

# NOTIFICATION OF ADDENDUM

## ADDENDUM NO. 1

**DATED 12/23/2009**

<b>Control</b>	<b>6203-78-001</b>
<b>Project</b>	<b>RMC - 620378001</b>
<b>Highway</b>	<b>IH0010</b>
<b>County</b>	<b>BEXAR</b>

Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an addendum notification which details the changes and the respective proposal pages which were added and/or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached.

Bid insert pages must be returned with the bid proposal submitted to the Department, unless your firm is submitting a bid using a computer print out. The computer print out must be changed to reflect the new bid item information.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum. Acknowledgment of this addendum is not requested if your company has been issued a proposal stamped "This Proposal Issued for Informational Purposes."

You are required to acknowledge receipt of this addendum on the Addendum Acknowledgement form contained in your bid proposal by placing a mark in the box next to the respective addendum.

Failure to Acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

SUBJECT: PLANS AND PROPOSAL ADDENDUMS

PROJECT: RMC - 620378001

CONTROL: 6203-78-001

COUNTY: BEXAR

LETTING: 01/05/2010

REFERENCE NO: 1223

**PROPOSAL ADDENDUMS**

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- PROPOSAL COVER
- BID INSERTS (SH. NO.:
- GENERAL NOTES (SH. NO.: SHEETS 2-5B

- SPEC LIST (SH. NO.:
- SPECIAL PROVISIONS:
- ADDED:

DELETED:

- SPECIAL SPECIFICATIONS:
- ADDED:

DELETED:

- OTHER:

DESCRIPTION OF ABOVE CHANGES  
(INCLUDING PLANS SHEET CHANGES)

REVISED TITLE SHEET OF THE PLANS  
ADDED SHEETS 59A, 59B AND 59C  
REVISED GENERAL NOTES - SHEETS 2-5B

**Project Number:** RMC 6203-78-001

**Highway:** IH 10, Etc.

**County:** Bexar

**Control:** 6203-78-001

### **General Notes**

**TxDOT Project Engineer** – The project will be managed by:

Michael Acosta, PE  
9320 SE Loop 410  
San Antonio, TX 78223  
Phone: (210) 633-1401  
e-mail: macosta@dot.state.tx.us

This project consists of mowing highway right of way, litter pickup, sweeping, guardrail repair, attenuator repair, post and cable fence repair, chain link fence repair, cable barrier system repair, storm water treatment systems and maintenance, cleaning pump house wells, drain inlets and raceways, and storm sewers in Bexar County.

Each contract awarded by the Department stands on its own and as such, is separate from other contracts. A contractor awarded multiple contracts, must be capable and sufficiently staffed to concurrently process any or all contracts at the same time.

The Department anticipates that the guardrail, attenuator, post and cable fence, chain link fence, cable barrier system, and storm water treatment work will start on April 1, 2010. The Department anticipates that the mowing, sweeping, and litter work will start on September 1, 2010. The Department anticipates that the pumphouse, drain, and storm sewer cleaning work will start on September 1, 2011.

Provide and maintain an e-mail address for receipt of work order and correspondence throughout the term of this contract. Respond to all correspondence within 24 hours to confirm receipt.

Notify the appropriate inspector by telephone each morning by 8:15 AM for any daytime or nighttime operations that are scheduled, with work location and time of arrival or reason for not working that day.

There are locations within the contract limits that are under construction by other contractors. Work may be performed in these areas as directed by the Engineer and will be paid for in accordance with the contract items.

There are locations within the contract limits that are under construction on another contract. If this construction prevents any item of work from being performed, payment of the cycle quantities due to the contractor will be reduced to the percent of work actually completed. When construction is completed and work on this contract can be resumed, payment will be made according to the actual amount of work performed.

All work for guardrail repair, attenuator repair, post and cable fence repair, chain link fence repair, cable barrier repair, concrete rail/concrete barrier repair and mowing is callout work and a written work order will be issued as work is needed. A work order will consist of the location of each repair, the bid items for the repairs and the approximate quantity of work to be paid. Work orders will not include a list of required materials for the repairs. Any additional work performed not specified in the work order will require prior approval for payment.

When notified by work order of emergency repair, begin physical work within 48 hours of notification and complete within 96 hours, unless otherwise approved.

Liquidated Damages will be assessed under the following circumstances (for guardrail repair, attenuator repair, post and cable fence repair, chain link fence repair, concrete rail/concrete barrier repair and cable barrier repair):

**Emergency Repairs** – If the emergency repairs on a work order are not completed within 96 hours.

**Non-Emergency Repairs** – If the repairs are not completed within 30 calendar days from the date of the work order.

TXDOT will provide completion forms for the contractor to document work at each location. These completion forms must be turned in each day that work is completed so that final inspection of each location can be performed.

### **Item 2 “Instructions to Bidders”**

This project includes plan sheets that are not part of the bid proposal.

**Project Number:** RMC 6203-78-001

**Highway:** IH 10, Etc.

**County:** Bexar

**Control:** 6203-78-001

View plans on-line or download from the web at:

<http://www.dot.state.tx.us/business/plansonline/plansonline.htm>.

Order plans from any of the plan reproduction companies shown on the web at:

<http://www.dot.state.tx.us/gsd/plans/companies.htm> .

**Item 4 “Scope of Work”**

If agreed upon in writing by both parties to the contract, the contract may be extended for an additional period of time not to exceed two years. The extended contract will be for the original bid quantities (or a percentage of the original bid quantities dependent upon the time extension), original terms and conditions plus any applicable change orders.

When the contract is extended by agreement by both parties, a payment and performance bond will be executed in the amount of the extension before the additional work begins.

**Item 6 “Control of Materials”**

Provide all materials for this project. Materials provided will be new unless otherwise shown on the plans or approved.

All salvageable material obtained after a repair is complete will become the property of the contractor unless otherwise directed.

**Item 8 “Prosecution and Progress”**

Between April 1st and October 31st the Texas Commission on Environmental Quality (TCEQ), is monitoring weather conditions on a daily basis in the San Antonio area to forecast the probability of ozone formation. In the event weather conditions indicate that excessive ozone may occur, the National Weather Service working with the TCEQ will issue an Air Quality Health Alert Day for the following day. TCEQ estimates that approximately 25 Air Quality Health Alert Days might be issued during the ozone formation season.

On Air Quality Health Alert Days, lane closures and the use of small gasoline engines will not be allowed until after 12 noon on all highways inside Loop 1604. The State will notify the Contractor by 4:00 p.m. of the day before the Air Quality Health Alert Day to inform them of the restrictions for the following day and to request their assistance in reducing any other operations that may contribute to an increase in the ozone readings. If these restrictions affect the critical items of work previously scheduled by the Contractor, a working day will not be charged. Time charges on these days will be as determined by the Engineer for each day.

Working days will be computed and charged in accordance with Article 8.3.A.5, Calendar Day Workweek. No work will be performed on Saturdays, Sundays, national or state holidays unless otherwise shown on the plans or approved.

Working hours for guardrail, attenuator, post and cable fence, chain link fence, cable barrier, storm water treatment, litter, CTB repair and pumphouses will be 9:00 AM through 4:00 PM. Working hours for mowing will be daylight hours. Working hours for sweeping, drain cleaning, and storm sewer cleaning will be 9:00 PM through 5:00 AM Sunday night through Friday morning.

**Item 432 “Riprap”**

Mow strips will be reinforced concrete. Install mow strips in accordance with the plans.

**Item 502 “Barricades, Signs, and Traffic Handling”**

Furnish and install all signs, barricades and other incidentals necessary for proper traffic control, in accordance with part VI of the “Texas Manual on Uniform Traffic Control Devices for Streets and Highways” and in accordance with the standard plan sheets. Additional devices may be needed to supplement these requirements. All warning signs shall be factory made and in satisfactory condition.

The signs and traffic control devices shown are minimum requirements. Additional signs and devices may be required to address existing conditions. Traffic control (all signs and devices) will be subsidiary to the various bid items.

**Project Number:** RMC 6203-78-001

**Highway:** IH 10, Etc.

**County:** Bexar

**Control:** 6203-78-001

Move signs as necessary to maintain the same relative spacing between the signs and the work area as work progresses along the roadway. Place signs as indicated on RS-TCP-05 (for mowing, litter pickup, sweeping, post and cable fence repair, chain link fence repair, cable barrier system repair, storm water treatment systems and maintenance and cleaning pump house wells work).

For mowing operations, furnish and install "MOWERS AHEAD" signs with flags in accordance with DMS 8310 "Flexible Roll-up Reflective Signs".

For litter removal operations, furnish and install "LITTER PICKUP AHEAD" head signs with flags in accordance with DMS 8310 "Flexible Roll-up Reflective Signs".

For sweeping operations, furnish and install "SWEEPERS AHEAD" signs with flags in accordance with DMS 8310 "Flexible Roll-up Reflective Signs".

For guardrail, attenuator, chain link fence, post and cable fence, cable barrier system, and concrete rail/concrete barrier work, furnish and install "ROAD WORK AHEAD" signs with flags in accordance with DMS 8310 "Flexible Roll-up Reflective Signs".

For pumphouse cleaning, drain cleaning, and storm water treatment system work, furnish and install "ROAD WORK AHEAD" signs with flags in accordance with DMS 8310 "Flexible Roll-up Reflective Signs".

Mount signs on a portable support.

For nighttime work, mount signs a minimum height of 7 feet, but not more than 9 feet above the pavement surface.

When a Traffic Control Plan (TCP) standard requires the use of one of the following devices, a Type III barricade, channelizing devices or shadow vehicle with orange flags or warning lights, use a shadow vehicle equipped with a Truck Mounted Attenuator (TMA).

Erect temporary traffic control signs in locations that will not obstruct the traveling public's view of the permanent roadway signing or obstruct sight distance at intersections and curves.

Lane closures will require prior approval. Request approval 48 hours in advance of lane closures. If a lane closure has to be cancelled due to weather or other unforeseen circumstances, immediately notify the inspector and reschedule the lane closure as necessary.

When arrowboards are required, provide a standby unit in good working condition at the jobsite ready for immediate use.

Place and remove all traffic control devices within the working hours listed.

#### **Item 540 "Metal Beam Guard Fence"**

This Item is intended for installation of guardrail in locations where guardrail did not previously exist.

After installation, repair all galvanized parts on which the galvanizing has become scratched, chipped, or otherwise damaged. Repair in accordance with Item 445.3.D, "Repairs". This work is subsidiary to the various bid items of the contract.

#### **Item 542 "Removing Metal Beam Guard Fence"**

When removing guardrail, the removal will include complete removal of any existing terminal anchor section when a new terminal anchor section or guardrail end treatment will not be installed.

Remove guardrail that is temporarily attached to concrete barriers for safety purposes. Deliver the guardrail and Michigan end shoes to the TxDOT yard located at 9320 SE LP 410 in San Antonio. The removal and delivery of this rail will be paid for with Item 542 2001 "Removing Metal Beam Guard Fence".

#### **Item 544 "Guardrail End Treatments"**

This Item is intended for:

**Project Number:** RMC 6203-78-001

**Highway:** IH 10, Etc.

**County:** Bexar

**Control:** 6203-78-001

1. Installation of guardrail end treatments (also known as single guardrail terminals-SGTs) in locations where guardrail did not previously exist, or
2. Complete removal of an existing guardrail end treatment when a new guardrail end treatment will not be installed.

When Item 544 is specified, install a Type III SGT.

After installation, repair all galvanized parts on which the galvanizing has become scratched, chipped, or otherwise damaged. Repair in accordance with Item 445.3.D, "Repairs". This work is subsidiary to the various bid items of the contract.

#### **Item 545 "Crash Cushion Attenuators"**

This Item is intended for:

1. Installation of a complete crash cushion attenuator in a location where an attenuator did not previously exist, or
2. Complete removal of a crash attenuator in a location in which no attenuator will be installed.

Perform all site preparation necessary to ensure correct installation of a new crash cushion attenuator (examples – removal of asphalt, debris, etc.). This site preparation is subsidiary to the various bid items of the contract.

The types of systems that may be completely removed include, but are not limited to, Hex Foam Sandwich System Crash Cushion, Quadguard System, React 350, Guardrail Energy Absorbing Terminal, SFPM's, or Hydraulic Crash Cushion System.

Payment for the complete installation and the complete removal of SFPM's will be by the entire attenuator system, not by each module.

#### **Item 550 "Chain Link Fence"**

Include a top rail when installing chain link fence at a new location. Damaged chain link fence may or may not include top rail. Repair chain link fence in-kind.

#### **Item 730 "Roadside Mowing"**

Written notification of when to begin mowing will be given. The type of mowing and tracts to be mowed, the date when time charges begin, and the number of working days for completion of the work will be given on the written notification.

Calculation of working days is based upon mowing 260 acres for Strip Mowing (15 feet), 260 acres for Strip Mowing (30 feet), 260 acres for Full Width Mowing and 10 acres for Spot Mowing per day.

Hand trim around all appurtenances (including but not limited to the face of retaining walls, metal beam guard fence, illumination, cable barrier fence, concrete traffic barrier, post and cable fence and all construction/operational signing) trees, and around all landscape plantings (including mass plantings) located within the right of way and immediately adjacent to areas to be mowed.

When mowing adjacent to the edge of pavement, mow in the direction of traffic flow.

When performing strip mowing, mow the entire right of way from the pavement edge to the right of way line in front of developed areas such as houses, churches, schools, cemeteries and businesses. Mow one 15 foot pass around the end of all drainage structures within the right of way.

There are mulched landscape planting beds with irrigation systems within the limits of this contract. Unless directed otherwise, hand trimming of vegetation along the edge of these beds (planting beds are maintained by others) up to the mulched area is required if it cannot be mowed without displacement of the mulch. If mulch is displaced as a result of mowing or hand trimming, replace the mulch to previous conditions.

At the time of letting for this contract, there may be locations of existing cable barrier fence, MBGF (metal beam guard fence) concrete traffic barrier, post and cable or another type of traffic barrier or divider in the right of way within the limits of this

**Project Number:** RMC 6203-78-001

**Highway:** IH 10, Etc.

**County:** Bexar

**Control:** 6203-78-001

contract. The contractor is responsible for traveling the highways within this contract to determine what type of mowing equipment will be necessary for mowing these narrow areas.

Conventional batwing mowers may not be suitable or acceptable for mowing along the narrow side of existing or new traffic barrier or divider. Encroachment of equipment onto the paved shoulder and closures of the travel lane will not be permitted for mowing this narrow width area. Therefore, the contractor must utilize mowing equipment that will not encroach into or adversely affect traffic in the adjacent travel lane.

There will be no adjustment to the unit bid prices on this contract for mowing and trimming along existing or new traffic barrier, MBGF, post and cable and/or any other type of traffic barrier or divider and any additional or alternative equipment, additional labor, or other anticipated expenses necessary to complete the work required by this contract will be paid for at the unit price bid for the items in this contract. No additional payment will be made for mowing of these narrow width areas along existing or new traffic barrier or divider.

Once work has started, proceed in an expeditious manner until all work on that work order is satisfactorily completed. Liquidated damages will be assessed for any day charged beyond the authorized time on each work order.

#### **“Supplemental Hand Trimming”**

Areas included in this item are those not trimmed under mowing bid items and include but are not limited to vegetation, living or dead, within and adjacent to all paved roadway surfaces, face and back of curbs, within paved or concrete riprap, retaining walls, sidewalks, islands, traffic barriers, raised medians, and all other concrete or asphalt structures. Edging of concrete structures to remove leaves or stems overhanging the edges of these structures is not required.

Trim vegetation to a height that is level with the soil or hard surface. Vegetation in areas with loose gravel or other debris adjacent to travel lanes where trimming to ground level may be hazardous to passing vehicles may be cut to a height of 2”-3” as approved to avoid scattering the material on the pavement surface.

This item may not be used every time a mowing cycle is performed but when it is used, time charges for the cycle will begin on the same day as time charges for the mowing cycle. Time charges for this work are calculated separately from those for mowing cycles. This item will be measured and paid by the centerline mile of each tract as shown on the plans. A centerline mile is defined as the distance measured from the beginning point to the ending point shown on the plans and is measured once regardless of the number of lanes, roadbeds, or structures included within those limits.

#### **Item 734 “Litter Removal”**

Remove all litter from the entire right of way, including all shoulders but excluding the traveled lanes.

Remove litter from behind traffic barrier and dividers, including MBGF and attenuator systems, that is not accessible by sweeping operations.

The Department will issue a written notice to begin the initial litter cycle. Successive cycles will be scheduled as follows.

Perform a cycle for Tracts 1 through 30 as listed in the scope of work for litter on the first day of the month or the first working day thereafter. Complete this cycle within 10 working days.

Perform a second cycle for Tracts 1 through 14 as listed in the scope of work for litter beginning on the twentieth day of the month or the first working day thereafter. Complete this cycle within 5 working days.

Once work has started on a cycle, proceed in an expeditious manner until all work on that cycle is satisfactorily completed. Liquidated damages will be assessed for any working day charged beyond the authorized time. Time will not be charged between cycles.

Whole tires picked up from the right-of-way may be delivered to:

TxDOT  
Bexar County Maintenance Yard  
4615 NW Loop 410  
San Antonio, TX 78229

**Project Number:** RMC 6203-78-001

**Highway:** IH 10, Etc.

**County:** Bexar

**Control:** 6203-78-001

**Item 738 “Cleaning And Sweeping Highways”**

The Department will issue a written notice to begin the initial sweeping cycle. Successive cycles will begin on the first working day of each month.

Provide sweeper operator with a cell phone to notify TransGuide at (210) 731-5139 of the sweeper’s work location. Notify TransGuide a minimum of 30 minutes in advance of beginning work or changing work direction on any freeway main lanes. This requirement is subsidiary to the various bid items of the contract.

Perform a cycle for tracts 1 through 8 as listed in the scope of work for sweeping for Items 738-2002, 738-2004, 738-2006 and 738-2008, beginning on the first day of each month or the first working day thereafter. Complete this cycle within 12 working days.

Removal of debris from pavement surface under this bid item includes but is not limited to the removal of dead animals, tires, tire fragments, wood, furniture, mattresses, household appliances, and scrap metal.

Clean under and around all attenuators and bull pens each cycle.

On divided highways, clean and sweep the left paved shoulders (including raised shoulders with mountable curbs of 5" or less) and left paved gutters.

Removal of aggregate placed on roadways as part of a deicing operation will be paid for under the item “Aggregate Removal.” This work will be placed on a work order separately from the normal sweeping cycle. Clean and Sweep each bridge deck plus 250 ft before and after each bridge deck. Perform this work within 30 calendar days from the date of the work order. Perform this work on Sunday nights through Thursday nights.

Once work has started on a cycle, proceed in an expeditious manner until all work on that cycle is satisfactorily completed. Liquidated damages will be assessed for any working day charged beyond the authorized time.

Material will be disposed of at an approved landfill. The Department has secured a waste code with the BFI landfill located at 7000 IH 10 East in San Antonio. A copy of the chemical analysis is available for review by contacting the District Environmental Office. The use of an alternate landfill may require additional analysis. Costs involved to any analytical laboratory will be at the Contractor’s expense. Provide written receipts showing disposal at licensed disposal facilities.

The Texas Department of Transportation, San Antonio District, will be listed on the manifest as the generator of the waste. The Contractor will sign the manifest as an agent for TxDOT. A letter authorizing the Contractor to sign the manifests will be provided to the Contractor when the contract is awarded. All copies of the manifests, signed by a representative of the landfill, will be returned to the Department within 45 days from the date of disposal.

**Item 764 “Pump Station and Drainage System Cleaning”**

All work on this item is callout work and a work order will be issued as work is needed to be performed.

Complete work within 10 working days of the work order. Once work has started, continuously prosecute the work until all work on that work order is satisfactorily completed. Liquidated damages will be assessed for any day charged beyond the authorized time on each work order.

Follow confined space procedures as outlined in OSHA Standard 29 CFR 1910.146. Have a copy of the permit at the work site whenever entering a confined workspace.

Remove and dispose of all debris from designated areas as directed. Do not dump or stockpile debris on State Property or right of way. Dispose of all debris at an E.P.A.- and State-approved disposal facility.

Debris removed from the pump houses is classified by the Texas Commission of Environmental Quality (TCEQ) as storm water receptor waste. Storm water receptor waste is regulated by the TCEQ as a special waste. Storm water receptor waste must be

**Project Number:** RMC 6203-78-001

**Highway:** IH 10, Etc.

**County:** Bexar

**Control:** 6203-78-001

transported with a non-hazardous special waste manifest or bill of lading identifying the material being transported as “Storm Water Receptor Waste”. The Texas Department of Transportation, San Antonio District, will be listed on the manifest as the generator of the waste. Sign the manifest as an agent for TxDOT. A letter authorizing the contractor to sign the manifest will be provided to the Contractor when the contract is awarded. All copies of the manifest, signed by a representative of the landfill, will be returned to the State within 45 days from the date of disposal.

The Department has secured a waste code with the BFI landfill located at 7000 IH 10 East in San Antonio. A copy of the chemical analysis is available for review by contacting the local TxDOT District Environmental Office. The contractor has the option to obtain a waste code from a different landfill. If the alternate landfill requires additional analysis, the Contractor will have to submit a sample of the waste to an analytical laboratory at the Contractor’s expense.

Provide all water needed to perform the work during this contract. The cost of this water will be considered subsidiary to the various bid items of this contract. For information regarding obtaining a water meter for fire hydrants, contact the San Antonio Water System at (210) 704-7075.

Provide equipment for this contract that is in good working condition and free of contamination.

Pump House Locations are as follows:

US 90 and Callaghan Rd., south of the ROW  
IH 410 and SH 151 (Southwest Corner)  
US 90 and Acme Rd. (Northwest Corner)

Supply all pipe plugs to stop any flows into any pump houses while cleaning.

#### **Item 770 “Guard Fence Repair”**

Replacement of guardrail blockouts and toenailing of blockouts will be subsidiary to the various items. After guardrail repair is complete, repair all galvanized parts on which the galvanizing has become scratched, chipped, or otherwise damaged. Repair galvanizing in accordance with Item 445.3.D, “Repairs”. This work is subsidiary to the various bid items of the contract.

When directed, replace all components of an entire section of guard fence (i.e. rail elements, posts, guardrail end treatments, etc.) from end to end in accordance with the most current standards. This work will be paid for under the applicable bid items under Item 770. Removal of existing guard fence components shall be considered subsidiary to the various bid items.

Installation/replacement of object markers, cable, anchors, struts, bearing plates and other hardware necessary to repair a Guardrail End Treatment will be subsidiary to Items 770-2010, 770-2011 and 770-2012.

“Repair Rail Element W-Beam (770-2001), Thrie Beam (770-2002), or Thrie Beam Transition to W-Beam (770-2003)”

If only the W-Beam portion of a T101 bridge rail is damaged, repair the W-Beam in accordance with this Item. This repair will be paid for as Item 770 2001, “Repair Rail Element (W-Beam).

Guardrail elements attached to concrete bridge rail will be paid as Item 770 2001 “Repair Rail Element (W-Beam) or Item 770 2002, “Repair Rail Element (Thrie-Beam)”.

When a retrofit plate is required to attach a thrie-beam to concrete bridge rail, TxDOT will provide a site specific design, and the Contractor shall provide and install the retrofit plate. This work will be subsidiary to this Item.

When repairing rail element attached to a concrete bridge rail, remove expansion anchors and drill holes (to provide a snug fit for 7/8 inch diameter bolts) completely through the parapet wall with a masonry bit or core drill. Do not use percussion drilling in concrete walls. Mount guardrail to the parapet wall with 7/8 inch diameter bolts that extend completely through the parapet wall. This work is subsidiary to this Item.

“Remove/Replace Timber/Steel Post without Concrete Foundation (770-2004)

**Project Number:** RMC 6203-78-001

**Highway:** IH 10, Etc.

**County:** Bexar

**Control:** 6203-78-001

When timber or steel posts are encountered in riprap without an existing blockout the contractor will remove existing post, saw cut a 18" X 18" square hole and replace post, backfill and compact with suitable material to the lower edge of the riprap and fill area between post and riprap with grout. Perform all grout work on the same day as repairs. This work will be paid with Item 770-2004 Remove/Replace Timber/Steel Post without Concrete Foundation.

Remove/Replace Timber/Steel Post with Concrete Foundation (770-2005)"

Timber/steel post with concrete foundation will be defined as a post that the entire foundation is completely encapsulated in concrete. This work will be paid under Item 770-2005 remove/replace timber/steel post with concrete foundation. All other posts, including those in riprap will be paid using Item 770-2004 Remove/Replace Timber/Steel Post without Concrete Foundation.

Repair damaged steel posts by exposing the post twelve inches below the damaged area. Cut post a minimum of six inches below the damaged area and weld a new post to the existing portion of post using full depth groove weld all the way around the post. Backfill will consist of grout.

When field welding is required, provide a "qualified" person, capable of making welds of sound quality in accordance with Item 448.4.B. "Welder Qualification". Correct unsatisfactory welds at the Contractor's expense.

"Realignment of Posts (770-2006)"

Do not damage existing posts when realigning posts. Drill new post holes and reset existing posts as directed.

If an SGT post must be realigned, removal and resetting of a steel tube will be necessary to complete the realignment of the post. This removal and resetting of the steel tube will be subsidiary to this item. Concrete/grout work may be necessary to perform the realignment of posts. This concrete/grout work will be subsidiary to this item. Work for Item 770 2006 "Realign Posts" may include posts where the guardrail is not damaged. When the Engineer determines that removal of undamaged guardrail is necessary in order to achieve proper realignment of posts and rail, additional payment for removal of old rail and replacement with new rail will be in accordance with Item 770-2001. Additional payment will not be made for the removal and replacement of the rail when the Engineer has not directed such work.

"Remove Guardrail End Treatment/Replace with SGT (770-2009)"

When this item is specified, install a Type III SGT.

Removal of the existing terminal anchor section and/or the existing guardrail end treatment will be considered subsidiary to this Item.

"Replace SGT Impact Head (770-2010),

This item is intended for removal of a damaged SGT impact head and replacement with a new impact head.

"Remove and Reset SGT Impact Head (770-2022)"

This item is intended for removal and re-installation of the impact head when a collision has caused the impact head to be moved out of its required position and the impact head is not damaged.

Remove damaged guardrail from the impact head as recommended by the manufacturer.

**Item 772 "Post and Cable Fence**

Replace any missing cylinder reflectors or any other missing or damaged incidental hardware within the installation or repair area. Work required will be paid for using the various applicable bid items. When Post and Cable Fence (Repair) is specified, the minimum length of repair will be 25 LF.

**Project Number:** RMC 6203-78-001

**Highway:** IH 10, Etc.

**County:** Bexar

**Control:** 6203-78-001

Any additional cable required to be loosened, re-stretched, spliced, and re-tightened as part of the repair or replacement will not be paid for directly, but will be considered subsidiary to this item.

**Item 774 “Attenuator Repair”**

Repair of VIA-SFPM’s will be by each barrel removed and replaced. The addition of any barrel to an existing VIA-SFPM attenuator system necessary to ensure the system meets the current standards will be paid for under this item. This item will be paid for in accordance with item 774-2048 “Repair (VIA-Sand Fill Plastic Barrels)”.

Realignment of existing undamaged VIA barrels will be subsidiary to Item 774 2048, “Repair (VIA-Sand Fill Plastic Barrels)”.

Make repairs and installations in accordance with manufacturer’s instructions and recommendations. The bid price will be full compensation for all materials recommended by the manufacturer. Perform all site preparation necessary to ensure correct installation of a new crash cushion attenuator (examples – removal of asphalt, debris, parts of old attenuator, etc.). This site preparation is subsidiary to the various bid items of the contract.

For repair of Quadguard systems, payment for the first bay will include nose assembly, cartridge and mounting hardware. No additional payment will be made for these items. Reposition undamaged cartridges in a Quadguard repair as necessary to ensure the system meets the specifications. The repositioning of cartridges is subsidiary to the various bid items in the contract. Payment of Quadguard bays will be for damaged bays.

For repair of the TRACC systems, repair or replacement of the nose assembly will be subsidiary to the TRACC repair.

All components and appurtenances (ie, bolts, cable, covers, etc.) required for repair of any attenuator system will be subsidiary to the various bid items.

“Repair (REACT) (774-2010)”

This item is intended to pay for the pulling (over-stretching) of a REACT 350 system during a repair. Object marker replacement/installation on a REACT 350 system is subsidiary to this item. When a REACT 350 system is damaged, reuse the cylinder covers, if deemed salvageable by the Engineer. If the cylinder covers are not salvageable or were not present before the REACT 350 was damaged, obtain and install new cylinder covers. This installation/replacement of cylinder covers is subsidiary to this item. Do not turn cylinders of a damaged REACT 350 system in order to try bring the system back to full length. The replacement of a damaged REACT 350 base track (front and/or rear section) (Ty-S or TY-B) is subsidiary to this item. The replacement of damaged nuts, bolts, washers, anchors, anchor plates, brackets, and the cable system of a damaged REACT 350 system is subsidiary to this item.

“Repair REACT (N) (Cylinders) (774-2027)”

This item is intended to pay for the replacement of damaged cylinders on the REACT 350 system. Payment for the box beams associated with cylinders #1 and #2 is included in payment of this item. Do not turn cylinders of a damaged REACT 350 system in order to try bring the system back to full length. The determination of whether to use this pay item will be made by the Engineer.

**Item 7224 “Repair Cable Barrier System”**

Repair cable barrier system in accordance with the manufacturer’s recommendations as shown on the detail sheets. Re-tensioning the system will not be paid for directly, but will be subsidiary to the various bid items in the contract.

“Replace Posts (TL-3) (7224-2001)”

This item will be paid only when a post and/or posts are completely removed and replaced. If a post is reused, there will be no payment made. The reuse of a post is subsidiary to the various bid items in the contract.

“Replace Cable (TL-3) (7224-2010)”

This item will be paid only when cable is completely removed and replaced. If the cable is loose and just needs to be reattached to posts, there will be no payment made. The reuse of cable is subsidiary to the various bid items in the contract.

**Project Number:** RMC 6203-78-001

**Highway:** IH 10, Etc.

**County:** Bexar

**Control:** 6203-78-001

**Item 7511 “Vacuum Cleaning”**

Perform one cycle of Vacuum Cleaning of Drain Inlets/Raceways once every two (2) months. Perform this work at night, from 9:00 PM until 5:00 AM on Sunday through Thursday nights. A separate work order will be sent for this work. There are approximately 397 drains. Complete this cycle within five (5) working days. The locations for this work will be:

on the IH 410/IH 10 Interchange in NW Bexar County (approx. 126 drains), and  
on IH 410 EB and WB from West Avenue to near Blanco Rd (approx. 28 drains),  
on US 281/IH 410 Interchange (approx 193 drains), and  
on SH 16/IH 410 Interchange (approx. 50 drains).

Once work has started, continuously prosecute the work until all work on that work order is satisfactorily completed. Liquidated damages will be assessed for any day charged beyond the authorized time on each work order.

Empty and clean vacuum truck storage compartments prior to working on this project. Obtain TxDOT inspection of equipment prior to commencing work. A minimal amount of normal wash in the tank will be permitted.

Test, at an approved laboratory, debris or wash water removed that smells of volatiles or exhibits signs of environmental contamination. Provide written receipts showing disposal at licensed disposal facilities for material testing positive for contamination.

Remove and replace grates as needed or directed. Furnish replacement hardware for any missing or damaged nuts, bolts, and washers, unless otherwise approved. This replacement is subsidiary to this item.

**Item 7512 “Maintenance Computer Controlled Cartridge Filter System”**

Trash, Debris and Sediment Removal

Complete each cycle of trash, debris and sediment removal within one working day.

Replacing Filter Cartridges

When performing a site inspection, have on hand sufficient filters to perform replacement of filters at the time of the site inspection. Perform replacement of filters at that time if determined necessary.

Replace the outer screen covering of filter canister holder as necessary. This replacement will be subsidiary to replacing the filter cartridges.

Mowing and Trimming

The Engineer will give written notification of when to begin mowing. Begin mowing within seven (7) calendar days after the date of written notification to begin work and continuously prosecute same with such diligence as will enable the work to be completed within one (1) working day for each basin. Cut all vegetation within the designated areas either by mowing or hand trimming to a height of five (5) inches. Once work has started, continuously prosecute the work until all work on that work order is satisfactorily completed. Liquidated damages will be assessed for any day charged beyond the authorized time on each work order.

At each basin, mow all areas inside the fence. Mow the outside perimeter of the fence to a minimum of five (5) feet, where applicable, within the ROW.

Replacement of Battery

As determined necessary at a site inspection, replace the battery within 48 hours.

Replacement of Bladder

As determined necessary at a site inspection, replace the bladder within 48 hours.

**Item 7517 “Concrete Rail and Concrete Barrier Repair”**

Perform all Ty IV repairs to full depth, from top of the structure to foundation.

**Project Number:** RMC 6203-78-001

**Highway:** IH 10, Etc.

**County:** Bexar

**Control:** 6203-78-001

Attach a Michigan end shoe and guardrail or attach a Thrie-beam assembly (whichever is work ordered) when repairing Concrete Bridge Rail ends that have been damaged. The guardrail/Michigan end shoe or Thrie-beam assembly will be paid for in accordance with the pertinent Item 770 pay items.

Remove guardrail that is temporarily attached to concrete walls for safety purposes. Deliver the guardrail and Michigan end shoes to the TxDOT yard located at 9320 SE LP 410 in San Antonio. The removal and delivery of this rail will be paid for with Item 542 2001 "Removing Metal Beam Guard Fence.

Dowel and tie bar adhesive shall be Type III, Class A or Class C, in accordance with the DMS 6100 "Epoxy and Adhesives."

Place reinforcing steel in accordance with the applicable rail standards for concrete rail repairs.

The contractor has the option to dowel or provide welded splices to existing rail sections during concrete rail repairs.

A minimum dowel embedment depth will be 10 inches.

Perform welded splices in accordance with Item 448 "Structural Field Welding"

Rapid setting concrete/ hardener will conform to DMS 4655 - "Rapid-Hardening Cementing Materials for Concrete Repair" for concrete rail repairs.

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