Staff Report

TO: City Council

FROM: Jeff Hart, Director of Public Works

DATE March 16, 2021

SUBJECT: **Hold a Public Hearing and Consider Approval of the First Reading of an Ordinance Amending Beaumont Municipal Code Chapter 12.08 to Establish City Specific Supervisory Control and Data Acquisition, and Adopt East Valley Water District's Wet Weather Flow Criteria**

Background and Analysis:

Chapter 12.08 of the Beaumont Municipal Code addresses Public Works Construction Standards. More specifically, Beaumont Municipal Code Section 12.08.010 formally adopts the Eastern Municipal Water District 's (EMWD) standards for sanitary sewer facilities. Staff is recommending two modifications to this chapter; first is a modification from EWMD's Supervisory Control and Data Acquisition (SCADA) system, and the second is the addition of wet weather design flow criteria utilizing factors established in the East Valley Water District's (EVWD) master plan.

As part of the City's Programmable Logic Controller (PLC) project awarded by Council in April 2020, SKM Engineering evaluated ten of the City's lift stations and provided recommendations to upgrade the PLC and communications systems. This evaluation provided recommendations for a uniform SCADA system between the City's lift stations and the newly constructed wastewater treatment plant (see Attachment A). Among several minor technical deviations from EMWD's SCADA standard, City staff is also recommending a more robust communication system which will consist of both cellular and radio communication for redundancy and reliability. Many of the City's lift station facilities have limited capacity and time is of the essence during any unplanned shutdowns or power outages.

As part of the Sewer System Master Plan project (Master Plan), 14 flow meters were placed throughout the City's collection system in order determine sanitary sewer flows at various locations, as well as to assess the amount of infiltration into the system from either rainfall or elevated groundwater. The determination of peak wet weather flow allows the City to pursue a more conservative design criteria for future development, as

well as more accurately establish rehabilitation and replacement criteria for existing infrastructure.

EMWD's design criteria does not utilize wet weather flow due to challenges in obtaining pertinent rainfall in Southern California's arid climate. In order to combat this lack of data EMWD utilizes a more conservative allowable depth of flow in its pipe sizing criteria. Since the City was able to collect data during several significant rain events, City staff feels it is beneficial to the health of the collection system to utilize wet weather flow as one of its design criteria.

EVWD has a similar climate and has established wet weather flow criteria that are consistent the City's environment. Utilizing EVWD's wet weather flow design criteria allows the City to ensure that both the existing and future collection system is adequately sized.

Fiscal Impact:

The cost to prepare this staff report is estimated to be $750.

Recommended Action:

Hold a Public Hearing, and
Waive the full first reading and approve by title only, "An Ordinance of the City Council of the City of Beaumont Amending Section 12.08.010 of the Beaumont Municipal Code Concerning SCADA Design and Wet Weather Flow Calculation for Public Sewer Systems Within the City."

Attachments:

A. Lift Stations SCADA System Assessment