

018-21 APPENDIX A - TECHNICAL SPECIFICATIONS

FORCE MAIN REPLACEMENT TIMAWATHA AVE. & TARA WOODS LN.

The Company shall install approximately 2,200 LF of 4" force main with associated fittings, valves, and air relief valves. Approximately 1,400 LF of 6-inch AC force main and 2,560 LF of 4" AC force main will be grout filled upon release of C.O.C.

Restoration will include approximately 2,600 SY of sod, 500 SY of milling and resurfacing, 230 SY of sidewalk, 130 SY of driveway, and 90 LF of concrete curb and gutter.

901. BID DRAWINGS

Titled "Timawatha Ave. Force Main Replacement" and "Tara Woods Lane Force Main Replacement" as prepared by Construction & Engineering Services Consultants, Inc. are attached.

902. 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.

903. PERMITS AND PLAN APPROVALS

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

- COJ Plan Approval - CDN #4161.327
- Permit for Construction of an Extension to a JEA Drinking Water Distribution System and/or JEA Wastewater Collection/Transmission System
 - Permit # SWR-PERM-2020-12-000372 - Timawatha Ave.
 - Permit #SWR-PERM-2020-10-000361 - Tara Woods Lane FM

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 Permit.

Contractor is responsible for obtaining a COJ Right-of-Way (ROW) Permit prior to construction. A set of plans will be made available to the contractor to obtain

the ROW Permit.

904. 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.

905. 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 Manager and JEA Inspector.

906. 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.

907. GRASSING/SODDING

The Company shall replace all sod in-kind. St. Augustine type grass/sod will not be allowed in City of Jacksonville Right-of-Ways.

908. PAVEMENT REMOVAL

Saw cuts must be used on all asphalt removal.

909. TEMPORARY PAVEMENT

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.

910. PHASING

Any COJ standard pavement repair shall be completed within 10 calendar days or when 500 LF 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.

911. COJ 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 City of Jacksonville 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.
- A bituminous reflective pavement marker (RPM) adhesive meeting current City of Jacksonville and/or FDOT specifications shall be used on asphalt roadways.
- The Company shall use 4" x4" CLASS –B reflective pavement markers (RPMs) installed to meet current City of Jacksonville specifications and/or FDOT standard specifications. Acceptable examples are: Ennis Paint co., Model 911; Ray-O-Lite, Model AA-ARCII-FH; Apex, 921AR.
- Reflective pavement markers that do not conflict with permanent (thermoplastic) markings shall be placed on all final asphaltic concrete surfaces immediately after the temporary permanent striping is in place.
- The Company SHALL contact the Pavement Marking Inspector (904-387-8861) 48 hours PRIOR to installing any pavement markings of any City of Jacksonville roadway or streets.

912. IN-PLACE DENSITY TESTS OF EXCAVATION BACKFILL

The Contractor shall retain an independent testing laboratory to make in-place density tests of excavation backfill as specified in JEA Standard EXCAVATION AND EARTHWORK – SECTION 408 and as located by the JEA Representative. Density test reports shall be submitted to the JEA Representative for approval within 72 hours of the test directly from the laboratory. Test reports shall be identified by the project title, project number, project location and location and depth of each on-site test submitted. All costs associated with this work shall be included in the associated line item in the Bid Document.

913. 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.

914. 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/fittings/pipe/curb stops as shown in the plans or as approved by JEA.