
MEMORANDUM

TO: Jason Brown, County Administrator

FROM: Manny Cabo, Telecommunications Manager

THROUGH: Richard B. Szyrka, P.E., Public Works Director

SUBJECT: Proposal for NexusWorx - Fiber Documentation System – Project Phase-2

DATE: March 14, 2019

BACKGROUND

Indian River County Public Works Department, through IRC Telecommunications Division recently deployed a secure web-portal based system of municipal fiber optic infrastructure documentation, fiber mapping, and fiber record keeping, for all IRC Outside Plant (OSP), and IRC Inside Plant (ISP) fiber optic network assets. OSP is all fiber optic cable that is located outside any County or IRC Fiber Consortium buildings. ISP is all fiber optic cable located inside any County or IRC Fiber Consortium buildings. The first completed phase of the IRC fiber optic network documentation 'pilot project' is known as NexusWorx Phase-1. The NexusWorx application is a product of Byers Engineering Inc., who also manages the mirrored web-portal sites that support this application. The database, records, and all collected OSP and ISP information, is the property of Indian River County BOCC.

NexusWorx project Phase-2 is the next sequential step in fully documenting the IRC municipal fiber optic network grid. Phase-2 of the NexusWorx project will document an area north of the IRC South Relief Canal, within a logically selected area, extending north to 45th Street, in Vero Beach. In the east/west coverage area, NexusWorx Phase-2 will range from Highway A1A on the east perimeter, west to I-95.

As with the NexusWorx Phase-1 project, the scope of work will be two tiered. Byers Engineering Inc. will develop the OSP project scope of work, and provide it to Gerelcom Inc., who will go out in the field and open all IRC fiber optic splices and fiber optic patch panels to fully document all IRC fiber connections contained within. Byers Engineering personnel will collect and document all of the ISP fiber information. Once all of the data has been collected, Byers Engineering Inc. will compile and enter all of the data collected, within the NexusWorx Project Phase-2 scope of work area, into the NexusWorx web-portal, for daily use and administration by IRC personnel. The total cost of the Phase 2 Fiber Documentation System process is \$292,538.00.

ANALYSIS

The proposed Phase-2 component of the NexusWorx fiber documentation project described, entails the collection of all IRC field fiber optic network grid data, within the specified coverage area of project Phase-2, by Byers Engineering Inc. to include all of the following:

- * OSP fiber assets to include all underground fiber optic handholds, fiber pull boxes, fiber patch panel housings, IRC traffic fiber cabinets, underground and aerial fiber optic splice enclosures - information detailing the point-to-point fiber optic splice connections contained within each fiber optic splice housing, - within the specified Phase-2 project area.

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- * ISP fiber assets to include all fiber optic patch panel connections within County and shared resource IRC Fiber Consortium building sites - information detailing the point-to-point fiber jumper connections at each fiber optic patch panel, - within the specified Phase-2 project area.
- * After all OSP and ISP fiber network field data has been collected, Byers Engineering Inc. will enter and configure all of the collected fiber infrastructure data into the NexusWorx portal application, to be directly managed by IRC staff at completion of the process.

FUNDING

The cost for the Byers Engineering NexusWorx segment of the NexusWorx Phase-2 project is \$121,100.00

The estimated cost for the Gerelcom Inc. segment of the NexusWorxPhase-2 project is \$171,438.00.

The NexusWorx Phase-2 project, in the amount of \$292,538.00 will be funded by way of a budget amendment from MSTU/Cash Forward-Oct 1st to MSTU/Telecommunications/Other Professional Services- Account # 00423437-033190.

RECOMMENDATION

Staff recommends that the IRC Board of County Commissioners review and approve the proposed NexusWorx - Fiber documentation system – Project Phase-2.

ATTACHMENTS

Byers Phase 2 Proposal
Gerelcom Phase 2 Quote
Fiber Survey Phases Map

APPROVED AGENDA ITEM FOR 03/26/19