

MEMORANDUM

UTILITIES DEPARTMENT



City on the Gulf
Venice, Florida

TO: Ed Lavallee, City Manager

FROM: Len Bramble, Utilities Director 

DATE: February 5, 2014

SUBJECT: Additional Information
Cooperative Purchase–Aztek Communication of South Florida, Inc.
Water Treatment Plant–Reverse Osmosis (RO)/SCADA
Communication Improvement

Per your request, the purpose of this memorandum is to provide additional supporting information regarding the Water Treatment Plant – Reverse Osmosis (RO)/SCADA Communication Improvement project. As described in the City Council Agenda Item Request Memorandum the project includes the furnishing and installation of conduit and fiber optic cable to directly connect several (8 of 14) water supply wells and the Reiter Field Elevated Water Storage Tank to the City's Reverse Osmosis Water Treatment Plant (ROWTP). This connection will provide improved reliability of control and monitoring for these wells upon completion of the currently under construction Reverse Osmosis Membrane Replacement and SCADA (RO/SCADA) project. For further information please see the attachment.

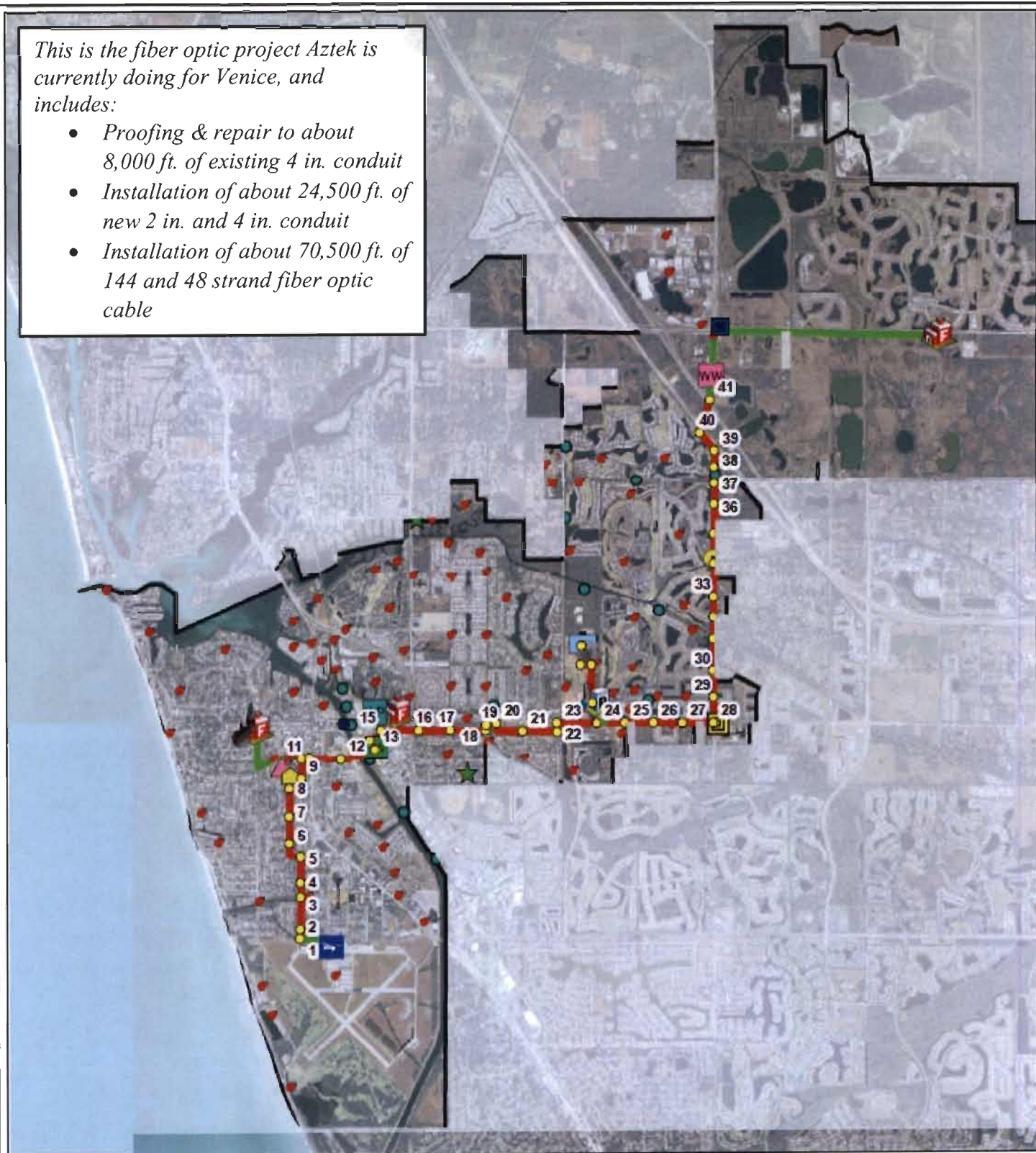
Regarding the method of procurement for the conduit and fiber optic cable installation we offer the following:

- Aztek Communications of South Florida, Inc. is the contractor for the City-wide fiber optic cable project currently under construction. The proposed conduit and fiber to be installed will connect to the City-wide fiber currently under construction and projected to be completed in May this year.
- During design of the RO/SCADA project the City was made aware of the improved communication and control that would be available for the Western Wellfield if a fiber optic connection were made to the ROWTP instead of the other alternatives discussed. Similarly, significant improvements can also be made for our Eastern Wellfield by establishing a new radio telemetry "node" that will alleviate current intermittent and poor communications between 3 wells and the ROWTP.
- This additional RO/SCADA fiber needs to be installed within a short time frame in order to prevent delay of the overall RO/SCADA construction. Delay of the overall project may result in the City incurring additional contractor costs. The tight time schedule does not allow for the preparation of construction documents and public bidding. Piggybacking of a Unit Price Contract (Collier County 12-5985) will enable the City to get the work completed and keep the RO/SCADA project on schedule.
- In addition, use of the same contractor for all the fiber work will provide a single point of responsibility in the event of any failure of the fiber optic cable.
- Staff has been unsuccessful in locating a local source for this type of work. Of the four bidders for Collier County, none were from Sarasota, Charlotte, Manatee, or Desoto counties. Further, Manatee County solicited this type of work in 2013 (bid# 12-2050-OV) and again, no local bidders submitted.

cc: Tim Hochuli, Assistant Utilities Director
Peter Boers, Purchasing Manager

This is the fiber optic project Aztek is currently doing for Venice, and includes:

- Proofing & repair to about 8,000 ft. of existing 4 in. conduit
- Installation of about 24,500 ft. of new 2 in. and 4 in. conduit
- Installation of about 70,500 ft. of 144 and 48 strand fiber optic cable

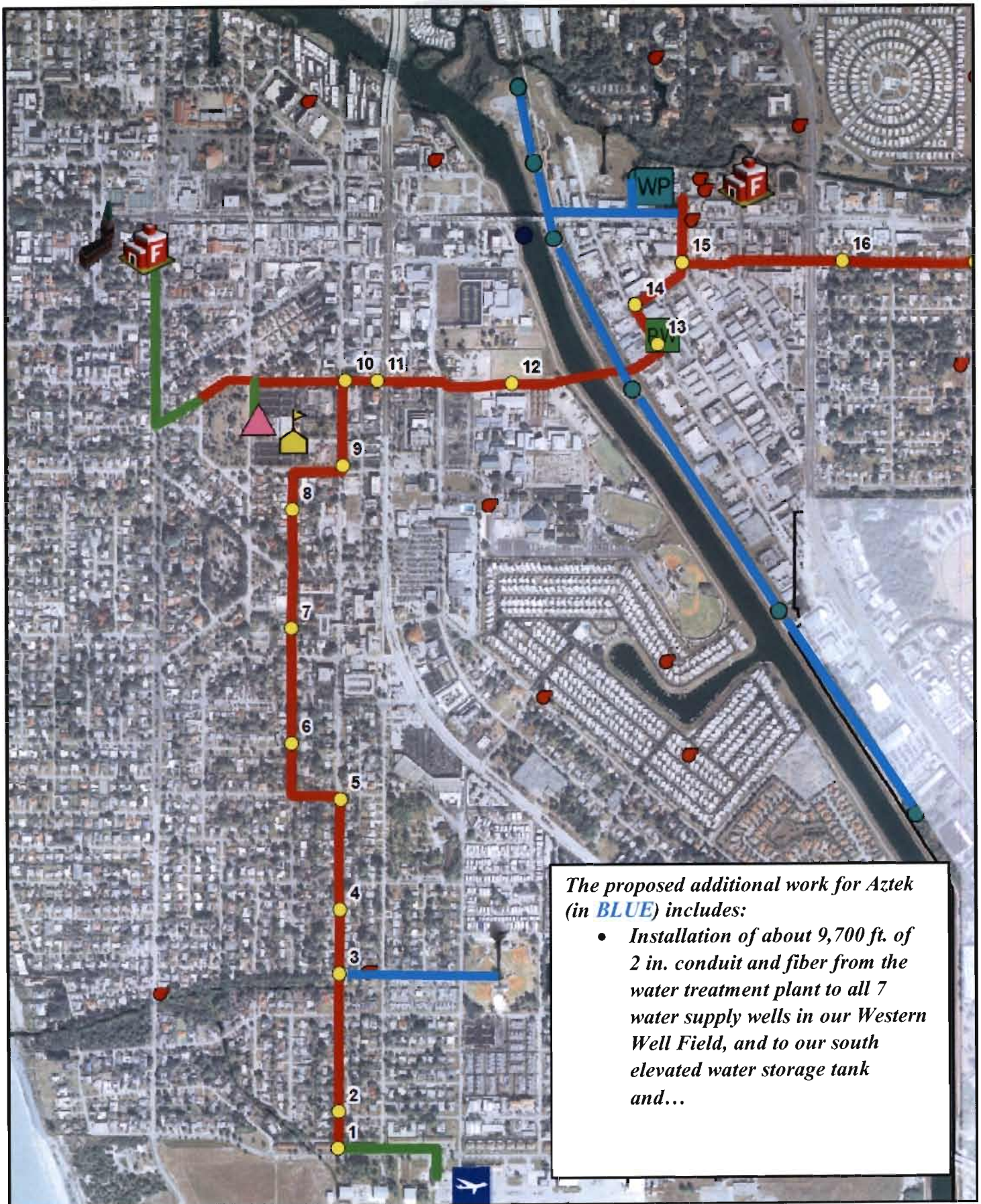


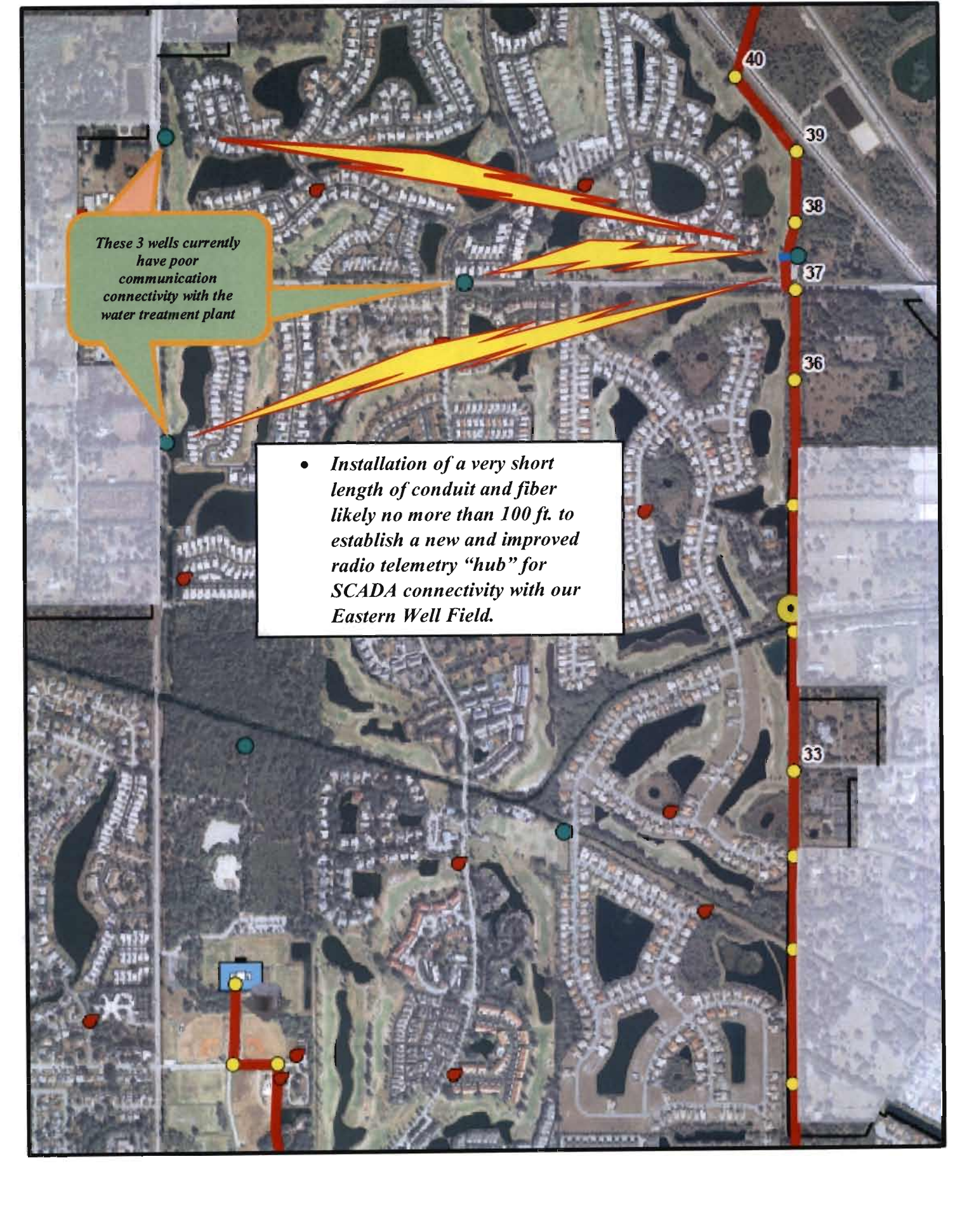
City of Venice Potential Connections to Fiber Optic

0 0.5 1 Miles

- | | | | |
|----------------------------|---|----------------------|------------------------------|
| Water Treatment Plant | Water Reclamation Facility | City Hall | Community Center |
| Above Ground Storage Tank | Sarasota County Reuse Interconnect | Airport | Triangle Inn |
| Ground Storage Water Tank | Lift Stations | Public Works | Proposed Fiber Optic Conduit |
| Production Wells | Curry Creek | Fire Station | Existing Fiber Optic Conduit |
| Water Booster Pumps | Sarasota County Wastewater Interconnect | Police Department | Existing Pull Boxes |
| Potable Water Interconnect | Concentrate Discharge | Venice City Boundary | |







These 3 wells currently have poor communication connectivity with the water treatment plant

- *Installation of a very short length of conduit and fiber likely no more than 100 ft. to establish a new and improved radio telemetry "hub" for SCADA connectivity with our Eastern Well Field.*

Why the recommendation to go with Aztek?

1. **Same Scope as Current Work:** The scope of this additional work is virtually identical to the work they are already doing for Venice (completion May 2014) repairing and installing conduit and fiber optic cabling that reaches from the Airport to Fire Station 3, and will connect multiple City facilities in one network, including but certainly not limited to:
 - a. Airport
 - b. Triangle Inn
 - c. Community Center
 - d. City Hall
 - e. Fire Station #1
 - f. Public Works
 - g. Utilities Administration & Water Treatment Facility
 - h. Fire Station #2
 - i. Police Department
 - j. IT & Utilities Facilities at Wellfield Park
 - k. Utilities Eastside Water Reclamation Facility
 - l. Fire Station #3
 - m. Numerous other facilities such as lift stations, bulk meters, emergency interconnections, fueling locations, improved City telephone system, security systems, etc.
2. **Is a Large Project:** This additional work, while certainly not the size of Aztek's current effort, is still quite large with approximately 9,700 feet of 2" conduit and fiber, and related appurtenances, to be installed.
3. **Is Very Closely Tied to the Water Treatment Plant Project:** This additional work is actually a significant part of the work currently being undertaken in a different project that is upgrading our water treatment reverse osmosis membranes and installing a state-of-the-art SCADA (Supervisory Control And Data Acquisition) system. This additional proposed work addresses current reliability and redundancy issues and concerns we have with communications with and control of the wells that provide the City's drinking water.
4. **Very Tight Timeline:** Accomplishing this additional proposed work at the correct time allows this work to be undertaken and completed as part of the water treatment plant upgrades. The timeline for completion of the water treatment plant upgrades is July 15, 2014 (just over 6 months from now), and we hope to have this additional work ready to incorporate into the larger water treatment plant project timeline in early April of this year (just about 2 months from now).
5. **Local Companies:** We always prefer work go to local vendors for multiple reasons including, but not limited to, improved communications, quick response time, vendor "pride" in our community, our support to local business. Doing work with local vendors almost always makes our jobs much easier. Unfortunately, there are times when circumstances don't allow that to happen, such as non-competitive pricing (pursuant to City Code), and lack of local vendors providing the goods or services desired or lacking sufficient experience or demonstration of experience in the services desired. Thus far we have not been able to determine similarly qualified vendors in our local area or region for the work that Aztek is providing us. We have determined area vendors who seem to specialize in installing & upgrading individual building and campus computer network and fiber optic systems, and we are currently having discussions with those in anticipation of soliciting quotes or bids from them for improvements to our buildings and campus network systems.