

Appendix A Technical Specifications

97743: 128 Hedgerow Master Lift Station Fiber Build 2019

JEA DOCUMENT REFERENCES

All construction work shall be completed in accordance with details and specifications contained in the documents listed below. These documents can be found on www.jea.com at https://www.jea.com/engineering_and_construction/electric_reference_materials/. JEA Contractors are required to fully understand and comply with these specifications.

- A. Fiber Optic Cable Standards – Latest Edition
- B. Underground Distribution Construction Standards – Latest Edition
- C. Overhead Distribution Construction Standards – Latest Edition

AS-BUILT/POST CONSTRUCTION/POST SPLICING DOCUMENTATION REQUIRED:

- 1) Contractor shall mark up supplemental project drawings, site plans, overhead installation and underground installation and submit on supplied drawings to JEA in an as built format.
- 2) Contractor shall provide electronic and hard copies of fiber optic testing documentation before and after installation.
- 3) Contractor shall perform bi-directional tests with a JEA approved OTDR/software package NetTest or EXFO from patch panel to patch panel.
- 4) Contractor shall perform bi-directional tests for Optical Return Loss with a JEA approved power meter and light source on terminated fibers from patch panel to patch panel.
- 5) Contractor shall provide electronic and hard copies of fiber optic testing documentation before and after splicing

Scope of Work for Fiber Installation and Splicing

1. The JEA contractor shall perform a pre-construction test of the new fiber cable (CAIUF0144) to insure its integrity prior to installation.
2. All underground construction will include conduit(s) as designed, a locate wire (#12 minimum solid), fiber route cote markers, and fiber optic vaults, as indicated on the construction drawings.
3. The Contractor will perform post construction fiber integrity testing. The Contractor will inform JEA the fiber plant is ready for pre splicing inspection. JEA will inspect the completed fiber plant construction within ten working days after the Contractor informs JEA that it is ready for inspection. Upon acceptance by JEA of the fiber, plant construction the Contractor will begin fiber splicing, post splicing testing and documentation.
4. The JEA Contractor shall identify and tag all exposed project related fiber cables within the project area with JEA provided tags.

Scope of Work

1. Install One (1), Two inch (2") conduit along Longleaf Pine Parkway.
2. Install JEA furnished handhole according to the drawing, some adjustments may be necessary.
3. Pull approximately 22,000ft of 144ct fiber.
4. Install Risers and pull fiber into substation and MLS
5. 128 Hedgerow MLS
 - a. Furnish and install Nema Cabinet on outside building per drawings
 - b. Install owner furnished communications rack in building
6. Furnish and install patch panel and terminate 12 fibers in Hedgerow Control room
7. Terminate 12 fibers and install contractor supplied patch panel in existing rack inside Switzerland Substation
8. Label all fiber terminations and provide as-build per JEA Standards
9. Install new ARC conduit from existing power panel to new Hedgerow cabinet. Install (2) new 120v/20amp
 - * Special note – Follow all St. Johns County permit instructions, please read carefully before submitting bid.

JEA shall provide the following:

1. 144 count single mode fiber.
2. Fiber route markers, fiber optic vaults and hand holes.
3. Maps, plans, drawings, design specifications and permits.

Contractor shall provide:

1. All equipment, tools and work force.
2. All consumables and other materials needed for the underground construction.
3. All conduit, inner ducts and locate wire.
4. All splicing and consumables.