

New Jersey Turnpike Authority

P.O. Box 5042, Woodbridge, NJ 07095



June 13, 2025

Document Change Announcement

2016 Standard Supplementary Specifications

Portable Longitudinal Steel Barrier

DCA2025SS-05

Subject: Revisions to

Section 801 Traffic Control on Authority Roadways, Subsection 801.02 Materials,
Subsection 801.03 Methods of Construction, Subsection 801.04 Measurement,
Subsection 801.05 Payment

Section 920 Traffic Control Devices, Subsection 920.17 Modular Glare Screen System,
Subsection 920.22 Portable Longitudinal Steel Barrier

Description of Change:

This DCA adds portable longitudinal steel barrier as an approved alternate to precast concrete construction barrier. Clarification was added for mounting of modular glare screen systems in accordance with instructions of the glare screen system manufacturer and barrier manufacturer as applicable.

Contract documents shall utilize as basis of design, unless otherwise directed, precast concrete construction barrier adhering to the joint classes as defined on the TP Standard Drawings and Section 10 of the Design Manual.

Concurrent DCAs to Design Manual and Standard Supplementary Specifications are released to integrate these revisions.

Notice to New Jersey Turnpike Authority Staff and Design Consultants

Effective immediately, all contracts currently in the design phase shall incorporate the revisions herein. For advertised contracts awaiting the opening of bids this revision shall be incorporated via addendum. Contact your New Jersey Turnpike Authority Project Manager for instruction.

The revisions may be accessed on the Authority's webpage: <https://www.njta.com/doing-business/professional-services>

Recommended By:

(signature on original)

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NOTE: All text herein are REVISIONS, as indicated by the tracked changes, to the latest version of the 2016 Standard Supplementary Specifications.

SECTION 801 – TRAFFIC CONTROL ON AUTHORITY ROADWAYS

801.02 Materials

Delete the following:

IMPACT ATTENUATOR (QUADGUARD)524

Add the following:

CONCRETE MOUNTED DELINEATORS 923.18(A)

RE-DIRECTIVE IMPACT ATTENUATOR..... 920.20

CONE TRUCK..... 920.21

PORTABLE LONGITUDINAL STEEL BARRIER..... 920.22

Specific to portable longitudinal steel barrier, the Contractor shall submit the manufacturer's certificates of compliance in accordance with Subsection 105.04 and shall include the following information:

1. Product Trade Name
2. Anchoring details and allowable deflection distances for MASH TL-3.
3. Installation requirements and procedures.

801.03 Methods of Construction

(A) GENERAL PROVISIONS

(1) State Police Authority

Delete the first paragraph and replace it with the following:

Traffic on Authority roadways is under the direct supervision and control of the New Jersey State Police who will enforce all statutory laws including the Authority's established Regulations under the Subchapter titled "Traffic Control On, And Use Of, New Jersey Turnpike Authority Property", as they pertain to the Contractor as well as to the traveling public. The regulations can be found on the Authority's website <https://www.njta.com/about/regulations-and-policies>. The Contractor shall become familiar with and adhere strictly to the requirements of these Regulations.

(2) Traffic Permit

In the first paragraph, delete the third sentence and replace it with the following:

A Traffic Permit Application can be found on the Authority's website at <https://www.njta.com/about/traffic-permits>.

(B) CLOSINGS, SLOWDOWNS, AND ESCORTS

Delete the ninth paragraph and replace it with the following:

The traffic protection devices for closing of a lane, shoulder, or ramp shall always be set up progressively in the direction of traffic from the cone truck and TMA traveling in the lane or shoulder being closed. The protection devices shall always be removed in the reverse order by the truck backing up on the closed lane, shoulder, or ramp. Proper flashing amber lights shall be installed on all construction vehicles in accordance with Subsection 920.13. Closing or opening operations along lane, shoulder, or ramps require at least a six (6) person team consisting of a TMA and cone truck with a four (4) person crew, and additional construction vehicles and workers

as required for installing signs and arrow boards. The Engineer will coordinate the procedures for closing or opening a lane, shoulder, or ramp

(C) TRAFFIC CONTROL DEVICES

(2) Precast Concrete Construction Barrier

Delete this Subparagraph in its entirety and replace it with the following:

Construction barrier shall be either precast concrete construction barrier or portable longitudinal steel barrier as defined below. Contractor shall not intermix precast concrete construction barrier and portable longitudinal steel barrier. Unless the contract documents specify otherwise the Contractor may use either Precast Concrete Construction Barrier or Portable Longitudinal Steel Barrier that provides working widths consistent with the requirements of the Contract Documents.

a. Precast Concrete Construction Barrier

Precast concrete construction barrier shall be inspected and approved by the Engineer prior to delivery to the job site. The precast concrete construction barrier shall meet the criteria set forth below. The Engineer will be the sole judge of the acceptability of the precast concrete barrier. Precast concrete barrier deemed unsatisfactory by the Engineer shall not be used. Precast concrete barrier that is damaged or deteriorates during the course of the Project shall be replaced at no additional cost to the Authority.

Where different joint classifications are required within a section of barrier, the controlling joint class shall extend beyond the area required for limited deflection as noted in the following table:

PCCB - Transition Between Joint Classes	
Joint Class Transition	Transition Requirements
D to C	Extend one complete barrier section of Joint Class D beyond the work area requiring limited deflection.
D to B D to A	Extend one complete barrier section of Joint Class D beyond the work area requiring limited deflection and pin the first hole of the Joint Class A or B barrier section on the traffic side of the PCCB.
C to B C to A	Extend one complete barrier section of Joint Class C beyond the work area requiring limited deflection and pin the first hole of the Joint Class A or B barrier section on the traffic side of the PCCB.
B to A	Extend Joint Class B box beam stiffing for 50 ft. minimum beyond the work area requiring limited deflection.

The concrete construction barrier may be installed after the removal of existing surfacing and removed prior to paving, unless otherwise shown on Plans, if site conditions and construction sequence require doing so.

The Contractor shall furnish all hardware, concrete barrier interlock devices, grouting, box beam and associated hardware, anchors and all else necessary for the complete installation and subsequent removal and/or relocation of the concrete barrier. Concrete barrier shall be installed on a uniform surface free from vertical projections and drop-offs and free from fixed objects for the maximum barrier deflection distances for the joint class as indicated on

the plans. Except as approved by the Engineer the Contractor must maintain the minimum clear area behind the barrier free from personnel, equipment, and material.

The Contractor shall be required to maintain the concrete barrier units in their correct alignment at all times. The Contractor shall promptly furnish (any time of the day or night upon notification from the Authority, State Police or the Engineer) all labor, materials and equipment as necessary to repair, reset and/or realign any portion of concrete barrier units damaged or displaced by traffic incidents or otherwise. All Contractor-furnished devices shall remain the property of the Contractor and shall be removed by the Contractor upon completion of the work.

All precast concrete construction barrier that does not meet the following criteria, as determined by the Engineer prior to placement on the roadway, shall be rejected for use:

- No more than three cracks in the middle 6 feet of the barrier.
- All cracks must be less than 1/8 inch wide.
- No gouges in the lower half of the face exposed to traffic.
- No reinforcing steel shall be exposed.
- The keyway must be intact.
- Lifting devices shall be intact.
- Face exposed to traffic must be clean of all road dirt.
- Concrete barrier delineators shall be in place.
- Interlock must accept key full depth without Projection of key cap above barrier.
- The full keyway must be available.

Precast concrete construction barrier that becomes damaged shall be replaced within 24-hours, as directed by the Engineer.

The Contractor shall clean and maintain the drainage slots at the bottom of the concrete construction barrier at all times as directed by the Engineer.

b. Portable Longitudinal Steel Barrier

Portable longitudinal steel barrier delivered to the job site shall be in new condition and maintained throughout the duration of the Project. The Engineer will determine the acceptability of the steel barrier. Steel barrier deemed unsatisfactory by the Engineer shall not be used. Steel barrier that is damaged during the course of the Project shall be replaced at no additional cost to the Authority.

All portable longitudinal steel barrier that does not meet the following criteria, as determined prior to placement on the roadways, shall be rejected for use:

- Barrier shall not be modified (cut, drilled, or penetrated) except as approved by the manufacturer.
- Barrier shall be free from manufacturing defects and visible deformation (bends, indentures, tearing, or buckling).
- The barrier connection ends shall be intact.
- Anchor slots shall be intact.
- Lifting devices shall be intact.
- Barrier shall have no visible evidence of corrosion or lack / loss of galvanization.
- Barrier face exposed to traffic must be clean of all road dirt; cosmetic damage to the barrier such as paint or tire blemishes shall not be cause for rejection.

- Reflectors shall be in place.

Portable longitudinal steel barrier may be installed after the removal of existing surfacing and removed prior to paving, unless otherwise shown on Plans, if site conditions and construction sequence require doing so.

The Contractor shall furnish all hardware, anchors, and all other components necessary for the complete installation and subsequent removal and/or relocation of the portable longitudinal steel barrier system. Steel barrier shall be installed on a uniform surface free from vertical projections and drop-offs for the entire length of the system as per the manufacturer's specified tolerances. The steel barrier system shall be free from fixed objects for the maximum barrier deflection distances as indicated on the plans. Except as approved by the Engineer the Contractor must maintain the minimum clear area behind the steel barrier free from personnel, equipment, and material.

The Contractor shall be required to maintain the portable longitudinal steel barrier units in their correct alignment at all times. The Contractor shall promptly furnish (any time of the day or night upon notification from the Authority, State Police or the Engineer) all labor, materials and equipment as necessary to repair, replace, reset and/or realign any portion of the steel barrier units damaged or displaced by traffic incidents or otherwise. All Contractor-furnished devices shall remain the property of the Contractor and shall be removed by the Contractor upon completion of the work.

Portable longitudinal steel barrier that becomes damaged shall be replaced within 24-hours, as directed by the Engineer.

The Contractor shall clean and maintain the drainage slots at the bottom of the portable longitudinal steel barrier, as applicable, at all times as directed by the Engineer.

All relevant references to "Precast Concrete Construction Barrier" and "PCCB" in the plans and specifications shall by extension be applicable to "Portable Longitudinal Steel Barrier".

(3) Modular Glare Screen System

Delete the first paragraph and replace it with the following:

Within isolated deck replacement areas and at parapet replacement areas, a Modular Glare Screen System with screening shall be installed on top of the barrier at locations shown on the Plans. The Modular Glare Screen System is required at isolated deck replacement areas scheduled for a Stage that is permitted for a period of four (4) days or greater and at all parapet replacement areas.

Delete the third paragraph and replace it with the following:

The Modular Glare Screen System shall extend for the full length of the barrier (except on taper sections) adjacent to deck breakouts as shown on the Plans.

Delete Part 801.03(C)(4) and replace it with the following:

(4) Temporary Impact Attenuators (Array)

Temporary Impact Attenuators (Array) refer to non-redirective sand-filled polyethylene plastic frangible modules. Temporary impact attenuator modules which are lost, stolen, damaged, destroyed or determined by the Engineer to be unacceptable shall be replaced without additional compensation.

Attenuators shall be installed in accordance with the manufacturer's directions and as indicated on the Plans. Attenuator system designs are independently evaluated for MASH compliance and unless indicated by the attenuator system manufacturer, components from different attenuator systems are not to be interchanged.

The Contractor shall be responsible for preparing the surface to the dimensions and grades as shown on the Plans and as required by the attenuator system manufacturer on which the attenuator will be

installed.

Install the attenuator according to the manufacturer's directions for the type of obstruction being shielded and the type of transition being used. The Contractor shall be certified in accordance with the manufacturer's requirements to perform installation.

The Contractor shall notify the Engineer immediately upon discovery of any damaged temporary impact attenuator module and shall immediately replace or repair all damaged modules. The Contractor shall have on the Project an adequate number of spare modules to repair any damaged attenuator unit. Any modules of a unit or sand which are damaged due to the Contractor's carelessness while placing, or due to the operation of the Contractor's equipment or personnel after such placement, shall be replaced at no additional cost to the Authority.

All new material shall be furnished, except where resetting or salvaging is called for on the Plans.

Delete Part 801.03(C)(5) and replace it with the following:

(5) Temporary Re-directive Impact Attenuators

Temporary Impact Attenuators (Cartridge) and Temporary Impact Attenuators, Type ____ refer to re-directive impact attenuators and transitions as identified on the Plans.

For re-directive impact attenuators installed in a construction zone on a temporary basis, work shall also include the maintenance of the attenuator during construction, repair or replacement during construction, relocation to a different area, removal upon completion and the restoration of pavement after removal.

Refer to Section 524 for additional requirements.

(6) Truck with Mounted Attenuator (TMA)

Delete this Subparagraph in its entirety and replace it with the following:

This item shall also include placing, moving, and removing the TMA unit as necessary when the Contractor is working within a closed shoulder or lane. The TMA shall be removed from the closed shoulder or lane when no work is in progress.

The Contractor shall provide a TMA as a barrier vehicle in the closed lane or closed shoulder preceding each work location where personnel are engaged in construction activities and no concrete barrier is called for.

The appropriate number of TMAs, as shown on the Plans, are to be provided for work on this Contract. The TMAs shall remain the Contractor's property upon Contract completion. If the Contractor elects to work at more than one location requiring a TMA, he shall furnish additional TMAs at no additional cost to the Authority.

The TMA layout (positioning) shall conform to the requirements set forth in the section on Truck Mounted Attenuators in the most recent Edition of the AASHTO Roadside Design Guide.

Any units or parts of the truck mounted attenuator which are damaged or become inoperable during construction shall be repaired or replaced. A complete replacement module and the required components for restoration shall be available at all times on the project without additional compensation.

The vehicle lights shall run continuously whenever the truck is performing closing and opening operations.

In the event that the TMA is hit during the process of the work and the crash cushions become damaged or inoperable, the Contractor shall have a replacement cartridge on the site at all times and shall immediately repair the truck mounted crash cushions. The replacement cartridge shall be compatible with the original unit so that the repair can be accomplished in a minimal amount of time.

The Contractor shall have a truck mounted attenuator with a driver available at the request of the Engineer for the purpose of inspection, condition assessment, layout of "If and Where Directed"

work, "Change Order", and/or "Emergency Work" and for the Final Inspection. It is anticipated that the truck mounted attenuator with the driver will be needed a minimum of four (4) hours and no more than eight (8) hours per request with a twelve (12) hour advance notice by the Engineer. Payment for costs associated with this work shall be in accordance with "Furnishing Truck Mounted Attenuator for Engineer's Use", or shall be included in the unit costs of the various pay items within Division 800.

(7) Cone Trucks.

Delete this Subparagraph in its entirety and replace it with the following:

All lane, shoulder, and ramp closing operations shall be performed with a minimum of three (3) vehicles consisting of a cone truck, a truck with mounted attenuator (TMA) in accordance with 801.03(C)(6), and auxiliary vehicle(s) for sign(s) and arrow board(s).

The cone truck shall be equipped with vehicle lights per Subsection 920.13. The vehicle lights shall run continuously whenever the cone truck is performing closing or opening operations.

The cone truck when actively installing or removing taper shall only be responsible for cones and shall not stop for signs or arrow boards. The installation or removal of signs or arrow boards located within a taper shall require an additional vehicle. The TMA shall not be used to store signs or other devices.

The crew of the cone truck includes three workers on the back of the cone truck, and the driver for a minimum four (4) person crew. One of the workers on the back of the cone truck is the traffic observer. The second worker on the back of the cone truck retrieves and delivers the devices to and from the worker basket and the third worker on the back of the cone truck deploys or retrieves the devices from the roadway.

The traffic observer shall be positioned on the cone truck in a location that allows unobstructed view and in the immediate vicinity of an emergency air horn, whistle, intercom or other audible device in case of an emergency. The sole responsibility of the traffic observer shall be to observe traffic and the crew, and this person shall activate the emergency audible device as a warning to indicate a threat to the crew or operation.

The use of the cone truck, and traffic observer during closing and opening operations is mandatory and no exception shall be made. At all times the cone truck shall operate in conjunction with a TMA and sufficient additional construction vehicles to ensure the closing and opening operation are performed in a continuous manner without stopping of the TMA or cone truck.

Under no circumstance shall a cone truck remain in a closed lane, shoulder, or ramp during non-working hours or a period of inactivity.

Add the following Paragraph::

(D) HOLIDAYS, RESTRICTIONS, AND SPECIAL PROVISIONS

[Insert text as necessary]

801.04 Measurement

Replace the 2nd thru 5th paragraphs 2 with the following:

Furnishing Construction Barrier will be measured by the linear foot along the front vertical face of the barrier, including tangent and taper runs, as it is used on the project, and the quantity will be limited to the maximum linear footage that is installed simultaneously on the project. Provisions for joint interlocking devices; reflectors; shimming and leveling; blockouts; grouting joints; anchorages into pavement; restoring roadway surfaces following barrier removal; lifting devices; flashing lights; the labor, materials and equipment for transportation and delivery to the project site; furnishing test results or service history for approval by the Engineer, and any incidentals required in supplying the required quantity of construction barrier to the Project will not be measured separately for payment.

Placing and Removing Construction Barrier will be measured by the linear foot along the front vertical face of the barrier, including tangent and taper runs, as it is installed in its properly assembled final alignment and subsequently removed. The barrier shall not be measured twice to account for subsequent removal. Labor for loading and

unloading of units; trucks; all trailers; all heavy machinery and other equipment required to place and remove the barrier as prescribed will not be measured separately for payment. Relocating construction barrier as a result of accidents will be paid under the established pay item in the Contract or on a cost-plus basis as specified in Subsection 108.04 or on such other basis as agreed upon by the Contractor and the Engineer. Relocating construction barrier to gain access to a work area will not be measured separately for payment.

Resetting Construction Barrier will be measured by the linear foot along front vertical face of the barrier, including tangent and taper runs, actually shifted when an existing barrier alignment is to be modified as shown on the Staging Plans, or as directed by the Engineer or for staged construction. Resetting construction barrier will only apply to barrier that had been previously installed on the Project and must be relocated to a new location a minimum of seven (7) feet adjacent to the previous location for staged construction. Resetting of barrier to a location less than seven (7) feet will not be measured separately for payment. Resetting of barrier that requires the loading of units onto a truck and unloading of same shall be measured under the item "Placing and Removing Construction Barrier". Resetting construction barrier as a result of accidents or to gain access to a work area will not be measured separately for payment.

Modular Glare Screen System along the top of construction barrier as directed by the Engineer will be measured for payment by the linear foot of system furnished, installed and maintained along the tangent section of barrier in each location as prescribed. Removal and subsequent installation of the modular guidance system and screening for the purpose of placing, relocating or removing the barrier will not be measured separately for payment. Furnishing, installing and maintaining of the screening will not be measured separately for payment.

Delete the eighth paragraph and replace it with the following:

Furnishing Portable Variable Message Sign will be measured by the number of each and will be limited to the maximum number provided in the Contract, which is installed simultaneously, plus one spare sign which must be retained by the Contractor for use in this Contract. Sign placement, removal and maintenance will not be measured separately for payment.

Delete the ninth paragraph and replace it with the following:

Furnishing Temporary Impact Attenuator (Array), ___ MPH will be measured by the number of each complete unit (barrel configuration) installed to the maximum number provided in the Proposal that are installed simultaneously.

Delete the tenth paragraph and replace it with the following:

Placing and Removing Temporary Impact Attenuator (Array), ___ MPH will be measured by the total number of complete units placed in each location as prescribed by the plans and as accepted by the Engineer. Removal, relocating or resetting of temporary impact attenuators will not be measured separately for payment.

Delete the eleventh paragraph and replace it with the following:

Repair and Reset Temporary Impact Attenuator (Array), Module will be measured by the total number of modules requiring replacement or repairs in each barrier system, either damaged or destroyed by the traveling public and as directed by the Engineer. Modules damaged by Contractor operations will not be measured for payment.

Delete the nineteenth paragraph and replace it with the following:

Furnishing Temporary Impact Attenuator (Cartridge), ___ Bays, ___" Wide will be measured by the number of each complete unit installed to the maximum number provided in the Proposal that are installed simultaneously.

Add the following to the end of the Subsection:

Placing and Removing Temporary Impact Attenuator (Cartridge) will be measured by the total number of complete units placed in each location as prescribed by the plans and as accepted by the Engineer. Removal of temporary impact attenuators will not be measured for payment.

Repair and Reset Temporary Impact Attenuators (Cartridge) will be measured by the number of each complete unit to be replaced or repaired, either damaged or destroyed by the traveling public and as directed by the Engineer. Units damaged by Contractor operations will not be measured for payment.

Furnishing Temporary Impact Attenuator, Type ___ will be measured by the number of each complete unit installed to the maximum number provided in the Proposal that are installed simultaneously.

Placing and Removing Temporary Impact Attenuator, Type ____ will be measured by the total number of complete units placed in each location as prescribed by the plans and as accepted by the Engineer. Removal of temporary impact attenuators will not be measured for payment.

Repair and Reset Temporary Impact Attenuators, Type ____ will be measured by the number of each complete unit to be replaced or repaired, either damaged or destroyed by the traveling public and as directed by the Engineer. Units damaged by Contractor operations will not be measured for payment.

Add the following to the end of this Subsection:

Installation, Maintenance, and Removal of Lane Closing will be measured by the number of each or percentage thereof (as described in Subsection 801.05), installed, maintained, and removed. See Subsection 801.05 for payment of Supplementary Lane Closings. Lane or shoulder closings for "Force Account", "If and Where Directed by the Engineer", "Change Order" or "Emergency" work will be measured in accordance with Subsection 108.04.

No separate payment will be made for lane closings and supplementary lane closings, but the costs thereof will be included in the unit price bid for the pay item "Furnishing Traffic Control Devices."

Replace the entire Subsection with the following:

Maintenance and Protection of Traffic will be measured on a lump sum basis and shall include all equipment, labor material or expense to install, maintain and remove maintenance and protection of traffic for the Contract.

801.05 Payment

The following items are removed:

PAY ITEM.....	PAY UNIT
FURNISHING TEMPORARY IMPACT ATTENUATOR.....	EACH
PLACING AND REMOVING TEMPORARY IMPACT ATTENUATOR.....	EACH
REPAIR TEMPORARY IMPACT ATTENUATORS.....	BARREL
<u>FURNISHING PRECAST CONCRETE CONSTRUCTION BARRIER</u>	<u>LINEAR FOOT</u>
<u>PLACING AND REMOVING PRECAST CONCRETE CONSTRUCTION BARRIER</u>	<u>LINEAR FOOT</u>
<u>RESETTING PRECAST CONCRETE CONSTRUCTION BARRIER</u>	<u>LINEAR FOOT</u>

Add the following items:

PAY ITEM.....	PAY UNIT
FURNISHING TEMPORARY IMPACT ATTENUATOR (ARRAY), ____ MPH.....	EACH
PLACING AND REMOVING TEMPORARY IMPACT ATTENUATOR (ARRAY), ____ MPH	EACH
REPAIR AND RESET TEMPORARY IMPACT ATTENUATOR (ARRAY) MODULE	EACH
FURNISHING TEMPORARY IMPACT ATTENUATOR (CARTRIDGE), __ BAYS, __" WIDE	EACH
PLACING AND REMOVING TEMPORARY IMPACT ATTENUATOR (CARTRIDGE).....	EACH
REPAIR AND RESET TEMPORARY IMPACT ATTENUATOR (CARTRIDGE).....	EACH
FURNISHING TEMPORARY IMPACT ATTENUATOR, TYPE ____	EACH
PLACING AND REMOVING TEMPORARY IMPACT ATTENUATOR, TYPE ____	EACH
REPAIR AND RESET TEMPORARY IMPACT ATTENUATOR, TYPE ____	EACH
<u>FURNISHING CONSTRUCTION BARRIER.....</u>	<u>LINEAR FOOT</u>
<u>PLACING AND REMOVING CONSTRUCTION BARRIER.....</u>	<u>LINEAR FOOT</u>
<u>RESETTING CONSTRUCTION BARRIER</u>	<u>LINEAR FOOT</u>

Delete the tenth paragraph after the pay item table and replace it with the following:

No separate payment will be made for repairing impact attenuator modules damaged by Contractor operations.

Delete the thirteenth paragraph after the pay item table and replace it with the following:

Payment for permanent Impact Attenuators to remain shall be in accordance with Subsection 524.05.

Add the following item:

PAY ITEM.....	PAY UNIT
INSTALLATION, MAINTENANCE AND REMOVAL OF LANE CLOSINGS.....	EACH

Add the following item:

PAY ITEM.....	PAY UNIT
MAINTENANCE AND PROTECTION OF TRAFFIC.....	LUMP SUM

A partial payment of 25% of the unit price bid for the pay item **“Installation, Maintenance, and Removal of Lane Closing”** will be made for the following closings:

- Supplementary lane closings installed adjacent to a right or left lane closing.
- Short duration lane closings required prior to or following the primary lane closing (pre and post closings) for temporary striping, concrete barrier placement and removal, and striping restoration.
- Lane closings that are cancelled or delayed by the Authority after the Contractor is mobilized.
- Ramp closings including those required in conjunction with mainline closings and pre and post ramp closings.
- Extension of an existing lane closing, as directed by the Engineer to perform additional work.
- The length of extension is anticipated not to exceed one mile.
- Shoulder Closings (those not requiring lane shifts).

Lane closings for lane shift installations will be paid for at 100% of the unit price bid for the pay item **“Installation, Maintenance, and Removal of Lane Closing”**, regardless of the number of lanes shifted.

Short duration lane closings required on mainline roadways for installation and removal of catches on overhead structures will be paid for at 100% of the unit price bid for the pay item **“Installation, Maintenance, and Removal of Lane Closing”**.

Supplementary right or left lane closings installed adjacent to right or left shoulder closings will be paid for at 100% of the unit price bid for the pay item **“Installation, Maintenance, and Removal of Lane Closing.”**

Payment for mainline shoulder and half-ramp closings will be made for only those closings noted in the staging write-up and will be paid for under the pay item **“Installation, Maintenance and Removal of Lane Closing.”** All other closings (i.e. partial or short sections of ramp closings) will not be paid for separately.

920.17 Modular Glare Screen System

Delete the first and second paragraph and replace it with the following:

Modular Glare Screen System shall be from an approved supplier as listed on the QPL. The panels shall be 6 inches wide with a height of 24 inches and shall be mounted to the top of the barrier as per the instructions of both the system manufacturer and the barrier manufacturer as applicable. The panels shall be FHWA highway green in color.

Reflective tape three (3) inches wide and six (6) inches high shall be applied to the blades every ten (10) feet. The tape shall be high intensity grade reflective sheeting. The tape color shall be white when traffic is to the left and yellow when traffic is to the right. Tape shall be applied vertically centered on the blade on the edge closest to passing traffic.

Add the following Subsection:

920.22 Portable Longitudinal Steel Barrier.

Portable longitudinal steel barrier systems shall be MASH compliant systems from the QPL. The MASH compliant system shall conform to MASH Test Level 3 (TL-3). MASH compliance shall include a FHWA Federal Aid eligibility letter, if issued by the FHWA, and documentation of MASH compliance including crash test videos, crash test results and/or analysis.

Installation and materials shall conform to the manufacturer's detailed drawings and instructions used to determine MASH compliance of the portable longitudinal steel barrier system. The nominal length of the steel barrier sections shall be adjusted to accommodate curved barrier alignments as specified by the manufacturer, down to the allowable minimum curve radius as determined by the manufacturer. Components from multiple barrier systems shall not be intermixed.

When used in lieu of concrete construction barrier as specified in Subsection 920.08, the maximum dynamic deflection of the portable longitudinal steel barrier system shall not exceed the minimum required clear area of the concrete barrier system joint class specified by the contract plans and as defined on the TP Standard Drawings. The equivalent anchorage treatment to achieve the minimum clear area of the required joint class shall be as per the manufacturer's instructions.

Portable longitudinal steel barriers shall be provided with delineators mounted on the side of the barrier as per the manufacturer's instructions at twenty (20) foot intervals. The side mounted delineators shall be yellow when the construction barrier is to the left of traffic and white when the construction barrier is to the right of traffic. Delineators shall also be mounted on the top of the steel barriers as per the manufacturer's instructions at 100-foot intervals on tangent sections, curves of radii greater than 1,910 feet, and at 50-foot intervals on curves of 1,910 feet or less. Delineators shall be provided in accordance with Subsection 923.18.

On tapered portions of portable longitudinal steel barrier, flashing lights shall be mounted instead of delineators as per the manufacturer's instructions. One flashing light is to be mounted at the beginning of the taper and additional flashing lights are to be mounted at forty (40) foot intervals. The flashing lights shall be in accordance with Subsection 920.04 and shall be operational twenty-four (24) hours a day.