



Agenda Item: 8.I

Date of Meeting: April 8, 2024

Department: Public Works

STAFF REPORT

To: City Council
From: Nora Gamino
Subject: **Permanent Sewer Flow Meter Installation at Clarke Street**
Prepared On: April 2, 2024
Attachments: Amendment 1

Background/History:

The Sewer Trunk Line Replacement Project, completed in 2023, included a diversion structure where the City's sewer line and the Eastern Sierra Community Service District's sewer line connected. A gate to control flow was installed on the District's sewer line. Fully opening this gate would cause the diversion structure (a 4-way cross) to allow the flows to split with some going to the City's plant and some going to the District's plant. Conversely, fully closing the gate would divert all flows from the City's line and District's line to the City's treatment plant.

The original intention of this gate was to operate in either a full-open or full-closed position. There is a draft Diversion Structure Agreement, prepared by the District, that was to be signed upon the completion of the Trunk Line project. This agreement was never finalized because a pricing structure could not be determined without some understanding of how the flows were splitting. The completion of the Trunk Line project was closely followed by unprecedented precipitation events in early 2023. These events caused over capacity issues at both treatment plants and since then the gate has operated in a mostly closed position, diverting substantial flows from the District's line to the City. Having the gate in this operating position for over a year, combined with lack of trust in the District's new meters, has made it impossible to determine what an appropriate pricing structure should be.

Analysis/Discussion:

With the City and District's wastewater systems being interconnected by the new diversion structure, there is currently no way to quantify how the flow is splitting. To quantify this split, flow in three of the four legs of the diversion must be measured. Those legs could be measured as follows:

- North – as part of the Trunk Line project, a new manhole was installed for the District on their line north of the diversion, however it has not been outfitted with a meter.
- East – the City has a meter at the treatment plant that records total flow, and that number minus the calculate flow of Johnston Drive, yields the east leg of the diversion.
- South – there is not a reasonably close manhole to the diversion structure that is well

suited for a permanent meter installation.

- West – the vast majority of the City's sewer flow crosses the Bishop Creek Canal through the main line that was replaced during the Trunk Line project. The closest reasonable point to the diversion to install a permanent meter would be in an existing manhole on this line at the end of Clarke Street.

The total City sewer flow could also be calculated based on a meter at Clarke Street and a calculation of the Johnston Drive flow. With this data, a methodology can then be created to determine the Diversion Structure Agreement pricing structure.

Control Point Engineering is currently under contract to upgrade the City's SCADA system. When a new flow meter is installed, it will need to be integrated into SCADA. To ensure seamless integration, the new meter will be built along with the system upgrade and necessary parts ordered through the upgrade project. Therefore, it is most effective to have Control Point perform the design work and procure the necessary equipment and parts as part of the SCADA upgrade project.

Economic Impacts:

There are no significant economic impacts.

Budget Impacts:

This item is partially included in the Fiscal Year 2023 – 2024 Budget. Upon execution of Amendment 1, the Sewer Fund budget will be adjusted to increase spending in Capital Improvement, 002-051-56027, from \$194,500 to \$239,500.

Additionally, by finalizing the Diversion Structure Agreement, the City will begin the process of recuperating the costs associated with treating a significant amount of the District's wastewater since early 2023.

Legal Review:

Not required.

Recommended Action:

Council consideration to approve and authorize the Public Works Director to execute Amendment 1 to the SCADA Upgrade Professional Services Agreement with Control Point Engineering in the amount of \$60,724.

Approved By: Ethan Aukee 4/3/2024

Approved By: Robin Picken 4/3/2024

Approved By: Deston Dishion 4/3/2024

Approved By: