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**September 8, 2015**

TO: All Interested Bidders  
SUBJECT: Invitation for Bids #15-2259CD  
44<sup>th</sup> Avenue East Roadway Project- from 19<sup>th</sup> Street Court East to 30<sup>th</sup> Street East

**ADDENDUM #2**

**Bidders are hereby notified that this Addendum shall be acknowledged on page Bid Form-1 of the Bid Form and made a part of the above named bidding and contract documents. Bids submitted without acknowledgment of the Addendum will be considered incomplete.**

The following items are issued to add to, modify, and clarify the bid and contract documents. These items shall have the same force and effect as the original bidding and contract documents, and cost involved shall be included in the bid prices. Bids to be submitted on the specified bid date, shall conform to the additions and revisions listed herein.

- 1. CLARIFICATION** of the last paragraph of Article A.04 on page A-3 of the bid documents:  
A site visit for the proposed 44<sup>th</sup> Avenue East project located within the B&H cattle property is scheduled for **September 15, 2015 at 10:00 am.** B&H Cattle is providing the County and all interested bidders access to the proposed project located within their property, and all interested bidders shall meet at the gate located off 38<sup>th</sup> Avenue East (see the aerial map attached to this Addendum #2 for gate location) no later than 10:00 AM on the day of the site visit. Those interested will need a 4x4 vehicle to follow the escort on to the property. This will be the only opportunity to access this portion of the site project site prior to the bid opening.
- 2. CHANGE** the second paragraph of Article A.06 on page A-3 of the bid documents to read as follows:  
**5:00 PM on September 17, 2015** shall be the deadline to submit to the Purchasing Division, in writing, all inquiries, suggestions, or requests concerning interpretation, clarification or additional information pertaining to this IFB.
- 3. ADD** the Supplemental Special Provisions for the 44<sup>th</sup> Avenue East roadway Project- from 19<sup>th</sup> Street Court East to 30<sup>th</sup> Street East dated September 2015 that is attached to this Addendum #2 to the Bid Documents.

4. **DELETE** Plan Sheets 1, 9A, 9B, 11, 12, 13, 14, 17, 18, 23, 24, 26, 28, 34, 36, 37, 38, 39, 41, 48, 49, 50, 51, 98, 147, and 150 of the Roadway Plans and **INSERT** the REVISED Plans Sheets 1, 9A, 9B, 11, 12, 13, 14, 17, 18, 23, 24, 26, 28, 34, 36, 37, 38, 39, 41, 48, 49, 50, 51, 98, 147, and 150 of the Roadway Plans that are attached to this Addendum #2.
5. **DELETE** Plan Sheets T-1, T-2, T-3, T-4, T-5, T-6, T-7, and T-8 of the Signalization Plans and **INSERT** the REVISED Plans Sheets T-1, T-2, T-3, T-4, T-5, T-6, T-7, and T-8 of the Signalization Plans that are attached to this Addendum #2.
6. **DELETE** Plan Sheets L-1, L-2, L-3, L-4, L-5, L-6, L-7, L-8, L-14, L-15, L-16, L-17, L-18, L-19, and L-20 of the Lighting Plans and **INSERT** the REVISED Plans Sheets L-1, L-2, L-3, L-4, L-5, L-6, L-7, L-8, L-14, L-15, L-16, L-17, L-18, L-19, and L-20 of the Lighting Plans that are attached to this Addendum #2.
7. **DELETE** Plan Sheets C-1, W-3, W-5, and W-9 of the Potable Water Main Plans and **INSERT** the REVISED Plans Sheets C-1, W-3, W-5, and W-9 of the Potable Water Main Plans that are attached to this Addendum #2.
8. **DELETE** Bid Form pages Bid Form- 2 thru Bid Form-13 and **INSERT** the REVISED Bid Form pages Bid Form- 2 thru Bid Form- 13 that are attached to this Addendum #2.
9. **DELETE** the interactive Excel Bid Forms with the Invitation for Bids and **INSERT** the REVISED interactive Excel Bid Forms issued with this Addendum #2.
10. **CLARIFICATION OF ENGINEER'S CHANGES:**

a. **Bid Form Changes:**

i. **Roadway Items:**

1. Added Pay Item 120-4, Subsoil Excavation.
2. Revised the quantity for Pay Item 120-6.
3. Revised the quantity for Pay Item 160-4.
4. Added Pay Item 160-4-1, Type B Stabilization (LBR 60).
5. Revised the quantity for Pay Item 285-701.
6. Revised the quantity for Pay Item 285-709, Optional Base Group 9.
7. Added new Pay Item 285-709, Optional Base Group 9 (6" Type B-12.5).
8. Revised the quantity for Pay Item 334-1-13.
9. Removed Pay Item 334-1-12, Superpave Asphaltic Concrete, Traffic D (1").
10. Removed Pay Item 334-1-12, Superpave Asphaltic Concrete, Traffic D (4").
11. Added Pay Item 334-1-14, Superpave Asphaltic Concrete, Traffic D (Variable Depth).
12. Added Pay Item 334-1-14, Superpave Asphaltic Concrete, Traffic D (2").
13. Added Pay Item 334-1-14, Superpave Asphaltic Concrete, Traffic D (4").
14. Revised the quantity for Pay Item 337-7-24.
15. Revised the quantity for Pay Item 337-43.
16. Added Pay Item 425-1-341, Inlets (Curb) (Type P-4) (<10').
17. Added Pay Item 425-1-351, Inlets (Curb) (Type P-5) (<10').
18. Revised the quantity for Pay Item 425-2-61.

19. Added Pay Item 425-2-91, Manholes (J-8) (<10').
20. Revised the quantity for Pay Item 430-174-118.
21. Revised the quantity for Pay Item 430-174-124.
22. Removed Pay Item 430-174-130, Pipe Culv (RCP)(30").
23. Revised the quantity for Pay Item 430-174-218.
24. Revised the quantity for Pay Item 430-174-230.
25. Added Pay Item 523-1, Pattern Pavement, Vehicular Areas.
26. Added Pay Item 524-1-49, Concrete Ditch Pavement, 6" Reinforced
27. Removed Pay Item 524-3, Concrete Core Ditch Blocks.
28. Added Pay Item 550-10-120, Fencing, Type A, 5.1-6.0, Standard.
29. Removed Pay Item 550-10-222, Fencing, Type B, 5.1-6.0 with Vinyl Coat.

ii. **Signalization Items:**

1. Added Pay Item 632-7-6, Signal Cable, Remove-Intersection.
2. Added Pay Item 641-2-80, Pole Removal-Deep-Direct Burial.
3. Added Pay Item 646-1-60, Signal Pedestal Remove.
4. Added Pay Item 650-1-14, Traffic Signal (F&I)(3 Sect.) (1-Way) (Aluminum).
5. Added Pay Item 650-1-19, Traffic Signal (F&I)(5 Sect.) (1-Way) (Aluminum).
6. Added Pay Item 653-1-11, Pedestrian Signal (F&I) (LED Countdown) (1 Directional).
7. Removed Pay Item 650-1-311, Traffic Signal (F&I)(3 Sect.) (1-Way) (Aluminum)
8. Removed Pay Item 650-1-511, Traffic Signal (F&I)(5 Sect.) (1-Way) (Aluminum)
9. Removed Pay Item 653-191, Pedestrian Signal (F&I) (LED Countdown) (1 Directional)
10. Removed Pay Item 690-10, Traffic Signal Head Assembly, Removal.
11. Removed Pay Item 690-20, Signal Pedestrian Assembly, Removal.
12. Removed Pay Item 690-31, Signal Pedestal Remove.
13. Removed Pay Item 690-34-1, Pole Removal - Deep - Direct Burial.
14. Removed Pay Item 690-60, Vehicle Detector Assembly, Remove.
15. Removed Pay Item 690-70, Pedestrian Detector Assembly Remove.
16. Removed Pay Item 690-80, Span Wire Assembly Remove.
17. Removed Pay Item 690-90, Remove Conduit & Cabling.
18. Removed Pay Item 690-100, Miscellaneous Signal Equipment Remove.
19. Removed Pay Item 700-3-602, Sign Panel (Remove) (12-20 SF).
20. Added Pay Item 684-1-1, ITS Managed Field Ethernet Switch (F&I).
21. Removed Pay Item 784-1-1, ITS Managed Field Ethernet Switch (F&I).

iii. **Potable Water Main Items:**

1. Removed Pay Item W9, Furnish & install 8"x8" tapping Sleeve and Valve

**b. Plan Changes:**

**i. Roadway Plans:**

1. Sheet 1
  - a. Revised the date for the FDOT Standard Specifications to 2015.
  - b. Revised the date for the FDOT Design Standards to 2015.
2. Sheet 9A and 9B
  - a. Added Summary of Drainage Structures Sheets
3. Sheet 11
  - a. Added limits of clearing and grubbing.
4. Sheet 12 and 13
  - a. Revised milling and pavement thicknesses for the shoulder.
5. Sheet 14
  - a. Added limits of clearing and grubbing.
6. Sheet 17
  - a. Added muck removal area.
  - b. Revised drainage structure elevations.
7. Sheet 18
  - a. Added muck removal area.
8. Sheet 23
  - a. Added muck removal area.
9. Sheet 24
  - a. Added pipe label for pipe connecting S-24A and S-24.
  - b. Added limits of Type A fencing.
10. Sheet 26
  - a. Revised pipe label for pipe connecting S-41A to S-42A.
11. Sheet 28
  - a. Revised pipe label for pipe connecting S-70 to S-71.
12. Sheet 34
  - a. Revised shoulder label to "Restripe as 4' Shoulder".
13. Sheet 36
  - a. Revised pipe label for pipe connecting S-41A to S-42A.
14. Sheet 37
  - a. Added ditch profile labels.
15. Sheet 38
  - a. Revised pipe label for pipe connecting S-47A to S-47C.
16. Sheet 39
  - a. Revised pipe label.
17. Sheet 41
  - a. Revised pipe label for pipe connecting S-61 to S-62.
18. Sheet 48
  - a. Revised "LBR 40" to "LBR 60" on Section A-A.
  - b. Added pavement description for under turn assistance collar.
19. Sheet 49
  - a. Revised "LBR 40" to "LBR 60" on Section B-B.
  - b. Added pavement description for under turn assistance collar.
20. Sheet 50
  - a. Revised fence label from "Type B" to "Type A".
21. Sheet 51
  - a. Revised fence label on Section A-A to "Existing Fence".

- 22. Sheet 52
    - a. Added skimmer details and note.
  - 23. Sheet 98
    - a. Revised earthwork summary.
  - 24. Sheet 147
    - a. Revised lighting design.
  - 25. Sheet 150
    - a. Revised lighting design.
- ii. **Signalization Plans: General Change-** Cardno Address in the border has been changed due to the Signalization Plans EOR has changed office locations.
- 1. Sheet T-1
    - a. The FDOT Design Standards and Specifications was changed to 2015.
  - 2. Sheet T-2
    - a. Pay item numbers were updated to the latest Basis of Estimates to meet 2015 Specifications
    - b. Pay item quantities and Grand Total quantities were revised due to changes on sheets T-5 and T-6.
  - 3. Sheet T-3
    - a. Pay item 690-100 that was used for the removal of pull boxes is no longer used in the Basis of Estimate. Note 40 was added to specify the removal cost of existing pull boxes are to be included under the Roadway Plans Clearing and Grubbing pay item.
  - 4. Sheet T-4
    - a. Pay item for the Ethernet Switch was changed in the latest Basis of Estimates so the new pay item number replaced the old number.
    - b. All the 690 Removal series was removed from the Basis of Estimates and removal items are under the same category of the item being removed. Since some of these items include multiple equipment/material so footnotes were added for clarification of what is included under the new removal pay item numbers.
    - c. The number bullets were updated since note orders was rearranged to new ascending order.
  - 5. Sheet T-5
    - a. Power service assembly was shifted to the SE corner.
    - b. Pull boxes, conduit quantities and labels were adjusted due to the power service assembly shift.
    - c. Additional concrete pedestal and disconnect was added by the cabinet since the power service assembly is on another corner.
    - d. Pay items for signal heads, Ethernet switch and pedestrian signals have been updated to the latest Basis of Estimates.
  - 6. Sheet T-6
    - a. Power service assembly was shifted to the NE corner.

- b. Pull boxes, conduit quantities and labels were adjusted due to the power service assembly shift.
  - c. Additional concrete pedestal and disconnect was added by the cabinet since the power service assembly is on another corner.
  - d. Pay items for signal heads, Ethernet switch and pedestrian signals have been updated to the latest Basis of Estimates.
7. Sheet T-7
- a. Pay items for signal heads, Ethernet switch and pedestrian signals have been updated to the latest Basis of Estimates.
8. Sheet T-8
- a. All 690 removal pay items were replaced with the appropriate removal pay items based on the latest Basis of Estimates. The pay item footnotes for the new numbers were added for clarification for those pay items that cover multiple items/equipment.
- iii. **Lighting Plans: General Change-** Cardno Address in the border has been changed due to the Signalization Plans EOR has changed office locations.
1. Sheet L-1
- a. The FDOT Design Standards and Specifications was changed to 2015.
2. Sheet L-2
- a. Pay Item quantities and Grand Total quantities were revised due to removal of Load Center A on sheet L-5, shift of Load Center B to sheet L-7, addition of conduit and conductors that connect to the lighting circuits to the west of 19<sup>th</sup> Street Court and addition of utility conflict poles on sheet L-5.
  - b. Added Pay Item footnote for 715-511-135 (Utility Conflict Pole).
3. Sheet L-3
- a. Added General Note 34 (connection coordination) and Note 37 (Low Profile Rig).
4. Sheet L-4
- a. Add utility pole symbol and description under the Legend.
  - b. Update the US 301 Segment Pole data with new pole numbers and circuit assignments.
  - c. Update station and offset for Pole 10 and 11 on the 44<sup>th</sup> Avenue segment due to light pole shift to compensate a pole shift on US 301.
  - d. Replace some standard light poles with utility conflict poles to avoid overhead power conflict on the west end of the 44<sup>th</sup> Avenue segment.
  - e. Update the 44<sup>th</sup> Avenue segment west of US 301 with new pole numbers and circuit assignments due to removal of Load Center A and connection to the existing lighting circuits from the existing Load Center B at 18<sup>th</sup> Street East.
5. Sheet L-5
- a. Removed Load Center A and associated conduit and conductors to connect both sides of 44<sup>th</sup> Avenue. The poles located along 44<sup>th</sup> Avenue west of US 301 and the west side

of US 301 will be on the existing lighting circuits from the existing Load Center B on the SW corner of 18<sup>th</sup> Street and 44<sup>th</sup> Avenue.

- b. Replaced standard light poles with utility conflict poles between station 52+00 and 57+00.
  - c. Added conduit, pull boxes and conductors to the west to the new matchline S.
  - d. Update labels for the pole numbers and circuit numbers to match the existing lighting circuits from existing Load Center B.
6. Sheet L-6
- a. Update labels for the pole numbers and circuit numbers to match the existing lighting circuits from existing Load Center B.
7. Sheet L-7
- a. Shifted proposed Load Center B from sheet L-8 and rename it Load Center D.
  - b. Add associated conduit and conductors to connect both sides of 44<sup>th</sup> Avenue.
  - c. Update labels for the pole numbers and circuit numbers due to change in the Load Center location and letter designation.
  - d. Shifted new pole number 10 and 11 on the east side of US 301 and new station has been determined.
  - e. Shift new pole number 5 (old pole number 13 on ckt B-2) on US 301 to sheet L-16.
8. Sheet L-8
- a. Shifted proposed Load Center B to sheet L-8 and rename it Load Center D.
  - b. Remove associated conduit and conductors to connect both sides of 44<sup>th</sup> Avenue from the shifted Load Center.
  - c. Update labels for the pole numbers and circuit numbers due to change in the Load Center location and letter designation.
9. Sheet L-14
- a. Added the left pane representing the west side of 19<sup>th</sup> Street Court showing the existing poles that the proposed pole conductors will connect to the existing Load Center B circuit.
  - b. Add conduit, conductors and pull boxes for connecting to the existing lighting system.
  - c. Add notes for contractor on the connection to the existing circuits.
  - d. Update the US 301 segment with new pole numbers and circuit assignments due to removal of Load Center A and connection to the existing lighting circuits from the existing Load Center B at 18<sup>th</sup> Street East.
10. Sheet L-15
- a. Update the US 301 segment with new pole numbers and circuit assignments due to removal of Load Center A and connection to the existing lighting circuits from the existing Load Center B at 18<sup>th</sup> Street East.

11. Sheet L-16
    - a. Update the US 301 segment with new pole numbers and circuit assignments due to removal of Load Center A and connection to the existing lighting circuits from the existing Load Center B at 18<sup>th</sup> Street East.
    - b. Shift new pole number 5 (old pole number 13 on ckt B-2) from sheet L-7.
  12. Sheet L-17
    - a. Update the US 301 segment with new pole numbers and circuit assignments due to removal of Load Center A and connection to the existing lighting circuits from the existing Load Center B at 18<sup>th</sup> Street East.
  13. Sheet L-18
    - a. Revise Keyed Note 1 by clarifying connection.
  14. Sheet L-19
    - a. Added note and arrow for clarification to FP&L connection
    - b. Change FDOT Standards to 2015
  15. Sheet L-20
    - a. Added note and arrow for clarification to FP&L connection
    - b. Change FDOT Standards to 2015
  16. Sheet L-21
    - a. Added new sheet with Utility Conflict Pole Details and notes.
- iv. **Potable Water Main Plans:**
1. Sheet 1
    - a. Revised the date for the FDOT Standard Specifications to 2015.
    - b. Revised the date for the FDOT Design Standards to 2015.
  2. Sheets W-3 and W-5
    - a. Revised thickness of the steel casing pipe from 3/8" to 3/16".
    - b. Added note in regards to removal and replacement of the fencing at the steel casing pipe locations.
  3. Sheet W-9
    - a. Revised pipe material for 8" water main.

The following questions have been presented by potential Bidders:

**QUESTION #1:** In the "Special Provisions", page 1, under "Standard Specifications", second paragraph, it states "The contractor's work shall follow the Manatee County Public Works Utility Standards and Specifications (dated 2011). On the first page of the "Utility Technical Specifications", page 1 of 131 in the title block it states 2015. On page 2 of 131 at the bottom it states "This specification includes by reference the Manatee County Utility Standards approved May 2011". Clarification needs to be made on what "year "of standards are we to follow. It also needs to be made clear that if we are bidding by the 2011 standards, that once the work commences we cannot be held to the 2015 standards. Please clarify.

**Response #1:** The utility plans and technical specifications were prepared based upon the 2011 Manatee County Utility Standards. The title block of the Utility Technical Specifications references the month and date (July 2015) the documents were last prepared for the project.

**QUESTION #2:** There is no Geotechnical Report in the bid documents. Was a geotechnical report done, if so can it be provided?

**Response #2:** The Geotechnical Reports were issued with Addendum #1.

**QUESTION #3:** On plan sheet 17 the existing pond that lies between sta. 55+80 to 57+80 +/- calls out for the "Contractor to De-Muck Existing Pond". There is no sub-soil excavation pay item. How will the contractor be paid for the de-mucking? A sub-soil excavation pay item needs to be added to the bid form with a quantity. Please clarify.

**Response #3:** Sheets 17 and 18 have been revised to show the approximate limits of the muck removal. The Bid Form has been revised to include a sub-soil excavation pay item.

**QUESTION #4:** On plan sheet 25 between sta. 90+60 to 92+00 +/- there is an existing wetland in the proposed roadway. I'm sure there some unsuitable material in this area that will have to be removed. There is no pay item for sub-soil excavation. How will the contractor be paid for removal of unsuitable material? A sub-soil pay item needs to be added to the bid form with a quantity provided. Please clarify.

**Response #4:** The geotechnical investigation found no evidence of unsuitable materials at this location.

**QUESTION #5:** In the Utility Technical Specifications, Division 2 Site Work, Section 02060 Jack and Bore, page 52 of 131, sub-section 3.9 Insurance Requirements and Fees, paragraph "B", second sentence reads "It is the responsibility of the Contractor to determine all requirements of these agencies and to comply with the said requirements including any necessary bonds, cash deposit, or insurance". Can it be determined at this time if there will be any bonds, cash deposits or extra insurance that will be required? Please clarify.

**Response #5:** We are not aware of any bonds, cash deposit, or insurance requirements at this time; however, it is the Contractor's responsibility to verify the requirements with the appropriate agency.

**QUESTION #6:** In Section 02261 Shaft Excavation and Support starting on page 64 of 131, part 1 General, sub-section 1.01 Summary, paragraph "B", second sentence reads "Provide compaction grouting (as specified in Section 03365 – Compaction Grouting) as necessary to improve soils for adequate jacking thrust reaction and to prevent loss of ground or subsidence at entry and exit locations. I cannot find Section 03365 – Compaction Grouting in the technical specifications. Will "Compaction Grouting" be required? If so provide specification. Please clarify.

**Response #6:** Section 03365 – Compaction Grouting has been added to the Utility Technical Specifications. See item #3 of this Addendum #2.

**QUESTION #7:** On page 65 of 131 of the same 02261 specification, sub-section 1.03, paragraph "A", sub-paragraph 3, it states "Limited Geotechnical Reports may be available for the roadway portion of this project". Are there Geotechnical Reports available? Please provide any geotechnical reports that are available.

**Response #7:** The Geotechnical Reports were issued with Addendum #1.

**QUESTION #8:** Section 02261 Shaft Excavation and Support is primarily specifying steel sheet pile for the entry and exit shafts for the jack and bores. Is this what will be required for the jacking and receiving pits at both the 301 jack and bore and the 30<sup>th</sup> St. E. jack and bore? Or are other methods of shoring acceptable? Please clarify.

**Response #8:** Please see Section 02261 Shaft Excavation and Support paragraph 1.01.D, which states the Contractor shall have sole responsibility for selection of shaft types, construction methods, and shaft excavation sizes.

**QUESTION #9:** Section 02325 Road and Railroad Crossings, page 73 of 131, sub-section 1.02, paragraph "E" states "The contractor shall perform all necessary soil test borings to determine actual soil conditions and shall utilize the results of said borings to determine the procedures required for each jack and bore operation, including, but not limited to, the presence of rock and necessary dewatering requirements". Please provide any geotechnical reports available.

**Response #9:** The Geotechnical Reports were issued with Addendum #1.

**QUESTION #10:** Section 02445 Settlement Instrumentation & Monitoring, page 76 of 131, sub-section 1.01 Summary, paragraph "C", states "It is anticipated that five (5) settlement monitoring points will be required for each crossing". When it states each crossing, is that referencing both jack and bores which would include the 301 jack and bore and the 30<sup>th</sup> St. jack and bore? Settlement monitoring points are not shown on the plans. Please provide where settlement points are to be located.

**Response #10:** Yes, both jack and bore crossings will require five (5) surface monitoring points (ten monitoring points total). Please see Section 02445 Settlement Instrumentation & Monitoring paragraph 1.05.B. which states all surface control points shall be established in the field.

**QUESTION #11:** I am bidding the lighting on this project and I have a question regarding some of the driveway and road crossings. For example on Page L-5 from pole # 1 to the north side junction box, should this be a Directional Bore? This plans have a lot of driveway and road crossings that state they need 2 –conduits. How do you want to handle these different places, are you wanting us to Directional bore or open cut these areas?

**Response #11:** For any existing driveway to remain, the lighting conduit shall be installed by directional bore under the driveway. If the conduit is crossing the proposed roadway where no existing roadway is there, then the conduit will be open trench. However, there shall be a spare conduit included for future use for any conduit installed under existing or proposed roadway. The conduit run shown on L-5 crossing from Pole 1 to the pull box on the north side has been removed from the revised Lighting plans attached to this Addendum #2 due to changes to power service/load center adjustments. The revised lighting plans attached to this Addendum #2 represent the correct conduit installation per previous mentioned criteria.

**QUESTION #12:** Can the skimmers for the control structures on page #52 be made out of 1/4" fiberglass per Environmental Composites company?

**Response #12:** The skimmer shall meet the requirements specified in FDOT Index 240.

**QUESTION #13:** On review of the typical sections Sheet 12 and 13 for US 301, it appears that several pay items are not defined on the bid form: (A) Typical section for proposed resurfacing is 2" TL D, there is not pay item shown. (B) Typical section for proposed shoulders is 1" SP 9.5; no Traffic level is defined. The bid form includes a pay item SP TL D 1", however FDOT specifications do not allow a 1" SP 9.5 for Traffic level D mix. Please clarify the Traffic level and thickness for the proposed shoulders and revise the bid form accordingly. (C) In addition, when proposed or existing shoulders < or = 5' wide, specifications dictate to pull the last lift of structure on the adjacent lane (or widening) with the shoulder. The typical section for proposed widening is 4" TL D (placed as 2-2" lifts) and resurfacing is shown as 2" TL D while the <5' wide shoulder shows a 1" SP 9.5 which will not comply with FDOT specification construction. Please clarify both the typical section for structure on widening, resurfacing and shoulders as well as revising the bid form to include those pay items. (D) Proposed overbuild asphalt is shown to be 19.0 Traffic Level D mix. A review of the cross sections and plan views does not provide enough detail for the contractor to determine or calculate the thickness and tonnage required for this area. Can the county provide quantities estimated for this work? In addition, FDOT specifications (334-1.4.3) define overbuild mix thickness as: 1/2" to 2" (SP 9.5), 1" to 3" (SP 12.5) and 2.5" to 4" (SP 19.0). There does not appear to be a pay item on the bid form for this work, please clarify how this tonnage will be paid. (E) Proposed widening shows OBG 9 with 6" B12.5 base and shoulders as OBG 1 with 4" B12.5 base. The bid form defines OBG 9 and OBG 1 line items, but is not specific for the B12.5 base. Please establish 2 pay items for the B12.5 base only OBG 9 and OBG 1.

**Response #13:** Please see item #10 above of this Addendum #2 as well as the REVISED Bid Form and REVISED Plan Sheets 12 and 13 that are attached to this Addendum #2.

**QUESTION #14:** On review of all typical sections compared to the plan view; I do not find typical sections nor stationing detailed for 38<sup>th</sup> Avenue. Please clarify or provide.

**Response #14:** 38th Avenue is only receiving milling and resurfacing. Thus, it does not have a typical section shown.

**QUESTION #15:** In the potable water main section of the bid form, bid item 138 has a description of, "Furnish & Install 8"x 8" Tapping Sleeve and Valve" with a quantity of 2. I cannot find where these 2 taps are called out on the plans. Can information be provided to where these taps are being made?

**Response #15:** Pay Item W9 has been removed from the Bid Form.

**QUESTION #16:** Follow up to the previous question, per the detail provided on sheet W-14, note number 4, the county does not allow size on size taps to be made. Please clarify what is to take place for this bid item if indeed there are to be 8"x 8" taps made.

**Response #16:** See response to question #15 above.

**QUESTION #17:** In the potable water main plans on sheet W-1, at station 52+30 ± there is a call out to install new service connection. What size is this connection to be? Please clarify.

**Response #17:** The size of the new service should be a 1-inch to 2-inch service connection, which can be field verified by the Contractor prior to bidding.

**QUESTION #18:** In the potable water main section of the bid form, pay item 131 is 8" DIP with a quantity of 400 LF. On the potable water main plans, sheet W-1 there are call outs for 8" DIP crossing 19<sup>th</sup> St. E., east to west and crossing the new 44<sup>th</sup> Ave. E., north to south. These locations do not equal 400 LF and I don't see anywhere else on the plans where it calls out for 8" DIP. Can clarification be made on where the remaining 8" DIP is going to be installed at?

**Response #18:** Sheet W-9 has been revised to show the locations of ductile iron pipe. Sheet W-1 includes 300 linear feet of 8" ductile iron pipe and Sheet W-9 includes 80 linear feet of 8" ductile iron. The total quantity listed for 8-inch ductile iron pipe in the Bid Form is rounded up to 400 linear feet.

**QUESTION #19:** On plan sheets 48 and 49 which shows the intersection grading for the proposed east and west roundabouts on 38<sup>th</sup> Ave. E. The "Turn Assistance Collar" material is called out to be the Paveway Systems STS product. There is no bid item in the bid form for the installation of this material. What are the intentions on where the cost of the installation for this material should be placed? I suggest that a bid item needs to be introduced to the bid form with a quantity provided.

**Response#19:** A Pay Item 523-1, Patterned Pavement has been added to the Bid Form.

**QUESTION #20:** To go along with the previous question concerning the roundabouts the cross sections shown on plan sheets 48 and 49 are not concise with what type of material that is to be installed under the "Turn Assistance Collar" or the thickness of the material to be installed. Is concrete being installed or is base and asphalt being installed under the "Turn Assistance Collar"? For that fact there are no typical sections for the road construction that is to take place on 38<sup>th</sup> Ave. E. Please provide information so that these items can be bid on accordingly.

**Response #20:** Plan sheets 48 and 49 have been revised to include the pavement requirements under the Turn Assistance Collar, and thee quantities have been added to the Bid Form.

**QUESTION #21:** Is it possible to provide a "Summary of Drainage Structures" it has been provided in the past projects and as in going through the plans and comparing structures to the bid form there is some considerable discrepancies? There are no bid items for the following but yet they are shown on the plans. Type P-4 (S-74), Type P-5 (S-1, 2, 4, 5, 7, 8, 20A, 20B, 25, 32, 33, 37 & 38). The following inlets have bid items but the quantities are not correct: Item 24, Type P-6 has a quantity of 13, there are only 6 shown (S-10, 11, 15, 16, 39 & 40). Item 25, Type "A" has a quantity of 6, there is only 1 shown (S-28A). Item 26, Type "C" has a quantity of 1, there are 6 shown (S-4A, 6F, 41A, 48, 55 & 65). Item 27, Type "D" has a quantity of 6, there are 4 shown (S-21, 47A, 47C &

**34A). Item 28, Type "S" has a quantity of 4, there are 6 shown (S-27, 27A, 29, 30, 70 & 71). Please verify the structure quantities and adjust the bid form accordingly.**

**Response #21:** Sheets 9A and 9B, Summary of Drainage Structure sheets, have been added to the plans and the quantities have been revised on the Bid Form.

**QUESTION #22:** Bid item 49, "Concrete Core Ditch Blocks". Cannot find these on the plans, is this supposed to be what's shown on plan sheet 37 as S-43, described as "Outfall Control Structure"? If so the detail shown for S-43 on plan sheet 52 does not give enough details. What is the width of this structure? Need to know if the slopes are 4:1 or 3:1 or give us the length. Need details on the skimmer. What type of posts, how many and what is there length? Looks like the bottom of the posts are encased in concrete, what is the dimensions of the concrete encasement? What type of material is the skimmer to be constructed of?

**Response #22:** Sheet 37 has been revised to show the slopes for S-43. The detail on Sheet 52 has revised to include details for the skimmer and a note for the payment. Bid item 49, Concrete Core Ditch Blocks, has been removed and Pay Item 524-1-49, Concrete Ditch Pavement, 6", Reinforced has been added to the Bid Form.

**QUESTION #23:** What type of pipe is running between S24 and S24A? Plan view does not call it out. Profile view shows 14"x 23" ERCP and 18" RCP at the same location.

**Response #23:** Sheet 24 has been revised to include a label for the 18" RCP between S-24 and S-24A.

**QUESTION #24:** Can you provide a top (rim) elevation for drainage structures S-3, S-6B, and S-6D?

**Response #24:** Sheets 17 and 18 have been revised with the top (rim) elevations for S-3, S-6B and S-6D.

**QUESTION #25:** Can you add a bid item for Inlet (Curb) (Type P-5)?

**Response #25:** The Bid Form has been revised to add a bid item for Inlet (Curb) (Type P-5).

**QUESTION #26:** Can you add a bid item for Inlet (Curb) (Type P-4)?

**Response #26:** The Bid Form has been revised to add a bid item for Inlet (Curb) (Type P-4).

**QUESTION #27:** The quantities on the bid form for the drainage structures and RCP pipe don't match those shown on the plans. Please review and revise the bid form.

**Response #27:** The Bid Form quantities for the drainage structures and pipe have been revised to match the plans.

**QUESTION #28:** Can you add a bid item for Outfall Control Structure S-43 on plan sheet 37?

**Response #28:** Sheet 52 has been revised to show the cost of Outfall Control Structure S-43 along with the skimmer, orifice and concrete ditch pavement is to be included in the cost of Pay Item 524-1-49, Concrete Ditch Pavement, 6".

**QUESTION #29:** On plan sheet 17 and 18 the contractor is to de-muck an existing pond. Are there soil borings to determine the thickness of the muck layer? What is the depth of the existing pond?

**Response #29:** The Geotechnical Report that include the soil borings has been provided. The existing ground in the cross sections show the depth of the existing pond. Sheets 17 and 18 have been revised to show the approximate limits of the muck removal.

**QUESTION #30:** A note on plan sheet 17 calls for a seepage cut off wall between the two ponds at station 56+80 RT and refers to a detail on plan sheet 52. The detail provides a cross section, but there are no limits shown on plan sheet 17. Can you provide the length of the cut off wall? Can you provide a specification for the "clayey soils" to be used in construction of the cut off wall?

**Response #30:** The limits of the seepage cut off wall at Station 56+80 RT will match the limits of the two ponds, which are approximately 52' RT to 198' RT. "Clayey Soils" is defined as A-6 or A-7 soil classification.

**QUESTION #31:** Watermain, 8" ductile iron pipe. The bid form has a quantity of 400 LF. I can only find 295 LF. Please clarify the locations of the 8" ductile iron pipe?

**Response #31:** Please see the response to question #18 above.

**QUESTION #32:** The Watermain bid form calls for 2 EA of 8"x8" Tapping Sleeve and Valve. I can't find these on the plans. Please clarify the locations of the 8"x8" tapping sleeve and valves?

**Response #32:** Please see response to question #15 above.

**QUESTION #33:** Does the measurement and payment for the weight of the fittings include the weight of the Mega-Lugs or is it just the fitting?

**Response #33:** The measurement and payment for the fittings should include the weight of the Mega-Lug.

**QUESTION #34:** At the pre-bid meeting, it was stated that Manatee County is paying for the geotechnical testing services. What testing firm will be doing this work?

**Response #34:** The testing firm has not yet been determined. The firm along with contact information will be provided at the pre-construction meeting.

**QUESTION #35:** I have a really simple question or it might be more like a statement on the Vehicle Detection Cabinet Assembly 660-4-11. When we get our quote from the vendor they take into consideration of what all is needed to make a complete and acceptable assembly for the cabinet and will have in this case a quantity of 3 not 12 there are 3 cabinets in question that need assemblies and there are 4 camera assemblies for each intersection 660-4-11 Qty. of 3 and 660-4-12 Qty. of 12. The Plans are calling for 660-4-11 Qty 12 and 660-4-12 Qty of 12. Please consider looking into this. Thank you

**Response #35:** The Basis of Estimates for pay item 660-4-11 is based off the shelf-mount or detector-card style video processor(s). It is assumed that each camera will have its own processor, therefore, the quantity for the cabinet equipment matches the above ground equipment (cameras) quantity. The contractor should bid per the plan's tabulation of quantities.

**QUESTION #36:** The typical sections for US 301 show a 1-3/4" mill on the shoulders. The bid items do not reflect this. Instead it appears that the 1-3/4" has been included with the mainline 2-3/4" milling item. Is this correct? Please clarify. Can consideration be made to adding a bid item for the 1-3/4" milling of the shoulders.

**Response #36:** Due to minimum thickness requirements for the Traffic Level D, sheets 12 and 13 have been revised to show a 2 3/4" milling depth and 2" of SP for the shoulders along US 301. The quantities have been revised on the Bid Form.

**QUESTION #37:** If the shoulders are to be milled 2 3/4", will the entire section match the mainline? Please clarify.

**Response #37:** Sheets 12 and 13 have been revised such that the shoulder and mainline milling and resurfacing match.

**QUESTION #38:** On plan sheets 12 and 13 of the typical sections for 301, under "Resurfacing", it calls out for Type SP Structural Course (Traffic Level D 2"). This would have an approx. quantity of 2300 tons. It appears that this has been missed as it is not included on the bid form. Please clarify on how this item is to be covered and paid for. Consider adding a bid item to the bid form for the SP D 2".

**Response #38:** The quantities have been revised on the Bid Form.

**QUESTION #39:** Is it possible to reproduce the MOT plan sheets 144 thru 146 to a 40:1 scale instead of the 100:1 scale to allow for a clearer view of the existing pavement lines versus what is needed for temporary asphalt to allow for the flow of the south and north bound traffic in the various MOT phases?

**Response #39:** No.

**QUESTION #40:** From approx. sta. 79+06 Lt. & Rt. to 81+46 Rt. and 81+26 Lt. the plans call out to construct "Type A Fence FDOT Index 801". This equates to approx. 480 LF of Type A fence that is not on the bid form. Please clarify on how this item is to be covered and paid for. Consider adding a bid item to the bid form for the Type A fence.

**Response #40:** The pay item for Type B Fence has been removed from the Bid Form and replaced with Type A Fence along with updated quantities.

**QUESTION #41:** There is Type A fence also located on plan sheets 24 and 25 at approx. sta. 87+09 to 87+50 at the top of the plan sheets and is not clear where it is located from there. Clarification needs to be made on the approx. location of the fence where it is not shown to so determination can be made on the quantity of materials needed, i.e. corner posts, end posts, line posts, approach posts and any gates if needed. If any gates are associated with the Type A fence consider adding a bid item to accommodate for the gate or gates to be installed. Clarification also needs to be made on if barbed wire will be included.

**Response #41:** Sheet 24 has been revised to provide more details in regards to the location of the fence. No gates are proposed for this Type A fence. As shown on Standard Index 801, barb wire is to be included.

**QUESTION #42:** On plan sheet 50, Pond 5 Site Plan, there is a call out for Type B Fence w/ Vinyl Coat, which looks like from approx. sta. 84+43 to 85+43 (100 LF). Bid item 51 on the bid form calls out for Fencing, Type B, 5.1-6.0, w/ Vinyl Coat, with a quantity of 996 EA. I would think "EA" is a typo and the unit should be "LF". It is not clear where the Type B fence is being installed from the information given. Please clarify the location of where the Type B fence is being installed so determination can be made on the quantity of materials needed i.e. pull post, corner posts and end posts. Are there any gates associated with the install of the Type B fence? If so consider adding a bid item to accommodate for the gate or gates to be installed.

**Response #42:** Sheet 50 has been revised to show the fence line in a different symbology for clarity and the label has been revised to show Type A fencing. No gates are proposed at this location. The units for the fencing have been revised on the Bid Form.

**QUESTION #43:** In doing the storm drain pipe take offs I am finding some considerable discrepancies in a few of the bid items. They are: Bid item 30, 18" RCP, bid form = 6 LF (Plans = 2,040 LF). Bid item 31, 24" RCP, bid form = 2,033 LF (Plans = 940 LF). Bid item 32, 30" RCP, bid form = 1,052 LF (Plans = 0 LF). Bid items 34 and 36 only have minor errors. The remainder storm pipe bid items are spot on! Can consideration be made to recalculate these quantities and revise the bid form accordingly?

**Response #43:** The quantities on the Bid Form have been corrected.

**QUESTION #44:** At the pre-bid meeting it was brought up that the Signalization plans were going to be revised and re-issued. To date the revised Signalization plans have not been issued. The date to submit questions has to be extended without having these plans in hand and not knowing what the revisions are, should perhaps any questions arise once they are reviewed. Please take this into consideration.

**Response #44:** See item #5 above of this Addendum #2.

**QUESTION #45:** On plan sheet 52, Mitigation Plan, note (2) states that " The cost of furnishing and installing the planting of the mitigation area, as well as monitoring and maintenance during construction, is included in the pay item for wetland mitigation planting (LS)". This states that monitoring and maintenance is only occurring during construction. Is this note correct? Clarification needs to be made on if this is correct or is there any additional time frames that will be needed for the "monitoring and maintenance"?

**Response #45:** This note is correct. The County will be responsible after project is completed and final inspection has occurred.

**QUESTION #46:** Being the contract for this project will be over 365 days, will price adjustments for fuel and bituminous materials be allowed as per the FDOT Standard Specifications for Road and Bridge Construction (2014), Section 9, Measurement and Payment, Index 9-2.1.1 Fuels and Index 9-2.1.2 Bituminous Material? Please clarify.

**Response #46:** No.

**QUESTION #47:** Will road closures with detours be allowed for the construction of the roundabouts on 38<sup>th</sup> Ave. E. at 30<sup>th</sup> St. E. and the roundabout on 38<sup>th</sup> Ave. E. at 27<sup>th</sup> St. E.? Please clarify.

**Response #47:** Not likely; Contractor may submit MOT plan to close roads. Based upon duration, time of year, etc. County may consider a temporary road closure, however, for bidding purposes bidders should not expect full road closures at these two intersections.

**QUESTION #48:** Is clearing and grubbing to take place from ROW to ROW along 30<sup>th</sup> St. E. and on 38<sup>th</sup> Ave. E.? Typical sections are not clear on this issue. Please clarify.

**Response #48:** Sheet 11 has been revised to show the limits of clearing and grubbing for 30<sup>th</sup> Street East. For 38<sup>th</sup> Street East, clearing and grubbing is isolated to the work as shown on the plan view and cross sections.

**QUESTION #49:** In the Special Provisions section on page 25 under “Clarification of Specific Line Items”. Bullet #1 states: Line Item #8, “Clearing and Grubbing” shall follow FDOT Specifications 2014.

**Response #49:** The reference to “FDOT Specifications 2014” has been revised to “FDOT Specification 2015” in the Supplemental Special Provisions attached to this Addendum #2.

**QUESTION #50:** Bullet #4 on page 26 of the Special Provisions states: Line items #42 “Manatee County Concrete Curb and Gutter, Type A”, #43 “Concrete Curb and Gutter, Type E”, #44 “Concrete Curb and Gutter, Type F”, #45 “Concrete Curb, Type D”, #46 “Concrete, Shoulder Gutter”, #47 “Sidewalk Concrete 4” thick” and #48 “Sidewalk Concrete 6” thick” shall include the removal and replacement of existing sidewalks, driveways and curbs. If we are following FDOT specifications as stated in bullet #1 wouldn’t removal of existing sidewalks, driveways and curbs be placed in “Clearing and Grubbing”? Please clarify.

**Response #50:** Removal of existing sidewalk, driveways and curbs are to be included with the cost of the proposed work in the area, such as new curb and gutter, sidewalk, etc. No separate payment will be included for the cost of this removal.

**QUESTION #51:** Bullet #6 on page 26 of the Special Provisions states “Line items #47, “Sidewalk Concrete 4” Thick” and #48 “Sidewalk Concrete 6” Thick”, shall include detectable warnings. Bid item #50 on the bid form is for “Detectable Warnings”. Are the “Detectable Warnings” to be placed in the bid item provided and not in bid items 47 and 48? Please clarify.

**Response #51:** The sixth bullet has been removed from the Special Provisions.

**QUESTION #52:** In the Signalization Plans on plan sheet T-22, it shows that soil borings were taken in the Offsite Pond, Pond 1, Pond 2 and Pond 5. There is no information showing the results of these borings. Can the data from borings B-201, B-202, B-203, B-204, B-205 and B-210 be provided to us?

**Response #52:** The Geotechnical Report completed during design has been provided in Addendum #1.

**QUESTION #53:** On plan sheet 34, at around sta. 422+00 there is a call out to "Const. 4' Shoulder". This should be a call out to "Restripe Existing Pavement as 4' Shoulder". Please clarify. Are we to construct new shoulder in this area or are we to restripe existing pavement as shoulder?

**Response #53:** Sheet 34 has been revised to call out the shoulder as "Restripe Existing Pavement as 4' Shoulder".

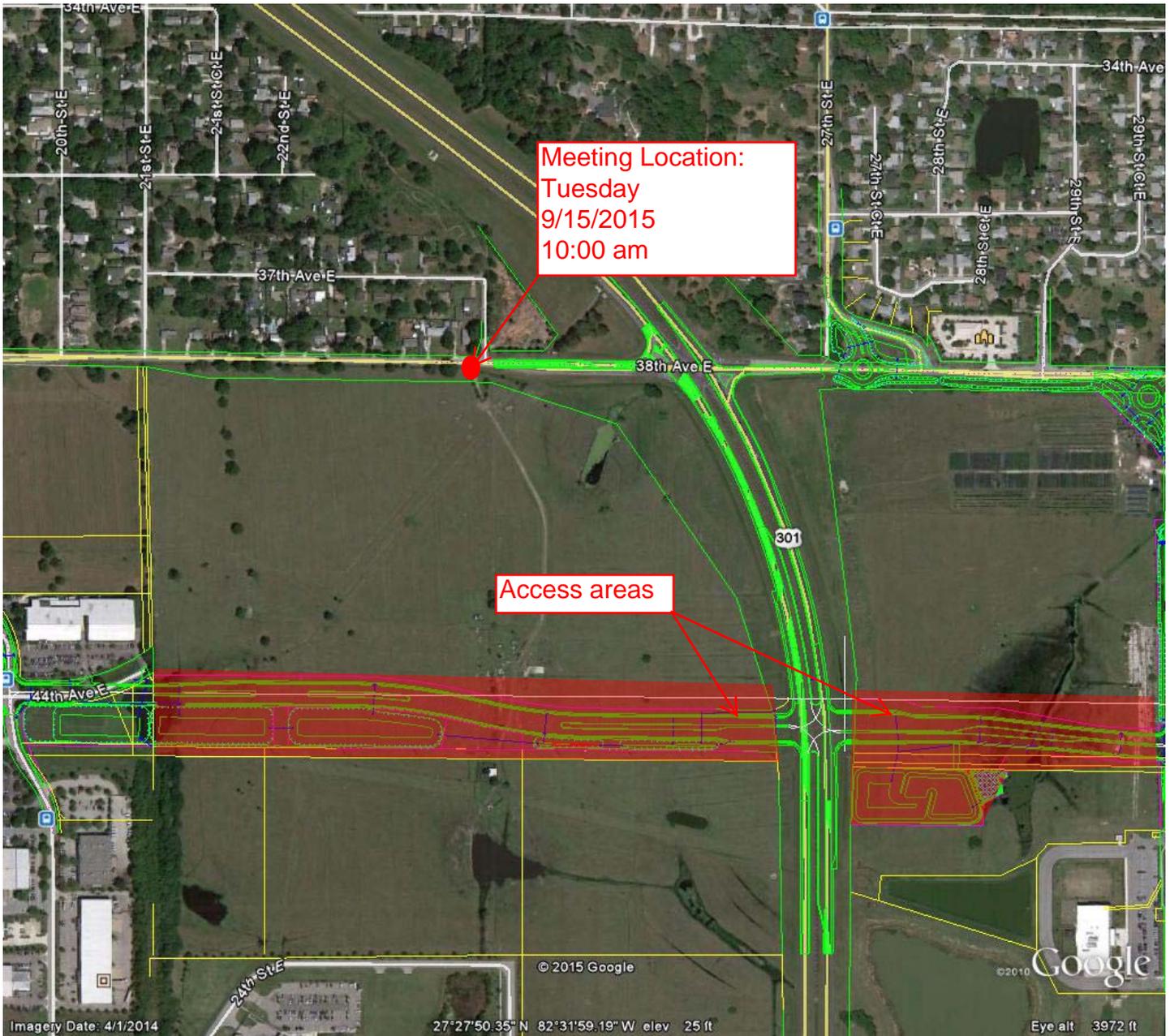
END OF ADDENDUM #2

Bids will be received at Manatee County Purchasing, 1112 Manatee Avenue West, Bradenton, Florida 34205 until **Friday, October 2, 2015 at 3:00 PM.**

Sincerely,



Melissa M. Wendel, CPPO *fw*  
Purchasing Official



#### **44th Avenue East (19th - 30th) - Site Visit**

**B&H Cattle is providing the County and prospective bidders access to the proposed 44th Avenue East project within the B&H Cattle property. Interested contractors need to meet at the gate located off 38th Avenue East no later than 10am on Tuesday, September 15th. B&H Cattle will provide escort. Those interested will need 4x4 to follow the escort onto the property. This will be the only opportunity to access this portion of the site prior to bid opening.**

# **SUPPLEMENTAL SPECIAL PROVISIONS**

**FOR**

**44<sup>TH</sup> AVENUE EAST**

**FROM 19<sup>TH</sup> STREET COURT EAST**

**TO 30<sup>TH</sup> STREET EAST**

**COUNTY PROJECT No. 6045660**



Prepared by:



**380 Park Place Boulevard, Suite 300  
Clearwater, Florida 33759**

**September 2015**

**STANDARD SPECIFICATIONS**

Replace the first sentence under the Standard Specifications section (Page 1) of the Special Provisions dated July 2015 with the following:

The standard Specifications to be used for this work shall be Division II and III of the Florida Department of Transportation (FDOT) *Standard Specifications for Road and Bridge Construction (2015 Edition)*, and all Supplemental Specifications thereto, hereinafter referred to as the *Standard Specifications*, for roadway construction, except as amended under this Contract, or as noted on the construction plans meeting the Manatee County Highway, Traffic & Stormwater Standards (dated 2007).

**CLARIFICATION OF SPECIFIC LINE ITEMS**

Replace the first bullet under the Clarification of Specific Line Items section (Page 25) of the Special Provisions dated July 2015 with the following:

- Line item #8, "Clearing & Grubbing" shall follow FDOT Specifications 2015, and shall also include the removal of existing underdrains, trees and bushes, concrete structures, existing concrete pavement, ripraps, and the plugging of the artesian wells.

Delete the sixth bullet under the Clarification of Specific Line Items section (Page 26) of the Special Provisions dated July 2015.

**LIST OF PERMIT DOCUMENTS**

Add the following to the List of Permit Documents table:

9	FDOT Permit Time Extension for: FDOT Connection Permit Permit Number – 2010-A-194-22 FDOT Drainage Connection Permit Permit Number – 2010-D-194-16 FDOT Utility Permit Permit Number – 2010-H-194-119	Issued 08/17/15
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**UTILITY TECHNICAL SPECIFICATIONS**

Add Section 03365 Compaction Grouting to the Utility Technical Specifications dated July 2015.



**Florida Department of Transportation**

**RICK SCOTT  
GOVERNOR**

1840 61<sup>st</sup> Street  
Sarasota, Florida 34243

**JIM BOXOLD  
SECRETARY**

August 17, 2015

**Manatee County Public Works  
1022 26<sup>th</sup> Avenue East  
Bradenton, Fl. 34208**

**Attn: Kent Bontrager, P.E.**

**RE: Time Extension Request  
Connection Permit Number: 2010-A-194-22  
Drainage Connection Permit Number: 2010-D-194-16  
Utility Permit Number 2014-H-194-72  
44<sup>th</sup> Avenue Intersection @ US 301/SR 683, 13121, M.P. 4.880-5.496**

**Dear Mr. Bontrager:**

This letter is to advise you that your request for a time extension for the subject permits has been approved.

An addendum to the subject permits shall be added to allow a three hundred and sixty five (365) day extension commencing on August 17, 2015. This will extend the permit expiration date to August 17, 2016.

This letter will authorize you to proceed with your proposed plans as submitted with the extension request, with all work to be completed in accordance with the amended permit.

If you have any further questions, please feel free to contact our office at 941-359-7313.

Sincerely:

A handwritten signature in blue ink that reads "Ed Giddens".

**Ed Giddens, Permits Manager  
Sarasota Operations**

**Cc: File**



## SECTION 03365 COMPACTION GROUTING

### PART 1 - GENERAL

#### 1.01 SUMMARY

- A. The Work specified in this Section includes the minimum requirements for soil improvement using compaction grouting where necessary to complete shaft construction and microtunneling work, and where shown on the Drawings.

#### 1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 02070 - Boring and Jacking
- B. Section 02261 - Shaft Excavation and Support
- C. Section 02445 - Settlement Instrumentation and Monitoring
- D. Section 03360 - Annular Space and Contact Grouting

#### 1.03 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

- A. The publications listed below form a part of this specification to the extent referenced. Where conflicts between these specifications and the referenced specification, code, or standard occur, the more restrictive specification shall govern. The publications are referenced in the text by basic designation only. Where a date is given for referenced standards, that edition shall be used. Where no date is given for referenced standards, the latest edition available on the date of issue of Contract Documents shall be used.

- B. Commercial Standards:

ASTM C31, Practice for Making and Curing Concrete Test Specimens in the Field.

ASTM C39, Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.

ASTM C94, Specifications for Ready Mix Concrete.

ASTM C109, Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (using two-inch or 50-mm cube specimens).

ASTM C144, Specification for Aggregate for Masonry Mortar.

ASTM C150, Specification for Portland Cement.

#### 1.04 DEFINITIONS

- A. Compaction grouting is defined as the injection of very stiff, low-slump (low mobility), mortar-type, Portland cement based grout (possibly with special admixtures including polymer resins). The grout mix is designed to stay in a homogeneous mass under relatively high pressure, to displace and compact soils in place by acting as a radial hydraulic jack to strengthen loose or soft soils. The material should not shrink, segregate or otherwise create additional problems.

## 1.05 QUALITY ASSURANCE

- A. Due to the specialized nature of compaction grouting, the Contractor shall engage a specialty subcontractor who shall furnish the materials and perform the work. The specialty subcontractor shall have completed at least ten projects of similar scope and magnitude.
- B. The Contractor shall undertake continuous surface monitoring for settlement or heave over the designated treatment area and monitoring of all nearby utilities and structures that may be affected by the grouting for the entire period of treatment
- C. Testing cylinders or cubes shall be taken by the contractor to ensure the required compressive strength of the grout is achieved. A testing laboratory approved by the Owner shall test cylinders.

## 1.06 DESIGN CRITERIA

- A. Grout shall be a Portland cement based mortar-type mix with slump less than 1 inches. Minimum strength of 10 psi in 24 hours, 50 psi in 28 days. The maximum 28-day compressive strength of the grout shall not exceed 150 psi.

## 1.07 SUBMITTALS

- A. Submittals shall be made in accordance with Special Provisions mentioned in the contract documents. Provide sufficient detail to allow the Engineer to judge whether the proposed equipment, materials, and procedures will meet the Contract requirements. All drawings shall be legible with dimensions accurately shown and clearly marked in English. Drawings and photographs transmitted by a facsimile will not be accepted. The Engineer's review of submitted details and data will be based on consideration of requirements for the completed work, protection of utilities and surface features, and the possibility of unnecessary delays in the execution of the work to be constructed under this Contract. Review and acceptance of the Contractor's submittals by the Engineer shall not be construed in any way as relieving the Contractor of its responsibilities under this Contract.
  - 1. Qualifications: Submit compaction grouting subcontractor qualifications in accordance with Paragraph 1.7 A, including ten completed projects of similar scope and magnitude, and the qualifications of the personnel responsible for performance of the work.
  - 2. Submit the name of the independent testing laboratory that will perform laboratory testing of test cylinders or cubes.
  - 3. Work Plan and Grouting Methods: Submit a detailed work plan describing the proposed grouting methods and equipment to be used including the following:
    - a. Detailed description of grouting procedures including the intended grouting pressures, pumping rates, and anticipated grout volumes required
    - b. Layout and designation of each location to be grouted, including hole patterns and sequence.
    - c. Grout mix design, source of mix materials, and admixtures. Grout mix design shall include target range for unit weight, Marsh Viscosity, and bleed, which will produce desired grout strength. Provide 24 hour and 28 day design compressive strengths for grout mix. Submit MSDS sheets for admixtures that may be used.
    - d. Description of grout mixing, recording, and injection equipment including

- e. manufacture, model number, and pressure capacities.
  - f. Site layout drawing of grout mixing, recording, and injection equipment.
  - g. Provisions to contain any spills or hydraulic fracturing should they occur.
  - g. Procedures and direction of grout stages in each hole.
4. Reports and Records: All daily drilling, grouting, and testing reports shall be submitted to the Owner within 24 hours of completing each grouting operation. The drilling and grouting reports shall include the following:
    - a. Name of driller, type of drill, method used, date, location of hole, tip depth or elevation of injection pipe.
    - b. Name of grouting technician, grout mix, quantity injected per stage, date, rate of pumping, beginning and final pressure obtained in each stage. The reason for refusal, such as refusal pressure, volume, movement of surface, and/or movement of structures/roadways.
  5. Protection of Existing Utilities: Submit a drawing of the area to be grouted indicating the location of existing utilities, along with a work plan to prevent damage to existing utilities.
  6. Grout Strength Tests: Prepare samples for 24-hour and 28-day compressive strength tests according to ASTM C31 for cylinders or ASTM C109 for cubes. Cylinder molds shall be at least two inches in diameter and four inches long. Grout cubes shall be either two inches or 50 millimeters square. Grout for the cylinders or cubes shall be taken from the nozzle of the grout injection pipe. Provide at least one set of four (4) samples for each 100 cubic feet of grout injected but not less than one set for each grouting shift, unless directed in writing otherwise by the Engineer. Have independent laboratory test samples according to ASTM C39 or C109 as applicable.

## PART 2 - PRODUCTS

### 2.01 MATERIALS

- A. Grout: Grout shall be a Portland cement based mortar-type mix with low slump. Contractor shall submit grout mix design to Engineer for approval. Minimum strength of 10 psi in 24 hours, 50 psi in 28 days. The maximum 28-day compressive strength of the grout shall not exceed 150 psi.
  1. Cement: Cement shall be Portland cement, ASTM C 150, Type I or II
  2. Aggregate: Aggregate shall conform to gradation limits listed below. Aggregate shall not contain clay; hydrometer and Atterberg limits for fines shall be submitted along with gradation report.

Percent Passing (%)	Sieve Size
100	¾"
80 to 100	¼"
70 to 100	#4
40 to 90	#10

Percent Passing (%)	Sieve Size
20 to 60	#40
10 to 40	#100
5 to 30	#200

3. Flyash: Flyash (if used) shall conform to ASTM C618 and be either Class C or Class F.
4. Water: Fresh and potable water shall be used.
5. Admixtures: Admixtures may be used as necessary to improve pumpability, to control set time, and to prevent segregation and bleeding. Admixtures shall be non-toxic and biodegradable and conform to ASTM C494. The use of admixtures shall not affect the required compressive strengths.

## 2.02 EQUIPMENT

- A. Grout Mixing System: Grout shall either be supplied by transit mix or mixed on site. The grout mixing system shall be capable of thoroughly mixing grout over the specified range. For each batch of transit mixed grout, a ticket shall be issued by the mix plant stating the composition of the mix. Any grout over 3 hours old shall be disposed of by the Contractor, unless it can be demonstrated that extended hold time has no detrimental effect. On site mixing systems shall be capable of precisely measuring, recording, and mixing all materials.
- B. Grout Pumping Systems: The grout pump shall include a positive displacement type pump with variable speed capabilities. The grout pump shall have the capability of injecting grout at a pressure of 800psi. The pump shall have a minimum capacity of 0.05 cubic feet per minute (cfm) and a maximum of up to 5 cfm. Pump shall be equipped with remote controls for operation in vicinity of the probe collar to control the injection process. A pressure regulator shall be used to control maximum grouting pressures.
- C. Grout Delivery System: The grout delivery system shall consist of hoses, couplings, and pipes compatible with the equipment used for this work and shall be capable of withstanding the pressure delivered by the pump.
- D. Pressure Gauges: All pressure gauges shall be adequately protected from the grout with suitable gauge savers to provide accurate pressure reading on a continuous basis and shall be calibrated to a Master Gauge prior to use. Any defective, inaccurate, or malfunctioning pressure gauge shall be removed from site.
- E. Grout Injection Volume Measurement System: There shall be a reliable mechanical means of measuring the quantity of grout injected to within 0.25 cf.

## **PART 3 - EXECUTION**

### **3.01 GENERAL REQUIREMENTS**

- A. The Contractor shall undertake continuous surface monitoring for settlement or heave over the designated treatment area and monitoring of all nearby utilities and structures that may be affected by the grouting for the entire period of treatment
- B. Contractor shall provide access and assistance to the Engineer for obtaining supplemental monitoring data, as requested by Engineer.

### **3.02 GROUT PIPE INSTALLATION**

- A. The pipes shall be either drilled or driven. The end of the pipe must be sealed to prevent soil from entering the pipe during installation. The injection pipes shall be installed to prevent grout leakage and/or premature upward movement of the casing during injection of high-pressure compaction grout.

### **3.03 GROUT INJECTION**

- A. Grout shall be mixed on site or provided from a transit mix grout truck. The slump of the mix shall not exceed 1 inch. Grout shall be injected at a rate not to exceed 2.0 cfm unless authorized by the Engineer.
- B. Grouting pressure shall be continuously monitored at the surface connection to the injection pipe with a suitable protected gauge. A grid pattern for the injection pipes shall be established and the grout shall be injected from the top down, unless approved in writing by the Engineer.
- C. The grouting process shall progress in stages within each injection pipe using the top down method. The ground surface and adjacent structures/roadways shall be monitored for surface movement at all times during grout injection. Grout injection shall stop when the ground movement is detected, if grout take decreases to less than 0.5 cfm in 10 minutes at the maximum recommended injection pressure, or if a sudden drop in pressure is noted.
- D. The compaction grout pumping rates and pressures shall be carefully controlled and monitored. The data from readings of grout volumes and pressures shall be provided to the Engineer within 24 hours of completing of each grout injection.

### **3.04 PROTECTION OF WORK AREA AND CLEANUP**

- A. During the work operations, the Contractor shall take such precautions as may be necessary to prevent drill cuttings, oil, wash water, and grout from contaminating the surrounding area.
- B. Upon completion of compaction grouting, the Contractor shall remove from site all waste materials resulting from the grouting operations, and shall restore the work area to pre-existing conditions.

**END OF SECTION**

**BID FORM**

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East  
Bid "A" Based on Completion Time of 450 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
<b>ROADWAY</b>						
1.	101-1	Mobilization	1.00	LS	\$	\$
2.	102-1	Maintenance of Traffic	1.00	LS	\$	\$
3.	102-3	Commercial Matl for Drwy Maint	100.00	CY	\$	\$
4.	104-10-3	Sediment Barrier	19,973.00	LF	\$	\$
5.	104-11	Floating Turbidity Barrier	1,707.00	LF	\$	\$
6.	104-15	Soil Tracking Prevention Device	2.00	EA	\$	\$
7.	104-18	Inlet Protection System	36.00	EA	\$	\$
8.	110-1-1	Clearing & Grubbing	45.00	AC	\$	\$
9.	120-1	Regular Excavation	61,480.00	CY	\$	\$
10.	120-4	Subsoil Excavation	6,136.00	CY	\$	\$
11.	120-6	Embankment	107,052.00	CY	\$	\$
12.	160-4	Type B Stabilization (LBR 40)	10,184.00	SY	\$	\$
13.	160-4-1	Type B Stabilization (LBR 60)	54,368.00	SY	\$	\$
14.	285-701	Optional Base, Group 1 (4" Type B-12.5)	2,336.00	SY	\$	\$
15.	285-709	Optional Base, Group 9	47,042.00	SY	\$	\$
16.	285-709	Optional Base, Group 9 (6" Type B-12.5)	6,939.00	SY	\$	\$
17.	286-1	Turnout Construction	1,018.00	SY	\$	\$
18.	327-70-6	Milling Existing Asphalt Pavement (1-1/2" Avg. Depth)	11,829.00	SY	\$	\$
19.	327-70-15	Milling Existing Asphalt Pavement (2-3/4" Avg. Depth)	20,655.00	SY	\$	\$
20.	327-70-19	Milling Existing Asphalt Pavement (3/4" Avg. Depth)	3,590.00	SY	\$	\$
21.	334-1-13	Superpave Asphaltic Conc, Traffic C, (3")	8,735.00	TN	\$	\$
22.	334-1-14	Superpave Asphaltic Conc, Traffic D, (Variable Depth)	642.00	TN	\$	\$
23.	334-1-14	Superpave Asphaltic Conc, Traffic D, (2")	2,530.00	TN	\$	\$
24.	334-1-14	Superpave Asphaltic Conc, Traffic D, (4")	1,527.00	TN	\$	\$
25.	337-7-24	Asphalt Concrete Friction Course, FC-5, Rubber (3/4")	1,645.00	TN	\$	\$
26.	337-7-43	Asphalt Concrete Friction Course, Traffic C, FC-12.5, Rubber (1-1/2")	5,344.00	TN	\$	\$
27.	339-1	Misc. Asphalt	17.00	TN	\$	\$
28.	425-1-341	Inlets (Curb) (Type P-4) (<10')	1.00	EA	\$	\$
29.	425-1-351	Inlets (Curb) (Type P-5) (<10')	13.00	EA	\$	\$
30.	425-1-361	Inlets (Curb) (Type P-6) (<10')	6.00	EA	\$	\$

Bidder Name: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

**BID FORM**

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East  
Bid "A" Based on Completion Time of 450 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
31.	425-1-501	Inlet (Dt Bot) (Type A) (<10')	1.00	EA	\$	\$
32.	425-1-521	Inlet (Dt Bot) (Type C) (<10')	6.00	EA	\$	\$
33.	425-1-541	Inlet (Dt Bot) (Type D) (<10')	4.00	EA	\$	\$
34.	425-1-701	Inlet (Gutter) (Type S) (<10')	6.00	EA	\$	\$
35.	425-2-61	Manholes (P-8) (<10')	5.00	EA	\$	\$
36.	425-2-91	Manholes (J-8) (<10')	1.00	EA	\$	\$
37.	430-174-118	Pipe Culv (RCP)(18")	2,038.00	LF	\$	\$
38.	430-174-124	Pipe Culv (RCP)(24")	1,020.00	LF	\$	\$
39.	430-174-215	Pipe Culv (ERCP) (12"x18")	18.00	LF	\$	\$
40.	430-174-218	Pipe Culv (ERCP) (14"x23")	1,327.00	LF	\$	\$
41.	430-174-224	Pipe Culv (ERCP) (19"x30")	967.00	LF	\$	\$
42.	430-174-230	Pipe Culv (ERCP) (24"x38")	268.00	LF	\$	\$
43.	430-984-125	MES (Round) (18" SD)	18.00	EA	\$	\$
44.	430-984-129	MES (Round) (24" SD)	8.00	EA	\$	\$
45.	430-984-625	MES (Round) (14"x23" SD)	5.00	EA	\$	\$
46.	430-984-629	MES (Ellip) (19"x30") (SD)	3.00	EA	\$	\$
47.	430-984-633	MES (Ellip) (24"x38") (SD)	3.00	EA	\$	\$
48.	520-1-MC	Manatee County Type A Gutter	942.00	LF	\$	\$
49.	520-1-7	Type E Curb & Gutter	6,636.00	LF	\$	\$
50.	520-1-10	Type F Curb & Gutter	8,164.00	LF	\$	\$
51.	520-2-1	Type D Curb	1,303.00	LF	\$	\$
52.	520-6	Shoulder Gutter, Concrete	945.00	LF	\$	\$
53.	522-1	Concrete Sidewalk and Driveways, 4" Thick	5,696.00	SY	\$	\$
54.	522-2	Concrete Sidewalk and Driveways, 6" Thick	531.00	SY	\$	\$
55.	523-1	Patterned Pavement, Vehicular Areas	721.00	SY	\$	\$
56.	524-1-49	Concrete Ditch Pavement, 6" Reinforced	40.00	SY	\$	\$
57.	527-2	Detectable Warnings	500.00	SF	\$	\$
58.	550-10-120	Fencing, Type A, 5.1-6.0, Standard	866.00	LF	\$	\$
59.	570-1-2	Sodding (Performance Turf) (Incl. Mowing, Fert. And Water)	108,668.00	SY	\$	\$
60.	571-1-13	Plastic Erosion Mat, Turf Reinforced Mat, Type 3	485.00	SY	\$	\$
61.	WMS-1	Wetland Mitigation Site	1.00	LS	\$	\$

Bidder Name: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

**BID FORM**

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East  
Bid "A" Based on Completion Time of 450 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
<b>SUBTOTAL (ROADWAY ONLY)</b>						\$
<b>SIGNING AND MARKINGS</b>						
62.	700-20-11	Sign Single Post, F&I, Less than 12 SF	95.00	AS	\$	\$
63.	700-20-12	Sign Single Post, F&I, 12-20 SF	8.00	AS	\$	\$
64.	700-20-14	Sign Single Post, F&I, 21-30 SF	4.00	AS	\$	\$
65.	700-20-40	Sign Single Post, (Relocate)	2.00	AS	\$	\$
66.	700-20-60	Sign Single Post, (Remove)	22.00	AS	\$	\$
67.	700-21-11	Multi-Post Sign, F&I, 50 SF or Less	2.00	AS	\$	\$
68.	700-21-60	Multi-Post Sign, Remove	2.00	AS	\$	\$
69.	705-11-3	Delineator, Flexible High Visibility Median	2.00	EA	\$	\$
70.	706-3	Retro-Reflective Pavement Markers	1,785.00	EA	\$	\$
71.	710-11-290	Painted Pavt Mark, Std, Yellow, Island Nose	1,552.00	SF	\$	\$
72.	711-11-111	Thermoplastic, Std, White, Solid, 6"	5.73	NM	\$	\$
73.	711-11-122	Thermoplastic, Std, White, Solid, 8"	1,126.00	LF	\$	\$
74.	711-11-123	Thermoplastic, Std, White, Solid, 12"	2,897.00	LF	\$	\$
75.	711-11-124	Thermoplastic, Std, White, Solid, 18"	2,790.00	LF	\$	\$
76.	711-11-125	Thermoplastic, Std, White, Solid, 24"	571.00	LF	\$	\$
77.	711-11-131	Painted Pavt Mark, Std, White, Skip, 6", 10-30	2.33	GM	\$	\$
78.	711-11-151	Painted Pavt Mark, Std, White, Dotted, 6", 2-4, 6-10	2,344.00	LF	\$	\$
79.	711-11-160	Thermoplastic, Std, White, Message	38.00	EA	\$	\$
80.	711-11-170	Thermoplastic, Std, White, Arrows	82.00	EA	\$	\$
81.	711-11-180	Thermoplastic, Std, White, Yield Line	60.00	LF	\$	\$
82.	711-11-211	Thermoplastic, Std, Yellow, Solid, 6"	5.61	NM	\$	\$
83.	711-11-224	Thermoplastic, Std, Yellow, Solid, 18"	2,733.00	LF	\$	\$
84.	711-11-231	Thermoplastic, Std, Yellow, Skip, 6", 10-30	115.00	LF	\$	\$
85.	711-11-160	Pavement Messages, Thermoplastic (Bike Lane Markings)	14.00	EA	\$	\$
<b>SUBTOTAL (SIGNING AND MARKINGS ONLY)</b>						\$

Bidder Name: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

**BID FORM**

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East  
Bid "A" Based on Completion Time of 450 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
<b>SIGNALIZATION</b>						
86.	630-2-11	Conduit (F&I) (Open Trench)	5,145.00	LF	\$	\$
87.	630-2-12	Conduit (F&I) (Directional Bore)	1,578.00	LF	\$	\$
88.	632-7-1	Signal Cable (New or Reconstructed Intersection-F&I)	3.00	PI	\$	\$
89.	632-7-6	Signal Cable, Remove-Intersection	1.00	PI	\$	\$
90.	633-1-121	FO Cable (F&I) (Underground) (2-12 Fibers)	505.00	LF	\$	\$
91.	633-1-122	FO Cable (F&I) (Underground) (13-48 Fibers)	6,355.00	LF	\$	\$
92.	633-2-31	FO Cable Conn (Insall) (Splice)	12.00	EA	\$	\$
93.	633-2-32	FO Cable Conn (Insall) (Termination)	48.00	EA	\$	\$
94.	633-3-11	FO Cable Conn Hardware (F&I) (Splice Enclosure)	5.00	EA	\$	\$
95.	633-3-12	FO Cable Conn Hardware (F&I) (Splice Tray)	6.00	EA	\$	\$
96.	633-3-15	FO Cable Conn Hardware (F&I) (Patch Panel) (Preterm)	3.00	EA	\$	\$
97.	635-2-11	Pull and Splice Box (F&I) (Standard Size)	34.00	EA	\$	\$
98.	635-2-12	Pull and Splice Box (F&I) (24"x36")	12.00	EA	\$	\$
99.	635-2-13	Pull and Splice Box (F&I) (30"x60")	4.00	EA	\$	\$
100.	639-1-122	Electrical Power Service (F&I) (Underground) (Meter Purchased by Contractor)	4.00	AS	\$	\$
101.	639-2-1	Electrical Service Wire (F&I)	2,445.00	LF	\$	\$
102.	639-3-11	Electrical Service Disconnect (F&I)	2.00	EA	\$	\$
103.	641-2-12	Prestressed Concrete Pole (F&I) (P-II Service) (12')	6.00	EA	\$	\$
104.	641-2-80	Pole Removal - Deep - Direct Burial	2.00	EA	\$	\$
105.	646-1-11	Aluminum Signal Pole (F&I) (Pedestal)	24.00	EA	\$	\$
106.	646-1-60	Signal Pedestal Remove	4.00	EA	\$	\$
107.	649-31-204	Steel Mast Arm Assemble (F&I) (130 mph) (70.5)	1.00	EA	\$	\$
108.	649-31-205	Steel Mast Arm Assemble (F&I) (130 mph) (78)	1.00	EA	\$	\$
109.	649-31-219	Steel Mast Arm Assemble (F&I) (130 mph) (70.5-70.5)	1.00	EA	\$	\$
110.	649-31-299	Steel Mast Arm Assemble (F&I) (130 mph) (Custom)	5.00	EA	\$	\$
111.	650-1-14	Traffic Signal (F&I)(3 Sect.) (1-Way) (Aluminum)	34.00	AS	\$	\$
112.	650-1-19	Traffic Signal (F&I)(5 Sect.) (1-Way) (Aluminum)	5.00	AS	\$	\$
113.	653-1-11	Pedestrian Signal (F&I) (LED Countdown) (1 Directional)	24.00	AS	\$	\$
114.	660-1-600	Vehicle Detector Assembly, Remove	12.00	EA	\$	\$
115.	660-4-11	Vehicle Detection System-Video (F&I) (Cabinet Equipment)	12.00	EA	\$	\$

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**BID FORM**

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**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East  
Bid "A" Based on Completion Time of 450 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
116.	660-4-12	Vehicle Detection System-Video (F&I) (Above Ground Equipment)	12.00	EA	\$	\$
117.	665-1-11	Pedestrian Detector (F&I) (Standard)	24.00	EA	\$	\$
118.	670-5-112	Traffic Controller Assembly (F&I) (NEMA) (2 Preemptions)	3.00	AS	\$	\$
119.	684-1-1	ITS Managed Field Ethernet Switch (F&I)	3.00	EA	\$	\$
120.	685-106	System Auxiliaries (F&I) (UPS)	3.00	EA	\$	\$
121.	700-5-22	Internally Illuminated Sign (F&I) (12-18 SF)	12.00	EA	\$	\$
<b>SUBTOTAL (SIGNALIZATION ONLY)</b>						\$
<b>LIGHTING</b>						
122.	630-2-11	Conduit (F&I) (Open Trench)	15,705.00	LF	\$	\$
123.	630-2-12	Conduit (F&I) (Directional Bore)	900.00	LF	\$	\$
124.	635-2-11	Pull & Splice Boxes (F&I) (13"x24")	84.00	EA	\$	\$
125.	715-1-12	Lighting - Conductor (F&I) (No. 6)	25,159.00	LF	\$	\$
126.	715-1-13	Lighting - Conductor (F&I) (No. 4)	24,853.00	LF	\$	\$
127.	715-4-123	Light Pole Complete (130 MPH) (50')	63.00	EA	\$	\$
128.	715-7-11	Load Center (F&I) (Secondary Voltage)	2.00	EA	\$	\$
129.	715-500-1	Light Pole Cable Distribution System	70.00	EA	\$	\$
130.	715-511-135	Light Pole Complete (F&I) (Special) (130 MPH) (35')	7.00	EA	\$	\$
<b>SUBTOTAL (LIGHTING ONLY)</b>						\$

Bidder Name: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

**BID FORM**

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East  
Bid "A" Based on Completion Time of 450 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
<b>POTABLE WATER MAIN</b>						
131.	W1	Furnish & Install C900 DR18 8-inch PVC Water Main	4,650.00	LF	\$	\$
132.	W2	Furnish & Install Class 350 8-inch Ductile Iron Water Main	400.00	LF	\$	\$
133.	W3	Jack & Bore 18" x 3/8" Steel Casing Pipe	385.00	LF	\$	\$
134.	W4	Furnish & Install 12" x 3/16" Steel Casing Pipe	520.00	LF	\$	\$
135.	W5	Furnish & Install 8-inch Gate Valve Assembly	15.00	EA	\$	\$
136.	W6	Furnish & Install Fire Hydrant Assembly	10.00	EA	\$	\$
137.	W7	Furnish & Install Automatic Air Release Assembly	1.00	EA	\$	\$
138.	W8	Furnish & Install 24" x 8" Tapping Sleeve and Valve	2.00	EA	\$	\$
139.	W10	Furnish & Install 8-inch Bell Restraints	135.00	EA	\$	\$
140.	W11	Furnish & Install Restrained Ductile Iron Mechanical Joint Fittings	6.00	TN	\$	\$
141.	W12	Furnish and Install Water Meter, Backflow Preventer, and Water Service Line	1.00	LS	\$	\$
142.	W13	Grout Fill Existing 8-inch Water Main	4.00	CY	\$	\$
143.	W14	Adjust Existing Manhole to Final Grade	2.00	EA	\$	\$
<b>SUBTOTAL (POTABLE WATER MAIN ONLY)</b>						\$
<b>TOTAL BASE BID "A" - Based on Completion Time of <u>450</u> Calendar Days</b>						\$
<b>CONTRACT CONTINGENCY WORK (USED ONLY WITH COUNTY APPROVAL)</b>					10%	\$
<b>TOTAL OFFER FOR BID "A" with Contract Contingency - Based on Completion Time of <u>450</u> Calendar Days</b>						\$

Bidder Name: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

**BID FORM**

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East  
Bid "B" Based on Completion Time of 630 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
<b>ROADWAY</b>						
1.	101-1	Mobilization	1.00	LS	\$	\$
2.	102-1	Maintenance of Traffic	1.00	LS	\$	\$
3.	102-3	Commercial Matl for Drwy Maint	100.00	CY	\$	\$
4.	104-10-3	Sediment Barrier	19,973.00	LF	\$	\$
5.	104-11	Floating Turbidity Barrier	1,707.00	LF	\$	\$
6.	104-15	Soil Tracking Prevention Device	2.00	EA	\$	\$
7.	104-18	Inlet Protection System	36.00	EA	\$	\$
8.	110-1-1	Clearing & Grubbing	45.00	AC	\$	\$
9.	120-1	Regular Excavation	61,480.00	CY	\$	\$
10.	120-4	Subsoil Excavation	6,136.00	CY	\$	\$
11.	120-6	Embankment	107,052.00	CY	\$	\$
12.	160-4	Type B Stabilization (LBR 40)	10,184.00	SY	\$	\$
13.	160-4-1	Type B Stabilization (LBR 60)	54,368.00	SY	\$	\$
14.	285-701	Optional Base, Group 1 (4" Type B-12.5)	2,336.00	SY	\$	\$
15.	285-709	Optional Base, Group 9	47,042.00	SY	\$	\$
16.	285-709	Optional Base, Group 9 (6" Type B-12.5)	6,939.00	SY	\$	\$
17.	286-1	Turnout Construction	1,018.00	SY	\$	\$
18.	327-70-6	Milling Existing Asphalt Pavement (1-1/2" Avg. Depth)	11,829.00	SY	\$	\$
19.	327-70-15	Milling Existing Asphalt Pavement (2-3/4" Avg. Depth)	20,655.00	SY	\$	\$
20.	327-70-19	Milling Existing Asphalt Pavement (3/4" Avg. Depth)	3,590.00	SY	\$	\$
21.	334-1-13	Superpave Asphaltic Conc, Traffic C, (3")	8,735.00	TN	\$	\$
22.	334-1-14	Superpave Asphaltic Conc, Traffic D, (Variable Depth)	642.00	TN	\$	\$
23.	334-1-14	Superpave Asphaltic Conc, Traffic D, (2")	2,530.00	TN	\$	\$
24.	334-1-14	Superpave Asphaltic Conc, Traffic D, (4")	1,527.00	TN	\$	\$
25.	337-7-24	Asphalt Concrete Friction Course, FC-5, Rubber (3/4")	1,645.00	TN	\$	\$
26.	337-7-43	Asphalt Concrete Friction Course, Traffic C, FC-12.5, Rubber (1-1/2")	5,344.00	TN	\$	\$
27.	339-1	Misc. Asphalt	17.00	TN	\$	\$
28.	425-1-341	Inlets (Curb) (Type P-4) (<10')	1.00	EA	\$	\$
29.	425-1-351	Inlets (Curb) (Type P-5) (<10')	13.00	EA	\$	\$
30.	425-1-361	Inlets (Curb) (Type P-6) (<10')	6.00	EA	\$	\$

Bidder Name: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

**BID FORM**

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**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East  
Bid "B" Based on Completion Time of 630 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
31.	425-1-501	Inlet (Dt Bot) (Type A) (<10')	1.00	EA	\$	\$
32.	425-1-521	Inlet (Dt Bot) (Type C) (<10')	6.00	EA	\$	\$
33.	425-1-541	Inlet (Dt Bot) (Type D) (<10')	4.00	EA	\$	\$
34.	425-1-701	Inlet (Gutter) (Type S) (<10')	6.00	EA	\$	\$
35.	425-2-61	Manholes (P-8) (<10')	5.00	EA	\$	\$
36.	425-2-91	Manholes (J-8) (<10')	1.00	EA	\$	\$
37.	430-174-118	Pipe Culv (RCP)(18")	2,038.00	LF	\$	\$
38.	430-174-124	Pipe Culv (RCP)(24")	1,020.00	LF	\$	\$
39.	430-174-215	Pipe Culv (ERCP) (12"x18")	18.00	LF	\$	\$
40.	430-174-218	Pipe Culv (ERCP) (14"x23")	1,327.00	LF	\$	\$
41.	430-174-224	Pipe Culv (ERCP) (19"x30")	967.00	LF	\$	\$
42.	430-174-230	Pipe Culv (ERCP) (24"x38")	268.00	LF	\$	\$
43.	430-984-125	MES (Round) (18" SD)	18.00	EA	\$	\$
44.	430-984-129	MES (Round) (24" SD)	8.00	EA	\$	\$
45.	430-984-625	MES (Round) (14"x23" SD)	5.00	EA	\$	\$
46.	430-984-629	MES (Ellip) (19"x30") (SD)	3.00	EA	\$	\$
47.	430-984-633	MES (Ellip) (24"x38") (SD)	3.00	EA	\$	\$
48.	520-1-MC	Manatee County Type A Gutter	942.00	LF	\$	\$
49.	520-1-7	Type E Curb & Gutter	6,636.00	LF	\$	\$
50.	520-1-10	Type F Curb & Gutter	8,164.00	LF	\$	\$
51.	520-2-1	Type D Curb	1,303.00	LF	\$	\$
52.	520-6	Shoulder Gutter, Concrete	945.00	LF	\$	\$
53.	522-1	Concrete Sidewalk and Driveways, 4" Thick	5,696.00	SY	\$	\$
54.	522-2	Concrete Sidewalk and Driveways, 6" Thick	531.00	SY	\$	\$
55.	523-1	Patterned Pavement, Vehicular Areas	721.00	SY	\$	\$
56.	524-1-49	Concrete Ditch Pavement, 6" Reinforced	40.00	SY	\$	\$
57.	527-2	Detectable Warnings	500.00	SF	\$	\$
58.	550-10-120	Fencing, Type A, 5.1-6.0, Standard	866.00	LF	\$	\$
59.	570-1-2	Sodding (Performance Turf) (Incl. Mowing, Fert. And Water)	108,668.00	SY	\$	\$
60.	571-1-13	Plastic Erosion Mat, Turf Reinforced Mat, Type 3	485.00	SY	\$	\$
61.	WMS-1	Wetland Mitigation Site	1.00	LS	\$	\$

Bidder Name: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

**BID FORM**

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East  
Bid "B" Based on Completion Time of 630 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
<b>SUBTOTAL (ROADWAY ONLY)</b>						\$
<b>SIGNING AND MARKINGS</b>						
62.	700-20-11	Sign Single Post, F&I, Less than 12 SF	95.00	AS	\$	\$
63.	700-20-12	Sign Single Post, F&I, 12-20 SF	8.00	AS	\$	\$
64.	700-20-14	Sign Single Post, F&I, 21-30 SF	4.00	AS	\$	\$
65.	700-20-40	Sign Single Post, (Relocate)	2.00	AS	\$	\$
66.	700-20-60	Sign Single Post, (Remove)	22.00	AS	\$	\$
67.	700-21-11	Multi-Post Sign, F&I, 50 SF or Less	2.00	AS	\$	\$
68.	700-21-60	Multi-Post Sign, Remove	2.00	AS	\$	\$
69.	705-11-3	Delineator, Flexible High Visibility Median	2.00	EA	\$	\$
70.	706-3	Retro-Reflective Pavement Markers	1,785.00	EA	\$	\$
71.	710-11-290	Painted Pavt Mark, Std, Yellow, Island Nose	1,552.00	SF	\$	\$
72.	711-11-111	Thermoplastic, Std, White, Solid, 6"	5.73	NM	\$	\$
73.	711-11-122	Thermoplastic, Std, White, Solid, 8"	1,126.00	LF	\$	\$
74.	711-11-123	Thermoplastic, Std, White, Solid, 12"	2,897.00	LF	\$	\$
75.	711-11-124	Thermoplastic, Std, White, Solid, 18"	2,790.00	LF	\$	\$
76.	711-11-125	Thermoplastic, Std, White, Solid, 24"	571.00	LF	\$	\$
77.	711-11-131	Painted Pavt Mark, Std, White, Skip, 6", 10-30	2.33	GM	\$	\$
78.	711-11-151	Painted Pavt Mark, Std, White, Dotted, 6", 2-4, 6-10	2,344.00	LF	\$	\$
79.	711-11-160	Thermoplastic, Std, White, Message	38.00	EA	\$	\$
80.	711-11-170	Thermoplastic, Std, White, Arrows	82.00	EA	\$	\$
81.	711-11-180	Thermoplastic, Std, White, Yield Line	60.00	LF	\$	\$
82.	711-11-211	Thermoplastic, Std, Yellow, Solid, 6"	5.61	NM	\$	\$
83.	711-11-224	Thermoplastic, Std, Yellow, Solid, 18"	2,733.00	LF	\$	\$
84.	711-11-231	Thermoplastic, Std, Yellow, Skip, 6", 10-30	115.00	LF	\$	\$
85.	711-11-160	Pavement Messages, Thermoplastic (Bike Lane Markings)	14.00	EA	\$	\$
<b>SUBTOTAL (SIGNING AND MARKINGS ONLY)</b>						\$

Bidder Name: \_\_\_\_\_

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**BID FORM**

(Submit in Triplicate)

**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East  
Bid "B" Based on Completion Time of 630 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
<b>SIGNALIZATION</b>						
86.	630-2-11	Conduit (F&I) (Open Trench)	5,145.00	LF	\$	\$
87.	630-2-12	Conduit (F&I) (Directional Bore)	1,578.00	LF	\$	\$
88.	632-7-1	Signal Cable (New or Reconstructed Intersection-F&I)	3.00	PI	\$	\$
89.	632-7-6	Signal Cable, Remove-Intersection	1.00	PI	\$	\$
90.	633-1-121	FO Cable (F&I) (Underground) (2-12 Fibers)	505.00	LF	\$	\$
91.	633-1-122	FO Cable (F&I) (Underground) (13-48 Fibers)	6,355.00	LF	\$	\$
92.	633-2-31	FO Cable Conn (Insall) (Splice)	12.00	EA	\$	\$
93.	633-2-32	FO Cable Conn (Insall) (Termination)	48.00	EA	\$	\$
94.	633-3-11	FO Cable Conn Hardware (F&I) (Splice Enclosure)	5.00	EA	\$	\$
95.	633-3-12	FO Cable Conn Hardware (F&I) (Splice Tray)	6.00	EA	\$	\$
96.	633-3-15	FO Cable Conn Hardware (F&I) (Patch Panel) (Preterm)	3.00	EA	\$	\$
97.	635-2-11	Pull and Splice Box (F&I) (Standard Size)	34.00	EA	\$	\$
98.	635-2-12	Pull and Splice Box (F&I) (24"x36")	12.00	EA	\$	\$
99.	635-2-13	Pull and Splice Box (F&I) (30"x60")	4.00	EA	\$	\$
100.	639-1-122	Electrical Power Service (F&I) (Underground) (Meter Purchased by Contractor)	4.00	AS	\$	\$
101.	639-2-1	Electrical Service Wire (F&I)	2,445.00	LF	\$	\$
102.	639-3-11	Electrical Service Disconnect (F&I)	2.00	EA	\$	\$
103.	641-2-12	Prestressed Concrete Pole (F&I) (P-II Service) (12')	6.00	EA	\$	\$
104.	641-2-80	Pole Removal - Deep - Direct Burial	2.00	EA	\$	\$
105.	646-1-11	Aluminum Signal Pole (F&I) (Pedestal)	24.00	EA	\$	\$
106.	646-1-60	Signal Pedestal Remove	4.00	EA	\$	\$
107.	649-31-204	Steel Mast Arm Assemble (F&I) (130 mph) (70.5)	1.00	EA	\$	\$
108.	649-31-205	Steel Mast Arm Assemble (F&I) (130 mph) (78)	1.00	EA	\$	\$
109.	649-31-219	Steel Mast Arm Assemble (F&I) (130 mph) (70.5-70.5)	1.00	EA	\$	\$
110.	649-31-299	Steel Mast Arm Assemble (F&I) (130 mph) (Custom)	5.00	EA	\$	\$
111.	650-1-14	Traffic Signal (F&I)(3 Sect.) (1-Way) (Aluminum)	34.00	AS	\$	\$
112.	650-1-19	Traffic Signal (F&I)(5 Sect.) (1-Way) (Aluminum)	5.00	AS	\$	\$
113.	653-1-11	Pedestrian Signal (F&I) (LED Countdown) (1 Directional)	24.00	AS	\$	\$
114.	660-1-600	Vehicle Detector Assembly, Remove	12.00	EA	\$	\$
115.	660-4-11	Vehicle Detection System-Video (F&I) (Cabinet Equipment)	12.00	EA	\$	\$

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**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East  
Bid "B" Based on Completion Time of 630 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
116.	660-4-12	Vehicle Detection System-Video (F&I) (Above Ground Equipment)	12.00	EA	\$	\$
117.	665-1-11	Pedestrian Detector (F&I) (Standard)	24.00	EA	\$	\$
118.	670-5-112	Traffic Controller Assembly (F&I) (NEMA) (2 Preemptions)	3.00	AS	\$	\$
119.	684-1-1	ITS Managed Field Ethernet Switch (F&I)	3.00	EA	\$	\$
120.	685-106	System Auxiliaries (F&I) (UPS)	3.00	EA	\$	\$
121.	700-5-22	Internally Illuminated Sign (F&I) (12-18 SF)	12.00	EA	\$	\$
<b>SUBTOTAL (SIGNALIZATION ONLY)</b>						\$
<b>LIGHTING</b>						
122.	630-2-11	Conduit (F&I) (Open Trench)	15,705.00	LF	\$	\$
123.	630-2-12	Conduit (F&I) (Directional Bore)	900.00	LF	\$	\$
124.	635-2-11	Pull & Splice Boxes (F&I) (13"x24")	84.00	EA	\$	\$
125.	715-1-12	Lighting - Conductor (F&I) (No. 6)	25,159.00	LF	\$	\$
126.	715-1-13	Lighting - Conductor (F&I) (No. 4)	24,853.00	LF	\$	\$
127.	715-4-123	Light Pole Complete (130 MPH) (50')	63.00	EA	\$	\$
128.	715-7-11	Load Center (F&I) (Secondary Voltage)	2.00	EA	\$	\$
129.	715-500-1	Light Pole Cable Distribution System	70.00	EA	\$	\$
130.	715-511-135	Light Pole Complete (F&I) (Special) (130 MPH) (35')	7.00	EA	\$	\$
<b>SUBTOTAL (LIGHTING ONLY)</b>						\$

Bidder Name: \_\_\_\_\_

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**BID FORM**

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**44th Avenue East Roadway Project- from 19th Street Court East to 30th Street East  
Bid "B" Based on Completion Time of 630 Calendar Days**

PAY ITEM NO.	FDOT ITEM NUMBER	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
<b>POTABLE WATER MAIN</b>						
131.	W1	Furnish & Install C900 DR18 8-inch PVC Water Main	4,650.00	LF	\$	\$
132.	W2	Furnish & Install Class 350 8-inch Ductile Iron Water Main	400.00	LF	\$	\$
133.	W3	Jack & Bore 18" x 3/8" Steel Casing Pipe	385.00	LF	\$	\$
134.	W4	Furnish & Install 12" x 3/16" Steel Casing Pipe	520.00	LF	\$	\$
135.	W5	Furnish & Install 8-inch Gate Valve Assembly	15.00	EA	\$	\$
136.	W6	Furnish & Install Fire Hydrant Assembly	10.00	EA	\$	\$
137.	W7	Furnish & Install Automatic Air Release Assembly	1.00	EA	\$	\$
138.	W8	Furnish & Install 24" x 8" Tapping Sleeve and Valve	2.00	EA	\$	\$
139.	W10	Furnish & Install 8-inch Bell Restraints	135.00	EA	\$	\$
140.	W11	Furnish & Install Restrained Ductile Iron Mechanical Joint Fittings	6.00	TN	\$	\$
141.	W12	Furnish and Install Water Meter, Backflow Preventer, and Water Service Line	1.00	LS	\$	\$
142.	W13	Grout Fill Existing 8-inch Water Main	4.00	CY	\$	\$
143.	W14	Adjust Existing Manhole to Final Grade	2.00	EA	\$	\$
<b>SUBTOTAL (POTABLE WATER MAIN ONLY)</b>						\$
<b>TOTAL BASE BID "B" - Based on Completion Time of <u>630</u> Calendar Days</b>						\$
<b>CONTRACT CONTINGENCY WORK (USED ONLY WITH COUNTY APPROVAL)</b>					10%	\$
<b>TOTAL OFFER FOR BID "B" with Contract Contingency - Based on Completion Time of <u>630</u> Calendar Days</b>						\$

Bidder Name: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_