



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Barry Ng

SUBJECT: SEE BELOW

DATE: September 25, 2017

Approved

Date

10-5-17

SUBJECT: MASTER AGREEMENT FOR MASTER PLANNING CONSULTANT SERVICES FOR THE SANITARY SEWER SYSTEM

RECOMMENDATION

Approve a Master Agreement with Woodard & Curran, Inc. for master planning consultant services for the sanitary sewer system from the date of execution to December 31, 2020, in an amount not to exceed \$2,000,000.

OUTCOME

Approval of the master agreement will enable the City to obtain consultant services for sanitary sewer modeling and master planning projects on an as-needed basis. The consultant services are needed to assist City staff in performing and delivering highly technical and specialized master planning analyses to support the economic growth of the City.

BACKGROUND

The City's Sanitary Sewer Master Plan Program utilizes computerized hydraulic models to study sanitary sewer flows, evaluate system capacity, and recommend needed capacity improvement projects. The program also supports the City's economic development by performing sewer capacity review for land use development projects.

Using these models, the City completed the city-wide *Sanitary Trunk Sewer Master Plan (Phase II and Phase I Update)* for pipes 10-inch and larger in diameter and the Detailed North San Jose Master Plan in 2013. These studies identified a total of 105 capacity improvement projects with an estimated \$190 million in capital improvement cost. To date, the City has completed 24 master plan projects totaling \$47 million. There are 17 projects currently under design and/or construction totaling \$48 million.

The City is currently developing the *Master Plan Phase III* project, which would further expand the analysis to the entire system, increasing the scope of the model network from approximately 480 miles of pipe to over 2,000 miles. Due to the increase in scope and complexity, expanding the current trunk model to an all-pipe model will present unique challenges. Consultant services are needed to provide specialized technical support and oversight to ensure the expansion is completed properly and efficiently.

The updated model will allow for development of CIP projects at the small-diameter level, as well as a refinement of previously identified CIP projects for the trunk system to support the growth identified in the General Plan 2040.

ANALYSIS

A Request for Qualifications (RFQ) to provide sanitary sewer modeling and master planning services was advertised on May 11, 2017. The City received Statement of Qualifications (SOQ) from one firm, Woodard & Curran, by the June 2, 2017 deadline. A Technical Evaluation Panel consisting of three representatives from the Sanitary and Storm Sewer Master Plan Section evaluated the submittal in accordance with the Citywide Capital Program Consultant Procurement Supplemental Manual and deemed the firm qualified.

<u>Company/Firm</u>	<u>Rank</u>
Woodard & Curran, Inc.	1

An alternative to hiring a consultant for the model expansion is for the work to be done by City staff. While City staff has experience and technical skills in building and using a trunk model, an all-pipe model is significantly more complex and presents many new challenges. The procedures being used for the trunk model would have to be re-evaluated for the all-pipe model, such as: how to systematically calibrate the new network using historical flow data from different seasons; how to estimate current and future sewer loads on the parcel level; and what factors to consider when evaluating the hydraulic performance of small-diameter pipes. Furthermore, the expansion may lead to more technical issues, such as increased simulation times and instability.

Woodard & Curran has experience with these issues from developing all-pipe models for several Bay Area agencies, including Central Contra Costa Sanitary District and the City of Alameda. Several of the key personnel listed in their SOQ have worked on the City's previous master plans, including Phase I in 2004, Phase II in 2013, and the North San José Update in 2014; and are familiar with the City's models and criteria. Their SOQ demonstrates an understanding of the methodology and the technical knowledge to develop and model a sanitary master plan.

EVALUATION AND FOLLOW-UP

This master agreement will provide staff with the ability to engage the services of qualified and experienced master planning consultant firm, thereby enabling more efficient and detailed analysis of the sanitary sewer system. No additional follow up action with the City Council is expected at this time.

POLICY ALTERNATIVES

Alternative #1: Re-advertise the project to solicit more bidders.

Pros: The City may gain more options for consultant selection.

Cons: Execution of agreement would be significantly delayed, and re-advertising is unlikely to solicit more bidders.

Reason for not recommending: Sewer modeling and master planning is a specialized area of engineering expertise. A previous RFQ advertised in 2016 resulted in no bidders. It is likely that re-bidding would result in a similar outcome.

Alternative #2: Do not award the master consultant agreement and direct City staff to provide the required services with in-house resources.

Pros: The project would be an opportunity for staff to advance modeling experience in developing all-pipe networks and GIS tools and databases.

Cons: City has limited in-house staff with experience in developing all-pipe networks, which are more detailed and complex than the City's current trunk network.

Reason for not recommending: While City staff has experience and expertise in conducting analysis using trunk networks, expanding the model would require additional resources and technical expertise to develop new methodologies and software tools. It would be more efficient and effective for City staff to gain the necessary experience and technical skills by working with an experienced consultant on this project, and then apply these skills to conduct in-house analyses in the future.

PUBLIC OUTREACH

The City advertised a Request for Qualifications to solicit professional firms for master planning services on BidSync from May 11, 2017, to June 2, 2017. In addition, this memorandum will be posted on the City's website for the October 17, 2017, City Council agenda.

COORDINATION

This agreement and memorandum have been coordinated with the City Attorney's Office and the City Manager's Budget Office.

COMMISSION RECOMMENDATION/INPUT

No commission recommendation or input is associated with this action.

FISCAL/POLICY ALIGNMENT

This agreement is consistent with the Council-approved Budget Strategy for Economic Recovery in that the master planning consultant retained under this agreement will assist sanitary master planning studies to identify capital improvement projects that will spur construction spending in our local economy and support future economic growth of the City.

COST SUMMARY/IMPLICATIONS

1. AMOUNT OF RECOMMENDATION/COST OF PROJECT:

Agreement	\$2,000,000
Project Delivery (Contract Administration)	\$250,000
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TOTAL	\$2,250,000

2. COST ELEMENTS OF AGREEMENT: The master plan consultant services are reimbursed based on an hourly rate schedule in the master agreement for the involved consultant personnel.

3. SOURCE OF FUNDING: 540 – Sanitary Sewer Connection Fee Fund, 545 – Sewer Service and Use Charge Capital Improvement Fund.

4. FISCAL IMPACT: The proposed operating and maintenance costs of this project have been reviewed, and staff has determined that the project will have no significant adverse impact on the Sewer Service and Use Charge Fund and General Fund operating budgets.

BUDGET REFERENCE

The table below identifies the fund and appropriations proposed to fund the master agreement recommended as part of this memorandum and remaining project costs, including project delivery.

Fund #	Appn #	Appn. Name	Total Appn.	2017-2018 Adopted Capital Budget Page	Last Budget Action (Date, Ord. No.)
540	7242	Master Planning Updates	\$220,000	207	6/20/2017, 29962
545	7242	Master Planning Updates	\$1,380,000	207	6/20/2017, 29962

Services performed by Woodard & Curran under this master agreement will be authorized by service orders. While an appropriation is not required for the execution of a master consultant agreement, one is required for each service order authorized under this agreement. Expenditures and encumbrances will be charged to one or more of the capital appropriations identified above upon issuance of service orders under the master agreement. Future funding is subject to appropriation and, if needed, will be included in the development of future year budgets during the annual budget process.

CEQA

Not a Project, File No. PP17-002, Consultant services for design, study, inspection, or other professional services with no commitment to future action.

/s/
BARRY NG
Director of Public Works

For questions please contact Michael O’Connell, Deputy Director, at 408-535-8300.