

## **APPENDIX A - TECHNICAL SPECIFICATIONS**

077-16 PONTE VEDRA WATER MAIN

AND FORCE MAIN REPLACEMENT CONSTRUCTION

**901. BID DRAWINGS TITLED “Construction Drawings for Ponte Vedra Water Main and Force Main Replacement” prepared by Almond Engineering, PA are attached.**

**902. GEOTECHNICAL REPORT TITLED “Report for Geotechnical Exploration For JEA Ponte Vedra Force Main and Water Main Replacement” prepared by Meskel & Associates Engineering, PLLC is attached.**

**903. GROUNDWATER SAMPLING REPORT TITLED “REPORT OF GROUNDWATER SAMPLING AND ANALYSES FOR JEA PONTE VEDRA DRAINAGE IMPROVEMENTS PONTE VEDRA, FLORIDA prepared by Meskel & Associates Engineering, PLLC is attached.**

### **904. RESPONSIBLE BIDDERS LIST (RBL) GC-11 LOCATE LINE VERIFICATION**

Upon request by JEA, Company shall identify which subcontractor on JEA’s RBL GC-11 Locate Line Services Verification listing will be utilized for the installation of locate wire on PVC piping. Company may obtain a list of prequalified persons and/or companies by contacting the JEA Procurement Bid Section, 21 W. Church Street, Suite 103, Jacksonville, FL 32202, (904) 665-6740, or by fax (904) 665-7294, or online at JEA.com.

### **905. PERMITS AND PLAN APPROVALS**

JEA has obtained the following permits and SJC Plan approvals for the project:

- FDEP Water Permit
- FDEP Wastewater Permit
- SJC – Right of Way Plan Approval

The Contractor must obtain a SJRWMD Notice of Intent to Use Noticed General Permit for Short Term Construction Dewatering (Form 40C-22-0590-1) prior to the commencement of any dewatering. As part of the permit, a Notice to District of Dewatering Activity (Form RDS-50) must be submitted to the SJRWMD ten days before commencement of dewatering.

Contractor shall comply with all requirements and conditions of the FDEP State of Florida Domestic Wastewater Collection/Transmission Individual Permit Number 0015269-025-DWC and the General Permit for Construction of the Water Main Extension for PWS General Number 0080377-024-DSGP.

Contractor is responsible for obtaining SJC Right-of-Way (ROW) Permit prior to construction. The SJC plan approval letter along with a set of the approved plans will be made available to the contractor to obtain the ROW Permit.

### **906. UPDATED SURVEYING**

In addition to the Surveying requirements set forth in section 2.14.20 of this solicitation, the Company shall be responsible for staking the project stationing, easements and/or right-of-way boundaries. The survey datum used for this project is N.A.V.D. 1988.

**907. CLEAR AND GRUB**

Payment for clearing and grubbing shall not be paid for separately, but shall be included in the cost of the associated item of work. Payment will be compensation in full for all clearing and grubbing required for the roadway right-of-way and for any other clearing and grubbing indicated or required for the construction of the entire project area including area of excavated trenches and where trenchless operations are required, including all necessary hauling, furnishing equipment, equipment operation, furnishing any areas required for disposal of debris, leveling of terrain and the landscaping work of trimming, etc. as required.

**908. EARTHWORK**

It shall be the sole responsibility of the Company to evaluate the geotechnical findings and recommendations along with the construction drawings to-determine the quantity of soil to be managed or removed/disposed and replaced in order to meet the requirements of the Contract Documents. No separate payment shall be made for stockpiling, managing, mixing, and/or removal, disposal, importation and placement of A-3 sand required for backfill and/or over-excavation (bedding) material for the pipeline(s) and structures, but all costs shall be merged with the associated item of work shown in the Bid Form. Excess and/or unsuitable material shall become the property of the Company and shall be disposed of outside of the right-of-way.

**909. PHASING**

Any SJC standard pavement repair shall be completed within 10 calendar days or when 500LF of roadway is disturbed after completion of the utility installation. All mobilization/demobilization required for rework/regrading of lime rock base, dust control, including asphalt paving shall not be paid for separately but shall be included in the cost of the associated items in the Bid Form.

**910. ROADWAY RECONSTRUCTION**

Company shall perform survey of existing roadway horizontal alignment and vertical grade of the existing limits of construction along San Juan Drive and Pablo Road prior to any construction. No separate payment shall be made, but all costs shall be included in the lump sum cost of the General Conditions line items. Intent is to remove and replace impacted roadway, curb & gutter, and sidewalk portions to existing alignment, width, and grade to match existing elevations after open cut construction is performed.

**911. PAVING PLAN**

The Company shall submit as part of their project schedule a paving plan which details the number of streets to be pulverized at any one time for the approval of the Engineer. Plan should address schedule for laying binder and overlay. All roadway repairs shall be in accordance with the St. Johns County Standards and Details, Detail No.:201.

**912. PAVEMENT REMOVAL**

Saw cuts must be used on all asphalt removal.

**913. SJC PAVEMENT MARKING REQUIREMENTS**

- Pavement markings should be placed as shown on the plans and detail sheets. If no specific striping comments are noted on the drawings, The Company shall replace damaged/removed striping due to construction activities with like striping and/or reflectors.
- Any required temporary markings must be in place before opening lanes of traffic. Pay items for temporary pavement markings are to be included in the tabulation of quantities.
- The removal of existing pavement markings will be considered an incidental item with no additional compensation provided.
- All permanent pavement markings shall be extruded thermoplastic and meet current St. John's County specifications and FDOT standard specifications, latest edition.
- Thermoplastic pavement markings are to be placed no sooner than 30 calendar days after the completion of the final pavement layer.

**914. SWALE AND DITCH CONSTRUCTION/REGRAIDING**

The Company shall re-grade all existing swales and ditches. No separate payment shall be made for re-grading or construction of new drainage ditches as shown on the drawings, but shall be included in the Bid Document for roadway paving replacement. Payment for ditch invert will be the same as made for storm pipe invert. Payment for sodding of ditches will be separate.

**915. FORCE MAIN PROFILE ELEVATIONS**

The force main profile shown on the contract drawings indicate the station and elevation for the air release valves (ARV). The ARV must be located at a high point. To ensure this requirement is met, the company shall take station and elevation readings of top of force main pipe at 100 foot intervals. The data collected shall be taken during the progression of the pipeline installation. Once the stations and elevations are collected, submit to the JEA Representative prior to installing the ARV. The JEA Engineer will review the elevations to determine if the station (location) for the ARV needs to be adjusted from that shown on the force main (FM) profile. If the company installs the pipeline such that additional high points are created on the pipeline profile beyond that shown on the contract drawings, the company shall be solely responsible for furnishing and installing additional ARV/manholes at each of these high points. Elevations should be referenced to the survey benchmark

**916. DUST CONTROL**

The Company shall utilize a water spray truck to mitigate dusty conditions when roadways are unpaved and construction areas are not sodded.

**917. PERMIT COORDINATION MEETINGS**

Company shall be responsible for being thoroughly familiar with all permit requirements prior to mobilizing and starting work associated with a particular permit. If a permit requires a notification or meeting with the issuing agency prior to starting work, Company shall be responsible for arranging said meeting and informing the JEA Representative. The following shall be attended by, but not limited to, the Company's Project Manager, Company's Site Superintendent, Permitting Agency Representative, JEA Project Engineer and JEA Inspector.

**918. SEWER LATERAL LOCATION**

Sewer laterals will be strategically located by The Company soliciting information from property owners

and by observation of field conditions or by CCTV. Locations of sewer laterals as depicted on the construction drawings may or may not reflect the actual location as determined by soliciting information from the property owners and observation of field conditions. The sewer laterals will, however, be extended to the edge of the right of way as shown on the drawings.

**919. SIDEWALK REMOVAL AND REPLACEMENT**

The measurement and payment for this item shall be in accordance with JEA's Water and Sewer Standard as specified in Section 491.1 and 491.4. In addition to these requirements, the following conditions apply:

- Payment of the sidewalk removal shall also include removal of all existing retaining walls, steps, handrails, etc. These existing improvements shall be removed as part of this work due to their proximity and/or connection to the existing sidewalk.
- Payment of the sidewalk replacement shall also include construction of all pre-existing items that were removed such as but not limited to: retaining walls, steps, handrails, etc. All existing improvements that were removed during construction shall be reconstructed in their existing location to their existing configurations utilizing the existing materials to provide an improvement that is equal to or exceeds the pre-existing condition.

**920. VALVE AND LOCATE WIRE BOX IDENTIFICATION MARKERS**

The Company shall furnish and install fiberglass identification markers at all gate valve and locate wire box locations as directed by the JEA Representative. All costs associated with this work shall be included in the associated line item in the Bid Document.

**921. PLUG EXISTING VALVE**

The measurement and payment for this item shall be in accordance with JEA's Water and Sewer Standard as specified in Section 801.III.2. In addition to these requirements, the existing valve shall be closed, an MJ plug installed and the box and cover removed.

**922. PEDESTRIAN BRIDGE PIPE REMOVAL - WATER**

Lump sum fee shall include removal of pipes from the pedestrian bridge, disposal of all materials and waste. The limits of the lump sum fee shall begin and end at the points of abandonment on either side of the bridge. The abandonment of the water main on the northern end of the bridge shall be plugged downstream of the last meter servicing the condominiums and the main shall be restrained. The abandonment of the water main on the south end of the bridge shall be located at the first joint below grade south of the bridge and shall also be restrained. Lump sum payment shall include all of the above. It is the CONTRACTOR's sole responsibility to protect the bridge during the removal of all utility materials. Any work necessary to repair the bridge to the original existing condition due to damage during removal of the pipe is the CONTRACTOR's responsibility and shall be done at no cost to the OWNER.

**923. PEDESTRIAN BRIDGE PIPE REMOVAL – SEWER**

Lump sum fee shall include removal of pipes from the pedestrian bridge, disposal of all materials and waste. The limits of lump sum fee shall begin and end at the points of abandonment on either side of the bridge. On both the northern and southern edge of the bridge, the force main shall be removed to the first joint below grade and plugged per JEA standards. It is the CONTRACTOR's sole responsibility to protect the bridge during the removal of all utility materials. Any work necessary to repair the bridge to the original existing condition due to damage during removal of the pipe is the CONTRACTOR's responsibility and shall be done at no cost to the OWNER. It is the CONTRACTOR's responsibility to protect the water and avoid any sewage spills during the removal of the force main from the bridge.

**924. DRIVEWAY REMOVAL/REPLACEMENT**

No driveway removal/replacement shall be compensated for the installation of the force main by method of pipe bursting. Should driveways or sidewalks be damaged during installation by pipe burst, it shall be the CONTRACTOR'S sole responsibility to make all necessary repairs at no additional cost to the OWNER.

**925. REMOVAL/ABANDONMENT OF FORCE MAINS**

Contractor shall refer to the JEA General Conditions for the removal and abandonment of all force mains. Contractor shall take every precaution to avoid contamination of all water sources adjacent to the scope of this project. The CONTRACTOR shall exercise care to prevent spills onto the ground surface and shall immediately contain and clean up any spills at no extra cost to the OWNER. The CONTRACTOR shall properly dispose of all waste and wastewater arising from grouting operations. Under no circumstance is grout to be discharged into water bodies.

**926. CONNECTIONS TO EXISTING WATER AND SEWER UTILITIES**

Contractor shall verify size and type of pipe at each connection prior to ordering materials for connections. Price for connections shall be a lump sum price to include the installation of restraints/sleeves as shown in the plans or as approved by JEA.

**927. ABANDONMENT OF ALL UTILITIES UNDER ROADWAYS**

All water and sewer utilities to be abandoned under roadways shall be capped and grout filled for the length of the pipe under pavement.

**928. INSTALLATION OF STAINLESS STEEL FORCE MAIN ON PABLO BRIDGE**

Lump sum payment shall include all Stainless Steel (S.S.) piping, structural supports, fittings, air release valve hardware, and restraints necessary for the installation of the 8-inch force main on the bridge along Pablo Road. Limits of the lump sum shall be approximately STA 26+33 to STA 28+10 (including the S.S. piping and SS. 45 degree bends on either side of the Pablo Road bridge).

**929. PIPE UNIT COST**

Unit costs for pipes shall include all temporary pavements as necessary to restore the roadway after each working day, until final pavement repair is made.

**930. REMOVE EXISTING FIRE HYDRANT**

Removal of hydrant shall include full compensation for the item of work, complete, including all required excavation and backfill; placing and removing all traffic signs and barriers and maintaining traffic; removal, disposal of all materials. When removing and replacing fire hydrants, the contractor shall salvage the old fire hydrant assemblies and return them to JEA's storage yard at 2434 N Pearl Street, Jacksonville, FL.

**931. BYPASS PUMPING**

The Contractor shall provide all necessary labor, materials and equipment to maintain the uninterrupted sewer service of laterals, mains, trunks, force mains and pump stations at all times. The manner in which this is accomplished shall be left to the discretion of the contractor, subject to the requirements of the Contract and the prior approval of the JEA Engineer. The JEA Engineer's approval in no way relieves the contractor of any liabilities resulting from the bypass method chosen.

The Contractor shall not allow any sewage, at any time, to be pumped into any drainage structure or to spill, puddle, or run upon any street, construction trench, public or private property.

The responsibility for coordinating the need, length of time, method, and suction and discharge locations for bypass pumping shall be the responsibility of the Contractor subject to approval by the JEA Engineer.

### **932. BRIDGE PIPING SHOP DRAWINGS**

The Contractor shall submit material certification to JEA to verify the material for the Lake Vedra Bridge Piping and hangers, hardware, etc. is 316 Stainless Steel.

### **933. SJC ROAD CLOSURES**

As a requirement of the SJC ROW approval the contractor will be responsible for notifying St. John's County Public Works two weeks prior to any full road closures and submit the MOT Plan for the road closure to SJC for approval.

### **934. DRAWING NO. 7 CORRECTION- EXPANSION JOINT**

The 8" expansion joint will not be installed as shown on the stainless steel bridge piping on Drawing No. 7. Therefore, this item should not be included for item described in specification 928.