



CITY OF
Tulsa
A New Kind of *Energy*.

FAX TRANSMITTAL

Date: November 01, 2016

To: Plan Holders

Company: Contractors

Number of Pages: 09 (Including Cover)

From:

RE: Project No. **143120-4, TMUA-W 16-43**
Mingo & Catfish Channel Improvements

ADDENDUM NO. 1

Please fax or email a signed cover sheet to 918 699-3158 or pebrown@cityoftulsa.org as acknowledgement of receipt.

Thank you,

Priscilla Brown

Signature

Company

Date



ENGINEERING SERVICES DEPARTMENT

October 31, 2016

**ADDENDUM NO. 1
TO
PROJECT NO. 143120-4, TMUA-W 16-43
MINGO & CATFISH CHANNEL IMPROVEMENTS**

This Addendum No. 1 consisting of two (2) items, submitted by Meshek & Associates, PLC, and one (1) item submitted by The City of Tulsa, is hereby made a part of the Contract Documents to the same extent as though it were originally included therein, and shall supersede anything contained in the Plans and Specifications with which it might conflict. **This Addendum shall be attached to the Index Sheet of the Contract Documents and submitted with bid. Failure to do so shall result in the bid being deemed non-responsive.**

This Addendum No. 1 consists of the following:

1. In the Specifications Book change the Bid Opening date from November 11, 2016 to **December 2, 2016.**

All other provisions of the Plans and Specifications shall remain in full force and effect.

CITY OF TULSA


Paul D. Zachary, P.E.
City Engineer


HAS/BJJ/PEB/peb

October 27, 2016

**ADDENDUM NO. 1
TO
MINGO & CATFISH CREEKS CHANNEL IMPROVEMENTS
PROJECT NO. 143120-4, TMUA-16-43**

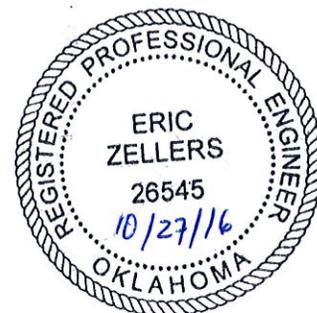
This Addendum No. 1, consisting of two (2) items submitted by Meshek & Associates, is hereby made a part of the Contract Documents to the same extent as though it were originally included therein, and shall supersede anything contained in the Plans and Specifications with which it might conflict. **This Addendum shall be attached to the Index Sheet of the Contract Documents and submitted with the bid. Failure to do so shall result in the bid being deemed non-responsive.**

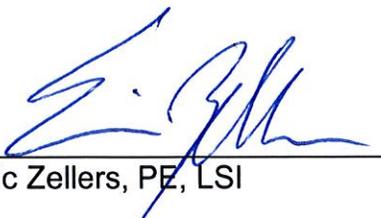
This Addendum No. 1 consists of the following:

SPECIAL PROVISIONS

1. Include the attached Special Provision for Articulating Block Revetment System in the contract documents.
2. Include the attached Special Provision for Urban Right of Way Restoration in the contract documents.

All other provisions of the Plans and Specifications shall remain in full force and effect.



BY: 
Eric Zellers, PE, LSI

DATE/SEAL: 10-27-16

SPECIAL PROVISIONS
ARTICULATING BLOCK REVETMENT SYSTEM

1. Articulating Block Revetment System is made up of concrete blocks connected by cables to form mattresses in order to provide protection from erosion due to water in higher velocity areas.
2. The concrete blocks shall be approximately 15.5 inches square at the base and approximately 11.5 inches at the top face with a center open area consisting of at least 19% open area to provide for vegetation and siltation.
3. Block weight shall be a minimum 37.5-40.5 lbs/sf with a minimum height of 5.5 inches.
4. The mix design for the blocks shall be 4000 psi at 28 days concrete with 4%-7% air entrainment. All ASTM standards shall be met in the production of the concrete. The minimum density of the block shall be 140 lbs/cf.
5. The cables shall be made of polyester revetment cable, and shall be diamond braided polyester filament cord braided over a polyester core. Cables shall be integrally poured with the concrete block and shall traverse through each block in both longitudinal and lateral directions of the mat system. UV degradation protection must be maintained when polyester cord is used. If cables are not integrally poured with the concrete block, shop drawings must be provided showing methodology of how the revetment system's integrity will be maintained.
6. Aluminum "C" clips shall be used to secure loops of adjacent mattresses. The standard placement of clamps shall be placed on 4 foot centers interlocking adjoining mats together. Clamps are required only in applications exceeding 10' per section. In slope applications greater than 2 to 1 where the mats are placed end to end, clamps shall be placed on 4 foot centers interlocking adjoining mats together. If "C" clips are not used, shop drawings must be submitted showing how the mattresses will be locked together.
7. When placing the mattresses, the gap between the mattresses should not be any larger than a 2 inch maximum. If the mattresses are placed with a larger space than 2 inches, it is required to grout the seam between the mattresses.
8. The standard geotextile material used is an 8 oz. needle punched non-woven fabric. The geotextile shall be installed on the sub base prior to installation of the articulated concrete mat. An overlap of 2 ft. to 3 ft. shall be incorporated on three sides of the mat. The overlap shall provide an area for the adjoining mats to be placed upon and prevent undermining of the erosion control system.

9. The supplier shall have a technician experienced in the installation of articulating block revetment system available at the start of an installation where the engineer or contractor have not had experience with the product to assist in any special techniques needed to assure a proper installation.
10. Installation equipment shall have a lifting capacity, capable of completely lifting the concrete mat and the lifting bar during unloading, stockpiling and installing etc.
11. Prepared areas shall be graded to a smooth plane finish. Any roots, debris and stones must be removed and discarded. Specified geotextile to be placed according to manufacturer's recommendations. There shall not be any dragging, tearing or damaging of the geotextile. The mats shall be laid on the geotextile in such a manner to produce a smooth plane surface. Intimate contact with the subsurface is critical to the systems performance in the field. Place block in accordance with typical sections.
12. The outside edges of the mat system shall be keyed in at least one block to prevent undercutting.
13. After the installation of the mats the system shall be backfilled with native soil and struck level then seeded in accordance with Item No. 6 (Seeding Method A). The mat system will allow moisture to traverse back and forth from sub grade to vegetation. The mat system will lend support at an even grade for maintenance vehicles (mowers) to traverse over it. Any surface application should not be placed prior to the inspection of the systems clamping and anchoring if required.
14. Shop drawings must be submitted showing block layout and geometry to be approved by the engineer.
15. Payment shall be by the square yard. All labor, material, and supervision necessary for the installation of the articulating block revetment system shall be included in the price bid for ARTICULATED CONCRETE BLOCK REVETMENT SYSTEM.

SPECIAL PROVISIONS

URBAN RIGHT OF WAY RESTORATION

DESCRIPTION:

The work under this item shall consist of restoring Rights-of-Way. Contractor shall be responsible for the removal and replacement of mailboxes, drains, traffic signs, and curb street address number, sprinkler system or any other improvement within the right of way that is not paid for in other items of work.

CONSTRUCTION REQUIREMENTS:

All existing improvements as called for in this special provision to be replaced or reconstructed shall be restored to substantially the same condition as existed prior to the construction. Contractor shall document by photographing all obstructions and improvements prior to the start of construction.

As the work progresses, all streets shall be thoroughly cleaned of all rubbish, excess earth, rock, and other debris resulting from such work. All clean-up operations at the location of such work shall be accomplished at the expense of the contractor and shall be completed to the satisfaction of the engineer.

IRRIGATION SYSTEMS

DESCRIPTION:

The work shall consist of repairing any irrigation systems inside or outside the street Right of Ways as a result of damages or adjustments needed during the course of the construction to the satisfaction of the engineer.

CONSTRUCTION REQUIREMENT:

Contractor shall repair irrigation systems using like materials and shall include all materials necessary for the proper installation and function of the system. Materials such as valves, controllers, pop up spray and rotary heads, risers, seals, backflow preventer and main line pipe damaged during the course of the construction shall be re installed to its original condition. Excavation, placement, testing, back filling and compacting shall be done as required by the city of Tulsa standard specifications.

STREET ADDRESS AT CURB

DESCRIPTION:

The street address of the building, structure or lot served by the reconstructed driveway shall be painted on the curb of the driveway. Location to be approved by the Engineer. The street address shall face traffic flow.

CONSTRUCTION REQUIREMENTS:

The Street Address to be painted shall conform to city specifications as to size and form, and the quality of paint to be used, as determined by the City of Tulsa Public Works Department.

Street Address placed on the curb shall be done using a vinyl numbers stencils; letters shall be in black paint in figures of the size of three inches in height, and impressed upon a white background of the size of five by eleven inches. Standard stencil lettering with height, color and style shall be as approved by the engineer or in accordance with the most current City of Tulsa Standards.

MAILBOX REMOVAL AND RELOCATION

DESCRIPTION:

Contractor shall remove, reset and/or reconstruct any and all mailboxes within the street right of way.

CONSTRUCTION REQUIREMENTS:

The removal, resetting and/or reconstruction of mail boxes in street right of way shall be coordinated with the local postmaster as required. Mailboxes shall be located no closer than 1' behind the face of curb to face of box.

Where Special mailboxes such as Stone, masonry brick, or non standard mail boxes exist, contractor shall replace all mailboxes in like kind. The kind and quality of materials in which mailboxes shall be reconstructed shall be to the satisfaction of the property owner and approved by the engineer.

The replaced mailbox shall be capable of withstanding wind loading and lateral load associated with the delivery of the mail.

DRAINS

DESCRIPTION:

Contractor shall reestablish drains, roof drains, and other drainage through the curb.

CONSTRUCTION REQUIREMENTS:

Removal, replacement, salvage of drains in street right of way shall be done during road construction phase.

Contractor shall replace all drains in like kind. The kind and quality of materials in which drains shall be reconstructed shall be to the satisfaction of the property owner and approved by the engineer.

All re-established drains shall include a storm water curb opening as described in City of Tulsa Standard Drawing 758.

TRAFFIC SIGNS

DESCRIPTION:

Unless otherwise directed by the plans and specifications, this item shall consist of removing, storing, and resetting all existing traffic signs. Contractor shall remove, store, and reset all traffic signage as required for construction of this project.

CONSTRUCTION REQUIREMENTS:

Roadside signs shall be placed at locations shown on the plans or at existing locations and shall be installed in compliance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).

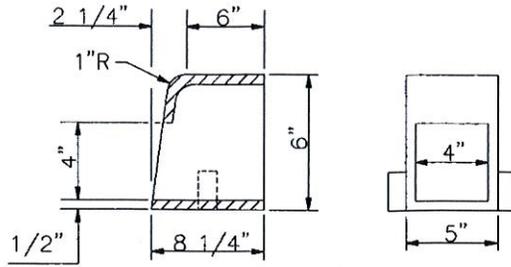
METHOD OF MEASUREMENT:

Irrigation Systems, Street Address at the Curb, Mailbox Removal and Relocation, Drains, and Traffic Signs will be measured by EACH for the project.

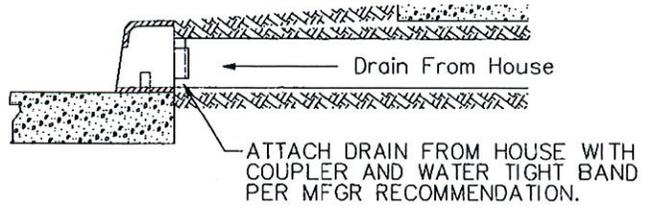
PAYMENT:

Special (C) Urban Right-Of Way Restoration (measured as provided above) will be paid for at the contract unit price by EACH. Such payment shall be full compensation for all equipment, tools, labor, and incidentals necessary to complete the work as specified.

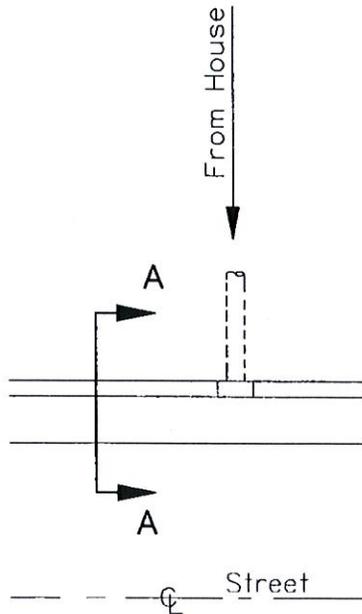
Special (C) Urban Right-Of-Way RestorationEACH



STORM WATER CURB OPENING



SECTION A-A



RESIDENTIAL CURB INLET

1. CONTRACTOR SHALL RECONNECT DRAINS FROM ADJACENT PROPER THROUGH THE CURB.
2. INSTALL R-3262-3 SERIES HEAVY STORM WATER CURB OPENING BY NEENAH OR APPROVED EQUAL
3. FIELD VERIFY SIZE AND LOCATION PRIOR TO PAVING OPERATIONS.
4. CONTRACTOR SHALL CAST INLET PLACE DURING CURB PRODUCTION "CUT IN" NOT ACCEPTED.

RESIDENTIAL STORM CURB OPENING
CITY OF TULSA, OKL

URWR-4