

## ENHANCED COMPLIANCE ACTION DESCRIPTION

### **Project Title:**

Downtown Collection System Improvements Project

### **Geographic Area of Interest:**

City of Mt. Shasta (City), Siskiyou and Shasta Counties, specifically the Sacramento River watershed downstream of the collection system

### **Name of Responsible Entity:**

City of Mt. Shasta

### **Contact Information:**

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### **Project Description and Goals:**

The City has owned and operated its sewer collection system since 1912. Portions of the original collection system are still in service today. The City is located in an area that experiences intense periods of precipitation in a harsh winter environment that can result in inflow & infiltration (I&I) into the collection system, affecting the capacity and structural integrity of portions of the collection system. The City has noted sanitary sewer overflows (SSOs) within its sewer system. The manhole at the intersection of N. Mt. Shasta Boulevard and Alma Street has experienced four SSOs since 2014. The sewer main along McCloud Avenue has experienced eleven SSOs since 2010. The City created a Sanitary Sewer Management Plan (SSMP) in 2010, including a hydraulic evaluation of the main trunk sewers serving the City. In addition, portions of the collection system were videoed to evaluate their condition and prioritize repairs.

The City secured the help of PACE Engineering, Inc. to provide a Preliminary Engineering Report (PER) to determine the most effective method of addressing wastewater utility issues, including within the collection system. The PER recommended new sewer mains be constructed to achieve the following goals:

- Replace aging infrastructure;
- Alleviate ongoing maintenance;
- Reduce the potential for wastewater blockages, surcharging, and overflows that may result in the discharge of pollutants to the Sacramento River watershed;
- Provide additional capacity in sewer mains to handle projected future flows; and,
- Reduce the amount of effluent discharged to the Sacramento River by reducing I&I in the collection system where possible.

The PER evaluated three sewer main route alternatives. The alternative that was most effectively able to achieve the project goals listed above was utilized as the proposed project. Figures are included for reference. The proposed project includes the following:

- 160 linear feet of 30-inch bore and jack;
- 240 linear feet of 30-inch steel casing;
- 1,390 linear feet of 18-inch sewer main;
- 25 linear feet of 12-inch sewer main;
- 2,515 linear feet of 10-inch sewer main;
- 1,170 linear feet of 8-inch sewer main;
- 85 linear feet of 6-inch sewer main;
- 1,295 linear feet of 4-inch sewer main;
- 26 new manholes;
- 1 new rod hole;
- Surface restoration; and,
- New connections to new sewer

The proposed project, to the extent possible, goes above and beyond preventing SSOs to meet all the listed project goals. The proposed project replaces existing laterals, providing two-way cleanouts and backwater check valves. These lateral improvements will reduce I&I and provide a means for the City to monitor I&I in the future to identify problematic areas in the collection system and ultimately reduce flow to the wastewater treatment plant downstream that discharges to the Sacramento River or ground water. The project also adds additional manholes at sewer junctions. These manholes will allow the City to perform needed maintenance and monitor the collection system for blockages and other issues that might lead to an SSO. Existing deficient manholes will be replaced rather than rehabilitated to extend the life of the collection system and rely less on maintenance of aging infrastructure. New sewer mains will be designed not only for existing flows but for future flows.

**Water Body, Beneficial Use, and/or Pollutant Addressed by the Project:**

The project will replace portions of the sewer system with enough capacity for future flows and reduce I&I into the collection system. This will reduce the potential for future SSOs and limit the amount of water that is discharged to the Sacramento River and ground water; therefore, the proposed project will go above and beyond fixing deficiencies to provide enhanced protection to adjacent water bodies and the Sacramento River watershed downstream of the collection system.

**Estimated Cost of Project:**

The estimated project cost is \$2,781,415. \$1,309,000 of the project is funded by a loan secured by the City and the remaining cost of the project is funded by grants.

**Project Schedule, Milestones, and Expected Completion Dates:**

The proposed project has, in large part, already been constructed. Completion of the proposed project is expected in July 2020. Table 1 summarizes the milestones that have already been achieved.

**Table 1 – Project Milestone Summary**

<b>MILESTONE</b>	<b>DATE</b>
<b>Pre-Construction</b>	
Project Posted for Public Bid	4/2/19
Pre-Bid Meeting	4/9/19
Public Bid	4/30/19
<b>Construction<sup>1</sup></b>	
Notice to Proceed Issued	6/3/19
25% Construction Complete	9/13/19
Union Pacific Railroad Bore and Jack Complete	9/26/19
50% Construction Complete	10/16/19
70% Construction Complete	12/10/19
90% Construction Complete	2/14/20

<sup>1</sup> Percent construction complete based on payment application percent of funds spent to date.

**Fund Expenditures:**

\$1,309,000 of the project is funded by a loan secured by the City. The first loan payment is due one year from the date of the project's final completion.

**Final Report:**

The City will submit a post-project final report documenting project completion and accounting of all expenditures. The accounting shall clearly show whether the final cost of the completed project is less than, equal to, or more than the suspended liability of \$1,058,209.

**The Final Report is due within 1 year of the adoption date of the Order.** The report shall be completed under penalty of perjury and in accordance with the terms described in this Order.