



Gupta & Associates, Inc.

consulting engineers

TBPE Reg. #F-2593
13717 Neutron Road
Dallas, Texas 75244
Tel: (972) 490-7661

18 November 2022

City of Pflugerville, Texas
15500 Sun Light Near Way, #B
Pflugerville, Texas 78660
Attn: Brandon Pritchett, P.E.

Re: Pflugerville Surface Water Treatment Plant Standby Generator
Change Order #02 Recommendation

Dear Mr. Pritchett:

The Surface Water Treatment Plant Generator Project is experiencing equipment delays that require adjusting the location of the generator to allow for existing electrical infrastructure to remain in place now in order to allow a more streamlined installation and changeover of power later. Additionally, during construction, the General Contractor, McDonald Municipal and Industrial (MM&I) identified a 12" waterline that is currently in use. This waterline is shown differently in record drawings and was not identified in the SUE work. MM&I was requested to evaluate adjusting the generator location, the relocation of the 12" waterline, and miscellaneous other modifications identified.

A few other observations regarding scheduling:

1. The generator and switchgear to be installed permanently at the Surface Water Treatment Plant (SWTP) will not be delivered until February of 2023.
2. The pad-mounted transformers will not be delivered until November of 2023.
3. The switchgear and generator can be tested and commissioned prior to the delivery of the pad-mounted transformers in April 2023, allowing for the rental generators to be returned at that time.
4. The rental transformer will need to be onsite until December 2023.
5. The 12" waterline relocation will follow the original design intent from the original plant project. This work is to be done by MM&I in 2023.

MM&I was requested to provide a proposed contract modification for this work. We worked with them to get sufficient documentation and to economize the costs where possible (see attached). Their proposal is in the amount of \$219,737.07 and an additional 441 days to provide these services as a change to the existing construction contract.

It is our recommendation to approve the attached change order in the amount of \$204,771.81 with a contract extension of 441 days.

If there are any questions, or if you require additional information, please do not hesitate to contact us. We look forward to continuing to work with you on this project.

Regards,

George Luke, P.E.
Gupta & Associates, Inc.

cc: V. K. Gupta, P.E.
Andrew Reed, P.E.
Mazhar Hajizadeh

PROPOSAL

DATE: 11/18/2022
TO: City of Pflugerville
ATTN: Brandon Pritchett
EMAIL: brandonp@pflugervilletx.gov
SUBJECT PROJECT: City of Pflugerville SWTP Standby Generator - Change Order #2



McDonald Municipal & Industrial
A Division of C. F. McDonald Electric, Inc.

WE PROPOSE TO FURNISH THE LABOR AND MATERIALS FOR THE WORK AS FOLLOWS

Provide the following:

- 1 Scope of work as described on the following page.
- 2 Change to the contract completion date as noted on the following page.

Exclusions:

- 1 Any items not identified in the scope of work.

	Price
Field Order Items 1 & 2	\$ 43,387.58
Field Order Item 3	\$ (3,507.44)
Field Order Item 4	\$ 18,662.26
RFI #15, 2500 kVA	\$ 15,967.15
RFI #15, 1000 kVA	\$ 12,410.57
Relocate Water Line	\$ 121,213.50
Subtotal Price:	\$ 208,133.62
General Conditions (3%):	\$ 6,244.01
Bond (2.5%)	\$ 5,359.44
Total Price:	\$ 219,737.07

This proposal may be withdrawn by us if not accepted within 30 days.

Approved by: _____ Date: _____

Should you have any further questions or comments, please do not hesitate to contact me at anytime.

Best Regards
C.F. McDonald Electric, Inc.

Wayne Berkenmeier
Cell: 713-202-4887
Office: 713-921-1368
wayneb@mcdonaldinc.com
www.mcdonaldinc.com

SCOPE OF WORK

Field Order #001		
1&2	Rotate generator 90 degrees and move to the North: Additional excavation for duct banks, install spacers, conduit, rebar, concrete and backfill.	
	Extend duct bank 2 approximately 30' to new generator pad location. 3-4" conduits, 2 with 3/C-350kcm 5kv & 350kcm (600V)G.	\$ 17,082.04
	Extend duct bank 3 approximately 25' to new generator pad location. 8-2" conduits; 6 with generator control cables / shore power; 2 spare	\$ 12,410.49
	Extend duct bank 14 approximately 30' to new generator pad location. 6-4" conduits, 4 with 3#350kcm, #350kcm G.	\$ 22,756.34
	Reduce duct bank 15 to (2)-3" from load bank connection box pad to aux. pad. Eliminate 2-4" conduits from load bank connection box to aux pad, each with 3/C-350kcm 5kv & 350kcm (600V)G.	\$ (8,861.29)
3	Aux pad reduce to 10 x 7.	\$ (3,507.44)
	No foundations changes are being included as the pier steel was already onsite and tied as of the Field Order issue date.	\$ -
4	Load bank connection box pad 4' x 4'.	\$ 18,662.26
RFI #15		
2500	In lieu of transformer pad detail E23/00E05, install an 8'x9' mat foundation with dimensions and reinforcing per the Oncor detail, sheet 27 without piers. Over-excavate and remove 6' depth of existing expansive fat clay soil. Extend the lateral limits of the excavation 2' beyond the perimeter of the foundation. Backfill and compact per RFI #15 response. Provide a 12" thick clay cap around the perimeter of the foundation, compacted per RFI #15 response.	\$ 15,967.15
1000	In lieu of transformer pad detail E23/00E05, install a 6'x8.5' mat foundation with dimensions and reinforcing per the Oncor detail, sheet 27 without piers. Over-excavate and remove 6' depth of existing expansive fat clay soil. Extend the lateral limits of the excavation 2' beyond the perimeter of the foundation. Backfill and compact per RFI #15 response. Provide a 12" thick clay cap around the perimeter of the foundation compacted per RFI #15 response.	\$ 12,410.57
Relocate Water Line		
1	Relocate the existing 12", 100PSI water line running below the new electrical building. Install new 12" PVC line 285 linear feet at 6' depth with 2 - 12" cut in bends and 1 - 12" bend. Additional depth or offsets if required due to conflicts with existing utilities are not included and will incur additional charges.	\$ 121,213.50

Contract Completion Date

1	Due to ongoing supply chain issues, the project generator, switchgear and pad mount transformers have been significantly delayed (please see the attached supplier letters). The generator and switchgear was customer coordinated for a scheduled delivery of June 2022 prior to award of our contract and Notice to Proceed. That equipemnt is now scheduled to ship in December 2022. The pad mount transformers lead time at bid was 40 weeks and has shifted to 80+ weeks. These delays are an unfortunate reality of today's global supply chain. With a now anticipated ship date of the transformers of November 2023 and as there is additional work which can only be completed after this equipment has been installed, we request that the substantial completion date be extended to December 2023.	\$ -
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Request for Information (RFI)

Project Name: City of Pflugerville Surface Water Treatment Plant Standby Generator	Contractor: McDonald Electric
RFI Number: 15	Engineering Firm: Gupta
Prepared By: Brad Hibbetts	Attn: Mazhar Hajizadeh
Date Response Needed: 05/13/2022	Plan Sheet: 00E05

Subject: Transformer pad

Details: The pad detail on sheet 00E05 note 2 refers to structural drawings for a transformer pad detail. We do not see a transformer pad detail in the structural drawings. We have included a ~24" slab on grade pad as depicted in the electrical detail with reinforcing similar to the generator pad shown on 15S01. Please advise if this is sufficient or if there are additional requirements.

05/11/2022

Brad Hibbetts

Date

Signature

Response:

~~USE A MAT FOUNDATION WITH 24" THICKNESS. REINFORCE WITH #6 TOP BARS WITH STANDARD HOOKS @ 12"C/C, EW, AND #6 BOTTOM BARS @ 12"C/C.~~

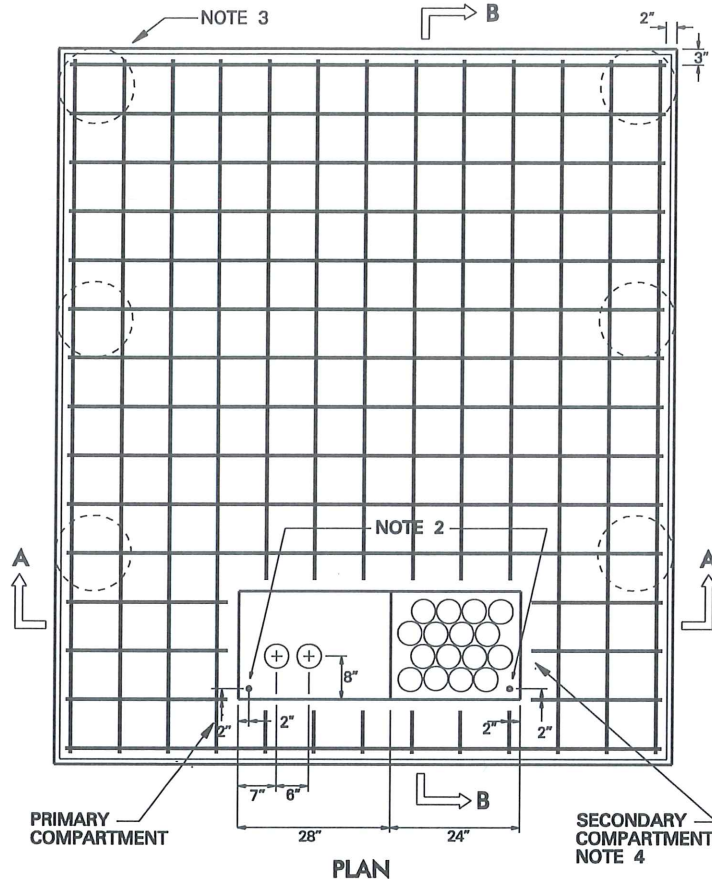
OVER-EXCAVATE AND REMOVE A MINIMUM 6'-0" DEPTH OF EXISTING EXPANSIVE FAT CLAY SOIL. EXTEND THE LATERAL LIMITS OF THE EXCAVATION 2'-0" BEYOND THE PERIMETER OF THE FOUNDATION. BACKFILL WITH CRUSHED LIMESTONE BASE MATERIAL (TXDOT STD SPEC ITEM 247, GRADE 1-2, TYPE A) OR NON-EXPANSIVE SELECT FILL (SOILS CLASSIFIED AS SP, SM, SC, CL, OR DUAL CLASSIFICATIONS THEREOF, LIQUID LIMIT NOT GREATER THAN 35, PLASTICITY INDEX BETWEEN 7 AND 15, FREE OF ORGANIC MATERIALS). PLACE BACKFILL IN 8" LOOSE LIFTS, COMPACT TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY (ASTM D698), AT A MOISTURE CONTENT WITHIN -1% TO +2% OF THE OPTIMUM MOISTURE. PROVIDE AN 12" THICK COMPACTED CLAY CAP AROUND THE PERIMETER OF THE FOUNDATION OVER THE BACKFILL. EXTEND THE CLAY CAP 2'-0" HORIZONTALLY BEYOND THE LIMITS OF THE BACKFILL. THE CLAY CAP SHALL BE CLAYS AND SANDY CLAYS, LIQUID LIMIT NOT LESS THAN 30, PLASTICITY INDEX NOT LESS THAN 15, MORE THAN 50% PASSING THE NO. 200 SIEVE, FREE OF ORGANIC MATERIALS. PLACE CLAY CAP IN 8" LOOSE LIFTS, COMPACT TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY (ASTM D698), AT A MOISTURE CONTENT WITHIN +0% TO +5% OF THE OPTIMUM MOISTURE.

Response Prepared By: Michael Robertson, P.E. 06/01/2022

Reviewed by City of Pflugerville On:

Response Returned to Contractor On:

Distribution: Contractor: _____ Engineer: _____ City PM: _____ Inspector: _____ File: _____



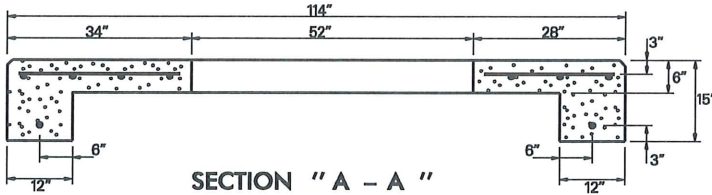
REINFORCEMENT SPACING: 9" CENTERS

REINFORCING SCHEDULE PAD WITH BEAMS (NOTES 2 & 3)		
NUMBER OF #3 BARS	LENGTH	WEIGHT (LBS)
9	128"	36.1
14	110"	48.2
6	96"	18.0
6	8"	1.5
3	30"	2.8
3	24"	2.2

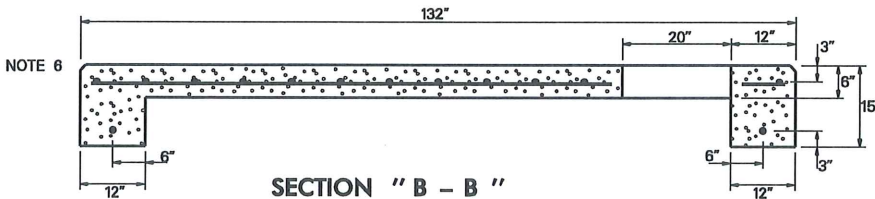
2.8 CU YARDS CONCRETE
TOTAL WEIGHT OF PAD 11,460 LBS

REINFORCING SCHEDULE PAD WITHOUT BEAMS		
NUMBER OF #3 BARS	LENGTH	WEIGHT (LBS)
7	128"	28.1
12	110"	41.4
6	96"	18.0
6	8"	1.5
3	30"	2.8
3	24"	2.2

1.8 CU YARDS CONCRETE
TOTAL WEIGHT OF PAD 7,300 LBS



SECTION "A - A"



SECTION "B - B"

NOTES:

1. SEE DETAIL SHEET 21 FOR GENERAL NOTES.
2. CONTRACTOR TO OBTAIN AND INSTALL (2) 5/8" X 8' GROUND RODS AS SHOWN. INSTALLATION DEPTH SHALL BE 7' - 6".
3. PIERS ARE REQUIRED ON ALL THREE PHASE TRANSFORMER PADS UNLESS WAIVED BY THE COMPANY INSPECTOR. REFERENCE DETAIL SHEET 22 FOR PIER DETAILS.
4. BEGIN SECONDARY CONDUITS AT RIGHT EDGE OF PAD WINDOW. ADD CONDUITS AS REQUIRED RIGHT TO LEFT. DO NOT CROSS DIVIDING LINE BETWEEN PRIMARY AND SECONDARY COMPARTMENTS.
5. GROUT WINDOW AS PER DETAIL SHEET 15.



**TRANSFORMER PAD
THREE PHASE
1500 - 2500 KVA RADIAL**

DDS-4 UG DETAIL SHEET 27 OF 57



PRICING SHEET

JOB Pflugerville SWTP Generator - RFI #15

WORK Revised 2500kVA Transformer Pad

ESTIMATE NO. _____

SHEET NO. 1

OF 2 **SHEETS**

DATE 9/8/2022

ESTIMATED BY: _____ **PRICED BY** _____ **EXTENDED BY** _____ **CHECKED BY** _____

	MATERIAL	QUANTITY	MATERIAL PRICE	PER	MATERIAL EXTENSION	EQUIPMENT RATE	PER	EQUIPMENT EXTENSION	LABOR UNIT	PER	LABOR EXTENSION	LABOR Rate	LABOR Cost	BURDEN 55%
1	Excavation	24.44	0.00	E	0.00	65.36	E	1119.00	0.70	E	17.11	35.00	598.85	329.37
2	Disposal	29.54	35.00	E	1034.00	32.90	E	195.00	0.20	E	5.91	27.00	159.57	87.76
3	Base / Gravel	20.37	80.00	E	1630.00	32.90	E	269.00	0.40	E	8.15	27.00	220.05	121.03
4	Subgrade Prep	146.67	0.00	E	0.00	28.72	E	3792.00	0.90	E	132.00	27.00	3564.00	1960.20
5	Reinforcing	-0.34	1500.00	E	-510.00	0.00	E	0.00	60.00	E	-20.40	27.00	-550.80	-302.94
6	Concrete	-3.08	170.00	E	-524.00	0.00	E	0.00	0.90	E	-2.77	27.00	-74.79	-41.13
7	Backfill & Compact	4.07	0.00	E	0.00	94.28	E	384.00	1.00	E	4.07	35.00	142.45	78.35
8	Concrete Form / Finish (no change)	0.00	3.00	E	0.00				0.50	E	0.00	27.00	0.00	0.00
9														
10														
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22														
23														
	Subtotal				1,630.00			5,759.00			144.07		4059.33	2232.64
	Overhead and Profit		25%		407.50	15%		863.85				25%	1014.83	0.00
	Subtotal				2037.50			6622.85					5074.16	2232.64
	Tax		0.00%		0.00	0.00%		0.00				0.00%	0.00	0.00
	Subtotal				2037.50			6622.85					5074.16	2232.64
	Total												\$ 15,967.15	



512.789.8636

www.titusworkstexas.com

CHANGE PROPOSAL No. 3 rev. 1
11/17/2022

Project: SWTP
Pflugerville, Texas

Scope of Proposed Work: as described below:

Water We propose to excavate and install the following major components: 2 each 12” cut-in bend, 285 lf 12” pvc, 1 each 12” bend. Includes sawcut and repair of existing asphalt pavement. **Revision: C9000 PVC, DR21 (DR25 not readily available); All pipe joints will be mechanically restrained for the same pressure rating.**

Revised Total: \$106,390.00

Qualifications:
Assume scale is 1”=50’

ACCEPTED: the above prices and specifications are satisfactory and are hereby accepted. All work to be performed under the same terms and conditions as specified in original contract (unless otherwise stated herein).

Authorized
Signature: _____ Date of Acceptance: _____



McDonald Electric

5044 Timber Creek Dr
Houston, TX 77017

8/9/2022

RE: City of Pflugerville Surface Water Treatment Plant - O-85207 Delay Letter

Dear Brad,

Cummins along with other industry and markets continues to experience global supply chain disruptions, impacting many areas of our business. We have seen over the past year, a disruptive impact on our production schedule due to increased demands, vendor part shortages, and increased lead times. Significant supply disruption initially began in late 2020 and we have seen sustained impacts to our supply chain over the past year.

Throughout 2021 and the first half of 2022, we worked to make improvements and mitigate the effects from these global supply challenges, making progress in many areas such as:

- Increasing parts supply to our aftermarket Parts Distribution Centers (PDCs) to meet critical aftermarket needs and managing increased demand on critical components.
- Utilizing our remanufacturing expertise to supplement the supply of new components impacted by supply chain constraints to meet aftermarket customer requirements.
- Decreasing our total number of backorders and improving the status of many back-ordered product groups such as overhaul kits, fuel systems, and cylinder heads, allowing us to fill more orders for customers.
- Improving the accuracy of and how we use the output of our demand planning process to improve forecasting and ordering across our supply base.

As we move into the second half of the year, we are facing new unexpected challenges in many areas of our supply chain, impacting our ability to rebound quickly. Current disruptions to our

Cummins Inc.
4855 Mountain Creek Pkwy.
Dallas, TX 75236
wemimo.agbesola@cummins.com

supply chain and operations are primarily driven by:

- Volatile demand, putting continued pressure on our already constrained supply base.
- The surge of the COVID-19 omicron variant, causing absenteeism to ebb and flow across all our global regions and creating new lockdowns in China that have impacted both production and logistics. Our direct operations in China have been able to continue operating through the most recent shutdown.
- Global transportation delays and logistics challenges reaching unprecedented levels, primarily driven by the lockdowns in China, increased transportation costs, and the ongoing conflict in Russia and Ukraine.

We are working to address these ongoing challenges and take action to mitigate the additional impact, continuing our focus on:

- Addressing staffing and absenteeism challenges while prioritizing the safety of both our colleagues and customers.
- Addressing operational challenges and global transportation and logistics delays.
- Supporting our suppliers in increasing their capacity and efficiency and solving ongoing issues with raw material and chip shortages.
- Prioritizing engine down orders to support critical service events.

The generator is scheduled to ship from our factory next week to our tank and enclosure vendor ACS. The current ship date from ACS is the week of 10/7.

The switchgear is currently scheduled to ship on December 19, 2022.

Let me know if you have any questions.



Sincerely,

A handwritten signature in black ink, appearing to read 'Wemmy Agbesola'.

Wemmy Agbesola

Project Manager

Cummins Sales and Service
4855 Mountain Creek Parkway
Dallas, TX 75236
972-839-4987

9/29/2022

To: McDonald Electric

Ref: Pflugerville SWTP Standby Generator Transformer Lead Time

Great Service, Great People
Since 1968!

Dear Sirs,

I wanted to make sure you were aware of the issues surrounding your above reference project in relation to the global supply chain obstacles we are facing.

In an attempt to satisfy the construction schedule for this project I have searched for alternatives with faster lead times. I was unsuccessful due to many different variables.

When this project bid back in 2021, the factory was at a 40+ week lead time. By time of NTP letter to contractor and approved submittal and release they were at 60+ weeks lead time. Currently the estimated ship date is 80+ weeks which translates to November of 2023 for this project. We remain steadfast in our expediting attempts with the factory. We will advise if this changes as we get more details.

Please feel free to reach out if you have any questions or concerns.

Thank You,

Steve Terry

713-417-4715