



City of Medicine Lake

City Council Update on the Capital Improvement Project (CIP)

June 7, 2021



Partnership



City of Medicine
Lake

Our scope – design all CIP improvements for potential bidding and construction in 2022 dependent on funding

Design related topics

The following items will be evaluated as part of design:

1. Replace streets/pavements
2. New water main
3. Sanitary Sewer Inflow/Infiltration (I/I)
4. Lift Station replacement (2021 project)
5. Driveways
6. Trail replacement on S. Shore Dr.
7. Signage
8. Drainage
9. Jevne Park

Replace streets



- Maintain current width – 24'
- Maintain current style – rural section (no curb and gutter)
- Will need to evaluate soils for structural pavement design
- Proper road drainage needs to be addressed.

Replace streets



Proposed Water main

- Size of main and adequate pressure at end of line
- Must meet a minimum of 20 psi for fire flow
- Location and spacing of hydrants
- Service lines installed to property line with curb stop shut off valves for future connection
- City of Plymouth will maintain water main, so design must meet their standards

Proposed Water Main



Legend

- ◆ Proposed Hydrant
- ◆ Proposed Valve
- Proposed 8-in DI pipe
- Plymouth Water Main



DATE	12/20/21
PROJECT	2020 CIP PLANNING STUDY
NO. OF SHEETS	1 OF 2
PROJECT NO.	21-010
PROJECT NAME	PROPOSED WATERMAIN
DESIGNED BY	DEH
CHECKED BY	MSS
DATE	12/20/21
SCALE	AS SHOWN

2020 CIP PLANNING STUDY
PROPOSED WATERMAIN

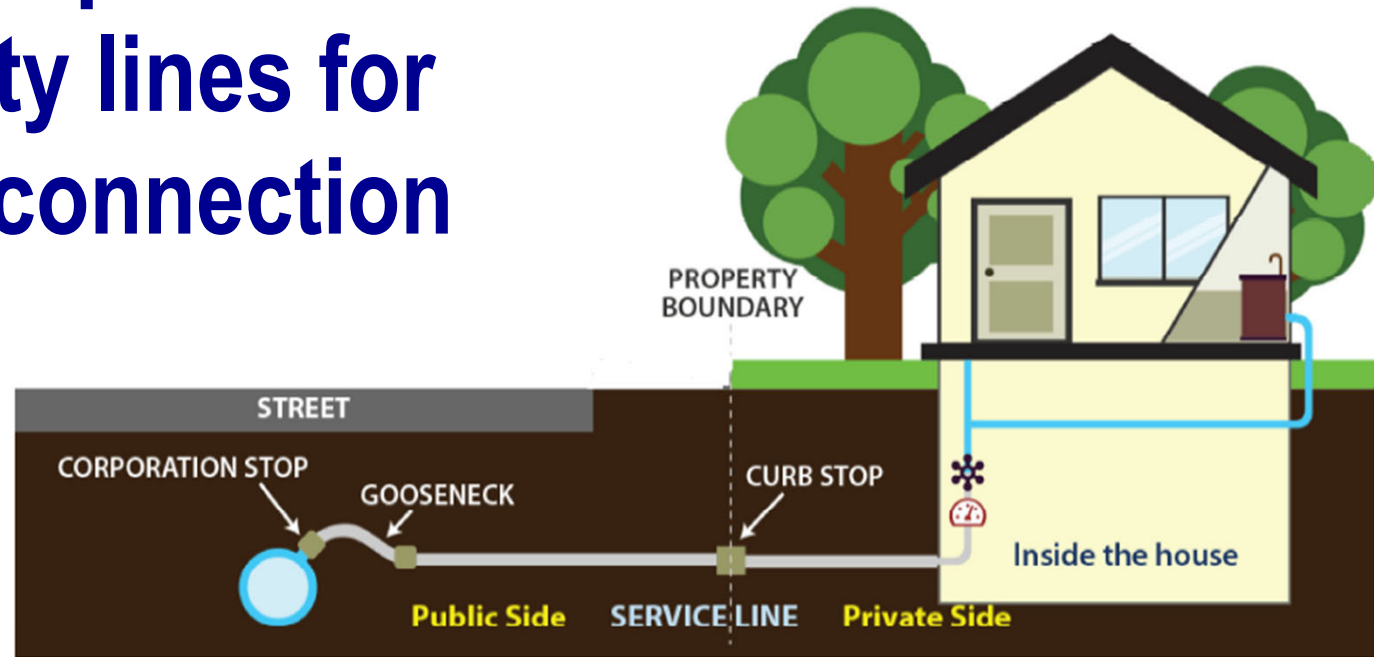
FIGURE
2



City of Medicine Lake



Curb stops to all property lines for future connection



Directional Drilling WM under wetland to connect to S. Shore Drive



10 x 10 Lining pit in S. Shore Drive



10 x 10 lining pit in Colonial Circle

Sanitary Sewer – Inflow/Infiltration (I/I)

- I/I grant from Met Council funding
- Lining all homeowner laterals
 - To R/W line in street: 25-30 feet
 - 5 feet long in easement areas
- Laterals will be televised first to make sure they can be lined
- Lining or rehabilitating manholes



Sanitary Sewer - New lift Station

Separate project

- Being designed and bid in 2021
- 50+ years old
- Maintenance and reliability concerns.



Driveway match points - examples

Items to be evaluated

- Frequency
- Width
- Slope
- Drainage



Driveway examples – back pitched (drains or slopes towards garages)



Examples – private parking areas in street R/W



Examples - Multiple driveways



Examples - Obstructions in R/W



Examples - Obstructions in R/w



Mailboxes



Trees, bituminous curb

Replace trail along S. Shore Drive



Drainage improvements



Signage

Opportunity to upgrade:

- Existing signage will be evaluated
- Old signage will be replaced
- Unnecessary or incorrect signs will be removed or replaced.
- Conform to MMUTCD



Signage



Safety opportunities?



Wetland protection regulations



Parks

Jevne Park Opportunities??

- Parking lot improvements
- Playground border



Memorial Park

Timeline

1. Activities to date

- a) Topography survey started – will be done by 5/28
- b) Soil borings taken – needed to design roadway structure and bedding support for water main pipe
- c) Lift Station design underway

2. Proposed Schedule/ Next Steps

- a) Lift station – bid late July for 2021 construction (fall)
- b) Street and utility design done by 12/31/21
 - 60% plans done by Aug 2021
 - 90% plans done by Oct 2021
 - Final plans/Bid documents done by December 2021
- c) Construction starts spring 2022

Public Engagement

1. CIP advisory committee updates
2. City Council updates/resident input
3. Individual meetings with residents – start meeting with them this summer on the following items:
 - Driveway connection details
 - Curb stop location
 - Other property impacts/concerns

Thank you !!

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