



DATA SHEET
Agenda Item No. 12.A.

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.

- A. Resolution authorizing acceptance of completed work, final payment and release of retainage for construction contract awarded to CDM Constructors, Inc., including approval of final change order.

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 6, 2014 meeting, the Board authorized award of Part II of contract with CDM Constructors Inc. (CCI) for Construction Manager at Risk for a guaranteed maximum amount of \$23,850,000.00 to proceed with construction of Phase I of Doe Branch Water Reclamation Plant. The contract date for substantial completion of the project, enabling the plant to be placed in service, was scheduled to be February 29, 2016.

While the extra costs were to be contained within the guaranteed maximum price (GMAX), subsequent events had a significant impact on the completion date for the project.

- Fairly early into construction, the north Texas area began experiencing what would become an historic period of intense and prolonged rainfall and flooding. During the peak period, Lewisville Lake achieved the highest level ever recorded.
- Concurrent with the weather events, development activity in north Texas was occurring at historic rates, as well. Construction labor personnel and supplies (especially concrete) were in high demand, impeding progress on construction.
- The concrete provided on one of the walls of the aeration basin was found to be defective. The entire section had to be demolished and re-constructed.
- The newly constructed influent line to the plant was determined to be out of round and contained serious cracks. It too had to be re-constructed.

The combination of these factors and events caused considerable delay in completion of this project. The plant was not placed into service until November 3, 2016, more than a year after the anticipated date.

In addition to the elements of extra cost that were contained within the GMAX, the following five items added to the scope of the project by requirements of municipal and regulatory entities:

• Unexpected requirements for engineered outfall structure (TCEQ)	\$ 99,242.00
• Ornamental perimeter fence (Little Elm)	\$ 44,168.00
• Concrete roads throughout plant (Little Elm)	\$136,253.00
• Concrete parking at admin building (Little Elm)	\$ 42,832.00
• Meter vault for potable water (Mustang SUD)	<u>\$ 74,951.00</u>
	Sub-Total \$397,446.00
Less the remaining account balance	<u>-\$ 20,251.00</u>
	Total \$377,195.00

The deduct of \$20,251 reflects the unused portion of the contractual Owner-Directed Allowance. The proposed Change Order No. 1 (Final) adds 487 calendar days and \$377,195.00 to the contract, for a revised total Part II contract amount of \$24,227,195.00. This proposed change order amounts to a 1.6% increase in the cost of the construction contract.

All work has been completed in accordance with the plans, specifications and change order except for minor punch list items. Further, District's consultant, CDM Smith Inc. and staff recommend that the Board approve Change Order No. 1, accept the project as complete, and authorize final payment, including release of retainage, pending completion of remaining punch list items.

Financial:

Original Part II Contract Amount	\$ 23,850,000.00
Previous Change Orders	\$ 0.00
Change Order No. 1	\$ 377,195.00
Revised Contract Amount	\$ 24,227,195.00
Revised Contract Substantial Completion Date	June 30, 2017
Revised Contract Final Completion Date	July 31, 2017

Funding was included in the current Capital Budget for the original Part II Contract amount. Now, considering proposed Change Order No. 1 (final), an amendment to the budget is necessary to provide sufficient funding for closeout of the project. See related agenda item.

Recommendation:

Staff recommends approval of the enclosed Resolution and Final Change Order No. 1. Approval of the necessary budget amendment is listed as a separate part of this Agenda Item.

Enclosures:

Resolution with Engineer's recommendation and Change Order No. 1 (Final).

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

Date: July 28, 2017



RESOLUTION

RESOLUTION # 2017- _____

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE UPPER TRINITY REGIONAL WATER DISTRICT AUTHORIZING ACCEPTANCE OF PHASE I OF DOE BRANCH WATER RECLAMATION PLANT, APPROVAL OF FINAL CHANGE ORDER, PROVIDING FOR FINAL PAYMENT AND RELEASE OF RETAINAGE TO CDM CONSTRUCTORS INC.

WHEREAS, on March 6, 2014 the Board of Directors of Upper Trinity Regional Water District approved Part II of contract with CDM Constructors Inc. for Construction Manager at Risk to construct Phase I of the Doe Branch Water Reclamation Plant; and,

WHEREAS, the construction contract was subsequently executed and notice to proceed was issued on March 31, 2014; and,

WHEREAS, attached Change Order Number 1 (Final) provides for compensation for additional scope and for adjustments to the contract time; and,

WHEREAS, CDM Constructors Inc. has completed all work on the Phase I facilities for the Doe Branch Water Reclamation Plant in accordance with the contract plans, specifications and approved change order, except for minor punch list items; and,

WHEREAS, District's consulting engineer, CDM Smith Inc. has certified the project to be in conformance with the contract plans, specifications and change orders.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE UPPER TRINITY REGIONAL WATER DISTRICT:

SECTION 1. That all matters stated in the preamble are found to be true and correct and are incorporated into the body of this resolution as if copied in their entirety.

SECTION 2. That attached Change Order No. 1 providing for an increase in contract amount of \$377,195.00 and a time extension of 487 days is hereby approved by the District.

SECTION 3. That construction of the facilities for Phase I of Doe Branch Water

Reclamation Plant is considered complete and is hereby accepted by the District, pending completion of minor punch list items.

SECTION 4. That the Executive Director is authorized to make final payment, including release of retainage, to the contractor in the amount of \$1,156,920.31.

Upper Trinity Regional Water District
Resolution No. 2017-____
Final Acceptance – Phase I Doe Branch Water Reclamation Plant
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SECTION 5. That this resolution shall become effective immediately upon its passage.

DULY PASSED AND APPROVED THIS 3RD DAY OF AUGUST 2017.

Recommended: Thomas E. Taylor
Thomas E. Taylor, Executive Director

Executed: _____
Kevin Mercer, President

Attest: _____
Mike Fairfield, Secretary

Attachments: Engineer's recommendation
Change Order No. 1





One Glen Lakes
 8140 Walnut Hill Lane, Suite 1000
 Dallas, Texas 75231
 Phone: 214 346-2800
 Fax: 214 987-2017

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

Subject: Proposed Construction Change Order 001 and Final Payment

Dear Mr. Zabolio:

CDM Smith Inc. has reviewed the proposed Contractor's Change Order 001 and Final Payment for the above-referenced project. This change order as agreed by both Upper Trinity Regional Water District and the Construction Manager at Risk (CDM Constructors Inc. [CCI]) includes payment for additional scope of construction work unforeseen at the time of development of Contract Plans and Specifications design and establishment of the CMAR's guaranteed maximum construction contract pricing. These items include:

- Addition of meter vault for Mustang SUD potable water service \$ 74,951.00
- Addition of cascade aerator at outfall per TCEQ requirements \$ 99,242.00
- Upgrade of perimeter fence per Town of Little Elm requirements \$ 44,168.00
- Upgrade of all plant roadways to concrete per Town of Little Elm Requirements \$136,253.00
- Add concrete parking lot per Town of Little Elm requirements \$ 42,832.00
- Deduct for unused Owner-Directed Allowance (\$ 20,251.00)
- Total \$377,195.00

In addition, proposed Change Order 001 includes a proposed time extension to the contract duration of 433 calendar days due to the above referenced additional work and 54 days due to inclement weather (487 days total).

CDM Smith Inc. concurs with and recommends the proposed addition of \$ 377,195.00 to the Contract Fee and 487 calendar days to the Contract Time under the CMAR's contract with the District via Change Order 001. Change Order 001 will bring all construction items to completion for the project allowing the processing of the final payment and project closeout.

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



Mr. Jody Zabolio, P.E., UTRWD

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Very truly yours,



Mark Gorthey, P.E.

CDM Smith Inc.

cc: Mr. Thomas Taylor, P.E., UTRWD
Mr. Thomas Snyder, P.E., UTRWD
Mr. Kurt Staller, P.E., UTRWD
Mr. Douglas Varner, P.E., CDM Smith Inc.
Mr. Adam Evans, P.E., CDM Smith Inc.
Mr. Samir Mathur, P.E., CDM Smith Inc.

CHANGE ORDER (CO)

PROJECT: <u>Doe Branch Water Reclamation Plant, Phase I</u>	<u>PROJECT NUMBERS</u>
OWNER: <u>Upper Trinity Regional Water District</u>	
ENGINEER: <u>CDM Smith Inc.</u>	ENGINEER: _____
CONTRACTOR: <u>CDM Constructors Inc.</u>	CONTRACTOR: _____
CHANGE ORDER NUMBER: <u>001 & Final</u>	DATE: <u>August 3, 2017</u>

The compensation agreed upon in this Change Order is a full, complete and final payment for all costs the Contractor incurs as a result of or relating to this change, whether said costs are known, unknown, foreseen or unforeseen at this time, including without limitation, any costs for delay, extended overhead, ripple or impact costs, or any other effect on changed or unchanged work as a result of this change.

CHANGE ORDER WORK TO BE PERFORMED

<u>Proposed Contract Modification</u>	<u>Time Extension Calendar Days</u>	<u>Increase / (Decrease) Amount \$</u>
Add meter vault for MSUD potable water service	<u>82</u>	\$ 74,951.00
Add cascade aerator at outfall per TCEQ	<u>108</u>	\$ 99,242.00
Upgrade perimeter fence per Town of Little Elm	<u>48</u>	\$ 44,168.00
Upgrade plant roadways to concrete per Town of Little Elm	<u>148</u>	\$136,253.00
Add concrete parking lot per Town of Little Elm	<u>47</u>	\$ 42,832.00
Credit for unused Owner-Directed Allowance	—	(\$ 20,251.00)
Time Extension: Weather Delays	<u>54</u>	
TOTAL	<u>487</u>	<u>\$377,195.00</u>

Original Part II Contract Amount	\$ 23,850,000.00
Previous Change Orders	\$ 0.00
Net Increase in Contract Amount (this change order)	\$ 377,195.00
Revised Contract Amount	\$ 24,227,195.00
Net Change in Contract Time (Substantial Completion)	<u>487 Calendar Days</u>
Net Change in Contract Time (Final Completion)	<u>487 Calendar Days</u>
Original Substantial Completion Date	<u>February 29, 2016</u>
Original Final Completion Date	<u>March 31, 2016</u>
Revised Substantial Completion Date	<u>June 30, 2017</u>
Revised Final Completion Date	<u>July 31, 2017</u>

CHANGE ORDER (CO)

PROJECT: Doe Branch Water Reclamation Plant, Phase I
OWNER: Upper Trinity Regional Water District
ENGINEER: CDM Smith Inc.
CONTRACTOR: CDM Constructors Inc.
CHANGE ORDER NUMBER: 001 & Final

PROJECT NUMBERS

ENGINEER: _____
CONTRACTOR: _____
DATE: August 3, 2017

Recommended by Engineer:

Submitted by Contractor:

By _____
For: CDM Smith Inc.

By _____
For: CDM Constructors Inc.

Date: _____

Date: _____

Recommended by:

By _____
For: Upper Trinity Regional Water District

Date: _____

Approved by:

By _____
For: Upper Trinity Regional Water District

Date: _____