THE CITY OF EDINBURG

ADDENDUM NUMBER ONE (1)

DATE: October 28, 2015

RE: BID NO. 2016-19 CAPITAL IMPROVEMENT PROJECTS SECTION 3 STREET IMPROVEMENTS

OWNER: CITY OF EDINBURG

TO: ALL PROPOSERS, HOLDERS OF SPECIFICATIONS, AND ALL INTERESTED PARTIES TO THE CITY OF EDINBURG

BID OPEN: 3:00 P.M. (Central Time), Monday, November 2, 2015 @ 3:00PM

The following clarifications, corrections and directives shall become part of the Proposal, Contract Documents and Specifications for **BID No. 2016-19 Capital Improvement Projects Section 3 – Street Improvements.**

CLARIFICATION:

1. Items - Specification numbers are from the Texas Department of Transportation 2004 Standards Specifications Manual.

SPECIFICATIONS:

1. TxDot Item: 502 will need to be referenced
2. TxDot item: 508 will need to be referenced
3. TxDot item: 662 will need to be referenced
4. TxDot item: 672 will need to be referenced
5. TxDot item: 677 will need to be referenced

Please make the necessary corrections to the Plans and Proposal, as appropriate.

PLEASE ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED IN THE BID PROPOSAL FORM.

Approved by:

Ponciano N. Longoria, P.E., C.F.M.
Director of Public Works

Please direct your questions regarding the preparation of the bid to Mr. Ponciano Longoria, P.E., C.F.M. at (956) 388-8211.

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ITEM 502

BARRICADES, SIGNS, AND TRAFFIC HANDLING

502.1. Description. Provide, install, move, replace, maintain, clean, and remove upon completion of work all barricades, signs, cones, lights, and other traffic control devices used for traffic handling as indicated on the plans and as directed.

502.2. Construction. Provide traffic control devices that conform to details shown on the plans, the TMUTCD, and the Compliant Work Zone Traffic Control Device List (CWZTCDL) maintained by the Traffic Operations Division.

A. **Implementation.** Before beginning work, designate in writing a Contractor's Responsible Person (CRP) to be the representative of the Contractor who is responsible for taking or directing corrective measures of installation and maintenance deficiencies as soon as possible. The CRP must be accessible by phone and able to respond to emergencies 24 hours per day.

   Follow the traffic control plan (TCP) and install traffic control devices as shown on the plans and as directed. Install traffic control devices straight and plumb. Do not make changes to the location of any device or implement any other changes to the TCP without the approval of the Engineer. Minor adjustments to meet field constructability and visibility are allowed.

   Submit Contractor-proposed TCP changes, signed and sealed by a licensed professional engineer, to the Engineer for approval. The Engineer may develop, sign, and seal Contractor-proposed changes. Changes must conform to guidelines established in the TMUTCD using approved products from the CWZTCDL.

   Maintain traffic control devices by taking corrective action as soon as possible. Corrective action includes but is not limited to cleaning, replacing, straightening, covering, or removing devices. Maintain the devices such that they are properly positioned, spaced, and legible, and that retroreflective characteristics meet requirements during darkness and rain.

B. **Flaggers.** Provide a Contractor representative who has been certified as a flagging instructor through courses offered by the Texas Engineering Extension Service, the American Traffic Safety Services Association, the National Safety Council, or other approved organizations. Provide the certificate indicating course completion when requested. This representative is responsible for training and assuring that all flaggers are qualified to perform flagging duties. A qualified flagger must be independently certified by one of the organizations listed above or trained by the Contractor's certified flagging instructor. Provide the Engineer with a current list of qualified flaggers before beginning flagging activities. Use only flaggers on the qualified list.

   Flaggers must be courteous and able to effectively communicate with the public. When directing traffic, flaggers must use standard attire, flags, signs, and signals and follow the flagging procedures set forth in the TMUTCD.

C. **Removal.** Upon completion of work, remove all barricades, signs, cones, lights, and other traffic control devices used for work-zone traffic handling, unless otherwise shown on the plans.

502.3. Measurement. This Item will be measured by the month.

502.4. Payment. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for

"Barricades, Signs, and Traffic Handling." This price is full compensation for installation, maintenance, adjustments, replacements, removal, materials, equipment, labor, tools, and incidentals.

When the plans establish pay items for particular work called for in the TCP, that work will be measured and paid for under pertinent Items.

A. **Initiation of Payment.** Payment for this Item will begin on the first estimate after barricades, signs, and traffic handling devices have been installed in accordance with the TCP and construction has begun. Installation of the project limit advance warning signs alone is not considered the beginning of construction.

B. **Paid Months.** Monthly payment will be made each succeeding month for this Item provided the barricades, signs, and traffic handling devices have been installed and maintained in accordance with the TCP until the Contract amount has been paid.

   If, within the time frame established by the Engineer, the Contractor fails to provide or properly maintain signs and barricades in compliance with the Contract requirements, as determined by the Engineer, the Contractor will be considered in noncompliance with this Item. No payment will be made for the months in question, and the total final payment quantity will be reduced by the number of months the Contractor was in noncompliance.

C. **Maximum Total Payment Prior to Acceptance.** The total payment for this Item will not exceed 10% of the total Contract amount before final acceptance in accordance with Article 5.8, "Final Acceptance." However, when all work is complete for all project locations, except for work for vegetative establishment and maintenance periods and performance and test periods, the 10% of the total Contract amount may be exceeded. The remaining balance will be paid in accordance with Section 502.4.E, "Balance Due."

D. **Total Payment Quantity.** The quantity paid under this Item will not exceed the total quantity shown in the plans except as modified by change order and as adjusted by Section 502.4.B, "Paid Months." An overrun of the plans quantity for this Item will not be allowed for approving designs; testing; material shortages; closed construction seasons; curing periods; establishment, performance, test, and maintenance periods; failure to complete the work in the number of months allotted; nor delays caused directly or indirectly by requirements of the contract.

E. **Balance Due.** If all work is complete and accepted in accordance with Article 5.8, "Final Acceptance," before payment of the amount allowed by this Article, the balance due will be paid on the next estimate after the initial retainage release estimate or final acceptance for projects without retainage.

F. **Law Enforcement.** Law enforcement required by the Engineer will be paid in accordance with Article 9.5, "Force Account."

END OF ITEM

ITEM 508

CONSTRUCTING DETOURS

508.1. Description. Construct and maintain detours. Remove detours when required.

508.2. Materials.

A. **Embankment.** Use roadway excavation for embankment material or use material from other approved sources.

B. **Temporary Drainage Pipe.** Furnish pipe required for temporary drainage in accordance with details shown on the plans or as directed. Pipe will become the property of the Contractor upon removal.

Temporary use of permanent pipe for use on the project is allowable if the sequence of work permits. If pipe used temporarily is damaged so that it is not acceptable in accordance with applicable Items, it will not be acceptable for incorporation in the final project. The damaged pipe remains the property of the Contractor.

C. **Base and Surfacing.** Furnish base and surfacing materials in accordance with Items as shown on the plans.

508.3. Construction. Construct the detour at the locations and to the lines, grades, and typical sections shown on the plans or as directed, in accordance with pertinent Items. Maintain detours for public travel in a safe and passable condition. The safety of the public and convenience of traffic is of prime importance. Maintain detours in accordance with Article 4.5, "Maintenance of Traffic"; Article 7.7, "Public Safety and Convenience"; Article 7.14, "Contractor's Responsibility for Work"; and this Item.

Remove detours after they are no longer needed for traffic. Removed materials will become the property of the Contractor unless otherwise shown on the plans or directed. Dispose of the materials off the right of way, unless otherwise directed, in accordance with federal, state, and local requirements. If allowed, materials may be disposed of by spreading along the adjacent roadway slopes. If embankment, base, or surfacing is to be reused within the roadway construction or stockpiled for future use, salvage or stockpile in accordance with pertinent Items.

508.4. Measurement. This Item will be measured by the 100-ft. station, the square yard of pavement area, or each detour constructed.

508.5. Payment. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit bid price for "Constructing Detours," or for "Constructing Detours (EBSS)." EBSS (Embankment Base Surface Separate) is used when embankment, base, and surface are paid for separately.

The price bid for "Constructing Detours" is full compensation for furnishing all materials required, including embankment, base, and surfacing; excavation and hauling of excavated material; sprinkling and compacting; furnishing, installing, and removing drainage structures; removal of detour; disposal of materials; and equipment, labor, tools, and incidentals.

The price bid for "Construction Detours (EBSS)" is full compensation for furnishing, installing, and removing drainage structures; removal of detour; disposal of materials; and equipment, labor, tools, and incidentals, except that embankment, flexible base, and surfacing will be measured and paid for in accordance with other pertinent Items.

Maintenance of detours constructed will not be paid for directly but will be subsidiary to this Item. Maintenance of pavement on detours that use existing pavement will be paid for in accordance with Article 7.14, "Contractor's Responsibility for Work."

When the plans require the base and surfacing to be removed and incorporated in the final roadway or stockpiled after use on the detour, the work will be performed, measured, and paid for in accordance with the pertinent Items shown for salvaging, replacing, or stockpiling materials.

All other items not specifically addressed in this Article will be paid for under pertinent Items, unless otherwise shown on the plans.

END OF ITEM

ITEM 662

WORK ZONE PAVEMENT MARKINGS

A. Description

610.2. When short-term markings are allowed for opening to traffic, place longitudinal standard markings no later than 14 calendar days after the placement of the surface. When inclement weather prohibits placement of markings, the 14-day period may be extended until weather permits prope. Furnish, place, and maintain work zone pavement markings.

610.3. Materials. Provide thermoplastic, paint and beads, raised pavement markers, prefabricated pavement markings, temporary flexible reflective roadway marker tabs, or other approved materials for work zone pavement markings. Purchase all pavement marking materials on the open market.

Supply materials meeting:

- DMS-4200, "Pavement Markers (Reflectorized),"
- DMS-4300, "Traffic Buttons,"
- DMS-8240, "Permanent Prefabricated Pavement Markings,"
- DMS-8241, "Removable Prefabricated Pavement Markings,"
- DMS-8242, "Temporary Flexible-Reflective Road Marker Tabs,"
- DMS-8200, "Traffic Paint,"
- DMS-8220, "Hot Applied Thermoplastic," and
- DMS-8290, "Glass Traffic Beads."

A. **Nonremovable Markings.** Use hot-applied thermoplastic or permanent prefabricated pavement markings for nonremovable markings. Paint and beads or other materials are not allowed for nonremovable markings unless shown on the plans.

B. **Removable and Short-Term Markings.** Use raised pavement markers, removable prefabricated pavement markings, temporary flexible reflective roadway marker tabs, or other approved materials for removable and short-term markings. Do not use hot-applied thermoplastic or traffic paint for removable markings. Use removable prefabricated pavement markings on the final pavement surface when the plans specify removable markings.

610.4. Construction. Apply pavement markings in accordance with the following Items:

- Item 666, "Reflectorized Pavement Markings"
- Item 668, "Prefabricated Pavement Markings"
- Item 672, "Raised Pavement Markers."

Placement. Install longitudinal markings on pavement surfaces before opening to traffic. Maintain lane alignment traffic control devices and operations until markings are installed. Install markings in proper alignment in accordance with the TMUTCD and as shown on the plans. Short-term markings will be allowed when standard markings (removable or nonremovable) cannot be placed before opening to traffic, if shown on the plans or directed.r application.

Place standard longitudinal markings no sooner than 3 calendar days after the placement of a surface treatment, unless otherwise shown on the plans.

Apply thermoplastic markings to a minimum thickness of 0.060 in. (60 mils). When paint and beads are allowed, apply to a minimum dry thickness of 0.012 in. (12 mils).

Place short-term markings in proper alignment with the location of the final pavement markings. Remove and replace short-term markings not in alignment at the Contractor's expense.

For removable placements, use of raised pavement markers to simulate longitudinal markings is at the Contractor's option. Use side-by-side raised pavement markers to simulate longitudinal lines wider than 4 in. Do not use raised pavement markers for words, symbols, shapes, or diagonal or transverse lines.

A. **Marking Removal.** Remove markings that conflict with succeeding markings in accordance with Item 677, "Eliminating Existing Pavement Markings and Markers." Remove short-term markings that interfere or conflict with final marking placement immediately before placing final pavement markings, unless otherwise directed. Remove the remainder of the short-term markings before final acceptance.

   Leave as little evidence as possible of the marking when removing marking materials.

B. **Performance Requirements.** All markings must be visible from a distance of at least 300 ft. in daylight conditions and from a distance of at least 160 ft. in nighttime conditions, illuminated by automobile low-beam headlight. Determine visibility distances using an automobile traveling on the roadway under dry conditions.

   Maintain the markings for 30 calendar days after installation. The end of the 30-day maintenance period does not relieve the contractor from the performance deficiencies requiring corrective action identified during the 30-day period. If markings fail to meet the requirements of this Item during the 30-day period, remove and replace them at the Contractor's expense. The 30-calendar day performance requirement will begin again after replacement of the markings.

   The daytime and nighttime reflected color of the markings must be distinctly white or yellow. The markings must exhibit uniform retroreflective characteristics.

610.5. Measurement. This Item will be measured by the foot or by each word, shape, symbol, or temporary flexible reflective roadway marker tab. Each stripe will be measured separately. Raised pavement markers used to simulate a marking will be measured by the foot of marking or by each raised pavement marker.

This is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal, unless modified by Article 9.2, "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

610.6. Payment. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Work Zone Pavement Markings" of the type and color specified and the shape, width, and size specified as applicable. This price is full compensation for furnishing, placing, maintaining, and removing work zone pavement markings and for materials, equipment, labor, tools, and incidentals.

Elimination of nonremovable markings will be paid for under Item 677, "Eliminating Existing Pavement Markings and Markers." Removal of short-term and removable markings will not be paid for directly, but will be subsidiary to this Item.

Type II work zone pavement markings (paint and beads) used as a sealer for Type I pavement markings (thermoplastic) will be paid for under this Item.

ITEM 672

RAISED PAVEMENT MARKERS

672.1. Description. Furnish and install raised pavement markers.

672.2. Materials.

A. **Markers.** Furnish raised pavement markers meeting the requirements of the following Department Material Specifications:

- **Jiggle Bar Tile.** DMS-4100, "Jiggle Bar Tile," types I-A, II-A-A, W, and Y.
- **Reflectorized Pavement Markers.** DMS-4200, "Pavement Markers (Reflectorized)," types I-A, I-C, I-R, II-A-A, and II-C-R.
- **Traffic Buttons.** DMS-4300, "Traffic Buttons," types I-A, I-C, I-R, II-A-A, II-C-R, W, and Y. Round or oval unless otherwise specified in the plans.
- **Plowable Reflectorized Pavement Markers.** DMS-4210, "Pavement Markers (Plowable Reflectorized)," types I-A, I-C, I-R, II-A-A, and II-C-R.

The following are descriptions for each type of raised pavement marker:

- **Type I-A.** Type I-A must contain an approach face that retro-reflects amber light. The body, other than the retro-reflective face must be yellow.
- **Type I-C.** Type I-C must contain an approach face that retro-reflects white light. The body, other than the retro-reflective face must be white or silver-white.
- **Type I-R.** Type I-R must contain a trailing face that retro-reflects red light. The body, other than the retro-reflective face must be white or silver-white.
- **Type II-A-A.** Type II-A-A must contain two retro-reflective faces (approach and trailing) each that retro-reflect amber light. The body, other than the retro-reflective faces, must be yellow.
- **Type II-C-R.** Type II-C-R must contain two retro-reflective faces, an approach face that retro-reflects white light and a trailing face that retro-reflects red light. The body, other than the retro-reflective faces, must be white or silver-white.
- **Type W.** Type W has a white body and no reflective faces.
- **Type Y.** Type Y has a yellow body and no reflective faces.

B. **Adhesives.** Furnish adhesives that conform to the following requirements:

- DMS-6100, "Epoxies and Adhesives."
- DMS-6130, "Bituminous Adhesive for Pavement Markers."

C. **Sampling.** The Engineer will sample in accordance with Tex-729-I.

672.3. Construction. Remove existing raised pavement markers in accordance with Item 677, "Eliminating Existing Pavement Markings and Markers" (except for measurement and payment). Furnish raised pavement markers for each class from the same manufacturer. Place raised pavement markers on the new asphaltic concrete surface or surface treatment only after the new surface has aged at least 14 days.

When shown on the plans, prepare all surfaces in accordance with Item 678, "Pavement Surface Preparation for Markings." Ensure that the bond surfaces are free of dirt, curing compound, grease, oil, moisture, loose or unsound pavement markings, and any other material that would adversely affect the adhesive bond.

Establish pavement marking guides to mark the lateral location of raised pavement markers as shown on the plans and as directed. Do not make permanent marks on the roadway for the guides.

Place raised pavement markers in proper alignment with the guides. Acceptable placement deviations are shown on the plans.

Remove raised pavement markers placed out of alignment or sequence, as shown on the plans or stated in this specification, at Contractor's expense, in accordance with Item 677, "Eliminating Existing Pavement Markings and Markers" (except for measurement and payment).

Use the following adhesive materials for placement of raised pavement markers unless otherwise shown on the plans:

- epoxy adhesive for plowable reflectorized pavement markers.
- bituminous adhesive for jiggle bar tile; reflectorized pavement markers described in DMS-4200, "Pavement Markers (Reflectorized)"; and traffic buttons on bituminous pavements.
- epoxy adhesive for jiggle bar tile, reflectorized pavement markers described in DMS-4200, and traffic buttons on hydraulic cement concrete pavements.

Apply adhesives in sufficient quantity to:

- ensure that 100% of the bonding area of raised pavement markers is in contact with the adhesive, and
- ensure that raised pavement markers, except for plowable markers, are seated on a continuous layer of adhesive and not in contact with the pavement surface.

Apply adhesives in accordance with manufacturer's recommendations unless otherwise required by this Article. Apply bituminous adhesive only when pavement temperature and raised pavement marker temperature are 40°F or higher. Do not heat bituminous adhesive above 400°F. Agitate bituminous adhesive to ensure even heat distribution.

Machine-mix epoxy adhesive.

Furnish raised pavement markers free of rust, scale, dirt, oil, grease, moisture, and contaminants that might adversely affect the adhesive bond.

Place raised pavement markers immediately after the adhesive is applied and ensure proper bonding. Do not use adhesives or any other material that impairs the functional retro-reflectivity of the raised pavement markers.

672.4. Measurement. This Item will be measured by each raised pavement marker.

This is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal, unless modified by Article 9.2, "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments are required.

672.5. Payment. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Jiggle Bar Tile," "Reflectorized Pavement Marker," "Traffic Button," or "Plowable Reflectorized Pavement Marker" of the types specified. This price is full compensation for removing existing markers; furnishing and installing raised pavement markers; and equipment, materials, labor, tools, and incidentals.

ITEM 677

ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS

610.1. Description. Eliminate existing pavement markings and raised pavement markers.

610.2. Materials. Furnish surface treatment materials in accordance with Item 300, "Asphalts, Oils, and Emulsions"; Item 302, "Aggregates for Surface Treatments"; and Item 316, "Surface Treatments." Use approved patching materials for repairing damaged surfaces.

Use a commercial abrasive blasting medium capable of producing the specified surface cleanliness. Use potable water when water is required.

610.3. Equipment. Furnish and maintain equipment in good working condition. Use moisture and oil traps in air compression equipment to remove all contaminants from the blasting air and prevent the deposition of moisture, oil, or other contaminants on the roadway surface.

610.4. Construction. Eliminate existing pavement markings and markers on both concrete and asphaltic surfaces in such a manner that color and texture contrast of the pavement surface will be held to a minimum. Repair damage to asphaltic surfaces, such as spalling, shelling, etc., greater than 1/4 in. in depth resulting from the removal of pavement markings and markers. Dispose of markers in accordance with federal, state, and local regulations. Use any of the following methods unless otherwise shown on the plans.

A. **Surface Treatment Method.** Apply surface treatment material at rates shown on the plans or as directed. Place a surface treatment a minimum of 2 ft. wide to cover the existing marking. Place a surface treatment, thin overlay, or microsurfacing a minimum of 1 lane in width in areas where directional changes of traffic are involved or in other areas as directed by the Engineer.

B. **Burn Method.** Use an approved burning method. For thermoplastic pavement markings or prefabricated pavement markings, heat may be applied to remove the bulk of the marking material prior to blast cleaning. When using heat, avoid spalling pavement surfaces. Sweeping or light blast cleaning may be used to remove minor residue.

C. **Blasting Method.** Use a blasting method such as water blasting, abrasive blasting, water abrasive blasting, shot blasting, slurry blasting, water-injected abrasive blasting, or brush blasting as approved. Remove pavement markings on concrete surfaces by a blasting method only.

D. **Mechanical Method.** Use any mechanical method except grinding. Flail milling is acceptable in the removal of markings on asphalt and concrete surfaces.

610.5. Measurement. This Item will be measured by each word, symbol, or shape eliminated; by the foot of marking eliminated; or by any other unit shown on the plans.

This is a plans quantity measurement item. The quantity to be paid is the quantity shown in the proposal unless modified by Article 9.2, "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

610.6. Payment. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Eliminating Existing Pavement Markings and Markers" of the type and width as applicable. This price is full compensation for the elimination method used and equipment, materials, tools, labor, and

incidentals. Removal of raised pavement markers will not be paid for directly and will be subsidiary to the pertinent bid items.