



Agenda Date: 11/4/2020

Agenda Placement: 7F

## Napa Sanitation District Board Agenda Letter

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**TO:** Honorable Board of Directors

**FROM:** Timothy Healy - General Manager  
NS-Technical Services/Engineer

**REPORT BY:** Matthew Lemmon, Senior Civil Engineer - 707-258-6004

**SUBJECT:** Award Task Order for the Inflow and Infiltration (I&I) Reduction Program (CIP 13705) Flow Monitoring

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### **RECOMMENDATION**

Authorize the Purchasing Agent to execute Task Order 37 with Carollo to provide professional services for the Inflow and Infiltration (I&I) Reduction Program (CIP 13705) for collection system flow monitoring and I&I reconnaissance in the amount of \$196,100.

### **EXECUTIVE SUMMARY**

This scope includes post-construction and pre-construction flow monitoring, preparation of a flow monitoring report, nighttime I&I reconnaissance, and preparation of an I&I reconnaissance report. Carollo will subcontract with V&A Engineers for flow monitoring and I&I reconnaissance. Carollo will evaluate the results and provide technical expertise on the reports.

The flow monitoring will collect post-construction data for projects constructed in 2019 and 2020, along with pre-construction data for upcoming projects. The I&I reconnaissance will investigate upcoming project areas to pinpoint sources of high infiltration.

The task order is structured to include optional items for flow monitoring up to 2.5 months. This allows for flexibility in the duration of flow monitoring depending on obtaining desirable conditions for flow monitoring. If the timing of rain events are such that adequate flow monitoring results are obtained in a shorter interval (1.5 months or 2 months) then a portion of the task order will be unused. NapaSan and Carollo will monitor the weather to determine when it is optimal to install the flow meters.

**FISCAL & STRATEGIC PLAN IMPACT**

Is there a Fiscal Impact?	Yes
Is it currently budgeted?	Yes
Where is it budgeted?	The project budget in the approved capital program is \$240,500.
Is it Mandatory or Discretionary?	Discretionary
Discretionary Justification:	Pre-construction and post-construction flow monitoring is used to analyze the effectiveness of I&I reduction projects. The work is consistent with recommendations in the 2007 Collection System Master Plan and the draft 2020 Collection System Master Plan, and will assist NapaSan in planning future I&I reduction projects.
Is the general fund affected?	Yes
Future fiscal impact:	None. The work will be completed in the current fiscal year.
Consequences if not approved:	The effectiveness of recent I&I reduction projects will not be known and upcoming projects could be delayed due to a lack of pre-construction flow monitoring and I&I reconnaissance data.
Additional Information:	None.

**ENVIRONMENTAL IMPACT**

None.

**BACKGROUND AND DISCUSSION**

The Board adopted the Collection System Master Plan (CSMP) in December of 2007. The CSMP included a pilot Capital Improvement Program (CIP) within the collection system that will measure the effectiveness of I&I reduction projects. The I&I Reduction Program is included in each year of the CIP as a project intended to monitor, analyze, and report data collected from individual I&I reduction projects. Pre-construction flow monitoring is used to establish a baseline flow for a basin/sub-basin which is compared to post-construction flow monitoring to determine the effectiveness (I&I reduced) of the project.

The draft 2020 CSMP will recommend continuation of the I&I Reduction Program on an annual basis.

**SUPPORTING DOCUMENTS**

- A . Project Map
- B . Task Order 37

Napa Sanitation District: Approve

Reviewed By: Timothy Healy