

SCOPE OF WORK

SRO Wells 19 & 20 Electrical Improvements Project.

A. SCOPE.

The project consists of replacing all the conductors and conduit in the SRO Wellfield - Wells 19 and 20.

The project will include:

- (1) Removal and replacement of all conductors and any damaged components within the system, including third Party testing of installed conductors
- (2) Removal and replacement of all existing conduits (approximately 5,500ft). Minimum depth of proposed conduits shall be 24 inches.
- (3) Installation of a 4-inch concrete protective cap over the conduits.
- (4) Replacement of Manhole nearest to Well # 19. Contractor to utilize existing electrical manhole (6'x6'x6') located at the SCRWTP. Contractor is responsible to transport existing manhole to project site.
- (5) There is communication fiber in 2" conduit that runs alongside the electrical conduits. During construction, the contractor will be responsible for protecting the fiber. Also, the fiber may run through the manhole to be replaced and will require disconnection and reconnection.
- (6) Existing manhole across from Well # 20 needs to be adjusted and re-bedded.
- (7) Build racks in the existing manholes to support the conductors.
- (8) Provide grounding for the manholes.
- (9) The six conduits from Manhole #4 to Well # 20 are to be replaced. Three of the conduits contain conductors from Well#21. These will be pulled back and reinstalled. These conductors must be protected.

This project will be an in-kind replacement and the replacement items shall be installed in accordance with the original project design documents, which are attached.

The work includes excavation, dewatering, removal of the bad conductors and existing conduits, reinstallation of new conduits and conductors, hookup and testing of system for proper operation. If Polaris connectors are used that bolt to the backplane, an insulator will be installed between the backplane and the conductors supporting the Polaris connectors in the center of the panel. Boxes and backplanes will be properly grounded to the ground ring. Collier county will provide the standoffs for the two boxes.

Information on the insulators that are going to be used for the standoff of the Polaris connectors for the backplane: ERFX 559610 ISO1-516 - INSULATOR 1.708/EA 85.38

ISO 1-5/16.

<https://www.galco.com/buy/ERICO/559610>

<https://www.galco.com/shop/ISO-ERICO-Electrical-Standoff-Insulators>

The Contractor shall test all items individually and as a system for proper operation. The Contractor shall employ the services of a third-party NETA Testing firm to test the installed conductors. The Contractor shall, at his expense, make all the requisite repairs, adjustments and/or alterations to correct any shortcomings found as a result of the tests performed. A representative of the County shall be present during all testing. The County shall be notified at least two (2) days prior to any testing.

The County will supply new wire, conduits, (one) manhole, and the standoff for two boxes. Contractor is responsible for taking an inventory of the materials, and to safely transport the materials to the job site

All other required materials are to be provided by the Contractor.

B. CONTRACTORS OVERVIEW OF RESPONSIBILITY

1. Furnish all labor, material (other than materials provided by the county), superintendence, dewatering equipment, tools, appliances, equipment, supplies, services, and other means of construction necessary for performing and completing the project.
2. All work done will meet applicable codes and Collier County standards.
3. The contractor will have sole responsibility for proper installation and equipment.
4. Maintaining the Work area and site in a clean and acceptable manner.
5. Conduct operations with the least inconvenience to the general public.
6. Protection of finished and unfinished Work during the project.
7. Repair and restoration of Work or existing facilities damaged during construction.
8. Furnishing necessary equipment and machinery, of sufficient capacity, to facilitate the work and to handle all emergencies normally encountered in Work of this type.
9. In case of damage to existing utilities caused by construction activities, contact the owner of the utility or appropriate COUNTY department (Water or Wastewater) immediately. Contractor is responsible for repairing any damage to existing utilities caused by construction activities in coordination with or as directed by the owner of the utility.
10. Contractor to provide all necessary equipment and materials (other than the wire noted in section A above) for a complete and operational system as per the plans and specifications.
11. Provide as-built information signed and sealed by a Florida Licensed Land Surveyor.
12. The Wire/Conductors purchased by the County are stored at the SCRWTP.

C. DISPOSAL OF MATERIAL

Any conductors/wire removed from the conduits, for disposal, should be disposed of at Garden Street Iron & Metal, and the funds obtained provided to the County.

D. EXECUTION

Time is of the essence for this project.

Starting Work: Start Work within five (5) calendar days following issuance of the purchase order and execute with such progress as may be required to prevent delay to other contractors or to the general completion of the project. Execute Work at such items and in or on such parts of the project, and with such forces, material and equipment, as to complete the Work in the time established by the Contract.

At all times, schedule, and direct the Work so that it provides an orderly progression to completion within the specified time for completion. Please submit a schedule within 3 calendar days of receiving the purchase order. Any weekend or holiday work must be approved by the project manager with at least 3 working days' notice. Any failed section noticed while removing the existing runs will be set aside for review to determine issues.