

November 12, 2018
BOARD OF COUNTY COMMISSIONERS
ORANGE COUNTY, FLORIDA
Y19-709-CH / ADDENDUM # 1
WESTERN REGIONAL WATER SUPPLY FACILITY IMPROVEMENTS PHASE 3B

Bid Opening Date: November 20, 2018

This addendum is hereby incorporated into the bid documents of the project referenced above. The following items are clarifications, corrections, additions, deletions and/or revisions to and shall take precedence over the original documents. Underlining indicates additions, deletions are indicated by ~~strikethrough~~.

A. The Bid Opening Date shall remain as the following:

November 20, 2018 at 2:00 P.M.

B. CLARIFICATIONS

1. **Q:** Reference 13300 2.05 E.6; This section requires the new PLC for Well 11 to match the existing PLCs. However the existing Quantum 140CPU11303 CPU is obsolete and has been for some time. The replacement for this CPU (140CPU43412U) will also be obsolete at year's end. Please provide an acceptable, compatible alternate PLC platform for Well 11.

A: Provide as per Spec. Use a 140CPU11303 CPU with 984 Ladder Logic and Nxt programming platform.

2. **Q:** Attachment C-2 required for good faith efforts for this project, is required to be filled out with all subcontractor and supplier to be used on the project along with the value of their part of the project. On hard bid projects of this nature, Prime Contractors are receiving bids as well as updated pricing from subcontractors and suppliers up and until the final minutes before the designated bid time. This makes complying with this document to the extent that is required a difficult if not impossible task. We would request that this document be allowed to be submitted in the same time frame as the Letters of Intent considering this is essentially this same information.

A: The completed attachment C-2 must be included with your bid on the official bid opening date. Please refer to IFB Y19-709-CH; page C-4:

MINORITY/WOMEN OWNED BUSINESS ENTERPRISES:

a. To provide for the participation of certified minority and women owned businesses (M/WBE's) in the County's procurement of construction services, Bidders submitting bids to the County are urged to comply with M/WBE subcontracting goals established by the County Minority/Women Business Enterprise Ordinance, No. 94-02 and amended by Ordinance No.2009-21. The overall goal for all bids (inclusive of all additive and deductive alternates) is 25% participation of the contract value for this contract for M/WBE subcontractors and suppliers. Upon Contract award the Contractor must

meet the M/WBE expenditure required by the Contract. Each M/WBE utilized to meet the project goal must be listed as a subcontractor on Attachment C-2. If there are any pre-qualifications required by the firm, then this must be provided to the M/WBE when they are solicited for interest in the bid. This required information must be completed prior to bid submittal.

3. Q: Question deadline for the project is 10 days prior to bid. Is that work days or calendar days? If the bid date remains November 20th, what is the actual questions deadline date?

A: 10 Calendar days. Last day for questions is 11/9/18.

4. Q: Where is the funding for this project coming from?

A: Funding is from the Orange County Utilities budget; no external grant funding is being sought for this project.

5. Q: Specification Section 01010, Part 1.03, Section C, states that the raw water supply line modification require a bypass of the existing static mixer. The location of the static mixer does not seem to be located on the drawings. Please provide location of the static mixer, pick-up and discharge point of the bypass, flow rates of line to be bypassed, and any other specifications and requirements for bypass systems?

A: The installation of a temporary raw water bypass line is not required for the modifications. Isolation Valve 1 & 2 (existing) shall be closed to bypass the static mixer and divert flow to the existing ground storage tanks. A temporary sodium hypochlorite feed line shall be provided from the sodium hypochlorite building to the north chemical vault as specified. All work shall be coordinated as specified. See attached sketch (Figure 1) indicating the locations of the static mixer, Isolation Valve 1 & 2, the sodium hypochlorite building, and the north chemical vault.

6. Q: Please provide existing site pipe demolition drawings for existing water main line.

A: Existing raw water piping details have been included. See revisions to Drawing C302 below in Part C of this addendum.

7. Q: Can the complete minority vendor listing be provided in Excel format.

A: Yes. The Orange County Business Development office can email the MWBE vendor listing in Excel format upon request from the vendor.

8. Q: At the pre-bid meeting, it was noted that there were gopher tortoise on site. Will an additional allowance for the relocation of any gopher tortoise be added to this proposal?
- A: **No allowance will be included for this bid. Gopher tortoise survey and relocation will be completed by the County prior to construction activities.**
9. Q: Page C-8 paragraph g indicates the letters of intent are due by 5 PM the second business day after bid opening. If this bids on 11-20 as stated, will this second business day fall on the Friday after Thanksgiving or the following Monday?
- A: **If bid opening remains November 20, 2018, the second business day will be Monday November 26, 2018.**
10. Q: Please provide civil detail of cut in section of 48" WM as shown on C302.
- A: **The indicated section of the existing 48" DIP is to be cut and removed for the installation of the new 48" BFV (MJ) and Restrained Coupling. Revised C302 shows this detail.**
11. Q: Above Grade Air Release Valve as detailed on 2/C504 does not provide information as to what size of piping and valve is required. Please provide information as to size of AVR and piping.
- A: **Both ARV and piping shall be 2". See revision to Drawing C504 included in Addendum #1.**
12. Q: Please identify which bedding and trenching detail shown on C503 is to be used with each piping listed on the piping schedule.
- A: **Bedding and Trenching – Type B detail is to be followed for typical pipe installation. Bedding and Trenching – Type A detail is to be followed if unsuitable materials are encountered.**
13. Q: Detail G on S501 appears to show a 4" CMU Block wall and a footing 4" wide on either side of that. Considering the CMU wall for the Pump building is 8" is the width of the footing on either side of the wall still to be 4"?
- A: **The dimensions shown for the footer width are incorrect. The correct dimensions for the footer width is 2'0". This includes 8" on either side of the 8" block. See revision to Drawing S501 included in Addendum #1.**
14. Q: Will the County allow well pumps from National Pump Company as an "Equal" to the specified names listed in Table 11213 on page 11213-17 of the specification? National Pump has a number of pumps throughout the Central Florida, both in operation as deep-well pumps and short-set wet-well and canned booster pumps. Their factory is ISO 9001 certified and their

pumps are NSF-61 certified. Attached are the relevant certificates, as well as a sample pump selection for this application.

A: **Contractors shall bid the project as specified. Procedures for substitutions are covered in Part C of the bid documents.**

15. Q: Will the County allow the minimum efficiency of the well pumps at primary flow & TDH to be 79%, as noted in Table 11213 of page 11213-17 of the specification?

A: **Contractors shall bid the project as specified. Procedures for substitutions are covered in Part C of the bid documents.**

16. Q: Will the County allow the minimum shutoff head of the well pumps to be 209 ft, as noted in Table 11213 of page 11213-17 of the specification?

A: **Contractors shall bid the project as specified. Procedures for substitutions are covered in Part C of the bid documents.**

17. Q: In the place of packing, listed in specification section 11213-Part 2.02.J, will the County allow the pumps to be supplied with cartridge-style mechanical seals, Flowserve ISC2 (or equal) with Silicon Carbide vs Carbon faces, Viton Elastomers, and 316SS metals? It is our experience that in well pump applications, these seals have long usable lives (7-10 years between seal related failures) and therefore have a lower life-cycle cost than conventional packing.

A: **Contractors shall bid the project as specified. Procedures for substitutions are covered in Part C of the bid documents.**

18. Q: Can the flow be stopped for the tie in of the 48" and 54" lines on the new GST?

A: **See response to Question No. 5 in Addendum #1.**

19. Q: If the flow can be stopped will these lines need to be BAC'TD before returning to service?

A: **Refer to answer to Question No. 5 above. The existing raw water piping that is being modified shall be disinfected back to the isolation valves. Disinfection shall be performed in accordance with Specification Section 15041.**

20. Q: Can the flow be stopped on the 16" line that will tie into the new well?

A: **Yes, there is an existing valve that can be closed to isolate the flow. All work shall be coordinated as specified.**

21. Q: Page V101 shows a 48" RCP mitered end section at inv. 111.8, is this an existing feature or will there be work to be done?
- A: **The 48" MES shown on V101 is existing.**
22. Q: We request Flowserve be added to the specifications in section 11213.
- A: **Contractors shall bid the project as specified. Procedures for substitutions are covered in Part C of the bid documents.**
23. Q. Specification 13205 paragraph 3.03A states to coat the interior walls and dome of the tank only per 09900. Specification 09900 paragraph 2.02 B states to coat the interior floor, wall, and dome of the tank. Are we to coat the interior floor?
- A: **Interior floor of the GST is not required to be coated. Interior walls, including CMU baffle wall and interior of the dome shall be coated. Exterior of the GST shall be coated. See revisions to Section 13205 and 09900 in Paragraph C of this addendum.**
24. Q. Page 13300-18, part 1, subsection 2.05, E6, states the minimum PLC system to have 8MB of RAM memory.
- Drawing I-0003 control panel BOM references Modicon 140CPU11303 which has 386KB memory and has been discontinued.
- The closest matching PLC processor able to meet the 8MB memory requirement is the Modicon Quantum PLC 140CPU65860 which has 11MB and retails for approximately \$23k. I'd like to propose the Modicon Quantum 140CPU31110 (retails for approximately \$8k) as an acceptable alternative. Please advise.
- A. **See response to Question No. 1 in Addendum #1 for replacement CPU model number.**
25. Q. What is the size of the ARV on the 54" line on page C-303?
- A. **See response to Question No. 11 in Addendum #1.**

C. Specifications

1. **Section 09900, delete 2.02 B., and replace with revised 2.02.B. as follows:**

B. Class 2 Exposures - Exposed Concrete, Immersion, Potable

1. Class 2 exposures shall consist of all cast-in-place reinforced concrete and prestressed concrete that is subject to continuous or intermittent immersion in potable water. Coat the entire concrete interior including floors (excluding interior floors of ground storage

tanks), ceilings and walls (entire wall height). Coating system shall be NSF approved. Structures to be coated include the following:

a. Interior concrete surfaces of the proposed ground storage tank.

b. CMU baffle wall in the proposed ground storage tank.

2. Surface Preparation: As specified in Paragraph 3.02 herein and in addition to the following:

a. Abrasive blast cleaning to remove laitance and roughen the entire surface equivalent to the surface of No. 80 grit sandpaper.

b. Concrete surfaces shall be patched to produce a consistent, void free surface, eliminating all air pockets, pinholes, bug holes, tie holes, form fins and burrs, honeycombs and cracks. Patching compound shall be a sand/portland cement mixture with a liquid, acrylic-polymer bonding additive equal to Master Builders Acryl-Set Liquid Polymer.

c. After surface patching remove remaining laitance or other debris by high pressure water blasting.

3. Class 2 Coating System.

a. Coating System for interior surfaces of the ground storage tank are specified in Section 13205.

NOTE: MAXIMUM ELAPSED TIME BETWEEN COATS, AS STATED BY THE COATING MANUFACTURER, SHALL NOT BE EXCEEDED.

2. Section 09900, 2.02 D.1., modify as shown below:

D. Class 4 Exposures - Concrete and Masonry, Exterior, Non-Immersion

1. Class 4 exposures consist of exposed exterior concrete and masonry surfaces of new buildings and structures subjected to normal exterior elements and not subjected to water immersion. Class 4 exposures shall include the following:

a. Exterior, aboveground concrete surfaces of new structures ~~including new ground storage tank and new well houses,~~ other than decorative CMU. Exterior surfaces of the ground storage tank are specified in Section 13205.

3. Section 13205, delete 3.03, and replace with revised 3.03 as follows:

3.03 PAINTING

A. All piping, supports, and other ferrous metal surfaces shall be coated in accordance with applicable requirements of Section 09900: Painting.

B. Ground storage tank interior

1. Walls and CMU Baffle Wall:

a. Prime coat: Prime coat: one (1) coat Tnemec Series 20HS Pota-Pox polyamide epoxy at 6.0 mils dft per coat or equal by approved manufacturer listed in Section 09900.

b. Finish coat: One (1) coat Tnemec Series 22 Epoxoline modified polyamide epoxy at 20.0 mils dft per coat or equal by approved manufacturer listed in Section 09900.

2. Dome (underside): One (1) coat 218-Mortar Clad (Surfacer) 1/16" dft or equal by approved manufacturer listed in Section 09900.

C. Ground storage tank exterior:

1. Walls: Two (2) coats Tnemec Series 156 Enviro-Crete modified waterborne acrylate at 6.0 mils dft per coat or equal by approved manufacturer listed in Section 09900.

2. Dome:

a. Prime: One (1) coat Tnemec Series 151 Elastogrip at 0.7-1.5 mils dft or equal by approved manufacturer listed in Section 09900.

b. Finish: Two (2) coats 158 Bio-Lastic at 7.5 mils dft per coat or equal by approved manufacturer listed in Section 09900.

D. Drawings

- 1. Drawing Sheet C302, Replace Drawing Sheet C302 Utility Plan with the attached Drawing Sheet C302 Utility Plan included in Addendum #1.**

2. Drawing Sheet C504, Detail 2, ARV callout, revised as described below:

2" Air Release Valve

3. Drawing Sheet S501, Detail G, wall footing F1, footer width dimensions, modify as described below:

Delete the three (3) 4" dimensions and replace with 8". Delete the 1'0" overall footer width dimension and replace with 2'0".

- E. All other terms, conditions, and specifications of the IFB remain unchanged.
- F. The Bidder shall acknowledge receipt of this addendum by completing the applicable section in the solicitation or by completion of the acknowledgement information on the addendum. Either form of acknowledgement must be completed and returned not later than the date and time for receipt of the proposal.

Receipt acknowledged by:

Authorized Signature

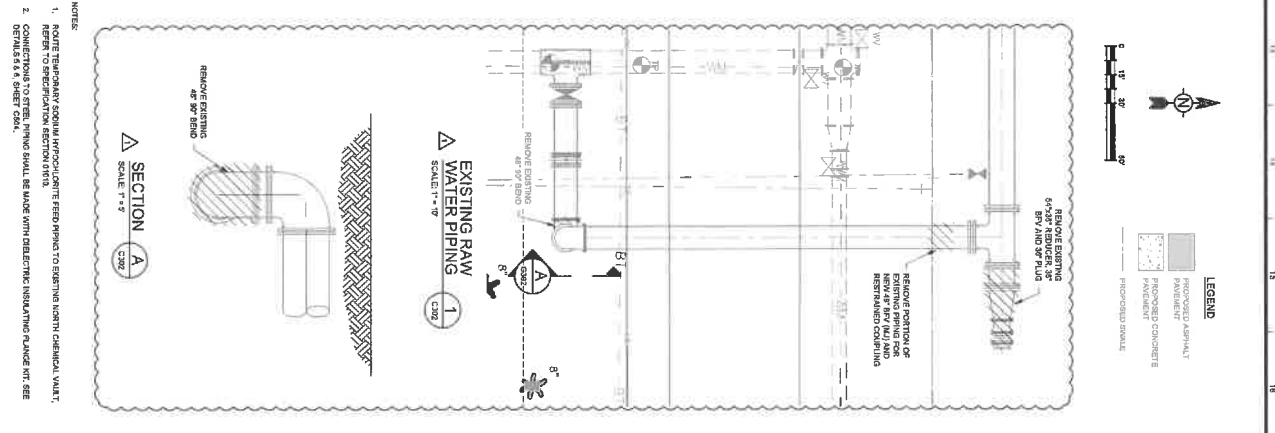
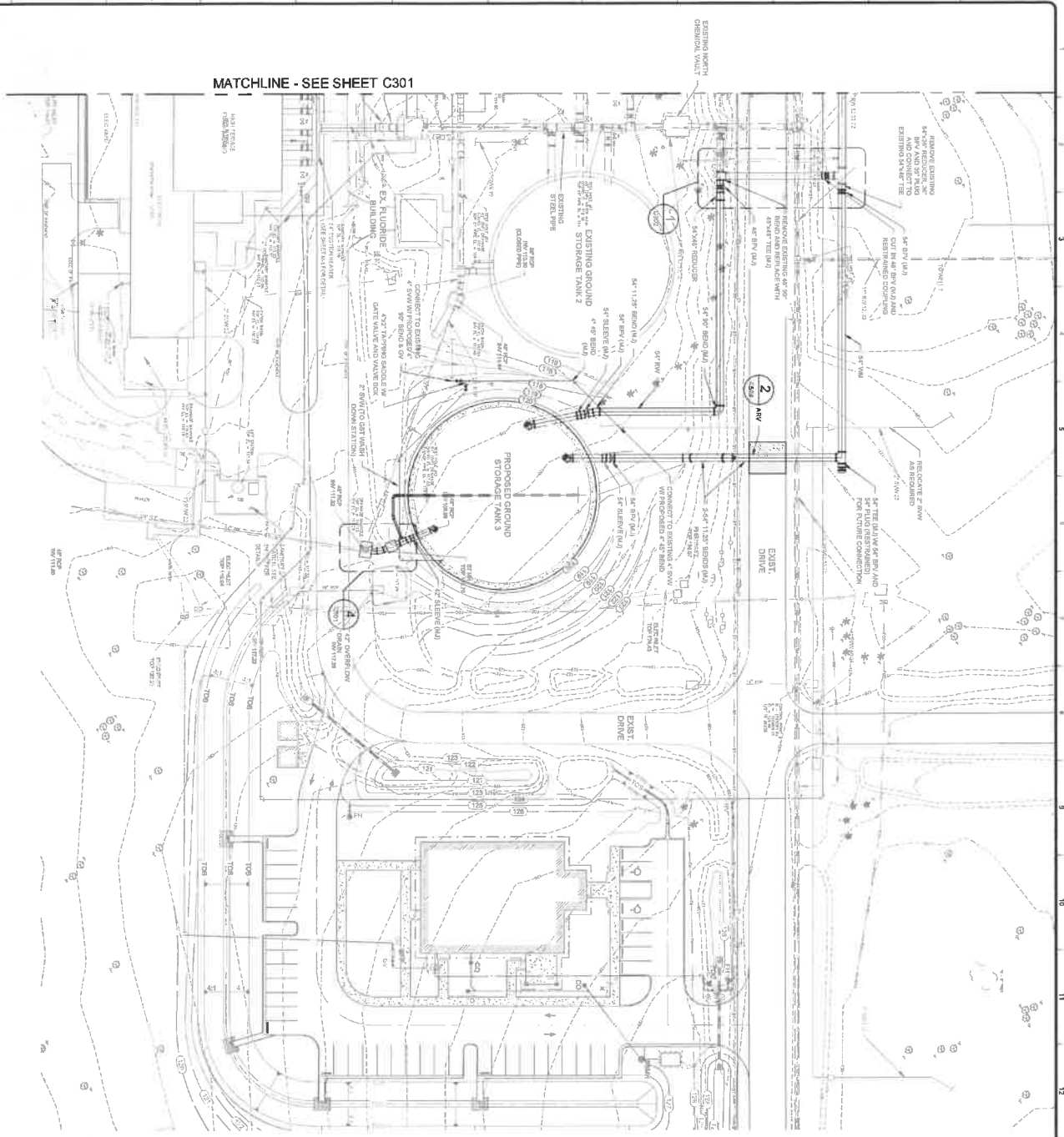
Date Signed

Title

Name of Firm

Y19-709-CH:
Addendum #1
November 12, 2018

MATCHLINE - SEE SHEET C301



MARK	DATE	DESCRIPTION	BY
1	11/05/18	PER ADDENDUM NO. 1	JTE

CLIENT: ORANGE COUNTY UTILITIES
PROJECT: WESTERN REGIONAL WATER SUPPLY FACILITY IMPROVEMENTS PHASE 3B
PROJECT NO.: 20118873-1000
DATE: 11/05/18
BY: JTE
CHECKED BY: [Blank]
SCALE: 1" = 10'

LEGEND

- PROPOSED ASPHALT
- PROPOSED CONCRETE
- PROPOSED STONE

SECTION A
SCALE: 1" = 10'

NOTES:

- REMOVE EXISTING 48" SCH 40 90° BEND
- REMOVE PORTION OF EXISTING PIPING FOR RESTRAINED CONNECTION
- REMOVE EXISTING 48" SCH 40 90° BEND
- REMOVE EXISTING 48" SCH 40 90° BEND

UTILITY PLAN

C302

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