
File #: 2023-2954

Agenda Date: 9/6/2023

Agenda Item No: 12.

FROM: Robert Thompson, General Manager
Originator: Mike Dorman, Director of Engineering

SUBJECT:

KNOTT-MILLER HOLDER ARTESIA BRANCH REHABILITATION, PROJECT NO. 3-60

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Approve a Professional Design Services Agreement with Dudek to provide engineering services for Knott-Miller Holder Artesia Branch Rehabilitation, Project No. 3-60, for an amount not to exceed \$1,200,000; and
- B. Approve a contingency of \$120,000 (10%).

BACKGROUND

The Miller-Holder Trunk was constructed by the Orange County Sanitation District (OC San) in the cities of Buena Park and La Palma from 1959 to 1998. The Knott Trunk was constructed from 1971 to 1978 in the City of Buena Park. These trunk sewers consist of 18-inch to 45-inch vitrified clay pipe or reinforced concrete pipe. All sewer manholes are concrete with polyurethane or PVC linings.

RELEVANT STANDARDS

- Comply with California Government Code Section 4526 to engage the best qualified firm “on the basis of demonstrated competence and qualifications” and “negotiate fair and reasonable fees”
- Protect OC San assets
- Meet or exceed sanitary sewer overflow regulations
- Commitment to safety & reducing risk in all operations

PROBLEM

There are multiple condition issues associated with the Knott Interceptor and Miller-Holder Trunk Sewers. Closed-circuit television inspection of the sewer indicates that sewer pipeline segments are significantly cracked, have multiple fractures and/or are broken leading to infiltration, and there are multiple areas where deposits have become encrusted and cannot be removed by cleaning. Additionally, sewer manholes in the same area have liner failure and widespread concrete failure.

PROPOSED SOLUTION

Approve a Professional Design Services Agreement for Knott-Miller Holder Artesia Branch Rehabilitation, Project No. 3-60. This project will rehabilitate portions of the Knott Interceptor and Miller-Holder Trunk sewers. The project includes the rehabilitation of 18-inch to 45-inch sewer, the rehabilitation of existing sewer manholes, construction of a new air jumper for a siphon, and construction of two new sewer manholes.

TIMING CONCERNS

Delaying approval of the agreement would delay the completion of the project, which could result in an increased risk of a pipe failure before the work is completed, resulting in urgent repairs or a sewage spill. Manholes would continue to corrode, resulting in more expensive repairs.

RAMIFICATIONS OF NOT TAKING ACTION

Without this project, the condition issues in the pipelines could result in a sewage spill.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATIONConsultant Selection:

OC San requested and advertised for proposals for Knott-Miller Holder Artesia Branch Rehabilitation, Project No. 3-60 on May 2, 2023. The following evaluation criteria were described in the Request for Proposals (RFP) and used to determine the most qualified Consultant.

CRITERION	WEIGHT
Project Understanding and Approach	40%
Related Project Experience	25%
Project Team and Staff Qualifications	35%

Four proposals were received on June 15, 2023 and evaluated in accordance with the evaluation process set forth in OC San's Purchasing Ordinance by a pre-selected Evaluation Team consisting of OC San staff: Senior Engineer (Project Manager) and two Engineering Supervisors. The Evaluation Team also included one non-voting representative from the Contracts Administration Division and one non-voting technical advisor from OC San staff.

The Evaluation Team scored the proposals on the established criteria as summarized in the table below:

	Firm	Approach (Max 40)	Related Experience (Max 25)	Team (Max 35)	Total Score (Max 100)
1	CDM Smith Inc.	31	18	25	74
2	Dudek	27	18	25	70
3	Stantec Consulting Services Inc	28	13	23	64
4	Michael Baker International, Inc.	23	18	22	63

Based on this scoring, two Consultants were shortlisted for interviews on July 13, 2023. Following the interview, each member of the Evaluation Team scored the Consultants based on both the proposals and interviews using the evaluation criteria and weighting described above. Based on the scoring shown below, Dudek was selected as the most qualified Consultant.

	Firm	Approach (Max 40)	Related Experience (Max 25)	Team (Max 35)	Total Score (Max 100)
1	Dudek	35	19	28	82
2	CDM Smith Inc.	29	18	26	73

Dudek, the proposer with the highest score, excelled in both the proposal and the interview. Their technical proposal went beyond a general understanding of the Scope of Work and provided specific examples of how the proposed team would efficiently approach design challenges of the Project. The following are key elements that were unique in Dudek's proposal:

- Approach to minimize bypass pumping by analyzing the hydraulic model and utilizing existing diversions where possible.
- Approach to review the existing condition assessment data to confirm the right approach is being taken and to look for cost saving ideas during the review.
- Demonstrated commitment to look for ways to design the Project to improve the system beyond what is asked of them.

Review of Fee Proposal and Negotiations:

Proposals were accompanied by sealed fee proposals. In accordance with the Purchasing Ordinance, the fee proposal of only the highest-ranked firm was opened after approval by the Director of Engineering of the Evaluation Committee's recommendation.

Staff conducted negotiations with Dudek to clarify the requirements of the Scope of Work, the assumptions used for the estimated level of effort, and the proposed approach to meet the goals and objectives for the project. Negotiations included multiple meetings and emails to verify assumptions and level of effort, resulting in a \$148,064 decrease in the overall level of effort.

	Original Fee Proposal	Negotiated Fee
Total Hours	5,744	5,145
Total Fee	\$1,348,064	\$1,200,000

The negotiated fee decreased the overall level of effort for the project. The following factors contributed to the revised level of effort:

- Removed groundwater pump testing from the Scope of Work. Based on existing information, it is not anticipated that dewatering will be needed.
- Reduced the number of potholes that will be conducted. Proposal was overly conservative on the number of potholes included.
- Reduced hours for field topographic investigation.
- Increased hours for permit coordination due to additional coordination anticipated with Caltrans at both Interstate 5 and Beach Blvd.
- Increased hours in traffic services to include additional traffic control phasing through the intersections to accommodate trenching for bypass pipeline installation.

The Consultant's fringe and overhead costs, which factor into the billing rate, have been substantiated. The contract profit is 9.1%, which is based on an established formula within OC San's standard design agreements. Staff is requesting a 10% contingency to address potential amendments to the Scope of Work as the project progresses through preliminary and final design.

Based on the above, staff has determined that the final negotiated fee is fair and reasonable for the level of effort required for this project and recommends approval of the Professional Design Services Agreement to Dudek.

CEQA

The project is exempt from CEQA and a Notice of Exemption will be filed with the OC Clerk-Recorder after OC San Board of Directors approval of the Professional Services Design Agreement.

FINANCIAL CONSIDERATIONS

This request complies with the authority levels of OC San's Purchasing Ordinance. This item has been budgeted (Budget Update, Fiscal Year 2023-2024, Appendix A, Page 7, Knott-Miller Holder-Artesia Branch Rehabilitation, Project No. 3-60) and the budget is sufficient for the recommended action.

ATTACHMENT

The following attachment(s) may be viewed on-line at the OC San website (www.ocsan.gov) with the complete agenda package:

- Professional Design Services Agreement
- Presentation

CM:tk