

## **CONSENT CALENDAR**

Agenda Item # 2

## AGENDA REPORT SUMMARY

Meeting Date: February 9, 2021

Subject: Design Contract Award: Sewer System Repair Program

Project WW0100121

**Prepared by:** Thanh Nguyen, Senior Civil Engineer

**Reviewed by:** James Sandoval, Engineering Services Director

**Approved by**: Brad Kilger, Interim City Manager

Attachment:

1. Consultant's Proposal

Initiated by:

City Council, CIP Project WW0100121

**Previous Council Consideration:** 

None

**Fiscal Impact**:

\$232,478.40 (Project WW0100121 budget) \$630,000.00 (Adopted CIP budget)

Based on the most qualified consultant fee proposal submitted, the estimated Project costs are:

Budget Elements	Budget			
Total Design & Permitting Costs (Consultant's Fee Proposal)	\$189,982.00			
Contingency (20%)	\$37,996.40			
Printing/Advertising/Misc.	\$ 4,500.00			
Total Project Expenses	\$ 232,478.40			
Total Funds Available in Adopted CIP Budget	\$ 630,000.00			

There are sufficient funds in the adopted CIP budget for Project WW0100121.

## **Environmental Review:**

Categorically Exempt pursuant to CEQA Section 15301(b) for the repair and maintenance of existing public facilities.

## Policy Question(s) for Council Consideration:

Not Applicable

	Reviewed By:	Reviewed By:						
Interim City Manager	City Attorney	Finance Director						
<u>BK</u>	<u> УН</u>	<u>SE</u>						



Subject: Design Contract Award: Sewer System Repair Program Project WW0100121

## Summary:

The Sewer System Repair Program Project WW0100121, includes replacing and realigning five sewer main segments located along First Street in downtown Los Altos between San Antonio Road and Main Street. This project will replace 1,479 linear feet of sewer pipes in total. An agreement with a consultant is required to provide professional design and consulting services for the project.

## **Staff Recommendation:**

Authorize the Interim City Manager to execute an agreement on behalf of the City with Bellecci & Associates, Inc. for the not-to-exceed amount of \$189,982.00 and up to a 20% contingency amount of \$37,996.40 to provide professional design and consulting services for the realignment and replacement of five sewer main segments located along First Street.

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Subject: Design Contract Award: Sewer System Repair Program Project WW0100121

## **Purpose**

Authorize the Interim City Manager to execute an agreement on behalf of the City with Bellecci & Associates, Inc. in the not-to-exceed amount of \$189,982.00 and up to a 20% contingency amount of \$37,996.40 to provide professional design and consulting services for the realignment and replacement of five sewer main segments located along First Street.

## Background

This project scope includes realigning and replacing five sewer main segments, located along First Street between San Antonio Road and Main Street in Downtown Los Altos. This comprises a total of 1,479 linear feet of pipes replacement. The existing 6-inch pipes will be replaced with new 8-inch pipes to increase capacity. The consultant design services for the project includes completion of a preliminary design assessment, design, bid support, and construction support.

The sewer main segments were identified in the 2013 Sanitary Sewer Master Plan Update as segments that need replacement due to the existing sewer pipe materials. In addition, realigning the pipe segments will provide clearance from potential future sidewalks and curbs which resolve potential maintenance issues.

### Discussion/Analysis

Through an RFP process, the City previously created a short-list of on-call firms for design and construction services for sanitary sewer projects. Bellecci & Associates was selected from the City's short list of firms to submit a proposal for this project. Bellecci & Associates has been in business for over 37 years and has satisfactorily completed similar projects for the City of Los Altos and other municipalities in the Bay Area. In 2019, Bellecci & Associates provided design and construction support services for the City of Los Altos Sewer System Replacement and Structural Reach Replacement projects, which included replacement of 20 sewer segments at 14 locations throughout the City. Attachment 1, Exhibit A, provides a detailed Scope of Work for this project. Bellecci's contract with the City for these services will be utilized to complete the following:

- Task I Preliminary Design Assessment Report & Preliminary Plans
- Task II 65% Design Submittal
- Task III 100% Design Submittal
- Task IV Final Design Submittal of Construction Drawings
- Task V Bidding Phase Support
- Task VI Construction Phase Support

It is recommended that the award of a design contract be made to Bellecci & Associates, Inc. in the not-to-exceed amount of \$189,982.00 and up to a 20% contingency amount of \$37,996.40 on behalf

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Subject: Design Contract Award: Sewer System Repair Program Project WW0100121

of the City to provide professional design and consulting services for the realignment and replacement of five sewer main segments located along First Street.

# **Options**

1) Authorize the Interim City Manager to execute an agreement on behalf of the City with Bellecci & Associates, Inc. for the not-to-exceed amount of \$189,982.00 and up to a 20% contingency amount of \$37,996.40 to provide professional design and consulting services for the realignment and replacement of five sewer main segments located along First Street.

**Advantages:** Completion of the design project will realign and increase the sewer capacity

to accommodate new development projects along First Street.

Disadvantages: None

2) Do not authorize the Acting City Manager to execute an agreement on behalf of the City with Bellecci & Associates, Inc.

Advantages: None

**Disadvantages:** Realignment and replacement of the sanitary sewer segments along First Street

would be delayed.

# Recommendation

The staff recommends Option 1.

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#### Understanding

The City of Los Altos seeks engineering services for the project administration, analysis, calculations, preliminary design report and preliminary design plans for the Sewer System Repair Program, Project WW0100121. Upon award of the contract we are prepared to immediately begin work on the 1st Street Sewer Realignment Feasibility Study and complete the preliminary design documents in preparation for the design and construction phase for the project. We understand that this project includes the following sewer segments listed below.

#### SEWER REALIGNMENT (6" to 8" or Larger)

Perform preliminary studies and field investigation to determine feasibility of realignment of the 1<sup>st</sup> Street sewer main between S. San Antonio Road and Main Street. The project includes following segments of existing sanitary sewer pipe:

- 1. 6" ACP, Sewer Segment F2S-512 F2S-514 (Length: 270 feet)
- 2. 6" ACP, Sewer Segment F2S-514 F2S-501 (Length: 309 feet)
- 6" ACP, Sewer Segment F2S-501 F2S-502 (Length: 320 feet) 3.
- 4. 6" ACP, Sewer Segment F2S-502 F2S-111 (Length: 301 feet)
- 6" ACP, Sewer Segment F2S-111 F2S-109 (Length: 279 feet)

Total = 1,479 feet

The project site is shown below.



#### TECHNICAL APPROACH AND SCOPE OF WORK

Our first order of work will be a meeting with the City to discuss the project in detail and to obtain all existing information on the project. After our meeting with the City, the Bellecci design team will evaluate the sewer videotapes to identify the locations of the active sewer lateral locations.

The success of this project is dependent on the creation of a detailed project topographic base map which depicts the location of known existing utilities that could be encountered during construction. We will do an investigation of the locations of the existing utilities

by obtaining utility maps from the utility companies and City record maps. Known utility locations will be shown on the base map used for the replacement of the sewer mains.

Our subconsultant 360 Aerial Surveys prepare an aerial planimetric topographic survey for the project street. The planimetric topographic survey site base map will be supplemented with relevant ground shot survey information from the Bellecci survey crew. The survey work will be performed and tied into the NAD 1983 HARN State Plane system survey control network. Existing sewer manholes will be surveyed and information on the inverts will be obtained. Survey shots and visible utility locations will be added to the drawing file to complete the base information for the designers.

In addition, as part of the project investigation phase, our subconsultant, Cleary Consultants, Inc. will prepare a geotechnical investigation of the existing soil at the project site. The geotechnical field investigation will include soil boring(s) at the site. The investigation will identify the different types of soil that the contractor probably will encounter during construction so they can account for the soil conditions in their bid.

Based on the information collected and the performed studies, we will provide the City with a preliminary design assessment report showing possible alternative sewer alignments along with the associated construction cost estimates. After meeting with the City to discuss the preliminary design assessment report, we will prepare preliminary design drawings for the chosen sewer alignment.

Plans and specifications for the project will be prepared for the sewer repair based on the City chosen sewer alignment from the preliminary design report. Plans and specifications will be prepared and customized to the City's requirements and will contain information necessary to obtain comprehensive contractor bids.

After the project is out for bid, Bellecci will respond to all questions regarding the plans and specifications and prepare any addendums to the plans and specifications necessary to clarify the design. In addition, we will attend the pre-bid meeting for the project.

Bellecci will attend the preconstruction meeting with the contractor, City staff and utility companies. We will review the contractor submittals for compliance with the specifications and respond within ten days. We will also clarify questions regarding the plans (RFIs), perform site visits during construction and provide a write up of our observations to the City and review change order requests from the contractor.

SPECIFIC SCOPE OF WORK

## Task I Preliminary Design Assessment Report & Preliminary Plans

## SEWER VIDEO INVESTIGATION

Bellecci will review the City provided sewer line video inspection tapes for the sections of sewer lines to be replaced. The video review will be used to determine the distances from the manholes to the sewer laterals to be reconnected. The information obtained from our review will be shown on the plans.

## COORDINATION WITH UTILITIES

Bellecci will coordinate with owners of the utilities (including City owned facilities) in the project areas to obtain their utility base maps for use in developing the plans. Utility locations will be shown on the base map used for the replacement of the sewer mains.

## **GEOTECHNICAL STUDY**

Bellecci's subconsultant, Cleary Consultants, Inc. will prepare a geotechnical investigation of the existing soil at each of the project site. The geotechnical field investigation will include at four (4) soil borings at the site. The investigation will identify the different types of soil that the contractor probably will encounter during construction

#### TOPOGRAPHIC SURVEY

Bellecci's survey crews will set control points for the planimetric survey and collect necessary field topographic information, visible utility locations and street elevations in order to supplement and complete the base information. The aerial planimetric survey will be performed by our subconsultant 360 Aerial Surveys. The survey work will be performed and tied into the NAD 1983 HARN State Plane system. Sewer manholes, storm drain inlets and storm drain manholes will be surveyed and information on the inverts will be obtained.

#### **POTHOLING**

The project design budget includes an allowance for 20 potholes. Bellecci has worked extensively with various potholing companies in the past and will coordinate the potholing locations with the potholing company in the field. Potholing will be done at the locations where the proposed sewer pipe alignment crosses an existing utility and the invert or depth of that utility cannot be calculated or measured.

#### PRELIMINARY DESIGN ASSESSMENT REPORT

Bellecci will use existing project information, the results of discussions with the City, analysis of hydraulic parameters (pipe sizing), alternative sewer alignments based on existing utilities, and the proposed design solutions to produce a preliminary design assessment report. The Basis of Design Report will include the definition of the project, a description of the proposed design and an evaluation of the proposed sewer replacement.

## PRELIMINARY PLANS AND ESTIMATE

The plans will be prepared in ACAD and use the aerial planimetric survey as the site base maps supplemented with relevant ground shot survey information. The plans will be at a 1"= 20' scale and will include a profile of the existing sewer line to be replaced showing the approximate locations of the utility crossings.

The engineer's estimate will be prepared in a format showing the anticipated bid items for the construction of the project and the estimated quantity and unit price for that item.

Deliverable: Electronic copies of: Topographic Survey, Geotechnical Study Report, Preliminary Design Assessment Report, Construction Cost Estimates, and Preliminary Design Drawings.

Schedule: The submittal of the preliminary design assessment report will be provided within the seventy-five (75) calendar days following the Notice to Proceed.

## Task II 65% Submittal

#### 65% PLANS, SPECIFICATIONS AND ESTIMATE

The plans, specifications and estimate will be compiled in standard City format providing sufficient information to obtain comprehensive contractor bids and to construct the project. The plans will be prepared in ACAD and use the aerial planimetric survey as the site base maps supplemented with relevant ground shot survey information. The plans will be at a 1'' = 20' scale and will include a profile of the existing sewer line to be replaced showing the approximate locations of the utility crossings.

The engineer's estimate will be prepared in a format showing the anticipated bid items for the construction of the project and the estimated quantity and unit price for that item.

#### 65% BASIS OF DESIGN REPORT

Bellecci will use existing project information, the results of discussions with the City and the proposed design solution to produce a Basis of Design Report. The Basis of Design Report will include the definition of the project, a description of the proposed design and an evaluation of the proposed sewer replacement.

Deliverable: Four (4) half-size to scale sets of the 65% design plans and two (2) full size sets of 65% design plans, and four (4) sets of the project specifications, basis of design report, geotechnical report and construction cost estimate.

Schedule: The submittal of the 65% design will be provided within the sixty (60) calendar days following the approval of Preliminary Design Assessment Report.

#### Task III 100% Submittal

#### 100% PLANS, SPECIFICATIONS AND ESTIMATE

The 100% plans will incorporate the City's 65% design review comments. The specifications will utilize the City's Technical Specifications supported by the American Public Works Association Standard Specifications for Public works for construction (Green Book). The specifications will contain the testing and submittal requirements to be provided by the contractor.



The 100% engineer's estimate will fine tune the 65% estimate to include the items and quantities anticipated in the construction of the project.

#### 100% BASIS OF DESIGN REPORT

The Basis of Design Report will be edited to discuss any changes to the design elements provided in the 65% Basis of Design Report. The 100% Basis of Design Report will include calculations used in the design.

Deliverable: Four (4) half-size to scale sets of 100% plans and two (2) full size sets of 100% plans, four (4) project specifications, Basis of Design Report, and construction cost estimate.

Schedule: Submittal shall be within forty (40) calendar days following receipt of comments on the 65% design submittal.

## Task IV Final Design Submittal of Construction Drawings

#### FINAL PLANS. SPECIFICATIONS AND ESTIMATE

The final construction drawings, specifications, contract documents and bid items will incorporate the City's 100% design review comments. The final bid documents will include the final adjustments to the project as approved by the City.

The final engineer's estimate will include the bid items and quantities anticipated in the construction of the project.

Deliverable: One (1) set of 24" X 36" original reproducible vellum or bond copy of plans signed and sealed by the appropriate design engineer(s), architect(s), and/or surveyor(s). One (1) set of 11" X 17" half size (to scale) bond copy of plans signed and sealed by the appropriate design engineer(s), architect(s), and/or surveyor(s). Provide electronic copy of plans in a format readable by AutoCAD Map 3D 2015 for personal computers. Provide one (1) hard copy of the final specification and cost estimate, and an electronic copy of the final specification and cost estimate in Microsoft Office Word 2010 for Windows or compatible format.

Schedule: Submittal shall be within twenty-one (21) calendar days following receipt of 100% design review comments.

#### Task V Bidding Phase

During the bidding phase, Bellecci will assist the City with the bidding process, attend the prebid meeting (if a meeting is held) and provide the City with assistance to answer any Contractor questions pertaining to the plans and specifications. We will prepare and issue contract addenda, as needed.

Deliverable: Copies of all addenda and correspondence

# **Task VI Construction Phase**

Bellecci will attend the preconstruction meeting as required. We will review the contractor submittals for compliance with the specifications and respond within ten days. We will also clarify questions regarding the plans (RFIs), review change order requests from the contractor and prepare as-needed plan modifications for the change orders. In addition, we will perform up to four (4) site visits during construction and provide a write up of our observations to the City.

Deliverable: Copies of all correspondence, change order plan & specification modifications, submittal reviews and site visit reports.

## EXHIBIT B - FEE SCHEDULE

CITY OF LOS ALTOS

Sewer System Repair Program, Project WW0100121 - 1st Street Sewer Realignment Feasibility Study and Final Design

					PRO	JECT RUD	GET ESTIMA	ATE							October 9	9, 2020
TAC	RATE	240	206	198	174	146	198	278	138	74	1.1	1.1	1.1			
#	TASKS DESCRIPTION	PIC*	PROJ. MNGR.	PROF. ENGR.	SENIO ENGR.	ASSNT. ENGR.	PROF. SURVEY	SURVE CREW	SURVE TECH		GEOTECH (Cleary)	Potholing Sub-	Aerial Mapping 360	HRS. /TAS	DIREC COST	TOTAL
ask	I - Preliminary Design Assessment Report & Preliminary Plans					_										\$101,704.
ask	1 - Project Management															
1	Project Meetings		4	4										8		\$1,616.
2	Project Administration		8											8		\$1,648.
3	Project Progress Summaries		4										1	4		\$824.
4	QA/QC				4			_	_					4		\$696.
	Sub-Total	0	16	4	4	0	0	0	0	0	0	0	0	24		\$4,784.
ask 1	2 - Site Investigation, Data Collection, Record Research Record Data Collection		1	4		4								9		\$1,582.
2	Utility Research & Coordination (PG&E, Comcast, AT&T, City, etc.)		1	2		8								11		\$1,770.
3	Review CCTV Sewer Inspection Tapes from the City		1	2		8								11		\$1,770.
4	Site Investigation		8	8		8								24		\$4,400.
5	Geotechnical Investigation (Cleary)		2	4							\$16,00			6		\$18,804.
6	Aerial Topographic Mapping (360 Degree)		2				2	8	4				\$3,900	16		\$7,874.
7	Potholing (Allowance for 20 Potholes)		2	4		8						\$25,00		14		\$29,872.
	Sub-Total	0	17	24	0	36	2	8	4		\$16,00	\$25,00	\$3,900	91		\$66,072.
ask 1	3 - Develop Design Base Map		2	2		8							+	12		64.070
2	Base Map Preparation Supplemental Topographic Mapping		2			ď	2	8	4				+	16		\$1,976. \$3,584.
3	Right of Way & Easement Determinations from Record Data						2	0	4				+	6	1	\$3,584 \$948.
J	Sub-Total	0	4	2	0	8	4	8	8	0	0	0	0	34	0	\$6,508.
Гask	4 - Prepare Preliminary Design Assessment Report and		_				7	Ŭ	Ŭ		<u> </u>	Ť	†	5-7	Ť	ψ0,000.
1	Alternative Alignment Plans		2	8	4	80				4				94		\$14,668.0
2	Preliminary Cost Estimate		2	2	4	8								16		\$2,672.
3	Preliminary Design Assessment Report		4	12		24				4				40		\$7,000.
	Sub-Total	0	8	22	8	112	0	0	0	8	0	0	0	150		\$24,340.
ask	II - 65% Submittal															\$27,146.
1	Project Meetings		3	3										6		\$1,212.
2	Project Administration		3	-										3		\$618.
3	Project Progress Summaries													0		\$0.0
4	Project Cost Estimates													0		\$0.0
5	QA/QC													0		\$0.0
	Sub-Total	0	6	3	0	0	0	0	0	0	\$0	\$0		9		\$1,830.0
rask	5 - Prepare Bid Documents															
1	65% Plans & Estimate (PS&E)		4	18		100							-	122		\$18,988.0
3	Preliminary Cost Estimate Basis of Design Report for 65% PS&E		2	4 12		16							+	22 14		\$3,540.0 \$2,788.0
J	Dasis of Design Report for 65 % P-3XL			12										14		\$25,316.0
ask	III - 100% Submittal															\$25,292.
1	Project Meetings	_	4		4									8		\$1,520.
2	Project Administration		4									<u> </u>	<u> </u>	4		\$824.0
	100% Draft Final Design - Plans, Specifications & Estimate (PS&E)		2	24		100							<b>_</b>	126	<u> </u>	\$19,764.
	Detailed Preliminary Cost Estimate			8									1	8		\$1,584.
6	Basis of Design Report for 100% PS&E		2	6								<u> </u>	-	8		\$1,600. <b>\$25,292.</b>
Гask	IV - Final Design Submittal of Construction Drawings															\$25,292. \$16,216.
	In		<u> </u>	<u> </u>									1	<u> </u>	<u> </u>	** - :
1	Project Meetings		4	4									1	8	1	\$1,616.
7	Project Administration  100% Final Design Bid Documents (PS&E)		2	20	0	40							+	72		\$824. \$12,192.
8	QA/QC			30 8	U	40							+	8		\$12,192. \$1,584.
υ	Sub-Total	0	30	114	4	256	0	0	0		\$0		†	404		\$1,564.0 \$16,216.0
ask	V- Bidding Phase						J				Ψ					\$2,596.
1	Bid Support		2	4	8									14		\$2,596.
	VI - Construction Phase															\$15,828
	Respond to RFI's		2	8	8									18		\$3,3
	Submittal Review			4	20								<u> </u>	24		\$4,2
4	Pre-Construction and Other Site Meetings		4	16	24								<b>_</b>	44	<u> </u>	\$8,1
5	Change Order Review												1	0	<u> </u>	
	Final Inspection												+	0	}	
	As-Built Drawings Sub-Total	0	8	32	60	0	0	0	0		\$0			100	¢1.00	\$15,8
1	Miscellaneous Expenses (Mileage, Prints, Postage, etc.)													<b>-</b>	\$1,20	\$1,2
	PROJECT	0	45	52	12	156	6	16	12	8	\$16,000	\$25,000	\$3,900	299	\$1,200	\$189,982