

STAFF REPORT

To: Coastside County Water District Board of Directors

From: James Derbin, Superintendent of Operations

Via: Mary Rogren, General Manager

Agenda: June 8, 2021

Date: June 4, 2021

Subject: Award of Contract for Engineering Services During Construction to HDR Engineering, Inc. for the Nunes Water Treatment Plant Improvement Project.

Recommendation:

Authorize the General Manager to enter into a professional services agreement with HDR Engineering, Inc. ("HDR") to provide Engineering Services During Construction for the Nunes Water Treatment Plant Improvement Project for a not to exceed amount of \$241,906.

Background:

In early 2020, the Board approved a contract with HDR Engineering, Inc. ("HDR") for a Basis of Design Report and later awarded a contract for a Detailed Design of the necessary upgrades to the Nunes facility. The 100% Detailed Design was completed in January 2021. This project includes the following needed improvements/upgrades:

- Filter improvements to four existing filters including media replacement, underdrain replacement, addition of air scour system and blowers, new filter-to-waste pumps and piping, and associated electrical/instrumentation improvements.
- Addition of a new plate settler sedimentation basin and associated electrical/instrumentation work.
- Chemical system improvements including the addition of a caustic soda bulk tank and transfer pump.
- Concrete repair and coating for the filters and existing clearwell.
- Other process improvements including replacement and addition of valves, flowmeters, and misc. piping.
- Civil improvements including a soil-nail retaining wall, asphalt pavement, aggregate based access road, site drainage and grading.

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- Electrical improvements including addition of a new MCC and miscellaneous electrical improvements.

This comprehensive project will provide extensive rehabilitation and upgrades to over 25% of the Nunes Facility and will serve the District's customers for several decades into the future. At the May 2021 Board Meeting, the Board of Directors awarded the construction contract to the low bidder, Ranger Pipeline, Inc. in the amount of \$8,340,000.

Staff solicited a proposal from HDR for Engineering Services During Construction to support the construction of the Nunes Water Treatment Plant Improvements Project. Staff feels that HDR would be the best fit to support the District with the Engineering Services During Construction since the design engineers are so familiar with the project and have vast experience with these services on similar sized projects. See Attachment A for a copy of the HDR proposal.

Fiscal Impact:

Funding for the Nunes Water Treatment Plant Improvement Project is included in the Fiscal Year 2020/2021 to Fiscal Year 2029/2030 Capital Improvement Program Budget in the amount of \$7,600,000. This project will take 24 months to complete, and the costs will be spread over FY 2020/2021 through FY 2022/2023.



May 19, 2021

Mr. James Derbin
Coastside County Water District
766 Main Street
Half Moon Bay, CA 94019

**RE: HDR's Proposal for the Nunes Water Treatment Plant Upgrades Project –
Engineering Services During Construction**

Dear Mr. Derbin:

HDR is pleased to present this proposal to provide engineering services during construction for upgrades to the Nunes Water Treatment Plant, which includes:

- A new sedimentation basin
- Recommended filter upgrades
- Caustic soda storage tank system
- Clearwell upgrades
- Miscellaneous electrical and mechanical improvements

Our proposed scope of work, schedule, and budget are presented below.

Scope of Work

Task 1 - Preconstruction Meeting

HDR will attend the two-hour pre-construction meeting and assist the District with initiation of the construction phase. The meeting will be attended by three HDR engineers (Project Manager, Project Engineer, and Staff Engineer) in person.

Task 2 - Contract Clarifications

HDR will answer questions and provide written interpretations of the requirements of the contract documents, and evaluate the acceptability of substitute materials and equipment.

Deliverables: Up to 50 clarifications or responses to requests for information (RFIs).

Task 3 - Submittal Reviews

HDR will review the contractor's submittals, including shop drawings and operations and maintenance (O&M) manuals, for conformance with the contract documents.

HDR will not be responsible for consultation or other services relating to construction means and methods, construction site safety, or labor compliance (including certified payroll)

Deliverables: Up to 70 submittal and 30 resubmittals reviews, and submittal log.

Task 4 - Contract Change Orders and Potential Changes

HDR will review potential contract change orders (PCOs) and other potential project changes prepared by the contractor. PCOs that are found to be applicable will be forwarded to the District for review and approval.

Deliverables: Up to six potential change items and three change orders.

Task 5 - Site Visits/Construction Meetings

HDR will visit the construction site to assist the District with reviewing the acceptability of the work and resolving field problems. It is assumed that District personnel will be available to co-attend these meetings. The budget for this task is based on up to 24 construction meetings to cover the monthly progress meetings for the duration of the project, including HDR's attendance for the final construction completion meeting. The meetings will be attended by one HDR engineer (Project Engineer) in person for 12 meetings and attended virtually for 12 meetings.

Task 6 - Startup and Testing, and Project Closeout

HDR will oversee facility startup and testing, and help address operational problems identified during startup. HDR and the District will jointly conduct a final inspection prior to startup, and HDR will prepare the final punch list for the District's review and approval prior to submitting it to the contractor for completion of the identified items. The District will process the project closeout documentation, including any release of retentions and bonds, and the Notice of Completion. The level of effort also includes one final inspection walkthrough attended by up to four HDR engineers (Project Manager, Project Engineer, Structural Engineer, and Electrical Engineer)

Deliverables: One copy of a final inspection punch list, and one copy of a final startup testing and acceptance report in PDF format.

Task 7 - As-Built/Record Drawings

HDR will provide final record drawings based on the contractor prepared as-built drawings. HDR will rely solely on the information provided by the contractor field mark-ups as the basis for preparing the record drawings.

Deliverables: AutoCAD and PDF of as-built drawings.

Task 8 – Operations Plan Update

HDR will update the existing Operations Plan to submit for Department of Drinking Water (DDW) approval. The existing document will be updated to include the new processes and updates to existing processes that will be installed as part of the Upgrades.

As required by DDW, the updated operations plan will include a control of the plant's performance monitoring program, unit process equipment maintenance program, filter media inspection program, operating personnel information, information on unit process operation, chemical dosing procedures, emergency response procedures and reliability features

Deliverables: Updated Operations Plan

Task 8 - Project Management

HDR will provide project management for the duration of the project, which includes preparation of monthly invoices.

Schedule

We anticipate receiving the notice to proceed for construction in May 2021, and project completion by June 2023.

Compensation

Table 1 shows the estimated work effort and cost to perform the scope of work described above. Our 2021 time and materials rate sheet is also attached.

If you have any questions, please do not hesitate to contact project manager Rich Stratton at (916) 817-4819 or Rich.Stratton@hdrinc.com.

Sincerely,
HDR ENGINEERING, INC.



Holly L.L. Kennedy, PE (CA)
Senior Vice President



Richard G. Stratton, PE (CA)
Project Manager

Table 1 - Estimated Work Effort and Cost

Coastside County Water District

Nunes Water Treatment Plant Upgrades Project – Engineering Services During Construction

Task No.	Task Description	Project Mgr	Project Engr	Staff Engr	Arch	Elec Engr	Struct Engr	Geotech Engineer	CADD Tech	Project Controller	Project Admin	Total HDR Labor Hours	Total HDR Labor (\$)	Total HDR Expenses (\$)	Total Cost (\$)
1	Preconstruction Meeting	4	6	8								18	\$3,947	\$200	\$4,147
2	Contract Clarifications (up to 50 RFIs)	4	40	88	4	63	63	4			25	290	\$54,716		\$54,716
3	Submittal Reviews (up to 75 Submittals)	4	32	188	4	94	94	4			35	454	\$81,959		\$81,959
4	Contract Change Orders (up to 3) and Potential Changes (up to 6)	6	8	32		16	16				9	86	\$16,249		\$16,249
5	Site Visits/Construction Meetings (up to 24)		84									84	\$18,423	\$920	\$19,343
6	Startup and Testing, and Project Closeout	12	12	20		16	12					72	\$15,897	\$200	\$16,097
7	As-Built/Record Drawings			30					115			145	\$21,305	\$100	\$21,405
8	Operations Plan Update	8		64						8		80	\$13,140	\$100	\$13,240
9	Project Management	12	24							48		84	\$14,750		\$14,750
COLUMN TOTALS		50	206	429	8	188	184	8	115	56	69	1,313	\$240,386	\$1,520	\$241,906

HDR Engineering, Inc.

RATE SCHEDULE

January 2021 to December 2021

Technical Specialist 5	\$330 to \$390
Technical Specialist 4	\$280 to \$330
Technical Specialist 3	\$240 to \$280
Technical Specialist 2	\$190 to \$240
Technical Specialist 1	\$150 to \$190
Engineer 5	\$300 to \$370
Engineer 4	\$250 to \$300
Engineer 3	\$190 to \$250
Engineer 2	\$150 to \$190
Engineer 1	\$100 to \$150
CAD/GIS Technician 1	\$100 to \$130
CAD/GIS Technician 2	\$130 to \$180
CAD/GIS Technician 3	\$180 to \$230
Project Controller	\$100 to \$170
Project Coordinator	\$90 to \$140

Rates include current overhead rate plus profit and are adjusted by an average of 4% annually on January 1st

EXPENSES

In-House Expenses

Vehicle Mileage (per mile)	Current Federal Travel Regulation (FTR)
Other Travel (e.g., airfare, fuel charges, parking, ride share, lodging, meals, rental/leased vehicle, etc)	at cost
Black/White Photocopies (per copy)	\$0.05 to \$0.09
Color Copy (per copy)	\$0.15 to \$0.30
Bond Plotting – Black/White (per square foot)	\$0.15
Bond Plotting – Color (per square foot)	\$0.90

Please note that expenses and subconsultants are charged with a five percent markup.