CITY OF NAPLES PURCHASING DIVISION CITY HALL, 735 8TH STREET SOUTH NAPLES, FLORIDA 34102 PH: 239-213-7100 FX: 239-213-7105

ADDENDUM NUMBER 2

NOTIFICATION DATE:	BID TITLE:	BID NUMBER:	BID OPENING DATE & TIME:
04/17/14	WWTP Reuse Pump Replacement	14-037	04/25/14 2:00PM

THE FOLLOWING INFORMATION IS HEREBY INCORPORATED INTO, AND MADE AN OFFICIAL PART OF THE ABOVE REFERENCED BID.

The following clarifications are issued for the referenced solicitation:

- Drawing E-601 Note 8 calls for all wire from the VFD to the motor to be VFD type. The VFD cable is not specified in Specification Section 16120. What type of VFD cable is required?
 ANSWER: Specification 26 05 13 is provided below, please refer to Exhibit A.
 - 2) Is it possible to reuse the existing underground conduits (power and control) between the electric building and the effluent pumps?

ANSWER: Please bid the project as designed. The City has concerns with the age and condition of the existing conduit and desires for new conduit to be utilized. As noted on the drawings the interior conduits for two (2) drives may be reused, but conduit for the other drives and the all exterior conduits shall be new as specified.

3) Some of the equipment, drives, etc may have long lead times. Added to the submittal and approval times, we may need an extra 30 to 45 days for contract completion. Can you add 45 days to the current 180 day completion period?

ANSWER: The contract duration has been extended 45 days to 225 days.

4) The engineer estimate appears to be very low. Do you have a revised estimate? ANSWER: The "estimate" provided previously was based on the City's budget and not the Engineer's estimate. Once the quotes are received, the City may choose to fund the project even if it is above the current budget amount.

IMPORTANT MESSAGE

- 5) From bidding this project last month I think your advertised budget of \$325,000 is not enough and way lite. Last time the electrical numbers were over this budget number by themselves. ANSWER: Comment noted.
 - 6) I was wondering if you had an Estimate on this one. You had mentioned when the Bid was cancelled, that you would have a lot of revisions to do, so I am curious what the Estimate is now.

ANSWER: The "estimate" provided previously (\$325,000) was based on the City's budget and not the Engineer's estimate. Once the quotes are received, the City may choose to fund the project even if it is above the current budget amount.

- 7) Drawing E-601. Do the conduits under the slab need to be removed and the concrete slab replaced as shown on this drawing or can the conduit just be grout filled and capped?
 ANSWER: The conduits can be cut to below grade and capped. They do not need to be grouted. The slab shall be replaced as shown and specified.
- B) Drawing D-102. Section A shows two proposed flex couplings in the 24" header. Are these flexible expansion joints or Victaulic coupling joints in both locations?
 ANSWER: The new couplings shall be Victaulic.

Exhibit A - Specification - SECTION 26 05 13 - VFD CABLES

14-037 Addendum 2 – Exhibit A

SECTION 26 05 13 - VFD CABLES

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes the following:
 - 1. VFD Cable.

1.02 SUBMITTALS

- A. Shop Drawings: Submit in accordance with Section 01 33 00, Shop Drawings covering the items included under this Section. Include Shop Drawings of wires, cables, connectors, splice kits, and termination assemblies.
- B. Reports of field tests prepared as noted in Section 01 81 00.

1.03 QUALITY ASSURANCE

- A. Except as otherwise stated herein, the power cables furnished in accordance with the specification shall comply with the latest applicable codes and standards of the American National Standards Institute (ANSI), the Institute of Electrical and Electronics Engineers (IEEE), the National Electrical Manufacturers Association (NEMA), the American Society for Testing and Materials (ASTM), Insulated Cable Engineers Association (ICEA), and Underwriters Laboratory (UL).
- B. As a minimum, the latest edition of the following individual standards shall apply:
 - 1. ICEA Standard S-73-532
 - 2. UL 44, UL 1277 for Type TC-ER
 - 3. ASTM B-3, B-8 for stranded copper conductors
 - 4. IEEE 1202/383 Flame Test, UL 1685 Flame TestUL Compliance

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Subject to compliance with specified requirements, manufacturers offering products which may be incorporated in Work include:
 - 1. Medium-Voltage Cable:
 - a. Belden
 - b. General Cable.
 - c. AmerCable

2.02 CABLE

- A. The cable shall be 600V/1000V rated, with stranded tinned copper conductors, shielded, suitable for use with Variable Frequency Drives.
- B. The insulation shall be rated for 90 degrees Celsius Wet/Dry operating temperature.
- C. Accessories (terminations) shall have ratings that are at least equal to those of the cable.
- D. Cable shall be free from material and workmanship defects.
- E. All cables shall be round.
- F. Cable shall be suitable for use in wet/dry locations, indoors and outdoors, in cable trays, in conduits, trenches, and in underground ducts and direct burial.

2.03 CONDUCTOR

A. The conductor shall be annealed stranded tinned copper per ASTM B3, B8, and B33.

2.04 INSULATION

- A. The insulation thickness shall have a minimum average wall thickness of 30 mils. The insulation material must be XLPE with a XHHW-2 listing per UL 44. Each insulated conductor shall be identified in accordance with ICEA Method 4 color coding.
- B. The insulated conductors are to be cabled together with a minimum of one ground wire. The ground wire(s) are to have a minimum circular mil area equivalent to one circuit conductor. Fillers shall be included as necessary to make the cable round.

2.05 SHIELDING

- A. The cabled assembly shall be shielded using one of two methods:
 - 1. Applying helically two 2-mil copper tapes. The shield shall provide 100% coverage over the assembly.
 - 2. Applying a 80% minimum coverage tinned copper braid shield used in conjunction with an Aluminum Foil shield tape.

2.06 JACKET

- A. All cables shall have a continuous overall outer sheath of Polyvinyl Chloride (PVC), suitable for 90°C use.
- B. The jacket shall be resistant to abrasion, rated for direct burial, sunlight resistant and flame resistant in accordance with UL 1277.

2.07 IDENTIFICATION

- A. The following permanent legend shall be clearly embossed or printed on the outer jacket for the entire length of the cable:
 - 1. Manufacturer's name and or Trade Mark
 - 2. Number of conductors and size (-- AWG)

- 3. Type of insulation (XLPE) or NEC Listed Conductor Type (XHHW-2)
- 4. Voltage rating
- 5. TC-ER rating

PART 3 - EXECUTION

3.01 FIELD QUALITY CONTROL

- A. VFD Cable Tests shall include high-potential test of cable and accessories and such tests and examinations required to achieve specified objectives. Where new cables are spliced to existing cables, high-potential test shall be performed on the new cable prior to splicing. After test results for new cables are approved and splice is made, an insulation resistance test and continuity test on the length of cable including the splice with existing cables being tested to the nearest disconnect point.
- B. Reports (non-LAN cable): Testing organization shall maintain a written record of observations and tests, report defective materials and workmanship, and retest corrected defective items. Testing organization shall submit written reports to ENGINEER.

END OF SECTION