41
63	Manhole, Stormwater, Adjust to Grade	EA	2	\$ 3,770.76	\$ 7,541.52
64	Valve Box, Gate, Adjust to Grade	EA	2	\$ 2,511.80	\$ 5,023.60
65	Miscellaneous Utility, Adjust to Grade, Water Meter	EA	0	\$ 715.26	\$
66	Miscellaneous Utility, Adjust to Grade, Junction Box	EA	3	\$ 2,221.12	\$ 6,663.36
67	Remove Commercial Sign	EA	1	\$ 5,177.23	\$ 5,177.23
68	Landscape Repair	SY	906	\$ 34.83	\$ 31,555.98
69	Asphalt Repair	SY	1039	\$ 63.10	\$ 65,560.90
70	Surveying	LS	1	\$ 48,758.97	\$ 48,758.97
71	Ornamental Rock	CY	68	\$ 222.51	\$ 15,130.68
72	Directed Survey (Contingency Allowance)	CA	1	\$ 5,000.00	\$ 5,000.00
73	Gravel Repair	SY	20	\$ 96.98	\$ 1,939.60
74	Remove and Reset Fence	LF	50	\$ 62.69	\$ 3,134.50
75	Temporary Fencing	LF	340	\$ 48.76	\$ 16,578.40
76	Silane 40 Concrete Sealer	SY	816	\$ 28.84	\$ 23,533.44
77	Stormwater Pollution Prevention Plan	LS	1	\$ 19,892.26	\$ 19,892.26
78	Cement Recycled Asphalt Base Stabilization Class II	SY	7500	\$ 7.25	\$ 54,375.00
79	Portland Cement	TN	182	\$ 355.24	\$ 64,653.68
80	Pulverize Existing Surface	SY	7500	\$ 3.67	\$ 27,525.00
81	Catch Basin TY 1A	EA	6	\$ 2,786.23	\$ 16,717.38
82	Catch Basin TY 3A	EA	7	\$ 4,162.85	\$ 29,139.95
83	Aluminum 12" Apron For Pipe (Per ITD SD No. 608-1)	EA	3	\$ 778.45	\$ 2,335.35
84	Aluminum 18" Apron For Pipe (Per ITD SD No. 608-1)	EA	1	\$ 1,103.32	\$ 1,103.32
85	Aluminum 36" Apron For Pipe (Per ITD SD No. 608-1)	EA	2	\$ 6,352.99	\$ 12,705.98
86	Traffic Signal Installation	LS	1	\$ 500,672.20	\$ 500,672.20
87	Rectangular Rapid Flashing Beacon Sign	EA	2	\$ 5,373.10	\$ 10,746.20
88	Obliteration of Pavement Markings	SF	1567	\$ 3.48	\$ 5,453.16
89	Portable Changeable Message Sign (PCM Sign)	HR	1750	\$ 4.18	\$ 7,315.00
90	Multiple Approach Video Detection System	LS	0	\$ 47,037.72	\$
91	Emergency Vehicle Preempt Detection	LS	1	\$ 12,383.08	\$ 12,383.08

CHANGE ORDERS

92	Removal of Asphalt (Includes Millings Backhaul & 4" Thick Placement)	SY	1820	\$	14.42	\$	26,244.40
93	Removal of Asphalt	SY	107	\$	6.23	\$	666.61
94	Removal of Concrete Pavers/Pedestrian Ramp	SY	46	\$	30.54	\$	1,404.84
95	Removal of Concrete Curb	LF	30	\$	34.74	\$	1,042.20
96	REMOVAL OF WATER VALVE/FITTING, SALVAGE TO CITY	EA	13	\$	325.54	\$	4,232.02
97	REMOVAL OF HYDRANT, SALVAGE TO CITY	EA	2	\$	3,546.50	\$	7,093.00
98	REMOVAL OF WATER METER	EA	3	\$	1,157.24	\$	3,471.72
99	ABANDON EXISTING WATER MAIN IN-PLACE	LF	2984	\$	13.51	\$	40,318.70
100	Dust Abatement Water	MG	90	\$	78.58	\$	7,072.20
101	Water Main Pipe - Size 4" - Type C900	LF	3	\$	545.12	\$	1,553.59
102	Water Main Pipe - Size 6" - Type C900	LF	16	\$	290.42	\$	4,513.13
103	Water Main Pipe - Size 8" - Type C900	LF	12	\$	302.71	\$	3,750.58
104	Water Main Pipe - Size 16" - Type C900	LF	2944	\$	180.10	\$	530,302.65
105	Water Main Fitting (Tee)- Size 16" to 8" (FL x FL)- Type C900	EA	3	\$	3,363.25	\$	10,089.75
106	Water Main Fitting (Tee)- Size 16" to 6" (FL x FL)- Type C900	EA	4	\$	3,493.60	\$	13,974.40
107	Water Main Fitting (Tee)- Size 8" to 16" (FL x FL)- Type C900	EA	1	\$	2,642.14	\$	2,642.14
108	WATER MAIN FITTING (11.25 DEGREE ELBOW) - SIZE 16" (MJ X MJ) - TYPE C900	EA	1	\$	2,329.54	\$	2,329.54
109	Water Main Fitting (Tee)- Size 16" to 4" (FL x FL)- Type C900	EA	1	\$	4,228.04	\$	4,228.04
110	4" Coupler	EA	1	\$	504.16	\$	504.16
111	6" Coupler	EA	6	\$	619.77	\$	3,718.62
112	8" Coupler	EA	6	\$	682.95	\$	4,097.70
113	Water Main Fitting (Vertical)- Size 8" (MJ x MJ)- Type C900	EA	10	\$	1,837.13	\$	18,371.30
114	Water Main Fitting (Reducer)- Size 16" to 8" - Type C900	EA	1	\$	1,599.37	\$	1,599.37
115	Water Main Fitting (Vertical)- Size 6" (MJ x MJ)- Type C900	EA	8	\$	1,677.29	\$	13,418.32
116	Air/vacuum combination Air Valve- 3", (Includes 3" Sched 40 galvanized vent pipe)	EA	2	\$	17,924.93	\$	35,849.86
117	Valve - 4" - Gate Valve	EA	1	\$	3,325.42	\$	3,325.42
118	Valve - 6" - Gate Valve	EA	4	\$	3,954.99	\$	15,819.96
119	Valve - 8" - Gate Valve	EA	6	\$	4,615.09	\$	27,690.54
120	Valve - 16" - Gate Valve	EA	6	\$	14,726.92	\$	88,361.52
121	Hydrant	EA	1	\$	10,621.61	\$	10,621.61
122	Water Service Connection, Size 1"	EA	3	\$	3,583.72	\$	10,751.16
123	Water Service Connection, Size 2"	EA	2	\$	5,694.93	\$	11,389.86
124	Standard 6" inch Vertical Curb and Gutter	LF	30	\$	77.56	\$	2,326.80
125	Concrete Sidewalks	SY	46	\$	130.86	\$	6,019.56

126	Pedestrian Ramp with Detectable Warning Domes (Cast Iron), Type A	EA	1	\$	4,756.68	\$	4,756.68
127	Crushed Aggregate For Base Type I	TN	32	\$	60.54	\$	1,937.28
128	Crushed Aggregate for Base Type II	TN	71	\$	56.77	\$	4,030.67
129	Diluted Emulsified Asphalt for Tack Coat	GAL	11	\$	0.01	\$	0.11
130	1/2" Plant Mix Pavement (SP 3) PG 64-34	TN	36	\$	187.49	\$	6,749.64
131	Construction Traffic Control	LS	1	\$	12,890.50	\$	12,890.50
132	Mobilization	LS	1	\$	38,629.13	\$	38,629.13
133	Surveying	LS	1	\$	7,089.78	\$	7,089.78
134	Pipe Bollard	EA	4	\$	1,869.12	\$	7,476.48
Total Construction Cost						\$	4,777,923.42
				Original Contract Price	\$	3,781,108.77	
				Contract Price after Change Order #1	\$	3,817,902.46	
				Change in Contract Price	\$	36,793.69	
				Contract Price after Change Order #2	\$	4,777,923.42	
				Change in Contract Price	\$	960,020.96	



GRANITE

Excavation Inc.

We're diggin this business

23 Warm Lake Hwy
 Cascade, ID 83611
 225 Wooddale Ave, Ste 115
 Eagle, ID 83616
 graniteexcavation.com
 208-382-4188

To:	City Of Mccall Public Works	Contact:	
Address:	216 E Park St Mccall, ID 83638	Phone:	(208) 634-3504
		Fax:	(208) 634-3038
Project Name:	Deinhard 16 Inch Waterline CO	Bid Number:	
Project Location:	McCall	Bid Date:	6/2/2023

Item #	Item Description	Estimated Quantity	Unit	Unit Price	Total Price
92	Removal Of Asphalt (Includes Millings Backhaul & 4" Thick Placement)	1,820.00	SF	\$14.42	\$26,244.40
96	REMOVAL OF WATER VALVE/FITTING, SALVAGE TO CITY	13.00	EACH	\$325.54	\$4,232.02
99	ABANDON EXISTING WATER MAIN IN-PLACE	2,984.00	LF	\$13.51	\$40,313.84
101	Water Main Pipe - Size 4" - Type C900	3.00	LF	\$545.12	\$1,635.36
102	Water Main Pipe - Size 6" - Type C900	16.00	LF	\$290.42	\$4,646.72
103	Water Main Pipe - Size 8" - Type C900	12.00	LF	\$302.71	\$3,632.52
104	Water Main Pipe - Size 16" - Type C900	2,944.00	LF	\$180.10	\$530,214.40
105	Water Main Fitting (Tee)- Size 16" To 8" (FL X FL)- Type C900	3.00	EACH	\$3,363.25	\$10,089.75
106	Water Main Fitting (Tee)- Size 16" To 6" (FL X FL)- Type C900	3.00	EACH	\$3,493.60	\$10,480.80
107	Water Main Fitting (Tee)- Size 8" To 16" (FL X FL)- Type C900	1.00	EACH	\$2,642.14	\$2,642.14
108	Water Main Fitting (Tee)- Size 16" To 8" To 6" (FL X FL) - Type C900	1.00	EACH	\$3,210.54	\$3,210.54
109	WATER MAIN FITTING (11.25 DEGREE ELBOW) - SIZE 16" (MJ X MJ) - TYPE C900	1.00	EACH	\$2,329.54	\$2,329.54
110	Water Main Fitting (Tee)- Size 16" To 4" (FL X FL)- Type C900	1.00	EACH	\$4,228.04	\$4,228.04
111	4" Coupler	1.00	EACH	\$504.16	\$504.16
112	6" Coupler	6.00	EACH	\$619.77	\$3,718.62
113	8" Coupler	6.00	EACH	\$682.95	\$4,097.70
114	Water Main Fitting (Vertical)- Size 8" (MJ X MJ)- Type C900	10.00	EACH	\$1,837.13	\$18,371.30
115	Water Main Fitting (Reducer)- Size 16" To 8" - Type C900	1.00	EACH	\$1,599.37	\$1,599.37
116	Water Main Fitting (Vertical)- Size 6" (MJ X MJ)- Type C900	8.00	EACH	\$1,677.29	\$13,418.32
117	Air/vacuum Combination Air Valve- 3", (Includes 3" Sched 40 Galvanized Vent Pipe)	2.00	EACH	\$17,924.93	\$35,849.86
118	Valve - 4" - Gate Valve	1.00	EACH	\$3,325.42	\$3,325.42
119	Valve - 6" - Gate Valve	4.00	EACH	\$3,954.99	\$15,819.96
120	Valve - 8" - Gate Valve	6.00	EACH	\$4,615.09	\$27,690.54
121	Valve - 16" - Gate Valve	12.00	EACH	\$14,726.92	\$176,723.04
122	Hydrant	4.00	EACH	\$10,621.61	\$42,486.44
123	Water Service Connection, Size 1"	3.00	EACH	\$3,583.72	\$10,751.16
124	Water Service Connection, Size 2"	2.00	EACH	\$5,694.93	\$11,389.86
133	Survey	1.00	LS	\$7,089.78	\$7,089.78
134	Construction Traffic Control	1.00	LS	\$12,890.50	\$12,890.50
134	Pipe Bollard	10.00	EACH	\$1,869.12	\$18,691.20
135	Mobilization	1.00	LS	\$38,629.13	\$38,629.13

Total Bid Price: \$1,086,946.43

-CITY OF McCALL-

-DEINHARD LANE-

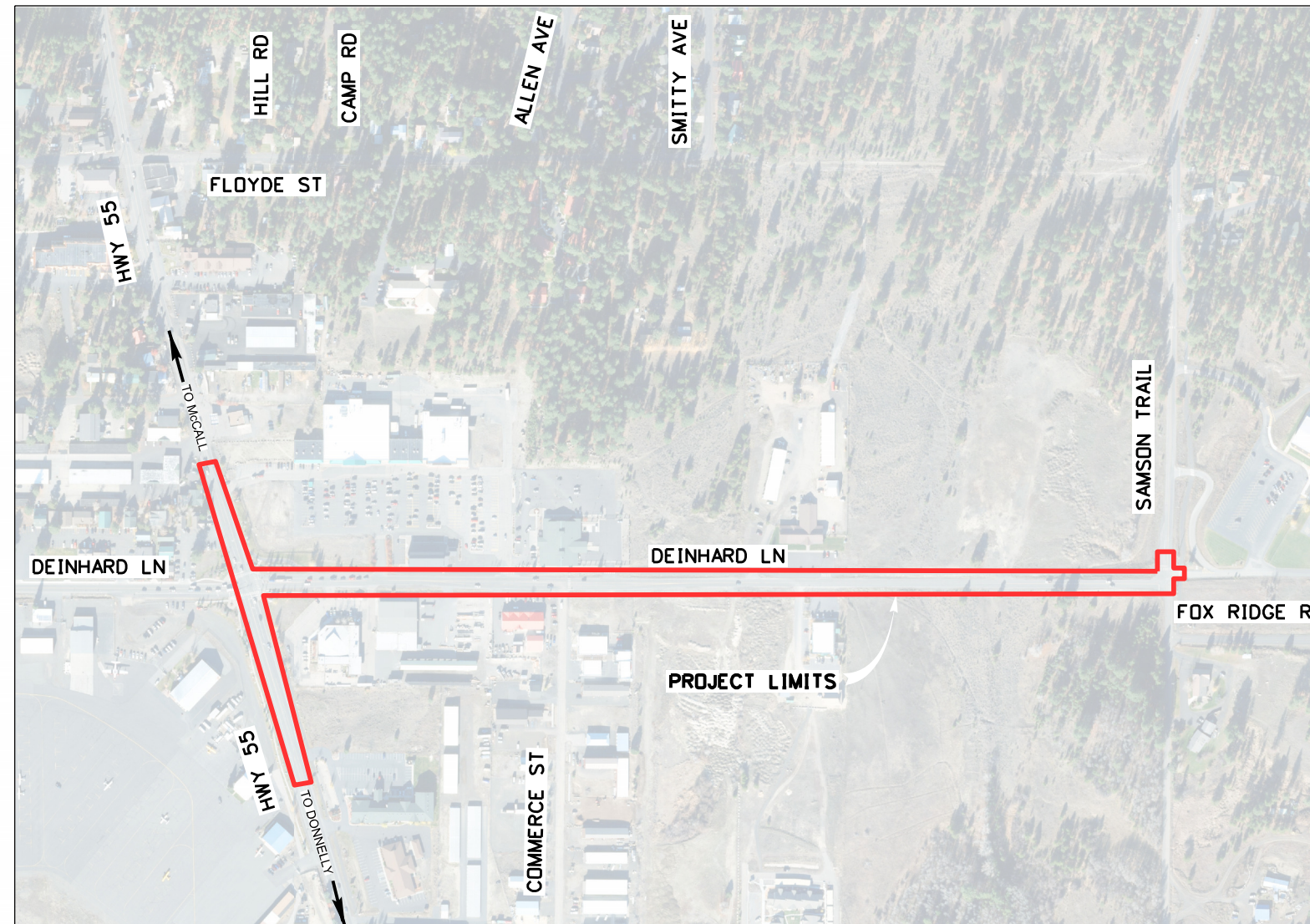
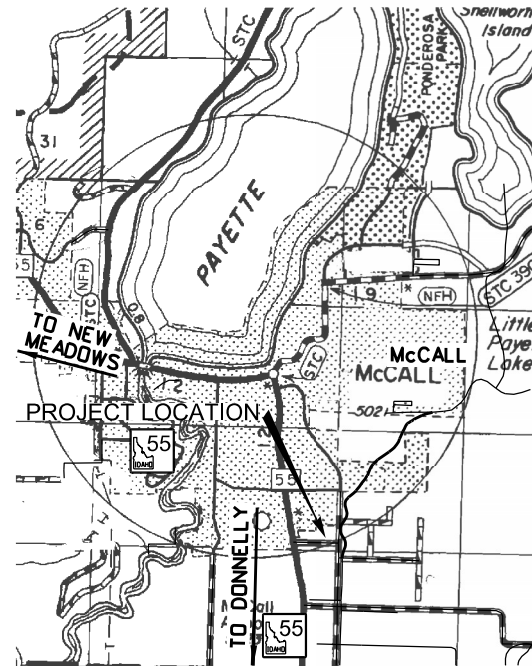
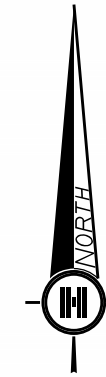
-SH-55 TO SAMSON TRAIL -

- 16" WATER LINE -

-T 18N R 3E SECTION 16-

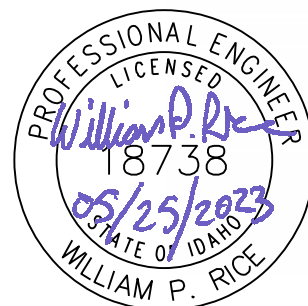
SHEET
NO.
1

INDEX TO SHEETS	
SHEET #	DESCRIPTION
1	TITLE SHEET
2-8	16" WATER LINE PLAN AND PROFILE SHEETS
9-12	CITY OF McCALL STANDARD DETAILS



APPROVED FOR
CONSTRUCTION

MAY 25th, 2023

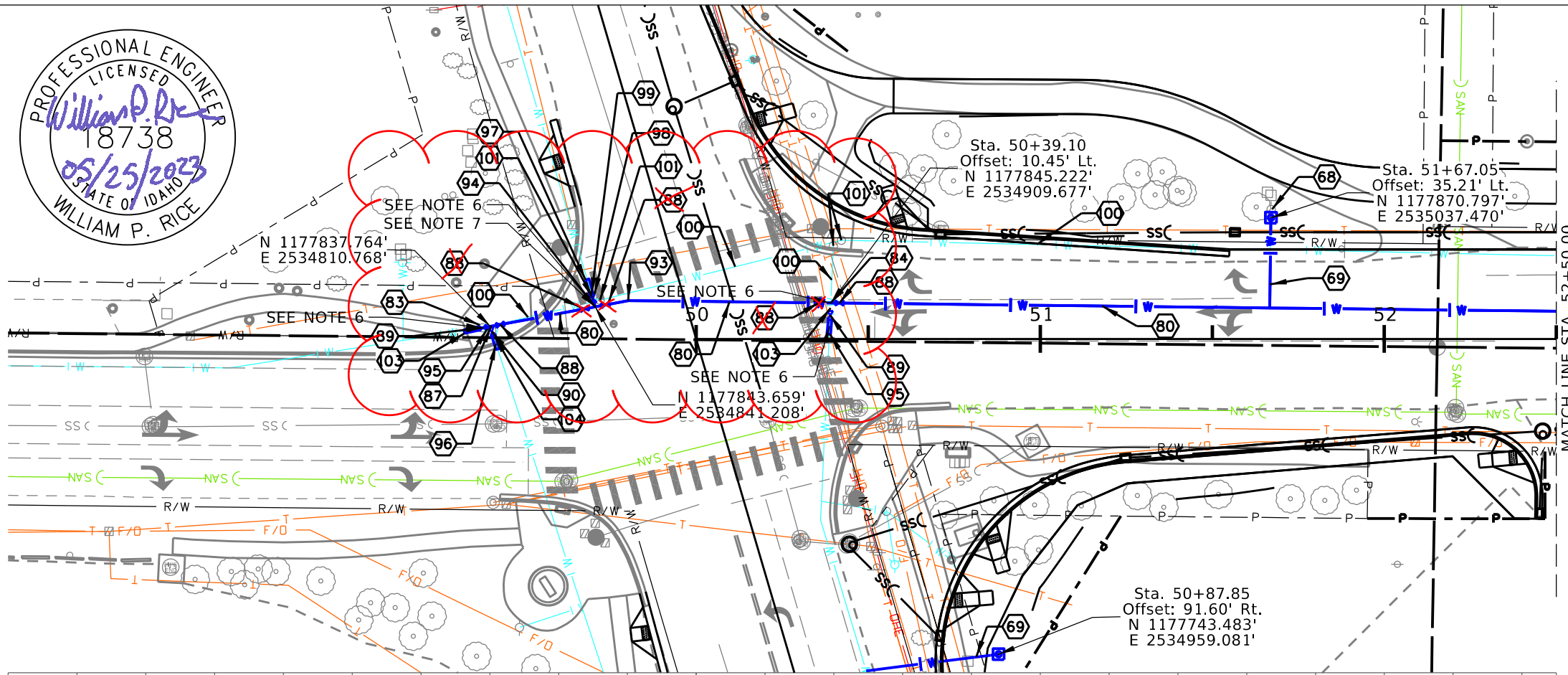
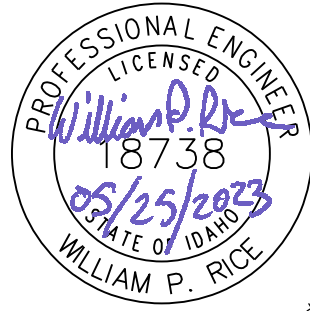


VICINITY MAP

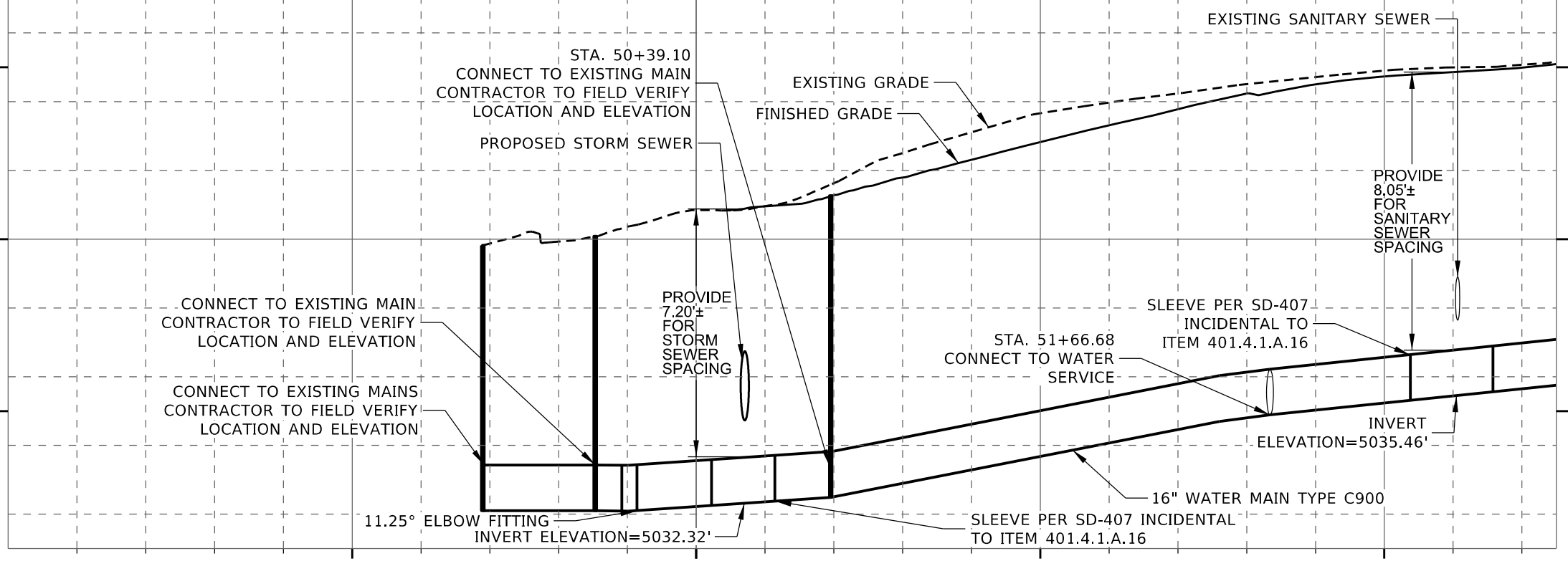
HORROCKS
ENGINEERS

GENERAL NOTES:

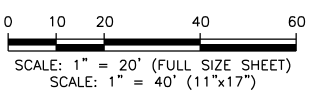
1. ALL PIPE BEDDING SHALL BE TYPE I OR TYPE III.
2. ALL PIPE, VALVE, AND METER CONNECTIONS SHALL BE WATERTIGHT.
3. ALL WATER MAIN PIPE SHALL BE C900 WITH DR-18 235 PSI REQUIRED.
4. CONTRACTOR TO FIELD VERIFY WATER SERVICE LOCATIONS AND ELEVATIONS, AND ENSURE EACH IS ACCOUNTED FOR.
5. ALL WATER AND STORMWATER PIPES 6" IN DIAMETER OR GREATER BEING ABANDONED IN PLACE SHALL BE FILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM).
6. THE CONTRACTOR SHALL NOTIFY PROPERTY/BUSINESS OWNERS OF ANY UTILITY SHUT OFFS A MINIMUM OF 72 HOURS IN ADVANCE.
7. CONTRACTOR TO VERIFY WATER VALVE, WATER METER, AND CLEANOUT LOCATIONS PRIOR TO INSTALLATION TO ENSURE ALL ARE ACCOUNTED FOR.
8. DE-WATERING, IF REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO PIPE COST AND NO ADDITIONAL PAYMENT WILL BE MADE.
9. CONTRACTOR SHALL SUBMIT A DE-WATERING PLAN TO THE ENGINEER FOR APPROVAL, IF REQUIRED.
10. ALL WATER VALVES SHALL BE RESILIENT WEDGE SEATED GATE VALVES C-515 OR C509.
11. CONTRACTOR TO PROVIDE THRUST RESTRAINTS AT ALL FITTINGS PER THE LATEST EDITION OF THE ISPMC.
12. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CALL "DIGLINE INC." AT 811 AT LEAST THREE (3) BUSINESS DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY ALL UTILITIES LOCATED IN THE VICINITY OF THE PROJECT OF ANTICIPATED CONSTRUCTION TIMES.
13. THE LOCATION OF THE EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. IT IS NOT THE INTENT OF THESE PLANS TO SHOW THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES. THE CONTRACTOR WILL BE RESPONSIBLE TO FIELD VERIFY THE EXACT UTILITY LOCATIONS BEFORE CONSTRUCTION BEGINS. ANY EXISTING UTILITIES DAMAGED BY THE CONTRACTOR WILL BE REPAIRED BY THE CONTRACTOR.
14. REFER TO THE DEINHARD LANE, SH-55 TO SAMSON TRAIL APPROVED FOR CONSTRUCTION PLANS FOR MORE INFORMATION.
15. THE 3" AIR/VAC VALVE WILL BE VAL-MATIC MODEL NUMBER 203C.2, BODY MATERIAL-CAST IRON, SST INTERNAL TRIM NPT OR FLANGED INLET, FUSION BONDED EPOXY LINING, OR APPROVED EQUAL BY ENGINEER AND CITY.
16. ALL PIPE FITTINGS WILL HAVE REQUIRED THRUST BLOCK RESTRAINTS. FOR ALL HORIZONTAL FITTING THRUST BLOCKS REFER TO ISPMC SD-403 FOR THRUST AREAS AND DETAILS. FOR ALL 8" AND 6" VERTICAL FITTINGS REQUIRED REFER TO ISPMC SD-403 FOR DETAILS AND USE A MINIMUM OF 2.5 CY OF 2500 PSI CONCRETE.
17. CONTRACTOR TO SUBMIT PLAN FOR CHLORINE DISPOSAL AND FLUSHING WATER DISPOSAL FOR ENGINEERS REVIEW AND APPROVAL, INCIDENTAL TO ITEMS 401.4.1.A.1



- BID ITEMS:**
- 68 REMOVAL OF WATER METER, ITEM 201.4.1.F.5
 - 69 WATER SERVICE CONNECTION, SIZE 1", ITEM 404.4.1.A.1
 - 80 WATER MAIN PIPE - SIZE 16" - TYPE C900, ITEM 401.4.1.A.1.16
 - 83 WATER MAIN FITTING (REDUCER), SIZE 16" TO 8" (MJxMJ) - TYPE C900, ITEM 401.4.1.B.9
 - 84 WATER MAIN FITTING (TEE) - SIZE 16" TO 8" (FL x FL) - TYPE C900, ITEM 401.4.1.B.1
 - 87 WATER MAIN FITTING (TEE) - SIZE 16" TO 6" (FL x FL) - TYPE C900, ITEM 401.4.1.B.4
 - 88 VALVE - SIZE 16" - TYPE RESILIENT SEATED WEDGE GATE VALVE, ITEM 402.4.1.A.1.16
 - 89 VALVE - SIZE 8" - TYPE GATE VALVE, ITEM 402.4.1.A.1.8
 - 90 VALVE - SIZE 6" - TYPE GATE VALVE, ITEM 402.4.1.A.1.6
 - 93 WATER MAIN FITTING (11.25° ELBOW) - SIZE 16" (MJ x MJ) - TYPE C900, ITEM 401.4.1.B.5
 - 94 WATER MAIN FITTING (TEE) - SIZE 16" TO 4" (FL x FL) - TYPE C900, ITEM 401.4.1.B.6
 - 95 WATER MAIN FITTING (COUPLER) - SIZE 8" (FL x FL) - TYPE C900, ITEM 401.4.1.B.7.8
 - 96 WATER MAIN FITTING (COUPLER) - SIZE 6" (FL x FL) - TYPE C900, ITEM 401.4.1.B.7.6
 - 97 WATER MAIN FITTING (COUPLER) - SIZE 4" (FL x FL) - TYPE C900, ITEM 401.4.1.B.7.4
 - 98 VALVE - SIZE 4" - TYPE GATE VALVE, ITEM 402.4.1.A.1.4
 - 99 WATER MAIN PIPE - SIZE 4" - TYPE C900, ITEM 401.4.1.A.1.4
 - 100 ABANDON EXISTING WATER MAIN IN-PLACE, ITEM 201.4.1.G.2
 - 101 REMOVAL OF WATER VALVE/FITTING, SALVAGE TO CITY, ITEM 201.4.1.F.2
 - 103 WATER MAIN FITTING (VERTICAL) - SIZE 8", (MJ x MJ) - TYPE C900, ITEM 401.4.1.B.8
 - 104 WATER MAIN FITTING (VERTICAL) - SIZE 6", (MJ x MJ) - TYPE C900, ITEM 401.4.1.B.10



- NOTES:**
1. CONTRACTOR SHALL FIELD VERIFY AND MAINTAIN VERTICAL SEPARATION OF 18 INCHES FOR WATER LINES CROSSING NON-POTABLE LINES. IF VERTICAL SEPARATION CANNOT BE MAINTAINED, REFER TO ISPWC STANDARD DRAWING SD-407.
 2. FILL ALL ABANDONED WATER & STORMWATER PIPES 6" AND GREATER IN DIAMETER WITH CLSM.
 3. PIPES TO BE ABANDONED THAT CONFLICT WITH PROPOSED CONSTRUCTION MAY BE REMOVED IN LIEU OF FILLED WITH CLSM AT NO ADDITIONAL COST TO THE PROJECT.
 4. IF EXPLORATORY EXCAVATION IS REQUIRED, IT WILL BE PAID UNDER ITEM 303.4.1.A.1.
 5. CAP ABANDONED WATER LINE WHERE NECESSARY OR AS DIRECTED. INCIDENTAL TO ITEM 201.4.1.G.2.
 6. NEW WATER MAIN TO BE BURIED AT A DEPTH OF 6'. USE VERTICAL FITTINGS ON EXISTING LINE SIDE OF TEE TO BRING DOWN TO PROPOSED 6' DEPTH (IF IT IS SHALLOWER THAN 6') AS NEEDED.
 7. IF NECESSARY, THE CONTRACTOR MAY USE A 4" REDUCER FROM A STANDARD 16" TEE TO CONNECT TO EXISTING 4" WATER MAIN, INCIDENTAL TO ITEMS 401.4.1.B.6.



NO.	REVISION	BY	DATE	DESIGN
				M. STONE
				DRAWN
				M. STONE
				CHECKED
				W. RICE
				APPROVED
				W. RICE

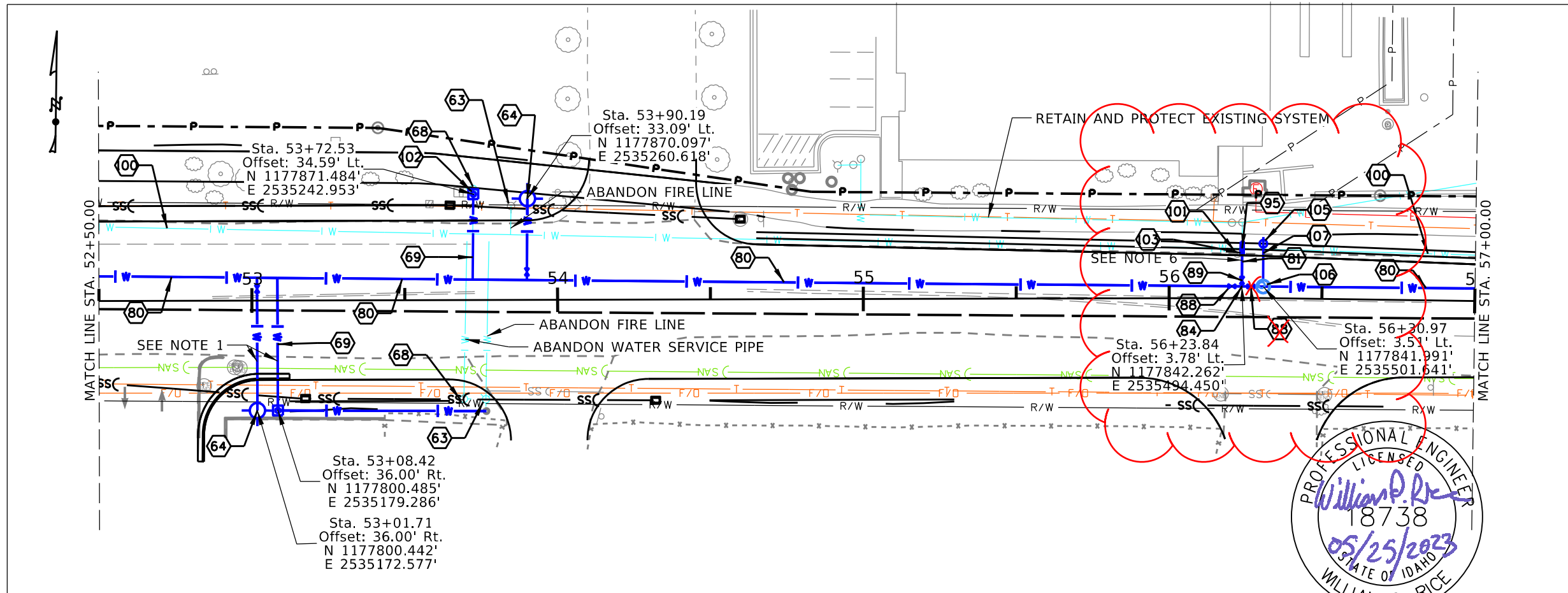
HORROCKS ENGINEERS
 2775 W. Navigator Dr.
 Suite 210
 Meridian, ID 83642
 (208)-895-2520



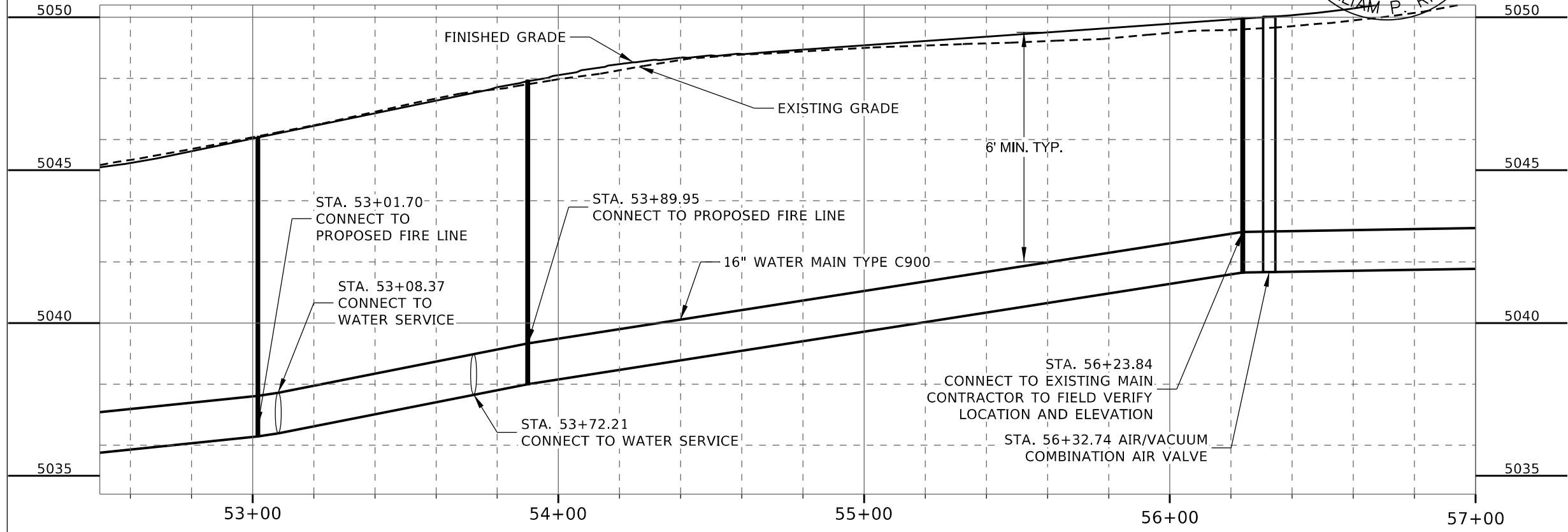
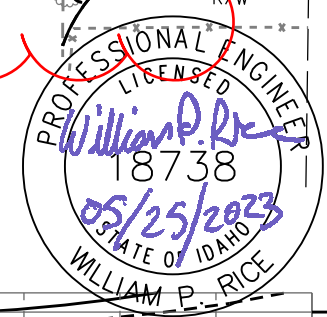
PUBLIC WORKS DEPARTMENT
 815 N. SAMSON TRAIL
 McCall, IDAHO 83638
 208.634.8943

CITY OF McCALL
 VALLEY COUNTY, IDAHO
 DEINHARD LANE, SH-55 TO SAMSON TRAIL
 DEINHARD LANE
 16" WATER LINE PLAN AND PROFILE SHEETS

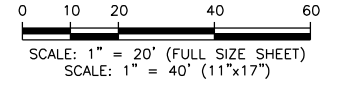
VERIFY SCALE
 BAR IS ONE INCH ON FULL SIZE DRAWING
 PROJECT DEINHARD LANE & SH-55
 DATE 5/25/2023
 DRAWING NO. SHEET NO.
 2 OF 12



- BID ITEMS:**
- 63 REMOVAL OF HYDRANT, SALVAGE TO CITY, ITEM 201.4.1.F.4
 - 64 HYDRANT, ITEM 403.4.1.A.1
 - 68 REMOVAL OF WATER METER, ITEM 201.4.1.F.5
 - 69 WATER SERVICE CONNECTION, SIZE 1", ITEM 404.4.1.A.1
 - 80 WATER MAIN PIPE - SIZE 16" - TYPE C900, ITEM 401.4.1.A.1.16
 - 81 WATER MAIN PIPE - SIZE 8" - TYPE C900, ITEM 401.4.1.A.1.8
 - 84 WATER MAIN FITTING (TEE) - SIZE 16" TO 8" (FL X FL) - TYPE C900, ITEM 401.4.1.B.1
 - 88 VALVE - SIZE 16" - TYPE RESILIENT SEATED WEDGE GATE VALVE, ITEM 402.4.1.A.1.16
 - 89 VALVE - SIZE 8" - TYPE GATE VALVE, ITEM 402.4.1.A.1.8
 - 95 WATER MAIN FITTING (COUPLER) - SIZE 8" (FL X FL) - TYPE C900, ITEM 401.4.1.B.7.8
 - 100 ABANDON EXISTING WATER MAIN IN-PLACE, ITEM 201.4.1.G.2
 - 101 REMOVAL OF WATER VALVE/FITTING, SALVAGE TO CITY, ITEM 201.4.1.F.2
 - 102 WATER SERVICE CONNECTION, SIZE 2", ITEM 404.4.1.A.2
 - 103 WATER MAIN FITTING (VERTICAL) - SIZE 8", (MJ X MJ) - TYPE C900, ITEM 401.4.1.B.8
 - 105 PIPE BOLLARD, ITEM SP-12
 - 106 AIR/VACUUM COMBINATION AIR VALVE - SIZE 3", ITEM 402.4.1.A.1.3
 - 107 SIZE 3" SCH. 40 GALVANIZED STEEL VENT PIPE, ITEM 401.4.1.A.1.3



- NOTES:**
1. CONTRACTOR SHALL FIELD VERIFY AND MAINTAIN VERTICAL SEPARATION OF 18 INCHES FOR WATER LINES CROSSING NON-POTABLE LINES. IF VERTICAL SEPARATION CANNOT BE MAINTAINED, REFER TO ISPWC STANDARD DRAWING SD-407.
 2. FILL ALL ABANDONED WATER & STORMWATER PIPES 6" AND GREATER IN DIAMETER WITH CLSM.
 3. PIPES TO BE ABANDONED THAT CONFLICT WITH PROPOSED CONSTRUCTION MAY BE REMOVED IN LIEU OF FILLED WITH CLSM AT NO ADDITIONAL COST TO THE PROJECT.
 4. IF EXPLORATORY EXCAVATION IS REQUIRED, IT WILL BE PAID UNDER ITEM 303.4.1.A.1.
 5. CAP ABANDONED WATER LINE WHERE NECESSARY OR AS DIRECTED. INCIDENTAL TO ITEM 201.4.1.G.2.
 6. NEW WATER MAIN TO BE BURIED AT A DEPTH OF 6'. USE VERTICAL FITTINGS ON EXISTING LINE SIDE OF TEE TO BRING DOWN TO PROPOSED 6' DEPTH (IF IT IS SHALLOWER THAN 6') AS NEEDED.



NO.	REVISION	BY	DATE	DESIGN
				M. STONE
				DRAWN
				M. STONE
				CHECKED
				W. RICE
				APPROVED
				W. RICE

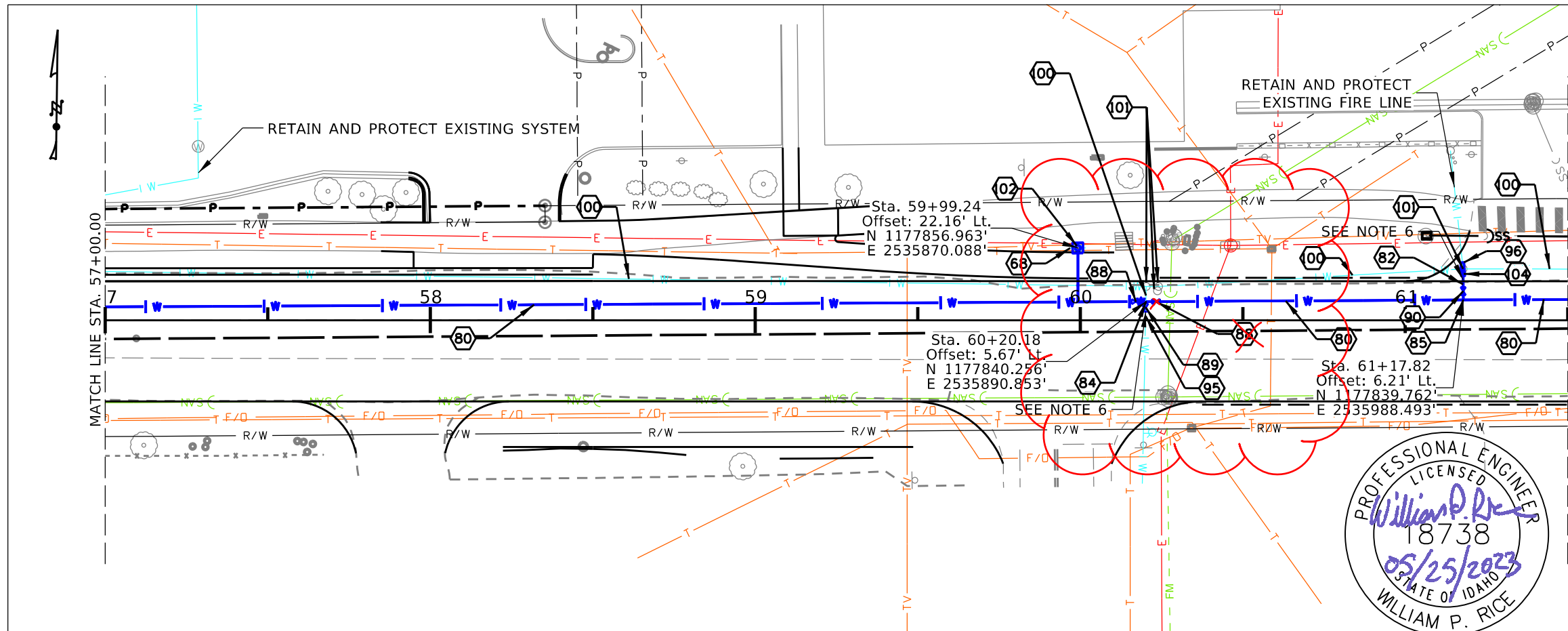
HORROCKS ENGINEERS
 2775 W. Navigator Dr.
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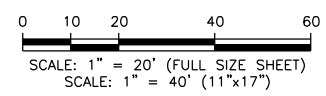
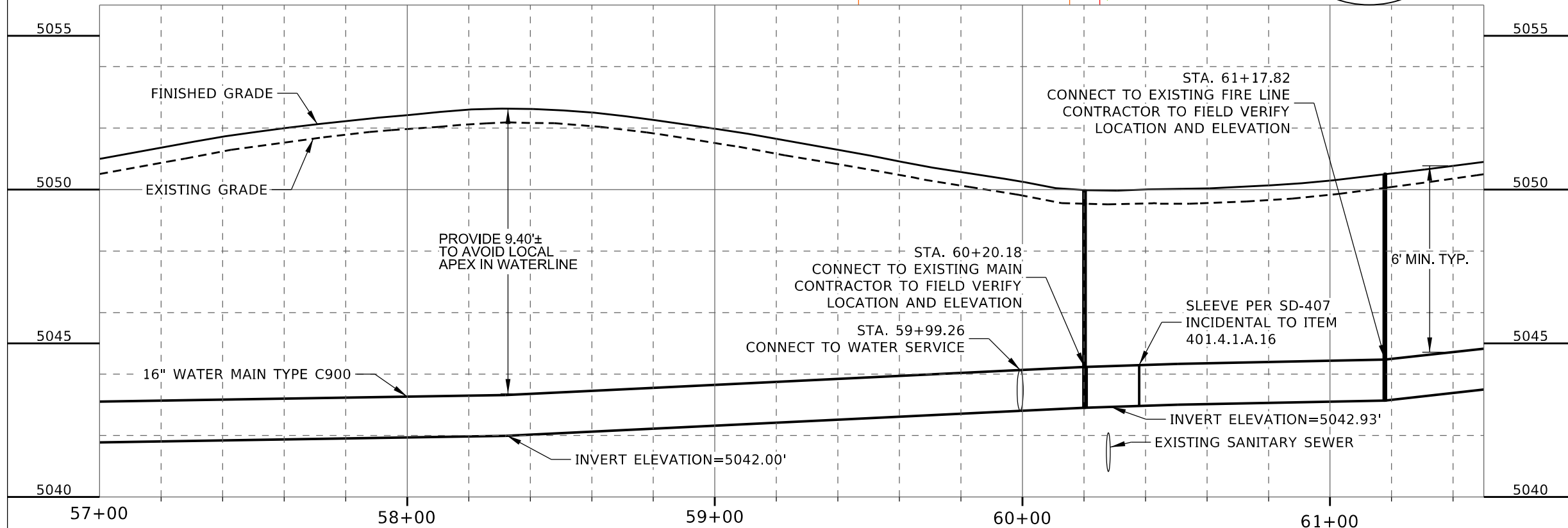
PUBLIC WORKS DEPARTMENT
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 McCall, IDAHO 83638
 208.634.8943

CITY OF McCall
 VALLEY COUNTY, IDAHO
 DEINHARD LANE, SH-55 TO SAMSON TRAIL
 DEINHARD LANE
 16" WATER LINE PLAN AND PROFILE SHEETS

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT DEINHARD LANE & SH-55	
DATE 5/25/2023	
DRAWING NO.	SHEET NO.
	3 OF 12



- BID ITEMS:**
- 68 REMOVAL OF WATER METER, ITEM 201.4.1.F.5
 - 80 WATER MAIN PIPE - SIZE 16" - TYPE C900, ITEM 401.4.1.A.1.16
 - 82 WATER MAIN PIPE - SIZE 6" - TYPE C900, ITEM 401.4.1.A.1.6
 - 84 WATER MAIN FITTING (TEE) - SIZE 16" TO 8" (FL x FL) - TYPE C900, ITEM 401.4.1.B.1
 - 85 WATER MAIN FITTING (TEE) - SIZE 16" TO 6" (FL x FL) - TYPE C900, ITEM 401.4.1.B.2
 - 88 VALVE - SIZE 16" - TYPE RESILIENT SEATED WEDGE GATE VALVE, ITEM 402.4.1.A.1.16
 - 89 VALVE - SIZE 8" - TYPE GATE VALVE, ITEM 402.4.1.A.1.8
 - 90 VALVE - SIZE 6" - TYPE GATE VALVE, ITEM 402.4.1.A.1.6
 - 95 WATER MAIN FITTING (COUPLER) - SIZE 8" (FL x FL) - TYPE C900, ITEM 401.4.1.B.7.8
 - 96 WATER MAIN FITTING (COUPLER) - SIZE 6" (FL x FL) - TYPE C900, ITEM 401.4.1.B.7.6
 - 100 ABANDON EXISTING WATER MAIN IN-PLACE, ITEM 201.4.1.G.2
 - 101 REMOVAL OF WATER VALVE/FITTING, SALVAGE TO CITY, ITEM 201.4.1.F.2
 - 102 WATER SERVICE CONNECTION, SIZE 2", ITEM 404.4.1.A.2
 - 104 WATER MAIN FITTING (VERTICAL) - SIZE 6" (MJ x MJ) - TYPE C900, ITEM 401.4.1.B.10
- NOTES:**
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				M. STONE
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				W. RICE
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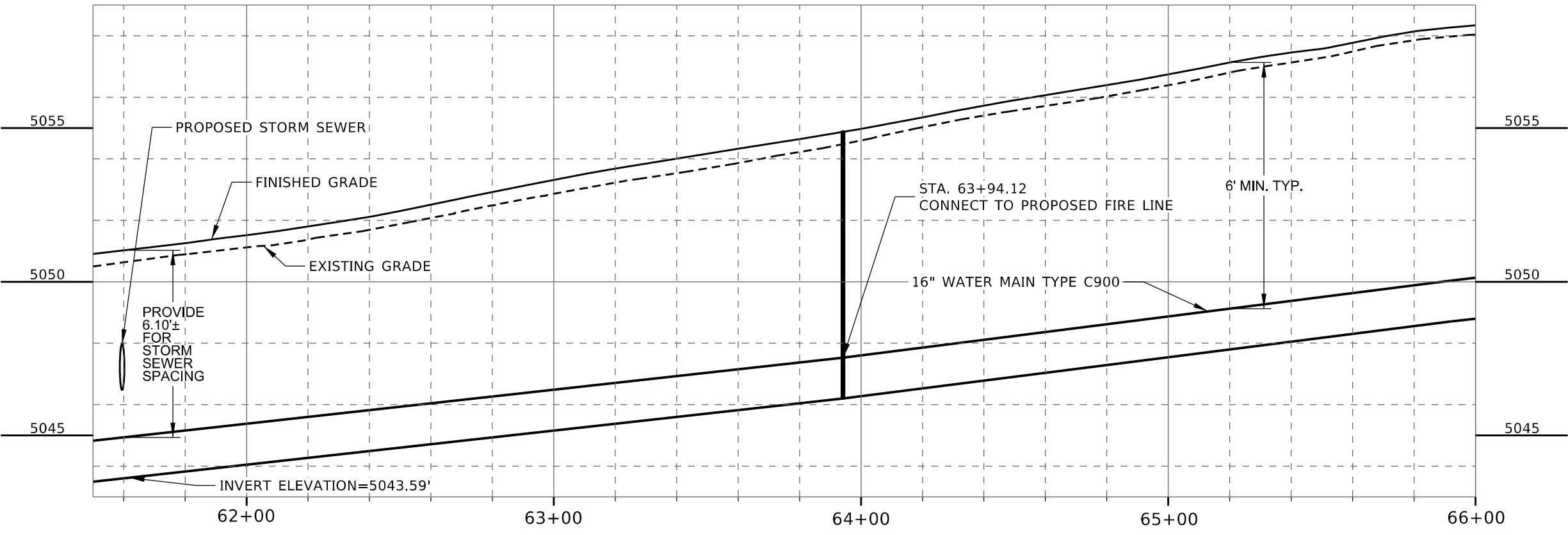
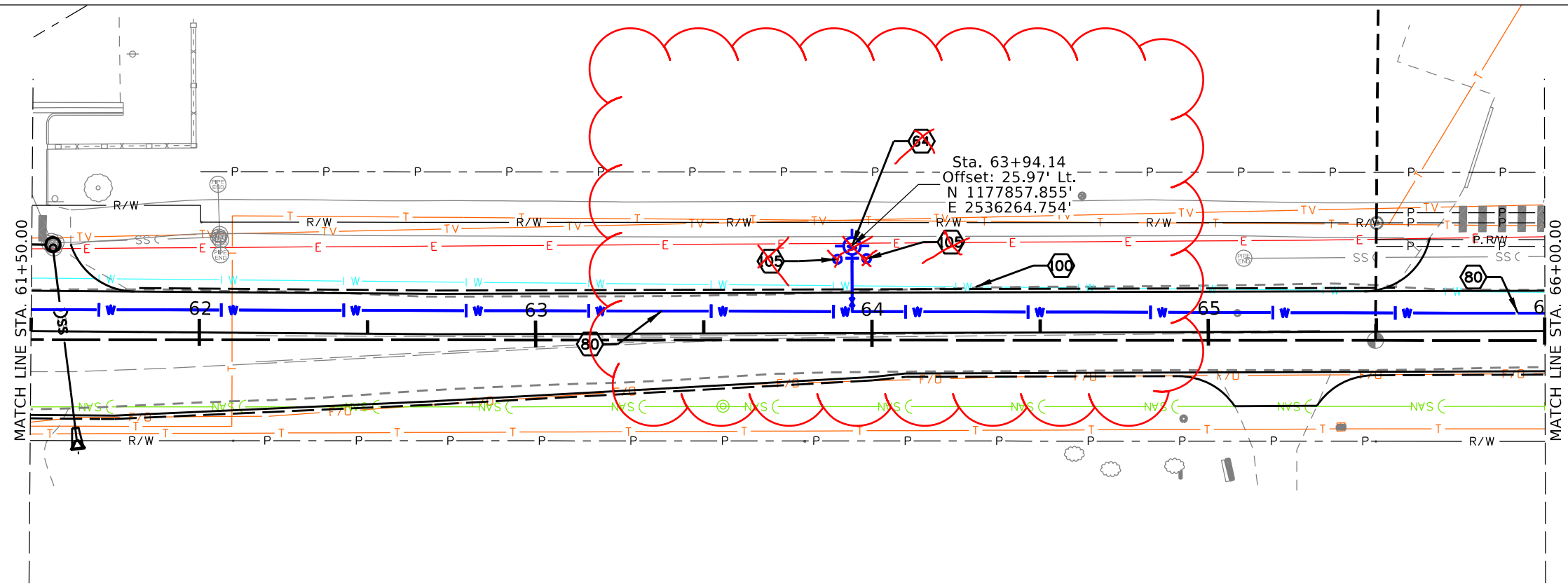
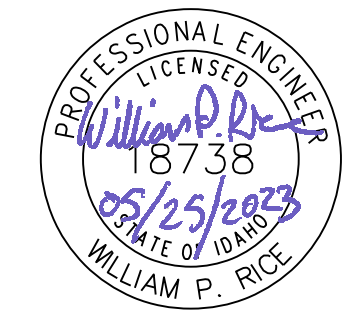


PUBLIC WORKS DEPARTMENT
 815 N. SAMSON TRAIL
 McCall, IDAHO 83638
 208.634.8943

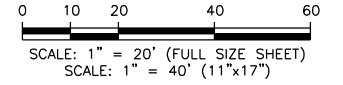
CITY OF McCALL
 VALLEY COUNTY, IDAHO
 DEINHARD LANE, SH-55 TO SAMSON TRAIL
 DEINHARD LANE
 16" WATER LINE PLAN AND PROFILE SHEETS

VERIFY SCALE
 BAR IS ONE INCH ON FULL SIZE DRAWING
 PROJECT DEINHARD LANE & SH-55
 DATE 5/25/2023
 DRAWING NO. SHEET NO.
 4 OF 12

- BID ITEMS:**
- 64 HYDRANT, ITEM 403.4.1.A.1
 - 80 WATER MAIN PIPE - SIZE 16" - TYPE C900, ITEM 401.4.1.A.1.16
 - 100 ABANDON EXISTING WATER MAIN IN-PLACE, ITEM 201.4.1.G.2
 - 105 PIPE BOLLARD, ITEM SP-12



- NOTES:**
1. CONTRACTOR SHALL FIELD VERIFY AND MAINTAIN VERTICAL SEPARATION OF 18 INCHES FOR WATER LINES CROSSING NON-POTABLE LINES. IF VERTICAL SEPARATION CANNOT BE MAINTAINED, REFER TO ISPWC STANDARD DRAWING SD-407.
 2. FILL ALL ABANDONED WATER & STORMWATER PIPES 6" AND GREATER IN DIAMETER WITH CLSM.
 3. PIPES TO BE ABANDONED THAT CONFLICT WITH PROPOSED CONSTRUCTION MAY BE REMOVED IN LIEU OF FILLED WITH CLSM AT NO ADDITIONAL COST TO THE PROJECT.
 4. IF EXPLORATORY EXCAVATION IS REQUIRED, IT WILL BE PAID UNDER ITEM 303.4.1.A.1.
 5. CAP ABANDONED WATER LINE WHERE NECESSARY OR AS DIRECTED. INCIDENTAL TO ITEM 201.4.1.G.2.
 6. NEW WATER MAIN TO BE BURIED AT A DEPTH OF 6'. USE VERTICAL FITTINGS ON EXISTING LINE SIDE OF TEE TO BRING DOWN TO PROPOSED 6' DEPTH (IF IT IS SHALLOWER THAN 6') AS NEEDED.



NO.	REVISION	BY	DATE	DESIGN
				M. STONE
				DRAWN
				M. STONE
				CHECKED
				W. RICE
				APPROVED
				W. RICE

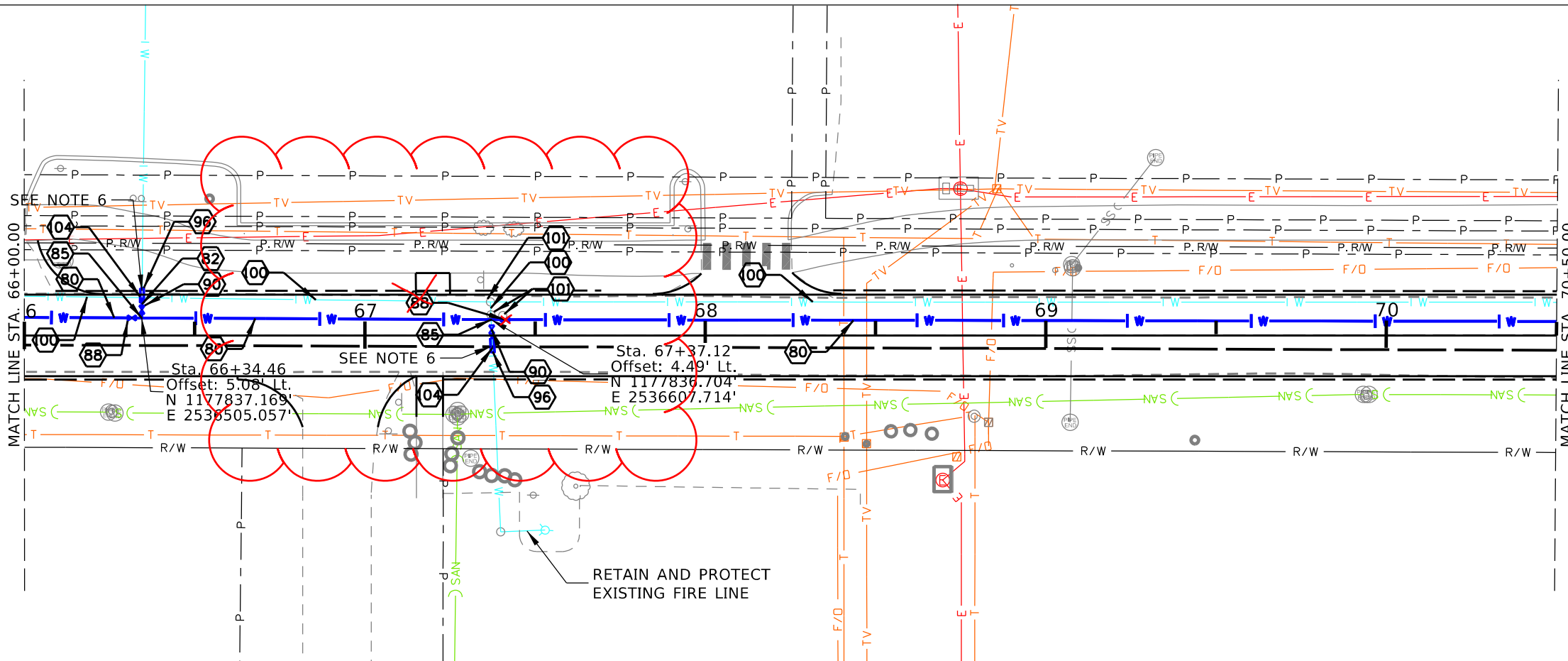
HORROCKS ENGINEERS
 2775 W. Navigator Dr.
 Suite 210
 Meridian, ID 83642
 (208)-895-2520



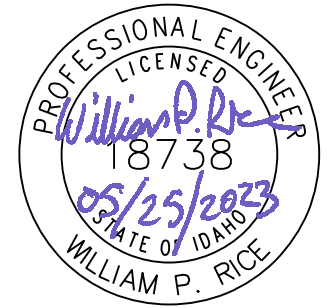
PUBLIC WORKS DEPARTMENT
 815 N. SAMSON TRAIL
 McCall, IDAHO 83638
 208.634.8943

CITY OF McCall
 VALLEY COUNTY, IDAHO
 DEINHARD LANE, SH-55 TO SAMSON TRAIL
 DEINHARD LANE
 16" WATER LINE PLAN AND PROFILE SHEETS

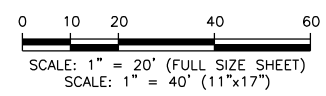
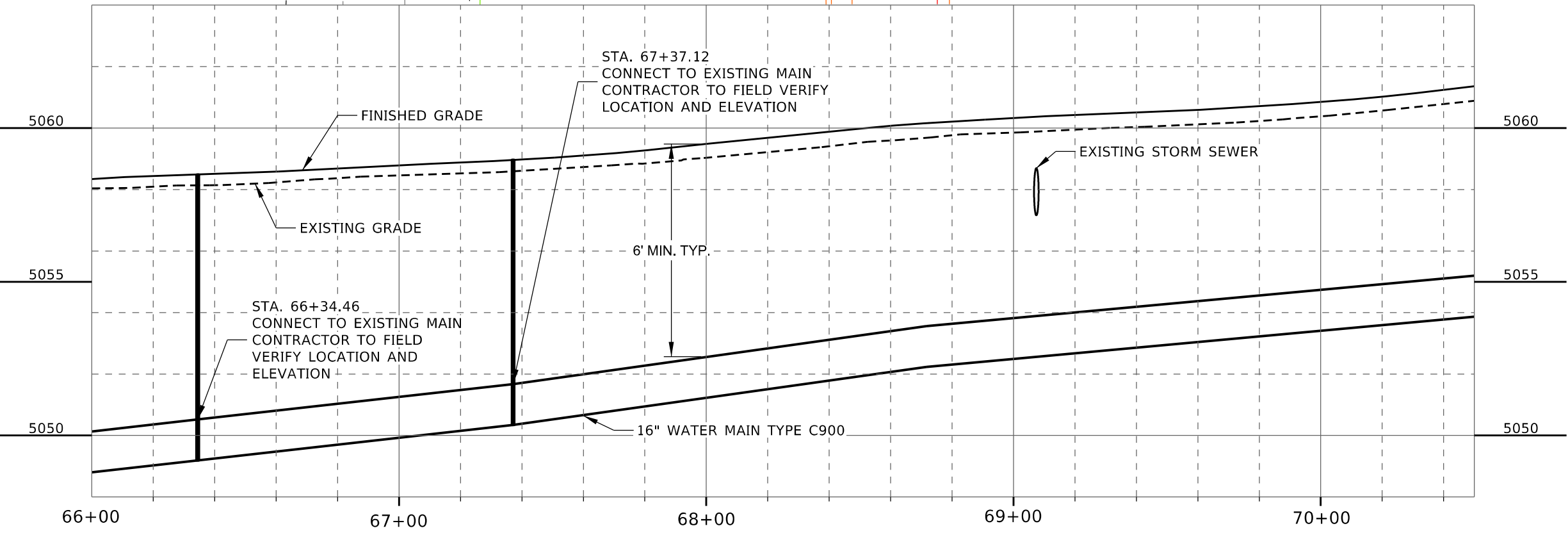
VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	1"
PROJECT	DEINHARD LANE & SH-55
DATE	5/25/2023
DRAWING NO.	SHEET NO.
	5 OF 12



- BID ITEMS:**
- 80 WATER MAIN PIPE - SIZE 16" - TYPE C900, ITEM 401.4.1.A.1.16
 - 82 WATER MAIN PIPE - SIZE 6" - TYPE C900, ITEM 401.4.1.A.1.6
 - 85 WATER MAIN FITTING (TEE) - SIZE 16" TO 6" (FL X FL) - TYPE C900, ITEM 401.4.1.B.2
 - 88 VALVE - SIZE 16" - TYPE RESILIENT SEATED WEDGE GATE VALVE, ITEM 402.4.1.A.1.16
 - 90 VALVE - SIZE 6" - TYPE GATE VALVE, ITEM 402.4.1.A.1.6
 - 96 WATER MAIN FITTING (COUPLER) - SIZE 6" (FL X FL) - TYPE C900, ITEM 401.4.1.B.7.6
 - 100 ABANDON EXISTING WATER MAIN IN-PLACE, ITEM 201.4.1.G.2
 - 101 REMOVAL OF WATER VALVE/FITTING, SALVAGE TO CITY, ITEM 201.4.1.F.2
 - 04 WATER MAIN FITTING (VERTICAL) - SIZE 6" (MJ x MJ) - TYPE C900, ITEM 401.4.1.B.10



- NOTES:**
1. CONTRACTOR SHALL FIELD VERIFY AND MAINTAIN VERTICAL SEPARATION OF 18 INCHES FOR WATER LINES CROSSING NON-POTABLE LINES. IF VERTICAL SEPARATION CANNOT BE MAINTAINED, REFER TO ISPWC STANDARD DRAWING SD-407.
 2. FILL ALL ABANDONED WATER & STORMWATER PIPES 6" AND GREATER IN DIAMETER WITH CLSM.
 3. PIPES TO BE ABANDONED THAT CONFLICT WITH PROPOSED CONSTRUCTION MAY BE REMOVED IN LIEU OF FILLED WITH CLSM AT NO ADDITIONAL COST TO THE PROJECT.
 4. IF EXPLORATORY EXCAVATION IS REQUIRED, IT WILL BE PAID UNDER ITEM 303.4.1.A.1.
 5. CAP ABANDONED WATER LINE WHERE NECESSARY OR AS DIRECTED. INCIDENTAL TO ITEM 201.4.1.G.2.
 6. NEW WATER MAIN TO BE BURIED AT A DEPTH OF 6'. USE VERTICAL FITTINGS ON EXISTING LINE SIDE OF TEE TO BRING DOWN TO PROPOSED 6' DEPTH (IF IT IS SHALLOWER THAN 6') AS NEEDED.



NO.	REVISION	BY	DATE	DESIGN
				M. STONE
				DRAWN
				M. STONE
				CHECKED
				W. RICE
				APPROVED
				W. RICE

HORROCKS ENGINEERS
 2775 W. Navigator Dr.
 Suite 210
 Meridian, ID 83642
 (208)-895-2520

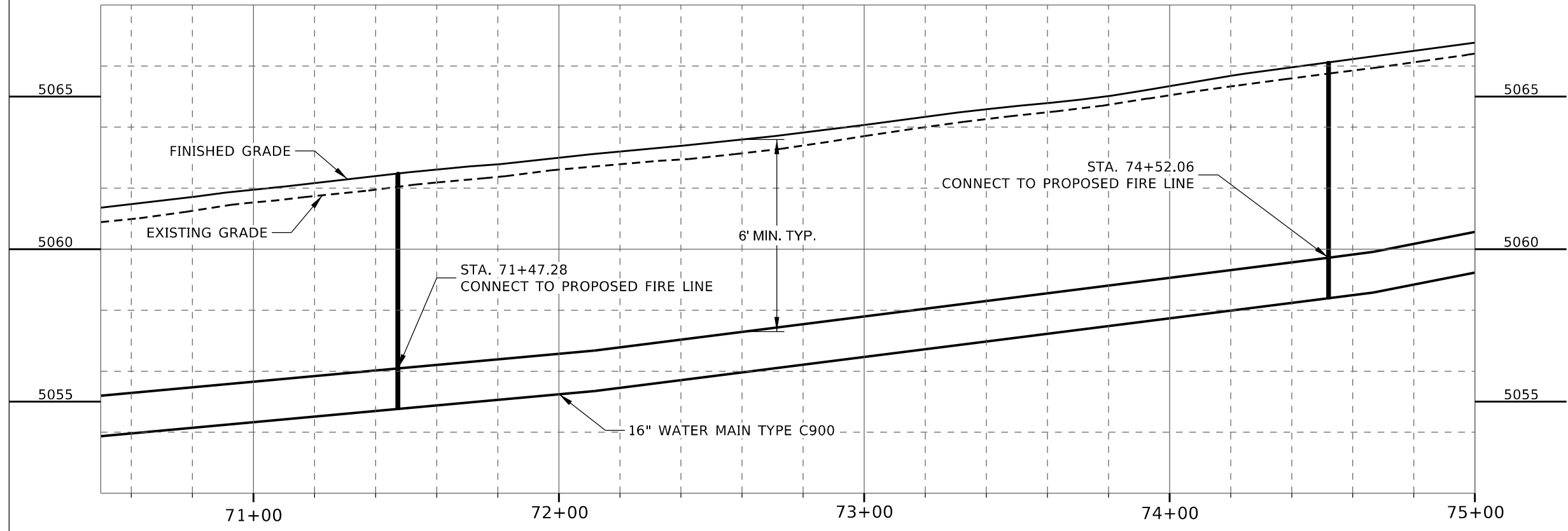
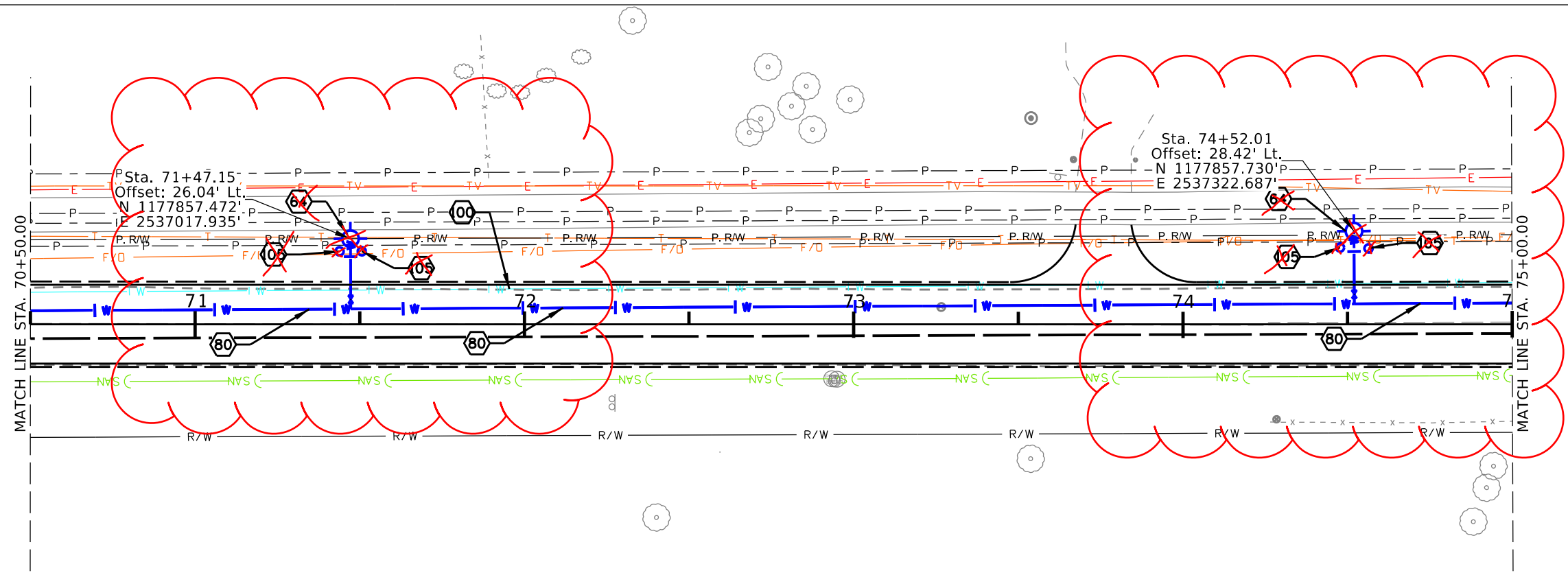
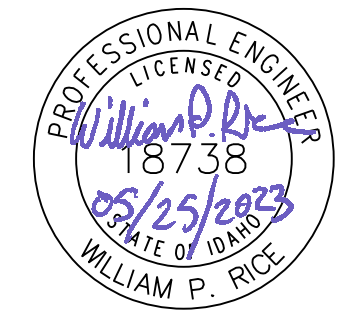


PUBLIC WORKS DEPARTMENT
 815 N. SAMSON TRAIL
 McCall, IDAHO 83638
 208.634.8943

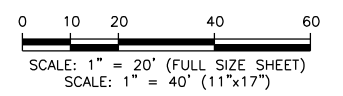
CITY OF McCall
VALLEY COUNTY, IDAHO
 DEINHARD LANE, SH-55 TO SAMSON TRAIL
 DEINHARD LANE
 16" WATER LINE PLAN AND PROFILE SHEETS

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	1"
PROJECT	DEINHARD LANE & SH-55
DATE	5/25/2023
DRAWING NO.	SHEET NO.
	6 OF 12

- BID ITEMS:**
- 64 HYDRANT, ITEM 403.4.1.A.1
 - 80 WATER MAIN PIPE - SIZE 16" - TYPE C900, ITEM 401.4.1.A.1.16
 - 100 ABANDON EXISTING WATER MAIN IN-PLACE, ITEM 201.4.1.G.2
 - 105 PIPE BOLLARD, ITEM SP-12



- NOTES:**
1. CONTRACTOR SHALL FIELD VERIFY AND MAINTAIN VERTICAL SEPARATION OF 18 INCHES FOR WATER LINES CROSSING NON-POTABLE LINES. IF VERTICAL SEPARATION CANNOT BE MAINTAINED, REFER TO ISPWC STANDARD DRAWING SD-407.
 2. FILL ALL ABANDONED WATER & STORMWATER PIPES 6" AND GREATER IN DIAMETER WITH CLSM.
 3. PIPES TO BE ABANDONED THAT CONFLICT WITH PROPOSED CONSTRUCTION MAY BE REMOVED IN LIEU OF FILLED WITH CLSM AT NO ADDITIONAL COST TO THE PROJECT.
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 6. NEW WATER MAIN TO BE BURIED AT A DEPTH OF 6'. USE VERTICAL FITTINGS ON EXISTING LINE SIDE OF TEE TO BRING DOWN TO PROPOSED 6' DEPTH (IF IT IS SHALLOWER THAN 6') AS NEEDED.



NO.	REVISION	BY	DATE	DESIGN
				M. STONE
				DRAWN
				M. STONE
				CHECKED
				W. RICE
				APPROVED
				W. RICE

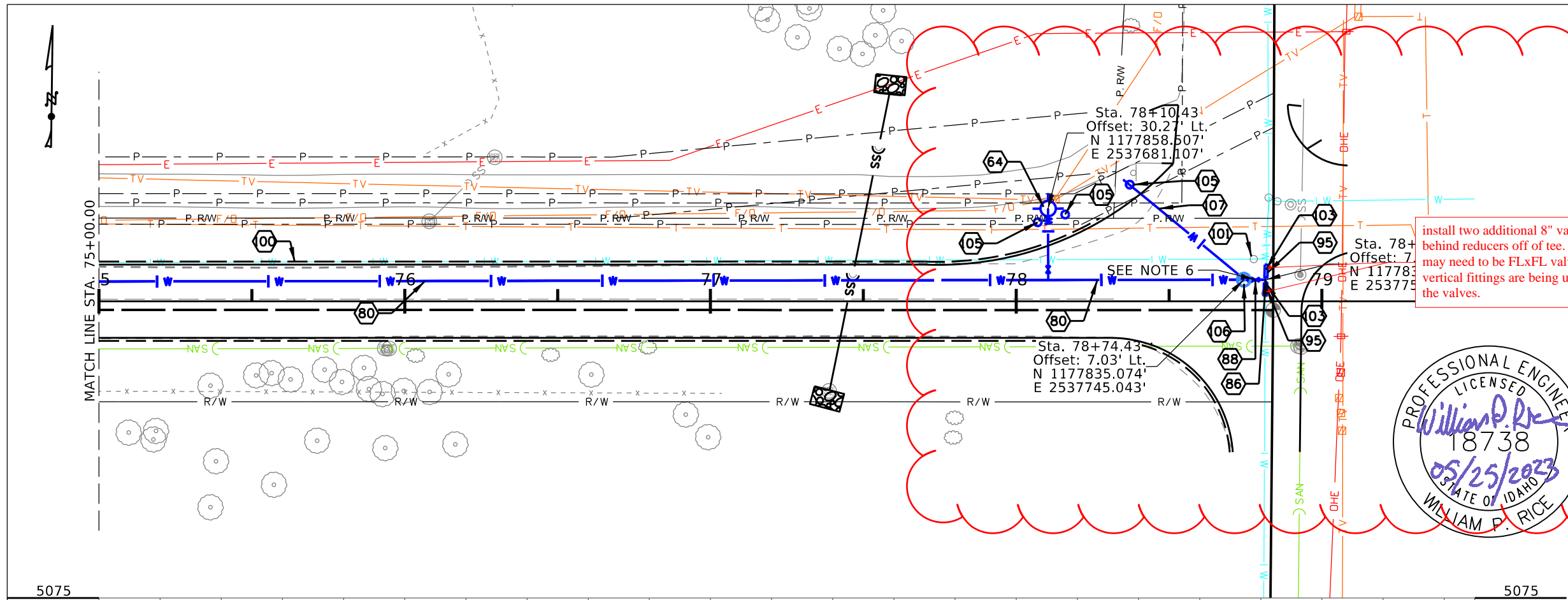
HORROCKS ENGINEERS
 2775 W. Navigator Dr.
 Suite 210
 Meridian, ID 83642
 (208)-895-2520



PUBLIC WORKS DEPARTMENT
 815 N. SAMSON TRAIL
 McCall, IDAHO 83638
 208.634.8943

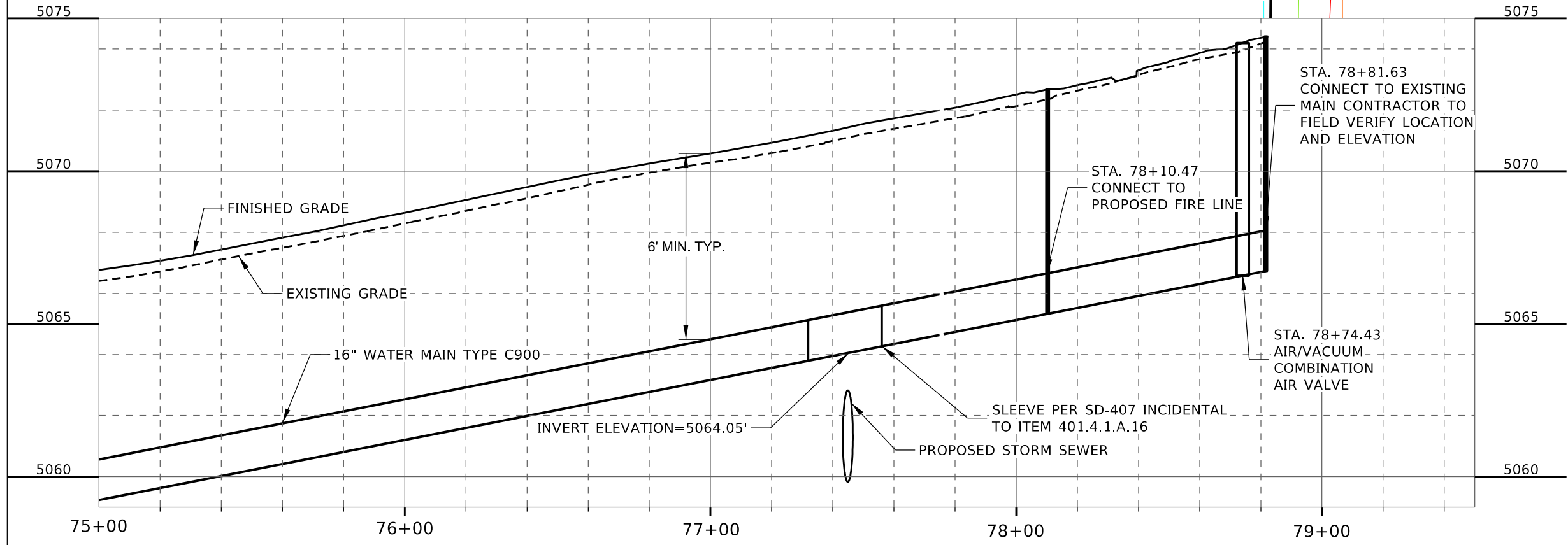
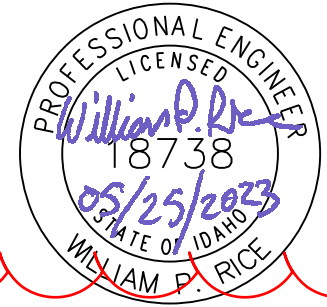
CITY OF McCALL
VALLEY COUNTY, IDAHO
 DEINHARD LANE, SH-55 TO SAMSON TRAIL
 DEINHARD LANE
 16" WATER LINE PLAN AND PROFILE SHEETS

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT DEINHARD LANE & SH-55	
DATE	5/25/2023
DRAWING NO.	SHEET NO.
	7 OF 12

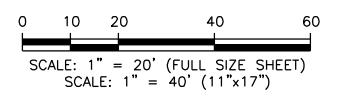


- BID ITEMS:**
- 64 HYDRANT, ITEM 403.4.1.A.1
 - 80 WATER MAIN PIPE - SIZE 16" - TYPE C900, ITEM 401.4.1.A.1.16
 - 86 WATER MAIN FITTING (TEE) - SIZE 8" TO 16" (FL x FL) - TYPE C900, ITEM 401.4.1.B.3
 - 88 VALVE - SIZE 16" - TYPE RESILIENT SEATED WEDGE GATE VALVE, ITEM 402.4.1.A.1.16
 - 95 WATER MAIN FITTING (COUPLER) - SIZE 8" (FL X FL) - TYPE C900, ITEM 401.4.1.B.7.8
 - 100 ABANDON EXISTING WATER MAIN IN-PLACE, ITEM 201.4.1.G.2
 - 101 REMOVAL OF WATER VALVE/FITTING, SALVAGE TO CITY, ITEM 201.4.1.F.2
 - 103 WATER MAIN FITTING (VERTICAL) - SIZE 8" (MJ x MJ) - TYPE C900, ITEM 401.4.1.B.8
 - 105 PIPE BOLLARD, ITEM SP-12
 - 106 AIR/VACUUM COMBINATION AIR VALVE - SIZE 3", ITEM 402.4.1.A.1.3
 - 107 SIZE 3" SCH. 40 GALVANIZED STEEL VENT PIPE, ITEM 401.4.1.A.1.3

install two additional 8" valves behind reducers off of tee. These may need to be FLxFL valves if vertical fittings are being used after the valves.



- NOTES:**
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NO.	REVISION	BY	DATE	DESIGN
				M. STONE
				DRAWN
				M. STONE
				CHECKED
				W. RICE
				APPROVED
				W. RICE

HORROCKS ENGINEERS
 2775 W. Navigator Dr.
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 Meridian, ID 83642
 (208)-895-2520



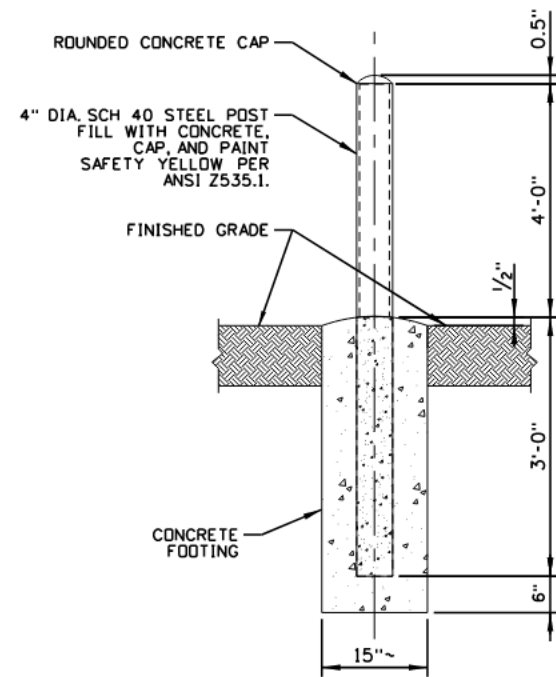
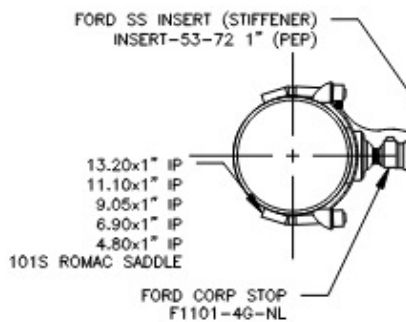
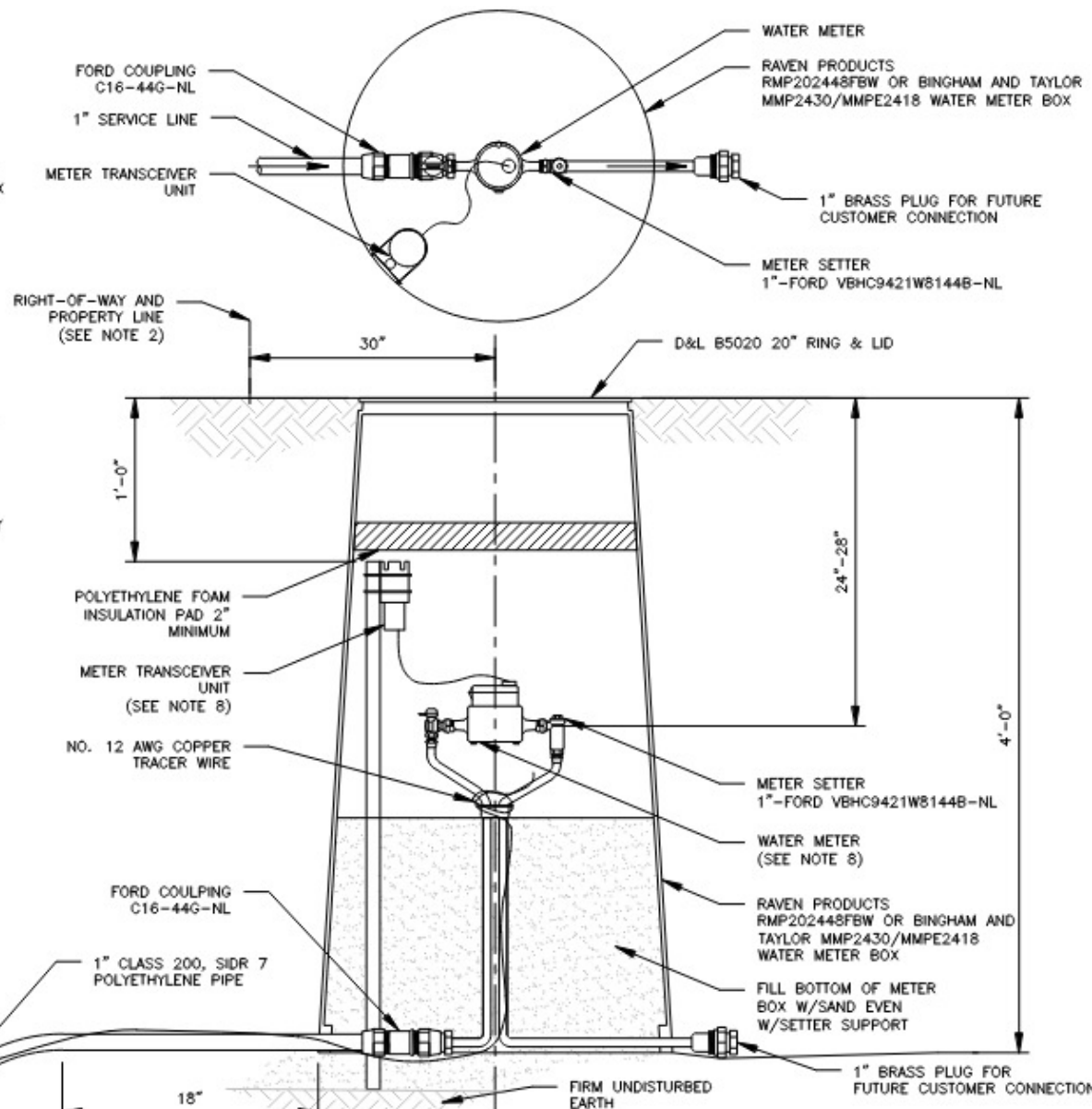
PUBLIC WORKS DEPARTMENT
 815 N. SAMSON TRAIL
 McCall, IDAHO 83638
 208.634.8943

CITY OF McCALL
VALLEY COUNTY, IDAHO
 DEINHARD LANE, SH-55 TO SAMSON TRAIL
 DEINHARD LANE
 16" WATER LINE PLAN AND PROFILE SHEETS

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	1"
PROJECT	DEINHARD LANE & SH-55
DATE	5/25/2023
DRAWING NO.	SHEET NO.
	8 OF 12

NOTES:

- ALL WATER SERVICE COMPONENTS SHALL BE IRON PIPE SIZE. NO GALVANIZED PIPE OR FITTINGS SHALL BE USED. WATER SERVICE SADDLE, CORPORATION STOP, AND PIPE SHALL BE SIZED AS FOLLOWS:
 - A. SINGLE SERVICE: 1".
- METER BOX LOCATIONS SHALL BE SHOWN ON WATER SYSTEM PLANS AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS. METER BOX LOCATION GENERALLY WILL BE LOCATED ON THE HOMEOWNER PROPERTY AS FOLLOWS:
 - A. SINGLE SERVICE: THIRTY (30") FROM R.O.W. CENTERED ON COMMON PROPERTY LINE.
- SERVICE PIPE SHALL BE CLASS 200, SIDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
- FORD STAINLESS STEEL INSERT (STIFFENER) TO BE USED WITH POLYETHYLENE PRESSURE PIPE AT FITTINGS PER MANUFACTURERS RECOMMENDATIONS.
- SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6") FEET AND SHALL RISE TO FOUR (4") FEET, WITHIN A MAXIMUM DISTANCE OF EIGHTEEN (18") INCHES OF METER BOX.
- SERVICE CONNECTIONS SHALL BE THIRTY-SIX (36") INCHES FROM FITTINGS OR WATER MAIN PIPE ENDS. MULTIPLE SERVICE CONNECTIONS IN THE SAME JOINT OF PIPE SHALL BE SEPARATED BY TWENTY-FOUR (24") INCHES AND NOT IN THE SAME HORIZONTAL LEVEL. -ABSOLUTE-
- SERVICE PIPE SHALL BE FLUSHED IMMEDIATELY PRIOR TO METER INSTALLATION.
- WATER METERS AND TRANSCIVER UNITS TO BE SUPPLIED AND INSTALLED BY THE CITY OF McCALL.
- MAINTAIN SEPARATION DISTANCES IN ACCORDANCE WITH IDAPA 58.01.08.
- REFER TO CITY OF McCALL STANDARD REVISIONS TO ISPWC AND CONDITIONS SECTION 404 FOR REQUIREMENTS ON CONNECTIONS TO THE PRIVATE SIDE OF THE WATER METER.



PIPE BOLLARD DETAIL (SP-12)
NTS

NOTES:

- CONTRACTOR TO VERIFY BOLLARD PLACEMENT DOES NOT CONFLICT WITH EXISTING UTILITIES PRIOR TO INSTALLATION.
- THE LOCATION OF BOLLARDS SHALL BE MARKED OUT IN THE FIELD BY THE CONTRACTOR AND APPROVAL SHALL BE OBTAINED FROM THE ENGINEER PRIOR TO CONSTRUCTION AND INSTALLATION.

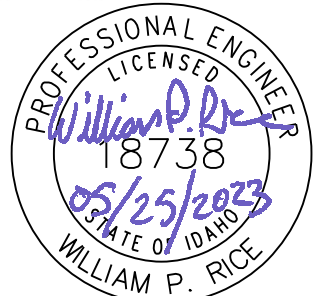
Description	Northing	Easting	Station & Offset
16" to 6" Tee	1177837.764	2534810.768	-
16" to 4" Tee	1177843.659	2534841.208	-
16" to 8" Tee	1177845.222	2534909.677	50+39.10, 10.45' Lt.
Water Service Connection, 1"	1177743.483	2534959.081	50+87.85, 91.60' Rt.
Water Service Connection, 1"	1177870.797	2535037.470	51+67.05, 35.21' Lt.
Hydrant	1177800.442	2535172.577	53+01.71, 36.00' Rt.
Water Service Connection, 1"	1177800.485	2535179.286	53+08.42, 36.00' Rt.
Water Service Connection, 2"	1177871.484	2535242.953	53+72.53, 34.59' Lt.
Hydrant	1177870.097	2535260.618	53+90.19, 33.09' Lt.
16" to 8" Tee	1177842.262	2535494.450	56+23.84, 3.78' Lt.
Water Service Connection, 1"	1177856.963	2535870.088	59+99.24, 22.16' Lt.
16" to 8" Tee	1177840.256	2535890.853	60+20.18, 5.67' Lt.
16" to 6" Tee	1177839.762	2535988.493	61+17.82, 6.21' Lt.
Hydrant	1177857.855	2536264.754	63+94.14, 25.97' Lt.
16" to 6" Tee	1177837.169	2536505.057	66+34.46, 5.08' Lt.
16" to 6" Tee	1177836.704	2536607.714	67+37.12, 4.49' Lt.
Hydrant	1177857.472	2537017.935	71+47.15, 26.04' Lt.
Hydrant	1177857.730	2537322.687	74+52.01, 28.42' Lt.
Hydrant	1177858.507	2537681.107	78+10.43, 30.27' Lt.
8" to 16" Tee	1177835.064	2537752.239	78+81.63, 7.04' Lt.

CITY OF McCALL
PUBLIC WORKS DEPARTMENT
815 N. SAMSON TRAIL
McCALL, IDAHO 83638
208.634.5580

CITY OF McCALL
SINGLE WATER SERVICE CONNECTION - 3/4" OR 1"

PROJECT	DRAWN BY	SHEET NO.
DATE	1/12/2023	1 OF 1

STANDARD DRAWING NO.
MSD-401B



NO.	REVISION	BY	DATE	DESIGN
				M. STONE
				DRAWN
				C. DESPAIN
				CHECKED
				W. RICE
				APPROVED
				W. RICE

HORROCKS ENGINEERS
2775 W. Navigator Dr.
Suite 210
Meridian, ID 83642
(208)-895-2520



PUBLIC WORKS DEPARTMENT
815 N. SAMSON TRAIL
McCALL, IDAHO 83638
208.634.8943

CITY OF McCALL
VALLEY COUNTY, IDAHO
DEINHARD LANE, SH-55 TO SAMSON TRAIL
DEINHARD LANE
CITY OF McCALL STANDARD DETAILS

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT DEINHARD LANE & SH-55	
DATE 5/25/2023	
DRAWING NO.	SHEET NO.
	10 OF 12

**CITY OF MCCALL
VALLEY COUNTY, IDAHO**

STANDARD REVISIONS TO THE 2020 ISPWC AND SUPPLEMENTAL CONDITIONS

DIVISION 400 – WATER

SECTION 404 -WATER SERVICE LINE AND METERS

PART 2 – MATERIALS

Amend Part 2.4.C to include the following:

2. All fittings shall be manufactured by Ford Meter Box Company or Owner and Engineer approved equivalent. All fittings shall be brass.
3. When connecting to service pipe on the private side of the water meter the following fittings shall be used unless otherwise approved by Owner and Engineer:

Connection to Private Service Line Fitting Table	
Private Pipe Type	Required All Brass Fitting
Galvanized	MIP x Grip Joint Adaptor**
	FMP x Grip Joint Adaptor**
Copper	MIP x CTS Grip Joint Adaptor**
	FMP x CTS Grip Joint Adaptor**
100 PSI HDPE	Brass Insert with SS Clamps (2 opposing)
160 PSI HDPE	SS Stiffener & Grip Joint Adaptor**
200 PSI HDPE	SS Stiffener & Grip Joint Adaptor**
PVC	PEP &/or CTS Grip Joint Adaptor**
Splice Repairs	PEP x PEP Grip Coupling
	PEP x CTS Combo Coupling
*Only Ford Meter Box Company Parts or Approved Equivalent	
**Only Ford Meter Box Company Grip Ring Adaptors	

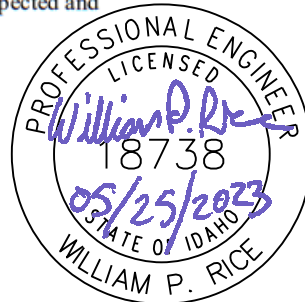
Amend Part 2.4.E to the following:

1. All brass with iron pipe threads.
2. Refer to Part 2.4.C for couplers and connection to private service pipes.

PART 3 – WORKMANSHIP

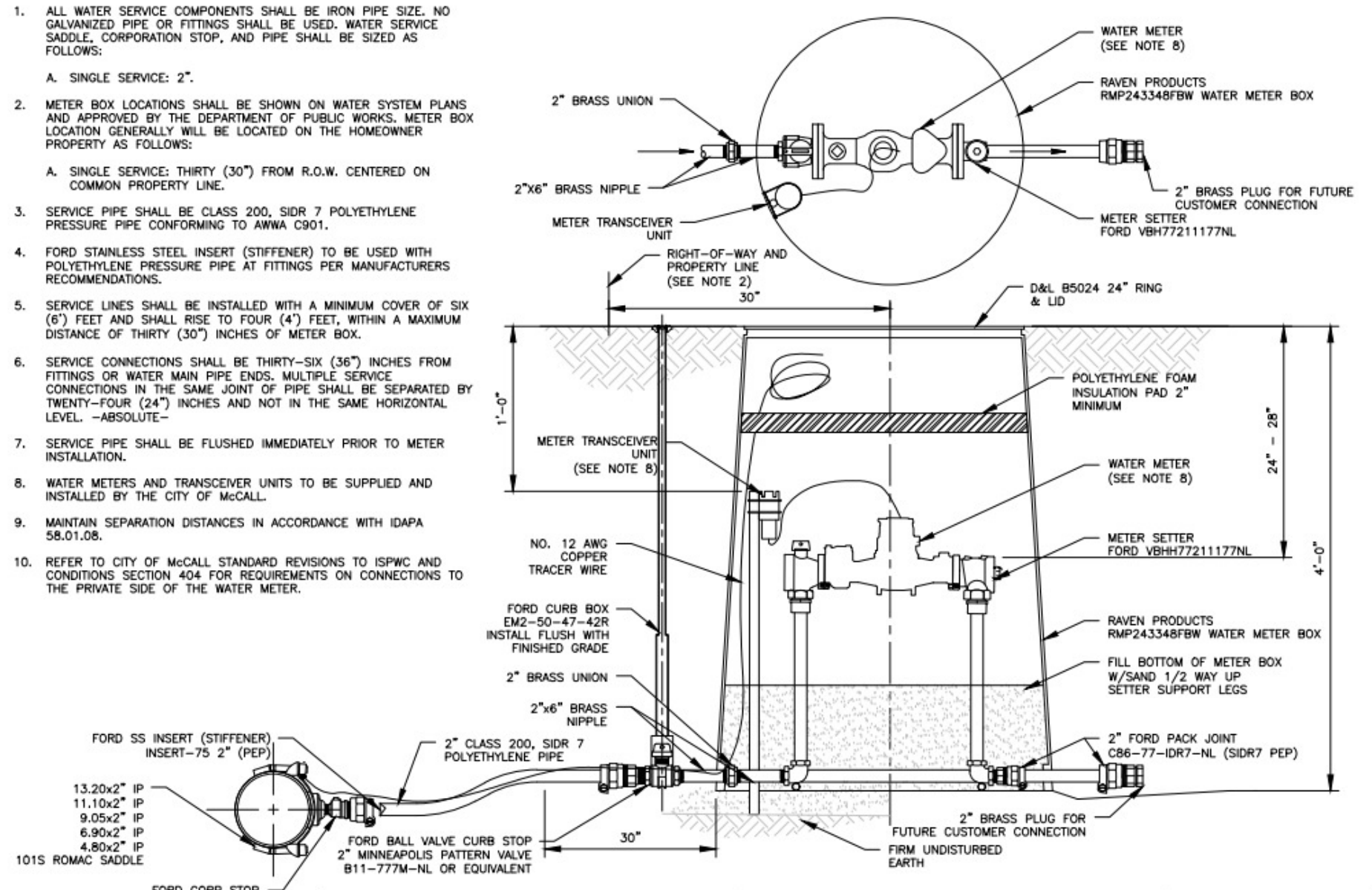
Add the following to 3.1:

- G. All connections on the private side of the water meter must be inspected and photographed by Owner and Engineer prior to backfilling.



NOTES:

1. ALL WATER SERVICE COMPONENTS SHALL BE IRON PIPE SIZE. NO GALVANIZED PIPE OR FITTINGS SHALL BE USED. WATER SERVICE SADDLE, CORPORATION STOP, AND PIPE SHALL BE SIZED AS FOLLOWS:
A. SINGLE SERVICE: 2".
2. METER BOX LOCATIONS SHALL BE SHOWN ON WATER SYSTEM PLANS AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS. METER BOX LOCATION GENERALLY WILL BE LOCATED ON THE HOMEOWNER PROPERTY AS FOLLOWS:
A. SINGLE SERVICE: THIRTY (30") FROM R.O.W. CENTERED ON COMMON PROPERTY LINE.
3. SERVICE PIPE SHALL BE CLASS 200, SIDR 7 POLYETHYLENE PRESSURE PIPE CONFORMING TO AWWA C901.
4. FORD STAINLESS STEEL INSERT (STIFFENER) TO BE USED WITH POLYETHYLENE PRESSURE PIPE AT FITTINGS PER MANUFACTURERS RECOMMENDATIONS.
5. SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF SIX (6') FEET AND SHALL RISE TO FOUR (4') FEET, WITHIN A MAXIMUM DISTANCE OF THIRTY (30") INCHES OF METER BOX.
6. SERVICE CONNECTIONS SHALL BE THIRTY-SIX (36") INCHES FROM FITTINGS OR WATER MAIN PIPE ENDS. MULTIPLE SERVICE CONNECTIONS IN THE SAME JOINT OF PIPE SHALL BE SEPARATED BY TWENTY-FOUR (24") INCHES AND NOT IN THE SAME HORIZONTAL LEVEL. -ABSOLUTE-
7. SERVICE PIPE SHALL BE FLUSHED IMMEDIATELY PRIOR TO METER INSTALLATION.
8. WATER METERS AND TRANSCIEVER UNITS TO BE SUPPLIED AND INSTALLED BY THE CITY OF McCall.
9. MAINTAIN SEPARATION DISTANCES IN ACCORDANCE WITH IDAPA 58.01.08.
10. REFER TO CITY OF McCall STANDARD REVISIONS TO ISPWC AND CONDITIONS SECTION 404 FOR REQUIREMENTS ON CONNECTIONS TO THE PRIVATE SIDE OF THE WATER METER.



<p>CITY OF McCall PUBLIC WORKS</p>	<p>PUBLIC WORKS DEPARTMENT 815 N. SAMSON TRAIL McCall, IDAHO 83638 208.634.5580</p>	<p>CITY OF McCall SINGLE WATER SERVICE CONNECTION - 2"</p>		<p>STANDARD DRAWING NO. MSD-401D</p>
		<p>PROJECT</p>	<p>DRAWN BY</p>	
<p>DATE 6/21/2022</p>		<p>1 OF 1</p>		

NO.	REVISION	BY	DATE	DESIGN
				M. STONE
				DRAWN
				C. DESPAN
				CHECKED
				W. RICE
				APPROVED
				W. RICE

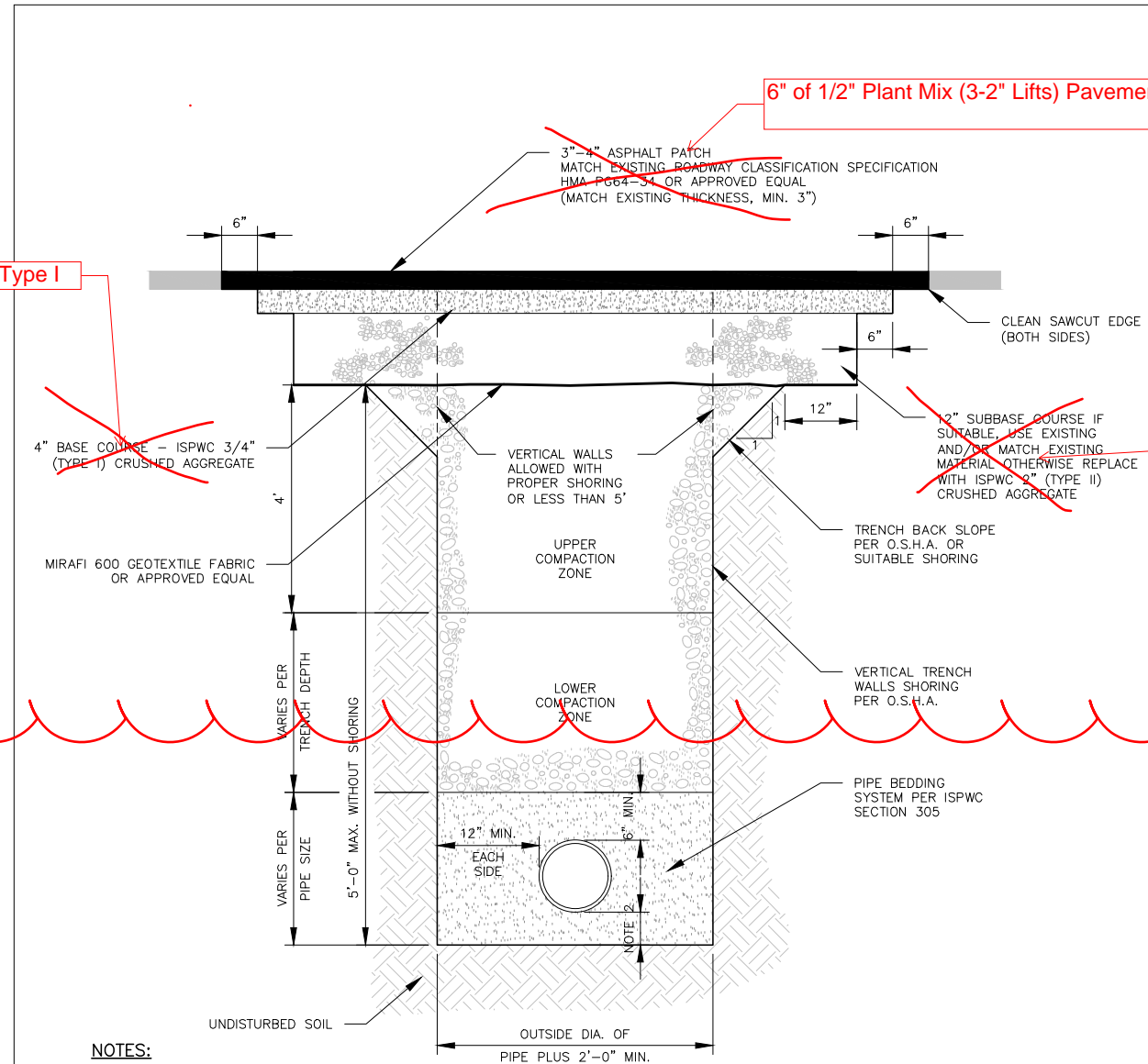
HORROCKS ENGINEERS
2775 W. Navigator Dr.
Suite 210
Meridian, ID 83642
(208)-895-2520



PUBLIC WORKS DEPARTMENT
815 N. SAMSON TRAIL
McCall, IDAHO 83638
208.634.8943


CITY OF McCall
VALLEY COUNTY, IDAHO
DEINHARD LANE, SH-55 TO SAMSON TRAIL
DEINHARD LANE
CITY OF McCall STANDARD DETAILS

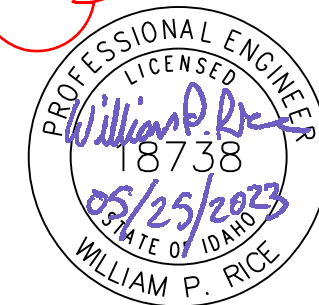
<p>VERIFY SCALE BAR IS ONE INCH ON FULL SIZE DRAWING 0" = 1"</p>	
<p>PROJECT DEINHARD LANE & SH-55</p>	<p>DATE 5/25/2023</p>
<p>DRAWING NO.</p>	<p>SHEET NO. 11 OF 12</p>



NOTES:

1. TRENCH EXCAVATION PER ISPMC SECTION 301.
2. PIPE BEDDING PER ISPMC SECTION 305.
3. BACKFILL AND COMPACTION PER ISPMC SECTION 306.
4. REFER TO ISPMC SECTION 304 FOR ADDITIONAL INFORMATION ON TRENCH FOUNDATION STABILIZATION IF NECESSARY FOR PROJECT CONSTRUCTION.
5. STREET CUTS AND SURFACE REPAIRS PER ISPMC SECTION 307 UNLESS OTHERWISE SHOWN IN THIS DETAIL.
6. ASPHALT CUTS AND PATCHES WILL NOT BE ALLOWED WITHIN THE WHEEL PATHS AND ALL CORNERS SHALL BE STRAIGHT CUTS (NOT RADIUS) UNLESS PRIOR WRITTEN APPROVAL FROM THE CITY OF McCALL PUBLIC WORKS DEPARTMENT HAS BEEN GRANTED.
7. ALL WORKMANSHIP LOCATED WITHIN A CITY OF McCALL RIGHT-OF-WAY TO CARRY A 2-YEAR WARRANTY.

 CITY OF McCALL PUBLIC WORKS DEPARTMENT 815 N. SAMSON TRAIL McCALL, IDAHO 83638 208.634.5580	CITY OF McCALL			STANDARD DRAWING NO. MSD-302
	TYPICAL TRENCH AND ASPHALT SURFACE REPAIR			
	PROJECT	DRAWN BY	SHEET NO.	
	DATE	2/15/2023	1 OF 1	



GENERAL NOTES:

COORDINATE SYSTEM AND PROJECTION INFORMATION - (MCCALL MODIFIED GRID)

HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)
 VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)
 COORDINATE SYSTEM: US STATE PLANE 1983, IDAHO WEST ZONE 1103
 PROJECT UNITS: US SURVEY FOOT
 COMBINED SCALE FACTOR: 1,00030200
 SCALE LOCATION: 1,190,000 NORTH, 2,536,000 EAST
 FALSE NORTHING: 0.00
 FALSE EASTING: 0.00
 GEOID MODEL: GEOID 03
 PROJECT BENCHMARK: MCCALL SURVEY CONTROL POINT "MDMS REV"

NOTES:
 HORIZONTAL AND VERTICAL CONTROL WERE ESTABLISHED USING MCCALL SURVEY CONTROL POINT DESIGNATED "MDMS REV", WITH PUBLISHED ELEVATION OF 5088.341. DIFFERENTIAL LEVELS WERE THEN RUN THROUGH PRIMARY AND SECONDARY CONTROL. "MSD1-REV" IS THE SECOND POINT OF REFERENCE, FROM THE MCCALL SURVEY CONTROL POINT NETWORK (MCPN).

NO.	REVISION	BY	DATE	DESIGN
				M. STONE
				DRAWN
				C. DESPAN
				CHECKED
				W. RICE
				APPROVED
				W. RICE

HORROCKS
 ENGINEERS
 2775 W. Navigator Dr.
 Suite 210
 Meridian, ID 83642
 (208)-895-2520



PUBLIC WORKS DEPARTMENT
 815 N. SAMSON TRAIL
 McCALL, IDAHO 83638
 208.634.8943

CITY OF McCALL
 VALLEY COUNTY, IDAHO
 DEINHARD LANE, SH-55 TO SAMSON TRAIL
 DEINHARD LANE
 CITY OF McCALL STANDARD DETAILS

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT DEINHARD LANE & SH-55	
DATE	5/25/2023
DRAWING NO.	SHEET NO.
	12 OF 12

CONSTRUCTION SIGN ASSEMBLIES

1 ROAD WORK AHEAD W20-1 48" X 48"
DEINHARD LN D3-1(o) 30" X 12"

2 DETOUR AHEAD W20-2 48" X 48"
DEINHARD LN D3-1(o) 30" X 12"

3 DETOUR M4-9L 30" X 24"
DEINHARD LN D3-1(o) 30" X 12"

4 DEINHARD LN D3-1(o) 30" X 12"
DETOUR M4-9R 30" X 24"

5 DEINHARD LN D3-1(o) 30" X 12"
DETOUR M4-9S 30" X 24"

6 ROAD CLOSED AHEAD W20-3 48" X 48"
DEINHARD LN D3-1(o) 30" X 12"

7 VALLEY SPRINGS D3-1(o) 30" X 12"
COMMERCE ST. D3-1(o) 30" X 12"
DETOUR M4-9L 30" X 24"

8 VALLEY SPRINGS D3-1(o) 30" X 12"
COMMERCE ST. D3-1(o) 30" X 12"
DETOUR M4-9R 30" X 24"

9 VALLEY SPRINGS D3-1(o) 30" X 12"
DETOUR M4-9S 30" X 24"

10 NO OUTLET W14-2 30" X 30" (o)

11 ROAD CLOSED TO THRU TRAFFIC R11-4 60" X 30"
TYPE III BARRICADE

12 ROAD CLOSED TO THRU TRAFFIC R11-4 60" X 30"
TYPE III BARRICADE

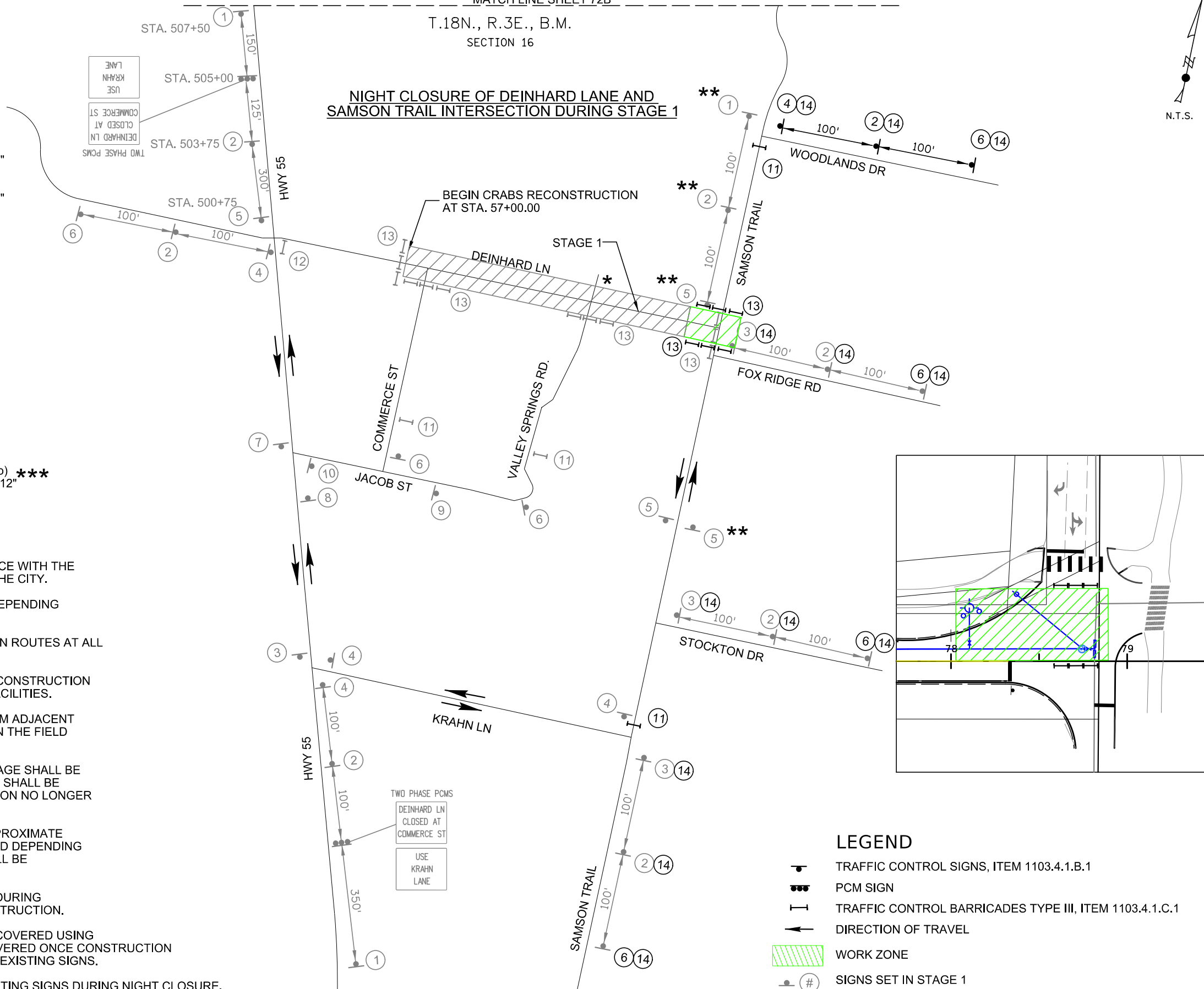
13 ROAD CLOSED TO THRU TRAFFIC R11-2 48" X 30"
TYPE III BARRICADES

14 SAMSON TL NB D3-1(o) ***
30" X 12"

NOTES:

- CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AS ADOPTED BY THE CITY.
- SIGN PLACEMENT ADJUSTMENTS MAY BE NECESSARY IN THE FIELD DEPENDING ON THE DRIVEWAY LOCATIONS AND THE CONDITIONS ENCOUNTERED.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING PEDESTRIAN ROUTES AT ALL TIMES UNLESS TEMPORARY CLOSURES ARE NEEDED.
- INSTALL TEMPORARY CONSTRUCTION FENCING AS NECESSARY FOR CONSTRUCTION OPERATIONS, HOWEVER FENCING SHALL NOT INHIBIT PEDESTRIAN FACILITIES.
- TRAFFIC CONTROL SIGNS SHALL BE PLACED APPROXIMATELY 50' FROM ADJACENT INTERSECTION. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS IN THE FIELD DEPENDING ON CONDITIONS ENCOUNTERED.
- ANY SIGNS WHICH CONFLICT WITH THE CURRENT CONSTRUCTION STAGE SHALL BE COVERED USING A METHOD APPROVED BY THE ENGINEER. ALL SIGNS SHALL BE UNCOVERED ONCE CONSTRUCTION AND TRAFFIC CONTROL OPERATION NO LONGER CONFLICT WITH THE EXISTING SIGNS.
- THE DISTANCES SHOWN BETWEEN TRAFFIC CONTROL SIGNS ARE APPROXIMATE MINIMUMS AND SOME ADJUSTMENTS MAY BE NECESSARY IN THE FIELD DEPENDING ON CONDITIONS ENCOUNTERED. CONSTRUCTION SIGN SPACING SHALL BE 100' UNLESS OTHERWISE NOTED.
- PROVIDE ACCESS TO McCALL RESOURCES MANAGEMENT COMPLEX DURING BUSINESS HOURS FROM VALLEY SPRINGS RD. DURING STAGE 1 CONSTRUCTION.
- SIGNS CONFLICT WITH NIGHT CLOSURE STAGE. ALL SIGNS SHALL BE COVERED USING A METHOD APPROVED BY THE ENGINEER. ALL SIGNS SHALL BE UNCOVERED ONCE CONSTRUCTION AND TRAFFIC CONTROL OPERATION NO LONGER CONFLICT WITH THE EXISTING SIGNS.
- PLAQUE IS TO BE ADDED ON EXISTING SIGN POST ABOVE/BELOW EXISTING SIGNS DURING NIGHT CLOSURE.

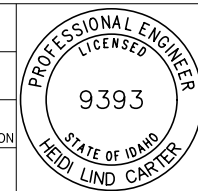
NIGHT CLOSURE OF DEINHARD LANE AND SAMSON TRAIL INTERSECTION DURING STAGE 1



LEGEND

- TRAFFIC CONTROL SIGNS, ITEM 1103.4.1.B.1
- PCM SIGN
- TRAFFIC CONTROL BARRICADES TYPE III, ITEM 1103.4.1.C.1
- DIRECTION OF TRAVEL
- WORK ZONE
- SIGNS SET IN STAGE 1

NO.	REVISION	BY	DATE	DESIGN
1	CHANGE ORDER #2 - DEINHARD LANE WATERLINE CONSTRUCTION	MS	6/2/2023	B. STURM DRAWN J. STURM CHECKED K. GULLICKSON APPROVED H. CARTER



HORROCKS ENGINEERS
2775 W. Navigator Dr.
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Meridian, ID 83642
(208)-895-2520



PUBLIC WORKS DEPARTMENT
815 N. SAMSON TRAIL
McCALL, IDAHO 83638
208.634.8943

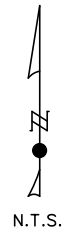
CITY OF McCALL
VALLEY COUNTY, IDAHO
DEINHARD LANE, SH-55 TO SAMSON TRAIL
DEINHARD LANE
STAGE 1A TRAFFIC CONTROL SHEET

VERIFY SCALE BAR IS ONE INCH ON FULL SIZE DRAWING 0 1"	
PROJECT	DEINHARD LANE & SH-55
DATE	6/5/2023
DRAWING NO.	SHEET NO.
	72A OF 102

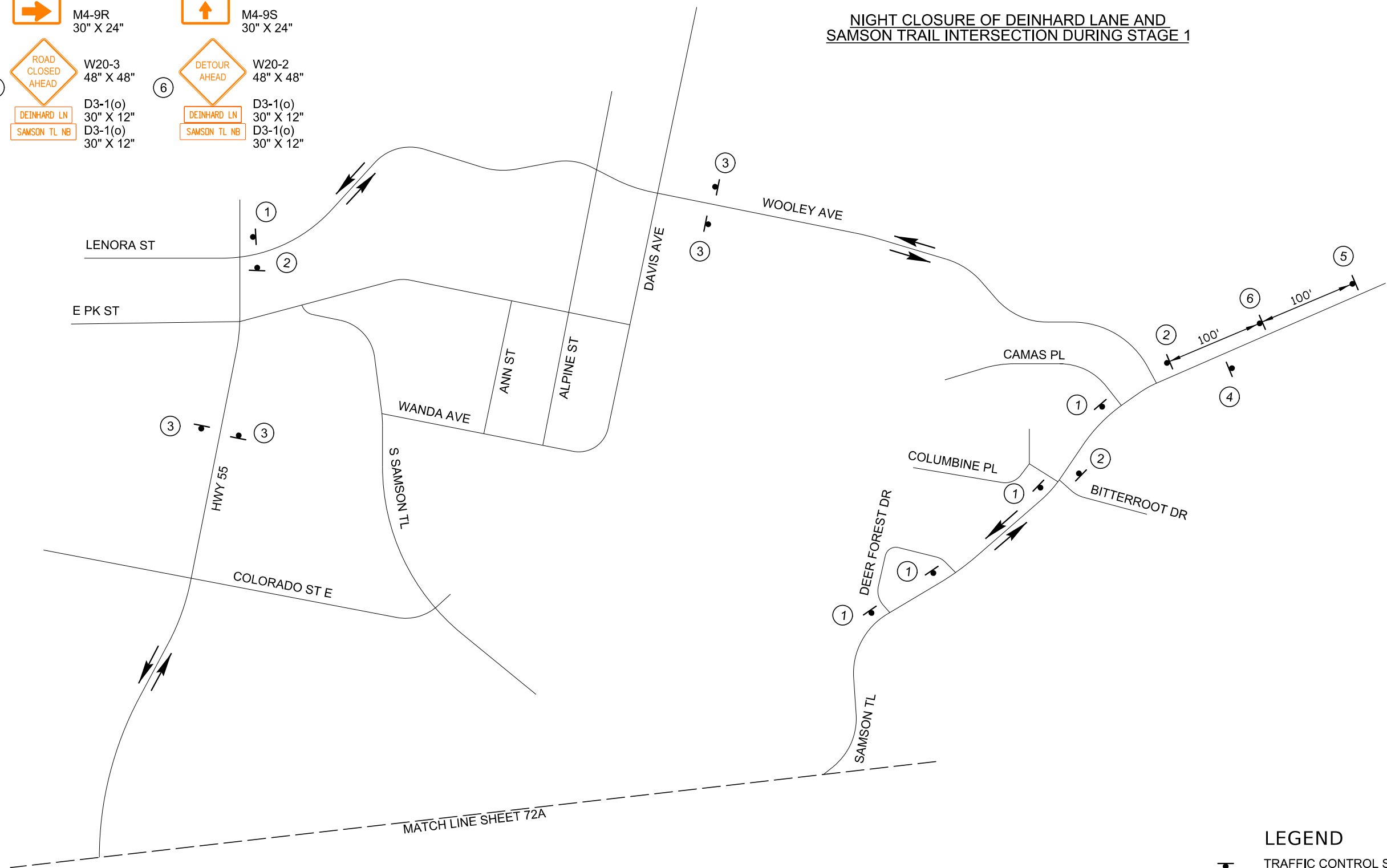
CONSTRUCTION SIGN ASSEMBLIES

- ① SAMSON TL NB D3-1(o) 30" X 12"
DEINHARD LN D3-1(o) 30" X 12"
DETOUR M4-9L 30" X 24"
- ② SAMSON TL NB D3-1(o) 30" X 12"
DEINHARD LN D3-1(o) 30" X 12"
DETOUR M4-9R 30" X 24"
- ③ SAMSON TL NB D3-1(o) 30" X 12"
DEINHARD LN D3-1(o) 30" X 12"
DETOUR M4-9S 30" X 24"
- ④ END DETOUR M4-8a 24" X 18"
- ⑤ ROAD CLOSED AHEAD W20-3 48" X 48"
DEINHARD LN D3-1(o) 30" X 12"
SAMSON TL NB D3-1(o) 30" X 12"
- ⑥ DETOUR AHEAD W20-2 48" X 48"
DEINHARD LN D3-1(o) 30" X 12"
SAMSON TL NB D3-1(o) 30" X 12"

T.18N., R.3E., B.M.
SECTION 9



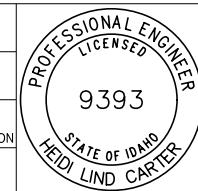
NIGHT CLOSURE OF DEINHARD LANE AND SAMSON TRAIL INTERSECTION DURING STAGE 1



LEGEND

- TRAFFIC CONTROL SIGNS, ITEM 1103.4.1.B.1
- DIRECTION OF TRAVEL

NO.	REVISION	BY	DATE	DESIGN
1	CHANGE ORDER #2 - DEINHARD LANE WATERLINE CONSTRUCTION	MS	6/2/2023	B. STURM
				J. STURM
				K. GULLICKSON
				H. CARTER



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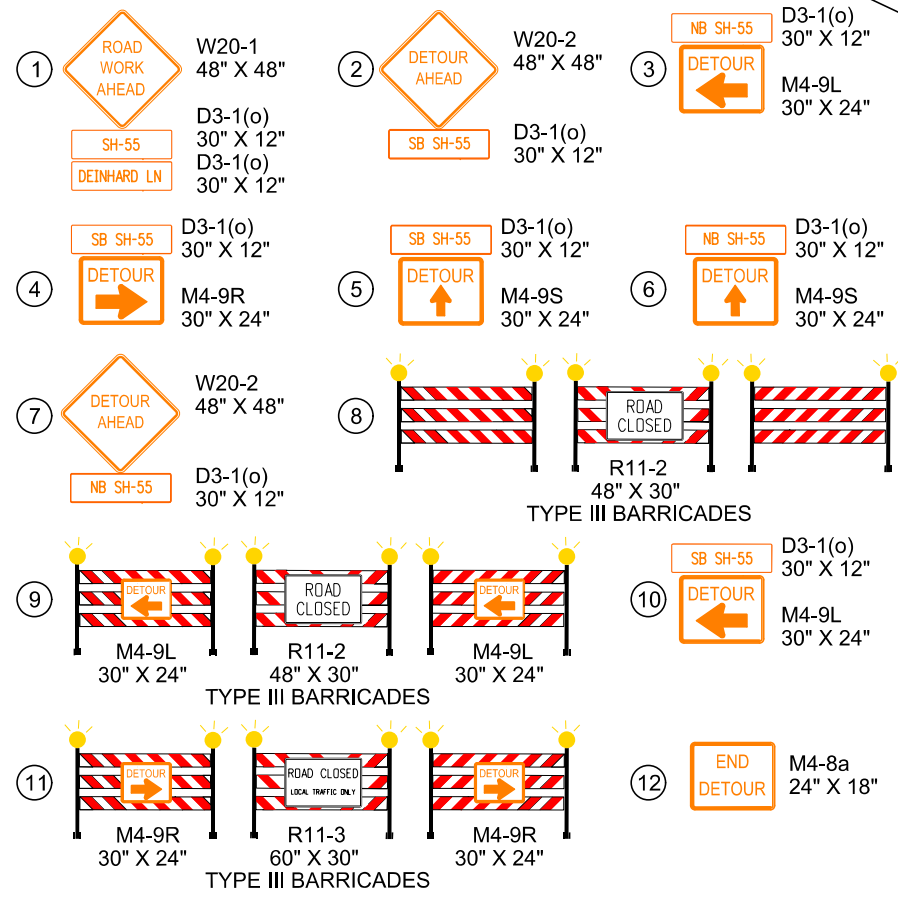
PUBLIC WORKS DEPARTMENT
815 N. SAMSON TRAIL
McCALL, IDAHO 83638
208.634.8943



CITY OF McCALL
VALLEY COUNTY, IDAHO
DEINHARD LANE, SH-55 TO SAMSON TRAIL
DEINHARD LANE
STAGE 1A TRAFFIC CONTROL SHEET

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT DEINHARD LANE & SH-55	
DATE	6/5/2023
DRAWING NO.	SHEET NO.
	72B OF 102

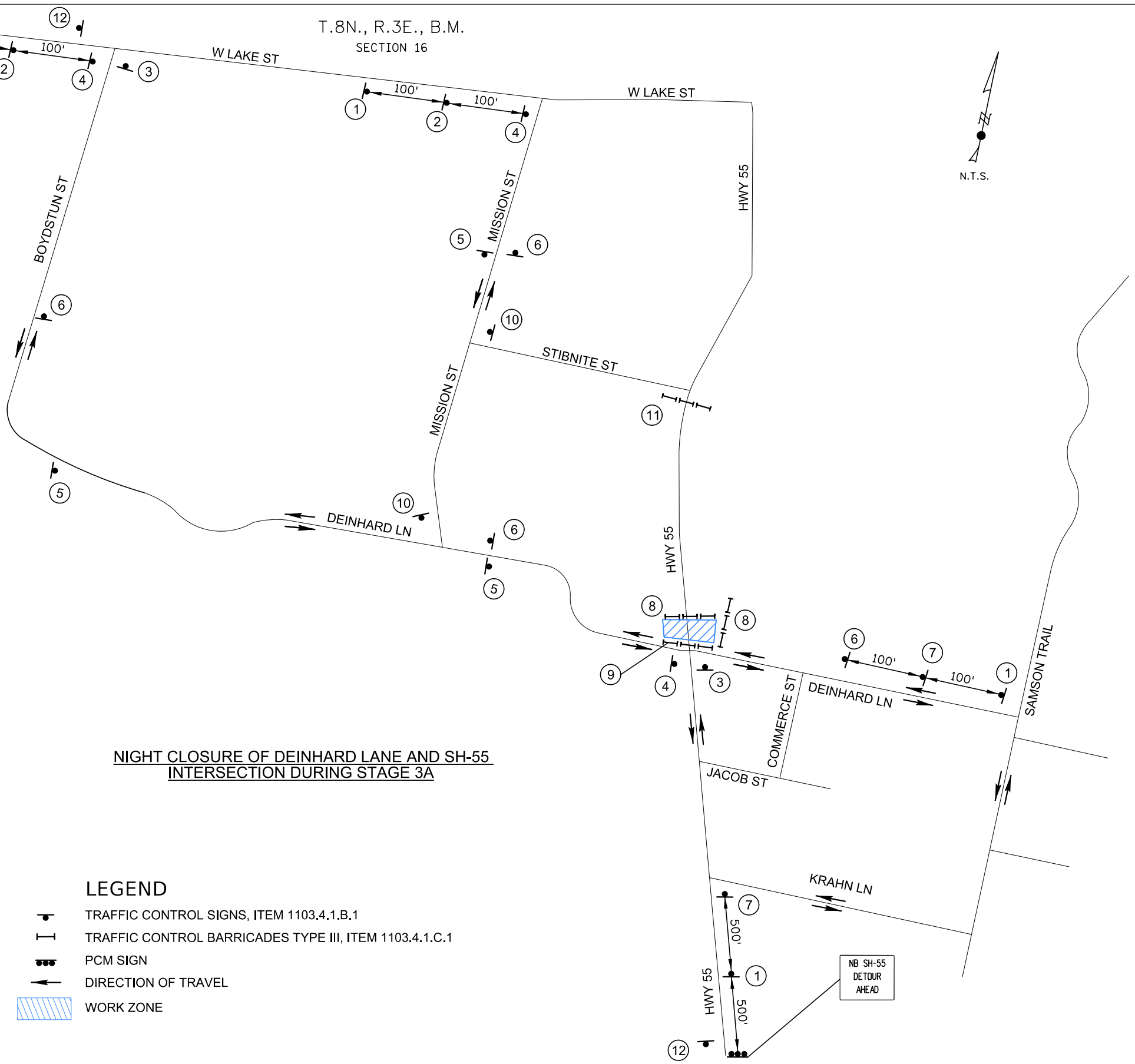
CONSTRUCTION SIGN ASSEMBLIES



NOTES:

- CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AS ADOPTED BY THE CITY.
- SIGN PLACEMENT ADJUSTMENTS MAY BE NECESSARY IN THE FIELD DEPENDING ON THE DRIVEWAY LOCATIONS AND THE CONDITIONS ENCOUNTERED.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PEDESTRIAN ROUTES AT ALL TIMES UNLESS TEMPORARY CLOSURES ARE NEEDED.
- INSTALL TEMPORARY CONSTRUCTION FENCING AS NECESSARY FOR CONSTRUCTION OPERATIONS, HOWEVER FENCING SHALL NOT INHIBIT PEDESTRIAN FACILITIES.
- TRAFFIC CONTROL SIGNS SHALL BE PLACED APPROXIMATELY 50' FROM ADJACENT INTERSECTION. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS IN THE FIELD DEPENDING ON CONDITIONS ENCOUNTERED.
- ANY SIGNS WHICH CONFLICT WITH THE CURRENT CONSTRUCTION STAGE SHALL BE COVERED USING A METHOD APPROVED BY THE ENGINEER. ALL SIGNS SHALL BE UNCOVERED ONCE CONSTRUCTION AND TRAFFIC CONTROL OPERATION NO LONGER CONFLICT WITH THE EXISTING SIGNS.
- THE DISTANCES SHOWN BETWEEN TRAFFIC CONTROL SIGNS ARE APPROXIMATE MINIMUMS AND SOME ADJUSTMENTS MAY BE NECESSARY IN THE FIELD DEPENDING ON CONDITIONS ENCOUNTERED. CONSTRUCTION SIGN SPACING SHALL BE 100' UNLESS OTHERWISE NOTED.
- STAGE 3C TO OCCUR WITH STAGE 3A. SEE STAGE 3A FOR ADDITIONAL SIGNING INFORMATION.
- COMPLETELY COVER CONFLICTING NORTHBOUND SH-55 DETOUR SIGNS FOR STAGE 3 DURING NIGHT CLOSURE.

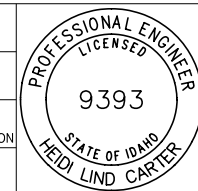
NIGHT CLOSURE OF DEINHARD LANE AND SH-55 INTERSECTION DURING STAGE 3A



LEGEND

- TRAFFIC CONTROL SIGNS, ITEM 1103.4.1.B.1
- TRAFFIC CONTROL BARRICADES TYPE III, ITEM 1103.4.1.C.1
- PCM SIGN
- DIRECTION OF TRAVEL
- WORK ZONE

NO.	REVISION	BY	DATE	DESIGN
1	CHANGE ORDER #2 - DEINHARD LANE WATERLINE CONSTRUCTION	MS	6/2/2023	B. STURM
				DRAWN
				E. PETERS
				CHECKED
				K. GULLICKSON
				APPROVED
				H. CARTER



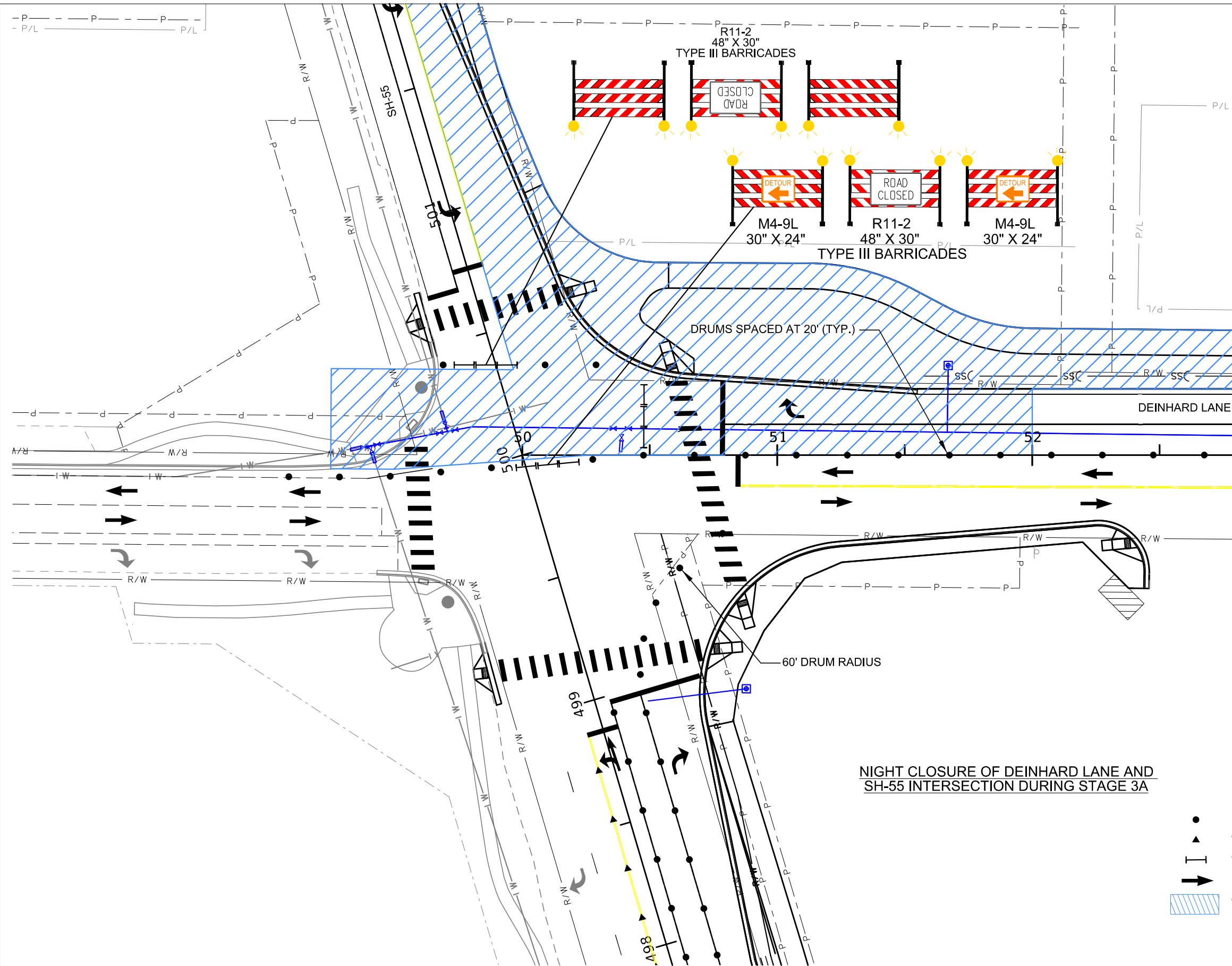
HORROCKS ENGINEERS
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PUBLIC WORKS DEPARTMENT
 815 N. SAMSON TRAIL
 McCall, IDAHO 83638
 208.634.8943

CITY OF McCALL
 VALLEY COUNTY, IDAHO
 DEINHARD LANE, SH-55 TO SAMSON TRAIL
 DEINHARD LANE
 STAGE 3C TRAFFIC CONTROL SHEET

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT DEINHARD LANE & SH-55	
DATE 6/5/2023	
DRAWING NO.	SHEET NO.
	101A OF 102

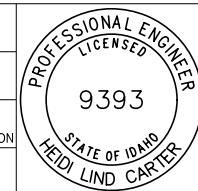


NOTES:
 1. STAGE 3C TO OCCUR WITH STAGE 3A. SEE STAGE 3A FOR ADDITIONAL SIGNING INFORMATION.

NIGHT CLOSURE OF DEINHARD LANE AND SH-55 INTERSECTION DURING STAGE 3A

- LEGEND**
- DRUM
 - ▲ WEIGHTED BASE TUBULAR MARKER
 - ⊥ TRAFFIC CONTROL BARRICADES TYPE III, ITEM 1103.4.1.C.1
 - ➔ DIRECTION OF TRAVEL
 - ▨ WORK ZONE

NO.	REVISION	BY	DATE	DESIGN
1	CHANGE ORDER #2 - DEINHARD LANE WATERLINE CONSTRUCTION	MS	6/2/2023	B. STURM
				DRAWN J. STURM
				CHECKED K. GULLICKSON
				APPROVED H. CARTER



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CITY OF McCALL
 VALLEY COUNTY, IDAHO
 DEINHARD LANE, SH-55 TO SAMSON TRAIL
 DEINHARD LANE
 STAGE 3C TRAFFIC CONTROL SHEET

VERIFY SCALE	
BAR IS ONE INCH ON FULL SIZE DRAWING	
PROJECT DEINHARD LANE & SH-55	
DATE	6/5/2023
DRAWING NO.	SHEET NO.
	101B OF 102

City Council Upcoming Meetings Schedule

June 15, 2023 5:00-7:00 p.m.- St Luke's Open House - Event

June 21-23, 2023 – AIC Conference – Event

June 24, 2023 Airport Open House - Event

June 29, 2023 - 5:30 pm, TEAMS Virtual and Legion Hall – Regular Meeting

1. *Clerk License Report - Consent*
2. *Treasurer's Monthly Report (Linda) – Consent*
3. *MSBT Law Annual Report – Tony Pantera will present (BessieJo)*
4. *PROS Plan adoption (Delta, Kurt) 30 min*
5. *Library Integrated Art final design approval (Delta) 20 min*
6. *Community Engagement Grant application (Delta) 5 min*
7. *Source Water Protection Grant application (Delta) 5 min*
8. *Downtown Mural Memo of Understanding between City and McPaws (Delta) 5 min*
9. *Simplet Easement (Nathan)*
10. *Council Salary Discussion and Direction to Staff (BessieJo) 20 min*
11. *MOU CIMBA (Kurt) 5min*
12. *Hangar Lease 702 (Emily) Consent*

June 30, 2023 – 9:00 – 1:00 p.m. TEAMS Virtual and TBD – Special Work Session

1. *Council FY24 Budget Work Session*
 - a. *Present draft CIP*
 - b. *LOT Commission Recommendations*

July 6, 2023 - 5:30 pm, TEAMS Virtual and Legion Hall – Special Meeting Tentative

- 1.

July 13, 2023 - 5:30 pm, TEAMS Virtual and Legion Hall – Regular Meeting

1. *Clerk License Report - Consent*
2. *Chamber Report*
3. *Monthly Department Reports*
4. *Committee Minutes - Consent*
5. *2ND Touch on Wildlife issues (Erin/Dallas)*

July 21, 2023 – 9:00 – 1:00 p.m. TEAMS Virtual and TBD – Special Work Session TBD

1. *Council FY24 Budget Work Session to Adopt Tentative FY24 Budget and Set Maximum Expenditures*

July 27, 2023 - 5:30 pm, TEAMS Virtual and Legion Hall – Regular Meeting

1. *Clerk License Report - Consent*
2. *Treasurer's Monthly Report (Linda) – Consent*
3. *Downtown Mural final design approval (Delta) 10 min*
4. *Planning and Zoning Commission annual report (Brian) 20Min*

July 28, 2023 - 9am work session

CANCELLED

August 3, 2023 - 5:30 pm, TEAMS Virtual and Legion Hall – Special Meeting Tentative

1.

August 4, 2023 – 9:00 – 1:00 p.m. TEAMS Virtual and TBD – Special Work Session TBD

1. *Council FY24 Budget Work Session to Adopt Tentative FY24 Budget and Set Maximum Expenditures*

August 10, 2023 - 5:30 pm, TEAMS Virtual and Legion Hall – Regular Meeting

1. *Clerk License Report - Consent*
2. *Chamber Report*
3. *Monthly Department Reports*
4. *Committee Minutes - Consent*

August 24, 2023 - 5:30 pm, TEAMS Virtual and Legion Hall – Regular Meeting

1. *Clerk License Report - Consent*
2. *Treasurer's Monthly Report (Linda) – Consent*
3. **PUBLIC HEARING** – *FY24 Budget Adoption (Linda)*

August 25, 2023 – 9:00 – 1:00 p.m. TEAMS Virtual and TBD – Special Work Session

1.

September 7, 2023 - 5:30 pm, TEAMS Virtual and Legion Hall – Special Meeting Tentative

1.

September 14, 2023, 2023 - 5:30 pm, TEAMS Virtual and Legion Hall – Regular Meeting

1. *Clerk License Report - Consent*
2. *Chamber Report*
3. *Monthly Department Reports*
4. *Committee Minutes - Consent*

September 28, 2023 - 5:30 pm, TEAMS Virtual and Legion Hall – Regular Meeting

1. *Clerk License Report - Consent*
2. *Treasurer's Monthly Report (Linda) – Consent*

September 29, 2023 – 9:00 – 1:00 p.m. TEAMS Virtual and TBD – Special Work Session

1.

To be Scheduled:

1. *MCC Title 6 Re-write (Nathan Stewart)*
2. *Investment Policy update (Linda)*
3. *Continuous Billing Code Amendment First Touch (Linda)*
4. *Joint with County STR Discussion **1hr***
5. *Public Hearing Ordinance for FD Impact Fees*
6. *MRA Appointment (Michelle)*
7. *Transportation/Land Use Work Session (Brian/Morgan)*