August 15, 2019

BOARD OF COUNTY COMMISSIONERS
ORANGE COUNTY, FLORIDA

IFB Y19-772-TA, ADDENDUM NO. 5

TOWN CENTER (PS 3497) AND SOUTH CENTRAL (PS 3499) MASTER PUMP STATION IMPROVEMENTS

REVISED BID OPENING DATE: <u>August 29, 2019</u>

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 **<u>underlining</u>** and deletions via ~~strikethrough~~.

BID OPENING DATE IS CHANGED FROM ~~August 22, 2019~~ to <u>August 29, 2019</u> at 2:00 PM.

A. Questions and Answers

Question No. 1: Reference I-201; please confirm the sluice gate control station is actually onboard the sluice gate actuator and is not a separate control station.

Response No. 1: Confirmed.

Question No. 2: Reference I-201; please confirm the sluice gate control station as shown is typical of 3.

Response No. 2: Confirmed.

Question No. 3: Reference I-201; please clarify the difference between the RTU and PLC as shown on the top right of page. It is our understanding the PLC is integral to the RTU. Are the RTU and PLC separate at PS 3499?

Response No. 3: They are not separate. See attached revised drawing.

Question No. 4: Reference I-201; please clarify why the I/O from the VFDs does not intersect with the PLC/RTU and goes straight to SCADA.

Response No. 4: I/O from the VFD should go to the PLC/RTU and SCADA. See attached revised drawing.

Question No. 5: Reference D-101, E-102, & I-101; Please clarify - the number of float switches required at PS 3497; D-101 & E-102 call for 7 while I-01 calls for 6.

Response No. 5: Provide seven (7) float switches as shown on D-101 and E-102. Provide 1"C(14#14) to PCP.

Question No. 6: Reference E-104; Is a rain gauge required at PS 3497? There is no I/O allocated for a rain gauge in the P&IDs.

Response No. 6: Provide a rain gauge as shown on E-102 and E-104. See attached revised drawing.

Question No. 7: Reference 13300 2.09; Please confirm a combustible gas detector is not required.

Response No. 7: Confirmed. See specification section revisions in part B of this addendum.

Question No. 8: Please provide a specification for the pressure indicating transmitters.

Response No. 8: See specification section addition in part B of this addendum.

Question No. 9: Reference E-102 & DD-01; Please clarify the installation of PIT 1 & PE 1. E-102 shows the sensing element and transmitter mounted separately and connected by a cable (depending on the transmitter specification this may not be an option). DD-01 shows the transmitter unit mounted to the piping.

Response No. 9: Mount as shown on DD-01. See attached revised drawing E-102.

Question No. 10: Reference I-201; Is a diaphragm seal required for the PIT/PI at PS 3499?

Response No. 10: Yes.

Question No. 11: Reference P&IDs; Will tag names and/or loop numbers be provided for the instruments shown?

Response No. 11: Contractor shall coordinate with Orange County for instrument tag names and/or loop numbers.

Question No. 12: 2.04 D of the attached 05530 reads as "Access hatches over wet well shall have a non-removable back plate constructed of 1/4-inch floor

plate, welded to the frame with holes sized to allow passage of pipe flanges with double modular pipe seal." Can you help us better understand what you are requiring/looking for from this information?

Response No. 12: Not applicable to the project. See specification section revision in part B of this addendum.

Question No. 13: Specialty coating on PS 3497 wet well. What is the existing coating on PS 3497 that must be removed? Are we understanding the requirements correctly that the specialty coating at PS 3497 can be any of the following:
E. SC-5: Spectrashield Multicomponent Liner System
D. System SC-4: Raven 405
C. System SC-3: Sewercoat (PG and 2000HS) calcium aluminate mortar
B. System SC-2: Tnemec Perma-Shield Coating System

Response No. 13: The existing coating on PS 3497 is unknown. The specialty coating to be applied shall be any of the coatings specified under Section 09901 2.06 Specialty Coatings and as listed in Appendix D List of Approved Products.

Question No. 14: Liner for new Master PS 3499 wet well can be any of the following types?
2.04 Fiberglass Liners
2.03 Preformed Polypropylene Liners
HDPE Liners (AFE/AGRU/Flowtite/Studliner/GU Liner/L&F Manufacturing) per list of approved products.

Response No. 14: Refer to revised noted in Section C of this addendum. PS 3499 liner shall be HDPE and shall be manufactured by a manufacturer as listed in Appendix D of the list of approved products.

Question No. 15: Callout for spray liner on downstream manhole on Sheet C-105. Is this callout referring to coatings for existing manholes in the list of approved products? (CCI Spectrum /Raven /Kerneos /Saureisen /Tnemec).

Response No. 15: The spray liner for existing manholes shall be as specified under Section 09901 2.06 Specialty Coatings and in accordance with Appendix D List of Approved Products.

Question No. 16: For PS_3499 South Central, we would like to propose the Sulzer/ABS XFP301M-CB2-PE1040/6 pump. Based on the pump data table of the spec section, it appears the duty points (and system

curves) have change from what we previously worked on with the engineer.

Response No. 16: ***The proposed pump does not meet all required duty points. Please refer to the expanded and updated duty points provided in Section B of this addendum.***

Question No. 17: If possible please identify the clearing and grubbing limits. The Pump Station 3499 site footprint appears to require clearing and grubbing. Additionally please confirm that there are no wetland impacts in the areas we are to clear for the construction of this pump station. An overlay drawing similar to what is provided in the geotechnical report would be useful if available.

Response No. 17: ***There are no defined clearing and grubbing limits. Clearing and grubbing shall be as required to perform the proposed work. Wetland boundary and buffer areas are shown on V-201. No work is required to be performed in these areas.***

Question No. 18: Please confirm that there are no unsuitable material in the area we are to clear and grub for pump station 3499. If there are unsuitables present we recommend that a unit rate is established in the contract for removal of said material in an effort to have consistency between all bidders.

Response No. 18: ***Existing slab structures were fractured and abandoned in place (see demolition drawings attached to this addendum; this is provided for contractor's convenience and the accuracy of the information has not been verified by Owner or Engineer). Contractor shall assume the concrete will need to be broken down further prior to removal. Removal of approximately 230 CY of concrete shall be accounted for in the bid price. Refer to Section C of this addendum for revised note.***

Question No. 19: Note 3, C-102 discussed phased demolition to maintain pump station 3497 in service. Is there a phased demolition plan? It does not appear feasible to demo this station in phases.

Response No. 19: ***The contractor shall prepare a demolition plan, including any proposed phasing that maintains PS 3497 in service at all times. A connection for bypass pumping "Temp. Pump-Out" is shown on C-105. Refer to Section 01516 Collection System Bypass for additional requirements.***

Question No. 20: Drawing C-104 discusses existing irrigation for PS 3497. Please advise what the irrigation system is needed for. When this pump

station is complete, we are either installing concrete driveways or #57 stone covered swales.

Response No. 20: ***The existing irrigation system serves adjacent developed properties outside the perimeter wall of the PS. The contractor shall protect the existing irrigation system or remove and replace with new irrigation as required for construction of the proposed pump station improvements. The irrigation system is owned by the Hunter Creek HOA. Contractor shall coordinate with the HOA prior to beginning any work on the irrigation piping.***

Question No. 21: For PS 3499 please confirm that we are to remove/replace the entire perimeter chain link fence in the entire parcel as depicted in drawing V-201 as surveyed by BPA.

Response No. 21: ***The perimeter chain link fence cannot be removed/replaced within the limits of the wetlands. See attached drawing with proposed limits for replacement (approximately 1,440 LF).***

Question No. 22: For the chain link fence replacement got PS 3499, on the east end, please note that there are wetland impacts associated with the replacement of this fence. Has the county purchased mitigation credits and are we permitted to conduct work within the wetlands? If this work is not permitted with FDEP and ACOE we may not be allowed to enter the area and install new posts in the ground.

Response No. 22: ***The perimeter chain link fence cannot be removed/replaced within the limits of the wetlands. See attached drawing with proposed limits for replacement (approximately 1440 LF).***

Question No. 23: The yard piping drawings for PS 3499 do not indicate a water source for the irrigation system that is to be installed. Please provide.

Response No. 23: ***Contractor to connect to the new potable water main as water source for the irrigation system.***

Question No. 24: If possible please provide an irrigation design required for PS 3499 in an effort to provide consistent bidding between all contractors.

Response No. 24: ***Per Section 02441, the Contractor is responsible for providing the irrigation design. The design shall be provided in accordance with the requirements specified in Section 02441.***

Question No. 25: Please confirm that the sheet steel piling specification is for the installation of PS 3499.

Response No. 25: Confirmed.

Question No. 26: Regarding the bid form, is it possible to come up with a flat fee for the permit drawings? If the Estimated cost as advertised is $7.3mil then we recommend a flat permit fee of $15,000.

Response No. 26: Permits are to be calculated as specified in the bid. There are no changes.

Question No. 27: Callout for Spray Liner on downstream manhole on Sheet C-105. What is the diameter of this manhole? 4, 6, or 8 feet in diameter? This information is needed to price the rehab.

Response No. 27: The manhole in Town Center Blvd is 4-foot diameter. The terminal manhole is 6-foot diameter.

Question No. 28: PS-3497 – Confirm removal of two (2) 8" Bottle Brush and one (1) 12" Bottle Brush along north side of existing Pump Station that are not marked for removal.

Response No. 28: The bottle brush are within the limits of construction and shall be removed.

Question No. 29: PS-3497 – Confirm protection is required of the 12" Oak located in ROW adjacent to RWM Re-Route. Required separation from Tree?

Response No. 29: The 12" oak is not designated for protection. It shall be removed if damaged during construction activities.

Question No. 30: PS-3497 – Utility Main Disconnect and Meter are in the footprint of the new transformer. Demolition site plan C-101 calls for the existing transformer to remain in service until new transformer is installed and the removal of the existing transformer once new transformer is in service. Please confirm intent with existing disconnect and meter in conflict with the new transformer.

Response No. 30: The location of the new transformer, utility meter CT cabinet, and utility meter can be adjusted to avoid conflict with the existing transformer and meter. The Contractor is responsible for coordinating these efforts with Duke Energy.

Question No. 31: PS-3497 – C-105 Note 9 limits the downtime of the Reclaimed Water Service to 8hrs. Please advise of any work hour constraints associated with the 8hr downtime.

Response No. 31: ***Work shall be performed during the hours as specified in the contract documents; 7 am to 7 pm. All service interruptions will need to be coordinated with the OCU RPR.***

Question No. 32: PS-3497 – Please provide dimensions for the sanitary sewer manhole located in Town Center Blvd and the dimensions for the main influent sanitary sewer manhole located on the pump station site. Rim elevations and pipe inverts are provided, but structure inverts and diameters are not.

Response No. 32: ***The manhole in Town Center Blvd is 4-foot diameter. The terminal manhole is 6-foot diameter. The pipe invert should be used for the manhole invert.***

Question No. 33: PS-3497 – Please provide odor control mechanical drawings and equipment details like what has been provided for PS3499. It is assumed the existing odor control equipment is to be relocated.

Response No. 33: ***The odor control specification provides design criteria and performance requirements, so the odor control layout will be per the selected manufacturer's requirements. Sheet C-101 calls for the odor control to be demolished. Only the items listed in Note 2 (C-101) should be salvaged to the Owner.***

Question No. 34: PS-3497 – Confirm the below grade odor control duct is to be PVC as called for on D-101, PS-3499 requires HDPE odor control duct.

Response No. 34: ***Odor control duct shall be HDPE. Refer to revisions to Pipe Material Table in Section C of this Addendum.***

Question No. 35: PS-3497 – Please confirm material of 20" Vent Pipe leaving wetwell. Vent on PS-3499 is called to be PVC w/ 316 Stainless Steel Mesh Screen.

Response No. 35: ***Vent shall be PVC with 316 stainless steel mesh. Refer to revised noted in Section C.***

Question No. 36: PS-.3497 – To install the CIPP liner in the existing 24" gravity sewer as called for the line will need to be bypassed for at least a few hours. With the location of the bypass manhole in the middle of Town Center Blvd., has the County conducted preliminary discussions with Orange County Public Works regarding MOT required for lane closure(s) on Town Center Blvd?

Response No. 36: ***There have been no preliminary discussions regarding the MOT. Contractor shall prepare and submit maintenance of***

traffic (MOT) plans to Orange County Public Works for approval pursuant to specification Section 01570.Two-way traffic must be maintained at all times. Refer to Section B of this addendum.

Question No. 37: PS-3499 – Note 6 states the existing Bioxide Tank shall be relocated and set prior to startup of new pump station. Are there requirements to maintain a temporary bioxide system at the existing station during the relocation work prior to the startup of the new station?

Response No. 37: A temporary bioxide system is not required, however the relocation shall be completed in a timely manner to minimize impacts to the existing system between the relocation and the startup of the new station.

Question No. 38: PS-3499 – Note 7 on C-202 states the existing odor control units are to be relocated near the new pump station and piped to the wet well for the first 30-days of startup to allow for biological growth to occur in the new units. Note 8 on C-202 states the existing odor control units are to remain in service during the 30-day startup of the new odor control system and the Contractor is to provide temporary piping and blowers to supply the existing units. Are the existing odor control units to remain in place and fully functional until the new units are started up and tested or are the existing units to be moved near the new pump station and piped to the wet well. If the existing units are to be moved near the wet well, are there electrical provisions to run the existing units or should the Contractor assume temporary power is required?

Response No. 38: The existing odor control units are to remain in place. Contractor to provide temporary piping to the new wet well and sufficiently sized blowers to maintain odor control service during the first 30 days of startup.

Question No. 39: PS-3499 – Silt Fence shown along the northern edge of the 20-ft utility is north of the perimeter chain link fence and in an area the adjacent homeowners would consider their backyard. Please confirm location of silt fence.

Response No. 39: Location confirmed.

Question No. 40: PS-3499 – There is wood fencing installed along and up against the chain link fence that is called to be remove along the north side of the site. Are there replacement requirements for damaged fence beyond the 6-ft chain link fence being that it is installed within the utility easement and the boundary will eventually restored with the planted bamboo?

Response No. 40: ***Wood fencing (approximately 230 LF) shall be removed and replaced with new fence matching the existing as necessary for construction activities.***

Question No. 41: PS-3499 –It appears the removal of the existing chain link fence will be exposing the residential properties in areas where there is no additional fence installed along both the North and West side of the property. Please advise if temporary fencing is required above and beyond silt fence for areas where this occurs.

Response No. 41: ***Provide temporary fencing per specification Section 01001.***

Question No. 42: PS-3499 – The 30" forcemain and 20" forcemain called to be removed on C-201 is shown north of the 6-ft wood fence and in the backyard of the residence on Lot 1121. The pipes are also either beneath or adjacent to vegetation/landscaping that has been installed by the owner of Lot 1121. This scenario also occurs during the forcemain removal and reconnection work adjacent to Lot 1117. Please advise on the extent of disturbance permitted as well as the restoration requirements. If the restoration is to be in kind, please provide details for what is located within the work zone that needs to be replanted.

Response No. 42: ***Replace all landscaping damaged by the construction activities.***

Question No. 43: Please confirm it is the Contractor's responsibility to coordinate with private property owners adjacent to the work.

Response No. 43: ***Confirmed. Refer to Section C of this addendum.***

Question No. 44: PS-3497 – Please confirm the 12" pump out connection is adequately sized for the anticipated 100% station bypass needed during construction.

Response No. 44: ***Confirmed. The pump out size is sufficient for the required bypass flow.***

Question No. 45: In section 13300 2.06 D. 1, please clarify the meaning of "interior panels to be silver-tek bronze". Is this referring to enclosures mounted indoors or the interior of an enclosure? If this is referring to a color, it is not offered by the enclosure manufacturers.

Response No. 45: ***Silver-tek bronze is not required. Provide standard panels.***

Question No. 46: We cannot find the Odor control system for the Town Center PS3497

in the mechanical drawings. Please provide a layout and design for this system similar to what is shown on drawings D-205 and D-206 for PS3499.

Response No. 46: ***The odor control specification provides design criteria and performance requirements, so the odor control layout will be per the selected manufacturer's requirements.***

Question No. 47: What is the diameter of the terminal manhole at LS 3497?

Response No. 47: ***6-feet diameter***

Question No. 48: Can a site visit be arranged?

Response No. 48: ***No.***

Question No. 49: Sheet C-202, indicates the contractor to "remove 24" FM" (upper most east side of property) – is this force main abandoned? It appears we are only to cap it.

Response No. 49: ***Remove any remaining portions of the existing force main after line stop and wet tap are completed, and flow transferred to the new pump station. Refer to C-205 for connection requirements.***

Question No. 50: LS 3499 - Sheet C205 calls out SSMH 3 to have 4 inverts, aren't the East and West pipe lines abandon / removed?

Response No. 50: ***The east and west invert information is provided if needed for the contractor's demolition and schedule requirements. Only the north and south inverts are needed for the completion of the new pump station.***

Question No. 51: 13300 2.06 G 1 calls for a licensed radio and 13300 2.06 G 1a calls for spread spectrum, which is an unlicensed radio. Which radio is required?

Response No. 51: ***Delete requirements for radios and SCADA poles.***

Question No. 52: Is there any as built information on the existing station at 3499 for demolition and filling purposes?

Response No. 52: ***See record drawings attached to this addendum. This is provided for contractor's convenience and the accuracy of the information has not been verified by Owner or Engineer.***

Question No. 53: What will be the expect flow at LS 3497 for by passing?

Response No. 53: ***Bypass pumping system capacity is provided in Section 01516 Collection System Bypass.***

Question No. 54: Can you provide clarification? 16120 2.04 A: this calls for VFD cable from the VFD's to the motors. E-205 has the same note #2 for the wire from the MDP to the VFD and from the VFD to the motor.

Response No. 54: ***Per the last sentence of Section 16120, 2.04, A, 600V THHN/THWN copper wire is acceptable when in conduit. Note #2 on E-205 calls for wire in conduit.***

Question No. 55: According to the list of approved manufactures, Square D is the only approved Gear and VFD supplier. Is this correct? In the past (For Pump Stations) other vendors have been acceptable. Please advise.

Response No. 55: ***Square D is the only approved Gear and VFD supplier.***

Question No. 56: Electrical sheet E-102 calls for a "Wetwell" junction box on the electrical rack and it shows another at the edge of the well. Is it necessary to have (2) terminal boxes for the Pump cables? If the terminal box at the well was deleted it would save a substantial amount since it is required to be Nema 7 explosion proof.

Response No. 56: ***Wet well junction box on rack next to panelboard "LP" is not required. NEMA 7 rating only required if equipment is within 10' of hatches and mounted at 18" or less. Refer to attached revised drawing.***

Question No. 57: Sheet E-102 also shows (3) junction boxes on the south edge of the wetwell, these also appear to be with in 10' of the hatch requiring them to be Nema 7 explosion proof. Can you clarify what these 3 boxes are for?

Response No. 57: ***The (3) junction boxes shown are for termination of the pump cables. The junction box to the south west is for instrument termination. NEMA 7 rating only required if equipment is within 10' of hatches and mounted at 18" or less.***

Question No. 58: Sheet E-202 shows (3) disconnects for the sluice gates and (2) disconnects for mixers that appear to be within 10' of a hatch, will these disconnects also need to be Nema 7 Explosion proof as described in note:1?

Response No. 58: ***NEMA 7 rating only required if equipment is within 10' of hatches and mounted at 18" or less.***

Question No. 59: PS-3499 – Please confirm the material of the existing 20" Forcemain. The survey drawings indicate this is CIP where the linestop and wet tap note indicate this is DIP.

Response No. 59: It is anticipated the material is ductile iron pipe. Contractor is responsible for field locating and verifying.

Question No. 60: PS-3499 – Please confirm the material of the existing 24" Forcemain. The survey drawings indicate this is CIP where the linestop and wet tap note on C-205 indicate this is DIP.

Response No. 60: It is anticipated the material is ductile iron pipe. Contractor is responsible for field locating and verifying.

Question No. 61: PS-3499 – Please confirm the material of the existing 30" Forcemain we are connecting to.

Response No. 61: It is anticipated the material is ductile iron pipe. Contractor is responsible for field locating and verifying.

Question No. 62: PS-3499 – Are there any as-built drawings available to show the size of the existing wet well to be abandoned and filled? If none are available please provide dimensions of the existing wet well. Same comment regarding the three (3) manholes to the east of the existing pump station with this designation but no dimensions shown.

Response No. 62: See record drawings attached to this addendum. This is provided for contractor's convenience and the accuracy of the information has not been verified by Owner or Engineer.

Question No. 63: PS-3499 – The Odor Control Mechanical drawings D204 and D-205 call for the above grade odor control air piping to be HDPE. The pipe schedule on drawing G-004 calls for above grade air piping to be SCH40 316 Stainless Steel. Please advise on the desired material.

Response No. 63: Odor control piping shall be HDPE. See revisions to Pipe Material Table in Section C of this Addendum.

Question No. 64: PS-3497 – Please confirm the pipe material of the existing 24" sanitary sewer called to have the CIPP liner installed.

Response No. 64: Based on GIS and CCTV data, the material is ductile iron.

Question No. 65: PS-3497 – Items 16 and 17 on the pump station fitting and valve schedule are incorrect. Please advise on the correct reducer size,

valve size, and pump out connection size.

Response No. 65: Refer to D-101 revisions in Section C of this Addendum.

Question No. 66: For Pump Station PS-3497, is the CT cabinet necessary? We should be able to mount the CT's inside the transformer or is this transformer feeding something else?

Response No. 66: Coordinate CTs with the power company during construction.

Question No. 67: There does not seem to be any specification for the VFD's in the documents.

Response No. 68: See Sections 16485 and 16405 attached to this addendum.

Question No. 69: At Pump Station 3499, the force main removal (northern most utility easement) appears to impact a large tree. Can all of the FM be grouted?

Response No. 69: The limits of the force main grouting may be extended up to 40 feet eastward to save the existing tree. Coordinate with the Owner's RPR during construction.

Question No. 70: At Pump Station 3499, is there a detail for the OUC water meter installation? Who pays for the meter? If the contractor is there a fee schedule?

Response No. 70: OUC water meter shall be installed per G-004 and CD-06. The contractor is responsible for paying for the meter.

Question No. 71: In reference to the bypass on PS 3497, the CIPP liner & the spray coating for the manhole will require the shutdown of Town Center Boulevard. Wanted to be sure you were aware of this fact. Will this be acceptable to Orange County?

Response No. 71: Yes. Two-way traffic shall be maintained at all times. Contractor shall prepare and submit maintenance of traffic (MOT) plans to Orange County Public Works for approval pursuant to Specification Section 01570.

Question No. 72: Is Lift station 3499 (Cast in place structure) to be LINED (HDPE) or can it be COATED with approved items in Appendix D?

Response No. 72: Pump Station # 3499 shall be HDPE lined. Refer to Section C of this addendum.

Question No. 73: The Geotechnical report states that “some mitigation activities will be necessary should dewatering be required” for lead, copper, and TOC’s. This essentially equates to groundwater remediation, as dewatering will be necessary. It is somewhat ambiguous as to how much reduction in TOC’s will be required as it is stated that a variance can re requested, but microfiltration and granular activated carbon may need to be added to the dewatering system. It is difficult to bid the dewatering without knowing how much mitigation will be required. Should we assume that all groundwater will require remediation through cartridge filters, ion-exchange systems, microfiltration systems, and granular activated carbon systems?

Response No. 73: Contractor shall comply with FDEP requirements for the discharge of any produced groundwater to surface waters.

Question No. 74: Flygt pumps and mixers are accepted by OCU. Flygt Products requests to be added to submersible mixer specification section 11220. We are specified as acceptable for project OC Y19-764 Hamlin WRF and Master Pump Station submersible mixer specification section 11515 and believe that this must just be an oversight for project OC Y19-772.

Response No. 74: Flygt submersible mixers are acceptable. Refer to Section B of this addendum.

Question No. 75: What is the head pressure on the force main at LS 3497?

Response No. 75: Refer to specification Section 11305.

Question No. 76: Can OUC accept Epoxytec CPP as an “or equal” on structures with lining systems detailed in OUC standards and as a lining system solution for wetwells/ lift stations?

Response No. 76: Bid as specified.

B. SPECIFICATIONS

1. Section 05530 – 2.04 D
Delete Paragraph 2.04. D in its entirety.

~~D. Access hatches over wet well shall have a non-removable back plate constructed of 1/4-inch floor plate, welded to the frame with holes sized to allow passage of pipe flanges with double modular pipe seal.~~

2. Section 11305 – Table 11305-A
Delete Table 11305-A in its entirety and replace with the following:

TABLE 11305-A

SUBMERSIBLE PUMPS SCHEDULE FOR PUMP STATION # 3499	
1. Manufacturer	Flygt
2. Model Number	NP 3306/665
3. Impeller Number	670
4. No. of Pumps Required	Six (6)
5. Pump Size, Inches	12
6. Primary Capacity (One Pump, 100%), GPM / Total Head, Feet	3,200/75
7. Secondary Capacity (One Pump, 100%), GPM / Total Head, Feet	9,000/22
8. Turn-Down Capacity (One Pump, 75%) GPM / Total Head, Feet	6,750/14
9. Run-out Capacity, GPM	9,000
10. Shut-off Head, Feet	130
11. Motor, HP (NEMA Code)	140
12. Maximum Speed, RPM	1200
13. Voltage, Volts	480
14. Phase	3
15. Frequency, Hertz	60
16. Service	Raw Unscreened Sewage

17. Minimum solid sphere size	3-inch
18. Minimum Pump Efficiency at Primary Capacity, %	60
19. Minimum Height of Base Elbow, Inches	23.75
20. Distance from Pump Volute to Base Plate, Inches	15.38

3. Section 13300 – 2.09 A
Delete Paragraph 2.09 A in its entirety and replace with the following:

A. Pressure Element and Transmitter

Instrument shall utilize a variable capacitance sensor cell to convert process pressure to capacitance with isolating diaphragms to separate the process fluid from the internal fill fluid. The electronic circuit shall convert capacitance change into a proportional 4-20mA output signal. The enclosure shall meet intrinsically safe, explosion proof (NEMA 7) and weatherproof (NEMA 4X) certifications. The operating range shall be configurable with 40:1 rangeability up to 5800 psi. The accuracy shall be + 0.1% of span. The output shall be two-wire 4-20mA with superimposed digital communication using HART protocol. Unit shall operate on loop-power from 12 to 45 VDC. The unit shall have configurable 4 ½ digit numerical plus 5-character alphanumeric displays to indicate PV and output in Engineering Units. Configuration shall be performed using digital HART protocol with PC laptop software or using a HART hand-held configurator or through local adjustment. Provide configurator as part of package. Unit shall be Smar LD301 Series or approved equal.

4. Section 13300
Delete Paragraph 2.06 G.

5. Section 13300
Delete Paragraph 2.06 L.

6. Section 16485
Add the Section 16485 in its entirety (attached to this addendum)

7. Section 16405
Add the Section 16405 in its entirety (attached to this addendum)

8. Section 01570
Add the following to 1.02 Requirements:

H. Two-way traffic shall always be maintained on Town Center Boulevard. Night

work will be required to perform bypass operations.

9. Section 11220
Revise 1.03.B to the following:

B. The submersible mixers shall be manufactured by ABS – Sulzer Model RW 300 Series or Xylem/Flygt.

10. Appendix C
Add the FDEP permits attached to this addendum to Appendix C.

11. Appendix E
Delete Appendix E.

12. Appendix F and Appendix G
Move the information in Appendix F to Appendix G. Delete reference to Appendix F in its entirety.

C. DRAWINGS

1. C-202
Delete Note 7 in its entirety.

~~7. The existing odor control units shall be relocated near the pump station and piped to the wet well for the first 30 days of startup to allow for biological growth to occur in the new odor control units. After 30 days, the existing odor control units and piping shall be decommissioned and demolished.~~

2. C-202
Delete Note 8 in its entirety and replace with the following:

~~8. Contractor shall maintain the existing odor control units in service during the 30 day startup of the new odor control system. Provide temporary piping and blowers to supply the existing units as required. Submit plan for maintaining odor control during startup of new system.~~

8. Contractor shall maintain the existing odor control units in service during the 30 day startup of the new odor control system to allow for biological growth to occur in the new odor control units. Provide temporary piping piped to the new wet well and blowers to supply the existing units as required. Submit plan for maintaining odor control during startup of new system. After 30 days, the existing odor control units and piping shall be decommissioned and demolished.

3. C-202
Delete “remove 24” force main” callout in its entirety (upper right corner of

drawing sheet) and replace with the following:

Remove any remaining portions of the existing force main after line stop and wet tap are completed, and flow transferred to the new pump station Refer to C-205 for connection requirements

4. E-102
Delete General Note 2 in its entirety.

5. E-102
Add the following to General Note 1:

1. The area within 10 feet of all hatches **and 18 inches above all hatches** is a hazardous class 1 div. 1 location. All electrical equipment within this area must have NEMA 7 rating.

6. E-102
Delete callout for 50' Concrete Antenna Pole and Antenna.

7. E-201
Delete callout for 50' Concrete Antenna Pole and Antenna.

8. E-202
Delete General Note 2 in its entirety.

9. E-202
Add the following to General Note 1:

1. The area within 10 feet of all hatches **and 18 inches above all hatches** is a hazardous class 1 div. 1 location. All electrical equipment within this area must have NEMA 7 rating.

10. G-004 Pipe Material Schedule
Delete the Air Service in its entirety and replacing with the following:

Service	Drawing Abbreviation	Above Grade		Below Grade	
		Pipe	Lining	Pipe	Lining
AIR	AIR	DR-11 HDPE	N/A	DR-11 HDPE	N/A

11. D-101 Fitting and Valve Schedule
Delete Mark 14, 16, 17 in its entirety and replace with the following:

Mark	Description
14	16" TEE

16	8” PLUG VALVE
17	8” x 6” TRUE WYE WITH 6” FEMALE CAMLOCK

12. D-202 Note 1
Delete Note 1 in its entirety and replace with the following:

~~1. Vent shall be PVC with a type 316 stainless steel mesh screen.~~

1. PVC vent shall include 316 SS insect screen mesh at end of vent and adjustable 316 SS Dampener. Below grade piping shall be 316 Sch. 40 SS. Bolts and nuts shall be 316 SS. Provide 30” by 30” concrete pad within 1 ft. of the end of the vent.

13. D-207 Note 1
Delete Note 1 in its entirety and replace with the following:

~~1. Existing as-built drawings indicate broken concrete is abandoned in place approximately 6-feet below grade within the limits shown in the plan view. Contractor to remove unsuitable materials and fill with suitable soils during installation.~~

1. Existing as-built drawings indicate broken concrete is abandoned in place approximately 6-feet below grade within the limits shown in the plan view. Additional areas of broken concrete may be encountered in other areas not identified. Contractor to remove all unsuitable materials and fill with suitable soils during installation.

14. C-201
Delete the following callout in its entirety

~~Remove and replace chainlink fence. Entire perimeter of parcel.~~

15. C-201
Delete the following callout in its entirety and replace with following

~~Remove and replace fencing along perimeter of entire parcel.~~

Remove and replace fencing along perimeter of parcel (approximately 1,440 LF). Existing fencing within the wetland boundaries to remain.

16. G-003
Add the following note:

~~36. Contractor is responsible for coordinating with private property owners that may be impacted by construction activities.~~

17. D-202, Note 2
Delete Note 2 in its entirety and replace with the following:

~~2. Wet well liner shall be installed on inside walls and underside of top slab.~~

2. Wet well liner shall HDPE and shall be installed on inside walls and underside of top slab.

18. C-105, SCADA Pole
Delete callout for New 50' SCADA Pole and Note 6.

19. C-105, SCADA Pole
Delete callout for New 50' SCADA Pole and Note 6.

20. I-001 RTU Antenna
Delete RTU Antenna Installation Detail and Antenna Notes.

D. ACKNOWLEDGEMENT OF ADDENDA

a. 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 bid.
b. All other terms, conditions and specifications of the IFB remain the same.
c. Receipt acknowledged by:

_____ _____
Authorized Signature Date Signed

_____

Name of Firm