



Agenda Memo

Crest Hill, IL

Meeting Date: | October 9, 2023
Submitter: | Ronald J Wiedeman
Department: | Engineering
Agenda Item: | U.S Route 30 Water Main Lining Project-Change Order No. 2.

Summary: Staff is bringing to council a request to approve change order 2 for the U.S. Route 30 Water Main Lining Project due to differing field conditions to what was known at the time of the design. The existing water main located in U.S. Route 30 was thought to be installed at a constant depth of 5 feet below the pavement elevation throughout the limits of the project. During construction it was found that the water main when it encountered a storm line or utility crossing that was perpendicular to the existing water main was lowered to go beneath these lines. Due to the water main dipping below these existing storm and utility conflicts the process of water main lining cannot be completed as currently proposed. In order to verify that these sections of the water main are in a good condition and do not need to be repaired or replaced additional work is required to physically verify to the condition of existing pipe.

The work below is a summary of the additional work required to verify the condition of the existing water main and address its current condition:

- 22 additional pits need to be dug and pavement resorted in order to visually inspect the existing water main. The cost for each pit is \$27,682.35 This change will increase the contract by \$584,123.10.
- Due to the additional 9 pits, additional video will be required to visually inspect these sections of the water main. The contract unit price is \$4.70 for an additional 2800 ft. This change will increase the contract by \$13,610.00.
- Due to the extra 9 pits additional mobilizations are required to video these lower sections of existing water main. This cost is not included in the cost of completing the actual video. This change will increase the contract by \$34,635.40.
- Due to the additional 9 pits, additional cleaning of these lower sections was required in order to video the existing water main. This change will increase the contract by \$15,910.64.
- Work not covered in Robinson Memo. Due to existing utility conflicts at the six corners intersection, there is a section of existing water main that cannot be lined (approximately

100 ft). Staff are not comfortable lining the entire water main along Plainfield Rd and leaving a small section not lined close to this intersection. Just a couple of years ago, we experienced a water main break just east of this section of the water main.

Due to the location of the connection of the existing water mains at Plainfield Rd, Caton Farm and Gaylord (six Corners) any work completed will need to be completed in the middle of this very busy intersection.

Also, if we just remove and replace the water main in the same location this will still leave 3 water valves in the middle of this intersection. If and when Public Works were required to shut down the existing water main to service a section, again they would be working in the middle of this very busy intersection.

If is staff's suggestion to abandon this section of water main and make a new connection through the right turn lane from Plainfield Rd to Caton Farm Rd. This would eliminate Public Works from having to go into the middle of this intersection to access water valves while also removing the existing water main from this busy intersection. Due to the large amount of traffic which passes through this intersection we are also recommending that this work be completed at night. The cost to complete this work will increase the contract by \$200,120.00.

The current budget has funds within it for this work without having to use fund balance to pay for this additional work. Staff recommends the following:

- Use \$370,000 from the water main replacement account (12-00-7620) that is not currently obligated.
- Move \$98,938.54 from 12-00-7615 to 12-00-7620.

Recommended Council Action: To approve Change Order No 2 for the U.S. Route 30 Water Main Lining Project which will increase the contract amount to \$3,167,938.54.

Financial Impact:

Funding Source: Water

Budgeted Amount: \$2,699,000.00 (Under Account no. 12-00-7620)

Cost: \$3,167,938.54

Attachments:

22-R0541_Crest Hill Memo_20231003_ready for City Staff