# Consolidated Rivertown Water Treatment Plant (WTP) Project Package

4/28/21



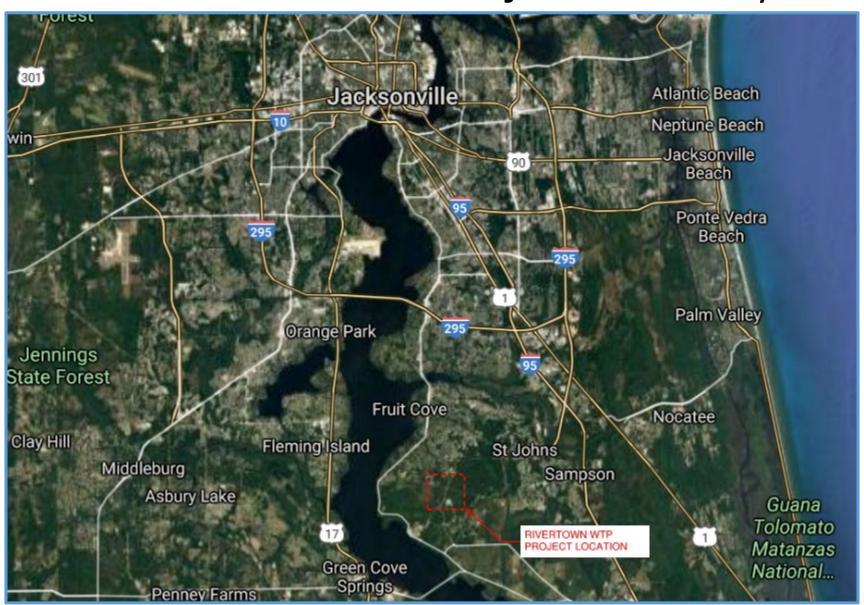
# Rivertown WTP Project Purpose and Location

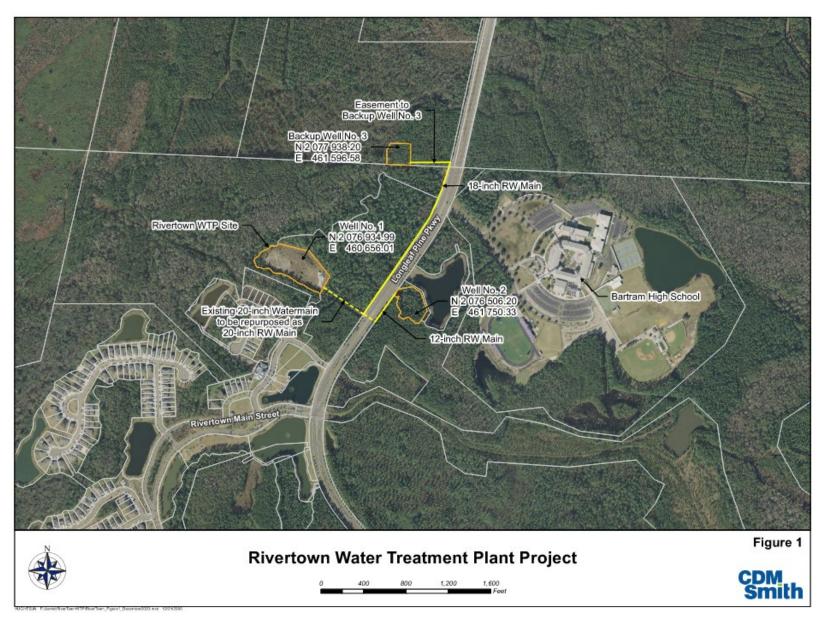
• The Project is being implemented to provide and distribute additional potable water in JEA's service area in northwest St Johns County.

 The Rivertown WTP site and Well No. 1 Site are located at 7612 Longleaf Pine Parkway, St. Johns County, Florida.

• Well No. 2 and 3 sites are located east and north of the WTP site (see following slides).

# Rivertown WTP Project Vicinity





# Rivertown WTP Project (continued)

- Owner: JEA
- Lead Engineering Consultant for the Project: CDM Smith Inc
- Engineering Consultant for Wells: Jacobs Engineering Group Inc
- Engineering Consultant for Pipeline: 4 Waters Engineering Inc

# Rivertown WTP Project (continued)

- The Rivertown WTP Project was developed in 2 packages (e.g., drawings, specifications, bid workbooks, schedules, etc.):
  - Part 1 Package: Well Nos. 1, 2, and Backup Well No. 3, Production Well Drilling, for the Rivertown WTP.
  - Part 2 Package: Rivertown Water Treatment Plant, Wellhead Mechanical and Facilities, and Raw Water Pipelines.
- Due to unexpected delays, both packages are being consolidated into one (1) Invitation for Bids and one (1) construction contract for implementation.

# Rivertown WTP Project (continued)

• The consolidation of both packages (e.g., Part 1 Package and Part 2 Package) is described in the document: Consolidation of Part 1: Well Nos. 1, 2, and Backup Well No. 3, Production Well Drilling, for the Rivertown Water Treatment Plant, and Part 2: Rivertown Water Treatment Plant, Wellhead Mechanical and Facilities, and Raw Water Piping

• The Contractor shall plan, coordinate, integrate, and perform all work in the Consolidated Rivertown WTP Project Package, which includes the Part 1 Package and the Part 2 Package.

# Part 1 Package: Well Nos. 1, 2, and Backup Well No. 3, Production Well Drilling

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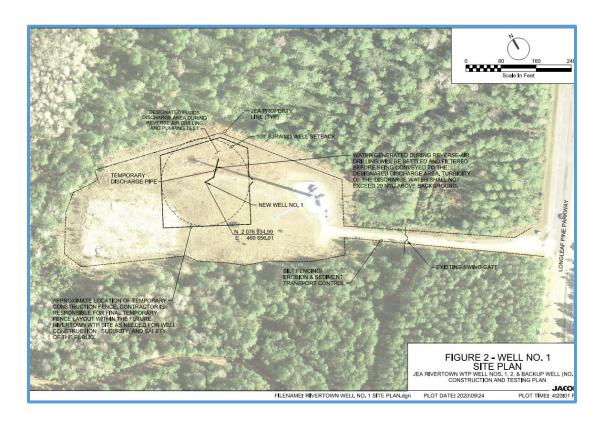


#### Scope for Part 1 Package

The work includes, but is not limited to:

- Permitting, mobilization, and demobilization.
- Production Well 1:
  - preparing Well 1 site including clearing as needed;
  - installing temporary security fence;
  - installation sediment and erosion control measures;
  - overexcavating unsuitable materials;
  - · providing and installing backfill;
  - drilling, constructing, developing, testing, logging/documenting the well, and disinfecting the well;
  - · fluid management; and
  - · restoration and stabilization.

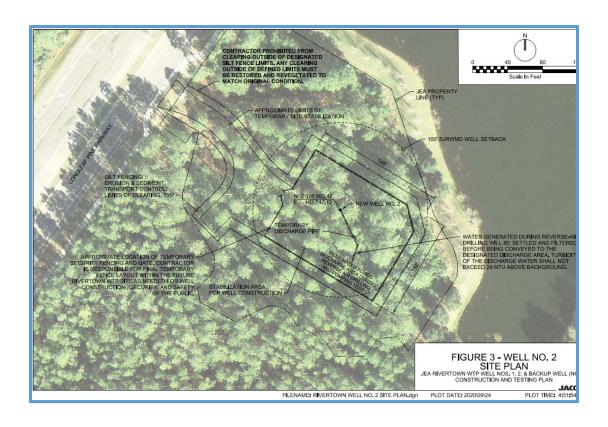
Note 1: See the project specifications and drawings for detailed discussion and description of project scope and requirements.



#### Production Well 2:

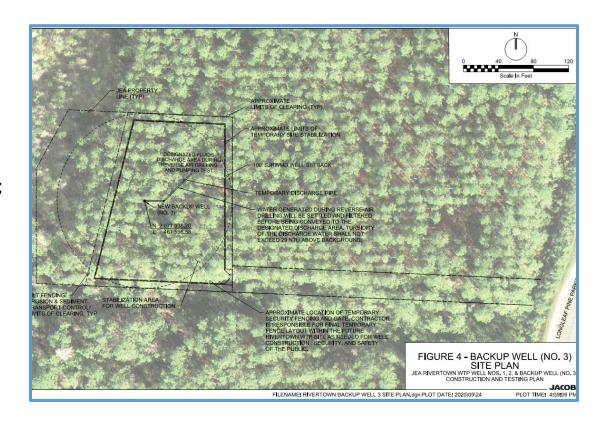
- preparing site and access road including clearing and grubbing;
- installation of temporary security fence;
- installation of sediment and control measures;
- overexcavating unsuitable materials;
- providing and installing fill;
- drilling, constructing, developing, testing, logging/documenting the well, and disinfecting the well;
- fluid management; and
- restoration and stabilization.

Note 1: See the project specifications and drawings for detailed discussion and description of project scope and requirements.



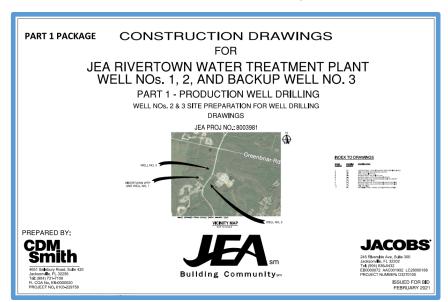
- Backup Well 3 (Alternate Bid Item):
  - preparing site and access road including clearing and grubbing;
  - installation of temporary security fence;
  - installation of sediment and control measures;
  - providing and installing fill;
  - constructing the access road including installation of sheetpile retaining wall, section of raw water pipe, and replacing curb and sidewalk;
  - drilling, constructing, developing, testing, logging/documenting the well, and disinfecting the well;
  - fluid management; and
  - restoration and stabilization.

Note 1: See the project specifications and drawings for detailed discussion and description of project scope and requirements.



## **Technical Documents**

- Technical Specifications, including:
  - Geotechnical Exploration and Evaluation Report
  - Test Holes Report
  - Preliminary Wetlands and Listed Species Report
- Construction Drawings





# Part 2 Package: Rivertown Water Treatment Plant (WTP), Wellhead Mechanical and Facilities, and Raw Water Pipelines

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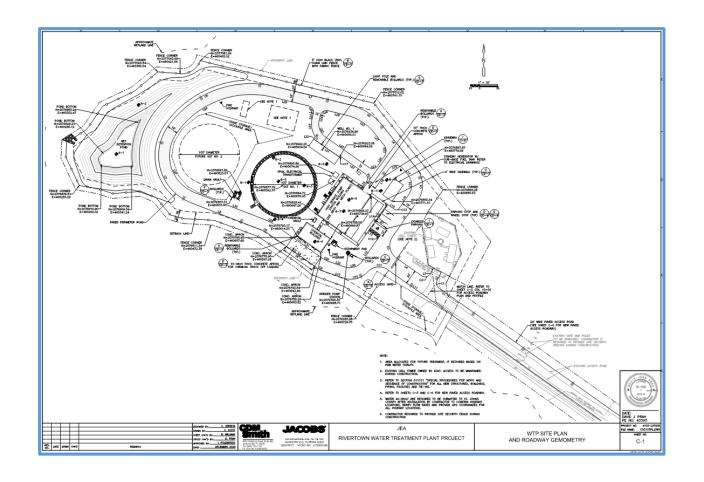


#### Scope – Part 2 Package

Note: See the project specifications and drawings for detailed discussion and description of project scope and requirements

#### Water Treatment Plant:

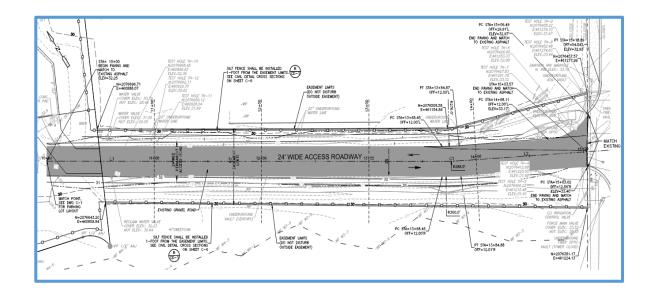
- Site work including landscaping
- Sanitary sewage (either pump station with force main or gravity sewer—alternate bid items).
- WTP loop roadway
- High Service Pump System & Building
- 2.0 MG Ground Storage Tank
- Sodium Hypochlorite System & Building
- Emergency generator
- 20-inch finished water line connection to existing finished water main
- Over-excavation, dewatering, & importing structural fill
- Stormwater system
- Piping (raw water and finished water), valves, flow meters, & associated components



Note: See the project specifications and drawings for detailed discussion and description of project scope and requirements

#### Water Treatment Plant (cont'd):

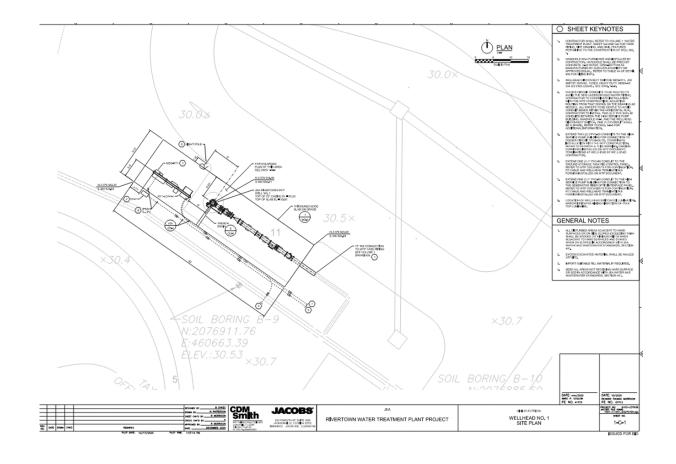
- Access Road (alternate bid item)
- Electrical system
- FP&L electrical infrastructure
- Instrumentation & Controls including SCADA
- Provision & installation of certain security features and coordination with JEA Security including:
  - Temporary security fence
  - Permanent security fence
- Removal and proper disposal of wastes & unsuitable materials/soils



Note: See the project specifications and drawings for detailed discussion and description of project scope and requirements

#### • Well No. 1 (located on WTP site):

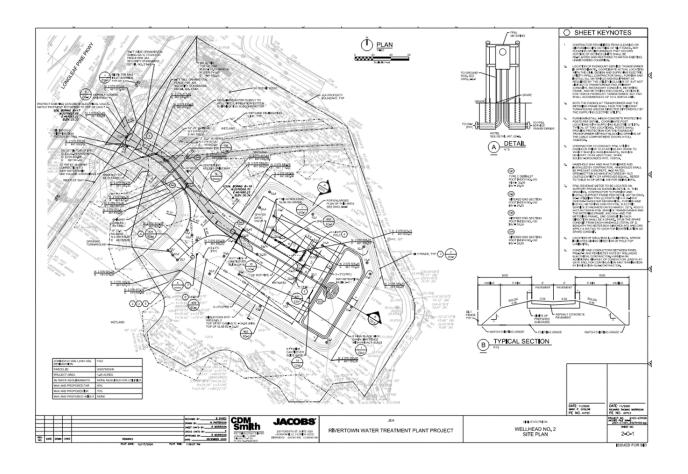
- Site work
- Well pump
- Well pad
- Wellhead piping, valves, flow meters, underground piping, and associated components
- Electrical system
- Instrumentation and controls
- Fiber optic communication
- Over-excavation, dewatering, & importing structural fill
- Removal and proper disposal of wastes & unsuitable materials/soils



Note: See the project specifications and drawings for detailed discussion and description of project scope and requirements

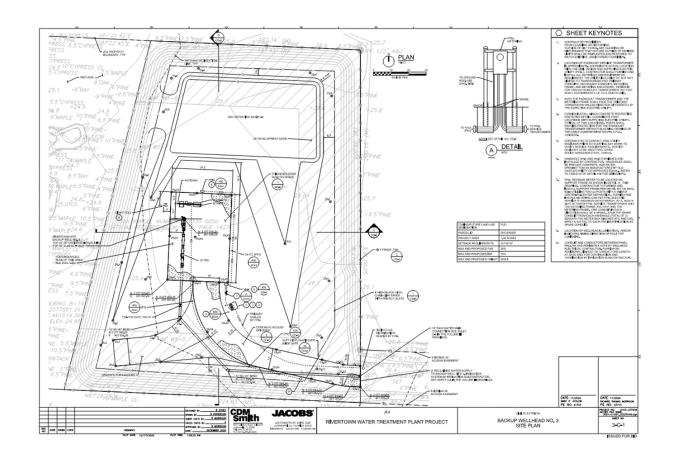
#### Well No. 2 & Access Road:

- Well pump
- Well pad
- Wellhead piping, valves, flow meters, and associated components
- Underground piping (note interface of lump sum bid item versus unit price bid item)
- Site work
- Access road
- Landscaping
- Stormwater features
- Lighting
- Fencing
- Electrical system
- FP&L electrical infrastructure
- Instrumentation and controls
- Radio communication
- Over-excavation, dewatering, & importing structural fill
- Removal and proper disposal of wastes & unsuitable materials/soils



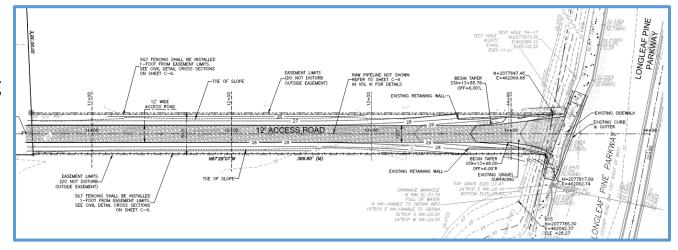
Note: See the project specifications and drawings for detailed discussion and description of project scope and requirements

- Well No. 3 & Access Road, Alternate Bid Items:
  - Well pump
  - Well pad
  - Wellhead piping, valves, flow meters, and associated components
  - Underground piping (note interface of lump sum bid item versus unit price bid item)
  - Site work
  - Landscaping
  - Stormwater features
  - Lighting
  - Fencing
  - Electrical system
  - Instrumentation and controls
  - Radio communication



Note: See the project specifications and drawings for detailed discussion and description of project scope and requirements

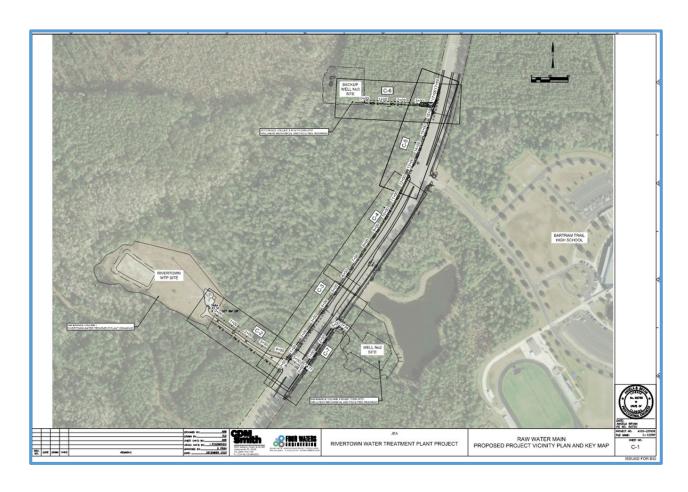
- Well No. 3 & Access Road, Alternate Bid Items (cont'd):
  - Access road
  - FP&L electrical infrastructure
  - Over-excavation, dewatering, & importing structural fill
  - Removal and proper disposal of wastes & unsuitable materials/soils



Note: See the project specifications and drawings for detailed discussion and description of project scope and requirements

#### Raw Water Pipelines:

- From Well No. 2:
  - 325 LF of 12-inch DIP open cut (Note: addition pipe footage to be included in Lump Sum for Well No. 2)
  - Disconnect existing east-west run of 20-inch water pipe from north-south run of 20-inch water main, and re-purpose east-west 20-inch pipe to raw water line.
- From Backup Well No. 3 (Alternate Bid Items):
  - 1,585 LF of 18-inch DR11 HDPE HDD pipe
  - 125 LF of 16-inch DIP open cut
  - 310 LF of 12-inch DIP open cut (Note: addition pipe footage to be included in Lump Sum for Well No. 3)
  - Connect to 20-inch raw water pipe at intersection of Longleaf Pine Parkway and WTP access road.
- 2-inch PVC reuse water pipe for irrigation.
- Bends, fittings, valves, flushing, air release, and sample tap assemblies.



Note: See the project specifications and drawings for detailed discussion and description of project scope and requirements

#### Florida Power & Light (FP&L) Infrastructure:

- FP&L Infrastructure (e.g., conduit, transformer pads, pull boxes, etc.) will be installed under this contract. FP&L will install electrical cable, transformers, and make power connections.
- FP&L will provide materials; however, the materials will have to be picked up at FP&L facility and transported to the job site.
- Estimated quantities included in bid workbook. Final payment will be based on installed quantities.
- FP&L Infrastructure for:
  - WTP
  - Well No. 2
  - Backup Well No. 3 (Alternate Bid Item)

Note: See the project specifications and drawings for detailed discussion and description of project scope and requirements

#### All Associated Work to Provide Complete and Operational Facilities:

- Mobilization
- Permits
- Testing
- Landscaping and Site Restoration
- Disinfection and Bact-T Testing
- Test & Check-out of Equipment
- Training for JEA Personnel
- O&M Manuals
- As-Built Drawings
- Demobilization

#### Allowances for Base and Alternate Bid Items:

- Testing (i.e., density and concrete) as defined in Solicitation
- Supplement Work Authorization

#### **Technical Documents**

- Technical Specifications, Volume IV-A, Rivertown Water Treatment Plant Project including:
  - Geotechnical Exploration and Evaluation Report
  - Soft Dig Report
- Technical Specifications, Volume IV-B, Rivertown Water Treatment Plant, Well No.s 1, 2, and Backup Well No.3, Wellhead Mechanical and Facilities
- Technical Specifications, Volume IV-C, for the Construction Rivertown Water Treatment Plant – Raw Water Piping
- Construction Drawings for Rivertown Water Treatment Plant, Volume 1 Water Treatment Plant
- Construction Drawings for Rivertown Water Treatment Plant, Well No.s 1, 2, and Backup Well No. 3, Volume II Wellhead Mechanical and Facilities,
- Construction Drawings for Rivertown Water Treatment Plant, Volume III Raw Water Pipelines
- Rivertown Water Treatment Plant, Volume V- FP&L Electrical Power Infrastructure

#### Schedule

• The Contractor shall provide a consolidated, comprehensive, and integrated schedule for the efficient and effective performance of the work in the Consolidated Rivertown WTP Project (e.g., Part 1 Package and Part 2 Package).

Note 1: See the project specifications and drawings for detailed discussion and description of project scope and requirements.

# Schedule (continued)

• All work to be completed after the Notice to Proceed as follows:

Description	Substantial Completion	Final Completion
Part 1 Package work for	130 calendar days after	160 calendar days after
Well No. 1 including	Notice to Proceed	Notice to Proceed
Drilling, Construction,		
Development and Water		
Quality Sampling		
Part 1 Package work for	260 calendar days after	290 calendar days after
Well No. 2 including	Notice to Proceed	Notice to Proceed
Drilling, Construction,		
Development and Water		
Quality Sampling		
All Part 2 Package work	480 calendar days after	540 calendar days after
except for Backup Well No.	Notice to Proceed	Notice to Proceed
3 Wellhead Mechanical,		
Facility, and Access Road		
Backup Well No. 3 (if	540 calendar days after	570 calendar days after
authorized by JEA)	Notice to Proceed	Notice to Proceed
Wellhead Mechanical,		
Facility, and Access Road		

Note 1: See the project specifications and drawings for detailed discussion and description of project scope and requirements.

# Permitting/Regulatory Status

- See the document titled: Permitting / Regulatory Status for the Rivertown Water Treatment Plant Project.
- Not all permits/regulatory approvals have been received. Field work will not be allowed on each site until all necessary permits/approvals have received for the respective site.

#### Bid Workbook

- Review Consolidated Bid Workbook for Part 1 Package and Part 2 Package.
  - Base Bid Items
  - Alternate Bid Items
- Limitations on General Conditions:
  - The "Sum of all General Conditions Bid Items plus Mobilization and Demobilization Bid Items" divided by the "Total Bid Price for Part 1 and Part 2" shall not exceed (10%).
  - General Conditions are defined in the Solicitation.

# Bid Workbook (continued)

• The bids will be evaluated for contract award based on the "Total Bid Price for Part 1 and Part 2 (Base Bid Items Plus Alternate Bid Items)" price.

 The actual authorization of alternate bid items for implementation will based on JEA's best interests and available funding.

• If there are questions/issues on the bid form, please identify early so that they can be promptly resolved.

# JEA Standards and Pending Addendum

- Compliance with JEA Standards is required.
- JEA's Water and Wastewater Standards and Approved Materials are available at:
  - https://www.jea.com/Engineering and Construction/Water and Wastewater Standards/
- JEA's Facilities Standards are available at:
  - https://www.jea.com/engineering and construction/jea facilities standards/
- An addendum will be issued to clarify approved I&C integrators and VFD's based on JEA's Standards and Approved Materials

#### Points to Note

- Overexcavation of unsuitable soil and providing and installing fill.
- Provision and installation of granular backfill complying with the specifications to meet percolation requirements for ERP Stormwater Permitting.
- The sites are near Bartram Trail High school:
  - Installation of temporary security fence is required before and during construction to minimize intrusion and potential safety concerns/injuries.
  - Must consider traffic

# Points to Note (continued)

- Rivertown Developer restrictions:
  - Imposed on Well 2 site.
  - Do Not clear/distribute beyond the limits of clearing!!
- Do Not infringe on any Adjacent Properties!!
- Another Developer may perform the following, which will may influence implementation of Alternate Bid Items:
  - Develop road and utilities between Longleaf Pine Parkway and WTP entrance (need to cooperate on WTP access during road & utility construction).
  - Construct wastewater pump station on Developer's property and install sanitary sewer connection to WTP property.
- Other Interfaces:
  - Cellular companies for cell tower facility on east side of WTP site.
  - FP&L for power.

# Points to Note (continued)

- Contractor must avoid track-out of mud, dirt, debris, etc onto Longleaf Pine Parkway. Contractor will be responsible for prompt removal and cleanup of any track-out that occurs.
- Contractor will need to provide temporary power and water supply.
  Options for water service include:
  - Install a temporary construction service off the finished water main in the Longleaf Pine Parkway ROW.
  - Install a temporary well.
- Work area is within JEA property:
  - JEA access badges required
  - Masks are required if social distancing cannot be performed
  - No weapons, alcohol, illegal drugs

# Mandatory Site Tour

- Potential hazards:
  - Potential COVID 19 Exposure
  - Heat
  - Tripping hazards
  - Traffic on Longleaf Pine Parkway
  - Stinging insects, ticks, snakes, etc.
  - *Etc*
- PPE
  - Mask
  - Safety boots
  - Hard hats (optional)
  - Safety glasses
  - Reflective vest
- No weapons, alcohol, or illegal drugs

# QUESTIONS