



DATA SHEET
Agenda Item No. 12.B.

Meeting Date: August 3, 2017

Agenda Item:

Consider approval of contract and financial matters related to construction of Phase I of Doe Branch Water Reclamation Plant.

- B. Amendment No. 1 to contract with CDM Smith Inc., authorizing additional funds, as a result of project construction delays.

Placement:	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Individual Consideration	<input type="checkbox"/> Executive Session
Vote:	<input type="checkbox"/> Non-Weighted	<input checked="" type="checkbox"/> Weighted Capital	
Recommending Department: Engineering			

Background:

At the March 7, 2013 meeting, the Board approved Task Order No. 4 with CDM Smith Inc. for professional services related to design and construction of Phase I of the Doe Branch Water Reclamation Plant.

As a result of various construction delays, due to weather and other construction difficulties, the consulting engineer was required to perform extra services over an extended period of time, exceeding the budgeted amount for construction phase services in the contract (Task Order No. 4). The proposed Amendment No. 1 will provide compensation for the services provided that exceeded the task order amount.

Financial:

Original Contracted (Task Order No. 4) Amount	\$ 1,660,000.00
Proposed Additional Funding	\$ 39,011.00
Revised Contract Amount	\$ 1,699,011.00

Funds to be provided by Budget amendment.

Recommendation:

Considering the extended period of time that the consulting engineer was required to perform oversight/ construction phase services, the amount of extra cost being requested seems to be reasonable. Staff recommends approval of proposed Amendment No. 1 to contract with CDM Smith Inc.

Enclosures:

Proposed Amendment No 1.

Submitted By: 
Jody Zabolio, Acting Director/ Engineering & Construction

Date: July 28, 2017



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July 21, 2017

Mr. Jody Zabolio, P.E.
Upper Trinity Regional Water District
900 North Kealy Street
Lewisville, TX 75075

Re: Upper Trinity Regional Water District
Doe Branch Water Reclamation Plant, Phase One
Task Order No. 4

Subject: Task Order Amendment Request for
Additional Fee Request for Extended and Additional Construction Phase
Services

Dear Mr. Zabolio:

During the execution of the construction phase of the above-referenced project, CDM Smith Inc. (Project Engineer) has provided extended additional out of scope services on the construction phase of the project. These additional services include

- Additional construction administration support incurred during the delay of construction substantial completion from original contract date of February 28, 2016 to March 2, 2017.
- Additional geotechnical engineering and field observation by CDM Smith's geotechnical engineer related to observation of replacement 42-inch influent sewer
- Additional structural engineering and field observation by CDM Smith's structural engineer related to correction of cracking and leakage at the Aeration Basin and Secondary Clarifiers.

Additional engineering services provided and costs incurred by CDM Smith on these three scope items is as follows:

A. Additional Construction Phase Engineering/Administration Services

With the delay of the achievement of substantial completion from original contract date of February 28, 2016 to March 2, 2017, CDM Smith provided additional construction phase services that included:



- Attendance at 21 additional on-site construction progress meetings.
- 16 additional site visits to address and document contractor questions and requests for information.
- Review of 26 additional submittals received after February 28, 2016.
- Review of 24 additional request for information (RFIs) received after February 28, 2016.

Costs incurred by the CDM Smith's construction phase project manager for the above were as follows:

Engineering Staff	Hours	Hourly Billing Rate	Total Incurred Cost
Project Manager (Mark Gorthey)	206	\$209	\$43,054

B. Additional Office and Field Geotechnical Engineering Support related to Influent Sewer Replacement

At the request of UTRWD, CDM Smith provided part-time, on-site geotechnical engineering support to assist in ensuring the proper installation and satisfactory performance of the replacement 42-inch influent sewer. CDM Smith's geotechnical project engineer (Jeff Van Pelt) was onsite on partial time basis during the pipe replacement to:

- Observe surrounding soil conditions around the pipe trench to confirm that unforeseen and adverse soil conditions were not present that would have resulted in the initial pipe deficiencies and unsatisfactory performance of the replacement pipe.
- Observe the CMAR work during pipe replacement; direct corrections of improper techniques for pipe foundation, bedding, and backfill construction when required.
- Confirm proper pipe handling and installation to the satisfaction of UTRWD staff.

Mr. Van Pelt's effort also included additional review of multiple revised dewatering and trench excavation submittals.

Costs incurred by the CDM Smith's geotechnical project engineer for the above were as follows:

Engineering Staff	Hours	Hourly Billing Rate	Total Incurred Cost
Geotechnical Engineer (Jeff Van Pelt)	131	\$121	\$15,851

C. Additional Structural Engineering Support related to Concrete Deficiencies at Aeration Basins and Secondary Clarifiers

Following construction of the Aeration Basin and Secondary Clarifiers, concrete construction deficiencies were found that required additional structural engineering support to develop remedies. These deficiencies included:

- Deficient concrete, with extensive honeycombing and voids on vertical walls at the north end of the Aeration Basin tanks, requiring development of structural design details for the proper removal and reconstruction of the subject walls.
- Identification of thin width cracking and resulting slow leakage in vertical walls of the Aeration Basin and Secondary Clarifiers structures requiring development of detail details and specifications for crack repairs to mitigate leakage and prevent long-term deterioration of the structure's reinforcement.

Costs incurred by the CDM Smith's geotechnical project engineer for the above were as follows:

Engineering Staff	Hours	Hourly Billing Rate	Total Incurred Cost
Senior Structural Engineer (Chun Wong)	71	\$172	\$12,212

Based on the above additional construction phase scope of work services, CDM Smith Inc. respectfully requests that Task Order No. 4 be amended by an amount of \$71,117.00. With approval of this amendment request, CDM Smith concurrently withdraws our request for additional fee of \$141,155.00 for out of scope services as detailed in our June 14, 2014 letter.

For information, a summary of the current cost status of Task Order No. 4 is as follows:

Original Task Order #4 Amount	\$1,660,000	
Task Order Work Not Performed to Date	(\$9,925)	Task 1.5 - Environmental Assessment
	(\$2,181)	Task 4.8 - GIS Files
	(\$20,000)	Allowance (\$50,000 minus \$30,000 authorized previously)
Authorized Work Tasks to Date	\$1,627,985	

Mr. Jody Zabolio, P.E., UTRWD

July 21, 2017

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Please do not hesitate to contact me if you have any questions.

Very truly yours,



Mark Gorthey, P.E.
CDM Smith Inc.

cc: Douglas Varner, P.E., CDM Smith
Adam Evans, P.E., CDM Smith
Samir S. Mathur, P.E., CDM Smith

Amendment #1 to Task Order No. 4

Original Authorization	\$1,660,000.00
Amendment No. 1 Request	+\$71,117.00
Task Order Work Not Performed	<u>(\$32,106.00)</u>
Requested Revised Task Order No. 4	
Total Authorization	\$1,699,011.00
Net Increase to Task Order No. 4	\$39,011.00

Approved by Upper Trinity Regional Water District:

_____ [Signature]
_____ [Name]
_____ [Title]

Date:
