

**Download materials
featured in this session:
LMC.ORG/ACMATERIALS**





CITY FEST

2025 ANNUAL
CONFERENCE

CONNECTING
LEADERS
.....
CELEBRATING
COMMUNITY



JUNE 25-27
DULUTH

.....
DULUTH ENTERTAINMENT
CONVENTION CENTER
.....

LMC.ORG/AC25



Big Projects, Small Communities: Infrastructure Success Stories from Medicine Lake and Alpha

LEAGUE OF MINNESOTA CITIES ANNUAL CONFERENCE



Presenters

Brent Kavitz, Associate & Project Manager, SEH

John Ingebretson, Public Works, Alpha

Kelly Soucek, City Clerk, Alpha

Bill McNaughton, Council Member, Medicine Lake

Dave Hutton, Senior Project Manager, SEH



City of Alpha's Funding Journey for the Water System Improvement Projects

EXPLORING FUNDING STRATEGIES FOR CRITICAL INFRASTRUCTURE



Population and Location



- **Geographical Location**

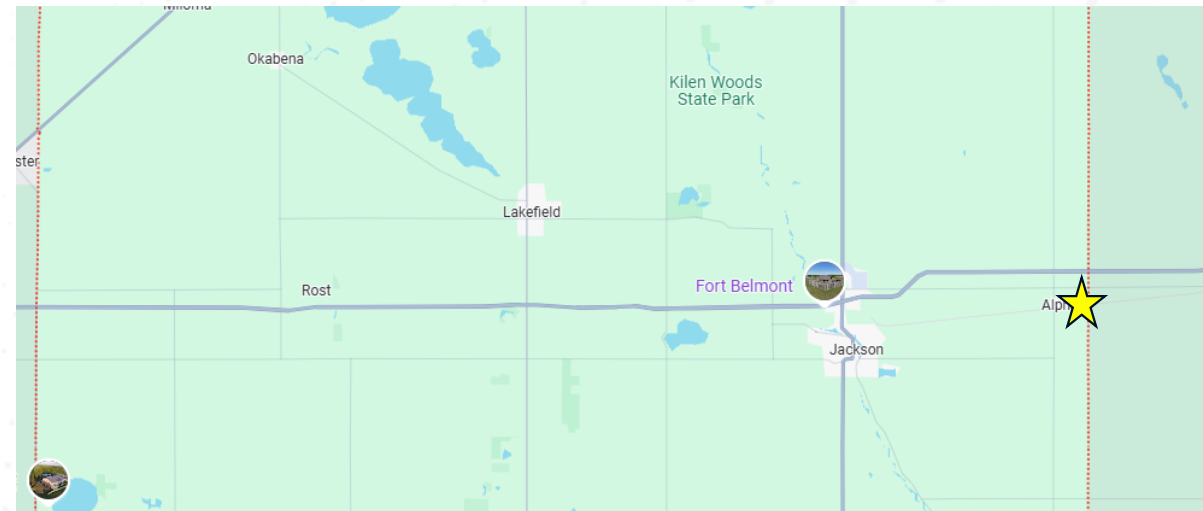
- Alpha is a small city located in Jackson County, in the southwestern part of Minnesota.

- **Population**

- Current population: 97
- Households: 56
- Median age: ~50 years

- **Community Snapshot**

- Alpha is a quiet, rural community with a strong sense of local identity.
- Surrounded by farmland and is part of a region known for agriculture and small-town living.



Severity of Existing Water and Wastewater System



Current Conditions



- **Water Treatment Plant – Funded Project**
 - Built in 1994, the water treatment plant's components are deteriorating and require urgent upgrades or replacements.
- **Water Distribution System – Funded Project**
 - This system has exceeded its design life, leading to frequent breaks and inoperable valves and hydrants.



Current Conditions – Future Project



- **Wastewater Treatment System**

- The collection and treatment system is approximately 30 years old, facing severe issues such as backups and structural failures.

Medium Household Income (MHI) & The Impact on Funding Eligibility



Median Household Income (MHI) Discrepancy

- **Pre-2020 Median Income**

- Before 2020, the Median Household Income (MHI) was reported at \$41,518.
- The water system improvements were awarded based on the 2010 MHI.

- **Post-2020**

- The 2023 American Community Survey reported a new MHI of \$140,273.

- **Impact on Grants and Loans**

- The drastic increase in MHI is expected to affect the city's eligibility for future grants and loans, potentially reducing financial resources.

Implications of Inflated MHI



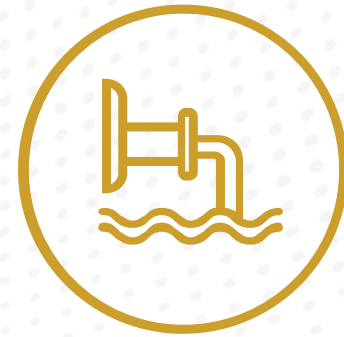
Funding Eligibility Criteria

Funding agencies consider MHI as a key factor for grants and loans, impacting financial support for cities.



Reduced Financial Assistance

An inflated MHI can decrease the City of Alpha's eligibility for essential financial assistance, hindering growth.



Critical Infrastructure Projects

Vital projects, like the future wastewater system improvements, may suffer delays due to lack of funding stemming from inflated MHI.

Steps to Correct MHI



- **Initial Discovery (June 2024)**

- City identified that the MHI used for the Wastewater project was unusually high.

- **Contact with LMC**

- Reached out to the League of Minnesota Cities for guidance on how to proceed.

- **Request a Correction from the U.S. Census Bureau**

- Specific dataset or report
- Detailed explanation of the error
- Evidence or data supporting correction requested
- Explanation how the incorrect data affects the community
- No response!

Steps to Correct MHI (cont.)



- **No Response Received**

- After no reply, LMC advised contacting Senator Tina Smith's office.

- **Engagement with Senator Smith's Office**

- Worked with the Outreach Director
- Identified some discrepancies

- **Boundary & Annexation Review**

- City Boundaries
- Discovery of Error
- Verification with County Recorder
- Corrected Boundary Map Sent to Census Bureau
- Suspected these parcels may have skewed income data

Outcomes of Request for Corrections

- **Typical Responses from the U.S. Census Bureau:**

- Correction Accepted and Implemented
- Request Under Review
- Request Denied with Explanation
- Additional Information Requested

- **Outcomes for the City of Alpha**

- No confirmation received from Census Bureau
- Reach out again to Senator Smith's office – no further assistance available
- New Legal Support in 2025
- Prepared a new request to the Census Bureau's Quality Control Center

Funding Process with USDA Rural Development



Engineering and Compliance

- **Preliminary Engineering Report**

- The Preliminary Engineering Report documented existing conditions and needs, crucial for funding and project guidance.

- **Environmental Compliance**

- An Environmental Report was required to ensure compliance with environmental laws, addressing necessary mitigations.

Application and Review Process



Application Submission

The City of Alpha submitted the application for funding in May 2022, marking the beginning of the process.



Review Process

The review of the project, including the Preliminary Engineering Report (PER) and Environmental Review (ER), occurred from April 2023 to May 2024.

Application and Review Process



Engineering Design

The engineering design phases include preliminary and final designs, scheduled from December 2024 to July 2025.



Construction Timeline

Construction is planned to start in December 2025, with final project completion expected by September 2027.

Congressional Directed Spending (CDS) Application Process



Steps and Coordination



- **Proposal Submission**

- The initial step involved submitting a detailed project description, justification, and local benefits to support the application.

- **Funding Request**

- The City of Alpha requested \$4.1 million for the design and construction of a water treatment plant and distribution system.

- **Coordination Efforts**

- Coordination with USDA-RD and Minnesota Public Facilities Authority is essential for securing matching funds for the project.

- **Application Review**

- The application undergoes multiple stages of review and approval by congressional offices and relevant subcommittees.

Summary of Awarded Grants and Funding



Project Overview and Funding Amounts



- **Water Infrastructure Project**

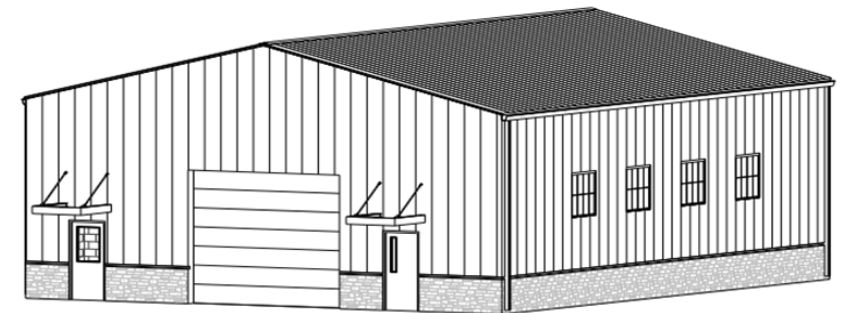
- The City of Alpha has initiated a water infrastructure project, receiving a Letter of Conditions from USDA Rural Development.

- **Funding Breakdown**

- The total project cost is \$6,215,000, including loans and grants from USDA Rural Development and the EPA (CDS Funding).

- **Conditions for Funding**

- Conditions outlined in the Letter of Conditions must be met for further funding consideration.



Project Scope and Budget



Project Scope Overview

The project includes new well pumps, a water treatment plant, and replacement of water mains and meters.



Budget Breakdown

The total project budget of \$6,215,000 includes costs for development, engineering, and contingencies.



Infrastructure Improvements

Replacement of cast iron mains, valves, and hydrants aims to improve water distribution infrastructure.

Key Conditions and Requirements



- **Project Completion Timeline**

- The project must be completed within three years, ensuring timely disbursement of funds.

- **Loan Terms**

- The loan features a 40-year repayment with interest rates locked at loan approval or closing.

- **Security and Reserves**

- A General Obligation bond secures the loan, with annual reserve fund deposits required.

- **Regulatory Compliance**

- The project must adhere to environmental policies and undergo regular compliance reviews.

Temporary Financing

- **Interim Financing**

- The City of Alpha sought interim financing from private or cooperative lenders to cover initial project costs.

- **USDA-RD Compliance**

- The City had to comply with USDA-RD requirements for interim financing on loans exceeding \$500,000.

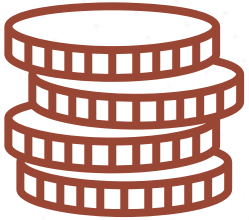
- **Disbursement of Funds**

- Funds are disbursed in a specific order: interim financing, Agency loans, and then Agency grants to maximize efficiency.

Challenges for Small Cities in Acquiring Funding



Common Challenges



Limited Financial Resources

Small cities have access to limited financial resources, affecting their ability to secure funding for large projects.



High Project Costs

Infrastructure projects require substantial investment, which small cities struggle to cover without external funding.



Complex Application Processes

Navigating federal and state funding requirements can be challenging, leading to less success in securing funds.



Competition for Funds

Small cities often find themselves competing against larger municipalities for the same limited funding resources.

Turning Challenges into Opportunities



- **Prioritize and Phase Projects**

- Broke large projects into smaller, manageable phases to make them more fundable.

- **Advocate and Network**

- Built relationships with State and Federal representatives to advocate for local needs.

- **Use Data and Storytelling**

- Collected local data to demonstrate need and potential impact
 - Shared compelling stories about how the project would benefit the community.

- **Explore Alternative Funding Sources**

- **Improve Financial Readiness**

- Maintained strong financial records and clean audits to build credibility.



CITY OF MEDICINE LAKE **2024 Street and Utility Project**

LEAGUE OF MINNESOTA CITIES ANNUAL CONFERENCE



Project Goals



Ensures the long-term vitality of the community



Rehabilitates aging infrastructure



Improves road safety for all users



Improves mobility for pedestrians and bicyclists



Improves fire protection with new fire hydrants



Provides municipal drinking water



Upgrades to the drainage and sewer infrastructures

Background Timeline



2017/2018

City discovers serious defects in sanitary sewer system

2020/2021

City embarks on a Capital Improvement Program (CIP) to determine all other infrastructure needs

2021/2022

City rehabilitates existing sanitary lift station on Kaiser Ave.

Background Timeline



2022

City bids out street and utility project.

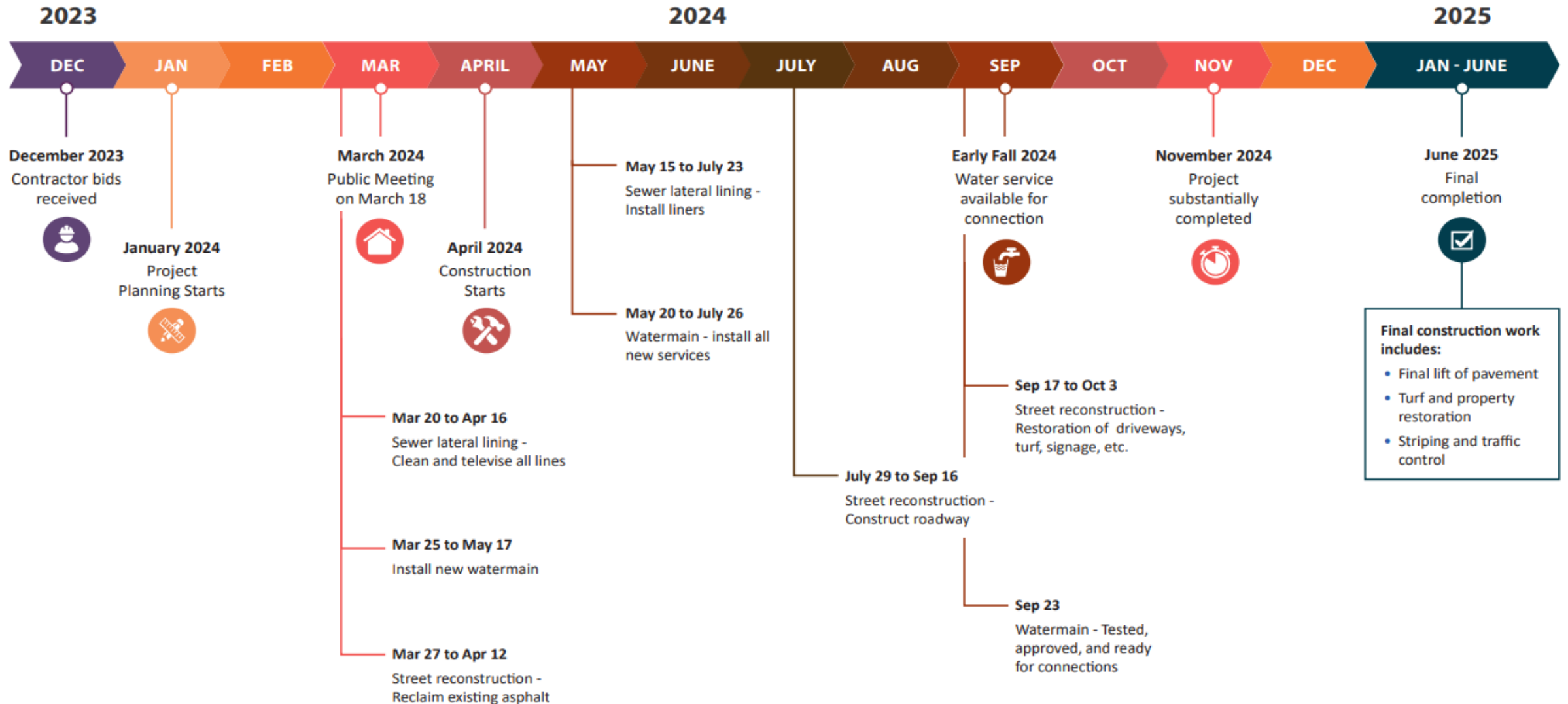
Rejects all bids due to lack of state bonding support

2023

Initial design plans modified based on contractor feedback during the 2022 bidding period.

City receives state bonding support for 50% of project.

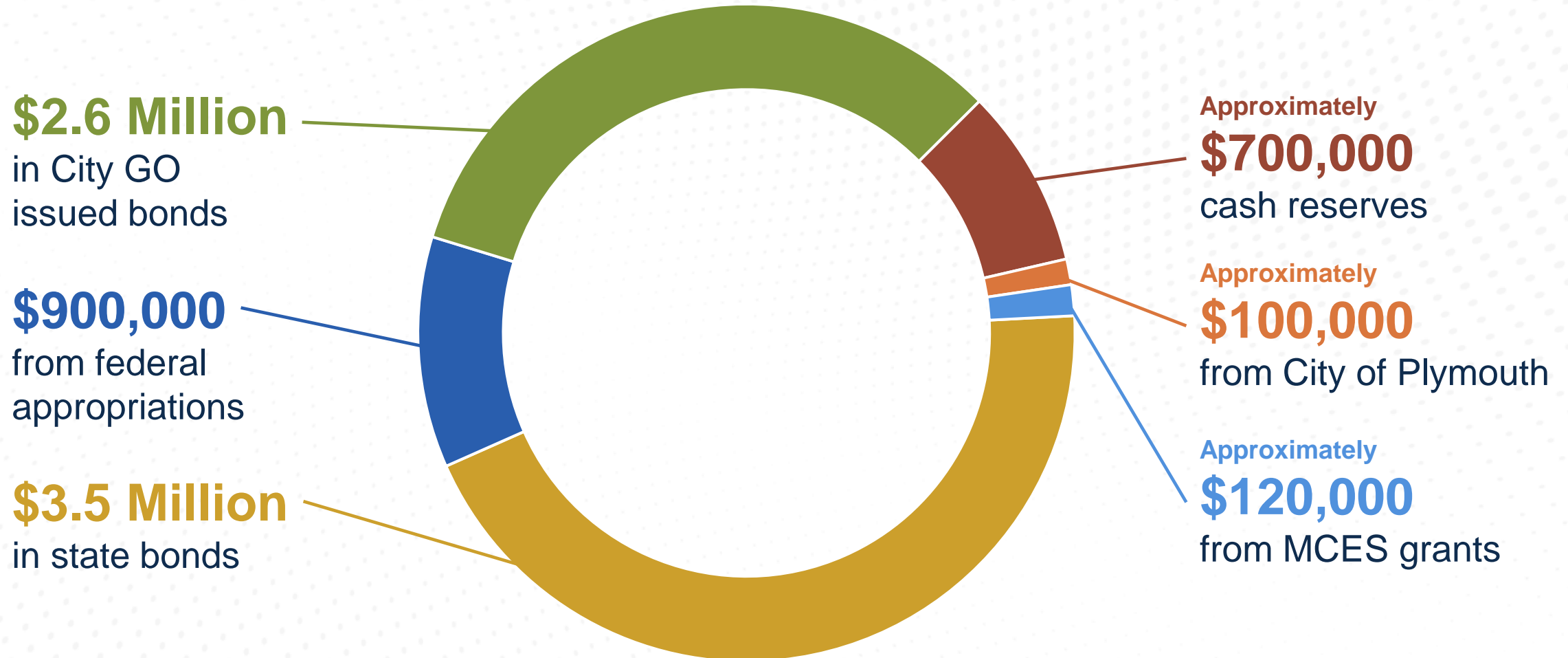
Construction Timeline



Financing and Project Partners



How is the project being paid for?



Details of Joint Powers Agreement with City of Plymouth



- **City of Medicine Lake to:**

- Pay per acre trunk fee - \$510,000
 - 25% paid on January 1, 2025
 - 75% paid overtime with connection charges
 - Increases after 10% if less than 75% connect to City water
- Pay annual maintenance fee to City of Plymouth - \$23,400
- Design to City of Plymouth Water standards

- **City of Plymouth to:**

- Own and maintain the watermain
- To issue and administer plumbing permits for hook ups and create billing system
- Pay for their share of 15th Ave (5 lots entirely within Plymouth)

Project Elements



New Watermain Installation



- A new watermain installed.
This was the primary goal of the project
 - Provides municipal drinking water to replace private wells
 - Maintained by City of Plymouth per JPA
 - Curb stops shut at each property
- New fire hydrants will be installed vastly improving the City's fire fighting capabilities

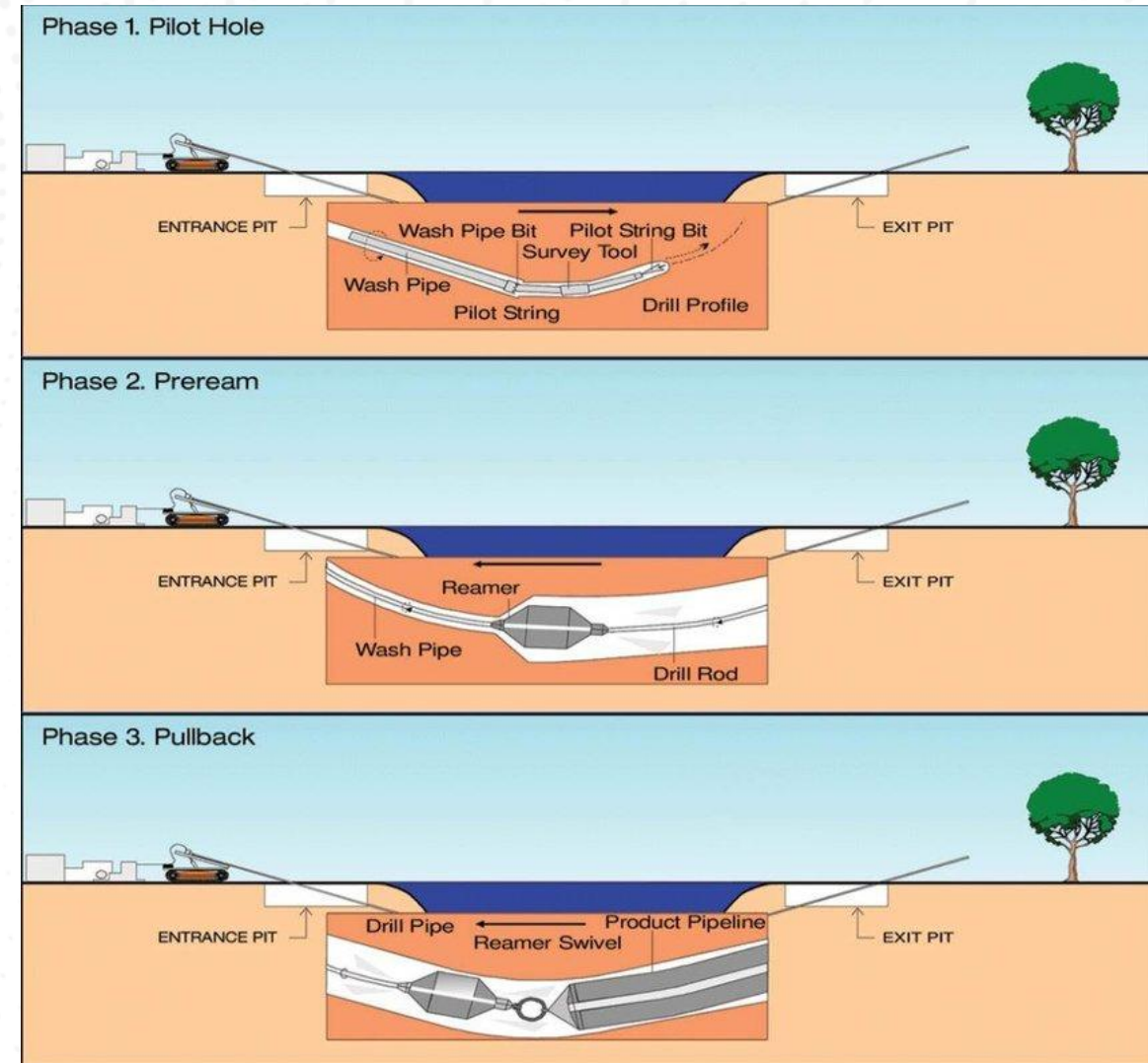


Horizontal Directional Drilling Watermain



A 3-step construction process

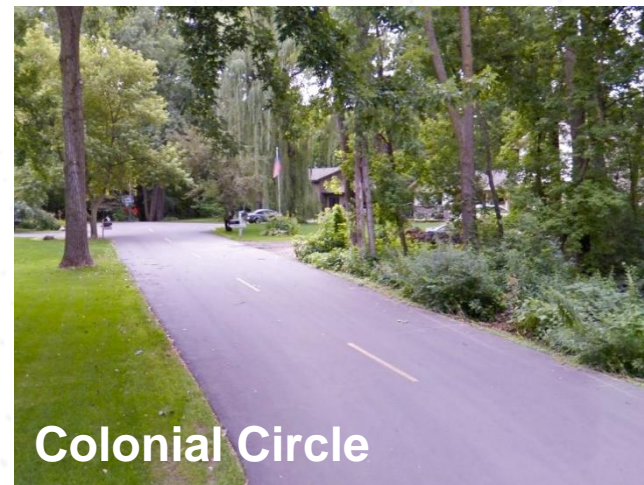
1. Drill a small pilot hole between pits.
Pits are usually 100-300 feet apart
 2. Ream out a larger hole to accept the new watermain pipe
 3. Pull new watermain pipe through
- **Note:** All new pipe to be fused together in Jevne Park and then dragged down to the pits to pull through hole.



Street Reconstruction



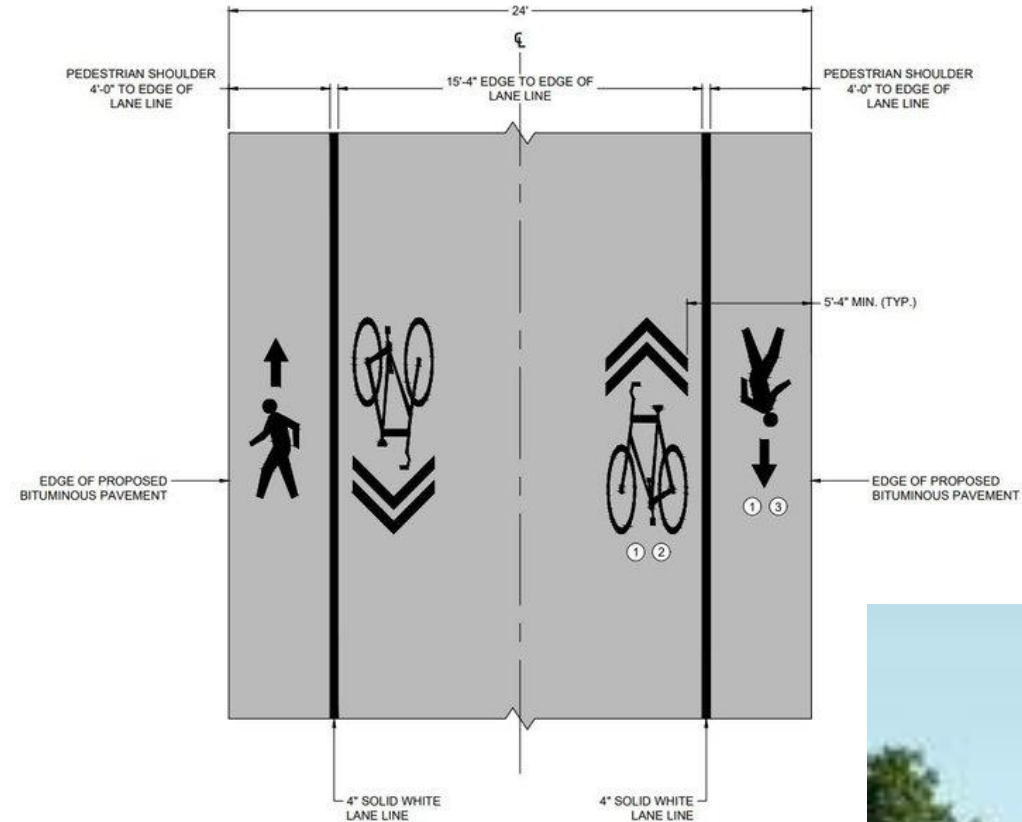
- Complete reconstruction of all streets
- Maintain existing 24-foot-wide pavement
- Minimal drainage improvements besides replacing existing culverts
- No new improvement such as curb and gutter or widening



Street – Complete Streets



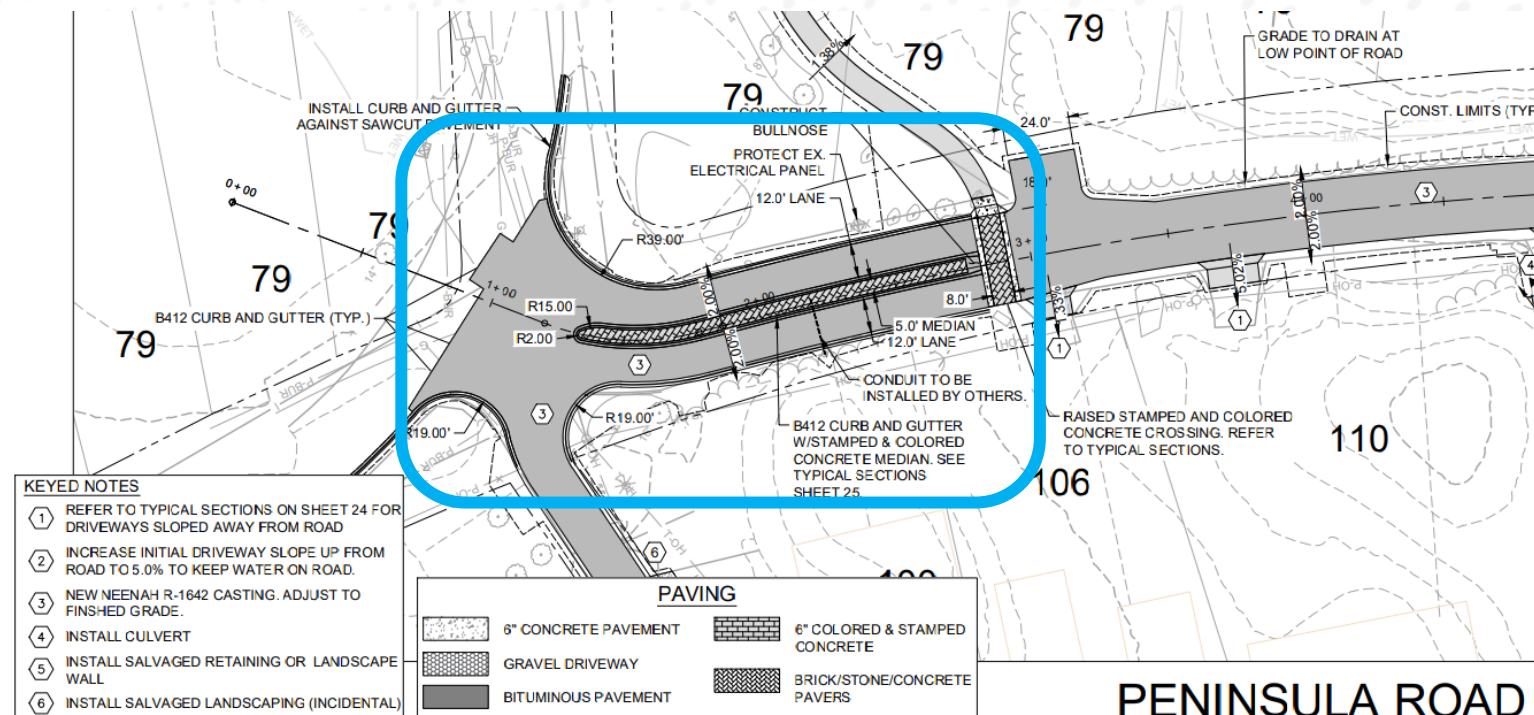
- Complete Streets principles
 - Improves safety and mobility for drivers, pedestrians, and bicyclists
 - Signs will be placed at City entrance to inform drivers of “shared road” system
- Driver Feedback signs along with several speed humps.



Project Elements – Entrance Feature



- Entrance features at South Shore Drive
 - Center median
 - Raised crosswalk using color and stamped concrete
 - Landscaping and signage



Project Elements – Sanitary Sewer



Sanitary Sewer

- Replaced the pressurized force main from Lift Station to MCES manhole
- Lined house laterals and manholes



Lift Station

Project Elements - Parks

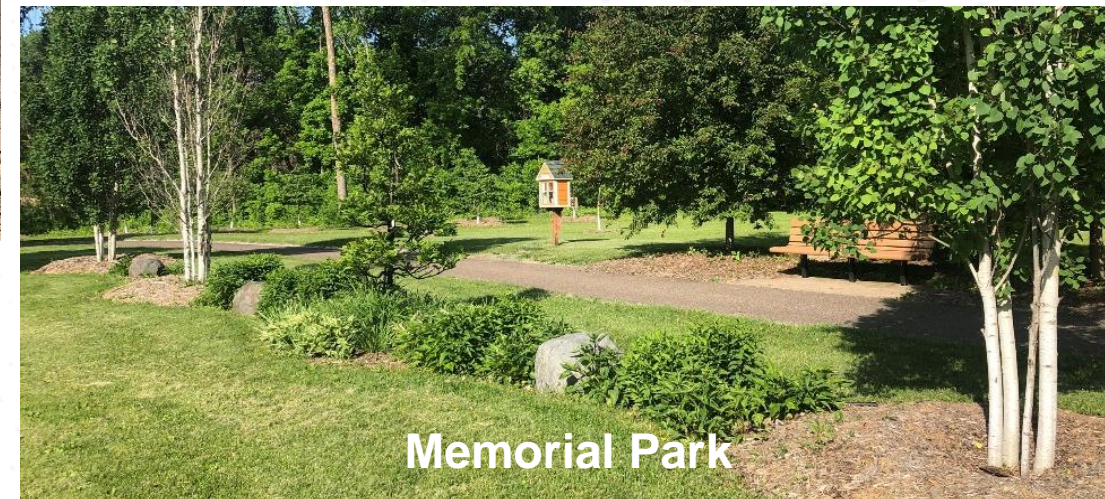


Parks

- Jevne Park
 - Paved 4 gravel lots
- Memorial Park
 - Irrigation system was installed
 - Replacement of existing trails and connection to regional trail

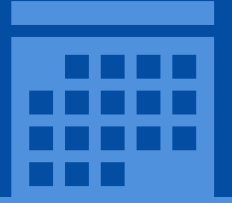


Jevne Park



Memorial Park

Environmental Concerns



Environmental concerns/mitigation

1. Construction site erosion/lake impacts
 - Erosion control and storm water management plans in place along with permits
2. Eagles nest impacts – 200 feet from road
 - Will follow USFW requirements
3. Long Eared Bat habitat/tree removal constraints
4. Nest of snakes under City Hall near temporary mailboxes caused a little stir in the spring



Water Service Connections

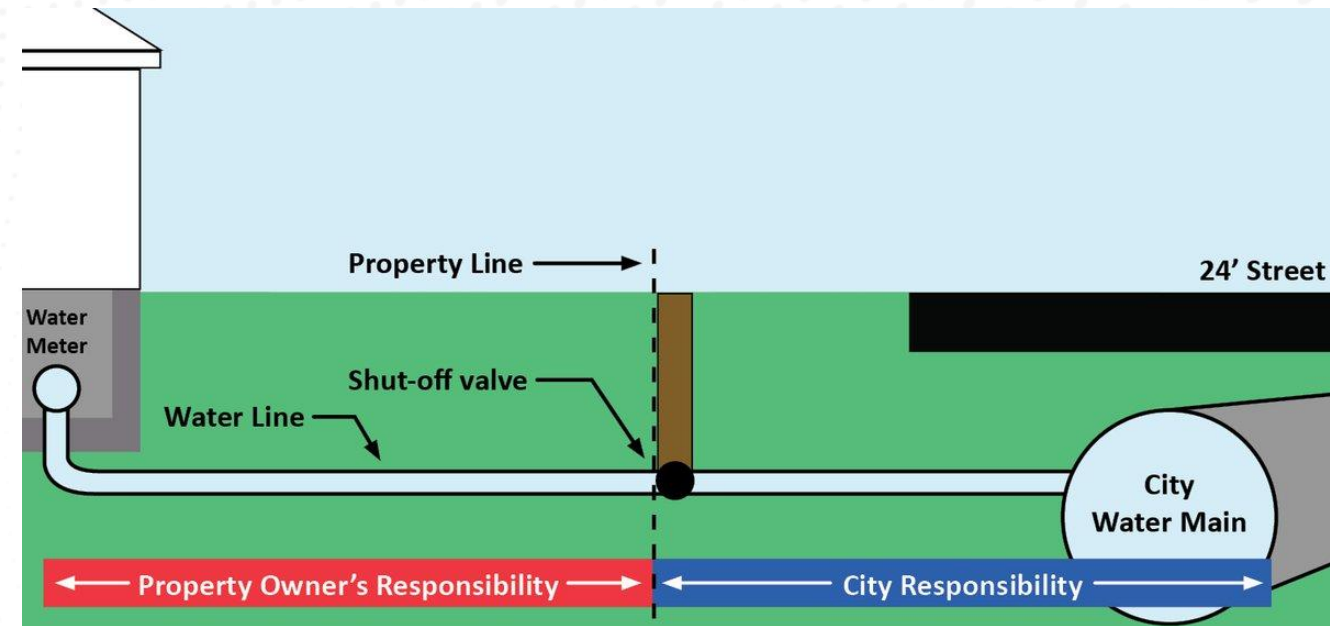


Water Service Connections



Construction Process

1. Watermain will be installed
2. MN Department of Health will test water and approve main line
3. Contractor will extend service lines and install curb stop / shut off valves to each property
4. Water service connection is available

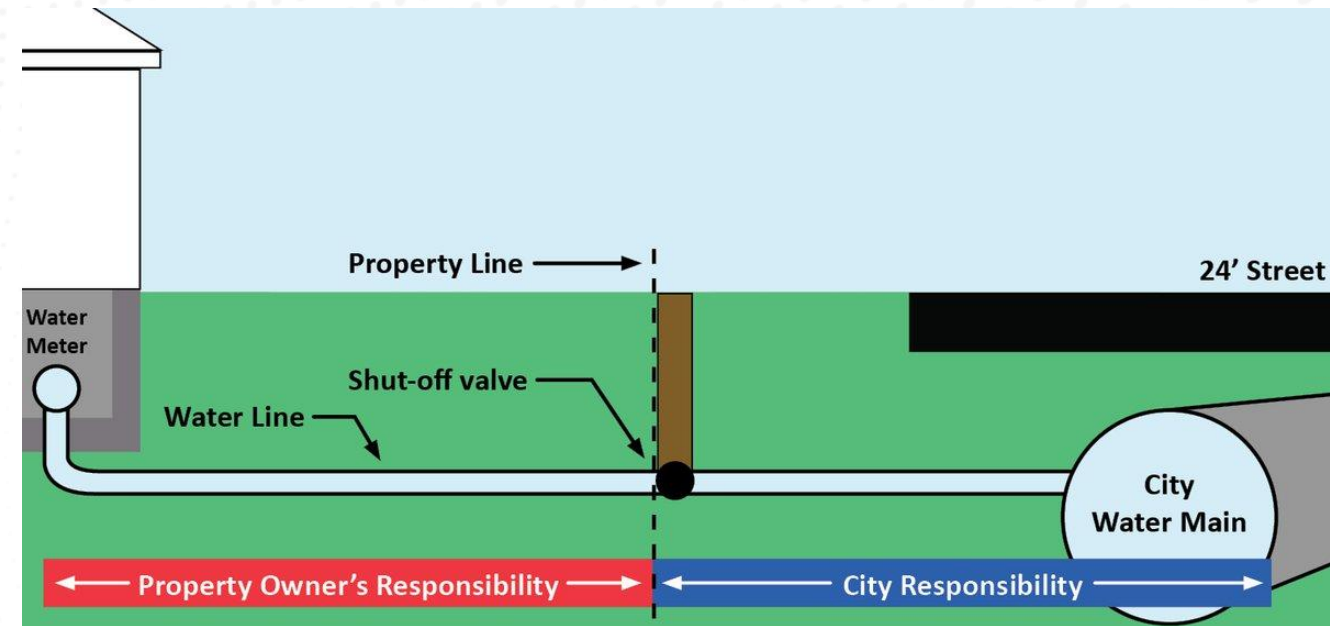


Water Service Connections



Connection Process

- Service became available fall 2024
- Contractor met with property owners to determine exact placement of water services shut off/curb stop valves
- Property owners obtained permit and water meter from City of Plymouth
- 25 properties already hooked up out of 130 total properties



Construction



Groundbreaking ceremony – April 2024



Temporary Mailboxes



**Storage was available
for larger packages**

Construction Photos Watermain



HDD Watermain Installation



Subgrade Geotechnical Fabric



Paving





Post construction drone photos



Post construction drone photos

6/16/2025



Post construction drone photos

Public Engagement



- Large open house with contractor prior to construction starting
- Active mobile friendly website
- Weekly construction updates via email and website
- Daily response to citizen requests
- Regular Council Meeting updates



Stay Engaged



Visit the project website
www.streetandutilityproject.com




The screenshot shows a web browser window with the address bar displaying "Medicine Lake Utility and S" and the URL "www.streetandutilityproject.com". The website header includes the City of Medicine Lake logo and the project name "2024 Street and Utility Project". A navigation menu contains links for Home, Improvements, Water Services, Construction, FAQs, and Meetings. The main content area features a large photograph of a tree-lined residential street. To the right of the photo, the headline reads "Street and utility improvements are coming to Medicine Lake in 2024!" followed by the text "Scroll down to learn more." Below the photo, there are two columns: "About the Project" and "Benefits". The "About the Project" section states that the city is addressing aging infrastructure and that construction will begin in spring 2024. The "Benefits" section lists that the project will ensure the long-term vitality of the Medicine Lake community.

Medicine Lake Utility and S x +
/www.streetandutilityproject.com

CITY OF MEDICINE LAKE
2024 Street and Utility Project

Home Improvements Water Services Construction FAQs Meetings



Street and utility improvements are coming to Medicine Lake in 2024!

Scroll down to learn more.

About the Project

The City of Medicine Lake is being proactive in addressing its aging infrastructure that cause maintenance issues and reliability concerns. The City will be making long-term public infrastructure improvements. Construction is scheduled to start in spring 2024.

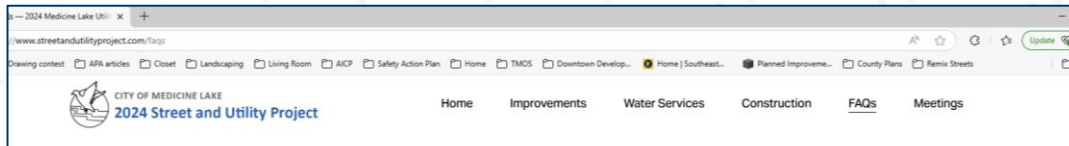
The following are included as part of the 2024 Street and Utility Project improvements:

Benefits

The 2024 Street and Utility Project will provide the following benefits:

- Ensures the long-term vitality of the Medicine Lake community.

Stay Engaged



Frequently Asked Questions

What is this project about?

The 2024 Street and Utility Project will make updates to the City of Medicine Lake's aging street and utility networks to ensure long-term community vitality. Construction is scheduled to start in spring 2024.

Will the project include pedestrian or bicycle facilities?

Yes, 2024 Street and Utility Project will improve safety and mobility for people walking, biking, and rolling. Improvements include designated bicycle lanes and pedestrian routes, and a replacement of the City Trail along S. Shore Drive.

How is this project being paid for?

The cost of the project for both engineering and construction costs is estimated at \$7 million. The City obtained a 50% match from State Bonding for \$3.5 million. The remaining balance will come from City issued, 30 year local bond and capital reserves. The City bond will cover approximately \$2.6 million of it and capital cash reserves will pay the remainder.

Will there be any assessments or tax increases for property owners as a result of the project?

The City has included a line item for the bond repayment in their annual operating budget. Therefore, there will be no need to increase property taxes to pay off the local bonds. No special assessments to the adjacent property owners will need to be utilized on this project.

When will construction start?

Construction is scheduled to start in spring 2024. Construction details will be available when they are available.

When will construction be completed?

Construction is anticipated to be completed by the fall of 2024.

Will there be any impacts on deliveries during construction?

Some private property will be removed during construction.



Construction information

The 2024 Street and Utility Project is a major reconstruction project that will impact the community.

The City of Medicine Lake is working with contractors to minimize those impacts during construction. The watermain and road will be reconstructed in stages to further reduce impacts.

We appreciate your cooperation to minimize external traffic and large gatherings to allow the contractor to expedite construction.

Construction Updates

All construction activities are paused until Spring 2025.

The contractor completed all the required construction obligations by the 2024 contract completion date of November 30, 2024, with the exception of paving the trail through Memorial Park. In light of this, the contractor agreed to plow the gravel trail all winter.

In the spring, the contractor will return to complete construction. The final completion date per contract is June 30, 2025.

The remaining work consists of the following items:

- Topsoil and seeding all disturbed areas
- All "punch list" repair items. There is a fairly extensive list of repairs that need to be fixed in the spring, many of which are located on private property. Once those are completed, we hope to confirm the repairs are satisfactory to each property owner
- Landscaping and irrigation in Memorial Park
- Pave the Memorial Park trail
- Raised crosswalks
- Final signage
- Final lift of asphalt (This is typically the last thing done once all the other work is completed. Includes speed bumps. In Minnesota, asphalt plants typically do not open until mid-May, but this is entirely weather dependent.

Events

The event was hosted at Jevne Park.



ing events. Stay tuned for more upcoming events. Stay

Sign up to receive email updates

(required)

Please write your email and click 'submit' to receive project updates.

Submit

Have any questions? Please contact:

Bill McNaughton, City Council Member

Email: bmcnaughton@cityofmedicinelake.com

Dave Hutton, Project Consultant

Email: dhutton@sehinc.com

Sam Straate, Veit - Construction Contractor

Lessons Learned



Lessons Learned



- Coordinating mail and packages was a challenge
- Underestimated number of flaggers needed with tight working conditions
- Water services and curb stop locations
- Condition of sewer laterals would not allow normal steam liners – had to switch to UV liners
- Inconsistent driveway grades and drainage
- Concrete Driveways with rebar – more than planned
- Paving was completed late -> trail did not get finished in 2024 as planned

Project Contacts



Bill McNaughton, City Council Member
bmcnaughton@cityofmedicinelake.com



Dave Hutton, Project Manager
(SEH, Consultant)
dhutton@sehinc.com



Thank you for your attendance!
Questions?

Brent Kavitz, Associate and Project Manager, SEH
bkavitz@sehinc.com | 507.299.5211

John Ingebretson, Public Works, Alpha
johnsrads@gmail.com | 507.841.0483

Kelly Soucek, City Clerk, Alpha
cityofalphamn@gmail.com | 507.847.3557

Bill McNaughton, Council Member, Medicine Lake
bmcnaughton@cityofmedicinelake.com | 612.670.3955

Dave Hutton, Senior Project Manager, SEH
dhutton@sehinc.com | 952.797.2329





CITY FEST

2025 ANNUAL
CONFERENCE

CONNECTING
LEADERS
CELEBRATING
COMMUNITY



JUNE 25-27
DULUTH

DULUTH ENTERTAINMENT
CONVENTION CENTER

[LMC.ORG/AC25](https://lmc.org/ac25)