

APPENDIX A TECHNICAL SPECIFICATIONS – DRAFT (NOT FOR CONSTRUCTION)

SIPS-Southside Blvd. Intertie to Deerwood III WTP

901. Scope of Work

JEA is soliciting Bids from construction contractors (hereinafter referred to as “Company”) for Construction of the SIPS-Southside Blvd. Intertie to Deerwood III WTP Project.

The Scope of work specified herein the installation of approximately:

- 35,131 LF of 30-inch DIP SIPS water main via open cut
- 186 LF of 30-inch DIP SIPS water main via Auger Boring at Beach Blvd
- 200 LF of 30-inch DIP SIPS water main via Auger Boring at Gate Pkwy
- 880 LF of 36-inch HDPE SIPS water main via Horizontal Directional Drill at J.T. Butler Blvd/SR 202
- 10 LF of 36-inch DIP SIPS water main via open cut
- 24 LF of 24-inch DIP SIPS water main via open cut
- 10 LF of 12-inch PVC water main via open cut
- 35 LF of 10-inch PVC water main via open cut
- 66 LF of 8-inch PVC water main via open cut
- 141 LF of 6-inch PVC water main via open cut
- 3,908 LF of 24-inch DIP raw water main via open cut
- 70 LF of 12-inch DIP raw water main via open cut
- 35 LF of 10-inch PVC reclaimed water main via open cut
- 198 LF of 4-inch PVC force main via open cut (relocation of existing force main)
- Decommissioning of the three existing TWMP Intertie Stations
- Deerwood III WTP Intertie Station, water quality monitoring, electrical, instrumentation, SCADA, tank connection, and plant site work

The 30-inch SIPS water main will connect to an existing 30-inch TWMP water main on Bradley Road, continue east on Bradley Road, turn south along Hilltop Blvd, turn southeast along Lake Drive, turn east along Fraser Road, turn south on Forest Blvd, turn east on Forest Blvd, turn south and continue in the JEA Electric Transmission (T-line) corridor to the Deerwood III WTP. A connection to the existing 24-inch TWMP water main at the Bradley Road/Hilltop Blvd intersection is also included. In the JEA T-line west of Validus Drive, an additional section of 30-inch SIPS water main will continue east from the tee along easements adjacent to Validus Drive, turn southeast on Burnt Mill Road to the stub out.

The 24-inch raw water main will connect to the existing 24-inch raw water main in the JEA T-line corridor adjacent to Forest Blvd, continue west on Forest Blvd, turn north on Forest Blvd, and stub out just north of Stone Road. A 24-inch raw water main stub out is included on Stone Road. A 12-inch raw water main stub out is included on Dobell Road. A 12-inch raw water main stub out is included to the property at 4210 Forest Blvd.

The 4-inch force main will connect to the existing 4-inch force main near the driveway in the northwest quadrant of the Beach Blvd/Forest Blvd intersection and continue east, crossing Forest Blvd, and connecting to an existing 4-inch force main in the northeast quadrant of the Beach Blvd/Forest Blvd intersection.

The proposed work is within COJ Right-of-Way, FDOT Right-of-Way, and JEA property and easements.

All Work shall be done in accordance with the January 2021 Edition of JEA Water & Wastewater Standards Manual. The following is a link to the JEA Water and Sewer Standards:

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

The following scope of work will be defined as the base bid for this contract and shall include, but is not necessarily limited to, the following:

- SIPS water main described above within COJ ROW, FDOT ROW, and JEA property and easements
- Raw water main described above within COJ ROW and JEA easement
- Small diameter water main described above within COJ ROW and JEA property
- Reclaimed water main described above within JEA property
- Force main relocation described above within COJ ROW and FDOT ROW
- Removal of existing water main and force main
- Deerwood III WTP Intertie Station, water quality monitoring, electrical, instrumentation, SCADA, tank connection, and plant site work
- Decommissioning of the three existing TWMP Intertie Stations
- Mobilization/demobilization, general requirements, and insurance
- Coordinate with JEA’s environmental consultant (as indicated in Section 951) prior to mobilization on any active Gopher Tortoise habitats
- Installation of Temporary Traffic Control (TTC) / Maintenance of Traffic (MOT) signs, devices, striping and measures to construct the project including temporary pavement and temporary signalization
- Coordination with JTA for bus stops; see TTC/MOT plans
- Installation/maintenance of erosion & sediment control devices/measures (E&SC) & other aspects of the stormwater pollution prevention plan (SWPPP)
- Site work
- Clearing, grading, seeding, and sodding

- Repaving throughout the project limits
- Repaving of all open cut crossings in accordance with FDOT, COJ, and JEA standards and details
- Milling and resurfacing throughout the project limits
- Restoration of FDOT and COJ right-of-way, including traffic loops
- Installation of isolation valves and appurtenances as per the Construction Drawings
- Installation of connections to existing water mains and force mains
- Performance of all testing, swabbing, flushing, and disinfection required during construction
- Compliance with all permits necessary to complete the work
- Performance of all site restoration to preconstruction (or better) condition

902. Bid Drawings and Supplemental Technical Specifications

Drawings titled “Construction Drawings for SIPS-Southside Blvd. Intertie to Deerwood III WTP”, Volumes I, II, and III, as prepared by Jacobs Engineering Group Inc. are attached. Supplemental Technical Specifications, Volume IV, as prepared by Jacobs Engineering Group Inc. are attached.

Volume I: SIPS Water Main and Raw Water Main

Volume II: SIPS Water Main and Raw Water Main; Civil, Restoration, and Temporary Traffic Control

Volume III: Deerwood WTP Priority 1 Projects

Volume IV: Supplemental Technical Specifications

903. Geotechnical Report

Titled “Geotechnical Exploration and Evaluation Report; SIPS Deerwood Route Water Main from Southside Boulevard Intertie Station to Deerwood III WTP; Jacksonville, FL” prepared by CSI Geo, Inc., dated April 19, 2021 is attached. The Company should review the geotechnical boring logs completed for this project.

904. SUE Test Hole Reports

Test hole reports titled “Vacuum Test Hole Reports – Part 1” prepared by Degrove Surveyors, Inc. and “Vacuum Test Hole Reports – Part 2” prepared by Smith Surveying/FR Aleman, Inc. are attached.

905. 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. The Company may obtain a list of prequalified persons and/or companies by contacting the JEA

Procurement Bid Section, 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.

906. Work Restrictions

No staging of equipment, personnel or materials shall be allowed outside the COJ ROW, FDOT ROW, or JEA property and easements unless the Company acquires a separate written agreement from the property owner.

Work in the Vicinity of Windy Hills Elementary School on Forest Blvd (approximately STA 320+75 to STA 338+77): Installation of the proposed pipelines on Forest Blvd from 50 feet north of Sky Crest Drive R/W and 50 feet south of Stone Road R/W shall be during the summer months, after the current Duval County School year has ended and prior to the next school year beginning.

Ditch Crossing in the JEA T-Line (approximately STA 521+73 to STA 522+71): Per F.A.C 62-330.453(3)(g) the maximum width of the excavated trench is limited to 8 feet, with temporary spoil storage banks not to exceed 10 feet, within the ditch area between the top of the ditch banks. To the extent practical, the Company is required to replace the top soil last when backfilling the trench within the ditch area between the top of the ditch banks. No staging or material storage shall occur within the ditch area between the top of the ditch banks. Installation and construction activities associated with the Ditch Crossing shall be limited to the dry season (generally January through March) and low water flow periods.

Wetland Crossing in the JEA T-Line (approximately STA 537+80 to STA 542+75): Per F.A.C 62-330.453(3)(g) the maximum width of the excavated trench is limited to 8 feet, with temporary spoil storage banks not to exceed 10 feet, within the delineated wetland boundary. To the extent practical, the Company is required to replace the top soil last when backfilling the trench within the delineated wetland boundary. No staging or material storage shall occur within the delineated wetland boundary.

907. Sequence of Construction

The following sequences are to emphasize critical tasks related to the order of installation in certain areas. It is not a complete list of all work to be completed.

SIPS Water Main Along Bradley Road:

1. The general intent is for the SIPS water main alignment to follow the existing 24-inch TMWP water main alignment on Bradley Road. Installation of the proposed 30-inch SIPS water main along Bradley Road, including the connection to the existing 30-inch TWMP water main (west end) and the existing 24-inch TWMP water main (east end), will require removal of the existing 24-inch TWMP water main. Based on the as-builts, a portion of the existing 24-inch TWMP water main is anticipated to be deeper than the proposed 30-inch SIPS water main elevation (between approximately Stations 100+48 and 101+80) and is anticipated to be cut, grout filled, and abandoned in place.

Beach Boulevard/Forest Boulevard-- SIPS Water Main Auger Bore Crossing and Force Main Relocation:

1. Refer to the Temporary Traffic Control plans for the requirements and limitations for the work in the FDOT right-of-way at Beach Blvd.

2. The following activities shall take place prior to the auger bore commencing.
 - a. The utility investigation shall be performed as described in Section 930, and including locating the existing 4-inch PVC force main at the proposed connection points, locating the fiber optic cables/lines, and underground electric lines.
 - b. The existing 6-inch HDPE force main shall be field located at the proposed crossing of the SIPS water main alignment on the north side of Beach Blvd/Forest Blvd intersection. The field locate shall explore to a depth of at least 1 foot below the bottom of the proposed 48-inch steel casing elevation, as required to locate the existing force main crossing at Forest Blvd. The Contractor shall notify the JEA Representative of the findings within 24 hours (including documentation indicating pipe size, pipe material, top of pipe elevation, and pipe location coordinates at the crossing point of the proposed SIPS water main alignment). The JEA Representative shall review the findings provide confirmation to the Contractor on whether to proceed with the new 4-inch force main installation.
 - c. If the 6-inch HDPE force main is found above the proposed elevation of the SIPS water main, the JEA Representative shall determine if the existing force main can remain in place with required vertical clearance or if the force main relocation and removal shall proceed as designed.
 - d. Upon confirmation from the JEA Representative to proceed with the 4-inch force main relocation, the new 4-inch force main shall be installed and placed into service in accordance with the Drawings and JEA Standards and requirements.
 - e. After the 4-inch force main is in service, the existing 6-inch HDPE force main shall be removed for the extents shown on the Drawings. The remaining portions of the 6-inch HDPE force main shall be grout filled and placed out of service, except for any portions that may need to be removed at the new force main connection points.

SIPS Water Main and Raw Water Main along Forest Blvd, between Stone Road and the JEA Electric Transmission corridor

1. Generally, the intent is for the proposed 30-inch SIPS water main and 24-inch Raw water main to be constructed together in the same trench along Forest Blvd between Stone Road and the JEA Electric Transmission corridor.
2. The pavement repair and other related civil/site restoration line items are based on a single trench/installation for the parallel portion of the two pipelines. Should the contractor elect to use two separate trenches and install separately, additional quantities/cost for two separate trenches will not be allowed.

Decommissioning of the three TWMP Intertie Stations

1. At each TWMP Intertie Station, the Contractor shall coordinate with JEA to close the valve at the connection to the existing water distribution system and to close the valve at the connection to the existing TWMP water main.

2. After confirmation from JEA the valves are closed, the Contractor shall remove the piping section and install the blind flanges and pipe supports as indicated on the Drawings.

908. Tie-In Connections Sequencing Constraints

The following tie-in connections sequencing constraints are to emphasize critical tasks related to connections to existing systems for the work in this Contract. It is not a complete list of all work to be completed.

- Indicate required interruptions of existing operations on Progress Schedule. Interruptions will be permitted to the extent that existing operation will not be jeopardized and identified constraints are satisfied.
- The Company shall give a minimum of 10 working days advance written notice to the JEA of each component proposed for shutdown, 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, points of connection, fittings to be used, method of flushing, and estimated construction time for connection.
- All connections and ties 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 connections 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 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, as designated by JEA.
- 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.
- Key/critical customers shall remain in service at all times. With written permission from JEA and a minimum of 7 days advance notice, brief service interruptions for key customers may be made for water service change over. Key/critical customers shall be as designated by JEA.

909. 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 installation, and limits of disturbance areas within JEA property and easements, FDOT ROW, and COJ ROW. 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 JEA property and easements, FDOT ROW, and the COJ ROW. Coordinate uses of premises with JEA, COJ, FDOT, and any other contractors.

Company shall assume full responsibility for security of all its and its subcontractors' materials and equipment stored on the site. Company shall maintain site security whenever a fence is removed.

If directed by the JEA Representative, move any stored items which interfere with operations of JEA or other contractors.

910. Company's Staging, Storage and Stockpile Area

No additional staging, storage, and stockpile will be made available by JEA along the project site. The Company is responsible for securing and obtaining any additional off site storage areas outside of the right-of-way and/or JEA's property and designated easement limits as necessary. The Company is responsible for obtaining and paying for the use of additional storage or work areas if needed to perform the work. The location shall be agreed to upon and discussed at the pre-construction meeting.

911. JEA Electrical T-Line Entry/Exit Requirements

The entry and exit locations for the JEA T-Line shall be as follows:

North of Gate Parkway North: The entry and exit locations for the JEA T-Line shall be from Gate Parkway North and Forest Boulevard South.

North of JTB (SR 202) to South of Gate Parkway North: The entry and exit locations for the JEA T-Line shall be from the existing JEA gate on the south side of Gate Parkway North. The use of the existing gate at the south end of the JEA T-Line at the JTB (SR 202) FDOT Right-of-Way shall only be used when coordinated in advance with JEA Electrical Utility Group and FDOT. In no case shall the existing gate at the JTB (SR 202) FDOT Right-of-Way be used to exit the T-Line and proceed west on JTB (SR 202). All construction traffic shall exit the T-Line via Gate Parkway North.

South of JTB (SR 202): The entry and exit locations for the JEA T-Line shall be from Deerwood Park Boulevard. The use of the existing JEA gate at the north end of the JEA T-Line at the JTB (SR 202) FDOT Right-of-Way shall only be used when coordinated in advance with JEA Electrical Utility Group and FDOT. In no case shall the existing gate at the JTB (SR 202) FDOT Right-of-Way be used to exit the T-Line and proceed east on JTB (SR 202). All construction traffic shall exit the T-Line via Deerwood Park Boulevard.

South of Deerwood Park Blvd to the Ditch Crossing: The entry and exit locations for the JEA T-Line shall be from Deerwood Park Blvd. The Contractor shall not utilize the parking lot areas outside the JEA T-Line property and easements.

South of the Ditch Crossing to the Deerwood III WTP: The entry and exit locations for the JEA T-Line shall be from the existing JEA gate on the east side of Southside Boulevard, just south of the Deerwood III WTP Plant entrance.

The existing access drive through the JEA T-Line shall be maintained to preconstruction conditions. The Company shall maintain T-Line access to JEA at all times.

If the existing fence at the JEA T-Line at the FDOT Right-of-Way needs to be temporarily removed or taken down for construction, the Contractor shall provide personnel to monitor the temporary fence opening for as long as the fence is temporarily removed or taken down (24 hours a day, 7 days a week). The designated monitor's primary function shall be to monitor the opening and prevent unauthorized access. Any unauthorized entry shall be reported immediately to JEA and City of Jacksonville Sheriff's Office. The fence shall be restored to preconstruction conditions, in accordance with FDOT Index 802, immediately upon completion of the construction activity necessitating its' temporary removal.

912. JEA Electrical T-Line Access Road Restoration

The Company shall provide all necessary labor, materials and equipment to restore any disturbed portions of the JEA T- Line Access Road to match preconstruction conditions and width. The manner in which this is accomplished shall be left to the discretion of the Company, subject to the requirements of the Contract and the prior approval of the JEA Representative. The JEA Representative approval in no way relieves the Company of any responsibilities or liabilities resulting from the restoration method chosen. Stone aggregate (limerock) aggregate shall be used to provide a final driving surface for the restored portions of the JEA T-Line Access Road. All costs associated with this work shall be included in the associated line item in the Bid Form.

The Contractor shall maintain access to the JEA T-Line Access Road at all times. If any portion of the JEA T-Line Access Road is impacted/blocked, the Contractor shall provide temporary access around the construction zone while the existing JEA T-Line Access Road is blocked for construction.

913. JEA Electrical T-Line Requirements

Disturbance within the JEA T-Line shall be limited to the areas outlined by silt fence on the Drawings. The Company shall submit a construction staging, storage, pipe stringing, and limits of disturbance plan to the JEA Electrical Utility Group and Environmental Group via the JEA Engineer for approval. All equipment and construction activities shall be kept outside a minimum twenty-foot (20') from all energized transmission wires/conductors (vertically or horizontally) and twenty feed (20') horizontally from all transmission structures.

The Company shall comply with the safety requirements and minimum clearances as set forth in OSHA Standard Number 1926.1408. JEA requires a minimum twenty-foot (20') separation for 138kV transmission lines.

The Company shall coordinate with the JEA Electrical Utility Group for entry/exit protocol for the JEA T-Line.

The Company shall maintain access to JEA Electrical Substation and JEA T-Line to JEA at all times. If access road is impacted or blocked, the Company shall coordinate with the JEA Electrical Group a minimum of 2 weeks in advance.

914. Field Office

The Company is responsible for providing a field office within a two block distance of the project route. The field office shall include a separate desk and chair for the JEA Inspector and a space for project meetings with a table and at least 10 chairs. The field office can be a trailer or leased

office space. Payment for the field office shall be the lump sum unit price as established in the Contract Documents and shall be full compensation for the item of work completed, including furnishing the field office, furniture, supplies, materials, labor, tools and equipment; utilities and property both public and private; removal of the field office and appurtenances at the completion of the work; and all incidental and related work required to complete the work of the item.

915. 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.

916. Permits and Plan Approvals

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

- COJ Plan Approval; CDN 4161.337, in progress
- FDEP Specific Permit to Construct PWS Components, in progress
- FDEP Environmental Resource Permit, in progress
- FDOT Utility Permit (Beach Blvd right-of-way), in progress
- FDOT Utility Permit (J.T. Butler Blvd/SR202 right-of-way), in progress
- USACE Nationwide Permit 12; Permit No. SAJ-2020-02559, issued October 21, 2020

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

- City of Jacksonville (COJ) Right-of-Way Permit
- FDEP NOI to Use NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities (CGP) – Form 62-621.300(4)(b)
- FDOT General Use Permit (for TTC/MOT signage and detours utilizing FDOT right-of-way)
- SJRWMD Notice to District of Dewatering Activity – Form 40C-2-900-12.
- SJRWMD Individual Consumptive Use Permit if unable to qualify for general permit under Rule 40C-2.042(9).

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.

917. Dewatering

If the Company encounters groundwater, the Company shall be responsible for utilizing a dewatering system(s) to remove water from the excavation. Prior to beginning any dewatering activities, the Company shall comply with all requirements listed in Florida Department of Environmental Protection (FDEP) Dewatering Regulations.

Temporary monitoring wells were installed in the areas identified by FDEP's Contaminated Soil Map. The results are provided with the geotechnical report. It is the Company's responsibility to comply with FDEP's dewatering regulations.

Additionally, prior to any dewatering, the Company shall apply for a St. Johns River Water Management District (SJRWMD) Generic Permit for Short Term Dewatering, and comply with all SJRWMD requirements.

At the Beach Blvd auger bore crossing, the Company shall prepare a dewatering plan to comply with the FDOT Utility Permit (Beach Blvd right-of-way) and Supplemental Specification Section 33 05 07.23. The dewatering plan shall be signed and sealed by a Professional Engineer licensed in the State of Florida. The Company shall receive approval of the dewatering plan from FDOT and JEA prior to starting work on the crossing or in FDOT right-of-way.

At the Gate Pkwy auger bore crossing, the Company shall prepare a dewatering plan to comply with Supplemental Specification Section 33 05 07.23. The dewatering plan shall be signed and sealed by a Professional Engineer licensed in the State of Florida. The Company shall receive approval of the dewatering plan from JEA prior to starting work on the crossing.

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

918. 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. Permit related meetings shall be attended by, but not limited to, the Company's Project Manager, Company's Site Superintendent, Permitting Agency Representative, JEA Representative, and JEA Inspector.

919. 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, irrigation systems, landscaping, signs, and 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. Unless designated otherwise on the Drawings, no trees shall be removed in the FDOT Right-of-Way. 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.

920. 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 shall 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.

921. Restoration

The Drawings show the limits for all restoration items based on the existing design location of the proposed water mains and are provided for the Company's convenience. If the Company is forced to move the main into pavement or sidewalk due to a direct conflict with a utility, the JEA Representative shall be notified immediately and authorize such work.

Damage to asphalt, sidewalk, driveways, or curb and gutter not indicated for removal and replacement will be replaced at the Company's expense unless otherwise authorized by JEA.

922. 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. All disturbed areas shall be restored by grassing or sodding, as indicated on the Drawings, and in accordance with JEA Section 441 of the JEA Water and Wastewater Standards Manual, titled, Grassing. Measurement and payment for grassing/sodding shall be in accordance with JEA Section 801.VIII.

923. 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 and grade. The Company shall make accommodations to maintain the flow of water in swales and ditches, such as temporary diversion, temporary pumping, or other means and methods to prevent a backup or overflow. No separate payment shall be made for regrading or construction of new drainage ditches as required for restoration, but shall be included in the associated item on the Bid Form.

924. 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.

925. 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 on 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.

926. Trench Excavation

Topsoil shall be stripped from the top of the trench and placed to the side for reuse during the final layer of backfill in areas to be re-sodded to facilitate productive growth of sod.

Trench excavation shall proceed far enough ahead of pipe laying to reveal any obstructions that might necessitate changing the line or grade of the pipeline. The trench shall be reasonably straight and uniform in grade. Trenches shall be kept free of water during construction of the pipeline. No separate payment shall be made for dewatering, but shall be included in the associated item on the Bid Form. Trench excavation shall proceed in a continuous manner from the beginning of the pipeline to the end.

Unless specifically authorized by the JEA Engineer, no skipping by obstacles such as road crossings, existing utilities, etc. shall be permitted.

Unless specifically directed otherwise by JEA Engineer, not more than 500 feet of trench shall be opened ahead of pipe laying, and not more than 500 feet of open ditch shall be left behind the pipe laying. All barricades, watch person, lighting, and other such signs and signals as may be necessary to warn the public of the dangers in connection with open trenches, excavations, and other obstructions, shall be provided by and at the expense of the Company.

At the close of each working day all trenches that have been excavated shall be refilled unless exceptions are granted by the JEA Engineer. All public and private drives shall be promptly backfilled or bridged at the direction of the JEA Engineer.

927. 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, right-of-way boundaries, and JEA property. 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.

928. Existing Utilities

Known surface and subsurface utilities are shown or noted on the Drawings as accurately as available information will permit. JEA and Jacobs do 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 their respective utility or material be located and staked in the field. Should the Company encounter an 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 COJ ROW, FDOT ROW, and JEA property and easements, the Company shall prevent damages to existing utilities caused by its work through field verification of the location of existing utilities.

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 and FDOT’s infrastructure, JEA’s utilities and infrastructure, and the existing facilities of other utility companies.

Company shall locate all traffic signal lines at all signalized intersections prior to construction at the signalized intersection.

929. Coordination of Construction with Existing Utilities

Company shall verify size, type, material, and location 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, AT&T, TECO/Peoples Gas, and Comcast to prevent interference with overhead and buried electrical, telephone, and television cables. AT&T, TECO/Peoples Gas, Comcast and others will need time to relocate their facilities.

The Company shall at all times conduct operations 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, City agencies, and FDOT, 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.

930. Test Hole/Utility Investigation Allowance

JEA will provide an allowance as specified in the Bid Form to reimburse the Company at cost for test holes and utility investigation in the following areas:

1. Beach Blvd/Forest Blvd right-of-way in the vicinity of the proposed 30-inch SIPS water main and 4-inch force main relocation alignments.

The Company shall locate, horizontally and vertically, and identify all existing utilities in the vicinity of the proposed 30-inch SIPS water main and 4-inch force main relocation, including existing utilities crossing the proposed alignments and within 10 feet of the proposed alignments. The depth and configuration of existing utilities and soil and groundwater conditions may require field verification measures such as, but not limited to, test holes, excavation, trenching, shoring,

and dewatering. The Company shall survey the location and elevation of all existing utilities in the designated areas, and indicate the size, material, and utility type of all existing utilities. All surveying shall be performed by a Professional Surveyor and Mapper (PSM) licensed in the State of Florida. The Company shall submit the survey depicting the existing utilities in the designated areas to JEA a minimum of 30 days in advance of planned pipeline installation in the designated areas to allow time for JEA to review the findings and determine if changes or deviations to the alignments are required.

Maintenance of traffic/temporary traffic control shall utilize the applicable MOT/TTC plans for each designated area. Payment for MOT/TTC shall not be included in the allowance, but included in the associated pipe line items.

The Company shall clearly mark on its invoices costs associated with test holes and utility investigation in the designated areas, identifying the cost to the Company, including equipment, labor, and materials.

931. Utility Pole Holding / Suspending

Holding or suspending of utility poles including power poles and telephone poles shall be performed 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. Company shall review the project and notify the JEA Representative of all anticipated holds/suspends within ten (10) days following the notice to proceed. JEA shall be responsible for the coordination and provision of utility pole holds/suspends. Notice, giving the exact date and time, for each hold/suspend, shall be provided by the Company in writing to the JEA Representative at least two weeks in advance of each hold/suspend. No separate pay will be made to the Company, but shall be included in the cost of the associated items on the Bid Form.

932. Remove and Relocate Light

Payment for the removal and relocation of lights shall be at the lump sum price set forth in the Contract Documents for the actual number of lights removed and relocated. Payment will be compensation in full for the removal and relocation of the existing lights and disposal of the debris. Payment shall include removal of the existing lights and appurtenances, installing the existing lights and appurtenances in the location to be designated by JEA and in accordance with COJ and JEA Standards; including, but not limited to: storage and protection of existing lights and appurtenances between removal and installation; all electrical conduit and wiring; protecting existing structures, utilities, and property; placing and removing all traffic signs and barriers and maintaining traffic; cleaning up the site; furnishing all labor, materials, tools, and equipment for the construction of the relocated light. If the existing lights and appurtenances are damaged during construction, the Company shall replace the light and appurtenances with a new light and appurtenances equal to the existing, and meeting COJ and JEA Standards, at no additional cost to JEA. If the existing lights and appurtenances to be relocated are not reusable as determined by JEA or the City, a new light and appurtenances equal to the existing, and meeting COJ and JEA Standards, shall be provided by the Company via a Supplemental Work Authorization (SWA).

933. Polyethylene Wrap (Encasement)

Where indicated on the Drawings, the Company shall polyethylene wrap all ductile iron pipe, fittings, valves, and appurtenances in accordance with AWWA C105 and the manufacturer's recommendations. Provide polyethylene wrap in accordance with JEA Specification Section 350.II.4.4. Measurement and payment shall be as described in JEA Specification Section 801.XIII.4.

934. Ductile Iron Pipe Restrained Joints

All fittings and valves for polyethylene wrapped (encased) ductile iron pipe shall be restrained per the Ductile Iron Pipe with Polyethylene Wrap Restraint Joint Schedule and details on sheet STD-1.04, as indicated on the Drawings. All fittings and valves for ductile iron pipe without polyethylene wrap shall be restrained per the Ductile Iron Pipe Restraint Joint Schedule and details on sheet STD-1.04. Fully extend all restrained pipe joints.

935. Auger Boring

The quantity to be paid for will be the actual number of linear feet of each size casing and method of installation actually installed in accordance with Supplemental Technical Specification Section 33 05 07.23. Measurement shall be made along the horizontal projection of the center line of the casing. Payment for work will be made at the Contract Unit Price and shall be full compensation for the items of work, complete, including steel casing pipe; casing spacers; furnishing, installation, monitoring, and removal of geotechnical instrumentation and monitoring equipment including, but not limited to, Settlement Monitoring Points (SMPs) and Piezometers in accordance with Supplemental Technical Specification Section 31 09 13; removal of grassing; erosion control; excavation; de-watering; backfill and compaction; protecting existing structures, utilities and property both public and private; placing and removing all traffic signs and barriers and maintaining traffic; cleaning up the site; as-builts; and all incidental work required to complete the work including all materials, labor, tools, and equipment.

936. Horizontal Directional Drilling

All pipe greater than 12-inch diameter installed by the Horizontal Directional Drilling method shall be in conformance to JEA Technical Specification Section 755 – Horizontal Directional Drilling (Large Diameter Pipe Greater Than 12 Inches) and Technical Specification section 33 05 07.13. In case of contradictory information, the supplemental technical specification requirements in Section 33 05 07.13 take precedence over Section 755. The Measurement and Payment for this item shall be in accordance with JEA's Water and Sewer Standard as specified in Section 801.XXIV1..

937. Cleaning and Disinfection of Water Transmission Mains

The Company shall clean and disinfect all water mains 24-inch and larger in accordance with Supplemental Technical Specification 33 13 00 and JEA Specification Section 350, except for water mains within the Deerwood III WTP site. Measurement and payment for cleaning and disinfection in accordance with Supplemental Technical Specification 33 13 00 and JEA Specification Section 350 shall be included in the cost of the pipe.

For water mains smaller than 24-inches in diameter, and for all water mains within the Deerwood III WTP site, cleaning and disinfection shall be in accordance with JEA Specification Section 350 and shall be included in the cost of the pipe.

938. Flushing/Pigging Launch/Retrieval Station Assembly

Payment for flushing/pigging launch/retrieval station assemblies shall be at the unit price for each flushing/pigging launch/retrieval station assembly installed for the SIPS water main as set forth in the Contract Documents based on the details in the Drawings. Payment for the work will be made at the contract unit price and shall be full compensation for the item of work including furnishing and installing the plain end by flanged ductile iron spool piece; ductile iron blind flange tapped for 2-inch, with double coat epoxy, and flange accessories; 2-inch poly piping and accessories; ID plate set in concrete pad; complete assembly, with all required excavation and backfill, necessary jointing, adapter pieces, electronic ball markers, placing and removing all traffic signs and barriers, and maintaining traffic; furnishing all materials, labor, tools, and equipment; flushing and disinfecting; performing pressure and leakage testing; and all incidental and related work required to complete the work as detailed on the Contract Drawings.

939. Gate Valve Installation

All 20-inch and larger gate valves shall be installed with the orientation indicated on the Drawings. The Company shall install all gate valves in accordance with JEA Standard Detail W-18 with the following exception:

12" (minimum) layer of gravel/#57 stone required for all gate valves. Geosynthetic wrap shall be provided on all sides of gravel/#57 stone layer in accordance with FDOT Section 985. Note #8 shall be revised to read "*Gravel/#57 stone shall be provided under all valves. The minimum vertical limit of gravel/#57 stone is 12" under the valve up to 1/3 the overall height of the valve. Wrap all sides of gravel/#57 stone layer with drainage textile type D2-d in accordance with FDOT Section 985.*" Payment shall be in accordance with JEA Section 801.XIV.3.

940. Below Ground Flushing/Manual Air Release Valve/Sample Tap Assembly (MARV)

The quantity to be paid will be the actual number of MARV assemblies (as detailed on the Drawings on Sheet STD-1.04) furnished and installed. Payment will be made at the Contract Unit Price for each MARV assembly and shall be full compensation for the item of work, complete, including all excavation; backfill; tapping or cutting opening in pipelines; furnishing and installing MARV assembly with all required appurtenances; meter box and cover; all piping fittings and valves between MARV assembly and water main; saddle, sleeve or Tee fitting in water main; all material, labor, tools and equipment, and all incidental and related work to complete the MARV assembly and the associated piping between the MARV assembly and water main.

941. Deerwood III WTP SIPS Water Quality Monitoring Station

The Contractor's lump sum bid as set forth in the contract shall constitute full compensation for the work involved in this section including the SIPS Deerwood Water Quality Monitoring Station as shown in the Volume III Drawings, including removal of previously abandoned Hypochlorite Generators equipment, piping, and appurtenances inside the existing High Service Pump Station

building, core drilling wall for sample lines within the High Service Pump Building, concrete pad modification, water quality monitoring equipment (wall mounted), sample piping and tubing, drain hubs and lines, pipe supports, valves, appurtenances, electrical, instrumentation, and controls; and all material, labor, tools and equipment, and all incidental and related work to complete the SIPS Water Quality Monitoring Station.

942. Deerwood III WTP SIPS Intertie Station

The Contractor's lump sum bid as set forth in the contract shall constitute full compensation for the work involved in this section for the SIPS Deerwood Intertie Station as shown in the Volume III Drawings including the concrete pad, piping, pipe supports, flow meter, flow control valve, valves, retractable coupon insertion assemblies, appurtenances, electrical, instrumentation, and controls; SIPS connection to existing ground storage tank No. 3 (tank dome penetration, concrete dome curb, water tight seal, concrete encasement, piping, pipe supports, painting, hydrostatic testing, disinfection, appurtenances, and concrete splash pads at Storage Tanks No. 2 & 3); yard piping and valves; paving; sample lines to the High Service Pump Building; temporary security fencing; remove and replace chain link plant fence; tree removal, clearing and grubbing as required; site grading and restoration; grassing of disturbed areas; silt fence and erosion and sedimentation control; and all electrical conduit and service to the SIPS Intertie Station. Lump sum price includes the work and improvements inside the Deerwood III WTP fence, except the work included in the “Deerwood III WTP SIPS Water Quality Monitoring Station” lump sum bid item.

943. Deerwood III WTP SIPS SCADA Design Integration

The Contractor's lump sum bid as set forth in the contract shall constitute full compensation for the work involved in this section for the SIPS SCADA Design Integration as detailed in the Supplemental Technical Specification 40 90 01, Instrumentation and Control for Process Systems and all material, labor, tools and equipment, and all incidental and related work to complete the SCADA Design Integration.

944. TWMP Intertie Station Decommissioning

The Contractor's lump sum bid as set forth in the contract shall constitute full compensation for the work involved in this section at each of the three existing TWMP Intertie Stations as shown in the Volume III Drawings, including removing the flanged spool piece and appurtenances, furnishing and installing blind flanges with flushing valves, pipe supports, painting; assembling all removed pipe, hardware, and accessories in a suitable storage box and transporting to the storage location designated by JEA; and all material, labor, tools and equipment, and all incidental and related work to complete the decommissioning at each of the three existing TWMP Intertie Stations.

945. Maintenance of Traffic / Temporary Traffic Control

The Company shall adhere to the maintenance of traffic/temporary traffic control plans, including construction zone signing, pavement markings, barricades, barriers, etc. as shown on the Drawings. The Company shall provide written approval from COJ to any proposed alternate MOT/TTC plan to JEA prior to starting work in area of alternate MOT/TTC plan.

Temporary closure of business entrances must be approved and coordinated with JEA. The affected business shall be given at least forty-eight (48) hours' notice prior to the closure. Any deviation from the contract documents or the requirements of the FDOT Roadway and Traffic Design Standards or City of Jacksonville Standards, such as construction zone signing, barricades, warning devices, temporary striping, flagmen, etc., must be approved by JEA and the governing jurisdiction (FDOT or COJ). JEA and the governing jurisdiction (FDOT or COJ) shall be notified and approval shall be obtained at least two (2) business days in advance of such deviation.

Pavement for all work required for maintenance of traffic / temporary traffic control, not provided as a specific pay item, including but not limited to, temporary pavement, flagmen, lighting, signage, etc., shall not be paid for separately but included in the associated line item on the Bid Form.

946. FDOT Pavement Marking Requirements

- Temporary and permanent pavement markings should be placed as shown on the plans and detail sheets. If no specific striping is noted on the Drawings, the Company shall replace damaged/removed striping due to construction activities with like striping and/or reflectors all in accordance with FDOT requirements.
- Any required temporary markings shall be in place before opening lanes to traffic. Temporary pavement markings are not paid for separately but are included in the associated item of paving.
- The removal of existing pavement markings shall be considered an incidental item with no additional compensation provided.
- All permanent pavement markings shall be extruded thermoplastic and meet FDOT standard specifications, latest edition.
- Thermoplastic pavement markings shall 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 permanent striping (“final paint”) is in place.

947. COJ Pavement Marking Requirements

- Temporary and permanent pavement markings shall be placed as shown on the plans and detail sheets. If no specific striping is 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 shall be in place before opening lanes to traffic. Temporary pavement markings are not paid for separately but are included in the associated item of paving.

- The removal of existing pavement markings shall 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 shall 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-ARCIIFH; 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 (“final paint”) is in place.
- The Company shall contact the Pavement Marking Inspector (904-255-7550) 48 hours prior to installing any pavement markings of any City of Jacksonville roadway or streets.

948. Roadway Restoration

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 item. The 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, drives, fencing, signs, lights, and drainage features shall be replaced at the Company’s expense unless otherwise authorized by JEA.

949. Traffic Signage and Pavement Markers

Costs incurred by the Company to provide new signage and pavement markers, or remove and replace existing signage and pavement markers, 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 COJ and FDOT requirements.

950. Updated As-Builts

As-Built drawings shall be in accordance with JEA Specification Section 501. 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 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 JEA 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.

951. Supplemental Endangered Species Protection Specification

Florida Fish and Wildlife Conservation Commission (FWC) Gopher Tortoise Temporary Exclusion Permit Conditions:

- The Company’s limits of disturbance shall not encroach within 25’ of an identified active gopher tortoise burrow. If the limits of disturbance, including silt fence installation, must encroach within the 25’ radius, the gopher tortoise shall be relocated by a JEA environmental representative certified to perform such work (ESI contact - Gary Howell at (904) 470-2200). The Company shall remain vigilant of any other gopher tortoises other than those noted on the construction drawings. Should the Company encounter any gopher tortoises or burrows, the Company shall notify the JEA Engineer and JEA environmental representative (ESI contact - Gary Howell at (904) 470-2200) immediately.
- Only individuals who are in possession of a valid permit or authorization issued by the United States Fish and Wildlife Service to capture or possess an eastern indigo snake (*Drymarchon corais couperi*) are permitted to physically handle these snakes. If individuals without this permit or authorization encounter an eastern indigo snake during attempts to capture gopher tortoises or during subsequent land alteration or development activities within the property, all movement of heavy equipment and land alteration or development activities within the vicinity of the snake shall cease to allow the snake to vacate the area. No movement of heavy equipment, or land alteration or development activities within the vicinity of the snake shall resume until the snake has vacated the work area.
- Before attempting to capture any gopher tortoises for relocation the Permittee shall either install filter fabric or other comparable fencing, buried at least eight inches into the ground, along the boundary separating the donor site utility construction corridor (“utility corridor”) from the recipient site(s), or utilize other methods approved by the FWC to keep gopher tortoises out of the utility corridor. If fencing is installed, it shall be removed immediately following completion of the utility installation and restoration of the gopher tortoise habitat within the utility corridor. Habitat restoration shall include restoring the pre-construction ground elevations and either seeding or sodding the utility corridor to provide suitable forage for gopher tortoises.

- Either this original permit, or a complete copy, shall be clearly posted at the affected site at all times while engaged in the permitted tortoises relocation activities.

Other Items to provide within Construction Information:

Gopher Tortoise Information:

- Silt fence is defined by FWC as: temporary sediment barrier consisting of a filter fabric stretched across and attached to supporting posts and entrenched. There are two types: 1) the silt fence is a temporary linear filter barrier constructed of synthetic filter fabric, posts, and, depending upon the strength of the fabric used, wire fence for support; 2) the filter barrier is constructed of stakes and burlap or synthetic filter fabric. These types of silt fencing are useful for temporary exclusion, but are generally not durable enough for six month-enclosures on recipient sites. FWC recommends a type of silt fencing produced by Belton Industries (#935). This is a durable type of silt fencing (36 in x 75 ft; pre-assembled, double-stapled, with oak stakes) that has been field-tested as an enclosure material for gopher tortoises. The manufacturer is Belton Industries, PO Box 127, Belton, SC; 800-845-8743; www.beltonindustries.com/silt.html. Distributors include Pallen Enterprises, Conyers, GA (770-922-1812) and Certified Slings, Ft. Myers, FL (239-334-1343).
- All site crew shall be required to attend an education presentation discussing the material below.
- Signs summarizing the information and what to do if you encounter a gopher tortoise will be provided.
- Description of the Gopher Tortoise and its Burrow
- The adult gopher tortoise is a large land turtle that burrows underground. Juvenile gopher tortoises can be as small as a silver dollar.
- Their top shells and skin are brown in color, with the bottom of their shells being more yellow in color. Younger tortoises can have larger areas of yellow on their top shell and have lighter colored skin.
- Tortoises dig burrows up to nine feet deep and 20 to 30 feet long with a large chamber at the bottom.
- Burrows are characterized by half-moon shaped openings with a large sandy apron located at the mouth of the burrow.
- Gopher tortoises are herbivores that feed primarily on wiregrass, broadleaf grasses, legumes and non-legume forbs. They are considered opportunistic feeders and will usually eat what is available to them. Active during the day, they spend time foraging, basking and traveling to other tortoise burrows. The remainder of the time is spent at the mouth of the burrow or in the burrow, depending upon daytime temperatures.

Federal and State Protection Status and Penalties

Federal

- Listed as “Threatened” and therefore covered by the Endangered Species Act.

- Definition of a “take” – a take is defined as “harassing, harming, pursuing, hunting, shooting wounding, killing, trapping, capturing or collecting, or attempting to engage in any such conduct, or possessing, selling, delivering, carrying, transporting or shipping.”
- Penalties for a “take” – violations of the Endangered Species Act can result in civil and criminal penalties of up to a \$13,000 fine and a year in jail.

State – Florida Fish and Wildlife Conservation Commission (FWC)

- Rule 68A-27.004 (F.A.C.) - The gopher tortoise is declared to be “Threatened.”
- No person shall take, attempt to take, pursue, hunt, harass, capture, possess, sell or transport any gopher tortoise or parts thereof or their eggs, or molest, damage, or destroy gopher tortoise burrows, except as authorized by FWC permit or when complying with FWC approved guidelines for specific actions which may impact gopher tortoises and their burrows.
- Only those authorized by FWC as an Authorized Agent and holding the appropriate permit specific to the project are authorized to handle any observed gopher tortoises.

WHAT TO DO IF YOU ENCOUNTER A GOPHER TORTOISE OR ITS BURROW DURING CONSTRUCTION ACTIVITIES

- If you encounter a gopher tortoise burrow within the footprint of construction delineated by the silt fencing:
- STOP all work in the vicinity. Call JEA environmental representative (Gary Howell at 904-470-2200) immediately. If Gary Howell cannot be reached, provide the following information to the receptionist: Your name, telephone number at which you can be reached, the name and the location of the project site, and an appropriate contact will get back to you ASAP.
- If a live gopher tortoise is encountered during construction:
- STOP all work in the vicinity. Call JEA environmental representative (Gary Howell at 904-470-2200) immediately. If Gary Howell cannot be reached, provide the following information to the receptionist: Your name, telephone number at which you can be reached, the name and the location of the project site, and an appropriate contact will get back to you ASAP.
- If a dead gopher tortoise encountered:
- STOP all work in the vicinity. Call JEA environmental representative (Gary Howell at 904-470-2200) immediately. If Gary Howell cannot be reached, provide the following information to the receptionist: Your name, telephone number at which you can be reached, the name and the location of the project site, and an appropriate contact will get back to you ASAP.

Appendices to provide within Construction Information:

- Gopher Tortoise Temporary Exclusion Permit Application #XXXXXX (Shall be posted on-site)

- Gopher Tortoise Temporary Exclusion for Major Linear Utility Corridors Permit # XXXXXXXX (Shall be posted on-site)

END OF APPENDIX A

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