**APPENDIX A-TECHNICAL SPECIFICATIONS**

017-18 Construction Services for St. Johns Pkwy – Racetrack Rd to Espada Ln –Trans – New - RWM

1. **SCOPE OF WORK**

JEA is soliciting Bids from construction contractors (hereinafter referred to as “Company”) for construction services for **St. Johns Pkwy – Racetrack Rd to Espada Ln –Trans – New - RWM** Project (the “Work” or “Services”.)

* + 1. This request is to solicit bids for construction services to install 4,500LF of 8-inch PVC DR18 reclaimed water main by open cut method. The new main will connect to an existing reclaimed water main at the intersection of Racetrack Rd and St Johns Parkway; run along the St Johns Parkway eastside of the ROW, and connect to Espada Ln.
		2. The Company shall strictly follow JEA’s Water & Sewer Standards Manual, issued January 1, 2017 or latest version, during the construction of the improvements. Contractor shall use a Request for Information in the event of a discrepancy.

The following is a link to the JEA Water and Sewer Standards: <https://www.jea.com/Working_With_JEA/Engineering_and_Construction/Reference_Materials/Water_and_Sewer_Standards.aspx>

* + 1. The Company shall follow and comply with St Johns County Standards and Detail Manual and St Johns County Development Review Manual
		2. The duration of work from the notice to proceed will be one hundred and eighty (180) days until substantial completion and two hundred and ten (210) days until final completion.
1. **BID DRAWINGS TITLED “CONSTRUCTION DRAWINGS FOR ST JOHNS PARKWAY RACETRACK ROAD TO ESPADA LANE 8’’ RECLAIMED WATER MAIN”** prepared by cph are attached.
2. **GEOTECHNICAL REPORT TITLED “Report of Geotechnical Exploration for St. Johns Parkway, Race Track Road to Espada Lane 8-inch Reclaimed Water Main, St. Johns County, FL”** by MAE Meskel and associates engineering, Inc. is attached.
3. **SUE Test Hole Reports** prepared by FR Aleman and Associates are attached
4. The Company shall obtain a ROW permit from St Johns County and adhere to the attached St Johns County Engineering Services Department’s, “Guidelines for minimum test requirements for St Johns County Inspections” and “As-Built Requirement Checklist”.
5. **BASIS OF AWARD**

The basis of award will be the lowest, responsive, and responsible Bidder submitting the Base Price for open cut, as referenced on the Bid Form.

1. **BID PRICING (included in front ends, but does not list each item)**

Contract lump sum price shown for the general conditions on the bid form shall be compensation to complete the work as required in the general conditions that is not paid for separately including, but not limited to payment bond, performance bond, safety, quality control, preparation of daily reports, maintenance of traffic, attendance at meetings, scheduling, testing (if not included elsewhere), and all other items listed in the general condition specifications. Payment of the lump sum price shall only be made for the percentage of work completed.

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.

1. **SURVEYING**

In addition to the Surveying requirements of this solicitation, the Contractor 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.

1. **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.

1. **EARTHWORK**

It shall be the sole responsibility of the Company to evaluate the geotechnical findings and recommendations along with the construction drawings todetermine 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.

1. **LANDSCAPING**

Company shall be responsible for protection and preservation of all trees, palms, shrubs, 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.  All costs associated with such shall not be paid for separately but shall be included in the cost of the associated item of work.

1. **PERMITTING**

Contractor shall comply with all requirements and conditions of the JEA Permit for Construction of Reclaimed Water Main.

Contractor is responsible for obtaining St Johns County Right-of-Way (ROW) Permit prior to construction.

**Environmental Permitting**

The Contractor must submit a FDEP - NPDES Notice of Intent (NOI) to Use Construction General Permit (CGP) for Small or Large Construction Activities two (2) days prior disturbing land.

A Notice to FDEP - NPDES of Dewatering Activity must be submitted (10) ten days before commencement of dewatering to obtain permitting coverage and this can be included in the NOI initial application if dewatering is anticipated.

Acknowledgement Letter from FDEP for verification of permit coverage for CGP, including the project identification number, and the permit coverage dates should be submitted to JEA once obtained.

Copy of SWPPP to be kept on site for FDEP inspections should be submitted to JEA before disturbing land activities start

Copy of dewatering plan should be submitted to JEA once applying for dewatering permit

1. **RESTORATION**

The drawings show limits for all restoration items based on the existing design location of the proposed force main and reclaim water main and are provided for the Contractor’s convenience.  If the Contractor is forced to move the force main into pavement or sidewalk due to a direct conflict with a utility or tree, the JEA Representative must be notified immediately and authorize such work.

Damage to asphalt, sidewalks, or curb and gutter (not indicated for removal and replacement) will be replaced at the Contractor’s expense unless otherwise authorized by JEA.

1. **COORDINATION OF CONSTRUCTION WITH EXISTING UTILITIES**

The Company shall establish liaison with and coordinate work with JEA, BellSouth / AT&T, TECO/Peoples Gas, Florida Power & Light and Comcast to prevent interference with overhead and buried electrical, telephone, and television cables. BellSouth, TECO/Peoples Gas, and Comcast may need time to relocate their facilities.

The Company shall at all times conduct its operation so as to interfere as little as possible with the existing utilities. The Company shall develop a program in cooperation with the 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 therefrom 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.

1. **LOCATION AND PROTECTION OF EXISTING PROPERTY - ON NON-RIGHT OF WAY ISSUES**

When working in areas outside the normal City, County and/or State right-of-ways, the Company shall be responsible for location and protection of all property shown or not shown on the drawings, including maintenance and repair of any damaged utility service. Utility locates shall be provided in accordance with local and state requirements. If the drawings indicate abandonment or removal of property or utility service by the Company, the Company shall proceed after it has determined that all services have been de-energized and/or decommissioned. The Company shall coordinate with the owner of the property (Owner) and the appropriate utility company to determine status of the existing utility service prior to starting work in the area. All property and utility services that are to remain shall be appropriately protected and maintenance during the construction activity. Should there be additional cost to the Company for protection or maintenance of property or utility services not shown on the drawings, the Company shall justify and document this cost in writing to the JEA Contract Administrator. A Supplemental Work Authorization (SWA) will be negotiated and approved prior to starting work. Should property or utility services be damaged by the Company, the Company shall notify the JEA Inspector, the Owner and the utility company immediately. Should the damage interrupt service, the Company shall be responsible for restoring service as soon as possible. However, the Company shall not make repairs without approval of the Owner or the utility company and should the Owner or a particular licensed Company be required to make the repairs the Company shall be responsible for coordinating this effort as well as any cost associated with the repair. JEA reserves the right to deduct any unsettled claim amount from monthly progress payments until such time as the claim is satisfactorily resolved. This paragraph is intended to stress the importance of customer relations and the maintenance of all services to the customer.

1. **PAVEMENT REPAIR (Only for Open Cut Option)**

Any St Johns County 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.

1. **ROADWAY RECONSTRUCTION**

Company shall perform survey of existing roadway horizontal alignment and vertical grade of the existing limits of construction along William Burgess 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.

1. **PAVEMENT REMOVAL (Open Cut only)**

Saw cuts must be used on all asphalt removal.

1. **SWALE AND DITCH CONSTRUCTION/REGRADING**

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.

1. **DUST CONTROL**

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

1. **PERMIT COORDINATION MEETING**

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.

1. **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 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.
1. **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.

1. **Connections to existing 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.

1. **Connect New 8-inch RECLAIMED Water Main to Existing 12-inch PVC Water Main AT THE CROSSING OF RACETRACK RD AND ST JOHNS PKWY.**

Contractor shall coordinate connection with JEA wet tap connection at STA 10+44.37 to existing 12-inch RWM

1. **Connect New 8-inch RECLAIMED Water Main to Existing 8-inch BLOW OFF AND CAP AT STA 55+09.13**

Contractor shall coordinate connection with JEA connection at STA 55+09.13 to existing 8-inch by removing blow off and 8-inch cap

1. **UTILITY POLE HOLDING / SUSPENDING**

Holding or suspending of utility poles including power poles and telephone poles as needed, and when trenching or excavating is within a horizontal distance from the pole that is less than the depth of the trenching or excavation. Work shall include, but not limited to, furnishing of all material, labor, supervision, tools, and equipment as required to hold/suspend utility poles. The Company must coordinate any utility pole holding/suspending with JEA. The Company shall schedule a meeting with the JEA Electrical representative in the field to discuss the anticipated work. A minimum of two (2) days’ notice for the field meeting is required. The actual pole hold work will be scheduled at the field meeting.

No separate pay item will be made for this work and all costs shall be included to the associated work item unit cost as indicated in the Bid Form.

1. **DEWATERING**

If the Company encounters groundwater, the Company shall be responsible for utilizing a dewatering system(s) to remove water from the excavations in accordance with the MAE Geo Dewatering and SWPPP which is part of the contract documents. If the above requirements are not followed, the Company shall be held liable for any fines and/or violations incurred by JEA.

1. **DRAINAGE ALONG RIGHT OF WAY AND UTILITY EASEMENT**

The Company shall so conduct its operations and maintain the Work in such condition that adequate drainage shall be in effect at all times. The Company shall not obstruct existing gutters, ditches and other runoff facilities.

1. **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.

1. **TRAFFIC SIGNAGE**

Costs incurred by the Contractor 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, FDOT requirements and City Traffic Engineer’s requirements.

1. **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.
1. **SWALE AND DITCH CONTRUCTION/REGRADING**

The Contractor shall regrade all existing swales and ditches as necessary to restore the swales and ditches to their original (or better) condition. No separate payment shall be made for regarding or construction of new drainage ditches as required for restoration, but shall be included in the Bid Document for roadway paving replacement. Payment for sodding of swales and ditches will be separate.