

June 10, 2014
BOARD OF COUNTY COMMISSIONERS
ORANGE COUNTY, FLORIDA

ADDENDUM NO. 5
BID NO. Y14-792 PH IFB
EAST SERVICE AREA POTABLE WATER AND RECLAIMED WATER
STORAGE AND REPUMP FACILITY

BID OPENING: June 17, 2014

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. Additions are indicated by underlining, deletions are indicated by ~~strikethrough~~.

The bid opening remains June 17, 2014 at 2:00 P.M.

A. BIDDER QUESTIONS

Corrections in Addendum No. 4 Answers:

On page 3, Answer 8: REPLACE “No.” with “The similar project requirement for 3,000 LF of 24” pipe will be deleted from Part D – OFFICIAL BID FORM,

Attachment E. See Specifications, Item 1 in Addendum No. 5.”

On page 7, Answer 30: REPLACE “30” with “29”.

On page 10, Answer 42: REPLACE “49” with “48”.

On page 12, Answer 48: REPLACE “46” with “42”.

On page 16, Answers 73, 74, and 75: REPLACE “66” with “65”.

On page 17, Answer 79: REPLACE “70” with “69”.

- 1. On P-02 item HB is shown as a Zurn Z1350-VB and the HB-2 is shown as Wilkins 195-BFP-8. The specifications specify different hose bibbs than shown on the drawings. Please clarify. Also, a hose station under 15210 D 1a. Leonard SW-75-1571 or equal is specified. Where would this be used? Do the HB-2 and the HB get hoses, nozzles and hose racks?**

Answer: On Drawing P02, PLUMBING FIXTURE SCHEDULE, under MARK, REPLACE “HP2” with “HB2”. Provide the hose bibbs HB and HB2 as scheduled on this PLUMBING FIXTURE SCHEDULE. Do not use the hose station in Section 15210, paragraph 2.11D; and do not use Section 15100, paragraph 2.14A. For each HB2, install hose rack Leonard Valve Co. HDHR or equal, and provide 50-foot 3/4-inch 8-ply heavy duty hose with 3/4-inch hose connections Flexogen by Gilmour or equal.

- 2. Surge protection is not shown on MCC or the main breakers. Please advise if it is required. If yes please furnish the make and model.**

Answer: Surge protection shall be provided for service entrance equipment per specification Section 16050, paragraph 2.21 starting on page 16050-18. Surge protection devices on the service entrance equipment are called out on revised Drawing E04, ATTACHED.

- 3. The specifications are silent on environmental/hazardous conditions. Do any known environmental/hazardous conditions currently exist at the site? If not known but uncovered during construction will the work be handled via Article 13 of the general conditions? Will the Owner be the “generator” of such environmental/hazardous conditions if uncovered at the site?**

Answer: There are no known environmental/hazardous conditions at the site. If not known but uncovered during construction, the work will be handled differently than described in Article 7, and the Contractor will not be held responsible for the conditions at the time of uncovering unknown environmental/hazardous conditions. For specifics on how this situation will be handled if it arises, refer to the latest version of Standard General Conditions of the Construction Contract prepared by Engineers Joint Contract Documents Committee (EJCDC), Article 4, paragraph titled “Hazardous Environmental Condition at Site”.

- 4. On drawing P-01 the notes under general diesel piping call for piping smaller than 2 1/2” to be schedule 80 and the fittings to be welded socket weld joints. The outside fuel lines are called to be contained piping. The specifications call for pipe to be Sch 40 and threaded fittings and the only containment piping is for buried pipe. Would you clarify this?**

Answer: Please refer to revised Section 15434, ATTACHED, for piping and fitting clarifications. The outside fuel lines are above grade and do not require containment; REVISE the subheading “EXTERIOR CONTAINMENT PIPING SYSTEM” to read “EXTERIOR BURIED CONTAINMENT PIPING SYSTEM” on Drawing P01 under GENERAL DIESEL PIPING NOTES:.

- 5. On sheet E09, the enlarged PW and RW Flow Meter Pad & RW Valve Station shows a Communications Manhole and refers you to the above ground pull box detail on E15. Is this the only manhole on the job that is above ground?**

Answer: No, there are other power and communication manholes. Please refer to revised Drawing E02 in Addendum No. 4.

6. If there are in ground manholes on the project, can we be furnished with detail drawings for the manholes?

Answer: All power and communication manholes in the project are above ground pull boxes. No in-ground power and communication manholes are allowed. See detail on Drawing E15 and revised Drawing E02 in Addendum No. 4.

7. Please clarify the following: Reference Drawing I02 & I12 and Spec 13300 1.01 A4: The specification calls for Garrettcom Ethernet switches to be mounted in the PLCs as shown on the drawings, however the drawings show a Cisco Ethernet switch mounted externally of the PLC panels. Please clarify which switches are required (brand and part #) and where they are to be mounted.

Answer: The correct Ethernet switches are Cisco IE3000 shown on Drawing I02.

8. Is there a designated construction trailer and parking location?

Answer: Not at this time. Since this is a greenfield project, there is nothing existing to avoid except for staying out of the 60-foot wide power right-of-way and 90-foot wide power easement (which includes a 30-foot wide landscape buffer). The Contractor and the County's R.P.R. will determine mutually acceptable location(s) for construction trailers and parking.

9. Detail 15 on drawing C19 indicates that the pipe encasement is to extend to the bottom of the slab if the distance is less than 12". The pipe encasements on drawings M03 and M04 are shown extending to the bottom of the slab even with the pipe greater than 10' under the bottom of the slab. Please confirm that the pipe encasement only needs to be extended to the bottom of the slab if it is within 12".

Answer: The 12-inch distance on Detail 15 on Drawing C19 is intended for pipe encasement below a building slab. The pipe encasements on Drawings M03 and M04 are clearly intended for pipe encasement below the tank floors.

10. The 12" drain pipes detailed on drawings M03 and M04 are shown to be located just inside the tank walls, however, the notes on details 3D and 4D states that the centerline of the sump is to be 8'0" east of tank center. Please verify if the drain sump is to be located as shown on the plan view or if it should be located 8'0" east of tank center as noted.

Answer: Sumps shall be located as shown on the plan view. The drain sump in Section 3D on Drawing M03 shall be located at the 52-foot radius. The drain sump in Section 4D on Drawing M04 shall be located at the 37-foot radius.

- 11. Drawing C11, Notes for Silt Fence Item 5 indicates that silt fence will be paid as a unit price item. The bid form does not include a provision for this. Please clarify.**

Answer: The silt fence will be included as part of the lump sum, not as a unit price item.

- 12. Table A in Section 01025 references several unit price work items. The bid form does not include a provision for this. Please clarify.**

Answer: The current Bid Form shows the project as a lump sum in Part 2, page D-2. The Measurement and Payment will be adjusted to match this basis.

- 13. Spec Section 01065 requires that the Contractor secure and pay for all permits and licenses. In that it is our understanding that fee amounts are dependent on building classification, please clarify the building category which would apply to this facility.**

Answer: Drawing A02 describes the building type as Mixed Use, Non-Separated, including Sprinklered H-4, F-3, and B; the construction type is IIB. Please refer to the ROOM AREAS table on the right side of Drawing A02 for the areas by occupancy and the total building area. Also, please refer to the answer to Question 19.

- 14. Drawing C13 Section A shows ARV's on the 36" Flanged Pipe. The Plan View is not clear and indicates TYP x 3. If this section is correct there would be a total of 5 ARV's at this valve station. Drawing C23 Asset Attribute does not list these are ARV's. Please confirm if ARV's are required at these locations.**

Answer: There are five ARVs at the PW Valve Station.

- 15. Drawing C13 Section E shows ARV's on the 24" Flanged Pipe. The Plan View is not clear and indicates TYP x 3. If this section is correct there would be a total of 5 ARV's at this valve station. Drawing C23 Asset Attribute does not list these are ARV's. Please confirm if ARV's are required at these locations.**

Answer: There are five ARVs at the RW Valve Station.

- 16. Sheet M09, C12 & C23 contradict the pipe configuration at the Influent side of the Flow Meter Station. C12 & C24 indicate the first fitting above grade (on each line) to be a flanged 90, while Drawing M09 indicates that fitting to be a reducing TEE that accommodates an ARV. Additionally there is no ARV indicated on C25 ASSET ATTRIBUTE TABLE at this location. Please indicate which configuration is correct.**

Answer: At the Flow Meter Station, provide the influent side configuration shown on Drawing M09, Sections 13A and 13B. Provide the ARVs as shown on this Drawing.

- 17. It is unclear what pipe material the small underground lines should be. Please indicate desired material for the following: 6" D, 8" FP, 12" D, 8" SAN. Also note that DIP fittings are called out on C24 ASSET ATTRIBUTE TABLE for one 6" Drain line, however there are no DIP fitting called out for the other 6" Drain line.**

Answer: The desired materials are as follows:

6" D – PVC C900 DR 18 pipe with ductile iron fittings; ductile iron pipe where shown in Detail 04 on Drawing C18. Provide restrained joints at fittings and pipe joints between ground storage tanks and nearest manhole.

8" FP – ductile iron pipe and fittings; also, see Addendum 4, answer to Question 42.

12" D – PVC C900 DR 18 pipe with ductile iron fittings.

8" SAN – PVC gravity pipe ASTM D3034, SDR35.

- 18. There are five fire hydrants shown on the 36" PW force main. Is the use of a tapping saddle acceptable for connecting the FHA to the 36" Main or does this need to be a 36" DIP Reducing TEE? No fitting was called out on C24 ASSET ATTRIBUTE TABLE for connecting the FHA to the 36" Main.**

Answer: Please refer to the answer to Question 14 in Addendum 4.

- 19. What is the cost for the building permit, Florida Gas permit and FDEP Fuel Tank permit?**

Answer: For the building permit fee, use the information on Drawing A02 and obtain the fee from the Orange County Building Department. Please refer to the answer above, which references Spec Section 01065. In addition, the building permit review fee according to the Orange County plans review web page is currently \$10,102.

There is no charge for the Florida Gas permit.

The FDEP Fuel Tank permit fee is \$50.

- 20. Please furnish a contact name for the primary electric supply to the site. If not, an allowance would be helpful. Will the owner pay for the power cost for testing?**

Answer: Please refer to the answers to Questions 55, 56, and 57 in Addendum 4.

- 21. Is there water available at the site for testing? It will take approximately 5 million gallons of water to test all lines and tanks. Will the owner pay for the test water? If not, what will be the charge?**

Answer: Please refer to the answer to Question 2 in Addendum No. 4, and the answer to the question below, which references Addendum #4, Question #2.

22. What is the duration for the demonstration testing?

Answer: The demonstration testing is Section 01650 is based on completing tests of each system under various operational circumstances. Based on the number of systems, the demonstration testing period will be at least 7 calendar-days.

23. Can the engineer furnish more information regarding the pre-engineered water mist system in the Generator room?

Answer: Provide a water mist system for room volume of 600 cubic meters, HI-FOG[®] gas driven pump unit GPU by Marioff, or Engineer-approved equal.

24. Is burning of vegetation allowed on site?

Answer: The Contractor may apply for a burn permit for cleared vegetation. Depending on weather conditions, the permit application may be denied or burning may be banned during the period covered by the permit.

25. The geotechnical report paragraph 7.7 discusses a jack & bore operation underneath a railroad. We are unable to locate this on the drawings. Please confirm where this is located.

Answer: The older report includes items that are not in this project. Please disregard the jack & bore discussion in the older geotechnical report.

26. Addendum #4, question #2 addresses a temporary water system installation for the duration of the project. Could a sketch be provided where the exact location of the water main tap is to occur and the intended alignment of the (temporary) main? (i.e. east or west of the main entrance for our ability to price additional (pavement) restoration and/or maintenance of traffic issues)

Answer: ATTACHED are a sketch of the temporary water main route along the north side of Wewahootee Road, and a sketch of the connection point relative to the entrance road to Moss Park Ridge.

27. Reference Drawings I11 and I12 and Spec 13300 2.08 C & D:

- a. The analyzers on the drawings indicate they are to generate a turbidity signal however the unit specified does not provide this function.**
 - i. Please clarify if the turbidity signal is required and if so, how is it to be derived?**

Answer: The two turbidity signals are required. Each AE/AIT for Turbidity shown on Drawing M08, Detail 10 is a Hach 1720E Turbidimeter with sc200 Controller.

28. Please clarify who is to provide the emergency shower flow switch. It would appear to be provided under Section 15400 however specified in Section 13300.

Answer: Provide the flow switch as a standard accessory from the emergency shower manufacturer under Section 15400.

29. Please provide the County's Standard Detail that depicts the control components required to interface the motorized gate, card access and the SCADA system.

Answer: The information for the control components that interface the motorized gate, card access, and the SCADA system are described in Section 02784, paragraph 2.01T.11.

30. Reference Section 02784 2.01 T. 11:

a. Please confirm if the intent of the specification is for the I&C supplier to supply the motorized gate and electronic access packages.

Answer: Section 02784 addresses the motorized gate package system in paragraph 2.01T. Paragraph 2.01T.11.b and j address the security control system provided by the I&C supplier, and coordination by the motorized gate supplier.

B. SPECIFICATIONS

1. Part C, 28.References Bidder should supply (with the bid form) two or more similar projects successfully completed **by the Bidder, as a Prime** within the last 10 years. Projects must have been constructed in the United States All similar projects should have one or more of the following elements:

- A new ground storage tank of at least 1.5 million gallons capacity
- A new potable water or reclaimed water high service (pressure boosting) pump station with a firm pumping capacity of at least 4,000 gallons per minute and the pumps controlled the variable frequency drives.
- ~~A new pipeline project with at least 3000 linear feet of 24 inch diameter or larger water, wastewater or reclaimed water pressurized transmission main.~~

Failure to provide this information may be cause for rejection of the bid

2. Part D – OFFICIAL BID FORM

In Attachment E, DELETE the third bullet that reads “A new pipeline project with at least 3000 linear feet of 24 inch diameter or larger water, wastewater, or reclaimed water pressurized transmission main.”

3. Part H Section 15434 – FUEL AND OIL PIPING SYSTEM

REPLACE paragraph 2.01A with the following:

A. Above Grade Product Piping:

Carbon Steel pipe: ASTM A53/A53M, Type E or S, Grade B, Seamless or electric welded. Pipe smaller than 2-1/2 inches shall be Schedule 80. Pipe 2-1/2 inches and larger shall be Schedule 40. End connections for pipe or fittings smaller than 2-1/2 inches shall be forged, socket weld type conforming to ASTM A182/A182M and ASME B16.11, unless indicated otherwise. End connections for pipe or fittings 2-1/2 inches and larger shall be butt weld type conforming to ASTM A234/A234M, Grade WPB and ASME B16.9 of the same wall thickness as the adjoining pipe. Where threaded end connections are indicated, provide connections that conform to ASME B16.3, Class 150 or ASME B16.

C. DRAWINGS

1. Drawing No. E04

REPLACE Drawing E04 with revised Drawing E04, ATTACHED.

2. Sketches of Temporary Water Pipe Route

ATTACHED are two sketches showing the temporary water pipe route.

D. 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 bid.

E. All other terms and conditions remain the same.

Receipt acknowledged by:

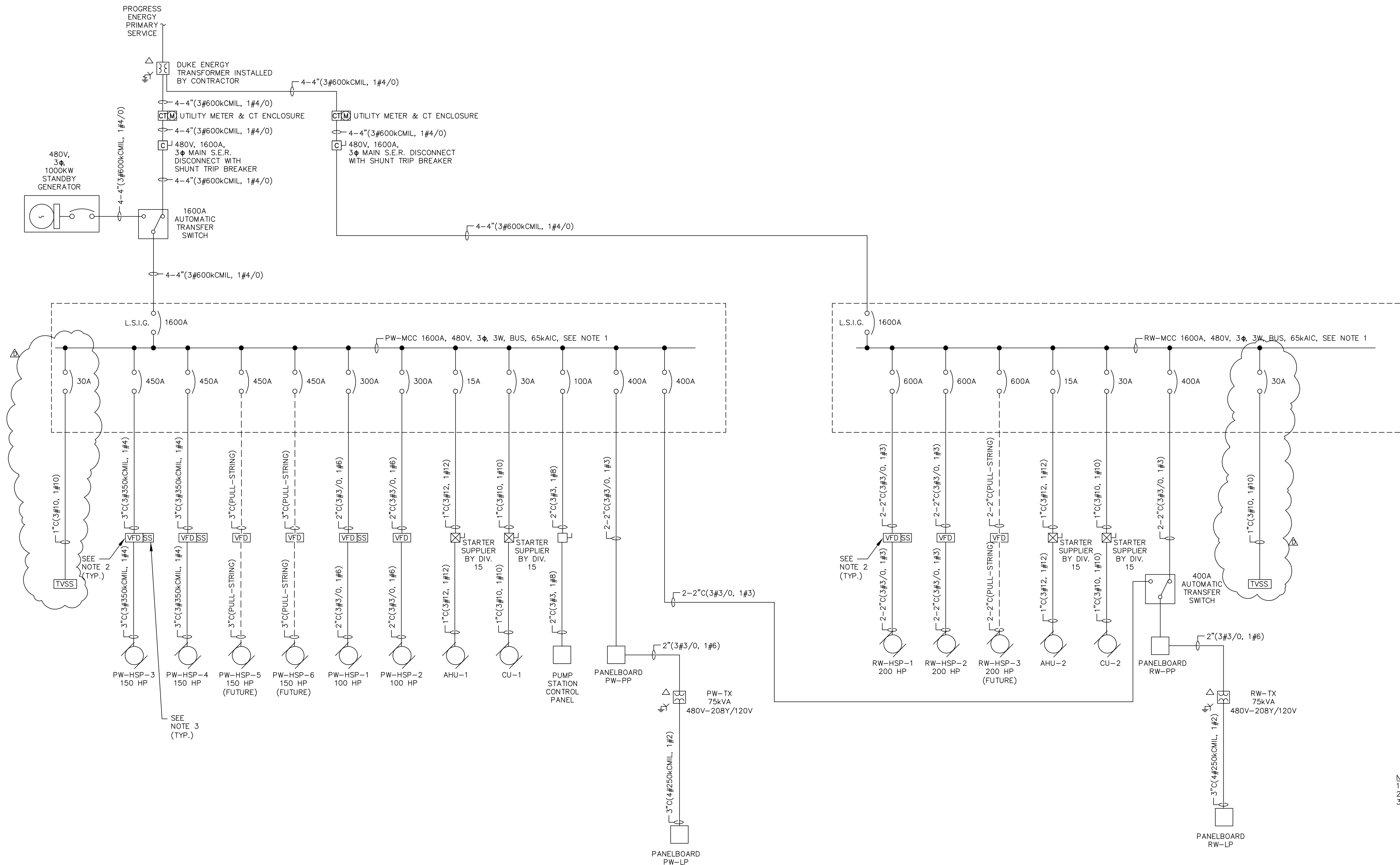
Authorized Signature

Date Signed

Title

Name of Firm

Parent Sheet: Set: 110005_ESARF Rev/Plot by: SEIGNORRET, JASON Rev on: 2/20/2014 1:30 PM Individual File Path: P:\ER\56384\200-56384-12001\CAD\SHEETFILES\E04 - SINGLE LINE DIAGRAM.DWG



- NOTES:
 1. PROVIDE PQM ON EACH MCC.
 2. VFD SHALL HAVE ABILITY FOR MONITORING BY ETHERNET.
 3. SOLID STATE BYPASS.



REV	DATE	DESCRIPTION	BY
D	6/2014	ADDENDUM #5	
C	2/21/2014	100% DRAWINGS	JTE
B	6/2013	90% DRAWINGS	JTE
A	2/2013	60% DRAWINGS	JTE

Issue Certification
 Robert T. Murphy, P.E.
 Florida P.E. No. 36132
 Tetratech
 Certificate of Authorization No. 2429
 201 East Pine Street, Suite 1000
 Orlando, FL 32801

Designed JAS
 Drawn JAS
 Checked RTM
 Reviewed RTM
 Approved RTM
 Date 2/21/2014

ORANGE COUNTY
 EAST SERVICE AREA POTABLE WATER AND RECLAIMED WATER STORAGE AND REPUMP FACILITY
 ELECTRICAL
 ELECTRICAL SINGLE-LINE DIAGRAM

PROJECT NO.:	110005
SCALE:	NOTED
DRAWING NO.:	E04
REVISION:	D
SHEET NO.:	076 OF 108

TETRA TECH
 ENGINEERING BUSINESS NO. 2429
 www.tetratech.com
 201 EAST PINE STREET, SUITE 1000
 ORLANDO, FLORIDA 32801
 PHONE: (407) 839-3955 FAX: (407) 839-3790

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 1016 SPRING VILLAS PT
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6" PVC FM (31965)

8" PVC WM (31965)

RPZ
BACKFLOW
PREVENTER

TAPPING SLEEVE
AND WET TAP
ON 8" ~~WM~~ WM

WATER METER

4" TEMP. WM



in rd

6" PVC FM (31965)

ASSET 10-511