



Town of Castle Rock

Agenda Memorandum

Agenda Date: 4/17/2018

Item #: File #: TMP 2018-251

To: Honorable Mayor and Members of Town Council

From: Mark Marlowe, P.E., Director of Castle Rock Water

Resolution Approving a Variance Pursuant to Chapter 9.16.070.E of the Castle Rock Municipal Code for Overnight Construction Activities Related to the Maher Force Main Discharge Manhole, as part of the Castle Rock Water Improvements Project
[located in the open space behind Fire Station 155, on Crowfoot Valley Road]

Executive Summary

Castle Rock Water staff requests Town Council approval of a Resolution (**Attachment A**) for a variance to allow construction work to be performed between 7:00 p.m. and 7:00 a.m., in late April/early May 2018, for one night. The Town's municipal code for noise control prohibits construction noise between the hours of 7:00 p.m. and 7:00 a.m. on weeknights, and between 6:00 p.m. and 8:00 a.m. on weekends (Chapter 9.16). A variance can be granted under municipal code section 9.16.070.E, if no reasonable alternative is available.

Garney Companies is under contract with the Town to replace the Maher force main discharge manhole, as part of the Castle Rock Water Improvements Project. The Maher force main will be temporarily by-passed during the majority of the construction work, but will need to be shut down to complete the final tie-in between the existing force main and the new manhole. Wastewater flow from the residential area is continuous, but significantly drops off at night; therefore, it is advantageous to complete the final tie-in at night. Castle Rock Water Collections staff will be on hand to monitor the wastewater flows into the lift station wet well and, if necessary, collect the flow with the Town's vacator truck. Given the short duration of the planned night work (no more than one night), and the limited affected area (the discharge manhole is located north of the fire station on Crowfoot Valley Road), staff requests Town Council approval for night work on one evening between April 26 and May 2, 2018. A time range for authorization is requested to accommodate any potential weather delays. A site map has been provided (**Attachment B**).

Notification and Outreach Efforts

Letters will be sent to homes in the immediate area notifying them of the upcoming work. Town staff will have cell phones and be available onsite during the entire operation.

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History of Past Town Council, Boards & Commissions, or Other Discussions

This topic was presented to the Castle Rock Water Commission at their regular meeting on March 28, 2018. The Commission voted _____.

Discussion

Town Council approved a contract with Garney Companies on January 16, 2018, for the Castle Rock Water Improvements Project. The Castle Rock Water Improvements Project has combined the required rehabilitation improvements at four facilities into a single project. One of the required improvements included in this project is the replacement of the discharge manhole for the Maher force main, which was constructed in 2002 to serve the Sapphire Pointe subdivision. Hydrogen sulfide is formed in anaerobic environments, such as wastewater force mains. When the wastewater in the force main is discharged into the receiving manhole, the hydrogen sulfide gas is released into the air within the manhole. This gas is corrosive to the concrete manhole. The existing discharge manhole needs to be replaced, due to damage from this gas. The new manhole will be epoxy lined to minimize future damage from hydrogen sulfide gases. Also, this past summer Operations staff added the ability to dose corrosion control inhibitors to the wastewater discharge, which will help minimize the formation of corrosive gases and odors in the future.

During the construction, the existing Maher force main will have a temporary by-pass installed to divert the wastewater flow around the discharge manhole. Once the new manhole has been installed, the Maher force main will need to be temporarily shut down to tie-in the new manhole to the existing force main. The Maher Lift Station typically operates four to five times per hour between 6:00 a.m. to 11:00 pm. Total daily flows average 120,000 gallons per day. The ideal time to shut down the Maher Lift Station is from 12:00 a.m. to 5:00 a.m., when the wastewater flows are minimal, operating one to two times per hour. Castle Rock Water collections staff will be at the Maher Lift Station with the Town's vactor truck to collect wastewater flows during the shutdown.

Budget Impact

This variance will have no impact on the budget.

Staff Recommendation

Staff requests Town Council approval of a Resolution permitting relief from the Town noise ordinance, allowing work overnight on the Maher force main discharge manhole, as part of the Castle Rock Water Improvements Project, for one night between April 26 and May 2, 2018.

Proposed Motion

"I move to approve the Resolution as introduced by title."

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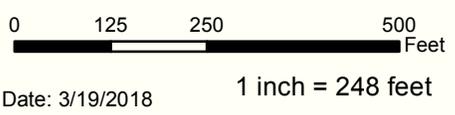
Attachments

Attachment A: Resolution
Attachment B: Map



Maher FM Manhole

- Legend**
- Sanitary Sewer
 - Stormwater Conduit
 - Fiber
 - Raw Water Distribution Main
 - Water Distribution Main



Date: 3/19/2018



Disclaimer: The data presented has been compiled from various sources, each of which introduces varying degrees of inaccuracies or inconsistencies. Such discrepancies in data are inherent and in supplying this product the Town of Castle Rock assumes no liability for its use or accuracy. Questions or comments regarding the cartographic composition of this map including, but not limited to, errors, omissions, corrections, and/or updates, should be directed to the Utilities Department, Town of Castle Rock, (720) 733-6087. Copyright 2012, Town of Castle Rock Utilities Mapping.

LOCATION MAP