

116

January 15, 2021 Letting

Notice to Bidders, Specifications and Proposal



**Contract No. 62N13
Various Counties
Section 2020-243-GRR
Various Routes
District 1 Construction Funds**

Prepared by

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Checked by

(Printed by authority of the State of Illinois)



- 1. TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. January 15, 2021 prevailing time at which time the bids will be publicly opened from the iCX SecureVault.
- 2. DESCRIPTION OF WORK.** The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

**Contract No. 62N13
Various Counties
Section 2020-243-GRR
Various Routes
District 1 Construction Funds**

This improvement consists of the repair and installation of guardrail along various expressway and arterial highways in various counties throughout District One.

- 3. INSTRUCTIONS TO BIDDERS.** (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.

(b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS.** This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

By Order of the
Illinois Department of Transportation

Omer Osman,
Acting Secretary

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2021

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS and frequently used RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 4-1-16) (Revised 1-1-21)

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STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted April 1, 2016, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of Various Routes, Section 2020-243-GRR, Various Counties, Contract No. 62N13 and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

Various Routes
Section 2020-243-GRR
Various Counties
Contract No. 62N13

LOCATION OF IMPROVEMENT

This work is located on various State maintained arterial and expressway routes and at other district-wide locations as determined by the Department within the counties of Cook, DuPage, Kane, Lake, McHenry and Will.

DESCRIPTION OF IMPROVEMENT

The work to be completed under this contract consists of installing guardrail at new locations and repairing existing damaged guardrail and traffic barrier terminals on a work order basis. This work includes removing damaged guardrail components and replacing all removed guardrail components with new material furnished by the Contractor. Guardrail shall be repaired according to the details and standards in the plans.

This work also includes removing damaged traffic barrier terminal components and replacing all removed traffic barrier terminal components with new material furnished by the Contractor.

COMPLETION DATE

The Contractor shall schedule his/her operations in order to complete all work orders issued from March 1, 2021 to January 31, 2022, including all clean-up work and open all roadways to traffic on or before January 31, 2022.

The provisions of Article 108.09 of the Standard Specifications shall apply for this contract's completion date.

NOTIFICATION OF STATE ELECTRICAL MAINTENANCE CONTRACTOR

The Contractor prior to the commencement of his work shall notify the State Electrical Maintenance Contractor of his intent to perform this work. Upon request from the Contractor, the State Electrical Maintenance Contractor will locate any State-buried cable, conduit or other electrical facility which may interfere with the Contractor's operations, without charge to him.

Should any damage occur to any State electrical facility through the Contractor's operations, the Contractor shall report the known or suspected damage to the State Maintenance Contractor and the Engineer. If repairs are needed, the Engineer will authorize the Electrical Maintenance Contractor to effect repairs. All repairs or replacement of damaged equipment shall conform to the requirements of the original installation.

The Electrical Maintenance Contractor shall invoice the Contractor directly for the cost of the repair. A copy of this invoice shall be forwarded to the Engineer. Final payment of the contract shall not be processed until a release from the Electrical Maintenance Contractor is furnished to the Engineer.

No extra compensation shall be allowed the Contractor for compliance with these requirements or for any expense incurred to effect repairs to damaged electrical facilities.

PROTECTION FOR DAMAGED LOCATIONS

The Contractor shall be required to install and maintain barricades with flashing lights at priority locations that have not been repaired within (7) seven calendar days after the date of the issuance of the work order.

The Department will initially have barricades installed at the priority locations and the Contractor will have the option to assume the cost of these rented barricades after the (7) seven days referred to above or have the barricades replaced with others. If the Contractor fails to exercise either of the above options, he shall be liable to the Department in the amount of \$2.00 per barricade per day, not as a penalty but as liquidated damages.

GUARDRAIL REPAIR

Effective June 1, 2012

PROSECUTION OF THE WORK

The Engineer will issue a work order to the Contractor prior to the Contractor proceeding with any work on this contract.

INTERPRETATION OF QUANTITIES AND PAYMENT

The quantities in the Summary of Quantities are approximate and include items necessary to repair existing damaged guardrail and an estimate of items necessary to repair damage that may occur from March 1, 2021 to January 31, 2022.

The quantities in the Summary of Quantities may be increased, decreased or deleted. Adjustments in contract unit prices will not be made due to an increase, decrease or deletion of items.

Payment for the work under this contract shall be made according to the schedule of prices in the contract and as herein after described. Prices shall include all labor, materials and equipment necessary to complete the work satisfactorily. Before any payment for work is authorized, for a given work order, all repairs must be completed satisfactorily and the guardrail installation must be functional as intended.

The Contractor is hereby informed and shall understand that payment will be made only for actual quantities utilized and accepted as satisfactory.

WORK ORDER

No work, except for priority work, is to be performed by the Contractor without the issuance of a work order authorizing the work. Work orders may be issued for this contract from April 1 to May 31 from March 1, 2021 to January 31, 2022. A work order will show the class of work, date issued to the Contractor, work order number, location, item description, and quantity of removals or repairs to be made. Only the amount of replacement or repairs shown on the work order is to be done by the Contractor. If, at the time repairs are being made, it is found that additional work is needed, prior approval must be obtained from the Engineer before work is done.

Work for the day will **not** be approved if proposed daily schedule is not submitted **prior to 8:00 a.m. on the preceding work day.** Contractor will have several people trained to ensure all required information arrives **prior to 8:00 a.m. on the preceding work day.**

Any additional work done by the Contractor, without prior approval of the Engineer, will not be paid. A sample work order is included in the special provisions.

The Contractor shall submit a list of completed work from the prior work day. The Contractor shall **not revise the sequence of daily planned work without the Engineer's approval.** The Contractor shall contact the Engineer (on a Monday through Friday), **and at least 24 hours in advance of Saturday, Sunday or holiday work.**

All work orders shall be issued by the Engineer to the Contractor. A copy of the work order will be sent by email. Original will be handed over to the Contractor during subsequent progress meeting.

There is no guaranteed minimum or maximum amount work order issuance for this unpredictable repair work.

The contractor, **assigning only personnel qualified in traffic control and materials**, at least **24 hours in advance**, **must** physically inspect, in detail, all work sites as specified in the work order to determine the correct required traffic control and protection obligations along with necessary new material requirements before proceeding with the work. The contractor **must** paint an “X” on **each section** of the guardrail to be removed along with indicating the limits of each section of guardrail to be removed by painting a **vertical line** at **each end**. The contractor’s markings shall be a different color than the markings placed by the Department of Transportation. In advance of any repair the contractor’s supervisory personnel shall be knowledgeable of and fully able to direct their work force to **all** work order locations.

After the work is completed, the Contractor with the permanent marker shall initial and record the completion date on each section/panel of guardrail and shall initial and record the completion date on the work order, the work order again will be signed and dated by the Engineer when the work has been inspected and accepted. The Contractor will be given one copy of the work order for his/her records.

High Priority and Priority work will be initiated by a verbal order from the Engineer. This verbal order will always be confirmed by a written work order.

Regular work will be initiated by a written work order from the Engineer.

Winter work will be initiated by a written work order from the Engineer.

CLASS OF WORK

1. High Priority Work.

High Priority work is defined as work that is required to correct a condition which the Department deems an immediate hazard to the public as designated by the Engineer to be of such severity that life and/or property are potentially endangered, or is a pressing operational need to the Department and first high priority corrective action is required.

The contractor shall be available to respond to calls for service at **ALL TIMES, including Saturdays, Sundays and Holidays**. The Department requests the work be **completed in 72 hours**.

The location of guardrail and appurtenances to be repaired as high priority work shall be determined by the Engineer and may be required at any time between the starting date and the completion date.

2. Priority Work.

Priority work is defined as work that is required to correct a condition which is a hazard to the public, designated by the Engineer to be a pressing operational need to the Department and priority corrective action is required.

The location of guardrail and appurtenances to be repaired as priority work shall be determined by the Engineer and may be required at any time between the starting date and the completion date.

3. Regular Work.

Regular Work is defined as work that involves those situations where the amount or nature of damage does not pose an immediate hazard to the public. Work of this type shall generally be grouped by locations for efficiency of repair.

4. Winter Work.

Winter work is defined as regular work issued between the dates of December 1 and February 28, inclusive.

Winter work shall require the Contractor to remove snow and ice at the repair site prior to repair. Additional equipment may also be required to repair the damaged location due to frozen ground. This work will not be paid for separately but shall be considered part of the repair work and no additional compensation will be provided.

COMPLETION TIME FOR WORK ORDERS

The Contractor shall schedule his/her operations in order to complete a High Priority Work Order within (72) hours from time of issued.

The Contractor shall schedule his/her operations in order to complete a Priority Work Order within seven (7) calendar days after the date issued.

The Contractor shall schedule his/her operations in order to complete a Regular Work Order within twenty-one (21) calendar days after the date issued.

The Contractor shall schedule his/her operations in order to complete a Winter Work Order within twenty-eight (28) calendar days after the date issued.

The Contractor will be expected to provide the necessary manpower and equipment to satisfactorily complete all work orders for all class of work orders on time.

FAILURE TO COMPLETE OR REPAIR – LIQUIDATED DAMAGES

Time is of the essence in the completion of each work order issued by the Department. Failure to make timely repairs will endanger the public safety, cause public inconvenience, and subject the Department to public criticism. All work shall be completed within the completion time designated for each work order. The contractor understands and agrees that performance will be expected in varying amounts and at various locations designated in the contract in accordance with the work orders issued by the Resident.

Should the contractor fail to complete the work order within the completion time stipulated, the contractor shall be liable and shall pay to the Department, not as a penalty but as liquidated damages, as specified in the following amounts:

WORK ORDER CLASS	LIQUIDATED DAMAGE AMOUNTS
High Priority	\$15 Per Hour
Priority	\$100 Per Calendar Day
Regular Work	\$25 Per Calendar Day
Winter Work	\$25 Per Calendar Day

The Department will deduct these liquidated damages from the monies due or to become due to the Contractor from the Department.

The provisions of Article 108.09 of the Standard Specifications shall apply to contract completions date.

CALENDAR DAYS.

A calendar day is every day shown on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four (24) hours later.

A calendar day will be charged for every day shown on the calendar except as follows:

- a) When the temperature or wind chill factor, as officially reported by the United States Weather Bureau at Chicago O'Hare Field, reaches zero degrees Fahrenheit or below during any portion of that day.
- b) When weather conditions, emergency conditions and/or unforeseen highway operational reasons prevent shoulder or lane closures required for the work.

- c) When the Contractor requests and is denied approval from the Illinois Department of Transportation's Expressway Traffic Operations Engineer for lane, ramp and shoulder closures required for the work on Freeways and/or Expressways in District One.
- d) During any legal holiday period as defined Article 107.09.
- e) Saturdays and Sundays

The Contractor shall petition the Engineer in writing within 48 hours for each non-chargeable calendar day request. Failure to petition in time shall be just cause to deny the petition. Approval of non-chargeable calendar day requests shall be by the sole determination of the Engineer.

SPRAY PAINT

The Contractor shall furnish the necessary spray paint and permanent markers required for the marking of components for removal. The paint shall be iridescent red, iridescent blue, or a color as specified by the Engineer. The furnishing of spray paint will not be paid for separately and the cost will be considered included in the items of work in the contract and no additional compensation will be allowed.

CLEARING

The Contractor is hereby informed and shall understand that at some locations of repairs built up earth and/or debris, water, ice, snow, shrubs, brush, branches, tree limbs, weeds and other vegetation may be encountered that must be removed in order to make the necessary repairs. The clearing of these obstructions as well as any equipment and labor required to deal with existing water regardless of depth shall be considered included as part of the contract and no additional compensation provided. All work shall be done in a neat and workmanlike manner and to the satisfaction of the Engineer.

SEEDING

Damage to turf areas shall be repaired as specified for Seeding, Class 2A in the applicable portions of Section 250 with the following requirements:

Damage occurring after October 1st shall be repaired between April 1st and April 30th of the following year.

This work will not be paid for separately but shall be considered included as part of the contract with no additional compensation provided.

REMOVAL OR REPAIR OF GUARDRAIL

No guardrail shall be removed from State right-of-way under this contract unless each section to be removed is clearly marked for removal. A representative of the Department of Transportation will paint an "X" on the section of guardrail to be removed and will indicate the limits of each section of guardrail to be removed by painting a vertical line at each end. The type and quantity of each piece so marked will be listed on a work order. This work order, when presented to the Contractor by a State Representative, will be authorization for the removal or repair of the guardrail.

Material removed from State right-of-way will be disposed of by the Contractor outside the right-of-way limits at locations provided by him. None of this material shall be reused on this project. The removal, transportation and storage of material removed from State right-of-way under this contract will not be paid for separately, but the cost thereof shall be included in the contract unit price for the replacement items.

New material shall conform to the dimensions and shapes of the material to be replaced except as noted, and shall meet the requirements as specified under each item in these Special Provisions and on the plans. Damaged guardrail that has been removed shall be totally and completely replaced on the same day that it has been removed.

Any ground HMA material adjacent to a concrete footing, which is removed or disturbed during the removal operations shall be restored to its original condition and to the satisfaction of the Engineer after the work has been completed. This restoration will not be paid for separately but shall be considered included with this item of work.

After the work is completed, the Contractor shall mark a rail element plate in the repair area using a paint stick with the work order number and date of repairs. Immediately after the specified repairs have been made, all nut, bolts, washers, posts, rail elements and any other guardrail components, damaged or undamaged, which are to be scrapped, shall be completely removed from the State right-of-way. Failure to do so will be cause for rejection of work.

The Contractor shall install and maintain a minimum of two Type I or Type II Barricades with flashing warning lights for each direction of traffic per damaged location. Additional barricades will be required for each additional length of 25 feet of damaged guardrail per direction of traffic or as directed by the Engineer.

The cost of furnishing, installing, maintaining and removal of the Type I or Type II Barricades will not be paid for separately, but shall be included in the contract unit bid price for the pay items involved.

CONCRETE FOOTINGS

Recurring Special Provisions Check Sheet #25 requires Quality Control/Quality Assurance of Portland Cement Concrete Mixtures. Area Batch Plants usually require a one yard or more minimum order for delivery. The majority of repair Work Order locations for this contract will require less than a yard of concrete to complete repairs. When a Work Order Repair site requires **LESS** than a **yard** of Portland Cement Mix to complete the repair the contractor will be allowed to use a **HIGH EARLY STRENGTH** Concrete Bag Mix. The **required HIGH EARLY STRENGTH** Concrete Bag Mix shall have a **Compressive strength of 2500 psi at 3 days and 3500 psi at 14 days with a slump range of 2"-3"**. When a Work Order Repair site requires a **yard or more** of Portland Cement Mix to complete the repair the contractor shall provide Portland Cement Mix as per Recurring Special Provisions Check Sheet #25 Quality Control/Quality Assurance of Portland Cement Concrete Mixtures requirements.

WOOD RAIL

This work consists of removing and disposing of all sections of damaged wood rub rail attached to the guardrail posts including all associated hardware, and furnishing and replacing in kind with new wood rub rail including all necessary hardware where directed by the Engineer.

Where existing wood rail is attached to a damaged terminal section that needs to be replaced, the wood rail shall not be reinstalled but the wood rail shall be disposed of and the cost shall be included in the cost of the traffic barrier terminal of the type specified.

The wood rub rail shall comply with the requirements of Section 1007 of the Standard Specifications. Preservative treatment shall be in accordance with Article 1007.12. Each piece of timber shall carry a grade stamp and quality assurance stamp indicating class of timber and chemical retention.

The wood railing shall match the existing configuration and size of timbers and be installed closely fitted, accurately set in place, and secured using fasteners and braces. All nuts, bolts, washers and other hardware shall be galvanized and shall match the original and adjacent installation. All joints shall be smooth and closed.

The furnishing and installing of all bolts, nuts, washers and other hardware necessary to comply with the above mentioned Special Provision will not be paid for separately, but shall be included in the contract unit bid price for the pay items involved.

Method of Measurement: Wood rail will be measured for payment in feet.

Basis of Payment: This work shall be paid for at the contract unit price per foot for WOOD RAIL.

VERTICAL ADJUSTMENT OF GUARDRAIL POST

This work consists of adjusting existing steel plate beam guardrail vertically to the height shown in the plans at locations determined and marked by the Engineer. It may be necessary for the Contractor to loosen and/or remove and replace the rail elements in order to adjust the guardrail to the required elevation.

Steel plate beam guardrail to be adjusted vertically will be measured per each guardrail post adjusted vertically.

Basis of Payment: This work will be paid for at the contract unit price each for GUARDRAIL POST-VERTICAL ADJUSTMENT, measured as specified.

RAIL ELEMENT PLATES

This work consists of removing all sections of damaged rail element plates including all associated hardware, and furnishing and installing new 12-gauge guardrail elements including all necessary hardware where directed by the Engineer. Plates, nuts, bolts, washers and other hardware shall be galvanized and shall match the original and adjacent installation as to type and design.

The Contractor shall adjust and realign existing rail element plates adjacent to rail elements removed and replaced as directed by the Engineer. Unbolting, bolting, adjusting, realigning or any other work necessary to accomplish the desired realignment shall be considered included with "Rail Element Plates".

The furnishing and installing of all bolts, nuts, washers and other hardware necessary to comply with the above mentioned Special Provision will not be paid for separately, but shall be included in the contract unit bid price for the pay items involved.

Method of Measurement: In order to clarify measurement and payment for work, the standard length of rail element plate shall be considered to be 12'-6". In the event existing damaged rail element plates to be removed and replaced measures 25 feet in length, they shall be considered as two (2) rail element plates of standard 12'-6" length.

Basis of Payment: This work shall be paid for at the contract unit price each for RAIL ELEMENT PLATES.

RADIUS RAIL ELEMENT PLATES

This work consists of removing all sections of damaged rail element plates including all associated hardware, and furnishing and installing new 12-gauge guardrail curved elements including all necessary hardware where directed by the Engineer. Plates, nuts, bolts, washers and other hardware shall be galvanized and shall match the original and adjacent installation as to type and design.

The Contractor shall adjust and realign existing rail element plates adjacent to rail elements removed and replaced as directed by the Engineer. Unbolting, bolting, adjusting, realigning or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for "Radius Rail Element Plates".

The furnishing and installing of all bolts, nuts, washers and other hardware necessary to comply with the above mentioned Special Provision will not be paid for separately, but shall be considered included in the contract unit bid price for the pay items involved.

The guardrail element plates will be factory fabricated to the radius of curvature necessary to match the existing guardrail configuration or as specified by the Engineer.

In order to clarify measurement and payment for work, the standard length of radial rail element plate shall be considered to be 12'-6". In the event existing damaged rail element plates to be removed and replaced measures 25 feet in length, they shall be considered as two (2) rail element plates of standard 12'-6".

If any portion of a standard 12'-6" rail element plate is factory fabricated to a radial shape the rail element plate shall be paid as one Radius Element Plate each.

Basis of Payment: This work shall be paid for at the contract unit price per each for RADIUS RAIL ELEMENT PLATES (RADIUS).

STEEL POSTS, MODIFIED

This work consists of removing the post which is to be replaced, unbolting the rail elements, and furnishing and setting a new post. The replacement posts, 4" X 6" WF steel with welded base plate, shall conform to the length, size and type of the original installation of single or double faced steel plate beam guardrail. Posts mounted on an existing culvert shall be replaced according to the applicable portions of Standard 630101 or as directed by the Engineer. Sheared bolts shall be replaced in kind. Replacement of sheared bolts, concrete work around the bolts, and any culvert cover fill removal and replacement will not be paid for separately, but shall be considered included with the contract unit price for furnishing and setting steel posts, modified. New steel posts and base plates shall be galvanized after fabrication, and shall match the configuration of the existing installation.

This work shall also include attaching posts to culvert head walls, decks, or retaining walls and shall include any and all port sizes, attachment configurations, methods, or hardware which may be necessary to conform to existing conditions and wall shapes.

Basis of Payment: This work shall be paid for at the contract unit price each for STEEL POSTS, MODIFIED.

SINGLE END SECTION

This work consists of removing damaged single end sections along with all nuts, bolts, washers and other hardware connected with the damaged end sections as directed by the Engineer and furnishing and installing new 12-gauge end sections, all nuts, bolts, washers and other hardware necessary for the installation of the single end sections on single element guardrail. The end sections are to match the existing and adjacent guardrail as to type and design and are to be galvanized to conform with the original and adjacent installation. Refer to Standard 630001.

The furnishing and installing of all bolts, nuts, washers and other hardware necessary to comply with the above mentioned Special Provision will not be paid for separately, but shall be included in the contract unit bid price for the pay items involved.

Basis of Payment: This work shall be paid for at the contract unit price each for SINGLE END SECTION.

RETURN END SECTION

This work consists of removing damaged return end sections along with all nuts, bolts, washers and other hardware connected to the damaged end sections as directed by the Engineer and furnishing and installing new 12-gauge end sections, all nuts, bolts, washers and other hardware necessary to the installation of return end section on double element guardrail. The end sections are to match the existing and adjacent guardrail as to type and design and are to be galvanized to conform with the original and adjacent installation. Refer to Standard 631021.

The furnishing and installing of all bolts, nuts, washers and other hardware necessary to comply with the above mentioned Special Provision will not be paid for separately, but shall be included in the contract unit bid price for the pay items involved.

Basis of Payment: This work will be paid for at the contract unit price each for RETURN END SECTION.

CONNECTING END SECTION

(Varied Types - Refer to Standard 631046)

This work consists of removing damaged end sections and furnishing and installing new end sections that are connected to an existing concrete structure. Replacing anchor bolts and concrete repairs when required, and all nuts, bolts, washers and other hardware, will be included with this item. Other components such as posts and rail elements at the work location, if damaged, will be replaced and paid for according to the provisions in this contract for similar items. All work and material will be in conformity with applicable plans and specifications in this contract.

Basis of Payment: This work will be paid for at the contract unit price each for CONNECTING END SECTION.

STEEL RAILING (SPECIAL)

This work shall consist of furnishing and installing Bridge Rail and Bridge Rail Posts according to Section 509 and the following:

This work consists of removing all sections of damaged bridge bicycle rail and bridge rail posts including all associated fabric, hardware, and furnishing and installing new bridge bicycle rail and bridge rail posts including all necessary hardware where directed by the Engineer. Plates, nuts, bolts, washers and other hardware shall be galvanized and shall match the original and adjacent installation as to type and design.

The Contractor shall adjust and realign existing bridge rail adjacent to rail elements removed and replaced as directed by the Engineer. Unbolting, bolting, adjusting, realigning or any other work necessary to accomplish the desired realignment shall be considered included in the work.

The furnishing and installing of all fabric, bolts, nuts, washers and other hardware necessary to comply with the above mentioned Special Provision will not be paid for separately, but shall be included in the contract unit bid price for the pay items involved.

Basis of Payment: This work shall be paid for at the contract unit price per foot for STEEL RAILING (SPECIAL).

STEEL POSTS

This work consists of removing the damaged guardrail posts (6'-9" or 7'-6" in length) and replacement with new W6 X 9 or W6 X 8.5 or "C" shape steel posts, whichever length conforms with the present installation of single, thrie-beam or double faced steel plate beam guardrail being repaired and according to the standards shown.

The 7'-6" long posts are designed for use at the top of slopes steeper than 3:1 and where single or double beams and channels are to be mounted 2'-6-1/2" above ground level, as measured to the top of the rail.

New steel posts shall be galvanized to match the existing installation. All work shall conform with applicable standards and as directed by the Engineer.

Also, included in this item is any and all hard digging that may be necessary due to (but not limited to), buried utility proximity, and also the coring of an appropriate size hole through Portland Cement Concrete (but not limited to), HMA or other hard finished surface.

Basis of Payment: This work shall be paid for at the contract unit price each for STEEL POSTS.

REALIGNING POSTS

At designated locations of steel plate beam guardrail where the existing undamaged posts can be realigned and restored to the proper alignment without removing said posts from the ground, the posts shall be so plumbed and realigned by a method which does not require the pulling of the posts out of the existing post holes. The posts shall be straightened with their front faces on the line shown on the plans, or as ordered by the Engineer and with their tops and bolt holes at the correct height so that the rail element plates bolted to them will be parallel to the surface of the shoulder.

The work as described under this Special Provision entitled "Realigning Posts" shall be included in the contract unit bid price for the pay items involved.

REMOVING AND RESETTING POSTS

This work consists of unbolting rail elements, removing and resetting existing undamaged steel plate beam guardrail posts to the proper alignment and elevation, including excavating and backfilling and refastening all loosened rail elements, all according to the applicable portions of the Standard Specifications at locations directions by the Engineer.

The reset posts shall be according to Standard 630001 and as approved by the Engineer.

Basis of Payment: This work shall be paid for at the contract unit price each for REMOVING AND RESETTING POSTS.

REATTACHING AND REALIGNING TERMINALS AND RAIL ELEMENT PLATES

This work consists of reattaching and realigning existing traffic barrier terminals and guardrail plates at locations as designated by the engineer where the existing traffic barrier terminals and guardrail plates are undamaged but are loosened or missing bolts or any hardware needed to restore its proper originally installed alignment and function.

This work includes all necessary adjusting, unbolting or refastening of traffic barrier terminals and rail plates to the proper alignment and elevation. This work also includes all cable assemblies, bolts, nuts, washers, and any hardware necessary, all according to the applicable portions of the Standard Specifications and as directed by the Engineer. No used bolts or any hardware will be permitted.

Basis of Payment: This work shall be paid for at the contract unit price per each for REATTACHING AND REALIGNING TERMINALS AND RAIL ELEMENT PLATES.

SPLICE PLATE 12"

This work consists of removing damaged splice plates (Plate "A", Standard 630001), furnishing and installing new splice plates and all nuts, bolts and hardware necessary thereto as directed by the Engineer.

The splice plates will not be paid for separately, but shall be included in the contract unit bid price for "Rail Element Plates".

INSTALLING GUARDRAIL CHANNEL

This work consists of removing the damaged channel which is being replaced and furnishing and installing the new 6'-8.2# X 12'-6" channel where directed by the Engineer to conform to the present installation of steel plate beam guardrail including any new bolts or hardware needed to complete the work

Method of Measurement: In order to clarify measurement and payment for work, the standard length of guardrail channel shall be considered to be 12'-6". In the event existing damaged guardrail channel to be removed and replaced measures 25 feet in length, they shall be considered as two (2) guardrail channels of standard 12'-6" length.

Basis of Payment: This work will be paid for at the contract unit prices each for INSTALLING GUARDRAIL CHANNEL.

STEEL POSTS, SPECIAL

This work consists of removing posts set in concrete, unbolting the rail elements, and furnishing and setting a new post in Portland Cement.

Also, included in this item is any and all hard digging that may be necessary due to (but not limited to), buried utility proximity, and also the coring of an appropriate size hole through Portland Cement Concrete (but not limited to), HMA or other hard finished surface.

Where existing damaged posts are set in concrete the Contractor shall remove the damaged post and concrete, dig or auger a new hole twelve (12) inches in diameter, thirty (30) inches deep, and set a new W6 X 9 or W6 X 8.5 or "C" Shaped Steel post of the same length as that removed in concrete on the same alignment and at the proper height to coincide with the adjacent and adjoining guardrail. New steel posts shall match the existing installation.

Where existing damaged posts are not set in concrete and are shorter than the length specified in the appropriate standard due to impervious material or underground utilities encountered, the new steel posts shall be set in concrete according to the details as shown in Standard 630001 and at the proper height to coincide with the adjacent guardrail. New steel posts shall match the existing installation.

Basis of Payment: This work shall be paid for at the contract unit price each for STEEL POSTS, SPECIAL.

GUARDRAIL BLOCKS

This work consists of removing and replacing existing damaged guardrail block-outs including unbolting and re-bolting rail elements including three beam rail elements, bolts, nuts, washers and other accessories to be replaced.

Replacement block-outs shall be the same dimensions as the existing damaged block-outs and shall conform to the details and standards included in the plans.

The guardrail block-outs used as replacements at locations of Guardrail Blocks shall be untapered block-outs as shown in the detail included in the plans.

Basis of Payment: This work shall be paid for at the contract unit price each for GUARDRAIL BLOCKS.

TRAFFIC BARRIER TERMINAL TYPE 1, NOSE

This work consists of removing and disposing of the damaged nose piece and related hardware holding it in place and installing a new nose as directed by the Engineer. If the Engineer determines damage has occurred to other portions of the traffic barrier terminal, the pay item for Furnishing and Installing Traffic Barrier Terminal Type 1, Special will be used. This item shall also include the furnishing and installing of a Direct Applied Reflectorized Terminal Marker which shall comply with the applicable portions of the contract special provision for "Guardrail And Barrier Wall Delineation" and the plans.

Basis of Payment: This work will be paid for at contract unit price each for TRAFFIC BARRIER TERMINAL TYPE 1, NOSE.

TRAFFIC BARRIER TERMINAL TYPE 1B

This work consists of furnishing and installing all new component parts for Traffic Barrier Terminal Type 1B according to the Standard Specifications, and all of the requirements of the standards. This item will be used primarily at locations adjacent to existing fill slopes. All earth work (excavating and backfilling) and seeding shall not be paid for separately, but shall be included in the contract unit bid price for the pay items involved.

Included in this item is the complete removal of an existing damaged or undamaged terminal section having a length of approximately twenty-five (25) feet, where the rail element is twisted 90°, terminating at an end post flush with the ground. All posts, rail element plates and related components of the existing terminal section, including the steel end post, shall be removed.

The existing steel end post encountered may be set in a concrete anchor or may have been driven according to the alternate requirements permissible at the time of the guardrail installation. In the event a concrete anchor is encountered, said concrete anchor shall be completely removed. After the concrete anchor is removed, the remaining hole shall be filled with sand or other suitable material approved by the Engineer.

Also included in this item is the complete removal of an existing damaged Traffic Barrier Terminal Type 1 or 1A. The Engineer will make this determination and inform the Contractor prior to commencing repairs.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the new traffic barrier terminal, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, guardrail removal, or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved.

Basis of Payment: This work will be paid for at the contract unit price each for TRAFFIC BARRIER TERMINAL TYPE 1B.

TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL

This work shall consist of furnishing and installing Traffic Barrier Terminal Type 1, Special of the type specified by the Engineer from the approved IDOT qualified products list of Traffic Barrier Terminal, Type I Special (Note: Only MASH devices listed on the qualified products list (QPC) are required for all contracts let on or after July 1, 2018), according to Section 631 and the following:

All Terminals shall meet the testing criteria contained in the Manual for Assessing Safety Hardware (MASH) and be approved by the Department (The MASH presents uniform guidelines for crash testing permanent and temporary highway safety features and recommends evaluation criteria to assess test results.)

The terminal shall be installed according to the manufacturer's specifications and shall include all necessary transitions between the terminal and the item to which it is attached.

The terminals shall follow the manufacturer's specifications for installation as to type and number of posts, foundation tubes, and soil plates.

The terminal section shall provide a minimum length of need of 37.5 ft (11.4 m).

Included in this item is the complete removal of an existing damaged or undamaged terminal section having a length of approximately fifty (50) feet, where the rail element is twisted 90, terminating at an end post flush with the ground. All posts, rail element plates and related components of the existing terminal section, including the steel end post, shall be removed. The existing steel end post encountered may be set in a concrete anchor or may have been driven according to the alternate requirements permissible at the time of the guardrail installation. In the event a concrete anchor is encountered, said concrete anchor shall be completely removed. After the concrete anchor is removed, the remaining hole shall be filled with sand or other suitable material approved by the Engineer. The loosened material around posts and holes due to post removal shall be filled with suitable material and compacted firmly using suitable compacting tool.

Also included in this item is the complete removal of an existing damaged or undamaged Traffic Barrier Terminal Type 1, Traffic Barrier Type 1A, Traffic Barrier Terminal Type 1, Special and any guardrail necessary to accommodate the new Traffic Barrier Terminal Type 1, Special. The Engineer will make this determination and inform the Contractor prior to commencing repairs. All old posts shall be removed and the remaining holes shall be filled with sand or other suitable material approved by the Engineer.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the new traffic barrier terminal, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, guardrail removal, or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved.

This item shall also include the furnishing and installing of a Direct Applied Reflectorized Terminal Marker and guardrail reflectors which shall comply with the applicable portions of the contract special provision for "Guardrail And Barrier Wall Delineation" and as shown in the plans and shall be included in the contract unit bid price for the pay items involved.

Basis of Payment: This work shall be paid for at the contract unit price each for TRAFFIC BARRIER TERMINAL TYPE 1, (SPECIAL) TANGENT and for TRAFFIC BARRIER TERMINAL TYPE 1, (SPECIAL) FLARED.

When concrete is encountered poured around terminal posts, any additional work required in removing existing posts or installing new ones shall be considered included in the unit price of the pay item.

TRAFFIC BARRIER TERMINAL TYPE 2

This work consists of furnishing and installing all new component parts for Traffic Barrier Terminal Type 2 according to of the Standard Specifications, and all of the requirements of the standards, at the locations as specified by the Engineer. It shall also include a radius installation.

Included in this item is the complete removal of an existing damaged or undamaged terminal section having a length of approximately twenty-five (25) feet, where the rail element is twisted 90 , terminating at an end post flush with the ground. All posts, rail element plates and related components of the existing terminal section, including the steel end post, shall be removed. The existing steel end post encountered may be set in a concrete anchor or may have been driven according to the alternate requirements permissible at the time of the guardrail installation. In the event a concrete anchor is encountered, said concrete anchor shall be completely removed. After the concrete anchor is removed, the remaining hole shall be filled with sand or other suitable material approved by the Engineer.

Also included in this item is the complete removal of an existing damaged Traffic Barrier Terminal Type 2. The Engineer will make this determination and inform the Contractor prior to commencing repairs.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the new traffic barrier terminal, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved.

Basis of Payment: This work shall be paid for at the contract unit price each for TRAFFIC BARRIER TERMINAL TYPE 2.

When concrete is encountered poured around posts, any additional work required in removing existing posts or installing posts or installing new ones shall be considered included in unit price of the pay item.

TRAFFIC BARRIER TERMINAL TYPE 3, SPECIAL

This work shall consist of furnishing and installing traffic barrier terminals according to Section 631 and the following.

Terminals shall be designed for bidirectional impacts and shall meet the testing criteria contained in National Cooperative Highway Research Program (NCHRP) Report 230 for terminal tested prior to May 16, 1994 or Report 350 for terminals tested after that date, and will have been approved by the Department.

The terminal shall be installed according to the manufacturer's specifications and shall include all necessary transitions between the terminal and the time to which it is attached.

The Contractor may, without additional compensation, use the C.A.T. Impact Attenuating System by Syro Steel Company, QuadGuard by Energy Absorption Systems, Inc., REACT 350, or an approved equivalent may be used.

Included in this item is the complete removal of an existing damaged or undamaged, single or double rail terminal section having a length of approximately twenty-five (25) feet, where the rail element is twisted 90, terminating at an end post flush with the ground. All posts, rail element plates and related components of the existing terminal section, including the steel end post, shall be removed. The existing steel end post encountered may be set in a concrete anchor or may have been driven according to the alternate requirements permissible at the time of the guardrail installation. In the event a concrete anchor is encountered, said concrete anchor shall be completely removed. After the concrete anchor is removed, the remaining hole shall be filled with sand or other suitable material approved by the Engineer.

Also included in this item is the complete removal of an existing damaged Traffic Barrier Terminal Type 3, 3A or Traffic Barrier Terminal Type 3, Special. The Engineer will make this determination and inform the Contractor prior to commencing repairs. All posts, rail element plates and related components of the existing terminal section, as well as any length of the guardrail types needed to accommodate the new Traffic Barrier Terminal Type 3 Special, shall be removed.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the new traffic barrier terminal, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, guardrail removal, or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved. This item shall also include the furnishing and installing of two (2) Direct Applied Reflectorized Terminal Markers which shall comply with the applicable portions of the contract special provision for "Guardrail And Barrier Wall Delineation" and the plans.

Basis of Payment: This work shall be paid for at the contract unit price each for TRAFFIC BARRIER TERMINAL TYPE 3 (SPECIAL).

When concrete is encountered poured around posts, any additional work required in removing existing posts or installing posts or installing new ones shall be considered included in unit price of the pay item.

TRAFFIC BARRIER TERMINAL TYPE 3 SPECIAL, NOSE

This work consists of removing and disposing of the damaged nose piece and related hardware holding it in place and installing a new nose as directed by the Engineer. If the Engineer determines damage has occurred to other portions of the traffic barrier terminal, the pay item for "Traffic Barrier Terminal Type 3, Special" will be used. This item shall also include the furnishing and installing of two (2) Direct Applied Reflectorized Terminal Markers which shall comply with the applicable portions of the contract special provision for "Guardrail And Barrier Wall Delineation" and the plans.

Basis of Payment: This work will be paid for at the contract unit price each for TRAFFIC BARRIER TERMINAL TYPE 3 (SPECIAL), NOSE.

TRAFFIC BARRIER TERMINAL TYPE 5 AND 6

This work consists of furnishing and installing all new component parts for Traffic Barrier Terminal Type5, Type 6 according to the Standard Specifications, and all of the requirements of the Standards at the locations as specified by the Engineer.

Also included in this item is the complete removal of an existing damaged or undamaged sub standard, Traffic Barrier Terminal Type 5 or Type 6 and whatever else may be existing. The Engineer will make this determination and inform the Contractor before commencing repairs. All posts, rail element plates and related components of the existing terminal section, as well as any length of the guardrail types needed to accommodate the new Traffic Barrier Type 5 or 6 shall be removed. Included in this item are all shims and blocks required by the Engineer to facilitate proper attachment to structure walls.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the new traffic barrier terminal, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, guardrail removal, or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved. This work shall also include any nonstandard sized or shaped blocks or hardware required to fit existing conditions.

Basis of Payment: This work will be paid for at the contract unit price each for TRAFFIC BARRIER TERMINAL, of the type specified.

REPAIR TRAFFIC BARRIER TERMINAL TYPE 1

This work consists of removing and replacing damaged components of existing Traffic Barrier Terminal Type 1 according to the applicable portions of the Standard Specifications, Standard B.L.R. 23, and the plans, at the locations as specified by the Engineer. This item shall be used primarily at locations where existing utility and/or geometrics preclude the upgrading to current standard Traffic Barrier Terminal Type 1, Special.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the traffic barrier terminal repaired, as directed by the Engineer. Unbolting, bolting, adjusting, realigning or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved.

Also included in the contract unit bid price for this item is all earth work (excavating and backfilling) and seeding that may be required to complete this work. This item shall also include the furnishing and installing of a Direct Applied Reflectorized Terminal Markers and Guardrail Reflectors which shall comply with the applicable portions of the contract special provision for "Guardrail And Barrier Wall Delineation" and as shown in the plans and shall be included in the contract unit bid price for the pay items involved.

Basis of Payment: This work will be paid for at the contract unit price each for REPAIR TRAFFIC BARRIER TERMINAL TYPE 1.

When concrete is encountered poured around posts, any additional work required in removing existing posts or installing posts or installing new ones shall be considered included in unit price of the pay item.

REPAIR TRAFFIC BARRIER TERMINAL TYPE 1B

This work consists of removing and replacing damaged components of existing Traffic Barrier Terminal Type 1B according to the applicable portions of the Standard Specifications, Standard 631006, and the plans, at the locations as specified by the Engineer.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the traffic barrier terminal repaired, as directed by the Engineer. Unbolting, bolting, adjusting, realigning or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved.

Also included in the contract unit bid price for this item is all earth work (excavating and backfilling) and seeding that may be required to complete this work.

Basis of Payment: This work will be paid for at the contract unit price each for REPAIR TRAFFIC BARRIER TERMINAL TYPE 1B.

REPAIR TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL

This work consists of removing and replacing all damaged components from the approach nose of the terminal, up to and including the second post and the first 25 feet of rail element plate according to the Standard Specifications and at the locations as specified by the Engineer.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to or within the traffic barrier terminal repaired, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, excavating, filling post holes or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved.

This item shall also include the furnishing and installing of a Direct Applied Reflectorized Terminal Marker and Guardrail Reflectors, if needed, which shall comply with the applicable portions of the contract special provision for "Guardrail And Barrier Wall Delineation" and the plans and shall be included in the contract unit bid price for the pay items involved.

The entire 25' rail element plate shall be replaced when an existing rail element plate is damaged. Replacement of the 25' rail element plate shall not be included in the measurement for payment but shall be considered included in the cost of this item. Also included in the cost of this item are cable assemblies, noses and all other hardware.

Basis of Payment: This work will be paid for at the contract unit price per each for REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL.

When concrete is encountered poured around posts, any additional work required in removing existing posts or installing posts or installing new ones shall be considered included in unit price of the pay item.

REPAIR TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL- POST

This work consists of removal and replacement of a damaged wood post and block and related hardware of a Traffic Barrier Terminal Type 1 Special according to the Standard Specifications and at the locations as specified by the Engineer.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the traffic barrier terminal repaired, as directed by the Engineer. Unbolting, bolting, adjusting, realigning or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved.

The cost of removing and replacing all damaged components from the approach nose of the terminal, up to and including the second post and the first 25 feet of rail element plate will be paid for separately.

Basis of Payment: This work will be paid for at the contract unit price per each for REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL - POST.

REPAIR TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL - RAIL ELEMENT PLATE

This work consists of removal and replacement of a damaged 25' rail element plate and related hardware of a Traffic Barrier Terminal Type 1, Special according to the Standard Specifications and at the locations as specified by the Engineer.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the traffic barrier terminal repaired, as directed by the Engineer. Unbolting, bolting, adjusting, realigning or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved.

The cost of removing and replacing all damaged components from the approach nose of the terminal, up to and including the second post and the first 25 feet of rail element plate will be paid for separately.

Basis of Payment: This work will be paid for at the contract unit price per each for REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL - RAIL ELEMENT PLATE.

REPAIR TRAFFIC BARRIER TERMINAL TYPE 2

This work consists of removing damaged components of existing Traffic Barrier Terminal Type 2 according to applicable portions of the Standard Specifications, Standard 631011, and at the locations as specified by the Engineer. This shall also include radius Type 2 locations.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the traffic barrier terminal repaired, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, excavating or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved.

This item shall also include the furnishing and installing of a direct applied reflectorized Terminal Markers and Guardrail Reflectors.

Basis of Payment: This work will be paid for at the contract unit price each for REPAIR TRAFFIC BARRIER TERMINAL, TYPE 2.

When concrete is encountered poured around posts, any additional work required in removing existing posts or installing posts or installing new ones shall be considered included in unit price of the pay item.

REPAIR TRAFFIC BARRIER TERMINAL TYPE 3, SPECIAL

This work consists of removing damaged components of existing Traffic Barrier Type 3, Special according to the Standard Specifications and the locations as specified by the Engineer.

The Contractor shall adjust and realign rail element plates and posts adjacent to the traffic barrier terminal repaired, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, excavating or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved. This item shall also include the furnishing and installing of two (2) Direct Applied Reflectorized Terminal Markers which shall comply with the applicable portions of the contract special provision for "Guardrail And Barrier Wall Delineation" and the plans.

Basis of Payment: This work will be paid for at the contract unit price each for REPAIR TRAFFIC BARRIER TERMINAL TYPE 3 SPECIAL.

When concrete is encountered poured around posts, any additional work required in removing existing posts or installing posts or installing new ones shall be considered included in unit price of the pay item.

REPAIR TRAFFIC BARRIER TERMINAL TYPE 4, 5 AND 6

This work consists of removing and replacing damaged components of existing Traffic Barrier Terminals Type 4, 5 and 6 according to the applicable portions of Section 630, Standards 631021, 631026, 631031, 631036 and the plans, at the locations as specified by the Engineer.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the traffic barrier terminal repaired, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, excavating or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved. This work shall also include any nonstandard sized or shaped blocks or hardware required to fit existing conditions.

The furnishing and installing of transition plates (Thrie-Beam to "W" Section) and all necessary hardware will not be paid for separately, but shall be included in the cost of "Thrie-Beam Guardrail Element Plates".

Basis of Payment: This work will be paid for at the contract unit price each for REPAIR TRAFFIC BARRIER TERMINAL, of the type specified.

REPAIR STEEL PLATE BEAM GUARDRAIL TYPE B AND C

This work consists of removing and replacing damaged steel plate beam guardrail Type B and C with all new components according to the applicable portions of the Standard Specifications, Standard 630001 and as directed by the Engineer. This work shall include proper disposal of damaged guardrail.

Steel Plate Beam Guardrail Type B is utilized to stiffen the guardrail as it approaches a more rigid barrier, such as a concrete structure, by utilizing a post spacing of 3'-1-1/2".

In the event the end section that is connected to the concrete structure is damaged, its replacement will be measured and paid for separately as "Connecting End Section" as described elsewhere in these Special Provisions.

Steel Plate Beam Guardrail Type C consists of guardrail mounted on a concrete structure, with block-outs spaced 3'-1-1/2" and anchored to the concrete structure with two unit expansion anchors. Steel posts are not utilized in this installation.

Method of Measurement: Repair Steel Plate Guardrail Type B and Type C will be measured in linear feet. The length paid for will be the overall length measured along the top edge of the rail element to the limits as designated and marked by the Engineer. Any posts or blocks replaced will not be paid separately and shall be considered included in the unit price of the pay item.

Basis of Payment: This work will be paid for at the contract unit price per foot for REPAIR STEEL PLATE BEAM GUARDRAIL, of the type specified.

THRIE-BEAM GUARDRAIL ELEMENT PLATES

This work consists of removing damaged Thrie-Beam Guardrail Element Plates, including all associated hardware, and furnishing and installing new Thrie-Beam Guardrail Element Plates, including all necessary hardware and metal blockouts according to the details as shown on the plans and as directed by the Engineer.

The Contractor shall adjust and realign guardrail element plates adjacent to guardrail elements removed and replaced as directed by the Engineer. Unbolting, bolting, adjusting, realigning or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved.

The furnishing and installing of transition plates (Thrie-Beam to "W" Section) and all necessary hardware will not be paid for separately, but shall be included in the cost of "Thrie-Beam Guardrail Element Plates".

The furnishing and installing of all bolts, nuts, washers and other hardware necessary to complete the installation will not be paid for separately, but shall be included in the contract unit bid price for the pay items involved.

Method of Measurement: In order to clarify measurement and payment for work, the standard length of thrie-beam guardrail element plates shall be considered to be 12'-6". In the event existing damaged guardrail element plates to be removed and replaced measures 25 feet in length, they shall be considered as two (2) guardrail element plates of standard 12'-6" length.

Basis of Payment: This work shall be paid for at the contract unit price each for THRIE-BEAM GUARDRAIL ELEMENT PLATES, which price shall include realigning adjacent guardrail element plates and/or posts and all associated hardware as specified by the Engineer.

NOTE: In the event a thrie-beam connecting end section attached to a concrete structure is damaged, the removal, replacement and basis of payment shall be according to the special provisions titled "CONNECTING END SECTION" found elsewhere in these Special Provisions.

THRIE BEAM POSTS

This work consists of removing the damaged guardrail posts (6'-9" or 7'-6" in length) and replacement with new W6 X 9 or W6 X 8.5 or "C" shape steel posts, whichever length conforms with the present installation of thrie-beam faced steel plate beam guardrail being repaired and according to the standards shown.

The 7'-6" long posts are designed for use at the top of slopes steeper than 3:1 and where single or double beams and channels are to be mounted 2'-6-1/2" above ground level, as measured to the top of the rail.

New steel posts shall be galvanized to match the existing installation. All work shall conform with applicable standards and as directed by the Engineer.

Basis of Payment: This work shall be paid for at the contract unit price each for THRIE-BEAM POSTS.

THRIE-BEAM RADIUS ELEMENT PLATES

This work consists of removing all sections of damaged thrie beam guardrail radius plates including all associated hardware, and furnishing and installing new 12-gauge guardrail curved elements including all necessary hardware where directed by the Engineer. Plates, nuts, bolts, washers and other hardware shall be galvanized and shall match the original and adjacent installation as to type and design.

The Contractor shall adjust and realign existing rail element plates adjacent to rail elements removed and replaced as directed by the Engineer. Unbolting, bolting, adjusting, realigning or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved.

The furnishing and installing of all bolts, nuts, washers and other hardware necessary to comply with the above mentioned Special Provision will not be paid for separately, but shall be included in the contract unit bid price for the pay items involved.

The guardrail element plates will be factory fabricated to the radius of curvature necessary to match the existing guardrail configuration or as specified by the Engineer.

In order to clarify measurement and payment for work, the standard length of radial rail element plate shall be considered to be 12'-6". In the event existing damaged rail element plates to be removed and replaced measures 25 feet in length, they shall be considered as two (2) rail element plates of standard 12'-6".

If any portion of a standard 12'-6" rail element plate is factory fabricated to a radial shape the rail element plate shall be paid as one Thrie-Beam Radius Element Plate each.

Basis of Payment: This work shall be paid for at the contract unit price per each for THRIE BEAM RADIUS ELEMENT PLATES.

THRIE-BEAM MODIFIED BLOCKS

This work consists of removing the damaged block which is being replaced, unbolting the thrie-beam rail element or elements, including thrie-beam rail element or elements, and furnishing and installing a new thrie-beam modified block. The new block shall be as shown in the plans.

All nuts, bolts, washers, and other hardware required shall be included and shall be included in the contract unit bid price for the pay items involved.

Basis of Payment: This work shall be paid for at the contract unit price each for THRIE-BEAM MODIFIED BLOCKS.

CURB REMOVAL (PARTIAL)

Included in this work is all related transitional work, grading, shoulder widening, roadside turf restoration and any other work required in advance of and adjacent to traffic barrier terminals to be repaired to comply with all details and standards in the plans.

This work shall consist of the partial depth removal of the existing concrete curb to an elevation 1-1/2 inches above the existing gutter flowline where the existing curb and gutter in advance of and adjacent to the guardrail terminal section repair location has a curb height greater than two (2) inches. This work shall be done according to the applicable portions of Section 440 and according to the details and standards in the plans, at locations for "Traffic Barrier Terminal, Type 1 (Special)", and for "Repair Traffic Barrier Terminal Type 1 Special", and as directed by the Engineer.

The Contractor shall remove the top portion of the existing curb in a manner which will provide a smooth straight line by using a self-propelled cold milling process, a concrete sawing process, or a process approved by the Engineer, and shall have an effective means of preventing dust from escaping into the air.

Any curb and gutter damaged by the Contractor's operations shall be replaced at the Contractor's expense.

Basis of Payment: This work will be paid for at the contract unit price per foot for CURB REMOVAL (PARTIAL).

Traffic barrier terminals shall be repaired according to the details and standards in the plans. Curb removal and all related work in advance of and adjacent to traffic barrier terminals to be repaired that is required to comply with all applicable sections of the standard specifications, the details and standards in the plans shall be paid for as CURB REMOVAL (PARTIAL).

The intent of this contract is to provide prompt repair of damaged guardrail and traffic barrier terminals. The locations of damaged guardrail and traffic barrier terminals to be repaired shall be determined by the Engineer.

CONTRACTOR'S RESPONSIBILITY FOR DAMAGE TO EXISTING STRUCTURES

Extreme care shall be exercised when driving posts since there are drainage structures, storm sewers, sign foundations, culverts, electrical and surveillance conduit, and other existing objects within the immediate work limits of this project. Operations are to be conducted in a manner which will minimize damage to the surrounding area.

The Contractor shall be held responsible for any damage to existing structures resulting from his operations. The Contractor shall, at his own expense, restore the damaged structures to a condition equal to that existing before such damaged was done by repairing, rebuilding or replacing it as directed by the Engineer. Where, in the opinion of the Engineer, the Contractor through his operations has excessively damaged the surrounding area, the Contractor shall restore the surrounding area to a condition meeting the satisfaction of the Engineer at his own expense.

No extra compensation will be allowed the Contractor for compliance with this requirement.

THE CONTRACTOR'S LIABILITY

The trees, shrubs and seeded areas on or adjacent to the work should be protected from unnecessary damage by the Contractor's operations in a manner satisfactory to the Engineer. The Contractor shall be responsible for the damage or destruction of property of any character resulting from neglect, misconduct, or omission in the execution or non-execution of the work, or caused by defective work or the use of unsatisfactory materials. Such responsibilities shall not be released until the work has been completed and accepted according to the requirements of these Special Provisions.

Damage to any property, public or private, shall be repaired by the Contractor to a condition equivalent to its original condition at no cost to the Department.

FINAL CLEAN-UP

All final cleaning up shall conform to the requirements set forth in Article 104.06. This will be required at each location where repairs have been completed

SAMPLE WORK ORDER



Guardrail Repair Work Order No. _____

Date: _____ Prepared By: _____ Contract: _____

<input type="checkbox"/> Cook	<input type="checkbox"/> DuPage	<input type="checkbox"/> Kane
<input type="checkbox"/> Lake	<input type="checkbox"/> McHenry	<input type="checkbox"/> Will

<input type="checkbox"/> North	Team Section Name
<input type="checkbox"/> South	

Marked Route: _____ Municipality: _____

Location:					
<u>Item</u>	<u>Unit</u>	<u>Quantity</u>	<u>Item</u>	<u>Unit</u>	<u>Quantity</u>
F&I Rail Ele Pits	Ea.	_____	F&I Single End Section	Ea.	_____
F&I Radius Ele Pits	Ea.	_____	Terminal Marker DA	Ea.	_____
F&I Gdrl Channel	Ea.	_____	Guardrail Marker	Ea.	_____
F&I Gdrl Blocks	Ea.	_____	Repair Spbgr Ty B	m	_____
F&S Steel Posts	Ea.	_____	Repair Spbgr Ty C	m	_____
F&S Steel Post Mod	Ea.	_____	Repair Tr. Bar. Term. T1	Ea.	_____
Gdrl Post Vert Adj	Ea.	_____	Repair Tr. Bar. Term. T1 Spl	Ea.	_____
Rem & Reset Posts	Ea.	_____	Repair Tr. Bar. Term. T2	Ea.	_____
Realign Posts	Ea.	_____	Repair Tr. Bar. Term. T3 Spl	Ea.	_____
Tr. Bar. Term. T1	Ea.	_____	Repair Tr. Bar. Term. T4	Ea.	_____
Tr Bar. Term T1 Spl	Ea.	_____	Repair Tr. Bar. Term. T5	Ea.	_____
F&I Tr. Bar. Term. T1 Nose	Ea.	_____	Repair Tr. Bar. Term. T6	Ea.	_____
Tr. Bar. Term. T2	Ea.	_____	Repair Tr. Bar. Term. T8	Ea.	_____
Tr. Bar. Term. T3 Spl	Ea.	_____	Repair Tr. Bar. TISPLPLT	Ea.	_____
			Repair Tr. Bar. TISPLPST	Ea.	_____

Note: The contractor shall inspect, in detail, the site of work to determine the required traffic control and protection before proceeding with the work.

Special Instructions: _____

Authorization of Work	
Resident Signature	
Date Work Order Issued	Contractor Initials

Certification of Completed Work	
Contractor Signature	
Date Work Order Completed	

Distribution
White – Contractor Canary – Resident Pink – Resident Gold - Inspector

Inspection and Acceptance of Completed Work	
Inspector Signature	
Date Work Order Inspected and Accepted This is to certify that the work order has been completed	

TRAFFIC CONTROL PLAN

Effective: September 30, 1985

Revised: January 1, 2007

Traffic Control shall be according to the applicable sections of the Standard Specifications, the Supplemental Specifications, the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", any special details and Highway Standards contained in the plans, and the Special Provisions contained herein.

Special attention is called to Article 107.09 of the Standard Specifications and the following Highway Standards, Details, Quality Standard for Work Zone Traffic Control Devices, Recurring Special Provisions and Special Provisions contained herein, relating to traffic control.

The Contractor shall contact the District One Bureau of Traffic at least 72 hours in advance of beginning work.

STANDARDS:

701006, 701011, 701101, 701106, 701201, 701301, 701311, 701336,
701400, 701401, 701411, 701421, 701426, 701427, 701428, 701501,
701502, 701601, 701606, 701701, 701801, 701901.

DETAILS:

Entrance Ramp and Closure Details (TC-08)
Traffic Control and Protection for Side Roads, Intersections and Driveways (TC-10)
Traffic Control and Protection at Turn Bays (To Remain Open to Traffic) (TC-14)
Traffic Control Details for Shoulder and Partial Ramp Closures (TC-17)
Signing for Flagging Operations at Work Zone Openings (TC-18)

SPECIAL PROVISIONS:

Protection for Damaged Locations
Public Convenience and Safety (D-1)
Nighttime Work Zone Lighting (District One)
Work Zone Traffic Control (D-1 Maintenance)
Keeping the Expressway Open to Traffic
Failure to Open Traffic Lanes to Traffic
Traffic Control and Protection (Expressways)
Traffic Control for Work Zone Areas
Keeping the Expressway Open to Traffic
Keeping the Arterial Roadways Open to Traffic (Lane Closures Only)
Speed Display Trailer (D-1)
Sign Shop Drawing Submittal
Traffic Control Deficiency Deduction for Pedestrian Barrier And
Guardrail Repair
Traffic Control Devices – Cones (BDE)
Traffic Spotters (BDE)
Work Zone Traffic Control Devices (BDE)

PUBLIC CONVENIENCE AND SAFETY (DIST 1)

Effective: May 1, 2012

Revised: July 15, 2012

Add the following to the end of the fourth paragraph of Article 107.09:

“If the holiday is on a Saturday or Sunday, and is legally observed on a Friday or Monday, the length of Holiday Period for Monday or Friday shall apply.”

Add the following sentence after the Holiday Period table in the fourth paragraph of Article 107.09:

“The Length of Holiday Period for Thanksgiving shall be from 5:00 AM the Wednesday prior to 11:59 PM the Sunday After”

Delete the fifth paragraph of Article 107.09 of the Standard Specifications:

“On weekends, excluding holidays, roadways with Average Daily Traffic of 25,000 or greater, all lanes shall be open to traffic from 3:00 P.M. Friday to midnight Sunday except where structure construction or major rehabilitation makes it impractical.”

NIGHTTIME WORK ZONE LIGHTING (DISTRICT ONE)

Effective: November 1, 2008

Revised: June 15, 2010

Description. This work shall consist of furnishing, installing, maintaining, moving, and removing lighting for nighttime work zones. Nighttime shall be defined as occurring shortly before sunset until after sunrise.

Materials. The lighting shall consist of mobile and/or stationary lighting systems as required herein for the specific type of construction. Mobile lighting systems shall consist of luminaires attached to construction equipment or moveable carts. Stationary lighting systems shall consist of roadway luminaires mounted on temporary poles or trailer mounted light towers at fixed locations. Some lighting systems, such as balloon lights, may be adapted to both mobile and stationary applications.

Equipment. The Contractor shall furnish an illuminance meter for use by the Engineer. The meter shall have a digital display calibrated to NIST standards, shall be cosine and color corrected, and shall have an accuracy of \pm five percent. The sensor shall have a level indicator to ensure measurements are taken in a horizontal plane.

CONSTRUCTION REQUIREMENTS

General. At the preconstruction conference, the Contractor shall submit the type(s) of lighting system to be used and the locations of all devices.

Before nighttime construction may begin, the lighting system shall be demonstrated as being operational.

Nighttime Flagging. The requirements for nighttime flagging shall be according to Article 701.13 of the Standard Specifications and the glare control requirements contained herein.

Lighting System Design. The lighting system shall be designed to meet the following.

- (a) Lighting Levels. The lighting system shall provide a minimum of 5 foot candles (54 lux) throughout the work area. For mobile operations, the work area shall be defined as 25 ft (9 m) in front of and behind moving equipment. For stationary operations, the work area shall be defined as the entire area where work is being performed.

Lighting levels will be measured with an illuminance meter. Readings will be taken in a horizontal plane 3 ft (1 m) above the pavement or ground surface.

- (b) Glare Control. The lighting system shall be designed and operated so as to avoid glare that interferes with traffic, workers, or inspection personnel. Lighting systems with flood, spot, or stadium type luminaires shall be aimed downward at the work and rotated outward no greater than 30 degrees from nadir (straight down). Balloon lights shall be positioned at least 12 ft (3.6 m) above the roadway.

As a large component of glare, the headlights of construction vehicles and equipment shall not be operated within the work zone except as allowed for specific construction operations. Headlights shall never be used when facing oncoming traffic.

- (c) Light Trespass. The lighting system shall be designed to effectively light the work area without spilling over to adjoining property. When, in the opinion of the Engineer, the lighting is disturbing adjoining property, the Contractor shall modify the lighting arrangement or add hardware to shield the light trespass.

Construction Operations. The lighting design required above shall be provided at any location where construction equipment is operating or workers are present on foot. When multiple operations are being carried on simultaneously, lighting shall be provided at each separate work area.

The lighting requirements for specific construction operations shall be as follows.

- (a) Installation or Removal of Work Zone Traffic Control. The required lighting level shall be provided at each truck and piece of equipment used during the installation or removal of work zone traffic control. Headlights may be operated in the work zone.
- (b) Guardrail, Fence and High Tension Cable Barrier Median Repair. The required lighting level shall be provided by mounting a minimum of one balloon light to each piece of mobile construction equipment used in the work zone. This would include all machines but not include trucks used to transport materials and personnel or other vehicles that are continuously moving in and out of the work zone. The headlights of construction equipment shall not be operated within the work zone.
- (c) Pavement Marking and Raised Reflective Pavement Marker Removal/Installation. The striping truck and the attenuator/arrow board trucks may be operated by headlights alone; however, additional lighting may be necessary for the operator of the striping truck to perform the work.

For raised reflective pavement marker removal and installation and other pavement marking operations where workers are on foot, the required lighting level shall be provided at each truck and piece of equipment.

- (d) Sweeping. The required lighting level shall be mounted on the sweeping train vehicles during the sweeping operations. Headlights may be operated in the work zone.
- (e) Layout, Testing, and Inspection. The required lighting level shall be provided for each active area of construction layout, material testing, and inspection. The work area shall be defined as 15 ft (7.6 m) in front and back of the individual(s) performing the tasks.

Nighttime Work Zone Lighting will not be paid for as a separate item, but the cost shall be considered as included in the contract unit prices for the construction items involved, and no additional compensation will be allowed.

WORK ZONE TRAFFIC CONTROL (D-1 MAINTENANCE)

Effective: May 30, 2006

Revised: June 15, 2010

Revise Article 701.19 Method of Measurement to read:

"Traffic Control and Protection will not be measured for payment."

Revise Article 701.20 Basis of Payment to read:

"(a) Traffic Control and Protection will not be paid for as separate items, but the costs shall be considered as included in the contract unit prices for the construction items involved, and no additional compensation will be allowed.

(b) Work or revisions in the phasing of construction or maintenance operations may require traffic control to be installed in accordance with a Standard other than those included in the plans. In such cases, the Standards will be made available to the Contractor at least one week in advance of the change in traffic control. Payment for traffic control required by these added Standards will be according to Article 109.04. Revisions or modifications to increase the traffic control protection shown in the contract shall be submitted by the Contractor for approval by the Engineer. A reduction of the traffic control shown in the contract will not be allowed."

KEEPING THE EXPRESSWAY OPEN TO TRAFFIC

Effective: March 22, 1996

Revised: January 21, 2015

Whenever work is in progress on or adjacent to an expressway, the Contractor shall provide the necessary traffic control devices to warn the public and to delineate the work zone as required in these Special Provisions, the Standard Specifications, the State Standards and the District Freeway details. All Contractors' personnel shall be limited to these barricaded work zones and shall not cross the expressway.

The Contractor shall request and gain approval from the Illinois Department of Transportation's Expressway Traffic Operations Engineer at www.idotlcs.com twenty-four (24) hours in advance of all daily lane, ramp and shoulder closures and 7 days in advance of all permanent and weekend closures on all Freeways and/or Expressways in District One. This advance notification is calculated based on workweek of Monday through Friday and shall not include weekends or Holidays.

Shoulder closures or partial ramp closures (per attached TC-17) will not be permitted on weekdays (Monday through Friday) from 5:00 A.M. to 9:00 A.M. and from 3:00 P.M. to 7:00 P.M. Lane and ramp closures are normally not permitted during the day. Exact hours will be determined by the Expressway Traffic Control Engineer.

Narrow Lanes and permanent shoulder closures will not be allowed between Dec. 1st and April 1st.

All daily lane closures shall be removed during adverse weather conditions such as rain, snow, and/or fog and as determined by the Engineer. Also, the contractor shall promptly remove their lane closures when Maintenance forces are out for snow and ice removal.

Additional lane closure hour restrictions may have to be imposed to facilitate the flow of traffic to and from major sporting events and/or other events.

Private vehicles shall not be parked in the work zone. Contractor's equipment and/or vehicles shall not be parked on the shoulders or in the median during non-working hours. The parking of equipment and/or vehicles on State right-of-way will only be permitted at the locations approved by the Engineer.

FAILURE TO OPEN TRAFFIC LANES TO TRAFFIC

Effective: March 22, 1996

Revised: February 9, 2005

Should the Contractor fail to completely open and keep open all the traffic lanes to traffic in accordance with the limitations specified under the Special Provisions for "Keeping the Expressway Open to Traffic", the Contractor shall be liable to the Department for the amount of:

One lane or ramp blocked = \$ **2000 / 15 min**

Not as a penalty but as liquidated and ascertained damages for each and every 15 minute interval or a portion thereof that a lane is blocked outside the allowable time limitations. Such damages may be deducted by the Department from any monies due the Contractor. These damages shall apply during the contract time and during any extensions of the contract time.

TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)(MAINTENANCE)

Effective: March 8, 1996

Revised: April 1, 2019

Description. This work shall include furnishing, installing, maintaining, replacing, relocating, and removing all traffic control devices used for the purpose of regulating, warning, or directing traffic. Traffic control and protection shall be provided as called for in the plans, applicable Highway Standards, District One Expressway details, Standards and Supplemental Specifications, these Special Provisions, or as directed by the Engineer.

General. The governing factor in the execution and staging of work for this project is to provide the motoring public with the safest possible travel conditions on the expressway through the construction zone. The Contractor shall arrange his operations to keep the closing of lanes and/or ramps to a minimum.

The Contractor shall be responsible for the proper location, installation, and arrangement of all traffic control devices. Special attention shall be given to existing warning signs and overhead guide signs during all construction operations. Warning signs and existing guide signs with down arrows shall be kept consistent with the barricade placement at all times. The Contractor shall immediately remove, completely cover, or turn from the motorist's view all signs which are inconsistent with lane assignment patterns.

The Contractor shall coordinate all traffic control work on this project with adjoining or overlapping projects, including barricade placement necessary to provide a uniform traffic detour pattern. When directed by the Engineer, the Contractor shall remove all traffic control devices that were furnished, installed, or maintained by him under this contract, and such devices shall remain the property of the Contractor. All traffic control devices shall remain in place until specific authorization for relocation or removal is received from the Engineer.

Additional requirements for traffic control devices shall be as follows.

- (a) Traffic Control Setup and Removal. The setting and removal of barricades for the taper portion of a lane closure shall be done under the protection of a vehicle with a truck/trailer mounted attenuator and arrow board per State Standard 701428 and Section 701 of the Standard Specifications. Failure to meet this requirement will be subject to a Traffic Control Deficiency. The deficiency will be calculated as outlined in Article 105.03 of the Standard Specifications. Truck/trailer mounted attenuators shall comply with Article 1106.02(g) or shall meet the requirements of NCHRP 350 Test Level 3 with vehicles used in accordance with manufacturer's recommendations and requirements.
- (b) Sign Requirements
 - (1) Sign Maintenance. Prior to the beginning of construction operations, the Contractor will be provided a sign log of all existing signs within the limits of the construction zone. The Contractor is responsible for verifying the accuracy of the sign log. Throughout the duration of this project, all existing traffic signs shall be maintained by the Contractor. All provisions of Article 107.25 of the Standard Specifications shall apply.
 - (2) Work Zone Speed Limit Signs. Work zone speed limit signs shall be installed as required in Article 701.14(b) and as shown in the plans and Highway Standards. Based upon the existing posted speed limit, work zone speed limits shall be established and signed as follows.

- a. Existing Speed Limit of 55mph or higher. The initial work zone speed limit assembly, located approximately 4200' before the closure, and shall be 55mph as shown in 701400. Additional work zone 45mph assemblies shall be used as required according to Article 701.14(b) and as shown in the Highway Standards and plans. WORK ZONE SPEED LIMIT 55 PHOTO ENFORCED assemblies may be omitted when this assembly would normally be placed within 1500 feet of the END WORK ZONE SPEED LIMIT sign. If existing speed limit is over 65mph then additional signage should be installed per 701400.
 - b. Existing Speed Limit of 45mph. The advance 55mph work zone speed limit assembly shown in 701400 shall be replaced with a 45mph assembly. Additional work zone 45mph assemblies shall be used as required according to Article 701.14(b) and as shown in the Highway Standards and plans. WORK ZONE SPEED LIMIT 55 PHOTO ENFORCED assemblies shall be eliminated in all cases. END WORK ZONE SPEED LIMIT signs are required.
- (3) Exit Signs. The exit gore signs as shown in Standard 701411 shall be a minimum size of 48 inch by 48 inch with 12 inch capital letters and a 20 inch arrow. EXIT OPEN AHEAD signs shown in Standard 701411 shall be a minimum size of 48 inch by 48 inch with 8 inch capital letters.
- (4) Uneven Lanes Signs. The Contractor shall furnish and erect "UNEVEN LANES" signs (W8-11) on both sides of the expressway, at any time when the elevation difference between adjacent lanes open to traffic equals or exceeds one inch. Signs shall be placed 500' in advance of the drop-off, within 500' of every entrance, and a minimum of every mile.
- (c) Drums/Barricades. Check barricades shall be placed in work areas perpendicular to traffic every 1000', one per lane and per shoulder, to prevent motorists from using work areas as a traveled way. Check barricades shall also be placed in advance of each open patch, or excavation, or any other hazard in the work area, the first at the edge of the open traffic lane and the second centered in the closed lane. Check barricades, either Type I or II, or drums shall be equipped with a flashing light.

To provide sufficient lane widths (10' minimum) for traffic and also working room, the Contractor shall furnish and install vertical barricades, in lieu of Type II or drums, along the cold milling and asphalt paving operations. The vertical barricades shall be placed at the same spacing as the drums.

- (d) Vertical Barricades. Vertical barricades shall not be used in lane closure tapers, lane shifts, exit ramp gores, or staged construction projects lasting more than 12 hours. Also, vertical barricades shall not be used as patch barricades or check barricades. Special attention shall be given, and ballast provided per manufacture's specification, to maintain the vertical barricades in an upright position and in proper alignment.

- (e) Temporary Concrete Barrier Wall. Prismatic barrier wall reflectors shall be installed on both the face of the wall next to traffic, and the top of sections of the temporary concrete barrier wall as shown in Standard 704001. The color of these reflectors shall match the color of the edgelines (yellow on the left and crystal or white on the right). If the base of the temporary concrete barrier wall is 12 inches or less from the travel lane, then the lower slope of the wall shall also have a 6 inch wide temporary pavement marking edgeline (yellow on the left and white on the right).
- (f) Flaggers. One flagger will be required for each separate activity of an operation that requires frequent construction vehicles to enter or leave a work zone to or from a lane open to traffic. Temporary traffic control and flagger position shall be according to District One Detail TC-18 – Expressway Flagging, or as directed by the Engineer.
- (g) Full Expressway Closures. Full Expressway Closures will only be permitted for a maximum of 15 minutes during the allowable hours listed in the Keeping the Expressway Open to Traffic Special Provision. During Full Expressway Closures, the Contractor will be required to close off all lanes except one, using Freeway Standard Closures. The Contractor will be required to provide one changeable message sign to be placed at the direction of the Engineer. The sign shall display a message as directed by the Engineer. A Maintenance of Traffic Plan shall be submitted to the District One Expressway Traffic Control Supervisor 14 days in advance of the planned work; including all stage changes. The Maintenance of Traffic Plan shall include, but not be limited to: lane and ramp closures, existing geometrics, and equipment and material location. The District One Expressway Traffic Control Supervisor (847-705-4151) shall be contacted at least 3 working days in advance of the proposed road closure and will coordinate the closure operation with police forces.

Method of Measurement.

Traffic Control and Protection will not be measured for payment.

All work for furnishing, installing, maintaining, replacing, relocating, and removing traffic control devices required in the plans and these Special Provisions shall be included in the contract unit prices for the construction item involved. Traffic control and protection required under Standards 701101, 701400, 701401, 701402, 701406, 701411, 701416, 701426, 701428, 701446, 701901 and District details TC-8, TC-9, TC-17, TC-18 and TC-25 will be included with this item.

Basis of Payment.

- (a) Traffic Control and Protection will not be paid for as separate items, but the costs shall be considered as included in the contract unit prices for the construction items involved, and no additional compensation will be allowed.
- (b) Work or revisions in the phasing of construction or maintenance operations may require traffic control to be installed in accordance with a Standard other than those included in the plans. In such cases, the Standards will be made available to the Contractor at least one week in advance of the change in traffic control. Payment for traffic control required by these added Standards will be according to Article 109.04. Revisions or modifications to increase the traffic control protection shown in the contract shall be submitted by the Contractor for approval by the Engineer. A reduction of the traffic control shown in the contract will not be allowed.

TRAFFIC CONTROL FOR WORK ZONE AREAS

Effective: September 14, 1995

Revised: January 1, 2007

Work zone entry and exit openings shall be established daily by the Contractor with the approval of the Engineer. All vehicles including cars and pickup trucks shall exit the work zone at the exit openings. All trucks shall enter the work zone at the entry openings. These openings shall be signed in accordance with the details shown elsewhere in the plans and shall be under flagger control during working hours.

The Contractor shall plan his trucking operations into and out of the work zone as well as on to and off the expressway to maintain adequate merging distance. Merging distances to cross all lanes of traffic shall be no less than 1/2 mile. This distance is the length from where the trucks enter the expressway to where the trucks enter the work zone. It is also the length from where the trucks exit the work zone to where the trucks exit the expressway. The stopping of expressway traffic to allow trucks to change lanes and/or cross the expressway is prohibited.

Failure to comply with the above requirements will result in a Traffic Control Deficiency charge. The deficiency charge will be calculated as outlined in Article 105.03 of the Standard Specifications. The Contractor will be assessed this daily charge for each day a deficiency is documented by the Engineer.

KEEPING ARTERIAL ROADWAYS OPEN TO TRAFFIC (LANE CLOSURES ONLY)

Effective: January 22, 2003

Revised: August 10, 2017

The Contractor shall provide the necessary traffic control devices to warn the public and to delineate the work zone as required in these Special Provisions, the Standard Specifications, the State Standards, and the District Details.

Arterial lane closures shall be in accordance with the Standard Specifications, Highway Standards, District Details, and the direction of the Engineer. The Contractor shall request and gain approval from the Engineer seventy-two (72) hours in advance of all long-term (24 hrs. or longer) lane closures.

Arterial lane closures not shown in the staging plans will not be permitted during **peak traffic volume hours**.

Peak traffic volume hours are defined as weekdays (Monday through Friday) from **6:00 AM to 8:30 AM and 4:30 PM to 6:00 PM**.

Private vehicles shall not be parked in the work zone. Contractor's equipment and/or vehicles shall not be parked on the shoulders or in the median during non-working hours. The parking of equipment and/or vehicles on State right-of-way will only be permitted at locations approved by the Engineer in accordance with Articles 701.08 and 701.11 of the Standard Specifications.

Should the Contractor fail to completely open and keep open all the traffic lanes to traffic in accordance with the limitations specified above, the Contractor shall be liable to the Department for the amount of:

One lane or ramp blocked = \$ 1000 / 15 min

Two lanes blocked = \$ 2,500 / 15 min

Not as a penalty but as liquidated and ascertained damages for each and every 15 minute interval or a portion thereof that a lane is blocked outside the allowable time limitations. Such damages may be deducted by the Department from any monies due the Contractor. These damages shall apply during the contract time and during any extensions of the contract time.

SPEED DISPLAY TRAILER (D1)

Effective: April 1, 2015

Revised: January 1, 2017

Revise the third paragraph of Article 701.11 of the Standard Specifications to read:

“When not being utilized to inform and direct traffic, sign trailers, speed display trailers, arrow boards, and portable changeable message boards shall be treated as nonoperating equipment.”

Add the following to Article 701.15 of the Standard Specifications:

“(m) Speed Display Trailer. A speed display trailer is used to enhance safety of the traveling public and workers in work zones by alerting drivers of their speed, thus deterring them from driving above the posted work zone speed limit.”

Whenever the speed display trailer is not in use, it shall be considered non-operating equipment and shall be stored according to Article 701.11.”

Add the following to Article 701.20 of the Standard Specifications:

“(k) “Speed Display Trailer will NOT be paid for by separate pay item, but its costs shall be included in the contract unit price of the various traffic control pay items.

Add the following to Article 1106.02 of the Standard Specifications:

“(o) Speed Display Trailer. The speed display trailer shall consist of a LED speed indicator display with self-contained, one-direction radar mounted on an orange see-through trailer. The height of the display and radar shall be such that it will function and be visible when located behind concrete barrier.

The speed measurement shall be by radar and provide a minimum detection distance of 1000 ft (300 m). The radar shall have an accuracy of ± 1 mile per hour.

The speed indicator display shall face approaching traffic and shall have a sign legend of “YOUR SPEED” immediately above or below the speed display. The digital speed display shall show two digits (00 to 99) in mph. The color of the changeable message legend shall be a yellow legend on a black background. The minimum height of the numerals shall be 18 in. (450 mm), and the nominal legibility distance shall be at least 750 ft (250 m).

The speed indicator display shall be equipped with a violation alert that flashes the displayed detected speed when the posted limit is exceeded. The speed indicator shall have a maximum speed cutoff. On roadway facilities with a normal posted speed limit greater than or equal to 45 mph, the detected speeds of vehicles traveling more than 25mph over the work zone speed limit shall not be displayed. On facilities with normal posted speed limit of less than 45 mph, the detected speeds of vehicles traveling more than 15 mph over the work zone speed limit shall not be displayed. On any roadway facility if detected speeds are less than 25 mph, speed shall not be displayed. The display shall include automatic dimming for nighttime operation.

The speed indicator measurement and display functions shall be equipped with the power supply capable of providing 24 hours of uninterrupted service.”

SIGN SHOP DRAWING SUBMITTAL

Effective: January 22, 2013

Revised: July 1, 2015

720.02TS

Add the following paragraph to Article 720.03 of the Standard Specifications:

Shop drawings will be required, according to Article 105.04, for all Arterials/Expressways signs except standard highway signs covered in the MUTCD. Shop drawings shall be submitted to the Engineer for review and approval prior to fabrication. The shop drawings shall include dimensions, letter sizing, font type, colors and materials.

TRAFFIC CONTROL DEFICIENCY DEDUCTION FOR PEDESTRIAN BARRIER AND GUARDRAIL REPAIR

To ensure a prompt response to incidents involving the integrity of the work zone traffic control devices, the Contractor shall provide a telephone number where a responsible individual can be contacted on a 24-hour-a-day basis. When the Engineer is notified or determines a deficiency exists, the Engineer shall be the sole judge as to whether the deficiency is an immediate safety hazard. When workers are present, the Contractor shall make needed corrections of deficiencies that constitute an immediate safety hazard within 15 minutes of notification. At all other times, the Contractor shall dispatch sufficient resources within 2 hours of notification to make needed corrections of deficiencies that constitute an immediate safety hazard. Other deficiencies shall be corrected within 12 hours. If the Contractor fails to restore the required traffic control and protection within the time limits specified above, the Engineer will impose a daily monetary deduction for each 24-hour period (or portion thereof) the deficiency exists. This time period will begin with the time of notification to the Contractor and end with the Resident Engineer's acceptance of the corrections. For this project, the daily deduction will be * per day per deficiency. In addition, if the Contractor fails to respond, the Engineer may correct the deficiencies and the cost thereof will be deducted from monies due or which may become due the Contractor. This corrective action will in no way relieve the Contractor of his/her contractual requirements or responsibilities.

*The cost of the daily deduction will be calculated by dividing three percent of the awarded contract price by the number of calendar days anticipated for this project. The number of days anticipated for this project is 128. This procedure is to be followed regardless of whether the contract is based upon working days, contains a completion date, or has an incentive/disincentive clause.

COMPENSABLE DELAY COSTS (BDE)

Effective: June 2, 2017

Revised: April 1, 2019

Revise Article 107.40(b) of the Standard Specifications to read:

“(b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows.

- (1) Minor Delay. A minor delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two hours, but not to exceed two weeks.
- (2) Major Delay. A major delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two weeks.
- (3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days.”

Revise Article 107.40(c) of the Standard Specifications to read:

“(c) Payment. Payment for Minor, Major, and Reduced Rate of Production Delays will be made as follows.

- (1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.

Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).

- (2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the Contractor’s yard or another job and the cost to re-mobilize, whichever is less. Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

- (3) Reduced Rate of Production Delay. The Contractor will be compensated for the reduced productivity for labor and equipment time in excess of the 25 percent threshold for that portion of the delay in excess of seven calendar days. Determination of compensation will be in accordance with Article 104.02, except labor and material additives will not be permitted.

Payment for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be determined according to Article 109.13.”

Revise Article 108.04(b) of the Standard Specifications to read:

“(b) No working day will be charged under the following conditions.

- (1) When adverse weather prevents work on the controlling item.
- (2) When job conditions due to recent weather prevent work on the controlling item.
- (3) When conduct or lack of conduct by the Department or its consultants, representatives, officers, agents, or employees; delay by the Department in making the site available; or delay in furnishing any items required to be furnished to the Contractor by the Department prevents work on the controlling item.
- (4) When delays caused by utility or railroad adjustments prevent work on the controlling item.
- (5) When strikes, lock-outs, extraordinary delays in transportation, or inability to procure critical materials prevent work on the controlling item, as long as these delays are not due to any fault of the Contractor.
- (6) When any condition over which the Contractor has no control prevents work on the controlling item.”

Revise Article 109.09(f) of the Standard Specifications to read:

“(f) Basis of Payment. After resolution of a claim in favor of the Contractor, any adjustment in time required for the work will be made according to Section 108. Any adjustment in the costs to be paid will be made for direct labor, direct materials, direct equipment, direct jobsite overhead, direct offsite overhead, and other direct costs allowed by the resolution. Adjustments in costs will not be made for interest charges, loss of anticipated profit, undocumented loss of efficiency, home office overhead and unabsorbed overhead other than as allowed by Article 109.13, lost opportunity, preparation of claim expenses and other consequential indirect costs regardless of method of calculation.

The above Basis of Payment is an essential element of the contract and the claim cost recovery of the Contractor shall be so limited.”

Add the following to Section 109 of the Standard Specifications.

“109.13 Payment for Contract Delay. Compensation for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be allowed when such costs result from a delay meeting the criteria in the following table.

Contract Type	Cause of Delay	Length of Delay
Working Days	Article 108.04(b)(3) or Article 108.04(b)(4)	No working days have been charged for two consecutive weeks.
Completion Date	Article 108.08(b)(1) or Article 108.08(b)(7)	The Contractor has been granted a minimum two week extension of contract time, according to Article 108.08.

Payment for each of the various costs will be according to the following.

- (a) Escalated Material and/or Labor Costs. When the delay causes work, which would have otherwise been completed, to be done after material and/or labor costs have increased, such increases will be paid. Payment for escalated material costs will be limited to the increased costs substantiated by documentation furnished by the Contractor. Payment for escalated labor costs will be limited to those items in Article 109.04(b)(1) and (2), except the 35 percent and 10 percent additives will not be permitted.
- (b) Extended Project Overhead. For the duration of the delay, payment for extended project overhead will be paid as follows.
 - (1) Direct Jobsite and Offsite Overhead. Payment for documented direct jobsite overhead and documented direct offsite overhead, including onsite supervisory and administrative personnel, will be allowed according to the following table.

Original Contract Amount	Supervisory and Administrative Personnel
Up to \$5,000,000	One Project Superintendent
Over \$ 5,000,000 - up to \$25,000,000	One Project Manager, One Project Superintendent or Engineer, and One Clerk
Over \$25,000,000 - up to \$50,000,000	One Project Manager, One Project Superintendent, One Engineer, and One Clerk
Over \$50,000,000	One Project Manager, Two Project Superintendents, One Engineer, and One Clerk

(2) Home Office and Unabsorbed Overhead. Payment for home office and unabsorbed overhead will be calculated as 8 percent of the total delay cost.

(c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid for according to Article 109.04.

When an extended traffic control adjustment is paid under this provision, an adjusted unit price as provided for in Article 701.20(a) for increase or decrease in the value of work by more than ten percent will not be paid.

Upon payment for a contract delay under this provision, the Contractor shall assign subrogation rights to the Department for the Department's efforts of recovery from any other party for monies paid by the Department as a result of any claim under this provision. The Contractor shall fully cooperate with the Department in its efforts to recover from another party any money paid to the Contractor for delay damages under this provision."

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010

Revised: November 1, 2014

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term "equipment" refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment's respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 ^{1/}	600-749	2002
	750 and up	2006
June 1, 2011 ^{2/}	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 ^{2/}	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

1/ Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

2/ Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (<http://www.epa.gov/cleandiesel/verification/verif-list.htm>), or verified by the California Air Resources Board (CARB) (<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

Diesel Retrofit Deficiency Deduction

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected. Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (DBE)

Effective: September 1, 2000

Revised: March 2, 2019

FEDERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory.

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

CONTRACTOR ASSURANCE. The Contractor makes the following assurance and agrees to include the assurance in each subcontract the Contractor signs with a subcontractor.

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (a) Withholding progress payments;
- (b) Assessing sanctions;
- (c) Liquidated damages; and/or
- (d) Disqualifying the Contractor from future bidding as non-responsible.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 0.00% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

- (a) The bidder documents enough DBE participation has been obtained to meet the goal or,
- (b) The bidder documents a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

DBE LOCATOR REFERENCES. Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217) 785-4611, or by visiting the Department's website at:

<http://www.idot.illinois.gov/doing-business/certifications/disadvantaged-business-enterprise-certification/il-ucp-directory/index>.

BIDDING PROCEDURES. Compliance with this Special Provision is a material bidding requirement and failure of the bidder to comply will render the bid not responsive.

The bidder shall submit a DBE Utilization Plan (form SBE 2026), and a DBE Participation Statement (form SBE 2025) for each DBE company proposed for the performance of work to achieve the contract goal, with the bid. If the Utilization Plan indicates the contract goal will not be met, documentation of good faith efforts shall also be submitted. The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract. The required forms and documentation must be submitted as a single .pdf file using the “Integrated Contractor Exchange (iCX)” application within the Department’s “EBids System”.

The Department will not accept a Utilization Plan if it does not meet the bidding procedures set forth herein and the bid will be declared not responsive. In the event the bid is declared not responsive, the Department may elect to cause the forfeiture of the penal sum of the bidder’s proposal guaranty and may deny authorization to bid the project if re-advertised for bids.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan is approved. All information submitted by the bidder must be complete, accurate and adequately document enough DBE participation has been obtained or document the good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. This means the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts the bidder has made. Mere *pro forma* efforts, in other words efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder’s good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases and will be considered by the Department.
 - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.

- (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces.
- (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
 - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.

- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided it is otherwise eligible for award. If the Department determines the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification will also include a statement of reasons for the adverse determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period to cure the deficiency.
- (c) The bidder may request administrative reconsideration of an adverse determination by emailing the Department at "DOT.DBE.UP@illinois.gov" within the five calendar days after the receipt of the notification of the determination. The determination shall become final if a request is not made on or before the fifth calendar day. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be reviewed by the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR Part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR Part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
 - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
 - (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the DBE Participation Commitment Statement.

- (a) **NO AMENDMENT.** No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be emailed to the Department at DOT.DBE.UP@illinois.gov.
- (b) **CHANGES TO WORK.** Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, a new Request for Approval of Subcontractor will not be required. However, the Contractor must document efforts to assure the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (c) **SUBCONTRACT.** The Contractor must provide copies of DBE subcontracts to the Department upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.
- (d) **ALTERNATIVE WORK METHODS.** In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
 - (1) The replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or

- (2) The DBE is aware its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
 - (3) The DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;

- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.
- (6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated or fails to complete its work on the Contract for any reason, the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

- (f) FINAL PAYMENT. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.

- (g) **ENFORCEMENT.** The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) **RECONSIDERATION.** Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

DISPOSAL FEES (BDE)

Effective: November 1, 2018

Replace Articles 109.04(b)(5) – 109.04(b)(8) of the Standard Specifications with the following:

- "(5) Disposal Fees. When the extra work performed includes paying for disposal fees at a clean construction and demolition debris facility, an uncontaminated soil fill operation or a landfill, the Contractor shall receive, as administrative costs, an amount equal to five percent of the first \$10,000 and one percent of any amount over \$10,000 of the total approved costs of such fees.
- (6) Miscellaneous. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.
- (7) Statements. No payment will be made for work performed on a force account basis until the Contractor has furnished the Engineer with itemized statements of the cost of such force account work. Statements shall be accompanied and supported by invoices for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices, the Contractor shall furnish an affidavit certifying that such materials were taken from his/her stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

Itemized statements at the cost of force account work shall be detailed as follows.

- a. Name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman. Payrolls shall be submitted to substantiate actual wages paid if so requested by the Engineer.
 - b. Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
 - c. Quantities of materials, prices and extensions.
 - d. Transportation of materials.
 - e. Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.
- (8) Work Performed by an Approved Subcontractor. When extra work is performed by an approved subcontractor, the Contractor shall receive, as administrative costs, an amount equal to five percent of the total approved costs of such work with the minimum payment being \$100.
- (9) All statements of the cost of force account work shall be furnished to the Engineer not later than 60 days after receipt of the Central Bureau of Construction form "Extra Work Daily Report". If the statement is not received within the specified time frame, all demands for payment for the extra work are waived and the Department is released from any and all such demands. It is the responsibility of the Contractor to ensure that all statements are received within the specified time regardless of the manner or method of delivery."

MOBILIZATION (BDE)

Effective: April 1, 2020

Replace Articles 671.02(a), (b), and (c) of the Standard Specifications with the following:

- "(a) Upon execution of the contract, 90 percent of the pay item will be paid.
- (b) When 90 percent of the adjusted contract value is earned, the remaining ten percent of the pay item will be paid along with any amount bid in excess of six percent of the original contract amount."

PORTLAND CEMENT CONCRETE – HAUL TIME (BDE)

Effective: July 1, 2020

Revise Article 1020.11(a)(7) of the Standard Specifications to read:

“(7) Haul Time. Haul time shall begin when the delivery ticket is stamped. The delivery ticket shall be stamped no later than five minutes after the addition of the mixing water to the cement, or after the addition of the cement to the aggregate when the combined aggregates contain free moisture in excess of two percent by weight (mass). If more than one batch is required for charging a truck using a stationary mixer, the time of haul shall start with mixing of the first batch. Haul time shall end when the truck is emptied for incorporation of the concrete into the work. The maximum haul time shall be as follows.

Concrete Temperature at Point of Discharge, °F (°C)	Maximum Haul Time ^{1/} (minutes)	
	Truck Mixer or Truck Agitator	Nonagitator Truck
50 - 64 (10 - 17.5)	90	45
> 64 (> 17.5) - without retarder	60	30
> 64 (> 17.5) - with retarder	90	45

1/ To encourage start-up testing for mix adjustments at the plant, the first two trucks will be allowed an additional 15 minutes haul time whenever such testing is performed.

For a mixture which is not mixed on the jobsite, a delivery ticket shall be required for each load. The following information shall be recorded on each delivery ticket: (1) ticket number; (2) name of producer and plant location; (3) contract number; (4) name of Contractor; (5) stamped date and time batched; (6) truck number; (7) quantity batched; (8) amount of admixture(s) in the batch; (9) amount of water in the batch; and (10) Department mix design number.

For concrete mixed in jobsite stationary mixers, the above delivery ticket may be waived, but a method of verifying the haul time shall be established to the satisfaction of the Engineer.”

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: January 1, 2019

Revised: January 1, 2020

Revise Section 669 of the Standard Specifications to read:

“SECTION 669. REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

669.01 Description. This work shall consist of the transportation and proper disposal of regulated substances. This work shall also consist of the removal, transportation, and proper disposal of underground storage tanks (UST), their contents and associated underground piping to the point where the piping is above the ground, including determining the content types and estimated quantities.

669.02 Equipment. The Contractor shall notify the Engineer of the delivery of all excavation, storage, and transportation equipment to a work area location. The equipment shall comply with OSHA and American Petroleum Institute (API) guidelines and shall be furnished in a clean condition. Clean condition means the equipment does not contain any residual material classified as a non-special waste, non-hazardous special waste, or hazardous waste. Residual materials include, but are not limited to, petroleum products, chemical products, sludges, or any other material present in or on equipment.

Before beginning any associated soil or groundwater management activity, the Contractor shall provide the Engineer with the opportunity to visually inspect and approve the equipment. If the equipment contains any contaminated residual material, decontamination shall be performed on the equipment as appropriate to the regulated substance and degree of contamination present according to OSHA and API guidelines. All cleaning fluids used shall be treated as the contaminant unless laboratory testing proves otherwise.

669.03 Pre-Construction Submittals and Qualifications. Prior to beginning this work, or working in areas with regulated substances, the Contractor shall submit a “Regulated Substances Pre-Construction Plan (RSPCP)” to the Engineer for review and approval using form BDE 2730. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.

As part of the RSPCP, the Contractor(s) or firm(s) performing the work shall meet the following qualifications.

- (a) Regulated Substances Monitoring. Qualification for environmental observation and field screening of regulated substances work and environmental observation of UST removal shall require either pre-qualification in Hazardous Waste by the Department or demonstration of acceptable project experience in remediation and operations for contaminated sites in accordance with applicable Federal, State, or local regulatory requirements using BDE 2730.

Qualification for each individual performing regulated substances monitoring shall require a minimum of one-year of experience in similar activities as those required for the project.

- (b) Underground Storage Tank Removal. Qualification for underground storage tank (UST) removal work shall require licensing and certification with the Office of the State Fire Marshall (OSFM) and possession of all permits required to perform the work. A copy of the permit shall be provided to the Engineer prior to tank removal.

The qualified Contractor(s) or firm(s) shall also document it does not have any current or former ties with any of the properties contained within, adjoining, or potentially affecting the work.

The Engineer will require up to 21 calendar days for review of the RSPCP. The review may involve rejection or revision and resubmittal; in which case, an additional 21 days will be required for each subsequent review. Work shall not commence until the RSPCP has been approved by the Engineer. After approval, the RSPCP shall be revised as necessary to reflect changed conditions in the field and documented using BDE 2730A "Regulated Substances Pre-Construction Plan (RSPCP) Addendum" and submitted to the Engineer for approval.

CONSTRUCTION REQUIREMENTS

669.04 Regulated Substances Monitoring. Regulated substances monitoring includes environmental observation and field screening during regulated substances management activities at the contract specific work areas. As part of the regulated substances monitoring, the monitoring personnel shall perform and document the applicable duties listed on form BDE 2732 "Regulated Substances Monitoring Daily Record (RSMDR)".

- (a) Environmental Observation. Prior to beginning excavation, the Contractor shall mark the limits of the contract specific work areas. Once work begins, the monitoring personnel shall be present on-site continuously during the excavation and loading of material.
- (b) Field Screening. Field screening shall be performed during the excavation and loading of material from the contract specific work areas, except for material classified according to Article 669.05(b)(1) or 669.05(c) where field screening is not required.

Field screening shall be performed with either a photoionization detector (PID) (minimum 10.6eV lamp) or a flame ionization detector (FID), and other equipment as appropriate, to monitor for potential contaminants associated with regulated substances. The PID or FID shall be calibrated on-site, and background level readings taken and recorded daily, and as field and weather conditions change. Field screen readings on the PID or FID in excess of background levels indicates the potential presence of regulated substances requiring handling as a non-special waste, special waste, or hazardous waste. PID or FID readings may be used as the basis of increasing the limits of removal with the approval of the Engineer but shall in no case be used to decrease the limits.

669.05 Regulated Substances Management and Disposal. The management and disposal of soil and/or groundwater containing regulated substances shall be according to the following:

- (a) Soil Analytical Results Exceed Most Stringent MAC. When the soil analytical results indicate detected levels exceed the most stringent maximum allowable concentration (MAC) for chemical constituents in soil established pursuant to Subpart F of 35 Ill. Adm. Code 1100.605, the soil shall be managed as follows:
 - (1) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC, but still considered within area background levels by the Engineer, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable. If the soils cannot be utilized within the right-of-way, they shall be managed and disposed of at a landfill as a non-special waste.
 - (2) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC but do not exceed the MAC for a Metropolitan Statistical Area (MSA) County identified in 35 Ill. Admin. Code 742 Appendix A. Table G, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of at a clean construction and demolition debris (CCDD) facility or an uncontaminated soil fill operation (USFO) within an MSA County provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
 - (3) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, or the MAC within the Chicago corporate limits, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
 - (4) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
 - (5) When the Engineer determines soil cannot be managed according to Articles 669.05(a)(1) through (a)(4) above and the materials do not contain special waste or hazardous waste, as determined by the Engineer, the soil shall be managed and disposed of at a landfill as a non-special waste.
 - (6) When analytical results indicate soil is hazardous by characteristic or listing pursuant to 35 Ill. Admin. Code 721, contains radiological constituents, or the Engineer otherwise determines the soil cannot be managed according to Articles 669.05(a)(1) through (a)(5) above, the soil shall be managed and disposed of off-site as a special waste or hazardous waste as applicable.

- (b) Soil Analytical Results Do Not Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels do not exceed the most stringent MAC, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO for any of the following reasons.
- (1) The pH of the soil is less than 6.25 or greater than 9.0.
 - (2) The soil exhibited PID or FID readings in excess of background levels.
- (c) Soil Analytical Results Exceed Most Stringent MAC but Do Not Exceed Tiered Approach to Corrective Action Objectives (TACO) Residential. When the soil analytical results indicate that detected levels exceed the most stringent MAC but do not exceed TACO Tier 1 Soil Remediation Objectives for Residential Properties pursuant to 35 Ill. Admin. Code 742 Appendix B Table A, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO.
- (d) Groundwater. When groundwater analytical results indicate the detected levels are above Appendix B, Table E of 35 Ill. Admin. Code 742, the most stringent Tier 1 Groundwater Remediation Objectives for Groundwater Component of the Groundwater Ingestion Route for Class 1 groundwater, the groundwater shall be managed off-site as a special waste or hazardous waste as applicable. Special waste groundwater shall be containerized and trucked to an off-site treatment facility, or may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority. Groundwater discharged to a sanitary sewer or combined sewer shall be pre-treated to remove particulates and measured with a calibrated flow meter to comply with applicable discharge limits. A copy of the permit shall be provided to the Engineer prior to discharging groundwater to the sanitary sewer or combined sewer.

Groundwater encountered within trenches may be managed within the trench and allowed to infiltrate back into the ground. If the groundwater cannot be managed within the trench, it may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority, or it shall be containerized and trucked to an off-site treatment facility as a special waste or hazardous waste. The Contractor is prohibited from discharging groundwater within the trench through a storm sewer. The Contractor shall install backfill plugs within the area of groundwater contamination.

One backfill plug shall be placed down gradient to the area of groundwater contamination. Backfill plugs shall be installed at intervals not to exceed 50 ft (15 m). Backfill plugs are to be 4 ft (1.2 m) long, measured parallel to the trench, full trench width and depth. Backfill plugs shall not have any fine aggregate bedding or backfill, but shall be entirely cohesive soil or any class of concrete. The Contractor shall provide test data that the material has a permeability of less than 10^{-7} cm/sec according to ASTM D 5084, Method A or per another test method approved by the Engineer.

The Contractor shall use due care when transferring contaminated material from the area of origin to the transporter. Should releases of contaminated material to the environment occur (i.e., spillage onto the ground, etc.), the Contractor shall clean-up spilled material and place in the appropriate storage containers as previously specified. Clean-up shall include, but not be limited to, sampling beneath the material staging area to determine complete removal of the spilled material.

The Contractor shall provide engineered barriers, when required, and shall include materials sufficient to completely line excavation surfaces, including sloped surfaces, bottoms, and sidewall faces, within the areas designated for protection.

The Contractor shall obtain all documentation including any permits and/or licenses required to transport the material containing regulated substances to the disposal facility. The Contractor shall coordinate with the Engineer on the completion of all documentation. The Contractor shall make all arrangements for collection and analysis of landfill acceptance testing. The Contractor shall coordinate waste disposal approvals with the disposal facility.

The Contractor shall provide the Engineer with all transport-related documentation within two days of transport or receipt of said document(s). For management of special or hazardous waste, the Contractor shall provide the Engineer with documentation that the Contractor is operating with a valid Illinois special waste transporter permit at least two weeks before transporting the first load of contaminated material.

Transportation and disposal of material classified according to Article 669.05(a)(5) or 669.05(a)(6) shall be completed each day so that none of the material remains on-site by the close of business, except when temporary staging has been approved.

Any waste generated as a special or hazardous waste from a non-fixed facility shall be manifested off-site using the Department's county generator number provided by the Bureau of Design and Environment. An authorized representative of the Department shall sign all manifests for the disposal of the contaminated material and confirm the Contractor's transported volume. Any waste generated as a non-special waste may be managed off-site without a manifest, a special waste transporter, or a generator number.

The Contractor shall select a landfill permitted for disposal of the contaminant within the State of Illinois. The Department will review and approve or reject the facility proposed by the Contractor to use as a landfill. The Contractor shall verify whether the selected disposal facility is compliant with those applicable standards as mandated by their permit and whether the disposal facility is presently, has previously been, or has never been, on the United States Environmental Protection Agency (U.S. EPA) National Priorities List or the Resource Conservation and Recovery Act (RCRA) List of Violating Facilities. The use of a Contractor selected landfill shall in no manner delay the construction schedule or alter the Contractor's responsibilities as set forth.

669.06 Non-Special Waste Certification. An authorized representative of the Department shall sign and date all non-special waste certifications. The Contractor shall be responsible for providing the Engineer with the required information that will allow the Engineer to certify the waste is not a special waste.

- (a) Definition. A waste is considered a non-special waste as long as it is not:
- (1) a potentially infectious medical waste;
 - (2) a hazardous waste as defined in 35 Ill. Admin. Code 721;
 - (3) an industrial process waste or pollution control waste that contains liquids, as determined using the paint filter test set forth in subdivision (3)(A) of subsection (m) of 35 Ill. Admin. Code 811.107;
 - (4) a regulated asbestos-containing waste material, as defined under the National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 61.141;
 - (5) a material containing polychlorinated biphenyls (PCB's) regulated pursuant to 40 CFR Part 761;
 - (6) a material subject to the waste analysis and recordkeeping requirements of 35 Ill. Admin. Code 728.107 under land disposal restrictions of 35 Ill. Admin. Code 728;
 - (7) a waste material generated by processing recyclable metals by shredding and required to be managed as a special waste under Section 22.29 of the Environmental Protection Act; or
 - (8) an empty portable device or container in which a special or hazardous waste has been stored, transported, treated, disposed of, or otherwise handled.
- (b) Certification Information. All information used to determine the waste is not a special waste shall be attached to the certification. The information shall include but not be limited to:
- (1) the means by which the generator has determined the waste is not a hazardous waste;
 - (2) the means by which the generator has determined the waste is not a liquid;
 - (3) if the waste undergoes testing, the analytic results obtained from testing, signed and dated by the person responsible for completing the analysis;
 - (4) if the waste does not undergo testing, an explanation as to why no testing is needed;

- (5) a description of the process generating the waste; and
- (6) relevant material safety data sheets.

669.07 Temporary Staging. Soil classified according to Articles 669.05(a)(2), (b)(1), or (c) may be temporarily staged at the Contractor's option. Soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) shall be managed and disposed of without temporary staging to the greatest extent practicable. If circumstances beyond the Contractor's control require temporary staging of these latter materials, the Contractor shall request approval from the Engineer in writing.

Temporary staging shall be accomplished within the right-of-way and the Contractor's means and methods shall be described in the approved or amended RSPCP. Staging areas shall not be located within 200 feet (61 m) of a public or private water supply well; nor within 100 feet (30 m) of sensitive environmental receptor areas, including wetlands, rivers, streams, lakes, or designated habitat zones.

The method of staging shall consist of containerization or stockpiling as applicable for the type, classification, and physical state (i.e., liquid, solid, semisolid) of the material. Materials of different classifications shall be staged separately with no mixing or co-mingling.

When containers are used, the containers and their contents shall remain intact and inaccessible to unauthorized persons until the manner of disposal is determined. The Contractor shall be responsible for all activities associated with the storage containers including, but not limited to, the procurement, transport, and labeling of the containers. The Contractor shall not use a storage container if visual inspection of the container reveals the presence of free liquids or other substances that could cause the waste to be reclassified as a hazardous or special waste.

When stockpiles are used, they shall be covered with a minimum 20-mil plastic sheeting or tarps secured using weights or tie-downs. Perimeter berms or diversionary trenches shall be provided to contain and collect for disposal any water that drains from the soil. Stockpiles shall be managed to prevent or reduce potential dust generation.

When staging non-special waste, special waste, or hazardous waste, the following additional requirements shall apply:

- (a) **Non-Special Waste.** When stockpiling soil classified according to Article 669.05(a)(1) or 669.05(a)(5), an impermeable surface barrier between the materials and the ground surface shall be installed. The impermeable barrier shall consist of a minimum 20-mil plastic liner material and the surface of the stockpile area shall be clean and free of debris prior to placement of the liner. Measures shall also be taken to limit or discourage access to the staging area.
- (b) **Special Waste and Hazardous Waste.** Soil classified according to Article 669.05(a)(6) shall not be stockpiled but shall be containerized immediately upon generation in containers, tanks or containment buildings as defined by RCRA, Toxic Substances Control Act (TSCA), and other applicable State or local regulations and requirements, including 35 Ill. Admin. Code Part 722, Standards Applicable to Generators of Hazardous Waste.

The staging area(s) shall be enclosed (by a fence or other structure) to restrict direct access to the area, and all required regulatory identification signs applicable to a staging area containing special waste or hazardous waste shall be deployed.

Storage containers shall be placed on an all-weather gravel-packed, asphalt, or concrete surface. Containers shall be in good condition and free of leaks, large dents, or severe rusting, which may compromise containment integrity. Containers must be constructed of, or lined with, materials that will not react or be otherwise incompatible with the hazardous or special waste contents. Containers used to store liquids shall not be filled more than 80 percent of the rated capacity. Incompatible wastes shall not be placed in the same container or comingled.

All containers shall be legibly labeled and marked using pre-printed labels and permanent marker in accordance with applicable regulations, clearly showing the date of waste generation, location and/or area of waste generation, and type of waste. The Contractor shall place these identifying markings on an exterior side surface of the container.

Storage containers shall be kept closed, and storage pads covered, except when access is needed by authorized personnel.

Special waste and hazardous waste shall be transported and disposed within 90 days from the date of generation.

669.08 Underground Storage Tank Removal. For the purposes of this section, an underground storage tank (UST) includes the underground storage tank, piping, electrical controls, pump island, vent pipes and appurtenances.

Prior to removing an UST, the Engineer shall determine whether the Department is considered an "owner" or "operator" of the UST as defined by the UST regulations (41 Ill. Adm. Code Part 176). Ownership of the UST refers to the Department's owning title to the UST during storage, use or dispensing of regulated substances. The Department may be considered an "operator" of the UST if it has control of, or has responsibility for, the daily operation of the UST. The Department may however voluntarily undertake actions to remove an UST from the ground without being deemed an "operator" of the UST.

In the event the Department is deemed not to be the "owner" or "operator" of the UST, the OSFM removal permit shall reflect who was the past "owner" or "operator" of the UST. If the "owner" or "operator" cannot be determined from past UST registration documents from OSFM, then the OSFM removal permit will state the "owner" or "operator" of the UST is the Department. The Department's Office of Chief Counsel (OCC) will review all UST removal permits prior to submitting any removal permit to the OSFM. If the Department is not the "owner" or "operator" of the UST then it will not register the UST or pay any registration fee.

The Contractor shall be responsible for obtaining permits required for removing the UST, notification to the OSFM, using an OSFM certified tank contractor, removal and disposal of the UST and its contents, and preparation and submittal of the OSFM Site Assessment Report in accordance with 41 Ill. Admin. Code Part 176.330.

The Contractor shall contact the Engineer and the OSFM's office at least 72 hours prior to removal to confirm the OSFM inspector's presence during the UST removal. Removal, transport, and disposal of the UST shall be according to the applicable portions of the latest revision of the "American Petroleum Institute (API) Recommended Practice 1604".

The Contractor shall collect and analyze tank content (sludge) for disposal purposes. The Contractor shall remove as much of the regulated substance from the UST system as necessary to prevent further release into the environment. All contents within the tank shall be removed, transported and disposed of, or recycled. The tank shall be removed and rendered empty according to IEPA definition.

The Contractor shall collect soil samples from the bottom and sidewalls of the excavated area in accordance with 35 Ill. Admin. Code Part 734.210(h) after the required backfill has been removed during the initial response action, to determine the level of contamination remaining in the ground, regardless if a release is confirmed or not by the OSFM on-site inspector.

In the event the UST is designated a leaking underground storage tank (LUST) by the OSFM's inspector, or confirmation by analytical results, the Contractor shall notify the Engineer and the District Environmental Studies Unit (DESU). Upon confirmation of a release of contaminants and notifications to the Engineer and DESU, the Contractor shall report the release to the Illinois Emergency Management Agency (IEMA) (e.g., by telephone or electronic mail) and provide them with whatever information is available ("owner" or "operator" shall be stated as the past registered "owner" or "operator", or the IDOT District in which the tank is located and the DESU Manager).

The Contractor shall perform the following initial response actions if a release is indicated by the OSFM inspector:

- (a) Take immediate action to prevent any further release of the regulated substance to the environment, which may include removing, at the Engineer's discretion, and disposing of up to 4 ft (1.2 m) of the contaminated material, as measured from the outside dimension of the tank;
- (b) Identify and mitigate fire, explosion and vapor hazards;
- (c) Visually inspect any above ground releases or exposed below ground releases and prevent further migration of the released substance into surrounding soils and groundwater; and
- (d) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors and free product that have migrated from the tank excavation zone and entered into subsurface structures (such as sewers or basements).

The tank excavation shall be backfilled according to applicable portions of Sections 205, 208, and 550 with a material that will compact and develop stability. All uncontaminated concrete and soil removed during tank extraction may be used to backfill the excavation, at the discretion of the Engineer.

After backfilling the excavation, the site shall be graded and cleaned.

669.09 Regulated Substances Final Construction Report. Not later than 90 days after completing this work, the Contractor shall submit a "Regulated Substances Final Construction Report (RSFCR)" to the Engineer using form BDE 2733 and required attachments. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.

669.10 Method of Measurement. Non-special waste, special waste, and hazardous waste soil will be measured for payment according to Article 202.07(b) when performing earth excavation, Article 502.12(b) when excavating for structures, or by computing the volume of the trench using the maximum trench width permitted and the actual depth of the trench.

Groundwater containerized and transported off-site for management, storage, and disposal will be measured for payment in gallons (liters).

Backfill plugs will be measured in cubic yards (cubic meters) in place, except the quantity for which payment will be made shall not exceed the volume of the trench, as computed by using the maximum width of trench permitted by the Specifications and the actual depth of the trench, with a deduction for the volume of the pipe.

Engineered Barriers will be measured for payment in square yards (square meters).

669.11 Basis of Payment. The work of preparing, submitting and administering a Regulated Substances Pre-Construction Plan will be paid for at the contract lump sum price for REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN.

Regulated substances monitoring, including completion of form BDE 2732 for each day of work, will be paid for at the contract unit price per calendar day, or fraction thereof to the nearest 0.5 calendar day, for REGULATED SUBSTANCES MONITORING.

The installation of engineered barriers will be paid for at the contract unit price per square yard (square meter) for ENGINEERED BARRIER.

The work of UST removal, soil excavation, soil and content sampling, the management of excavated soil and UST content, and UST disposal, will be paid for at the contract unit price per each for UNDERGROUND STORAGE TANK REMOVAL.

The transportation and disposal of soil and other materials from an excavation determined to be contaminated will be paid for at the contract unit price per cubic yard (cubic meter) for NON-SPECIAL WASTE DISPOSAL, SPECIAL WASTE DISPOSAL, or HAZARDOUS WASTE DISPOSAL.

The transportation and disposal of groundwater from an excavation determined to be contaminated will be paid for at the contract unit price per gallon (liter) for SPECIAL WASTE GROUNDWATER DISPOSAL or HAZARDOUS WASTE GROUNDWATER DISPOSAL. When groundwater is discharged to a sanitary or combined sewer by permit, the cost will be paid for according to Article 109.05.

Backfill plugs will be paid for at the contract unit price per cubic yard (cubic meter) for BACKFILL PLUGS.

Payment for temporary staging of soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) will be paid for according to Article 109.04. The Department will not be responsible for any additional costs incurred, if mismanagement of the staging area, storage containers, or their contents by the Contractor results in excess cost expenditure for disposal or other material management requirements.

Payment for accumulated stormwater removal and disposal will be according to Article 109.04. Payment will only be allowed if appropriate stormwater and erosion control methods were used.

Payment for decontamination, labor, material, and equipment for monitoring areas beyond the specified areas, with the Engineer's prior written approval, will be according to Article 109.04.

When the waste material for disposal requires sampling for landfill disposal acceptance, the samples shall be analyzed for TCLP VOCs, SVOCs, RCRA metals, pH, ignitability, and paint filter test. The analysis will be paid for at the contract unit price per each for SOIL DISPOSAL ANALYSIS using EPA Methods 1311 (extraction), 8260B for VOCs, 8270C for SVOCs, 6010B and 7470A for RCRA metals, 9045C for pH, 1030 for ignitability, and 9095A for paint filter.

The work of preparing, submitting and administering a Regulated Substances Final Construction Report will be paid for at the contract lump sum price REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT."

STEEL COST ADJUSTMENT (BDE)

Effective: April 2, 2004

Revised: August 1, 2017

Description. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate with their bid whether or not this special provision will be part of the contract. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment.

Types of Steel Products. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

Metal Piling (excluding temporary sheet piling)
Structural Steel
Reinforcing Steel

Other steel materials such as dowel bars, tie bars, mesh reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), and frames and grates will be subject to a steel cost adjustment when the pay items they are used in have a contract value of \$10,000 or greater.

The adjustments shall apply to the above items when they are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply when the item is added as extra work and paid for at a lump sum price or by force account.

Documentation. Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.
- (b) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

$$SCA = Q \times D$$

Where: SCA = steel cost adjustment, in dollars
Q = quantity of steel incorporated into the work, in lb (kg)
D = price factor, in dollars per lb (kg)

$$D = MPI_M - MPI_L$$

Where: MPI_M = The Materials Cost Index for steel as published by the Engineering News-Record for the month the steel is shipped from the mill. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

MPI_L = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price,. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

The unit weights (masses) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

No steel cost adjustment will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the MPI_M will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

Basis of Payment. Steel cost adjustments may be positive or negative but will only be made when there is a difference between the MPI_L and MPI_M in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(MPI_L - MPI_M) \div MPI_L\} \times 100$$

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the items of work are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Attachment

Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness	23 lb/ft (34 kg/m)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness	32 lb/ft (48 kg/m)
Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness	37 lb/ft (55 kg/m)
Other piling	See plans
Structural Steel	See plans for weights (masses)
Reinforcing Steel	See plans for weights (masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Mesh Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail	
Steel Plate Beam Guardrail, Type A w/steel posts	20 lb/ft (30 kg/m)
Steel Plate Beam Guardrail, Type B w/steel posts	30 lb/ft (45 kg/m)
Steel Plate Beam Guardrail, Types A and B w/wood posts	8 lb/ft (12 kg/m)
Steel Plate Beam Guardrail, Type 2	305 lb (140 kg) each
Steel Plate Beam Guardrail, Type 6	1260 lb (570 kg) each
Traffic Barrier Terminal, Type 1 Special (Tangent)	730 lb (330 kg) each
Traffic Barrier Terminal, Type 1 Special (Flared)	410 lb (185 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms	
Traffic Signal Post	11 lb/ft (16 kg/m)
Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 – 12 m)	14 lb/ft (21 kg/m)
Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 – 16.5 m)	21 lb/ft (31 kg/m)
Light Pole w/Mast Arm, 30 - 50 ft (9 – 15.2 m)	13 lb/ft (19 kg/m)
Light Pole w/Mast Arm, 55 - 60 ft (16.5 – 18 m)	19 lb/ft (28 kg/m)
Light Tower w/Luminaire Mount, 80 - 110 ft (24 – 33.5 m)	31 lb/ft (46 kg/m)
Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 – 42.5 m)	65 lb/ft (97 kg/m)
Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 – 48.5 m)	80 lb/ft (119 kg/m)
Metal Railings (excluding wire fence)	
Steel Railing, Type SM	64 lb/ft (95 kg/m)
Steel Railing, Type S-1	39 lb/ft (58 kg/m)
Steel Railing, Type T-1	53 lb/ft (79 kg/m)
Steel Bridge Rail	52 lb/ft (77 kg/m)
Frames and Grates	
Frame	250 lb (115 kg)
Lids and Grates	150 lb (70 kg)

STEEL PLATE BEAM GUARDRAIL MANUFACTURING (BDE)

Effective: January 1, 2019

Revise the first three paragraphs of Article 1006.25 of the Standard Specifications to read:

“1006.25 Steel Plate Beam Guardrail. Steel plate beam guardrail, including bolts, nuts, and washers, shall be according to AASHTO M 180. The guardrail shall be Class A, with a Type II galvanized coating.

Steel plates for mounting guardrail on existing culverts shall be according to AASHTO M 270 Grade 36 (M 270M Grade 250) and zinc coated according to AASHTO M 111.

The Department will accept guardrail based on the “Brand Registration and Guarantee” requirements of AASHTO M 180 and the manufacturer shall be listed as compliant through the NTPEP Program. The Department will maintain a qualified product list.”

SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

“109.14 Subcontractor and Disadvantaged Business Enterprise Payment Reporting. The Contractor shall report all payments made to the following parties:

- (a) first tier subcontractors;
- (b) lower tier subcontractors affecting disadvantaged business enterprise (DBE) goal credit;
- (c) material suppliers or trucking firms that are part of the Contractor’s submitted DBE utilization plan.

The report shall be made through the Department’s on-line subcontractor payment reporting system within 21 days of making the payment.”

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: November 2, 2017

Revised: April 1, 2019

Replace the second paragraph of Article 109.12 of the Standard Specifications with the following:

“This mobilization payment shall be made at least seven days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor’s work.

Value of Subcontract Reported on Form BC 260A	Mobilization Percentage
Less than \$10,000	25%
\$10,000 to less than \$20,000	20%
\$20,000 to less than \$40,000	18%
\$40,000 to less than \$60,000	16%
\$60,000 to less than \$80,000	14%
\$80,000 to less than \$100,000	12%
\$100,000 to less than \$250,000	10%
\$250,000 to less than \$500,000	9%
\$500,000 to \$750,000	8%
Over \$750,000	7%”

TRAFFIC CONTROL DEVICES - CONES (BDE)

Effective: January 1, 2019

Revise Article 701.15(a) of the Standard Specifications to read:

“(a) Cones. Cones are used to channelize traffic. Cones used to channelize traffic at night shall be reflectorized; however, cones shall not be used in nighttime lane closure tapers or nighttime lane shifts.”

Revise Article 1106.02(b) of the Standard Specifications to read:

“(b) Cones. Cones shall be predominantly orange. Cones used at night that are 28 to 36 in. (700 to 900 mm) in height shall have two white circumferential stripes. If non-reflective spaces are left between the stripes, the spaces shall be no more than 2 in. (50mm) in width. Cones used at night that are taller than 36 in. (900 mm) shall have a minimum of two white and two fluorescent orange alternating, circumferential stripes with the top stripe being fluorescent orange. If non-reflective spaces are left between the stripes, the spaces shall be no more than 3 in. (75 mm) in width.

The minimum weights for the various cone heights shall be 4 lb for 18 in. (2 kg for 450 mm), 7 lb for 28 in. (3 kg for 700 mm), and 10 lb for 36 in. (5 kg for 900 mm) with a minimum of 60 percent of the total weight in the base. Cones taller than 36 in. shall be weighted per the manufacturer’s specifications such that they are not moved by wind or passing traffic.”

TRAFFIC SPOTTERS (BDE)

Effective: January 1, 2019

Revise Article 701.13 of the Standard Specifications to read:

“701.13 Flaggers and Spotters. Flaggers shall be certified by an agency approved by the Department. While on the job site, each flagger shall have in his/her possession a current driver’s license and a current flagger certification I.D. card. For non-drivers, the Illinois Identification Card issued by the Secretary of State will meet the requirement for a current driver’s license. This certification requirement may be waived by the Engineer for emergency situations that arise due to actions beyond the Contractor’s control where flagging is needed to maintain safe traffic control on a temporary basis. Spotters are defined as certified flaggers that provide support to workers by monitoring traffic.

Flaggers and spotters shall be stationed to the satisfaction of the Engineer and be equipped with a fluorescent orange, fluorescent yellow/green, or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of ANSI/ISEA 107-2004 or ANSI/ISEA 107-2010 for Conspicuity Class 2 garments. Flaggers shall be equipped with a stop/slow traffic control sign. Spotters shall be equipped with a loud warning device. The warning sound shall be identifiable by workers so they can take evasive action when necessary. Other types of garments may be substituted for the vest as long as the garments have a manufacturer’s tag identifying them as meeting the ANSI Class 2 requirement. The longitudinal placement of the flagger may be increased up to 100 ft (30 m) from that shown on the plans to improve the visibility of the flagger. Flaggers shall not encroach on the open lane of traffic unless traffic has been stopped. Spotters shall not encroach on the open lane of traffic, nor interact with or control the flow of traffic.

For nighttime flagging, flaggers shall be illuminated by an overhead light source providing a minimum vertical illuminance of 10 fc (108 lux) measured 1 ft (300 mm) out from the flagger’s chest. The bottom of any luminaire shall be a minimum of 10 ft (3 m) above the pavement. Luminaire(s) shall be shielded to minimize glare to approaching traffic and trespass light to adjoining properties. Nighttime flaggers shall be equipped with fluorescent orange or fluorescent orange and fluorescent yellow/green apparel meeting the requirements of ANSI/ISEA 107-2004 or ANSI/ISEA 107-2010 for Conspicuity Class 3 garments.

Flaggers and spotters shall be provided per the traffic control plan and as follows.

- (a) Two-Lane Highways. Two flaggers will be required for each separate operation where two-way traffic is maintained over one lane of pavement. Work operations controlled by flaggers shall be no more than 1 mile (1600 m) in length. Flaggers shall be in sight of each other or in direct communication at all times. Direct communication shall be obtained by using portable two-way radios or walkie-talkies.

The Engineer will determine when a side road or entrance shall be closed to traffic. A flagger will be required at each side road or entrance remaining open to traffic within the operation where two-way traffic is maintained on one lane of pavement. The flagger shall be positioned as shown on the plans or as directed by the Engineer.

(b) Multi-Lane Highways. At all times where traffic is restricted to less than the normal number of lanes on a multilane pavement with a posted speed limit greater than 40 mph and the workers are present, but not separated from the traffic by physical barriers, a flagger or spotter shall be furnished as shown on the plans. Flaggers shall warn and direct traffic. Spotters shall monitor traffic conditions and warn workers of errant approaching vehicles or other hazardous conditions as they occur. One flagger will be required for each separate activity of an operation that requires frequent encroachment in a lane open to traffic. One spotter will be required for each separate activity with workers near the edge of the open lane or with their backs facing traffic.

Flaggers will not be required when no work is being performed, unless there is a lane closure on two-lane, two-way pavement.”

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

Revised: April 2, 2015

The Contractor shall submit a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) that are used for DBE goal credit.

The report shall be submitted to the Engineer on Department form “SBE 723” within ten business days following the reporting period. The reporting period shall be Monday through Sunday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020

Add the following to Article 701.03 of the Standard Specifications:

“(q) Temporary Sign Supports1106.02”

Revise the third paragraph of Article 701.14 of the Standard Specifications to read:

“For temporary sign supports, the Contractor shall provide a FHWA eligibility letter for each device used on the contract. The letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device. The signs shall be supported within 20 degrees of vertical. Weights used to stabilize signs shall be attached to the sign support per the manufacturer’s specifications.”

Revise the first paragraph of Article 701.15 of the Standard Specifications to read:

“701.15 Traffic Control Devices. For devices that must meet crashworthiness standards, the Contractor shall provide a manufacturer’s self-certification or a FHWA eligibility letter for each Category 1 device and a FHWA eligibility letter for each Category 2 and Category 3 device used on the contract. The self-certification or letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device.”

Revise the first six paragraphs of Article 1106.02 of the Standard Specifications to read:

“1106.02 Devices. Work zone traffic control devices and combinations of devices shall meet crashworthiness standards for their respective categories. The categories are as follows.

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, plastic drums, and delineators, with no attachments (e.g. lights). Category 1 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 1 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include vertical panels with lights, barricades, temporary sign supports, and Category 1 devices with attachments (e.g. drums with lights). Category 2 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 2 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions (impact attenuators), truck mounted attenuators, and other devices not meeting the definitions of Category 1 or 2. Category 3 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2029. Category 3 devices shall be crash tested for Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as arrow boards, changeable message signs, temporary traffic signals, and area lighting supports. It is preferable for Category 4 devices manufactured after December 31, 2019 to be MASH-16 compliant; however, there are currently no crash tested devices in this category, so it remains exempt from the NCHRP 350 or MASH compliance requirement.

For each type of device, when no more than one MASH-16 compliant is available, an NCHRP 350 or MASH-2009 compliant device may be used, even if manufactured after December 31, 2019.”

Revise Articles 1106.02(g), 1106.02(k), and 1106.02(l) to read:

“(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be approved for use at Test Level 3. Test Level 2 may be used for normal posted speeds less than or equal to 45 mph.

(k) Temporary Water Filled Barrier. The water filled barrier shall be a lightweight plastic shell designed to accept water ballast and be on the Department’s qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings.

(l) Movable Traffic Barrier. The movable traffic barrier shall be on the Department’s qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings. The barrier shall be capable of being moved on and off the roadway on a daily basis.”

REVISIONS TO THE ILLINOIS PREVAILING WAGE RATES

The Prevailing rates of wages are included in the Contract proposals which are subject to Check Sheet #5 of the Supplemental Specifications and Recurring Special Provisions. The rates have been ascertained and certified by the Illinois Department of Labor for the locality in which the work is to be performed and for each craft or type of work or mechanic needed to execute the work of the Contract. As required by Prevailing Wage Act (820 ILCS 130/0.01, et seq.) and Check Sheet #5 of the Contract, not less than the rates of wages ascertained by the Illinois Department of Labor and as revised during the performance of a Contract shall be paid to all laborers, workers and mechanics performing work under the Contract. Post the scale of wages in a prominent and easily accessible place at the site of work.

If the Illinois Department of Labor revises the prevailing rates of wages to be paid as listed in the specification of rates, the contractor shall post the revised rates of wages and shall pay not less than the revised rates of wages. Current wage rate information shall be obtained by visiting the Illinois Department of Labor web site at <http://www.state.il.us/agency/idol/> or by calling 312-793-2814. It is the responsibility of the contractor to review the rates applicable to the work of the contract at regular intervals in order to insure the timely payment of current rates. Provision of this information to the contractor by means of the Illinois Department of Labor web site satisfies the notification of revisions by the Department to the contractor pursuant to the Act, and the contractor agrees that no additional notice is required. The contractor shall notify each of its subcontractors of the revised rates of wages.