

Memorandum

To: Honorable Mayor and Members of the City Council

Administration and Public Works Committee

From: David Stoneback, Public Works Agency Director

Lara Biggs, P.E., Bureau Chief – Capital Planning / City Engineer

Paul Moyano, P.E., Senior Project Manager

Subject: Treated Water Storage Replacement Project

Engineering Services (15-55) Approval of Change Order No. 3

Date: September 6, 2018

Recommended Action:

Staff recommends that City Council authorize the City Manager to execute Change Order No. 3 to the agreement for the Treated Water Storage Replacement Project Engineering Services to CDM Smith (125 South Wacker Drive, Suite 600, Chicago, IL) in the amount of \$22,040.00. This will increase the total contract amount from the current contract price of \$1,328,730.00 to \$1,350,770.00.

Funding Source:

Funding will be from the Water Fund, Capital Improvement Account 513.71.7330.62145 -733107, which has an FY 2018 budget allocation of \$12,500,000.

The FY 2018 budget allocation anticipated beginning construction in 2018. Because of delays in initiating construction, funding remains available in 2018.

Staff is in the process of applying for a low-interest loan from the Illinois Environmental Protection Agency (IEPA). The loan offer is only given after the design has been finalized and the contractor has been selected for construction. If the City is successful in obtaining the loan, eligible engineering fees will be funded by the loan.

Livability Benefits:

Built Environment: Manage water resources responsibly

Reduce Environmental Impact: Improve energy and water efficiency Health and Safety: Enhance resiliency to natural and human hazards

Background:

On January 11, 2016, the City Council awarded the engineering services for the treated water storage replacement to CDM Smith. Currently, CDM Smith is working to finalize bid documents and will assist the City during the bidding process. The existing treated water storage tank is located beneath a Northwestern University (NU) parking lot at the southwest corner of Lincoln Street and Campus Drive. The City has been coordinating closely with NU throughout design.

On January 23, 2017, the City Council approved the first change order to the CDM contract for additional engineering to mitigate the impact of the proposed storage tank construction to existing adjacent University buildings.

On July 10, 2018, the City Council approved the second change order to the CDM contract to account for an expanded electrical room area required to accommodate the installation of a new 400 HP pump that will be installed as part of this project.

Analysis:

During final negotiations with Northwestern University (NU) related to restoration of the site and easement requirements, some additional changes to the design were required. Design changes are listed in the attached letter from CDM dated August 6, 2018, and include:

- Strengthening of the designed structure to allow for additional fill on top of the reservoir required to accommodate NU's proposed restoration plans.
- Revision of proposed site grading to address aesthetic concerns from NU.
- Expanded restoration area to address grading and drainage between the reservoir and existing buildings.
- Revision to access plans for city maintenance.
- Revision to the lighting plan.

While these changes result in an overall improvement to the project, they were initiated late in the design, resulting in the additional cost to incorporate them.

The total change in fees is 1.6% of the total design cost, or less than 0.1% of the total anticipated project cost. A summary of the project funding is as follows:

Item	Amount
Original Contract Amount	
(Awarded by City Council on January 11, 2016)	\$1,174,685.00
Current Contract Amount	\$1,328,730.00
Change Order No. 3	
(Under Consideration)	\$22,040.00
Revised Total Contract Amount	\$1,350,770.00
FY2018 Budget Allocation	\$12,500,000.00

The time extension included in this Change Order is to account for delays external to the engineering contract, and serves to provide continuity to this contract.

Legislative History:

City Council awarded the contract to CDM Smith on January 11, 2016.

City Council authorized Change Order #1 on January 23, 2017.

City Council authorized Change Order #2 on July 10, 2018.

Attachments:

Change Order No. 3

Change Order Proposal from CDM Smith

CITY OF EVANSTON CHANGE ORDER

	Order No. 003							
	Date: September 1,							
	Agreement Date: Ja	nuary 14, 2016						
PROJECT: OWNER:	Treated Water Storage Replacement City of Evanston							
CONTRACTOR:	CDM Smith							
The following chang	es are hereby made to the AGREEMENT :							
Additional engineeri easement agreemer	ng related to design revisions required to meet require nt with Northwestern University. Engineering services or Modification to the Design of the Clearwell 9 Replac	are described in the						
Total change in COI The CONTRACT PF Original COMPLETI Current COMPLETI Total Change in CO	PRICE adjusted by previous CHANGE ORDERS NTRACT PRICE for this CHANGE ORDER 003 RICE including this CHANGE ORDER will be	\$ 1,174,685.00 \$ 1,328,730.00 \$ 22,040.00 \$ 1,350,770.00 May 31, 2018 May 31, 2018 214 December 31, 2018						
Accepted by (Contractor):	CDM Smith	 Date						
Approved by (Owner):	City of Evanston	 						
	only of Evalidion	Dato						



August 6, 2018

Paul Moyano, P.E., PMP Senior Project Manager – Water and Sewer City of Evanston, Public Works Agency Lorraine H. Morton Civic Center 2100 Ridge Avenue Evanston, Illinois 60201

Subject: Treated Water Storage Replacement Project (RFP 15-55) Proposal for

Modification to the Design of the Clearwell 9 Replacement Project

Dear Mr. Moyano:

In response to your request, and for your consideration, CDM Smith is pleased to provide this proposal for services related to modifications to the design of the Clearwell 9 replacement project for the Evanston Water Treatment Plant (WTP).

Scope of Services

CDM Smith understands that the City of Evanston (City) wishes to incorporate changes to the 100% design drawings for this project to accommodate recent requests from Northwestern University (NU) related to the final landscaping, grading, and finishes for the clearwell and associated structures. The proposed modifications to the design drawings include:

Civil:

Revise final site grading to eliminate railings in the areas requested by NU, where feasible. Change from soil fill to lightweight fill material over the clearwell. Eliminate the paved approach drive over the clearwell. Re-model and revise, if feasible, the vehicle access path onto the clearwell. Revise the location of the underdrain manhole and infiltration manhole to accommodate the revised vehicle access path. Model and revise the site drainage to the west of the clearwell. Incorporate information from the as-built survey for the 560 Lincoln dormitory. Revise stormwater drainage calculations for the revised site grading and paving areas. Replace the design for permeable grass pavers with reinforced soil. Revise the turn-around areas at the clearwell access hatch.

Structural:

Revise structural design drawings and details to eliminate railing, where feasible. Incorporate details for seat wall and concrete finishing requested by NU. Review and revise calculations for structural loading due to increased soil height. Investigate options for reducing loading on the new clearwell roof.



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Geotechnical:

Revise underdrain layout drawings to incorporate relocation of underdrain manhole described above.

Electrical:

Revise lighting plan as requested by NU.

Proposed Project Fee

In consideration of the aforementioned proposed scope of services, CDM Smith proposes to perform the defined Tasks for the not to exceed fee of **\$22,040**.

Compensation will be on an hourly basis, in accordance with the attached hourly billing rate schedule, and will include reimbursement for travel, work product reproduction, and express mail. An estimate of labor effort breakdown is included as an attachment.

Please call either Mark or myself directly should you have any questions or request any additional information regarding our proposal revision. We thank you in advance for your consideration.

Very truly yours,

Chris M. Martel, P.E., BCEE, LEED AP

Vice President CDM Smith Inc.

Attachment

Mark C. White, P.E., BCEE

Mark White

Project Manager CDM Smith Inc.

City of Evanston Treated Water Storage Replacement Project - Modifications to the 100% Design Drawings 6-Aug-18 Proposed Project Tasks and Fee

Task	Description								
		PM / Design Lead	Structural Engineers	Site Civil - Terra (WBE)	Geotechnical Engineers	Electrical - AAA (WBE)	Labor Hours	Labor Dollars	Other Direct Costs
3	Design Engineering								
	Modifications to 100% Design	10	53	58	8	16	145	\$22,040	
	Totals Hours	10	53	58	8	16	145		
	Totals Dollars	\$2,349	\$7,394	\$8,410	\$1,488	\$2,400		\$22,040	\$0
	TOTAL ENGINEERING FEE							\$22,040	