

January 12, 2021

Chris Mattingly, P.E.
City of Norman, OK
201 West Gray, Building C
Norman, OK 73069

Subject: Norman Water Treatment Plant Phase II Improvements
DWSRF Project No. P40-1020801-02, Norman Contract No. K-1617-121
Review of potential change order items

Dear Mr. Mattingly:

The purpose of this letter is to review 15 potential change order (PCO) items received. The potential change order proposals are attached to this letter with brief descriptions provided below. The recommended changes are summarized in Table 1 at the end of the letter.

PCO 88 - GAC and acid feed system for OSHG softener pretreatment

The Work generally includes addition of a GAC system for chloramine removal to pretreat the utility water prior to the on-site sodium hypochlorite generators (OSHG) softeners (from PCO 85) and acid feed system for pH adjustment to pretreat the utility water prior to the OSHG softeners. Following a review of the Contractor's proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for addition of the Work. Carollo recommends that the City accept this response to this proposal and provide the \$41,062.29 as an addition to the Contract Price and no change to the Contract Time.

PCO 89 - Filter Effluent Pipe Investigation and Repair

The Work generally covers Filter Effluent (FE) piping repairs, associated work to allow City to inspect connections at new and old FE piping, and prep work for future installation of isolation valve, tee, and access manway. Following a review of the Contractor's proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for addition of the Work. Carollo recommends that the City accept this response to this proposal and provide the \$96,068.85 proposed as an addition to the Contract Price and 28 days added to the Contract Time.

PCO 96 - Lime Building emergency eyewash/shower station

The Work generally includes addition of an emergency eyewash/shower station in the slaker room of the Lime Building to provide safety equipment for plant staff and operators. Following a review of the Contractor's proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for addition of the Work. Carollo recommends that the City accept this proposal and provide the \$3,748.14 proposed as an addition to the Contract Price and no change to the Contract Time.

PCO 97 - Ferric sulfate area grating and chemical piping

The Work generally covers installing a grating platform, guardrail, and handrail in the ferric sulfate area as well as adjusting chemical piping. Following a review of the Contractor's proposal, Carollo Engineers has

determined that the price and time proposed by Enerfab is fair and equitable for addition of the Work. Carollo recommends that the City accept this response to this proposal and provide the \$24,592.48 proposed as an addition to the Contract Price and no change to the Contract Time.

PCO 98 - Credits for asphalt work

The Work generally includes a credit for the removal of the remainder of asphalt work including: the balance of Bit Item 5, asphalt work south of new Maintenance Building, and site wide striping. Following a review of the Contractor's proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for addition of the Work. Carollo recommends that the City accept this response to this proposal and a credit of \$70,568.37 proposed as reduction to the Contract Price and no change to the Contract Time.

PCO 99 - Lime valves and tees for emergency slurry pump

The Work generally includes addition of lime slurry valves and tees for the slakers and emergency pump loop to provide isolation and redundancy for the plant during lime system upgrades. Following a review of the Contractor's proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for addition of the Work. Carollo recommends that the City accept this response to this proposal and provide the \$6,291.53 proposed as an addition to the Contract Price and no change to the Contract Time.

PCO 100 - Filter Building bathroom changes

The Work generally includes replacing the wall-mounted toilets in the women's restroom with tank-type floor toilets in the Filter Building restrooms, to preserve the wall between the bathrooms. This also includes associated plumbing changes in the basement to accommodate the new women's floor toilets. Following a review of the Contractor's proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for addition of the Work. Carollo recommends that the City accept this response to this proposal and provide the \$4,951.28 proposed as an addition to the Contract Price and no change to the Contract Time.

PCO 101 - SCC 2 valve actuator electrical board replacement

The Work generally includes replacement of SCC 2 valve actuator circuit board, due to water damage. The cost is split 50-50 with Enerfab. Following a review of the Contractor's proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for addition of the Work. Carollo recommends that the City accept this response to this proposal and provide the \$2,172.13 proposed as an addition to the Contract Price and no change to the Contract Time.

PCO 102 - Admin Building server room outlet

The Work generally includes adding a 208 V outlet in the Administration Building server room. Following a review of the Contractor's proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for addition of the Work. Carollo recommends that the City accept this response

to this proposal and provide the \$784.16 proposed as an addition to the Contract Price and no change to the Contract Time.

PCO 103 - Closeout paving and curb changes

The Work generally includes closeout paving and curb work including new curb north of Lagoon 1, and surge rock and regrading around UV outfall structure. Following a review of the Contractor's proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for addition of the Work. Carollo recommends that the City accept this response to this proposal and provide the \$12,535.11 proposed as an addition to the Contract Price and 10 days added to the Contract Time.

PCO 104 - Replacement of PCM thin clients with micro thick clients

The Work generally includes switching the PCM thin clients to micro thick clients, connecting the new micro thick clients to the industrial panel touchscreen monitors, and configuring the clients to work with GE Webspace. Following a review of the Contractor's proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for addition of the Work. Carollo recommends that the City accept this response to this proposal and provide the \$13,446.64 proposed as an addition to the Contract Price and 28 days added to the Contract Time.

PCO 105 - Acid system PVDF piping

The Work generally includes fabricated PVDF piping pieces and fusing for the OSHG acid system. Following a review of the Contractor's proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for addition of the Work. Carollo recommends that the City accept this response to this proposal and provide the \$4,325.93 proposed as an addition to the Contract Price and 21 days added to the Contract Time.

PCO 106 - Credit for PCO 71 Work

The Work includes a full credit for the work from PCO 71 that was not completed, including the addition of a drain pipe to drain the trench that houses the SCC1/2 lime slurry supply hosing. Following a review of the Contractor's proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for addition of the Work. Carollo recommends that the City accept this response to this proposal and a credit of \$6,146.81 proposed as reduction to the Contract Price and no change to the Contract Time.

PCO 107.1 - Punch List items Credit No. 1.

The Work reflects the agreed-to credit amount for Punch List items that will not be corrected, per the Settlement Agreement and Mutual Release. Following a review of the Contractor's proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for deduction of the punchlist items from Enerfab's obligations under the Contract Documents. Carollo recommends that the City accept this response to this proposal and a credit of (\$7,112.00) proposed as reduction to the Contract Price and no change to the Contract Time.

PCO 108 - Project days added

The Work reflects the agreed-to project days added to achieve a final completion date of January 26, 2021, per the Settlement Agreement and Mutual Release. Following a review of the Contractor’s proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for addition of the Work. Carollo recommends that the City accept this response to this proposal with no change to the Contract Price and add 277 calendar days to the Contract Time as summarized in the Change Order No. 6.

PCO 109 – Punchlist Items Credit No. 2

The Work reflects the agreed-to credit amount for Punch List items that will not be corrected, per the Settlement Agreement and Mutual Release. Following a review of the Contractor’s proposal, Carollo Engineers has determined that the price and time proposed by Enerfab is fair and equitable for deduction of the punchlist items from Enerfab’s obligations under the Contract Documents. Carollo recommends that the City accept this response to this proposal and a credit of (\$1,600.00) proposed as reduction to the Contract Price and no change to the Contract Time

Change Order 6 Summary

Table 1 presents a summary of the potential change order proposals presented and discussed here. Carollo recommends that the City process a change order in the amount of \$124,533.36 with 364 days added to the contract time to revise the final Completion date to January 26, 2021.

Table 1: Change Order 6 Summary

Item Description	Change in Contract Amount	Change in Contract Time (Calendar Days)
PCO 88 - Acid feed system for OSHG softener pretreatment	\$41,062.29	
PCO 89 - FE Pipe Investigation and Repair	\$96,068.85	28
PCO 96 - Lime Building emergency eyewash/shower station	\$3,748.14	
PCO 97 - FES area grating	\$24,592.48	
PCO 98 - Credits for asphalt work	(\$70,568.37)	
PCO 99 - Lime valves and tees for emergency slurry pump	\$6,291.53	
PCO 100 - Filter Building bathroom changes	\$4,951.28	
PCO 101 - SCC 2 valve actuator electrical board replacement	\$2,172.13	
PCO 102 - Admin Building server room outlet	\$784.16	

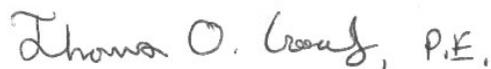
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Item Description	Change in Contract Amount	Change in Contract Time (Calendar Days)
PCO 103 - Closeout paving and curb changes	\$12,535.11	10
PCO 104 - Replacement of PCM thin clients with micro thick clients	\$13,446.64	28
PCO 105 - Acid system PVDF piping	\$4,325.93	21
PCO 106 - Credit for PCO 71 Work	(\$6,164.81)	
PCO 107 - Punch List items credit no. 1	(\$7,112.00)	
PCO 108 - Project days added		277
PCO 109 - Punch List items credit no. 2	(\$1,600.00)	
Total recommended Change Order 6	\$124,533.36	364
Current contract value and time	\$30,610,963.06	974
Revised contract value and time	\$30,735,496.42	1338

Sincerely,

CAROLLO ENGINEERS, INC.



Thomas O. Crowley, PE
Vice President

Enclosures: PCO documentation

cc: Amber Wooten, Carollo