003-21 Appendix A - Technical Specifications

Ponte Vedra Blvd 6-inch CI Water Main Replacement

901. Scope of Work

JEA is soliciting Bids from construction contractors (hereinafter referred to as "Company") for Construction of the **Ponte Vedra Blvd 6-inch CI Water Main Replacement** Project (the "Work" or "Services"). The Project is located in St. Johns County (SJC), Florida.

A. The Scope of work specified herein consists of the installation of a new water main (WM) along Ponte Vedra Blvd between Corona Rd and Pablo Rd and along Solana Rd between Ponte Vedra Blvd and Rutile Dr by open trench at the approximate lengths indicated: 7,860 LF of 12-inch PVC DR18, 80 LF of 10-inch PVC DR18, 100 LF of 8-inch PVC DR18, 280 LF of 6-inch PVC DR18 and 240 LF of 6-inch DIP (PC 350).

B. Connections to the existing water mains at the following locations:

- Connect new 12-inch PVC on Ponte Vedra Blvd to existing 12-inch PVC at Corona Rd
- Connect new 12-inch PVC on Solana Rd to existing 12-inch PVC on Solana Rd, west of Rutile Dr
- Connect new 10-inch PVC on Solana Rd to existing 10-inch AC on Rutile Dr
- Connect new 12-inch PVC on Ponte Vedra Blvd to existing 12-inch PVC at STA 56+64
- Connect new 12-inch PVC on Ponte Vedra Blvd to existing 12-inch PVC at STA 60+61
- Connect new 12-inch PVC on Ponte Vedra Blvd to existing 12-inch PVC at Miranda Rd

C. Installation of approximately 85 short-side water services and 82 long-side water services to transfer from existing to new water mains. Installaiton of 22 Fire Hydrant Assemblies.

D. The abandonment of existing water mains by grout-fill at approximate lengths indicated: 4,732 LF of 12-inch, 3,461 LF of 8-inch, 10,250 LF of 6-inch, 127 LF of 4-inch, and removal of 18 Fire Hydrant Assemblies.

E. Asphalt milling and resurfacing, and pavement striping to be done following completion of all work defined in the scope for the following roads:

- Ponte Vedra Blvd full-width from edge-of-pavement to edge-of-pavement from Corona Rd to Pablo Rd, including at side road intersections as delineated in the Plans
- Solana Rd full-width from edge-of-pavement to edge-of-pavement from Ponte Vedra Blvd to west of Rutile Dr as delineated in the Plans
- Rutile Dr full-width from edge-of-pavement to edge-of-pavement from Solana Rd to a point south as delineated in the Plans

F. Other work required shall include, but is not necessarily limited to, the following:

- Mobilization/demobilization, general requirements, and insurance
- Installation of Maintenance of Traffic (MOT) signs, devices, striping and measures to construct the project including temporary pavement and temporary signalization
- Installation/maintenance of erosion & sediment control devices/measures (E&SC) & other aspects of the storm water pollution prevention plan (SWPPP)
- Site work
- Clearing, grading, and sodding

- Repaving of all open cut crossings in accordance with SJC and JEA standards and details
- Restoration of SJC Right of Way
- Restoration of SJC westerly 34-ft Right of Way
- Installation of isolation valves and appurtenances as per the construction drawings
- Installation of connection to existing water mains
- Performance of all testing and swabbing required during construction
- Performance of all permits necessary to complete the work
- Performance of all site restoration to preconstruction (or better) condition

All Work shall be done in accordance with the January 2020 Edition of JEA Water & Wastewater Standards Manual. The following is a link to the JEA Water and Wastewater Standards:

https://www.jea.com/Engineering_and_Construction/Water_and_Wastewater_Standards/

The Company shall follow and comply with the latest edition of the St. Johns County Standards and Detail Manual included as a supplement to the Land Development Code, as applicable.

902. General Conditions

The General Conditions Lump Sum price shown on the Bid Form shall be compensation to complete the Work as required in this contract (except for items listed separately on the bid form), including but not limited to costs and expenses related to the following:

- The execution and recording of the Payment and Performance Bonds
- Safety requirements
- Quality Control
- Preparation of daily reports
- Attendance of meetings, project scheduling
- Maintenance of traffic (if not included elsewhere)
- Testing (if not included elsewhere)

Except as provided below for expenses related to Bonds and Surveying, JEA's payment for the General/Special Conditions line item shall be based upon the percentage of Work completed.

Bonds - Company will be permitted to invoice JEA, in its first payment application, for the costs associated with the execution and recording of the Payment and Performance Bonds. The amount paid by JEA for the Payment and Performance Bonds will be deducted from the General/Special Conditions line item total.

Surveying – Prior to construction, the Company will be permitted to invoice JEA for costs associated with the survey of the existing roadway horizontal alignment. The amount paid by JEA for these costs will be deducted from the General/Special Conditions line item total.

SWA - In the event that JEA authorizes changes to the Work under a Supplemental Work Authorization (SWA), the amount of the Bid Form line item for SWA Allowance will not be increased unless the total value of all SWA Work exceeds the original SWA Allowance provided on the Bid Form.

903. Bid Drawings

Titled "Construction Drawings for Ponte Vedra Blvd 6-inch CI Water Main Replacement", dated October 2020, prepared by Constantine Engineering, Inc. are attached.

904. St Johns County Road Pavement Marking Plans

Titled "Ponte Vedra Blvd From Corona Road to Duval County Line Pavement Marking Plans", St. Johns County, Florida, Project No. 19270-172-01, prepared by Jones Edmunds are attached.

905. Geotechnical Report

Titled "Geotechnical Exploration and Evaluation Report Revision No. 01 for JEA Ponte Vedra Blvd Watermain Replacement, St. Johns County, Florida; prepared by CSI Geo, Inc., dated January 17, 2020 is attached. The Company is responsible for reviewing the general subsurface conditions, design and site preparation recommendations, geotechnical boring logs and other pertinent information for this project.

906. Dewatering and Stormwater Pollution Prevention Plan

Titled "Dewatering and Stormwater Pollution Prevention Plan, Rev No. 01 for JEA Ponte Vedra Blvd Watermain Replacement, Ponte Vedra, Florida; prepared by CSI Geo, Inc., dated January 17, 2020 is attached.

907. Subsurface Utility Engineering (Test Hole Data Sheets)

Test Hole Data Sheets for Ponte Vedra Blvd; prepared by Maser Consulting, dated December 2019 and January 2020 are attached. The Company is responsible for reviewing this information for this project.

908. Temporary Assignment of Easement

The temporary assignment of easement made June 2, 2020 between St. Johns County and JEA is to temporarily assign its easement rights described in Exhibit A (Easement Area) of the easement for the purpose of performing work under the Project.

909. Permits and Plan Approvals

JEA will provide the following permits/Approvals for the Project:

- St Johns County Right-of-Way Permit
- FDEP General Permit Water Main Extension: Permit No. 0080377-032-DSGP, issued May 19, 2020

Prior to commencing Work the Company is responsible for obtaining the following permits, including but not limited to:

- FDEP NOI to Use NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities (CGP) – Form 62-621.300(4)(b)
- SJRWMD Notice to District of Dewatering Activity – Form 40C-2-900-12

All costs associated with obtaining such permits shall not be paid for separately but shall be included in the cost of the associated item of work in the Bid Form. The Company shall comply with all conditions of

permits issued for the Work, either directly or indirectly, issued by federal, state, or local governmental agencies.

910. 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.

911. Ponte Vedra Beach Municipal Service District (MSD) Townhall Meeting

Company shall attend the preconstruction Ponte Vedra Beach MSD Townhall meeting for the project. Advance notice of the meeting date, time and location will be provided to the Company.

912. Project Work Hours

The Company shall comply with St. Johns County project work hours at all times along Ponte Vedra Blvd and all side roads. The working hours are from **8:00 am to 6:00 pm, Monday through Friday**; and on weekends if scheduled a minimum of (5) working days in advance and agreed to in writing by SJC. No work allowed on Holidays. Refer to Plan sheet TTC-1 for lane closure hours.

No lane closures are allowed before 8:00 am and after 6:00 pm, Monday through Friday.

913. Project Work Hours – Ponte Vedra Resorts

The Company shall comply with the Ponte Vedra Resorts work hours at all times along Ponte Vedra Blvd. The working hours are from **8:00 am to 6:00 pm, Monday through Friday**; and on weekends if scheduled a minimum of (5) working days in advance and agreed to in writing by Ponte Vedra Resorts and SJC. No work allowed on Holidays.

The specific properties include:

Ponte Vedra Inn & Club
200 Ponte Vedra Blvd.

The Lodge & Club
607 Ponte Vedra Blvd.

Stockton Building
547 Ponte Vedra Blvd.

914. Players Championship Golf Tournament Event Work Restrictions

The Company shall shutdown and will not be allowed to perform any work activities during The Players Championship Golf Tournament which runs from March 5-15, 2021 in Ponte Vedra, Florida. Prior to the shutdown, the Company shall restore the roadway to a drivable surface consisting of permanent asphalt repair placed on the limerock base course as specified in the Plans. The Company shall also clean up the entire work and surrounding areas, remove any hazards, secure all materials and equipment, and remove all Temporary Traffic Control devices.

915. School Bus (private and public) Prioritization on One Lane Road

St. Johns County requires that when a school bus, private or public approaches the Work Area and is stopped by flagging operations due to the one lane road, the Company shall make it a priority to minimize the amount of time the school bus is stopped, and allow the bus to travel through the work zone in an expeditious and safe manner.

916. Critical Path Method (CPM) Scheduling

The Contractor shall use the Critical Path Method (CPM) to schedule and manage the Work in accordance with Section 2.13.2 CPM SCHEDULE REQUIREMENTS of the Solicitation.

917. Maintenance of Traffic/Temporary Traffic Control

The Temporary Traffic Control (TTC) Plan shall be in accordance with drawings, TTC-1 to TTC-13. Payment will not be paid for separately, but shall be included in the associated bid item as set forth in the Bid Form, and shall include, but not be limited to, mobilization, excavation, sod, pavement marking removal, pavement marking removable tape, thermoplastic pavement marking, thermoplastic preformed pavement marking, permanent tape for concrete bridges, permanent tape for concrete surfaces, temporary reflective pavement markers, permanent reflective pavement markers, work zone signs, temporary barrier wall, temporary crash cushion, channelizing devices, milling existing asphalt pavement, superpave asphaltic concrete, grounding rumble strips and portable changeable message sign, removal of all TTC components, cleaning up the site; furnishing all material, labor, tools, and equipment and all incidental and related work required to complete the work of the item.

918. Roadway Reconstruction

Company shall perform survey of existing roadway horizontal alignment and vertical grade and of the existing structures and appurtenances for the Work area prior to initiating 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 restore existing roadway, structures and appurtenances to existing alignment, width, and grade to match existing elevations after construction is performed. Damage to existing features, including but not limited to asphalt, sidewalks, curb and gutter, driveways, walls, fencing, signs, lights, landscaping, and hardscape, will be replaced at the Contractor's expense unless otherwise authorized by JEA.

919. Open Cut Trench for Pressure Pipe

The new water main pipeline (water services excluded) shall be installed by open-cut as depicted on the Plans and be in accordance with JEA Water and Wastewater Standards Manual, Plate W-42 OPEN CUT TRENCH FOR PRESSURE PIPE (January 2020).

920. Pipeline Trench Repair and Asphalt Surface

Upon completion of the pipeline trench repair, the roadway shall be restored to a drivable surface consisting of temporary or permanent asphalt placed on a limerock surface before it is reopened to traffic at the end of each workday and before the Contractor moves to the next construction/work zone.

The SJC standard permanent pavement repairs shall be in accordance with the Major Collector, Minor Collector and Detail 201 as applicable and depicted on the Plans; and shall be completed within five (5) 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.

921. Asphalt Pavement Milling & Resurfacing

Asphalt pavement milling & resurfacing shall be completed when all pipeline work is done as depicted on the Plans. The work shall be done in two lifts as described herein, with a separate bid item for each lift.

- Asphalt Milling = 3.5 inches
- Resurface 1st Lift (base course) = 2 inches (Asphalt Type SP 12.5)
- Resurface 2nd lift (surface course) = 1.5 inches (Asphalt Type SP 9.5)

The Company shall submit as part of their project schedule a pavement milling & resurfacing sequencing plan to be approved by JEA prior to scheduling the work. All work shall be done in accordance with the St. Johns County Standards and Details.

922. St. Johns County Pavement Marking Requirements

Pavement markings shall be placed within the Project limits as shown on the attached "Ponte Vedra Blvd From Corona Road to Duval County Line Pavement Marking Plans", St. Johns County, Florida, Project No. 19270-172-01, prepared by Jones Edmunds.

- Any required temporary markings must be in place before opening lanes of traffic. Pay items for temporary pavement markings are not paid for separately but included in the associated item of paving.
- 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.
- A bituminous reflective pavement marker (RPM) adhesive meeting current FDOT specifications shall be used on asphalt roadways.
- Reflective pavement markers that do not conflict with permanent (thermoplastic) markings shall be placed on all final asphaltic concrete surfaces immediately after the temporary striping is in place.

923. Traffic Signage

Costs incurred by the Company to provide new signage and pavement markers, or remove and replace existing signage as necessary to accomplish the work shall not be paid for separately but shall be merged with the cost of the associated item of work. Damaged signage shall be replaced with new signage. All signage and pavement markers shall be in accordance with the drawings and St. Johns County requirements.

924. Swale and Ditch Construction/Regrading

The Company shall regrade all existing swales and ditches as necessary to restore the swales and ditches to their pre-construction (or better) condition. No separate payment shall be made for regrading or construction of new drainage ditches as required for restoration, but shall be included in the associate item on the Bid Form.

925. Sidewalk Removal and Replacement

The measurement and payment for this item shall be in accordance with JEA's Water and Wastewater Standards Manual as specified in Section 801-X.1 & X.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.

926. Company's Use of Premises

Company shall have complete use of the premises for the performance of the Work. Prior to mobilization, the Company's Work Plan shall address its staging, storage, pipe stringing, pipe installation, and limits of disturbance areas within St. Johns County right-of-way. Also, the Company shall coordinate activities with any other Company who will be performing work in the same general area.

All work shall take place within the St. Johns County right-of-way.

The Company is responsible for securing and obtaining any additional off-site storage areas necessary.

Coordinate uses of premises with JEA, St. Johns County, Ponte Vedra Resorts, and other entities with vested interest.

Company shall assume full responsibility for security of all its and its subcontractors' materials and equipment stored on the site.

If directed by the JEA or ENGINEER, move any stored items which interferes with operations of St. Johns County, or other contractors.

Company is responsible for obtaining and paying for the use of additional storage or work areas if needed to perform the work.

927. Company's Staging, Storage and Stockpile Area

No additional staging, storage, and stockpile will be made available by the JEA along the project site. The Company is not allowed to store any equipment or materials outside the SJC right-of-way. The location will be agreed to upon and discussed at the pre-construction meeting.

928. Updated Surveying

In addition to the Surveying requirements set forth elsewhere in this solicitation, the Company shall be responsible for surveying and staking the project stationing, permanent easements, temporary construction easements, and/or right-of–way boundaries. The survey datum used for this project is NAVD 1988. Staking shall be maintained throughout construction, including resurveying and restaking if the stakes are damaged

or removed. All surveying shall be performed by a Professional Surveyor and Mapper (PSM) licensed in the State of Florida.

929. Existing Utilities

Known surface and subsurface utilities are shown or noted on the drawings as accurately available information will permit. JEA does not guarantee the information shown or noted or that utilities other than those indicated (on the drawings) do not exist. It is the responsibility of the Company to notify each of the utilities at least (15) fifteen working days prior to construction and request that the location of their respective utility or material be located and staked in the field. Should the Company encounter unidentified utility, work in the immediate area shall promptly cease and the JEA representative shall be advised. JEA shall investigate the condition and propose remedial action. The Company is reminded of the laws of Florida requiring notification of Gas Company, at least four (4) working days in advanced of any digging operation. The Company shall call the Sunshine State One-Call of Florida (811) to request location of all facilities owned by utilities that participate in the locate program. Failure by the Company to contact Sunshine State One-Call of Florida prior to digging shall obligate the Company for damages to participating utility Company and associated repair cost.

In order to reduce the disruption and cost of utility damages occurring in the St. Johns County, the Company shall prevent damages to existing utilities caused by its work through field verification of the location of existing utilities. In the case of open excavation, verification may be performed during the Company's work.

Company shall verify the location of existing utilities as needed to avoid contact. Existing utilities shall be exposed using detection equipment or other acceptable means. Such methods may include but shall not be limited to "soft dig" equipment and ground penetrating radar (GPR). The excavator shall be held liable for damages caused to the city's infrastructure and the existing facilities of other utility companies.

930. Coordination of Construction with Existing Utilities

Company shall verify size and type of existing pipe at each connection prior to ordering materials for connections. All costs associated with connections to existing water and sewer utilities shall not be paid for separately, but shall be included in the cost of the associated line items shown on the Bid Form.

The Company shall establish liaison with and coordinate work with (including; but, not limited to) JEA, Beaches Energy, AT&T, TECO/Peoples Gas, and Comcast to prevent interference with overhead and buried electrical, telephone, and television cables. AT&T, Beaches Energy, TECO/Peoples Gas, Comcast and others will need time to relocate their facilities.

The Company shall at all times conduct his operation so as to interfere as little as possible with the existing utilities. The Company shall develop a program in cooperation with JEA and interested representatives of Utilities and City agencies, which shall provide for the construction of, and putting into service, the new work in the most orderly manner possible. This program shall be adhered to, except as deviations there from are expressly permitted. All work of connecting with, cutting into, and reconstructing existing pipes and structures shall be planned so as not to interfere with the operation of the existing utility.

931. Construction Sequencing Constraints & Connections

The Company shall adhere to the following construction sequencing constraints for the work in this Contract. It is not necessarily a complete list of all work to be completed

- The Work shall commence at the north end of the project on Ponte Vedra Blvd from Miranda Rd (STA. 85+10 as shown on Drawing C-13) to Pablo Rd (STA. 104+00 as shown on Drawing C-15). The purpose is to transfer the existing water service connections from the existing 6-inch CI WM

located on the east side of Ponte Vedra Blvd to the existing 12-inch PVC WM located on the west side of Ponte Vedra Blvd.

The Company is allowed to commence the remaining project work simultaneously with the work at the north end of the project, based on its construction sequencing plans.

- The Company shall give a minimum of five (5) working days advance written notice to the JEA of each component proposed for shutdown, outages, tie-in, or disruption, all of which shall be subject to JEA's approval and limitations. The request shall include, but not be limited to, point of connection, fittings to be used, method of flushing, and estimated construction time for connection.
- Connection to the existing system and transfer of services shall be performed by the Company under the JEA's direction. The Company shall not operate any valves in the existing system.
- The JEA reserves the right to postpone connection to existing utilities due to operational and/or weather related concerns.
- Connection to the existing system may depend on the closure of certain valves. The existing valves may be not be operable or may not seal properly. The Company shall coordinate with the JEA in advance of connections to determine condition of existing valves.
- Interruption of service is not allowed during peak flow periods or holidays.
- Work shall proceed continuously to complete connections in the minimum time. Minimize shutdown times by thorough advanced planning. Have required equipment, materials, and labor on hand at time of shutdown.

Company shall anticipate performing the water main relocation tie-in work within a 6-hour maximum shutdown time.

932. Water Main Flushing Plan

The Contractor shall prepare a written flushing plan which outlines water supply point and all blow-off points and submit the plan a minimum of ten (10) working days prior to the proposed work to the JEA Project Manager. Due to the limited water supply and operating limitations of the JEA system, the flushing plan must be approved by the JEA Project Manager prior to implementation. The Contractor shall modify the flushing plan as directed by JEA, at no additional cost. Due to the many operating limitations of the existing water systems, the flushing operation will be scheduled (date and time), by JEA and will often require flushing during low water demand periods (10 p.m. to 5 a.m.). The Contractor shall anticipate flushing lines during low water demand periods.

For additional requirements, refer to Section 350-III.6.2, III.6.3 in the JEA Water and Wastewater Standards Manual.

The Contractor shall provide notification of affected property owners, business's, Ponte Vedra Inn & Club Resorts, residents a minimum of five (5) working days prior to implementing the flushing plan.

933. Pressure and Leakage Testing

The Contractor shall test the water main pipeline in accordance with Section 350-III.6.3 in the JEA Water and Wastewater Standards Manual. The total length of pipe within the test section shall not exceed 5,000 linear feet.

934. Water Service Connections

All long side water service connections (services crossing roadway) shall be installed by trenchless methods such as pneumatic moling/boring from the new water main to the existing or relocated water meter location, unless indicated otherwise on drawings.

935. Fire Hydrant Branch Piping and Valves

The 6-inch pipe branch material from the water main tee to the fire hydrant shall be restrained joint pipe, using either PVC or Ductile Iron Pipe (DIP) as depicted on the Plans. All gate valves connected to fire hydrant assemblies shall be located outside of roadway pavement, and not required to be located adjacent to the water main tee fitting for the 6-inch pipe branch, unless it is outside of the pavement. The pipe material is dependent on whether it is a short or long side service as defined below:

> Short-Side Water Services: The 6-inch pipe material from the water main tee to the fire hydrant shall be restrained joint PVC as depicted on the Plans.
>
> Long-Side Water Services: The 6-inch pipe material (crossing the pavement to the far side) from the water main tee to the fire hydrant shall be restrained joint Ductile Iron Pipe (Pressure Class 350) as depicted on the Plans.

In reference to Plate W-13 FIRE HYDRANT INSTALLATION USING MECHANICAL JOINT TEE in the JEA Water and Wastewater Standards Manual, the following revisions are noted:

The material for Ductile Iron Pipe shall be Pressure Class 350, with Mechanical Joints conforming to AWWA C151. Note that this is a revision to Plate W-13 FIRE HYDRANT INSTALLATION USING MECHANICAL JOINT TEE in the JEA Water and Wastewater Standards Manual, and shown on Drawing W-STD-1, for long-side services only.

936. Removal of Existing Fire Hydrant

Removal of fire 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.

937. Dewatering

If Company encounters groundwater, the Company shall be responsible for obtaining; a *Generic Permit for Discharge of Produced Ground Water From any Non-Contaminated Site Activity* from the Florida Department of Environmental Protection (FDEP), and a *Noticed General Permit for Short-term Construction Dewatering* from the St. Johns River Water Management District (SJRWMD) before any dewatering activities can begin

The Company shall be responsible for developing and utilizing a dewatering system(s) to remove water from the excavations. Prior to beginning any dewatering activities, the Company shall submit a dewatering plan to JEA for review. The Company shall comply with all sampling requirements listed in FDEP regulation (62-621.300(2) F.A.C.) before any dewatering can begin.

If the above requirements are not followed, the Company shall be held liable for any fines and/or violations incurred by JEA.

Refer to Section 2.14.3 NPDES PERMIT CONFORMANCE - DEWATERING of the Solicitation for further information and requirements for dewatering.

938. Landscaping

Except for trees designated for removal and/or replacement and areas within the designated limits of clearing on the drawings, the Company shall be responsible for protection and preservation of all trees, palms, shrubs, plants, irrigation systems, landscaping, signs, etc. along the route of the proposed work including hand digging, removal and storage of such and subsequent replacement to the fullest extent possible of the pre-existing condition. No trees shall be removed in the St. Johns County right-of-way unless designated for relocation on the construction drawings. All costs associated with such shall not be paid for separately but shall be included in the cost of the associated item of work shown on the Bid Form.

939. Clearing and Grubbing

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.

940. Dust Control

The Company shall utilize a water spray truck to mitigate dusty conditions when roadways are unpaved and construction areas have a lack of vegetative cover.

941. 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 and easements.

942. Temporary Mailbox Removal/Relocation

Contractor shall remove and temporarily relocate any mailboxes that are in conflict with construction for the working day. All mailboxes removed/relocated shall be reinstalled by the end of the workday. It is the Contractor's responsibility to protect all mailboxes from damage during construction. Damage to any mailboxes during construction will be replaced at the Contractor's expense. All costs associated with temporary relocating mailboxes shall not be paid for separately but shall be incorporated in the associated line item work.

943. Site Restoration Allowance

The Site Restoration Allowance is to cover costs for labor, materials and equipment associated with the restoration of various features that are damaged during normal construction operations found along the pipeline route within the project work area. These features include but are not limited to: repair or replacement costs of pavers, leveling sand, shell aggregate/specialty concrete, painted concrete, brick and stone driveways; all types of mail boxes; ornamental plants, flowers, shrubs, bushes and trees; planters and various types of garden borders; mulch, rock, stones and other ground cover; light poles, ground lights, spot lights and associated electrical work to reconnect damaged electrical features; metal and wooden fences; irrigation systems; and other damages.

The Site Restoration Allowance is intended for items that are not covered by any other line item on the Bid Form as defined in the Measurement and Payment Section 801 of the JEA Water and Wastewater Standards Manual. This allowance does not cover the cost of any damages outside the work area that are a direct result of or caused by negligence by the Company or their sub-contractor. In order for the allowance to be used for restoration of any item, the Company must submit documentation of the specific work to be completed to the JEA Project Manager or Representative. The Company must get written authorization signed by the JEA Representative prior to beginning the work that will cause damages to the item(s) in question. Once the Company receives written approval from JEA or their Representative, the work causing damage to the item and/or to repair the item can commence. The Company shall not consider verbal statements as authorization to proceed with the work.

In determining costs for site restoration work, the Company and the JEA Representative shall mutually agree to the pricing of the work. Any negotiated increase in the price shall be based on the Company's costs for labor, materials and equipment directly applicable to the increase plus 10% thereof for Company's supervision, overhead, bonds and profit. For any negotiated increase, the Company will provide a complete detailed breakdown for all labor, material, and equipment, etc. associated with the work. A lump sum figure submitted with no breakdown will be returned to the Company without review.

The site restoration allowance is not applicable to grassing/sodding, as this is covered under a separate line item in the Bid Form. Refer to section 944 Grassing/Sodding in the technical specifications.

944. Grassing/Sodding

Disturbed areas within the St. Johns County right-of-way and on private property must be restored to original or better conditions using sod (if grass was established pre-construction) which complies with Section 441 GRASSING of the JEA Water and Wastewater Standards Manual requirements and specifications.

This section describes the coordination of the sod type and inclusion of additional sod varieties that are not included in the JEA Standards Manual. The Company shall coordinate existing sod type with property owner, if available, and replace the sod in kind. Sod shall match existing sod to one of the varieties listed below:

- Floratam St. Augustine
- Palmetto St. Augustine
- Argentina Bahia
- Tiftuf Bermuda
- Bimini Bermuda
- Tifway 419 Bermuda
- Icon Zoysia

945. Updated As Builts

Upon submission of each payment application, Company shall furnish to the JEA Engineer a photocopy "redline" set of drawings identifying those field changes made to the Work to date, along with a photocopy set of the associated field notes. Revisions and recording of information on the photocopy set of drawings shall be done in scale in red ink clearly and accurately identifying those changes in the Work by a competent drafter. All "As-Built" information shall be recorded and kept current during the progress of the Work. The JEA Engineer may review and comment on the drawings which shall be incorporated into the next month's

as-built submittal. Failure to incorporate changes the following month may result in denial of pay application request. These requirements only supplement the requirements of the General Conditions.

When the payment of application submitted includes associated items of final restoration for a project, or a portion of the project thereof, then the associated final as-builts shall be submitted as a "redline" marked photocopy set of drawings for that pay period. The Project Engineer may review and comment on the drawings with the view toward final as-built submittal. The subsequent month submittal made with the payment application shall incorporate a photocopy set of CADD drawing final as-builts. The JEA Engineer shall review and comment on the photocopy set of CADD drawings which shall be incorporated into the final as-built submittal. These requirements only supplement the requirements of the General Conditions.

946. Quality Control and Quality Assurance

The Company shall provide Quality Control to ensure the Work is performed in accordance with the Contract. Quality Control shall be appropriate for the nature of the Work, and shall be conducted in manner consistent with sound quality management and industrial engineering principles. The Company shall have only personnel trained in Quality Control techniques and experienced with the nature of the Work perform the Quality Control function.

JEA will perform Quality Assurance activities. Such activities do not in any way limit or reduce the Company's requirements. JEA may become aware of quality related problems during its performance of Quality Assurance, but has no obligation to notify the Company of its findings. The Company shall provide access to all areas of Work, including the Company's facilities, for JEA Quality Assurance personnel and JEA Representatives. JEA will conduct Quality Assurance activities so as not to excessively interfere with the Work, however, where JEA Quality Assurance personnel request specific actions of the Company, the Company shall comply with the request and agrees that such compliance is included as part of its Contract Price.

947. Reporting

The Company shall provide daily reports and other reports as defined in the Contract Documents.

Where the reporting frequency is daily, reports shall be submitted by noon of the following workday. Where the reporting frequency is weekly, reports are due by Monday at noon, covering the prior workweek. Where Monday is a Holiday, the reports are due at noon on the next workday. Where reports are due monthly, reports are due by noon on the first business day of each month. Sample forms for reports may be included in the Contract Documents. Where they are included they are to be used. Where they are not included, the Company shall provide a sample of its proposed report format for each report to the Contract Administrator at least one-week prior to its initial due date. The JEA Engineer will review and either approve or reject use of the report. Where proposed report is rejected, Company shall resubmit revised report formats, until JEA Engineer approves format. Reporting cycle shall begin upon PO date, or, if used, date of Notice to Proceed.

948. 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 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 Office, 21 W. Church Street, Customer Center 1st Floor – Room 002, Jacksonville, FL 32202, (904) 665-6740, or by fax (904) 665-7294, or online at JEA.com.

949. JEA Company / Subcontractor Safety Requirements

Company and Subcontractors must be prequalified under JEA's safety prequalification program. Bids from Companies not prequalified under the safety program will not be opened. Subcontractors do not need to be safety prequalified at time of bid opening, but must prequalified before they step on the jobsite. To inquire

as to status of safety prequalification, contact Jerry Fulop, JEA, 21 W. Church Street, Jacksonville, FL 32202, (904) 665-5810, e-mail: fuloje@jea.com

Company agrees to abide by all JEA's Safety Rules and Regulations in accordance with JEA Company Safety Requirement. In addition, ALL Company employees will be required to attend and successfully complete Company's orientation and supervisor's training at Company's expense prior to the start of any work activities. This is a condition of employment for Company and Subcontractors who perform work for JEA. There will be at least four (4) categories of training mandated. 1) Orientation, 2) Supervisor, 3) Competent Person, and 4) Certified Flagger.

ORIENTATION - Required one day training class for ALL personnel working at JEA's sites. Acceptable training will be EITHER attendance at an OSHA 10 hour class in the last two years (will require an OSHA issued card for proof) or attend the NCCER (National Center for Construction Education and Research) 8 hour Orientation. Company personnel utilizing the OSHA 10 Hour class must also attend the JEA 2-Hour Operation specific training. This training must be completed prior to starting work on a JEA job site.

SUPERVISOR - Orientation and the JEA Safety Leadership Development (SLD) Class. This requirement is for ALL employees paid as a foreman, general foreman, superintendent or any employee that will direct or may be expected to direct work.

CERTIFIED FLAGGER – All Company's performing any construction to or on City of Jacksonville, or State of Florida streets and highways shall provide certified flaggers to direct traffic in accordance with the approved MOT of the project.

NOTE: OSHA ten (10) hour classes are available from the following: Trained and Certified OSHA Instructors, Consultants, Safety Councils, etc. Other training mandated by JEA has been developed and approved by the NCCER. This training will be available from Certified Master Instructors, JEA, Northeast Florida Safety Council or other approved sources and will be tracked in the form of an individual transcript for each employee by NCCER.

Company may request exemption for specialty work based on task to be performed, hazard involved, and duration of work.

950. Customer Service Plan

The Company's Customer Service Plan to achieve customer satisfaction requirements as determined by JEA Project Outreach and Ponte Vedra Municipal Service District shall include, but is not limited to the following:

- Name of Company's Customer Service Representative
- Office phone number
- Cell phone number
- Email address
- Fax number
- Detailed flow chart outlining how the Company will handle customer concerns
- Preemptive customer satisfaction control measures (such as door hangers provided by JEA, and neighborhood meetings in conjunction with JEA staff)
- Company's plan for notification of affected property owners, business's, residents of proposed road and/or sidewalk closures as shown in the project plans

- Construction best practices that eliminate damage to customers' property including, but not limited to, blocking customers' access to driveways, cutting customers' services during tie-in, excessive noise from construction equipment, and elimination of dust during construction Work.
- Providing access for business and home owners, mail delivery, landscape service, and garbage/yard debris/bulk pick-up