

June 10, 2013

SUBJECT: FAP Route 338(IL 59) Section (112 & 113)WRS-5 DuPage County Contract No. 60I31 Item No. 198, June 14, 2013 Letting Addendum B

NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

- 1. Replaced page 28 of the Schedule of Prices.
- 2. Revised pages ii & vii of the Table of Contents to the Special Provisions.
- 3. Revised pages 42,43, 527 & 530 of the Special Provisions.
- 4. Added pages 531-533 to the Special Provisions.

Prime contractors must utilize the enclosed material when preparing their bid and must include any Schedule of Prices changes in their bidding proposal.

Bidders using computer-generated bids are cautioned to reflect any and all Schedule of Prices changes, if involved, into their computer programs.

Very truly yours,

John D. Baranzelli, P. E. Acting Engineer of Design and Environment

Tette alechbyon A.E.

By: Ted B. Walschleger, P. E. Engineer of Project Management

cc: John Fortmann, Region 1, District 1; Mike Renner; D. Carl Puzey; Estimates

ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT 60|31 NUMBER -

C-91-014-10 St

Project Number

Route

FAP 338

| C-91-014-1 |
|------------|
| 0-31-014- |

County Name -DUPAGE--Code -43 - -1 - -District -

*REVISED: JUNE 5, 2013 *REVISED: JUNE 10, 2013

Section Number - (112 & 113) WRS-5

| ltem Number | Pay Item Description | Unit of Measure | Quantity | x | Unit Price | = | Total Price |
|----------------|-----------------------|--------------------|------------|---|------------|---|-------------|
| 78100100 | RAISED REFL PAVT MKR | EACH | 334.000 | | | | |
| 78100105 | RAISED REF PVT MKR BR | EACH | 34.000 | | | | |
| 78100200 | TEMP RAIS REF PVT MKR | EACH | 176.000 | | | | |
| 78200300 | PRISMATIC CURB REFL | EACH | 190.000 | | | | |
| 78200410 | GUARDRAIL MKR TYPE A | EACH | 4.000 | | | | |
| 78200530 | BAR WALL MKR TYPE C | EACH | 85.000 | | | | |
| 78201000 | TERMINAL MARKER - DA | EACH | 1.000 | | | | |
| 78300100 | PAVT MARKING REMOVAL | SQ FT | 49,658.000 | | | | |
| 78300200 | RAISED REF PVT MK REM | EACH | 235.000 | | | | |
| 80400100 | ELECT SERV INSTALL | EACH | 1.000 | | | | |
| *REV 80400200 | ELECT UTIL SERV CONN | L SUM | 1.000 | | 91,350.000 | | 91,350.000 |
| 80500010 | SERV INSTALL GRND MT | EACH | 2.000 | | | | |
| 81028200 | UNDRGRD C GALVS 2 | FOOT | 4,846.000 | | | | |
| 81028210 | UNDRGRD C GALVS 2 1/2 | FOOT | 1,087.000 | | | | |
| 81028220 | UNDRGRD C GALVS 3 | FOOT | 437.000 | | | | |

Page 28 6/10/2013

| CONCRETE BARRIER WALL (SPECIAL) | 31 |
|---|----|
| COMBINATION CURB AND GUTTER REMOVAL (SPECIAL) | 31 |
| COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL) | 31 |
| CONCRETE MEDIAN, TYPE SB-6 (SPECIAL) | 32 |
| GUTTER TYPE G | 32 |
| HOT-MIX ASPHALT PRESSURE RELIEF JOINT | 33 |
| CLASS D PATCHES, TYPE III, 15 INCH (SPECIAL) | 33 |
| PROTECTION OF EXISTING DRAINAGE FACILITIES DURING CONSTRUCTION | 33 |
| REMOVE EXISTING FLARED END SECTION | 34 |
| PIPE INSULATION SYSTEM | 34 |
| PIPE UNDERDRAIN, FABRIC LINED TRENCH | 35 |
| INLET, SPECIAL | 35 |
| TEMPORARY CATCH BASINS | 36 |
| MANHOLES, TYPE A, 6' – DIAMETER, WITH 2 TYPE 1 FRAME, OPEN LIDS, RESTRICTOR | |
| PLATE | 36 |
| MANHOLES, DROP TYPE, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID | 37 |
| MANHOLES, WITH RESTRICTOR PLATE | 37 |
| STORM SEWER TO BE FILLED | 37 |
| STORM SEWERS TO BE CLEANED | 38 |
| TELEVISION INSPECTION OF SEWER | 38 |
| SLEEPER SLAB | 38 |
| DRAINAGE SCUPPERS | 39 |
| DRAINAGE SYSTEM | 39 |
| FIELD SPLICING OF SOLDIER PILES | 40 |
| ARCHITECTURAL FINISH FOR RETAINING WALLS | 40 |
| REBUILD EXISTING HANDHOLE, SPECIAL | 41 |
| OPTIMIZE TRAFFIC SIGNAL SYSTEM SPECIAL | 44 |
| TEMPORARY TRAFFIC SIGNAL TIMING | 45 |
| FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL | 47 |
| CONTROLLER CABINET TYPE IV, SPECIAL | 49 |
| UNINTERRUPTIBLE POWER SUPPLY | 51 |
| CONTROLLER CABINET AND PERIPHERAL EQUIPMENT | 52 |
| UNINTERRUPTIBLE POWER SUPPLY (UPS) | 53 |
| EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C | 56 |
| GENERAL ELECTRICAL REQUIREMENTS | 57 |
| | ~ |

FAP 338 (IL 59) Section (112 & 113) WRS-5 DuPage County Contract 60I31

| STORM WATER POLLUTION PREVENTION PLAN | 479 |
|--|-----|
| BITUMINOUS MATERIALS COST ADJUSTMENTS (bde) (RETURN FORM WITH BID) | 499 |
| FUEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID) | 502 |
| STEEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID) | 506 |
| PROJECT LABOR AGREEMENT - QUARTERLY EMPLOYMENT REPORT | 510 |
| PROJECT LABOR AGREEMENT | 511 |
| PIPE UNDERDRAINS FOR STRUCTURES | 527 |
| IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION | |
| (TPG) | 528 |
| PORTABLE VIDEO TOWER STATIONS | 530 |

FAP 338 (IL 59) Section (112 & 113) WRS-5 DuPage County Contract 60I31

Following the removal of the temporary pavement and steel plate, four (4) holes, four (4) inches in depth and, one half (1/2) inch in diameter, shall be drilled into the remaining concrete; one hole centered on each of the four handhole walls. Four (4) #3 steel dowels, eight (8) inches in length, shall be furnished and shall be installed in the drilled holes with a masonry epoxy.

All concrete debris shall be removed from the right-of-way to a location approved by the Engineer.

The area adjacent to each side of the handhole shall be excavated to allow forming. All steel hooks, handhole frame, cover, and concrete shall be provided to construct a rebuilt handhole according to applicable portions of the current District One Traffic Signal Specifications. (The existing frame and cover shall be replaced if it was damaged during removal or as determined by the Engineer.)

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price each for REBUILD EXISTING HANDHOLE, SPECIAL, which contract unit price shall be payment in full for all labor, materials, and equipment necessary to complete the work described above and as indicated.

The remainder of this page left intentionally blank.

FAP 338 (IL 59) Section (112 & 113) WRS-5 DuPage County Contract 60I31

This page intentionally left blank.

PIPE UNDERDRAINS FOR STRUCTURES

Effective: May 17, 2000 Revised: January 22, 2010

<u>Description</u>. This work shall consist of furnishing and installing a pipe underdrain system as shown on the plans, as specified herein, and as directed by the Engineer.

Materials. Materials shall meet the requirements as set forth below:

The perforated pipe underdrain shall be according to Article 601.02 of the Standard Specifications. Outlet pipes or pipes connecting to a separate storm sewer system shall not be perforated.

The drainage aggregate shall be a combination of one or more of the following gradations, FA1, FA2, CA5, CA7, CA8, CA11, or CA13 thru 16, according to Sections 1003 and 1004 of the Standard Specifications.

The fabric surrounding the drainage aggregate shall be Geotechnical Fabric for French Drains according to Article 1080.05 of the Standard Specifications.

<u>Construction Requirements.</u> All work shall be according to the applicable requirements of Section 601 of the Standard Specifications except as modified below.

The pipe underdrains shall consist of a perforated pipe drain situated at the bottom of an area of drainage aggregate wrapped completely in geotechnical fabric and shall be installed to the lines and gradients as shown on the plans.

<u>Method of Measurement.</u> Pipe Underdrains for Structures shall be measured for payment in feet (meters), in place. Measurement shall be along the centerline of the pipe underdrains. All connectors, outlet pipes, elbows, and all other miscellaneous items shall be included in the measurement. Concrete headwalls shall be included in the cost of Pipe Underdrains for Structures, but shall not be included in the measurement for payment.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per foot (meter) for PIPE UNDERDRAINS FOR STRUCTURES of the diameter specified. Furnishing and installation of the drainage aggregate, geotechnical fabric, forming holes in structural elements and any excavation required, will not be paid for separately, but shall be included in the cost of the pipe underdrains for structures.

Training and upgrading of TPGs of IDOT pre-apprentice training programs is intended to move said TPGs toward journeyman status and is the primary objective of this Training Program Graduate Special Provision. Accordingly, the Contractor shall make every effort to enroll TPGs by recruitment through the IDOT Illinois Community College Program to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance and entitled to the Training Program Graduate TPG Special Provision \$10.00 an hour incentive.

The Contractor or subcontractor shall provide each TPG with a certification showing the type and length of training satisfactorily completed.

PORTABLE VIDEO TOWER STATIONS

Description. This work shall consist of furnishing, delivering and operational maintenance including deployment and redeployment as directed by the Engineer and to provide 24/7 functionality of the System for the contract duration at the locations shown on the plans and/or as directed by the Engineer. The System is required to provide a trailer mounted portable closed circuit television (CCTV) camera assembly including a digital pan tilt zoom (PTZ) and digital video camera and the necessary cellular modem communications required to transmit and receive with the Illinois Tollway Traffic Information Management System (TIMS) Traffic Operations Center (TOC) for the contract duration. Testing must be completed BEFORE the Contractor is required to have the System in operation. Contractors are to contact the Tollway Intelligent Transportation System (ITS) Deployment Engineer to schedule pre-qualification testing. Only System's that have passed the pre-qualification testing will be allowed to be used for this Contract.

<u>General Requirements.</u> The System shall have the following minimum functional requirements:

- Trailer
- Camera
- Tower
- Communications equipment
- Cabinets
- Electronic support components
- Power unit
- Associated cabling
- 1. Prior to deploying any System, the Contractor must have each System inspected and approved by the Tollway at the Central Shop location 3460 S. Finley Road, Downers Grove. The Tollway at its discretion may install various equipment on each System. This equipment will remain the property of the Tollway and cannot be removed or altered. All Systems will be marked by the Tollway with a unique identification number. At the end of the contract period, the Contractor is required to deliver any and all Systems to the Central Shop location. A final System inspection will be performed to ensure no damage exists to the System.
- 2. The System shall be self-contained and shall be capable of setup by a one-person crew in less than 30 minutes.

- 3. The trailer shall have four 2,000 pounds rated leveling jacks/stabilizers and have a 3,500 pounds capacity trailer axle with 15" radial tires with fenders.
- 4. All external metal surfaces shall be powder coated in safety orange.
- 5. All four sides of the trailer must have 100 inches minimum of DOT rated reflective red and white safety tape.
- 6. Trailer lights and reflectors shall meet DOT standards.
- 7. The trailer shall have a lockable battery and compartment storage cover, an adjustable height pintle hitch with 3" eye opening, 3/8" safety chains and hooks, and a removable trailer tongue or hitch.
- 8. The trailer shall have a seven pole pin type trailer light plug wired to DOT standards.
- 9. The trailer shall include four leveling jacks/stabilizers that shall provide setup in areas with an incline of (+/-) 10 degrees and allow for leveling adjustments.
- 10. Trailer assembly shall be capable of withstanding a minimum wind load of 70 mph in any direction when the tower is completely extended and the trailer is in a normal operating configuration.
- 11. System shall provide an extendable tower that shall extend to at 30 feet above the ground level.
- 12. The tower shall fold down or collapse level as mounted on the trailer.
- 13. System shall be able to erect and lower the tower.
- 14. A back-up manual system for erecting and lowering the tower shall be included if the System is electric or hydraulically operated.
- 15. System shall prevent tower from retracting if primary system of erection is severed.
- 16. The System shall have a Closed Circuit Television (CCTV) Dome camera with Pan/Tilt/Zoom (PTZ) functionality and shall be Model SD435-PG-E1 as manufactured by Pelco or an approved equivalent.
- 17. The camera shall be easily removable as to eliminate the possibility of damage during transport.
- 18. Camera shall be a minimum of 25 feet above pavement with the tower extended. The PTZ CCTV camera should have a minimum 315 degree horizontal view (i.e., a maximum of 45 degrees blocked by the tower) with any dead zone to the left or right side of the trailer not the front or back.
- 19. The System cabinet shall include an Optelecom Model C-60-E/MC/SA video encoder with Model PSR 12DC/US power supply, two duplex receptacles (one GFI), surge suppressors for camera video, control, and 24 VAC power cables, and all necessary panels, brackets, and outdoor rated wiring required for a complete and operating system or an approved equivalent. Each component mounted outside of the cabinets shall be mounted with an approved equipment bracket on top of the tower or at an appropriate location so as not to impede the function or operations of the tower or components. All coaxial, Cat 5E, power and PTZ cable shall be outdoor rated. All coaxial cable shall be RG-6/U.
- 20. All equipment shall be manufactured for mobile applications. All components and mounting equipment must be secured during transport and hardened to ensure no damage during transport.
- 21. All external devices shall be NEMA 4X rated and field hardened. Controllers and servers for these devices shall be field hardened and at a minimum have the ability to withstand temperatures between -20° F to 140° F.

22. The System shall be equipped with a Grey Island Systems GPS/AVL WAAS transponder.

Grey Island Systems Contact: Chris Jackson 76 Stafford Street Suite 100 Toronto Ontario M6J 2S1 Phone: 416/248-9991 ext. 312 <u>chrisj@interfleet.com</u>

- 23. The Contractor is responsible for establishing and maintaining data communication lines for the System for the duration of this Contract.
- 24. The Tollway reserves the right to operate the System via the Tollway's TIMS Center which may take over control the System(s) remotely. The Contractor must notify the TIMS Center if a System(s) is inoperable for any reason. The Contractor may be required to regularly update the TIMS Center on the System(s) location. The Tollway may move or alter the location of the System at its discretion.
- 25. Batteries shall be capable of running all components from full charge without recharging for 15 days minimum.
- 26. Solar recharging of batteries shall allow continuous full camera use during all weather conditions, year-round in northern Illinois.
- 27. The System shall provide all cabling necessary to provide a connection to commercial power if available within 100 feet of the set up location.
- 28. The System shall provide for means to restrain all wiring cable from the mast to the equipment bracket. Cables shall be restrained from the wind when the System is fully deployed.
- 29. Cables shall move up and down with tower, provide guide for extend/retract of tower.
- 30. Security of components shall be provided by using positive latches and pad locks on housing and operational controls. Controls shall include at least the following:
 - i. Main power switch
 - ii. 12 volt system meter
 - iii. Battery/Solar charge ammeter
- 31. Communications to the TIMS center shall be through an AirLink Raven XE EVDO Rev A Verizon DC Power Model # V2221E VD modem that is IP addressable. The System software shall have the capability of working with encrypted IP addresses as required by the Tollway's TIMS operating software. The modem shall be approved by Verizon Wireless for use on their network.
- 32. One hard copy and two CD/DVD copies of service, parts and operators manuals. Operators manual to include laminated abbreviated reminder sheet to assist operators in usage. There shall be 4 hours of training per System with a total not to exceed 16 hours for Tollway personnel including Traffic Operations Center Personnel.
- 33. The Contractor shall perform maintenance on all field equipment throughout each component specific warranty period and thereafter if requested and paid for by the successful bidder.

34. Traffic Operation Center Integration: Each individual unit shall provide communications to the Traffic Operation Centers systems for all video capture. The portable component requirements listed above pertain to the trailer mounted system and are to ensure the successful delivery of the video to the Traffic Operations Center. The bidder is expected to work with the Tollway's TIMS's integrator (Delcan) to develop the necessary software enhancements to integrate the video into the Tollway's Traffic Center system.

The traffic centers software integrator shall be considered a subcontractor to the successful bidder, so it is ultimately the responsibility of the successful bidder to ensure all components are working properly.

The Software Components shall meet the following requirements:

- a. The bidder shall provide functionality for operators to manually locate trailer on the Traffic Operations Center's system map.
- b. The bidder/Delcan shall create a new icon for the active CCTV camera using existing processes and procedures.
- c. Mousing over the icon shall present a window to the operator with additional options.
- d. Double clicking the icon shall present a CCTV Snapshot.

Interruption of Service. The Contractor shall provide all preventive efforts necessary to achieve uninterrupted service. Upon notification by the Engineer, the Contractor shall respond by arriving at the System location and commencing maintenance – failure to respond within 1/2 hour of said notification will result in the appropriate penalty, per Article 701.01(b)(2) of the Tollway Supplemental Specifications. If service is interrupted for any cause and not restored to full operational service within twelve (12) hours, the defective System shall be removed and a replacement System shall be provided.

If after 24 hours the defective System has not been repaired or replaced, the Contractor shall be assessed a Non-Compliance with Specifications penalty, per Article 701.01(b) (1) of the Tollway Supplemental Specifications.

<u>Method of Measurement.</u> This work will be measured on a calendar month basis for the entire System.

Basis of Payment. Payment for PORTABLE VIDEO TOWER STATIONS will be made at the Contract unit price per calendar month for each System ordered, placed, tested and accepted by the Engineer and the Tollway.

Payment for the PORTABLE VIDEO TOWER STATIONS shall constitute full compensation for furnishing, placing, testing, maintaining, and relocating the System as directed by the Engineer, including the warranty, for all labor, equipment, tools, and incidentals necessary to provide the System as specified, and for providing documentation and training.