Attachment 9

Special Notes – NYSDOT Specific Projects
(REVISED 02/10/2022)

Liquid Bituminous Materials
(2022 VPP NYSDOT Specific Projects)
(Federal & State Funds)

IFB# 23257

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SECTION 1: CHIP SEAL - SPECIFIC PROJECTS

1.1 Introduction

Chip seal is a pavement preventive maintenance treatment which consists of single-sized stone embedded in a liquid bituminous material. The liquid bituminous material seals cracks in the existing pavement and the stone provides a high-friction wearing surface.

1.2 Pricing Information

1.2.1 General

Price quoted for chip seal shall be net per square yard furnished, hauled, delivered, and applied with contractor's equipment totally by the contractor at the locations indicated herein including the cost of labor, surface preparation, and materials, except liquid bituminous materials and cover sand. Liquid bituminous materials used for chip seal and fog seal, and the cover sand will be paid for under separate items. Price quoted per square yard of chip seal shall also include mobilization to the project site, the provision of Work Zone Traffic Control as indicated elsewhere in this Invitation for Bids, and Maintenance Materials Bond as listed in the *Maintenance Material Bonds* section in this Invitation for Bids. The price quoted per gallon of liquid bituminous materials for chip seal and fog seal shall include heating, hauling, and applying the liquid bituminous materials at the project locations indicated herein. The price quoted per square yard of cover sand shall include hauling and applying the necessary cover sand at the project locations indicated herein.

1.3 Asphalt Price Adjustments

1.3.1 General

a. Asphalt price adjustments allowed will be based on the January 2022 average of the F.O.B. terminal price per ton of unmodified PG 64S-22 binder without anti-stripping agent (base average F.O.B. terminal price). The new monthly average terminal price will be determined by the New York State Department of Transportation based on prices of preapproved primary sources of performance graded binder in accordance with the New York State Department of Transportation Standard Specifications.

The January 2022 average is $580.00.

NOTE: The same grade of asphalt cement used in establishing the base average F.O.B. terminal price shall be used in establishing the new average F.O.B. terminal price.

In the event that one or more of the New York State Department of Transportation pre-approved sources discontinue posting a price for asphalt cement, the base average F.O.B. terminal **price shall not be recalculated.**

b. The new average F.O.B. terminal price will be determined based on the above F.O.B. terminal prices posted on the 20th of each month, hereafter known as the "Adjustment Date", during the contract period. However, asphalt price adjustments, in accordance with the formula below, will be effective for deliveries made on and after the first of the month following the adjustment date.

c. The unit prices of liquid bituminous materials purchased from any award based on this specification will be subject to adjustment based on the following formula:

$$\text{Price Adjustment (per gallon)} = \frac{\text{New Monthly Average FOB Terminal Price} - \text{Base Average Terminal Price}}{235} \times \text{Total Allowable Petroleum \%}$$

Positive Price Adjustment number shall be added to original per gallon Bid Price.
Negative Price Adjustment number shall be subtracted from original per gallon Bid Price.

SECTION 1: CHIP SEAL - SPECIFIC PROJECTS (Cont'd)

New Monthly Average F.O.B. Terminal Price

The average F.O.B. terminal price for unmodified PG 64S-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation per New York State Department of Transportation Standard Specification.

Base Average F.O.B. Terminal Price

The average F.O.B. terminal price of unmodified PG 64S-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation as of January 2022.

Total Allowable Petroleum

The percentage of total allowable petroleum for each item is as follows:

Material Designation	Grade	Asphalt %	Petroleum Allowance %	Total Allowable Petroleum
702-3101P	RS-2	63	2.7	65.7
702-3102P	HFRS-2	63	2.7	65.7
702-3301P	HFMS-2	65	8.2	73.2
702-4101P	CRS-2	65	2.7	67.7
702-XXXXT	Diluted Tack Coat	40	0.2	40.2

Asphalt Price Adjustments will not be allowed for materials which do not have an asphalt cement base.

d. Work performed after the expiration of the contract, where no extension has been granted, resultant from purchase orders placed prior to expiration of the contract will receive the Asphalt Price Adjustments applicable in effect during the last month of the contract.

Asphalt Price Adjustments for any contracts that are extended will be based on the new average for the month in which the work is done applying the same base established for that contract.

e. Asphalt price adjustments allowed by this contract shall be calculated and applied to the original prices. There will not be asphalt price adjustments unless the change amounts to more than $0.100 per ton/$0.010 per gallon as applicable from the original price. In these instances, prices will revert to the original prices.

f. All Asphalt Price Adjustments will be computed to three decimal places.

g. Should these provisions result in a price structure which becomes unworkable, detrimental or injurious to the State or in prices which are not truly reflective of market conditions or which are deemed by the Commissioner to be unreasonable or excessive, and no adjustment in price is mutually agreeable, the Commissioner reserves the sole right upon ten business days written notice mailed to the Contractor to terminate any contract resulting from this bid opening.

h. All asphalt price adjustments shall be published by the State and issued to all contract holders whose responsibility will be to attach the appropriate State notification (based on when the work was performed) to the payment invoice submitted to agency.

SECTION 1: CHIP SEAL - SPECIFIC PROJECTS (Cont'd)

1.3.2 Asphalt Price Adjustment: Example

Material Designation 702-3301P, HFMS-2

Base Avg. Price per Ton = $580.000

New Avg. Price per Ton = $590.000

Total % Asphalt Plus Petroleum Allowance = 73.2%

Price Adjustment (per gallon)	=	$\frac{(590.000 - 580.000)}{235}$	X	0.732

Price Adjustment (per gallon)	=	+$0.031 per gallon

Positive Price Adjustment number shall be added to original per gallon Bid Price.
Negative Price Adjustment number shall be subtracted from original per gallon Bid Price.

1.4 Payment

Payment for chip seal shall be made at contract price bid for the actual number of completed square yards of chip seal, actual numbers of gallons of bituminous materials for chip seal, actual numbers of gallons of bituminous materials for fog seal, actual number of square yards of cover sand used in the accepted portions of the work. The determination as to quantities involved in any contract shall be accepted as final and binding upon the contractor.

Payment of work zone traffic control and abrading the existing pavement markings shall be included in the payment for number of square yards of completed chip seal.

A delivery slip stating quantities of liquid bituminous materials (modified or unmodified emulsions) shall accompany each shipment. An invoice listing the quantities of surface treatment shall be sent promptly by the contractor to the resident engineer.

1.5 Pre-Chip Seal Meeting

The contractor shall schedule a Pre-Chip Seal Meeting with the affected Resident Engineer at least two weeks prior to the start of the work under this contract. Project level supervisors from contractor and from the state shall be present at this meeting. At this meeting contractor shall present their chip seal schedule, mix design, number and types of equipment, chip seal procedure, and Work Zone Traffic Control Plan to the state for approval. The mix design for the chip seal must show the quantity in gallons per square yard of fog seal, the quantity in pounds per square yard of cover sand, the quantity in gallons and the type of liquid bituminous material per square yard, the quantity in pounds per square yard of aggregate, percent of polymer used to modify the asphalt emulsion, quantity in pounds per square yards of fiber (if applicable), and the design curing time. All the component materials used in the mix design shall be representative of the material proposed by the contractors to be used on the project. Adjustment may be required during the construction based on field conditions and with the approval of the state.

The contractor shall also furnish the state the copies of the calibrations of the liquid bituminous materials distributor and the aggregate spreader at the same time. The contractor shall indicate the aggregate sources at this meeting. At least one week prior to the start of work under this contract, the contractor shall coordinate the details of the chip seal with the state's representative.

SECTION 1: CHIP SEAL - SPECIFIC PROJECTS (Cont'd)

1.6 Bonding Requirements – Chip Seal

A Maintenance Material Bond is required for chip seal projects in this IFB. Please see sample in Attachment 10 – *Detailed Specifications – Liquid Bituminous Materials*.

Maintenance bond is to be provided to the attention of the Regional Director of Operations, or their Regional designee as determined at the Pre-Chip Seal meeting, for the corresponding Region. Each bond shall be specific to each Project Number, not contract, so that they may be released upon the completion of the terms in the contract for each corresponding Project/site.

1.7 Supervision

The Department of Transportation shall provide supervision for the chip seal operation, and pavement marking abrading if applicable. The Resident Engineer shall designate a Project Supervisor who shall be in charge of the operation. All orders pertaining to Work Zone Traffic Control plan from the Project Supervisor to the contractor shall be binding on the contractor. The following portions of Section 105 - CONTROL OF WORK of the Standard Specifications shall apply to these projects: 105-01 ENGINEER'S AUTHORITY, 105-05 VENDOR RESPONSIBILITY, 105-06 COOPERATION WITH UTILITIES AND OTHER CONTRACTORS.

1.8 Construction Details

The construction details shall comply with the requirements specified herein, including those appearing in the enclosed Attachment 10 - *Detailed Specifications – Liquid Bituminous Materials*. The project supervisor from the State shall have sole responsibility for determining compliance with the specifications. All orders given to the contractor regarding construction details shall be considered final.

1.9 Work Hours

Work shall not be permitted on Sundays and NYS Holidays. If the contractors desire to work overtime on other days, dispensation from NYS Labor Department must be obtained using Department of Labor Form PW-30 (04/21). Night work is prohibited unless agreed to by the Contractor and NYS Department of Transportation. All Overtime Dispensations requests shall be submitted to the Resident Engineer or his/her designee at the preconstruction meeting.

1.10 Special Note for Chip Seal

The Contractor will not be responsible for the initial conditioning of the existing pavement and shoulder surfaces as described in Section 402-3.05 of the NYSDOT Standard Specifications. Patching, joint repair, crack filling will be done by NYSDOT forces prior to the chip seal project. However, once work on the project begins, the Contractor is responsible for keeping the pavement and shoulders clean until the paving operations are completed, as per Section 633-3.01 of the NYSDOT Standard Specifications.

1.11 Restoration of Disturbed Areas

During the course of the work the vendor shall take reasonable care not to disturb areas outside the existing pavement. Any areas disturbed by the vendor shall be returned to their original condition at no expense to the State. Any and all debris generated as part of the work shall be removed by the Vendor upon completion of the project.

1.12 Damaged or Deficient Areas

Prior to acceptance and payment by the State for work under this contract, any placed pavement that ravels, delaminates, fails to properly cure, or is in any way defective shall be redone to the satisfaction of the State at the contractor's expense.

SECTION 1: CHIP SEAL - SPECIFIC PROJECTS (Cont'd)

1.13 Work Zone Traffic Control

The contractor shall be responsible for Work Zone Traffic Control. Traffic shall be controlled in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), Section 619-1 through 619-3 of the Standard Specifications as described herein including modifications to the Standard Specifications. The contractor shall submit a Work Zone Traffic Control Plan for approval to the Resident Engineer at the Pre-Chip Seal meeting. For two-way roadways, Figures TAST-C1, TAST-C2, TAST-C3OF, TAST-C3TF, TAST-C7 and TAST-CMF included in this Invitation for Bids may be used as a basis for development of a Work Zone Traffic Control Plan. For one-way roadways, Figures TAST-CE1, TAST-CE2, and TAST-C8 may be used as a basis for development of a Work Zone Traffic Control Plan.

All necessary flaggers for Work Zone Traffic Control shall be provided by the Contractor. For two-way roadways, a minimum of three flaggers shall be provided while the work operation is underway. One shall be stationed at each end of the applicable operation and one shall be stationed with the operation. For one-way roadways, a minimum of two flaggers shall be provided while the work operation is underway. One shall be stationed at the beginning of the applicable operation and one shall be stationed with the operation. The Contractor shall station flaggers such that communication is maintained between the flaggers. Hand signals, radios, pilot vehicles, or some other means of communication may be used subject to the approval of the Resident Engineer.

All costs of Work Zone Traffic Control as prescribed by this specification including flagging, temporary pavement marking and/or delineation, and construction signs, are to be included in the unit price bid. No separate payment shall be made.

(Continues on next page)

SECTION 1: CHIP SEAL - SPECIFIC PROJECTS (Cont'd)

1.13.1 Permanent Construction Signs

The Contractor shall provide construction signs as specified in Section 619-1 through 619-3 of the Standard Specifications and in the MUTCD. At minimum the Contractor shall install the following permanent construction signs: **(see next page).**

Major intersecting roads are defined as through State, County, Town, Village, or City roads. The Contractor may provide portable signs as shown in Figure 6F-2 of the MUTCD and meeting the requirements of Section 619 of the Standard Specifications for lane closures during work hours. Signs left active at night shall be rigid and reflectorized in accordance with the Standard Specifications.

With prior permission of the State's Resident Engineer, the Vendor may provide portable signs as shown in Figure 6F-2 of the MUTCD for the above referenced DO NOT PASS and NO CENTER LINE signs. The Contractor shall be responsible for assuring that these signs will be in their upright, visible positions twenty-four hours a day, seven days a week while 2' X 4" temporary yellow markings are used instead of full barrier pavement markings.

1.13.2 Temporary Pavement Markings

The Contractor shall install and maintain temporary pavement markings on any paved surface without permanent pavement markings before opening it to traffic, before nightfall or before the end of the work day, whichever comes soonest except for areas that are open during the work shift with channelizing devices or flaggers. Temporary pavement markings shall meet the requirements of Section 619 of the Standard Specifications except that two-lane, two-way highways may be left without full barrier centerlines in no passing zones for a maximum of 7 calendar days provided that NO CENTER LINE (W8-12, black on orange), NO PASSING ZONE (W14-3, black on orange pennant shaped sign), and DO NOT PASS (R4-1) signs are used consistent with the MUTCD and in conjunction with yellow 2 foot by 4 inch temporary markings consisting of retroreflective removable pavement marking tape, paint or yellow temporary overlay markers installed on a 40 ft. cycle to delineate the centerline location.

The State is responsible for the final pavement markings unless otherwise indicated in the contract. If the vendor chooses to install NO CENTER LINE and DO NOT PASS signs and temporary yellow 2 foot by 4 inch pavement markings in lieu of full barrier centerline markings, the signs shall be left in place until the state has completed installing the final pavement markings. The state will normally complete final pavement markings within 7 days of the project completion. However, if unavoidable situations delay the pavement marking installation the signs shall remain in place for 14 calendar days after the project has been completed or until the state has completed installing the final pavement markings, whichever comes first. If permanent pavement marking cannot be installed within 14 days of the project completion, state must install interim pavement marking including center lines, edge lines, stop bars, and simple crosswalks with no hatching before the end of 14 days after project completion.

All costs for Work Zone Traffic Control including flagging, temporary pavement markings, delineation, and construction signs are to be included in the prices bid per ton or square yard as applicable.

SECTION 1: CHIP SEAL - SPECIFIC PROJECTS (Cont'd)

SIGN	MINIMUM SIZE	LOCATION
ROAD WORK NEXT ____ MILES	G20-1 Conventional 36" x 18" Freeways 48" x 24"	On main line upstream of project in each direction.
END ROAD WORK	G20-2 Conventional 36" x 18" Freeways 48" x 24"	On main line after end of project in each direction.
ROAD WORK AHEAD	W20-1 Conventional 36" x 36" Freeways 48" x 48"	On main line in advance of the affected highway segment in each direction and on major intersecting roads 300 -500 feet in advance of main line. Sign should be covered if it conflicts with temporary signing in the vicinity. (Place between the G20-1 and the first warning sign that states condition- i.e. W8-12, W8-9 or W8-15.)
DO NOT PASS	R4-1 Conventional 24" x 30"	If 2'x 4" temporary yellow markings are used instead of full barrier centerline pavement markings, place the first sign at or within 100 feet of the beginning of the unmarked area, second within 1,000 feet and subsequent signs, spaced every ½ mile along project in each direction.
NO CENTER LINE	W8-12 Conventional 36" x 36"	If 2'x 4" temporary yellow markings are used instead of full barrier centerline pavement markings, place the first sign in advance of the condition and the first "DO NOT PASS" sign: 300' urban is preferred (100' minimum), 500' rural is preferred (200' minimum). Place additional signs spaced every 2 miles on mainline in each direction and after every major intersecting road.
LOW SHOULDER	W8-9 Conventional 36" x 36" Freeways 48" x 48"	Place on mainline spaced every 2 miles along project in each direction and after every major intersecting road until shoulder back-up is installed (if conditions warrant use, place between the W8-12 and R4-1, maintaining a minimum of 200' between signs for rural roads and 100' on urban. The W8-12 can be moved upstream to accommodate the required spacing).
LOOSE GRAVEL	W8-7 36" x 36"	Place on mainline at start of the project and spaced every ½ mile along project in each direction.
30 MPH	W13-1P 18" x 18"	Mounted on W8-7 LOOSE GRAVEL sign.

**All signs should maintain an absolute minimum spacing of 200' rural or 100' urban. 500' is preferred on rural and 300' is preferred on urban. Double stacking of any of the above signs, or combination thereof, will NOT be permitted.

SECTION 1: CHIP SEAL - SPECIFIC PROJECTS (Cont'd)

1.13.3 Abrading Existing Pavement Markings

The Contractor shall remove any epoxy or thermoplastic pavement markings. Other markings shall be removed as ordered by the Resident Engineer. Care shall be taken to avoid damage to passing traffic. All damage to passing traffic caused by the Contractor's operations shall be the Contractor's responsibility. Waste material generated by the abrading operation shall be cleaned up and disposed of by the Vendor.

When the Contractor abrades the existing pavement markings, the Contractor shall place temporary pavement markings as specified elsewhere in this Invitation for Bids under Work Zone Traffic Control, unless the paving material will be placed the same day as pavement markings are abraded. The Contractor shall make every effort to expeditiously place the paving material in areas where pavement markings have been abraded and temporary pavement markings are in place. Under no circumstances will temporary pavement markings be allowed for more than five calendar days in areas where pavement markings have been abraded. In this event, the Contractor shall be required to place full pavement markings at no cost to the state. During the pavement markings abrading operation, traffic will be controlled by the Contractor in accordance with the Work Zone Traffic Control requirements included herein. The Contractor shall submit a proposed Traffic Control Plan to the Resident Engineer for approval. The plan may be based on the Work Zone Traffic Control drawings included in this Invitation for Bids.

Payment for pavement marking abrading shall be included in the price bid per square yard of chip seal. No separate payment shall be made.

1.13.4 Special Note: Work Zone Intrusion Initiative

As part of the Department of Transportation's Work Zone Intrusion Initiative, the following countermeasures shall apply to this Invitation for Bids.

Channelizing Device Spacing Reduction

A maximum channelizing device spacing of 40 ft. shall be provided at work sites where workers are exposed to traffic. This spacing shall be maintained a reasonable distance upstream of workers and shall be used throughout the work zone.

Where tapers are located less than 500 ft. from the work site, the 40-ft. spacing shall be used in the tapers as well.

Drums or vertical panels are preferred for intermediate to long-term stationary work zones, and at any locations where the risk of intrusion is high. Traffic cones are normally adequate for work zones set up and removed on a daily basis.

In long lane or shoulder closures, at least two channelizing devices shall be placed transversely at maximum 800 ft. intervals to discourage traffic from driving through the closed lane. Transversely placed devices are not required where pilot cars are in use.

Frequent checks shall be made to reset channelizing devices dislodged by traffic.

Flagger Station Enhanced Setups

Additional cones and a flag tree meeting Section 6F.62 of the MUTCD shall be used upstream of flagger stations to provide added warning to drivers. These devices shall be used for flagger stations except those that are constantly moving or are in use at one location for no more than a few minutes. If the W20-7a flagger sign is used, the additional cones and flag tree shall also be used.

For additional details on Flagger Station Enhanced Setups, see Work Zone Traffic Control drawings in this Invitation for Bids.

SECTION 1: CHIP SEAL - SPECIFIC PROJECTS (Cont'd)

Temporary Rumble Strips

a. Description

This work shall consist of the installation, maintenance and subsequent removal of temporary rumble strips in paving work zones where indicated in the Invitation for Bids or as directed by the Engineer.

b. Materials

Rumble strips shall be either constructed in place from a raised strip of asphalt concrete or constructed in place with removable pavement marking tape. Raised removable tape rumble strips shall be formed by applying four layers of removable black non-reflectorized removable pavement marking tape. The tape shall be applied to a clean, dry pavement surface in accordance with the manufacturer's recommendations. The pavement surface shall be cleaned with compressed air just prior to application of the tape.

Raised asphalt rumble strips shall be formed from hot mix asphalt meeting the requirements of Items 402.058904 or 402.098904. Tack coat meeting the requirements of Materials Designation 702-XXXXT Asphalt Emulsion Diluted Tack Coat shall be used to adhere the rumble strip to the existing pavement. Temporary rumble strips shall be formed using a specially constructed rumble strip paver (drag box) pulled transversely across the pavement, or by hand placement between forms fixed to the pavement. If forms are used, they shall be removed prior to compaction of the asphalt mixture. Compaction shall be accomplished using a plate tamper or a static roller. The roadway surface on which the rumble strips are to be attached shall be dry, free of surface contaminants such as dust or oil, and shall be 45ºF or greater unless otherwise authorized by the Engineer. The pavement surface shall be cleaned with compressed air just prior to tack coating and subsequent installation of rumble strips.

Temporary rumble strips shall be placed in a succession of three 6-Strip Patterns according to the attached "Suggested Layout Details - Temporary Rumble Strips". Each strip shall be placed on 10 foot centers and traversing the full width of each travel lane. On curbed roadways, rumble strips shall end a minimum of 3 feet from the curb so as to not interfere with drainage. Rumble strips shall be between 6 inches and 9 inches in width and have a final compacted thickness of 0.4 inches $\pm$ 0.1 inches.

Any raised rumble strips that fail to adhere to the pavement, or become damaged or flattened such that, in the opinion of the Engineer, they are no longer performing their intended function, shall be replaced or repaired by the Contractor to the satisfaction of the Engineer. Any associated damage to the pavement shall also be repaired by the Contractor to the satisfaction of the Engineer. These replacements or repairs shall be made at no additional expense to the Purchasing Agency.

When directed by the Engineer, (e.g., prior to the start of the winter plowing season), or prior to the placement of successive pavement courses, the Contractor shall completely remove the rumble strips from the pavement. Rumble strips shall be removed upon completion of work and concurrently with the removal of other temporary traffic control signs and devices. Any pavement that is damaged in the process of removing the rumble strips shall be repaired by the Contractor to the satisfaction of the Engineer at no additional expense to the Purchasing Agency.

c. Basis of Payment

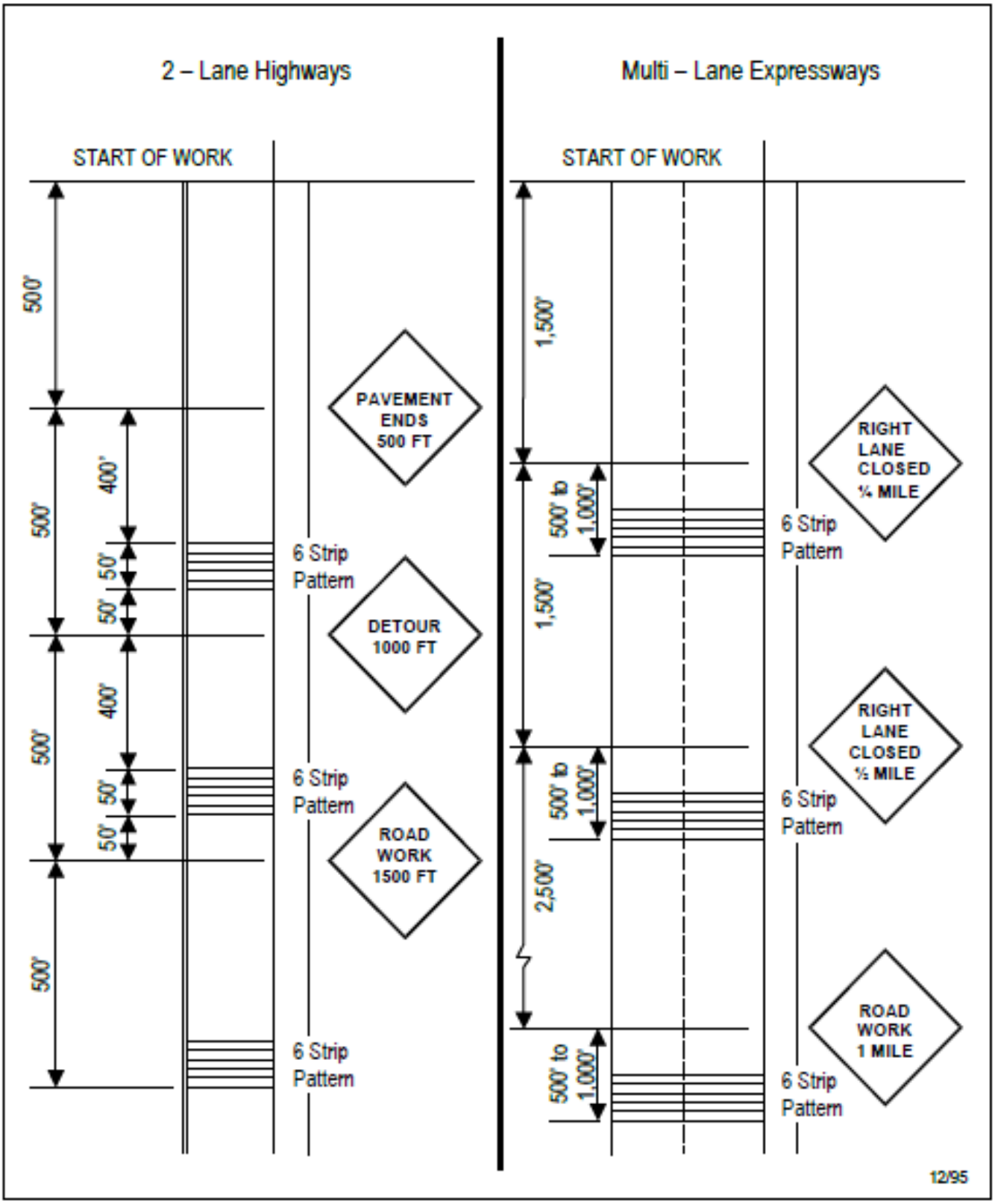
All costs for the installation, maintenance and removal of temporary rumble strips are included in the price per ton or square yard as appropriate. No separate payment shall be made.

d. Suggested Layout Details Drawing-- Temporary Rumble Strips

See the Suggested Layout Details Drawing on the **next page**.

SECTION 1: CHIP SEAL - SPECIFIC PROJECTS (Cont'd)

Suggested Layout Details -- Temporary Rumble Strips



SECTION 1: CHIP SEAL - SPECIFIC PROJECTS (Cont'd)

1.14 Special Notes – Chip Seal

1.14.1 Funding Source (Chip Seal)

Project 9V2221, 9V2222, 9V2241, 9V2251, 9V2261, 9V2262, 9V2263, and 9V2270 will be funded by Federal Aid.

1.14.2 Special Note - Rail Road Involvement in Federal Funded Projects (Chip Seal)

Bidders are advised that there may be active at-grade railroad crossings within the limits of projects in this Invitation for Bids. The following at-grade railroad crossings have been identified, but there may be others within the limits of these projects that have not been identified:

Project Number	County	Route	Rail Road Name	Location
9V2251	Otsego	7	Cooperstown & Charlotte Valley Railroad (CACV)	RM 7 9403 3050

At the identified at-grade crossings, and any other active at grade railroad crossings encountered on the projects in this Invitation for Bids, the contractor shall conduct its work and handle the equipment such that no part of any material or equipment shall foul a track, catenary, electrical facility or signal facility. A track is fouled when any object is brought within 7.62 M (25') of the centerline of the track or the nearest point of a rail road's catenary, electrical facility or signal facility.

1.14.3 NYSDOT Region 9 Special Notes (Chip Seal)

Chip Seal Operations – Region 9

Clean existing pavement and shoulder surfaces to be chip sealed, including ruts and depressions, by the use of mechanical sweepers, hand brooms, or other means until the surfaces are free of all material which might interfere with the bond between the overlay material and the existing surfaces. All cleaning equipment shall be approved by the Engineer prior to use. Remove all debris from the pavement and shoulders surfaces and dispose of in an appropriate manner. Cleaning of the existing roadway shall occur just ahead of the chip seal operation to ensure a clean roadway. The cost of this work shall be incorporated in the cost per square yard of chip seal, no separate payment shall be made for this operation.

Temporary Road Pavement Markers – Region 9

Temporary Road Pavement Markers (Chip Seal Markers) shall be placed every 100' along the centerline of the roadway in order to delineate centerline after chip sealing operations are complete. If the roadway has multiple travel lanes chip seal markers shall be placed along the lane lines at the same 100' interval. Marker color shall match lane line color and adhere well to the existing surface. If markers are damaged or missing prior to the chip seal passing the location of that marker replace the marker. The cost of this work shall be incorporated in the cost per square yard of chip seal, no separate payment shall be made for this operation.

Sand Sealing Operations – Region 9

The sand seal shall be rolled into the fog seal with one pass of a rubber tire roller within 5 minutes of its placement to insure the sand bonds to the fog seal. The cost of this work shall be incorporated in the cost per square yard of sand seal, no separate payment shall be made for this operation.

SECTION 1: CHIP SEAL - SPECIFIC PROJECTS (Cont'd)

Project 9V2270 – Sullivan County – Region 9

On Route NY 97, in Sullivan county, no lane closures are allowed after 12 PM Friday through the following Sunday. This seasonal restriction is effective on all weekends from Memorial Day weekend through Labor Day weekend.

Work on this project shall start after August 22nd, 2022 to avoid affecting eagles nesting in the project vicinity.

To mitigate possible impacts to timber rattlesnakes, the following steps shall be taken:

a. Prior to the start of construction activities, all contractors working on this project will be trained by a NYS DEC Biologist or NYSDOT Environmental Staff on timber rattlesnake identification, habitat, behavior, and proper procedures to follow for encounters.
b. The southeastern half of the project area is within the timber rattlesnake habitat. All staging/parking of equipment and supplies shall be kept northwest of Reference Marker 97 9602-1085.
c. The contractor will be trained to visually inspect the route for timber rattlesnakes, immediately prior to commencing work on this project.
d. If a timber rattlesnake is encountered at any time, work shall immediately cease in that location, and the contractor's staff shall evacuate that location. The contractor shall immediately contact NYSDOT staff, who will then contact NYSDEC, to provide the time and location information.
e. If a timber rattlesnake is encountered, prior to evacuating the location, the contractor shall maintain visual contact of the rattlesnake from a safe distance to track its whereabouts. If the rattlesnake remains coiled and stationary, or within the work area, a NYSDEC licensed nuisance responder shall be contacted to relocate the rattlesnake.
f. If the rattlesnake moves off on its own, work may resume once the rattlesnake is at least 250 feet from the work area.
g. If a licensed nuisance responder can move the rattlesnake, it will be relocated at least 250 feet outside the work area, and in the direction of its movement, or the direction of the nearest known hibernaculum, whichever is most appropriate.
h. If the rattlesnake remains within the work area, and a responder is not available, the contractors shall abandon the site and move to another section of the project away from the rattlesnake. The phone number for the NYSDEC Region 4 Bureau of Wildlife is (845) 256-3098.

SECTION 1: CHIP SEAL - SPECIFIC PROJECTS (Cont'd)

1.15 Detailed Specifications – Chip Seal

Please, see Attachment 10 – *Detailed Specifications – Liquid Bituminous Materials*.

1.15.1 Project Dimensions - Chip Seal

Information on pavement widths for projects in this Invitation for Bids is listed for informational purposes only. The dimensions listed in Attachment 12 – Project Dimensions are the best information available, but 100% accuracy is not guaranteed. Bidders should visit the project site to confirm the dimensions given and familiarize themselves with the project particulars before submitting a bid. NYS OGS/NYSDOT assumes no responsibility for erroneous information listed herein.

Please refer to Attachment 12 – Project Dimensions for the Project Dimensions Data.

SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS

2.1 Introduction

Cold Recycling of bituminous concrete pavements is a corrective maintenance technique. The existing pavement is milled off for a depth of 3 to 4 inches, a liquid bituminous material is added to the millings, and the resulting mixture is placed and compacted on the milled surface. A new bituminous concrete sealing layer is added later. Existing cracks are eliminated, and the resulting pavement should last for many years.

2.2 Pricing Information

2.2.1 General

Price quoted for cold recycling shall be net per square yard completed with contractor's equipment totally by the contractor at the locations indicated herein. The price quoted for cold recycling per square yard shall also include mobilization to the project site and the provision of Work Zone Traffic Control as indicated elsewhere in this Invitation for Bids.

Some projects in this Invitation for Bids include an optional bid item to supply the liquid bituminous material necessary for the cold recycling. **Bidders shall either submit a bid for an emulsion or a PG binder per project, but not both**. The price quoted per gallon for **either** the asphalt emulsion or PG 64S-22 binder (liquid bituminous material) shall include heating, hauling, and applying the liquid bituminous material at the project locations indicated herein. The price quoted per ton for aggregate shall include hauling and applying the necessary aggregate as per the mix design at the project locations indicated herein.

If fog seal is applied, it will be paid under a separate item as the total volume of material used for fog seal operations. The price quoted per gallon of fog seal shall include heating, hauling, and applying the liquid bituminous material used for fog sealing operation at the project locations indicated herein.

If Portland cement is used, it will be paid under a separate item as the total tons of material used at the location. The price quoted per ton of Portland cement shall include hauling, delivery, and mixing.

2.3 Asphalt Price Adjustments

2.3.1 General

a. Asphalt price adjustments allowed will be based on the January 2022 average of the F.O.B. terminal price per ton of unmodified PG 64S-22 binder without anti-stripping agent (base average F.O.B. terminal price). The new monthly average terminal price will be determined by the New York State Department of Transportation based on prices of preapproved primary sources of performance graded binder in accordance with the New York State Department of Transportation Standard Specifications.

The January 2022 average is $580.000.

NOTE: The same grade of asphalt cement used in establishing the base average F.O.B. terminal price shall be used in establishing the new average F.O.B. terminal price.

In the event that one or more of the New York State Department of Transportation pre-approved sources discontinue posting a price for asphalt cement, the base average F.O.B. terminal **price shall not be recalculated.**

b. The new average F.O.B. terminal price will be determined based on the above F.O.B. terminal prices posted on the 20th of each month, hereafter known as the "Adjustment Date", during the contract period. However, asphalt price adjustments, in accordance with the formula below, will be effective for deliveries made on and after the first of the month following the adjustment date.

SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

c. The unit prices of liquid bituminous materials purchased from any award based on this specification will be subject to adjustment based on the following formula:

$$\text{Price Adjustment (per gallon)} = \frac{\text{New Monthly Average FOB Terminal Price} - \text{Base Average Terminal Price}}{235} \times \text{Total Allowable Petroleum \%}$$

Positive Price Adjustment number shall be added to original per gallon Bid Price.
Negative Price Adjustment number shall be subtracted from original per gallon Bid Price.

New Monthly Average F.O.B. Terminal Price

The average F.O.B. terminal price for unmodified PG 64S-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation per New York State Department of Transportation Standard Specification.

Base Average F.O.B. Terminal Price

The average F.O.B. terminal price of unmodified PG 64S-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation as of January 2022.

Total Allowable Petroleum

The percentage of total allowable petroleum for each item is as follows:

Material Designation	Grade	Asphalt %	Petroleum Allowance %	Total Allowable Petroleum %
702-3201	MS-2	65	8.2	73.2
702-3301	HFMS-2	65	8.2	73.2
702-3401	HFMS-2h	65	2.7	67.7
702-3402	HFMS-2s	65	8.2	73.2
702-3501	SS-1	65	0.2	65.2
702-3601	SS-1h	65	0.2	65.2
702-4201	CMS-2	65	10.2	75.2
702-4301	CMS-2h	65	10.2	75.2
702-4401	CSS-1	65	0.2	65.2
702-4501	CSS-1h	65	0.2	65.2
	PG 64S-22	100	0.2	100.2

Asphalt Price Adjustments will not be allowed for materials which do not have an asphalt cement base.

d. Work performed after the expiration of the contract, where no extension has been granted, resultant from purchase orders placed prior to expiration of the contract will receive the Asphalt Price Adjustments applicable in effect during the last month of the contract.

Asphalt Price Adjustments for any contracts that are extended will be based on the new average for the month in which the work is done applying the same base established for that contract.

SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

e. Asphalt price adjustments allowed by this contract shall be calculated and applied to the original prices. There will not be asphalt price adjustments unless the change amounts to more than $0.100 per ton/$0.010 per gallon as applicable from the original price. In these instances, prices will revert to the original prices.

f. All Asphalt Price Adjustments will be computed to three decimal places.

g. Should these provisions result in a price structure which becomes unworkable, detrimental or injurious to the State or in prices which are not truly reflective of market conditions or which are deemed by the Commissioner to be unreasonable or excessive, and no adjustment in price is mutually agreeable, the Commissioner reserves the sole right upon ten business days written notice mailed to the Contractor to terminate any contract resulting from this bid opening.

h. All asphalt price adjustments shall be published by the State and issued to all contract holders whose responsibility will be to attach the appropriate State notification (based on when the work was performed) to the payment invoice submitted to agency.

2.3.2 Asphalt Price Adjustment: Example

This example is for illustration purposes only. Actual Base Average Price, etc., may vary:

Material Designation 702-3301, HFMS-2
Base Avg. Price per Ton = $580.000
New Avg. Price per Ton = $590.000
Total % Asphalt Plus Petroleum Allowance = 73.2%

Price Adjustment (per gallon)	=	$\frac{(590.000 - 580.000)}{235}$	X	0.732

Price Adjustment (per gallon)	=	+$0.031 per gallon

Positive Price Adjustment number shall be added to original per gallon Bid Price.
Negative Price Adjustment number shall be subtracted from original per gallon Bid Price.

2.4 Payment

Payment for cold recycling shall be made at the contract price bid for the actual number of completed square yards of cold recycling; the actual number of tons of aggregate; the actual number of gallons of either asphalt emulsion (unmodified or modified) or PG 64S-22 binder at 60 degrees F verified by the receiving agency used in the accepted portions of the work; if used, the actual number of gallons of asphalt emulsion used for fog sealing at 60 degrees F verified by the receiving agency used in the accepted portions of the work; and if used, actual number of tons of Portland cement. The determination as to quantities involved in any contract shall be accepted as final and binding upon the contractor.

A delivery slip stating quantities of liquid bituminous material (unmodified or modified emulsion or PG 64S-22 binder) shall accompany each shipment. An invoice listing the quantities of cold recycling shall be sent promptly by the contractor to the engineer.

No separate payment will be made for the use of water in the mixing process. Any work required for the maintenance and repair of the cold recycling including sweeping by the contractor during the ten-day curing period and for an additional twenty days thereafter shall be done at the contractor's expense.

Payment for work zone traffic control shall be included in the payment for the number of square yards of completed recycling.

SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

2.5 Pre-Recycling Meeting

The contractor shall schedule a Pre-Recycling Meeting with the affected resident engineer after the acceptance of the mix design by the State and at least one week prior to the start of the recycling. Project-level supervisors for both the owner agency and the contractor shall be present at this meeting. At this meeting the contractor shall present Certificates of Insurance evidencing compliance with the additional insurance requirements set forth in the INSURANCE clause, their proposed recycling schedule, procedure, equipment, mix design, calibration and Work Zone Traffic Control Plan to the State for approval. Prior to the start of recycling, the contractor shall coordinate the details of the recycling with the resident engineer.

2.6 Supervision

The Department of Transportation shall provide supervision for the recycling operation, and pavement marking abrading if applicable. The Resident Engineer shall designate a Project Supervisor who shall be in charge of the operation. All orders pertaining to Work Zone Traffic Control plan from the Project Supervisor to the contractor shall be binding on the contractor. The following portions of Section 105 - CONTROL OF WORK of the Standard Specifications shall apply to these projects: 105-01 ENGINEER'S AUTHORITY, 105-05 VENDOR RESPONSIBILITY, 105-06 COOPERATION WITH UTILITIES AND OTHER CONTRACTORS.

2.7 Work Hours

Work shall not be permitted on Sundays and NYS Holidays. If the contractors desire to work overtime on other days, dispensation from NYS Labor Department must be obtained using Department of Labor Form PW-30 (04/21). Night work is prohibited unless agreed to by the Contractor and NYS Department of Transportation. All Overtime Dispensations requests shall be submitted to the Resident Engineer or his/her designee at the preconstruction meeting.

2.8 Construction Details

The construction details shall comply with the requirements specified herein, including those appearing in the enclosed Attachment 10 - *Detailed Specifications – Liquid Bituminous Materials*. The project supervisor from the State shall have sole responsibility for determining compliance with the specifications. All orders given to the contractor regarding construction details shall be considered final.

2.9 Restoration of Disturbed Areas

During the course of the work the vendor shall take reasonable care not to disturb areas outside the existing pavement. Any areas disturbed by the vendor shall be returned to their original condition at no expense to the State. Any and all debris generated as part of the work shall be removed by the Vendor upon completion of the project.

2.10 Damaged or Deficient Areas

Prior to acceptance and payment by the State for work under this contract, any placed pavement that ravels, delaminates, fails to properly cure, or is in any way defective shall be redone to the satisfaction of the State at the contractor's expense.

SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

2.11 Possible Mix Design – Cold Recycling

All NYSDOT Regions except Regions 3 and 6

The Department may core the pavement and supply those cores to the contractor. The quantities shown on price pages are estimated and indicate the amount and type of added aggregate and the type and amount of asphalt emulsion and the amount of PG 64S-22 binder (if the option is provided) to properly recycle the pavement. The contractor shall develop their bids for square yards of cold recycling, aggregate and **either emulsion (unmodified or modified) or PG binder (if the option is provided) for each project** using the estimated quantities. After award, the contractor shall develop their own mix design as per the detailed specifications and submit it to the agency's representative for approval. The bidder shall submit a bid for cold recycling, aggregate, and either asphalt emulsion or PG 64S-22 binder (if the option is provided)**. If the bidder's bid does not conform to these requirements, their bid offer will be rejected**. Core results may be obtained from respective Resident Engineer or Regional Materials Engineer.

Regions 3 and 6

The possible mix design is shown on bid pages and indicates the amount and type of added aggregate and the type and amount of asphalt emulsion, and the amount of PG 64S-22 binder (if the option is provided) to properly recycle the pavement. The contractor shall develop their bids for square yards of cold recycling, aggregate and **either emulsion (unmodified or modified) or PG binder (if the option is provided) for each project** using the indicated possible mix design.

After award, the contractor shall take pavement cores and develop their own mix design and submit it to the agency's representative for approval. This mix design must be submitted a minimum of ten working days prior to the start of work. The bidder shall submit a bid for cold recycling, aggregate, and either asphalt emulsion or PG 64S-22 binder (if the option is provided). **If the bidder's bid does not conform to these requirements, their bid offer will be rejected**.

2.12 Work Zone Traffic Control

The contractor shall be responsible for Work Zone Traffic Control. Traffic shall be controlled in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), Section 619-1 through 619-3 of the Standard Specifications as described herein including modifications to the Standard Specifications. The contractor shall submit a Work Zone Traffic Control Plan for approval to the Resident Engineer at the Pre-Work meeting. For two-way roadways, Figures TAST-C1, TAST-C2, TAST-C3OF, TAST-C3TF, TAST-C7 and TAST-CMF included in this Invitation for Bids may be used as a basis for development of a Work Zone Traffic Control Plan. For one-way roadways, Figures TAST-CE1, TAST-CE2, and TAST-C8 may be used as a basis for development of a Work Zone Traffic Control Plan. For one-way Freeways or Expressways, Figures TAST-E1, TAST-CE1, TAST-E6, and TAST-E7 may be used as a basis for development of a Work Zone Traffic Control Plan.

All necessary flaggers for Work Zone Traffic Control shall be provided by the Contractor. For two-way roadways, a minimum of three flaggers shall be provided while the work operation is underway. One shall be stationed at each end of the applicable operation and one shall be stationed with the operation. For one-way roadways, a minimum of two flaggers shall be provided while the work operation is underway. One shall be stationed at the beginning of the applicable operation and one shall be stationed with the operation. The Contractor shall station flaggers such that communication is maintained between the flaggers. Hand signals, radios, pilot vehicles, or some other means of communication may be used subject to the approval of the Resident Engineer.

All costs of Work Zone Traffic Control as prescribed by this specification including flagging, temporary pavement marking and/or delineation, and construction signs, are to be included in the unit price bid. No separate payment shall be made.

2.12.1 Permanent Construction Signs

The Contractor shall provide construction signs as specified in Section 619-1 through 619-3 of the Standard Specifications and in the MUTCD. At minimum the Contractor shall install the following permanent construction signs: (see next page).

SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

SIGN	MINIMUM SIZE	LOCATION
ROAD WORK NEXT _____ MILES	G20-1 Conventional 36" x 18" Freeways 48" x 24"	On main line upstream of project in each direction.
END ROAD WORK	G20-2 Conventional 36" x 18" Freeways 48" x 24"	On main line after end of project in each direction.
ROAD WORK AHEAD	W20-1 Conventional 36" x 36" Freeways 48" x 48"	On main line in advance of the affected highway segment in each direction and on major intersecting roads 300 -500 feet in advance of main line. Sign should be covered if it conflicts with temporary signing in the vicinity. (Place between the G20-1 and the first warning sign that states condition- i.e. W8-12, W8-9 or W8-15.)
DO NOT PASS	R4-1 Conventional 24" x 30"	If 2'x 4" temporary yellow markings are used instead of full barrier centerline pavement markings, place the first sign at or within 100 feet of the beginning of the unmarked area, second within 1,000 feet and subsequent signs, spaced every ½ mile along project in each direction.
NO CENTER LINE	W8-12 Conventional 36" x 36"	If 2'x 4" temporary yellow markings are used instead of full barrier centerline pavement markings, place the first sign in advance of the condition and the first "DO NOT PASS" sign: 300' urban is preferred (100' minimum), 500' rural is preferred (200' minimum). Place additional signs spaced every 2 miles on mainline in each direction and after every major intersecting road.
LOW SHOULDER	W8-9 Conventional 36" x 36" Freeways 48" x 48"	Place on mainline spaced every 2 miles along project in each direction and after every major intersecting road until shoulder back-up is installed (if conditions warrant use, place between the W8-12 and R4-1, maintaining a minimum of 200' between signs for rural roads and 100' on urban. The W8-12 can be moved upstream to accommodate the required spacing.)
GROOVED PAVEMENT	W8-15 Conventional 36" x 36" Freeways 48" x 48"	On any roadway 500 feet in advance of rebates milled under this contract, but not paved. Remove or cover after paving rebate.

**All signs should maintain an absolute minimum spacing of 200' rural or 100' urban. 500' is preferred on rural and 300' is preferred on urban. Double stacking of any of the above signs, or combination thereof, will NOT be permitted.

SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

Major intersecting roads are defined as through State, County, Town, Village, or City roads. The Contractor may provide portable signs as shown in Figure 6F-2 of the MUTCD and meeting the requirements of Section 619 of the Standard Specifications for lane closures during work hours. Signs left active at night shall be rigid and reflectorized in accordance with the Standard Specifications.

With prior permission of the State's Resident Engineer, the Vendor may provide portable signs as shown in Figure 6F-2 of the MUTCD for the above referenced DO NOT PASS and NO CENTER LINE signs. The Contractor shall be responsible for assuring that these signs will be in their upright, visible positions twenty-four hours a day, seven days a week while 2' X 4" temporary yellow markings are used instead of full barrier pavement markings.

2.12.2 Temporary Pavement Markings

The Contractor shall install and maintain temporary pavement markings on any paved surface without permanent pavement markings before opening it to traffic, before nightfall or before the end of the work day, whichever comes soonest except for areas that are open during the work shift with channelizing devices or flaggers. Temporary pavement markings shall meet the requirements of Section 619 of the Standard Specifications except that two-lane, two-way highways may be left without full barrier centerlines in no passing zones for a maximum of 7 calendar days provided that NO CENTER LINE (W8-12, black on orange), NO PASSING ZONE (W14-3, black on orange pennant shaped sign), and DO NOT PASS (R4-1) signs are used consistent with the MUTCD and in conjunction with yellow 2 foot by 4 inch temporary markings consisting of retroreflective removable pavement marking tape, paint or yellow temporary overlay markers installed on a 40 ft. cycle to delineate the centerline location.

The State is responsible for the final pavement markings unless otherwise indicated in the contract. If the vendor chooses to install NO CENTER LINE and DO NOT PASS signs and temporary yellow 2 foot by 4 inch pavement markings in lieu of full barrier centerline markings, the signs shall be left in place until the state has completed installing the final pavement markings. The state will normally complete final pavement markings within 7 days of the project completion. However, if unavoidable situations delay the pavement marking installation the signs shall remain in place for 14 calendar days after the project has been completed or until the state has completed installing the final pavement markings, whichever comes first. If permanent pavement marking cannot be installed within 14 days of the project completion, state must install interim pavement marking including center lines, edge lines, stop bars, and simple crosswalks with no hatching before the end of 14 days after project completion.

All costs for Work Zone Traffic Control including flagging, temporary pavement markings, delineation, and construction signs are to be included in the prices bid per ton or square yard as applicable.

2.12.3 Special Note: Work Zone Intrusion Initiative

As part of the Department of Transportation's Work Zone Intrusion Initiative, the following countermeasures shall apply to this Invitation for Bids.

Channelizing Device Spacing Reduction

A maximum channelizing device spacing of 40 ft. shall be provided at work sites where workers are exposed to traffic. This spacing shall be maintained a reasonable distance upstream of workers and shall be used throughout the work zone.

Where tapers are located less than 500 ft. from the work site, the 40-ft. spacing shall be used in the tapers as well.

Drums or vertical panels are preferred for intermediate to long-term stationary work zones, and at any locations where the risk of intrusion is high. Traffic cones are normally adequate for work zones set up and removed on a daily basis.

In long lane or shoulder closures, at least two channelizing devices shall be placed transversely at maximum 800 ft. intervals to discourage traffic from driving through the closed lane. Transversely placed devices are not required where pilot cars are in use.

Frequent checks shall be made to reset channelizing devices dislodged by traffic.

SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

Flagger Station Enhanced Setups

Additional cones and a flag tree meeting Section 6F.62 of the MUTCD shall be used upstream of flagger stations to provide added warning to drivers. These devices shall be used for flagger stations except those that are constantly moving or are in use at one location for no more than a few minutes. If the W20-7a flagger sign is used, the additional cones and flag tree shall also be used.

For additional details on Flagger Station Enhanced Setups, see Work Zone Traffic Control drawings in this Invitation for Bids.

Temporary Rumble Strips

a. Description

This work shall consist of the installation, maintenance and subsequent removal of temporary rumble strips in paving work zones where indicated in the Invitation for Bids or as directed by the Engineer.

b. Materials

Rumble strips shall be either constructed in place from a raised strip of asphalt concrete or constructed in place with removable pavement marking tape. Raised removable tape rumble strips shall be formed by applying four layers of removable black non-reflectorized removable pavement marking tape. The tape shall be applied to a clean, dry pavement surface in accordance with the manufacturer's recommendations. The pavement surface shall be cleaned with compressed air just prior to application of the tape.

Raised asphalt rumble strips shall be formed from hot mix asphalt meeting the requirements of Items 402.058904 or 402.098904. Tack coat meeting the requirements of Materials Designation 702-XXXXT Asphalt Emulsion Diluted Tack Coat shall be used to adhere the rumble strip to the existing pavement. Temporary rumble strips shall be formed using a specially constructed rumble strip paver (drag box) pulled transversely across the pavement, or by hand placement between forms fixed to the pavement. If forms are used, they shall be removed prior to compaction of the asphalt mixture. Compaction shall be accomplished using a plate tamper or a static roller. The roadway surface on which the rumble strips are to be attached shall be dry, free of surface contaminants such as dust or oil, and shall be 45ºF or greater unless otherwise authorized by the Engineer. The pavement surface shall be cleaned with compressed air just prior to tack coating and subsequent installation of rumble strips.

Temporary rumble strips shall be placed in a succession of three 6-Strip Patterns according to the attached "Suggested Layout Details - Temporary Rumble Strips". Each strip shall be placed on 10 foot centers and traversing the full width of each travel lane. On curbed roadways, rumble strips shall end a minimum of 3 feet from the curb so as to not interfere with drainage. Rumble strips shall be between 6 inches and 9 inches in width and have a final compacted thickness of 0.4 inches + 0.1 inches.

Any raised rumble strips that fail to adhere to the pavement, or become damaged or flattened such that, in the opinion of the Engineer, they are no longer performing their intended function, shall be replaced or repaired by the Contractor to the satisfaction of the Engineer. Any associated damage to the pavement shall also be repaired by the Contractor to the satisfaction of the Engineer. These replacements or repairs shall be made at no additional expense to the Purchasing Agency.

When directed by the Engineer, (e.g., prior to the start of the winter plowing season), or prior to the placement of successive pavement courses, the Contractor shall completely remove the rumble strips from the pavement. Rumble strips shall be removed upon completion of work and concurrently with the removal of other temporary traffic control signs and devices. Any pavement that is damaged in the process of removing the rumble strips shall be repaired by the Contractor to the satisfaction of the Engineer at no additional expense to the Purchasing Agency.

c. Basis of Payment

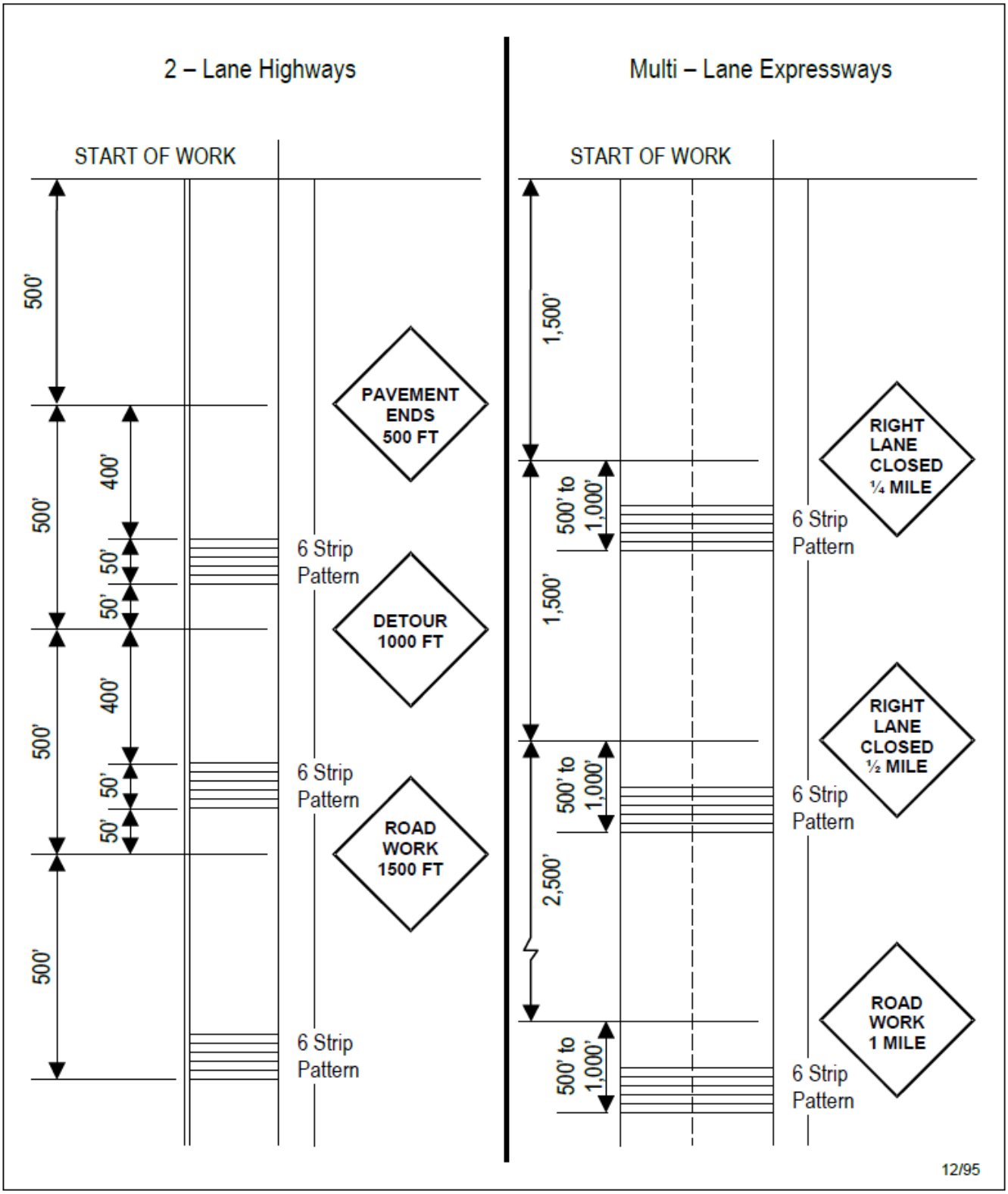
All costs for the installation, maintenance and removal of temporary rumble strips are included in the price per ton or square yard as appropriate. No separate payment shall be made.

d. Suggested Layout Details Drawing-- Temporary Rumble Strips

See the Suggested Layout Details Drawing on the next page.

SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

Suggested Layout Details -- Temporary Rumble Strips



SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

2.13 Special Notes – Cold Recycling

2.13.1 Funding Source (Cold Recycling)

Projects 1V2211, 1V2212, 1V2231, 1V2243, and 1V2281 will be funded by Federal Aid**.**

Projects 1V2244, 1V2251, 2V2241, 2V2261, 360454, 6V2246, 7V2241, 7V2242, 9S2240, 9S2242, 9S2252, 9S2260, 9S2280, and 9S2282 are 100% State funded.

2.13.2 Special Note for Coordination with Other Projects (Cold Recycling)

All the projects in this Contract Award Notification involve HMA overlay or chip seal to the cold recycling through separate contract(s). All projects shall require that the cold recycling contractor coordinates their work with the overlay/chip seal contractor(s) to provide required curing period before placing the overlay/chip seal as well as to minimize disruption to the traveling public and the time traffic is running over a recycled surface.

2.13.3 Special Note - Rail Road Involvement in State Funded Projects (Cold Recycling)

Bidders are advised that there may be active at-grade railroad crossings within the limits of projects in this Invitation for Bids. The following at-grade railroad crossings have been identified, but there may be others within the limits of these projects that have not been identified:

Project Number	County	Route	Rail Road Name	Location
1V2251	Saratoga	32	Canadian Pacific Rail	RM 9N-1505-3272
6V2246	Steuben	415	Bath and Hammondsport Railroad	RM 15-6401-1425

At the identified at grade crossings, and any other active at grade railroad crossings encountered on the projects in this Invitation for Bids, the contractor shall coordinate with the corresponding Rail Road as per follows:

Coordination with Railroad(s)

The Contractor shall note that this project may require close coordination with a railroad and railroad protective flagging services.

DESCRIPTION

The Contractor shall conduct its work and handle its equipment such that no part of any material or equipment shall foul a track, catenary, electrical facility or signal facility without written permission from the chief engineer of the railroad company(s) affected. A track is fouled when any object is brought within 7.62 M (25') of the centerline of the track or the nearest point of a railroad's catenary, electrical facility or signal facility.

SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

CONSTRUCTION DETAILS

In the event the Contractor's work does foul a railroad facility the Contractor shall obtain a permit in order to enter railroad property and to cover the costs of the railroad's force account services. The Contractor will not be allowed to enter onto the railroad's property to perform contract work, nor will the railroad provide services occasioned by the Contractor's operations unless the Contractor notifies the Railroad and receives the railroad's prior approval. A railroad will not provide any services necessitated by the Contractor's operations until the permit is obtained. These railroad costs will include but may not be limited to costs incurred by the railroad to provide flaggers, spotters, engineering services, administrative services, construction inspection, or other labor, material or equipment necessary to provide a safe environment for both the Contractor's and Railroad's forces.

The Contractor is advised that a railroad may not be able to provide flag persons on a daily basis due to the railroad's operational necessities. The Contractor shall coordinate and schedule his construction activities with the railroad's engineer no later than two weeks prior to the start of the work, in consultation with the State's Engineer-in-Charge, so that a workable schedule can be formulated and agreed upon. In addition to the above, the Contractor shall also comply with the current Standard Specifications §105-09 WORK AFFECTING RAILROADS.

BASIS OF PAYMENT

All costs incurred by the contractor to comply with the requirements in this Special Note shall be included in the price bid per square yard of cold recycling. No extra payment shall be made.

2.13.4 NYSDOT REGION 1 Special Notes (Cold Recycling)

All Region 1 Projects shall follow the following holiday restrictions:

There shall be no temporary lane closures permitted on the following dates:

- 6:00 am Friday, May 27, 2022 thru 6:00 am Tuesday, May 31, 2022 – (Memorial Day Holiday)
- 6:00 am Friday, July 1, 2022 thru 6:00 am Tuesday, July 5, 2022 – (July 4th Holiday)
- 6:00 am Friday, September 2, 2022 thru 6:00 am Tuesday, September 6, 2022 – (Labor Day Holiday)
- 6:00 am Wednesday, November 23, 2022 thru 6:00 am Tuesday, November 29, 2022 – (Thanksgiving Holiday)

Region 1 Projects – Pavement Markings

It shall be the contractor's responsibility to inventory and document the existing pavement marking patterns prior to recycling and submit to the Engineer a copy of the inventory prior to beginning work. If the original markings are obliterated, the contractor shall contact the resident engineer for guidance on their location.

Region 1 Recycling Operations

Recycling operations shall progress in the opposite direction of traffic. This provision may only be waived by the Region 1 Materials Engineer.

Region 1 Project Completion Date

The recycling operations for Region 1 projects shall be completed by **August 31, 2022**. The Contractor shall submit a schedule to the Engineer prior to the start of work.

SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

2.13.5 NYSDOT REGION 2 Special Notes (Cold Recycling)

General Notes – Applied to All Region 2 Cold Recycling Projects

1. It shall be the contractor's responsibility to inventory and document the existing pavement marking patterns prior to milling and/or resurfacing and submit to the Engineer a copy of the inventory prior to beginning work. The contractor shall be responsible for completing all layout work necessary for the installation of all final pavement markings. If the original markings are obliterated, the contractor shall contact the resident engineer for guidance on their location.
2. All Cold Recycling must be complete by 7/31/2022. The contractor will submit a schedule reflecting this requirement to the Resident Engineer upon award of the work.
3. The mix design shall be a fine gradation. No add stone will be used in the mix design.
4. Recycling operations shall progress in the opposite direction of traffic. There will be no waivers allowed.
5. The outside 3' of each side of the shoulders shall be removed to a depth of 4 inches. This material shall not be incorporated into the recycled mat. The contractor shall include the method to be used for this in their Materials Management Plan (MMP). *Payment for the shoulder milling/removal will be made under item 416.01.*
6. Any excess millings will become the property of the contractor and shall be removed from the project by the contractor.
7. The final recycled surface cross slope shall be shown in the MMP drawings.
8. The minimum cut depth shall be 4". The minimum final compacted thickness shall be 3". The contractor may adjust cut depth greater than 4" to achieve this. No additional payment will be made for any additional cut depth. Proposed milling depth shall be included in the MMP. Under no circumstances will the minimum cut depth be less than 4". The cut depth listed in the MMP shall not be adjusted in the field.
9. The cold recycled mat will be fog sealed at the end of each day's production. The minimum application rate shall be .05 gal/SY. Payment for the fog seal will be made using 416.30.
10. Pavement cores to be used in developing the CIPR mix design were taken by Region 2 Materials and are stored at the Technical Services Laboratory, 1701 Broad St., Utica NY, 13502. Contact the Regional Materials Engineer at 315-734-9419 to arrange for pick up of the cores and the core reports.

2V2261 - Route 274 – Ward Street to Fuller Road

This project contains three separate areas of Cold-In-Place Recycling as follows:

- RM 274-2601-1009(+200') to 274-2601-1017
- RM 274-2601-1023 to 274-2601-1039(+100')
- RM 274-2601-1040(+325') to 1054
- The remaining segments of this project will **NOT** be Cold-In-Place recycled.

SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

2.13.6 NYSDOT REGION 3 Special Notes (Cold Recycling)

All Region 3 Projects shall follow the holiday restrictions listed below:

There shall be no temporary lane closures permitted on the following dates:

- 6:00 am Friday, May 27, 2022 thru 6:00 am Tuesday, May 31, 2022 – (Memorial Day Holiday)
- 6:00 am Friday, July 1, 2022 thru 6:00 am Tuesday, July 5, 2022 – (July 4th Holiday)
- 6:00 am Friday, September 2, 2022 thru 6:00 am Tuesday, September 6, 2022 – (Labor Day Holiday)
- 6:00 am Wednesday, November 23, 2022 thru 6:00 am Monday, November 28, 2022 – (Thanksgiving Holiday)

Region 3 Projects – Pavement Markings

It shall be the Contractor's responsibility to inventory and document the existing pavement marking patterns prior to Heater Scarification or Cold-In-Place Recycling and submit to the Engineer a copy of the inventory prior to beginning work. The contractor shall also document the existing lane widths and shoulder widths of the pavement marking patterns and any special markings. The Contractor shall be responsible for completing all pavement marking layout necessary for the installation of the final pavement markings. There may be the need for the contractor to make adjustments to the pavement marking layout including changes as indicated by the Regional Traffic and Safety Group or the Resident Engineer. If the original markings are obliterated, the contractor shall contact the Resident Engineer for guidance on their location.

Region 3 Projects – Project Completion

All cold in place recycling operations for Region 3 shall be completed by September 1, 2022. The Contractor shall submit a schedule to the Engineer, to this effect, prior to beginning operations.

Project 360454 – Route 414, Seneca County

This project will be paved after cold recycling. The cold recycling contactor is responsible to coordinate their work schedule with the State's paving contractor.

2.13.7 NYSDOT REGION 6 Special Notes (Cold Recycling)

Region 6 Specific Special Notes:

To minimize travel delays associated with major holidays, no work shall be permitted during the following periods:

- 6:00 am Friday, May 27, 2022 thru 6:00 am Tuesday, May 31, 2022 - (Memorial Day Holiday)
- 6:00 am Friday, July 1, 2022 thru 6:00 am Tuesday, July 5, 2022 - (July 4th Holiday)
- 6:00 am Friday, September 2, 2022 thru 6:00 am Tuesday, September 6, 2022 - (Labor Day Holiday)

All CIPR projects are at a 3" depth unless otherwise noted in the plans.

The Region requests all Preconstruction paperwork be submitted electronically as .pdf files to Gary.Shepard@dot.ny.gov prior to the Pre-Recycling Meeting, or all documentation be brought to the Pre-Recycling Meeting electronically as .pdf files on a CD or USB "thumb" drive that will not be returned to the contractor.

The expectation of Region 6 is that fog seal shall only be used when environmental conditions (pending rain, cooler temperatures, etc.) could result in a negative impact to the mat (raveling, etc.,); Contractors should not plan to fog seal a mat at the close of business daily as part of their normal operations. Region 6 does not anticipate paying for fog seal, so Contractors should plan accordingly.

SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

In lieu of longitudinal cones full project length between open and closed lanes of traffic, the contractor may elect to substitute, when using pilot vehicles, use of cones placed transversely across the closed lane at intervals per section 619-3.02 J.2 (every 800') and at strategic locations, such as intersections and driveways. All work zone signs will be at a minimum of 5' tall from the bottom of sign panel.

All Region 6 Cold Recycling projects shall be completed no later than **July 31, 2022**. A schedule reflecting this shall be submitted before start of work to the Region's ARDO and Gary Shepard, for approval.

Paint with beads is the only option permitted in Region 6 for temporary and interim pavement markings, unless approved on a case by case basis by the Resident Engineer. Offset the centerline temporary/interim pavement markings so that the permanent markings will cover up the temporary/interim markings, as follows: 8" centerline offset for 2 lane roads, 6" centerline offset for multi-lane roadways.

3 Rollers will be required to be used on all Region 6 cold recycling projects. The same roller cannot be substituted as the "knock-down" and "finish" roller.

All coring shall be coordinated with the Regional Materials Engineer, Dennis Cotton. The mix design submittal for approval shall include all data associated with each core, this shall include but not be limited to locations and all laboratory results used to develop the mix design. Additionally, the Regional Materials Engineer may designate companion cores to be taken for QA testing in the regional lab, this shall be done in the presence of the RME or his designee.

Region 6 will waive the requirement to have the nuclear gage inspector on site at the start of the operation for the cold recycling operation. This inspector shall be on site within 4 hours of the start of the operation or as required by the Resident Engineer.

A reminder that per Code Rule 753, a "Dig Safe" ticket shall be submitted for each project notifying of "…the movement or removal…of pavement…". Some of these utilities may request "no vibratory rolling" for a distance up to 100' over interstate/intercontinental gas/petroleum transverse crossings. Contractors can visit the following website to view whether there is a likelihood for these utilities in the project limits:

https://www.npms.phmsa.dot.gov/ and then click the npms public map viewer link and follow the instructions.

All stockpile, spoils, and clean-out sites need to be preapproved by the Regional Maintenance Environmental Coordinator, Ruth Hart, prior to use.

The following bridges are within the project limits and are not to receive the cold recycle treatment:

Project Number	BIN/CIN	Reference Marker
6V2246	BIN 1011390	15-6401-1400
	BIN 1011400	15-6401-1423
	BIN 1011410	15-6401-1427
	BIN 1011420	15-6401-1434
	BIN 1011430	15-6401-1465

Project 6V2246

This project has the Bath and Hammondsport Railroad at RM 15-6401-1425. The CIPR will stop 40' short of the tracks on south side of the crossing.

The gutter/curb/ Wallace Hamlet sections will be skipped between RM 15-6401-1426-1433. This area will be production milled.

SECTION 2: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

2.13.8 NYSDOT REGION 7 Special Notes (Cold Recycling)

Recycling Operations:

All recycling operations for Region 7 shall be complete and out of cure by **September 1, 2022**. The Contractor shall submit a schedule to the Engineer, to this effect, prior to beginning operations.

Projects 7V2241 (Lewis County)

The recycling operations for Project 7V2241 shall be started no earlier than August 1, 2022 and out of cure by September 1, 2022. The Contractor shall submit a schedule to the Engineer, to this effect, prior to beginning operations.

2.13.9 NYSDOT REGION 9 Special Notes (Cold Recycling)

Recycling Operations:

The contractor shall mill the shoulders 4 feet wide and 4" deep and remove this material, contractor is responsible for disposing of material. It is intended to include a shoulder break for the 3' wide shoulder. The contractor shall include the method to be used for this in their MMP. Payment for the shoulder milling/removal will be made under item 416.01.

A three-roller train is required for the CIPR on this project. All MMPs that are submitted using a two-roller train with one roller acting as a finish and either a break down or intermediate roller will not be accepted.

Region 9 Materials has already cored the highway and the cores for this project are stored at the Region 9 Technical Services building. The winning bidder will need to contact Region 9 Materials to arrange core pickup to develop the project's mix design.

Project 9S2240 – Delaware County – Region 9

The completion date for Cold Recycling is 8/31/2022.

Project 9S2260 – Schoharie County – Region 9

The completion date for Cold Recycling is 8/31/2022.

Project 9S2280 and 9S2282 – Tioga County – Region 9

The completion date for Cold Recycling is 8/1/2022.

2.14 Detailed Specifications – Cold Recycling

Please see Attachment 10 – *Detailed Specifications – Liquid Bituminous Materials*.

2.14.1 Project Dimensions - Cold Recycling

Information on pavement widths for projects in this Invitation for Bids is listed for informational purposes only. The dimensions listed in Attachment 12 – Project Dimensions are the best information available, but 100% accuracy is not guaranteed. Bidders should visit the project site to confirm the dimensions given and familiarize themselves with the project particulars before submitting a bid. NYS OGS/NYSDOT assumes no responsibility for erroneous information listed herein.

Please refer to Attachment 12 – Project Dimensions for the Project Dimensions Data.

SECTION 3: JOINT AND CRACK FILLER/SEALER AND MASTIC REPAIR MATERIALS - SPECIFIC PROJECTS

3.1 Introduction

Joint and crack filler/sealers and mastics are hot-poured liquid bituminous materials used to fill and/or seal cracks in the surface of highway pavements. Some products incorporate recycled materials with up to 18% recycled content and up to 18% post-consumer content.

3.2 Pricing Information

3.2.1 General

Price quoted for joint & crack filler/sealer and mastic repair materials shall be net lane mile, furnished, delivered, heated, and applied by the contractor at the locations indicated herein. Price calculations, if any, will be calculated on the basis of lane miles of crack/joint sealing/filling actually furnished. Work Zone Traffic Control, cleaning of cracks/joints, and disposal of debris shall be included in the price quoted per lane mile of crack sealer or mastic filler. Cracks within shoulder area are to be sealed and included in the price bid per lane mile unless stated otherwise elsewhere in the bid document.

The contractor is to furnish all necessary labor and equipment to complete the indicated projects except that the State will supervise and control the operation. The equipment supplied to complete the crack sealing and mastic filling projects shall conform with the specifications included in this Invitation for Bids.

3.3 Asphalt Price Adjustment

3.3.1 General

a. Asphalt price adjustments allowed will be based on the January 2022 average of the F.O.B. terminal price per ton of unmodified PG 64S-22 binder without anti-stripping agent (base average F.O.B. terminal price). The new monthly average terminal price will be determined by the New York State Department of Transportation based on prices of preapproved primary sources of performance graded binder in accordance with the New York State Department of Transportation Standard Specifications.

The January 2022 average is $580.000 per ton.

NOTE: The same grade of asphalt cement used in establishing the base average F.O.B. terminal price shall be used in establishing the new average F.O.B. terminal price.

In the event that one or more of the New York State Department of Transportation pre-approved sources discontinue posting a price for asphalt cement, the base average F.O.B. terminal **price shall not be recalculated.**

b. The new average F.O.B. terminal price will be determined based on the above F.O.B. terminal prices posted on the 20th of each month, hereafter known as the "Adjustment Date", during the contract period. However, asphalt price adjustments, in accordance with the formula below, will be effective for deliveries made on and after the first of the month following the adjustment date.

c. The unit prices of liquid bituminous materials purchased from any award based on this specification will be subject to adjustment based on the following formula:

For Crack Sealing (ASTM D6690 Type II):

$$\text{Price Adjustment (per lane mile)} = \frac{\text{New Monthly Average FOB Terminal Price} - \text{Base Average Terminal Price}}{2.35} \times \text{Total Allowable Petroleum \%}$$

SECTION 3: JOINT AND CRACK FILLER/SEALER AND MASTIC REPAIR MATERIALS - SPECIFIC PROJECTS (Cont'd)

For Mastic Materials:

$$\text{Price Adjustment (per lane mile)} = \frac{\text{New Monthly Average FOB Terminal Price} - \text{Base Average Terminal Price}}{0.44} \times \text{Total Allowable Petroleum \%}$$

Positive Price Adjustment number shall be added to original per lane mile Bid Price.
Negative Price Adjustment number shall be subtracted from original per lane mile Bid Price.

New Monthly Average F.O.B. Terminal Price

The average F.O.B. terminal price for unmodified PG 64S-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation per New York State Department of Transportation Standard Specification.

Base Average F.O.B. Terminal Price

The average F.O.B. terminal price of unmodified PG 64S-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation as of January 2022.

Total Allowable Petroleum

The percentage of total allowable petroleum for each item is as follows:

Material Designation	Grade	Asphalt %	Petroleum Allowance %	Total Allowable Petroleum
ASTM D6690 Type II		56	0.2	56.2%
Mastic Materials		40	0.2	40.2%

Asphalt Price Adjustments will not be allowed for materials which do not have an asphalt cement base.

d. Work performed after the expiration of the contract, where no extension has been granted, resultant from purchase orders placed prior to expiration of the contract will receive the Asphalt Price Adjustments applicable in effect during the last month of the contract.

e. Asphalt Price Adjustments for any contracts that are extended will be based on the new average for the month in which the work is done applying the same base established for that contract.

Asphalt price adjustments allowed by this contract shall be calculated and applied to the original prices. There will not be asphalt price adjustments unless the change amounts to more than $1.000 per lane mile. In these instances, prices will revert to the original prices.

f. All Asphalt Price Adjustments will be computed to three decimal places.

g. Should these provisions result in a price structure which becomes unworkable, detrimental or injurious to the State or in prices which are not truly reflective of market conditions or which are deemed by the Commissioner to be unreasonable or excessive, and no adjustment in price is mutually agreeable, the Commissioner reserves the sole right upon ten business days written notice mailed to the Contractor to terminate any contract resulting from this bid opening.

h. All asphalt price adjustments shall be published by the State and issued to all contract holders whose responsibility will be to attach the appropriate State notification (based on when the work was performed) to the payment invoice submitted to agency.

SECTION 3: JOINT AND CRACK FILLER/SEALER AND MASTIC REPAIR MATERIALS - SPECIFIC PROJECTS (Cont'd)

3.3.2 Asphalt Price Adjustment: Example

These examples are for illustration purposes only. Actual Base Average Price, etc., may vary:

Crack Sealing/Filling
Material ASTM D6690 Type II
Base Avg. Price per Ton = $580.000
New Avg. Price per Ton = $590.000
Total Allowable Petroleum = 56.2%

$$\text{Price Adjustment (per lane mile)} = \frac{(590.000 - 580.000)}{2.35} \times 0.562$$

$$\text{Price Adjustment (per lane mile)} = +\$\ 2.391 \text{ per lane mile}$$

Item ASTM D6690 Type II

Positive Price Adjustment number shall be added to original per lane mile Bid Price.
Negative Price Adjustment number shall be subtracted from original per lane mile Bid Price.

Mastic Materials
Total Allowable Petroleum = 40.2%

$$\text{Price Adjustment (per lane mile)} = \frac{(590.000 - 580.000)}{0.44} \times 0.402$$

$$\text{Price Adjustment (per lane mile)} = +\$\ 9.136 \text{ per lane mile}$$

Positive Price Adjustment number shall be added to original per lane mile Bid Price.
Negative Price Adjustment number shall be subtracted from original per lane mile Bid Price.

3.4 Payment

Payment for crack filler/sealer shall be made at contract price per lane mile for the actual quantities furnished to and verified by the receiving agency. This determination as to quantities involved in any contract shall be accepted as final and binding upon the Contractor. An invoice shall be sent promptly by the Contractor to the Engineer of the Region placing the order. Measurement shall be based on actual lane mile of crack filler/sealer. Cracks sealed within shoulder area is included in the price per lane mile.

SECTION 3: JOINT AND CRACK FILLER/SEALER AND MASTIC REPAIR MATERIALS - SPECIFIC PROJECTS (Cont'd)

3.5 Pre-Crack Sealing/Mastic Filling Meeting

The contractor shall coordinate a schedule for a Pre-Crack Sealing/Mastic Filling Meeting with the Resident Engineer (RE), Resident Operation Engineer (ROE) and his or her project quality Assurance Representative within one month after the award of the contract and at least two weeks prior to the start of the crack sealing/mastic filling. At this meeting the contractor shall present Certificates of Insurance evidencing compliance with the additional Insurance Requirements set forth in the INSURANCE clause, their proposed crack sealing schedule, equipment, and crack sealing/mastic filling procedure and Work Zone Traffic Control Plan to the State for approval. At least one week prior to the start of crack sealing/mastic filling, the contractor shall coordinate the details of the crack sealing/mastic filling with the Resident Engineer.

3.6 Supervision

The Department of Transportation shall provide supervision for the crack sealing operation, and pavement marking abrading if applicable. The Resident Engineer shall designate a Project Supervisor who shall be in charge of the operation. All orders pertaining to Work Zone Traffic Control plan from the Project Supervisor to the contractor shall be binding on the contractor. The following portions of Section 105 - CONTROL OF WORK of the Standard Specifications shall apply to these projects: 105-01 ENGINEER'S AUTHORITY, 105-05 VENDOR RESPONSIBILITY, 105-06 COOPERATION WITH UTILITIES AND OTHER CONTRACTORS.

3.7 Work Hours

Work shall not be permitted on Sundays and NYS Holidays. If the contractors desire to work overtime on other days, dispensation from NYS Labor Department must be obtained using Department of Labor Form PW-30 (04/21). Night work is prohibited unless agreed to by the Contractor and NYS Department of Transportation. All Overtime Dispensations requests shall be submitted to the Resident Engineer or his/her designee at the preconstruction meeting.

3.8 Construction Details

The construction details shall comply with the requirements specified herein, including those appearing in the enclosed Attachment 10 - *Detailed Specifications – Liquid Bituminous Materials*. The project supervisor from the State shall have sole responsibility for determining compliance with the specifications. All orders given to the contractor regarding construction details shall be considered final.

3.9 Restoration Disturbed Areas

During the course of the work the vendor shall take reasonable care not to disturb areas outside the existing pavement. Any areas disturbed by the vendor shall be returned to their original condition at no expense to the State. Any and all debris generated as part of the work shall be removed by the Vendor upon completion of the project.

3.10 Damaged or Deficient Areas

Prior to acceptance and payment by the State for work under this contract, any placed pavement that ravels, delaminates, fails to properly cure, or is in any way defective shall be redone to the satisfaction of the State at the contractor's expense.

SECTION 3: JOINT AND CRACK FILLER/SEALER AND MASTIC REPAIR MATERIALS - SPECIFIC PROJECTS (Cont'd)

3.11 Work Zone Traffic Control

The contractor shall be responsible for Work Zone Traffic Control. Traffic shall be controlled in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), Section 619-1 through 619-3 of the Standard Specifications as described herein including modifications to the Standard Specifications. The contractor shall submit a Work Zone Traffic Control Plan for approval to the Resident Engineer at the Pre-Crack Sealing Meeting. For two-way roadways, Figures TAST-C1, TAST-C2, TAST-C3OF, TAST-C3TF, TAST-C7 and TAST-CMF included in this Invitation for Bids may be used as a basis for development of a Work Zone Traffic Control Plan. For one-way roadways, Figures TAST-CE1, TAST-CE2, and TAST-C8 may be used as a basis for development of a Work Zone Traffic Control Plan. For one-way Freeways or Expressways, Figures TAST-E1, TAST-CE1, TAST-E6, and TAST-E7 may be used as a basis for development of a Work Zone Traffic Control Plan.

All necessary flaggers for Work Zone Traffic Control shall be provided by the Contractor. For two-way roadways, a minimum of three flaggers shall be provided while the work operation is underway. One shall be stationed at each end of the applicable operation and one shall be stationed with the operation. For one-way roadways, a minimum of two flaggers shall be provided while the work operation is underway. One shall be stationed at the beginning of the applicable operation and one shall be stationed with the operation. The Contractor shall station flaggers such that communication is maintained between the flaggers. Hand signals, radios, pilot vehicles, or some other means of communication may be used subject to the approval of the Resident Engineer.

All costs of Work Zone Traffic Control as prescribed by this specification including flagging, temporary pavement marking and/or delineation, and construction signs, are to be included in the unit price bid. No separate payment shall be made.

3.11.1 Temporary Construction Signs

The vendor shall provide temporary construction signs as specified in Section 619-1 through 619-3 of the Standard Specifications and in the MUTCD. All costs for Work Zone Traffic Control including flagging, construction signs and shadow vehicles are to be included in the price per gallon. No separate payment shall be made.

3.11.2 Shadow Vehicle Requirements

The shadow vehicles shall have a gross vehicle weight of 18,000 lb. to 20,000 lb. each. The shadow vehicles shall be equipped with a combination of four (4) rotary lights and strobes, two front and two rear and four (4) flashing amber lights, two (2) front and two (2) rear. All equipment on the shadow vehicle furnished under this contract shall be in full compliance with the latest edition of the New York State Vehicle and Traffic Law, Article 9, Sections 375 and 376. The shadow vehicles shall each be equipped with a Mobile Construction Zone Impact Attenuator, as per Section 712-06 of the NYSDOT Standard Specifications, and one Type B Arrow Panel, as described in Section 294.5 of the MUTCD. Contractor shall supply all necessary operators for the shadow vehicles.

3.11.3 Special Note: Work Zone Intrusion Initiative

As part of the Department of Transportation's Work Zone Intrusion Initiative, the following countermeasures shall apply to this Invitation for Bids.

Channelizing Device Spacing Reduction

A maximum channelizing device spacing of 40 ft. shall be provided at work sites where workers are exposed to traffic. This spacing shall be maintained a reasonable distance upstream of workers and shall be used throughout the work zone.

Where tapers are located less than 500 ft. from the work site, the 40-ft. spacing shall be used in the tapers as well.

Drums or vertical panels are preferred for intermediate to long-term stationary work zones, and at any locations where the risk of intrusion is high. Traffic cones are normally adequate for work zones set up and removed on a daily basis.

In long lane or shoulder closures, at least two channelizing devices shall be placed transversely at maximum 800 ft. intervals to discourage traffic from driving through the closed lane. Transversely placed devices are not required where pilot cars are in use. Frequent checks shall be made to reset channelizing devices dislodged by traffic.

SECTION 3: JOINT AND CRACK FILLER/SEALER AND MASTIC REPAIR MATERIALS - SPECIFIC PROJECTS (Cont'd)

Flagger Station Enhanced Setups

Additional cones and a flag tree meeting Section 6F.62 of the MUTCD shall be used upstream of flagger stations to provide added warning to drivers. These devices shall be used for flagger stations except those that are constantly moving or are in use at one location for no more than a few minutes. If the W20-7a flagger sign is used, the additional cones and flag tree shall also be used.

For additional details on Flagger Station Enhanced Setups, see Work Zone Traffic Control drawings in this Invitation for Bids.

Temporary Rumble Strips

a. Description

This work shall consist of the installation, maintenance and subsequent removal of temporary rumble strips in paving work zones where indicated in the Invitation for Bids or as directed by the Engineer.

b. Materials

Rumble strips shall be either constructed in place from a raised strip of asphalt concrete or constructed in place with removable pavement marking tape. Raised removable tape rumble strips shall be formed by applying four layers of removable black non-reflectorized removable pavement marking tape. The tape shall be applied to a clean, dry pavement surface in accordance with the manufacturer's recommendations. The pavement surface shall be cleaned with compressed air just prior to application of the tape.

Raised asphalt rumble strips shall be formed from hot mix asphalt meeting the requirements of Items 402.058904 or 402.098904. Tack coat meeting the requirements of Materials Designation 702-XXXXT Asphalt Emulsion Diluted Tack Coat shall be used to adhere the rumble strip to the existing pavement. Temporary rumble strips shall be formed using a specially constructed rumble strip paver (drag box) pulled transversely across the pavement, or by hand placement between forms fixed to the pavement. If forms are used, they shall be removed prior to compaction of the asphalt mixture. Compaction shall be accomplished using a plate tamper or a static roller. The roadway surface on which the rumble strips are to be attached shall be dry, free of surface contaminants such as dust or oil, and shall be 45ºF or greater unless otherwise authorized by the Engineer. The pavement surface shall be cleaned with compressed air just prior to tack coating and subsequent installation of rumble strips.

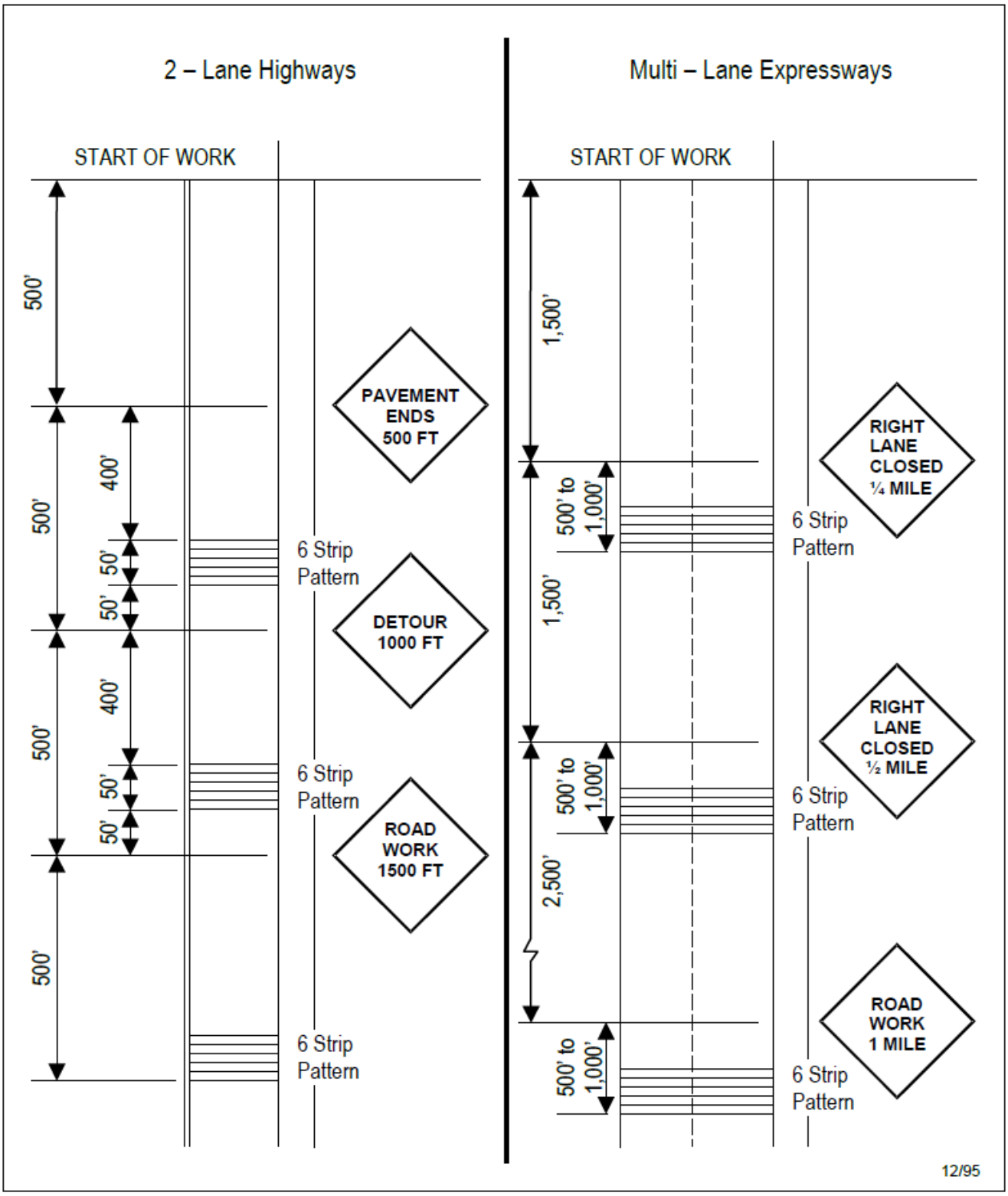
Temporary rumble strips shall be placed in a succession of three 6-Strip Patterns according to the attached "Suggested Layout Details - Temporary Rumble Strips". Each strip shall be placed on 10 foot centers and traversing the full width of each travel lane. On curbed roadways, rumble strips shall end a minimum of 3 feet from the curb so as to not interfere with drainage. Rumble strips shall be between 6 inches and 9 inches in width and have a final compacted thickness of 0.4 inches $\pm$ 0.1 inches.

Any raised rumble strips that fail to adhere to the pavement, or become damaged or flattened such that, in the opinion of the Engineer, they are no longer performing their intended function, shall be replaced or repaired by the Contractor to the satisfaction of the Engineer. Any associated damage to the pavement shall also be repaired by the Contractor to the satisfaction of the Engineer. These replacements or repairs shall be made at no additional expense to the Purchasing Agency.

When directed by the Engineer, (e.g., prior to the start of the winter plowing season), or prior to the placement of successive pavement courses, the Contractor shall completely remove the rumble strips from the pavement. Rumble strips shall be removed upon completion of work and concurrently with the removal of other temporary traffic control signs and devices. Any pavement that is damaged in the process of removing the rumble strips shall be repaired by the Contractor to the satisfaction of the Engineer at no additional expense to the Purchasing Agency.

SECTION 3: JOINT AND CRACK FILLER/SEALER AND MASTIC REPAIR MATERIALS - SPECIFIC PROJECTS (Cont'd)

Suggested Layout Details -- Temporary Rumble Strips



SECTION 3: JOINT AND CRACK FILLER/SEALER AND MASTIC REPAIR MATERIALS - SPECIFIC PROJECTS (Cont'd)

c. Basis of Payment

All costs for the installation, maintenance and removal of temporary rumble strips are included in the price per ton or square yard or lane mile as appropriate. No separate payment shall be made.

d. Suggested Layout Details Drawing-- Temporary Rumble Strips

See the Suggested Layout Details Drawing on the previous page.

3.12 Special Notes – Crack Sealing/Mastic Filling

3.12.1 Funding Source (Crack Sealer/Mastic Filler)

Projects 280632, 9CRS21, 9CRS22, 9CRS23, 9CRS24, and 9MCF22 will be funded by Federal Aid**.**
Projects 5V22CS and 6M2201 are 100% State funded.

3.12.2 NYSDOT REGION 5 Special Notes (Crack Sealing)

Project 5V22CS

All Region 5 Projects shall follow the time restrictions outlined in the "Work Zone Traffic Control - for Design/Construction on State Highways in Region 5" available on the NYSDOT website at the following link:

https://www.dot.ny.gov/regional-offices/region5/repository/R05_2012_WZTC_Typicals.pdf

The Inspector reserves the right to modify the limits of sealing based on needs and field conditions. The Crack sealing locations include ramps where applicable.

3.12.3 NYSDOT REGION 6 Special Notes (Crack Sealing)

***Region 6 Specific Special Notes*:**

To minimize travel delays associated with major holidays, no work shall be permitted during the following periods:

6:00 am Friday, May 27, 2022 thru 6:00 am Tuesday, May 31, 2022 - (Memorial Day Holiday)
6:00 am Friday, July 1, 2022 thru 6:00 am Tuesday, July 5, 2022 - (July 4th Holiday)
6:00 am Friday, September 2, 2022 thru 6:00 am Tuesday, September 6, 2022 - (Labor Day Holiday)

All Region 6 Crack Seal projects shall be completed no later than August 31, 2022. A schedule reflecting this shall be submitted before start of work to the Region's ARDO and Gary Shepard, for approval.

All Region 6 Crack Seal projects on I-86, Route 17, and Route 15 shall follow TAST- CMF, TAST-CE1, and TAST-E6 WZTC plans contained within this Invitation for Bids.

All crack seal sites denoted as "(concrete)" are only intended to receive crack seal at the longitudinal joint between the concrete pavement and the asphalt guiderail strip.

A map depicting the Region 6 Regional Priority Network Restricted Area can be found on the next page. No lane closures are permitted in the restricted area Monday thru Friday, between the hours of 3:00PM and 6:00PM without the expressed written approval of the Regional Traffic Engineer, or his designee.

3.12.4 NYSDOT REGION 9 Special Notes (Crack Sealing/Mastic Filling)

All projects must be completed by **August 31st, 2022.**

Project 9MCF22

Mastic Crack Filling shall be completed in the right lane only and involves sealing wide cracks, potholes, and alligator cracking on the centerline, right lane, and joint between the right shoulder and the right lane.

3.13 Detailed Specifications – Crack Sealing and Mastic Filling/Sealing

Please, see Attachment 10 – *Detailed Specifications – Liquid Bituminous Materials*.

PRIORITY NETWORK (RPN) RESTRICTED ZONES 4/10/20

Regional Priority Network (RPN) Notes to be included on the RPN Map:

Exceptions to RPN restrictions can only be approved by the Regional Traffic Engineer (RTE) or their designee

All segments of the RPN not specified below will adhere to the following restriction:

- **Lane Closures are not permitted Monday thru Friday between the hours of 3:00PM and 6:00PM**

I86, X43 – X46 (includes all associated ramps):

- **Daytime lane closures will be allowed under the following conditions:**
  - EB lane closures will be set up after 8:00AM and removed by dusk Monday thru Friday.
  - WB lane closures are not permitted Monday thru Friday between the hours of 3:00PM and 6:00PM.
  - Speed reduction to 55mph
  - Trooper Coverage will be requested
- **Nighttime lane closures will be allowed under the following conditions:**
  - Lane closures using barrels will be allowed from 7:00PM to 6:00AM
  - VMS will be provided for lane closures in either direction
  - Speed reduction to 55mph
  - Trooper Coverage will be requested
- **Lane closures extending beyond a single daytime or nighttime period:**
  - Plans for long term closures will be reviewed for approval by the Regional Traffic & Safety Office

I86 Bridges over Cohocton River (Ci Ci's Bridge) and 415 over I86:

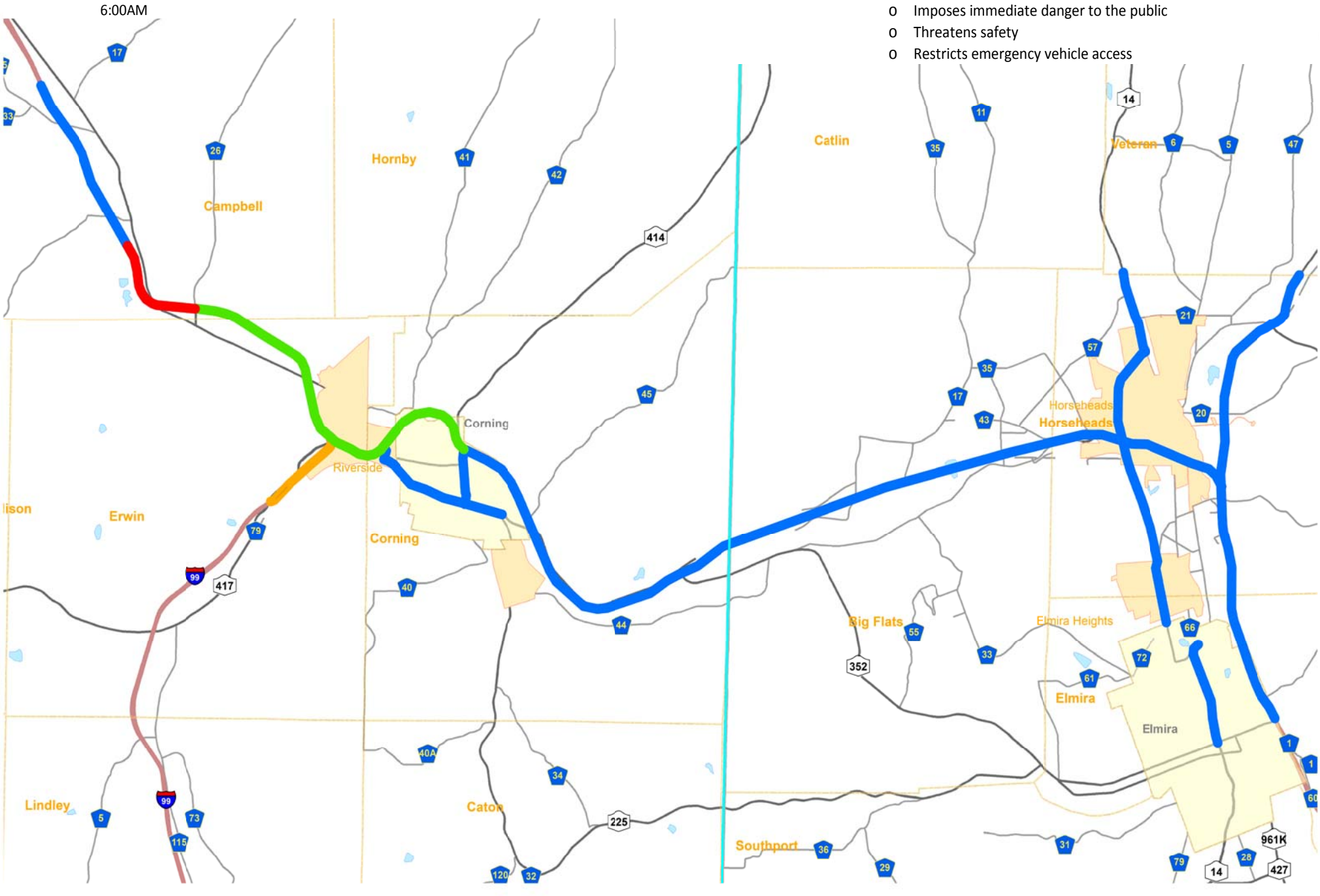
- **Daytime lane closures will be allowed under the following conditions:**
  - EB closure will be set up after 8:00AM and removed by dusk Monday thru Friday. Barrels will be utilized for lane closure
  - WB closure will be set up when daylight allows, and removal will be by 3:00PM Monday thru Friday.
  - WB lane closures (driving or passing) will require closing the WB X42 on ramp and properly signing a detour for that traffic
    - Ramp to be reopened by 3:00PM or at conclusion of work whichever comes first
  - VMS will be provided for all daytime lane closures in either direction
  - Speed reduction to 55mph for lane closures in either direction
  - Trooper coverage will be requested
- **Nighttime lane closures will be allowed under the following conditions:**
  - Nighttime WB and EB lane closures using barrels will be allowed from 7:00PM to 6:00AM
- **Nighttime lane closures will be allowed under the following conditions (continued):**
  - VMS will be provided for all nighttime lane closures in either direction
  - Speed reduction to 55mph
  - Trooper Coverage will be requested
- **Lane closures extending beyond a single daytime or nighttime period:**
  - Plans for long term closures will be reviewed on a case by case basis and approved by the Regional Traffic & Safety Office and will include at a minimum the following:
    - Concrete Barrier will be required for lane closures in either direction
    - Concrete Barrier will be installed utilizing the Daytime Lane Closures Restrictions listed above
    - WB lane closures (driving or passing) will require closing the WB X42 on ramp and properly signing a detour for that traffic
      - Detour to remain in place as long as concrete barrier is in place.
    - VMS will be provided for lane closures in either direction
    - Speed reduction to 55mph
    - Trooper coverage will be requested

I99 from Forest Dr to I86

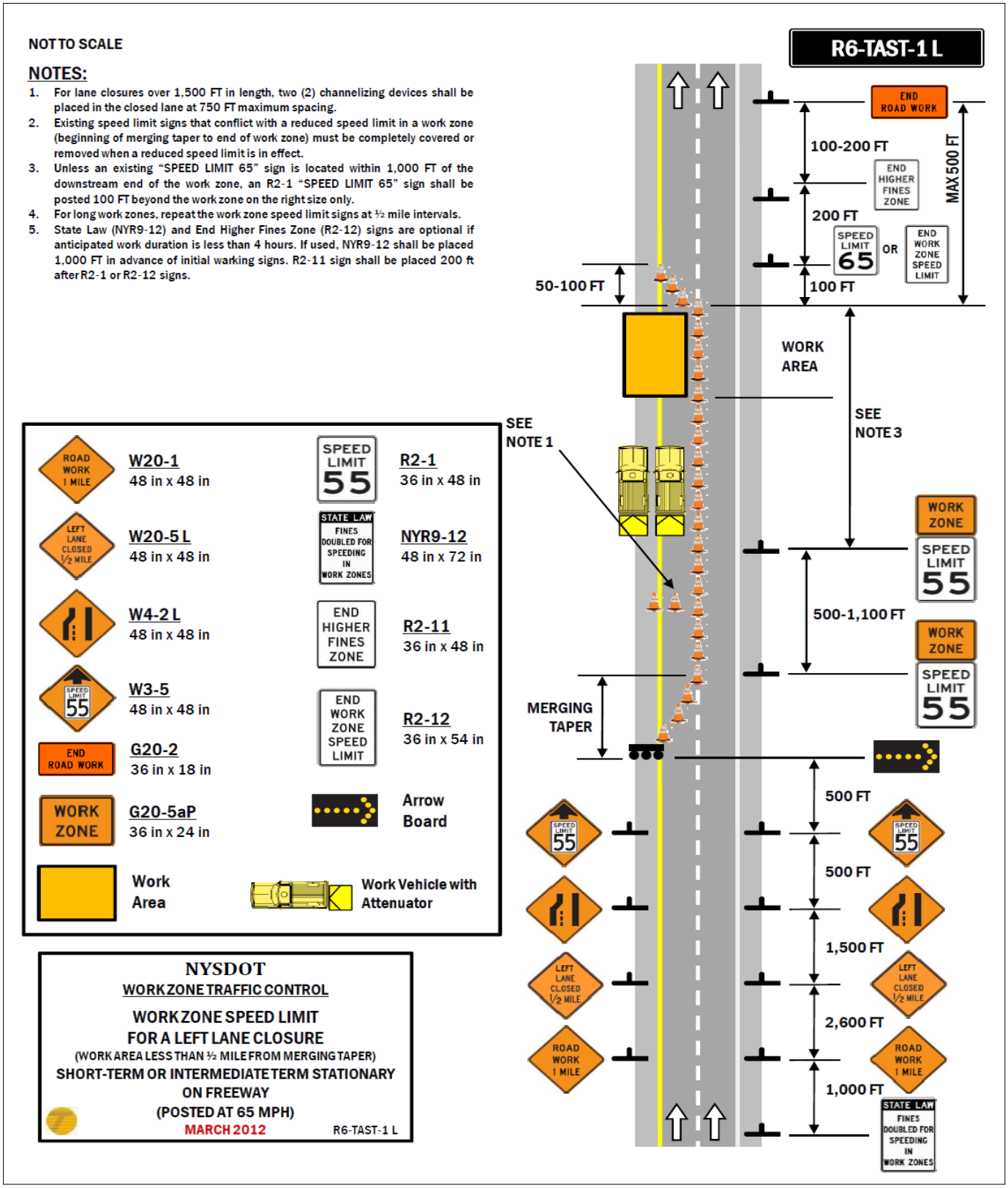
- **Daytime lane closures will be allowed under the following conditions:**
  - Lane closures in the NB and SB direction will be set up after 8:00AM and will not be allowed between the hours of 3:00PM and 6:00PM
  - Speed reduction to 55mph
  - Trooper Coverage will be requested
- **Nighttime lane closures will be allowed under the following conditions:**
  - Nighttime lane closures using barrels will be allowed from 7:00PM to 6:00AM
  - VMS will be provided for all nighttime lane closures in either direction
  - Speed reduction to 55mph
  - Trooper Coverage will be requested
- **Lane closures extending beyond a single daytime or nighttime period:**
  - Plans for long term closures will be reviewed for approval by the Regional Traffic & Safety Office

Emergency Work

- **Emergency Work will be allowed as required and with commensurate TTC**
  - Emergency work is described as an extraordinary damage or an extraordinary condition qualifying for an emergency repair or immediate, urgent or imminent need for private services and has as a minimum one of the following criteria
    - Imposes immediate danger to the public
    - Threatens safety
    - Restricts emergency vehicle access



SECTION 3: JOINT AND CRACK FILLER/SEALER AND MASTIC REPAIR MATERIALS - SPECIFIC PROJECTS (Cont'd)

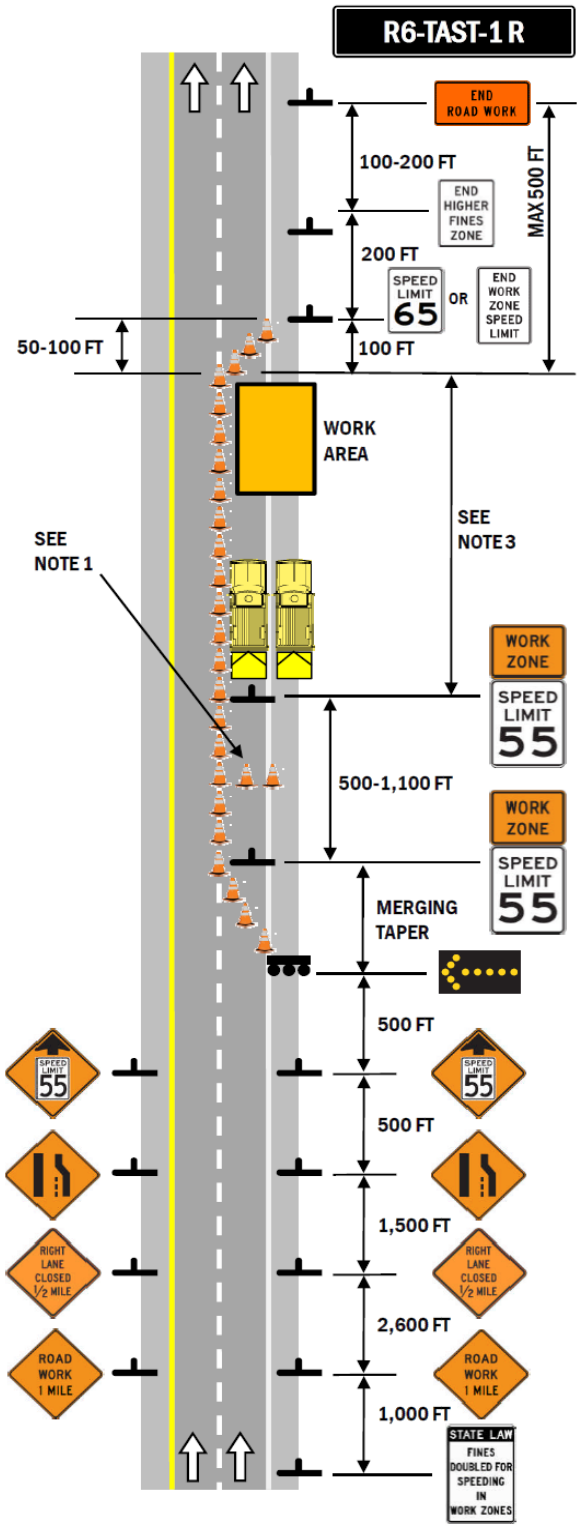


SECTION 3: JOINT AND CRACK FILLER/SEALER AND MASTIC REPAIR MATERIALS - SPECIFIC PROJECTS (Cont'd)

NOT TO SCALE

NOTES:

1. For lane closures over 1,500 FT in length, two (2) channelizing devices shall be placed in the closed lane at 750 FT maximum spacing.
2. Existing speed limit signs that conflict with a reduced speed limit in a work zone (beginning of merging taper to end of work zone) must be completely covered or removed when a reduced speed limit is in effect.
3. Unless an existing "SPEED LIMIT 65" sign is located within 1,000 FT of the downstream end of the work zone, an R2-1 "SPEED LIMIT 65" sign shall be posted 100 FT beyond the work zone on the right size only.
4. For long work zones, repeat the work zone speed limit signs at ½ mile intervals.
5. State Law (NYR9-12) and End Higher Fines Zone (R2-12) signs are optional if anticipated work duration is less than 4 hours. If used, NYR9-12 shall be placed 1,000 FT in advance of initial warking signs. R2-11 sign shall be placed 200 ft after R2-1 or R2-12 signs.



ROAD WORK 1 MILE — **W20-1** 48 in x 48 in

RIGHT LANE CLOSED ½ MILE — **W20-5 R** 48 in x 48 in

W4-2 R 48 in x 48 in

SPEED LIMIT 55 — **W3-5** 48 in x 48 in

END ROAD WORK — **G20-2** 36 in x 18 in

WORK ZONE — **G20-5aP** 36 in x 24 in

Work Area

SPEED LIMIT 55 — **R2-1** 36 in x 48 in

STATE LAW FINES DOUBLED FOR SPEEDING IN WORK ZONES — **NYR9-12** 48 in x 72 in

END HIGHER FINES ZONE — **R2-11** 36 in x 48 in

END WORK ZONE SPEED LIMIT — **R2-12** 36 in x 54 in

Arrow Board

Work Vehicle with Attenuator

NYSDOT
WORK ZONE TRAFFIC CONTROL
WORK ZONE SPEED LIMIT
FOR A RIGHT LANE CLOSURE
(WORK AREA LESS THAN ½ MILE FROM MERGING TAPER)
SHORT-TERM OR INTERMEDIATE TERM STATIONARY
ON FREEWAY
(POSTED AT 65 MPH)
AUGUST 2014 R6-TAST-1 R

SECTION 4: HEATER SCARIFICATION - SPECIFIC PROJECTS

4.1 Introduction

Heater scarification is a continuous multi-step process in which the existing hot mix asphalt (HMA) pavement surface is recycled using specialized equipment. The HMA pavement surface is heated causing the asphalt to soften. The softened asphalt surface is then immediately scarified and milled to a specified depth. The reclaimed asphalt pavement is then mixed with a recycling agent that rejuvenates the asphalt. The recycled mix is then placed and compacted back onto the roadway. A new bituminous concrete sealing layer is added later. Existing cracks are eliminated, and the resulting pavement should provide a longer life.

4.2 Pricing Information

4.2.1 General

Price quoted for heater scarification shall be net per square yard completed with contractor's equipment totally by the contractor at the locations indicated herein. The price quoted for heater scarification per square yard shall also include mobilization to the project site and the provision of Work Zone Traffic Control as indicated elsewhere in this Invitation for Bids.

The price quoted per gallon for recycling agent shall include heating, hauling, and applying the recycling agent at the project locations indicated herein.

4.3 Asphalt Price Adjustments

4.3.1 General

a. Asphalt price adjustments allowed will be based on the January 2022 average of the F.O.B. terminal price per ton of unmodified PG 64S-22 binder without anti-stripping agent (base average F.O.B. terminal price). The new monthly average terminal price will be determined by the New York State Department of Transportation based on prices of preapproved primary sources of performance graded binder in accordance with the New York State Department of Transportation Standard Specifications.

The January 2022 average is $580.000.

NOTE: The same grade of asphalt cement used in establishing the base average F.O.B. terminal price shall be used in establishing the new average F.O.B. terminal price.

In the event that one or more of the New York State Department of Transportation pre-approved sources discontinue posting a price for asphalt cement, the base average F.O.B. terminal **price shall not be recalculated.**

b. The new average F.O.B. terminal price will be determined based on the above F.O.B. terminal prices posted on the 20th of each month, hereafter known as the "Adjustment Date", during the contract period. However, asphalt price adjustments, in accordance with the formula below, will be effective for deliveries made on and after the first of the month following the adjustment date.

c. The unit prices of liquid bituminous materials (recycling agent) purchased from any award based on this specification will be subject to adjustment based on the following formula:

$$\text{Price Adjustment (per gallon)} = \frac{\text{New Monthly Average FOB Terminal Price} - \text{Base Average Terminal Price}}{235} \times \text{Total Allowable Petroleum \%}$$

Positive Price Adjustment number shall be added to original per gallon Bid Price.
Negative Price Adjustment number shall be subtracted from original per gallon Bid Price.

SECTION 4: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

New Monthly Average F.O.B. Terminal Price

The average F.O.B. terminal price for unmodified PG 64S-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation per New York State Department of Transportation Standard Specification.

Base Average F.O.B. Terminal Price

The average F.O.B. terminal price of unmodified PG 64S-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation as of January 2022.

Total Allowable Petroleum

The percentage of total allowable petroleum for each item is as follows:

Item	Grade	Asphalt %	Petroleum Allowance %	Total Allowable Petroleum %
417.0101	Recycling Agent	65.0	1.0	66.0%

Asphalt Price Adjustments will not be allowed for materials which do not have an asphalt cement base.

d. Work performed after the expiration of the contract, where no extension has been granted, resultant from purchase orders placed prior to expiration of the contract will receive the Asphalt Price Adjustments applicable in effect during the last month of the contract.

Asphalt Price Adjustments for any contracts that are extended will be based on the new average for the month in which the work is done applying the same base established for that contract.

e. Asphalt price adjustments allowed by this contract shall be calculated and applied to the original prices. There will not be asphalt price adjustments unless the change amounts to more than $0.100 per ton/$0.010 per gallon as applicable from the original price. In these instances, prices will revert to the original prices.

f. All Asphalt Price Adjustments will be computed to three decimal places.

g. Should these provisions result in a price structure which becomes unworkable, detrimental or injurious to the State or in prices which are not truly reflective of market conditions or which are deemed by the Commissioner to be unreasonable or excessive, and no adjustment in price is mutually agreeable, the Commissioner reserves the sole right upon ten business days written notice mailed to the Contractor to terminate any contract resulting from this bid opening.

All asphalt price adjustments shall be published by the State and issued to all contract holders whose responsibility will be to attach the appropriate State notification (based on when the work was performed) to the payment invoice submitted to agency.

SECTION 4: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

4.3.2 Asphalt Price Adjustment: Example

This example is for illustration purposes only. Actual Base Average Price, etc., may vary:

Item 417.0101
Base Avg. Price per Ton = $580.000
New Avg. Price per Ton = $590.000
Total % Asphalt Plus Petroleum Allowance = 66%

Price Adjustment (per gallon)	=	$\frac{(590.000 - 580.000)}{235}$	X	0.66

Price Adjustment (per gallon)	=	+$0.028 per gallon

Positive Price Adjustment number shall be added to original per gallon Bid Price.
Negative Price Adjustment number shall be subtracted from original per gallon Bid Price.

4.4 Payment

Payment for heater scarification shall be made at the contract price bid for the actual number of completed square yards of heater scarification; the actual number of gallons of recycling agent at 60 degrees F verified by the receiving agency used in the accepted portions of the work. The determination as to quantities involved in any contract shall be accepted as final and binding upon the contractor.

A delivery slip stating quantities of recycling agent shall accompany each shipment. An invoice listing the quantities of heater scarification and recycling agent shall be sent promptly by the contractor to the engineer.

No separate payment will be made for the use of water in the mixing process. Any work required for the maintenance and repair of the heater scarification including sweeping by the contractor during the ten-day curing period and for an additional twenty days thereafter shall be done at the contractor's expense.

Payment for work zone traffic control shall be included in the payment for the number of square yards of completed heater scarification.

4.5 Pre-Heater Scarification Meeting

The contractor shall schedule a Pre-Heater Scarification Meeting with the affected resident engineer after the acceptance of the mix design by the State and at least one week prior to the start of the heater scarification. Project-level supervisors for both the owner agency and the contractor shall be present at this meeting. At this meeting the contractor shall present Certificates of Insurance evidencing compliance with the additional insurance requirements set forth in the INSURANCE clause, their proposed work schedule, procedure, equipment, mix design, calibration and Work Zone Traffic Control Plan to the State for approval. Prior to the start of heater scarification, the contractor shall coordinate the details of the heater scarification with the resident engineer.

4.6 Supervision

The Department of Transportation shall provide supervision for the heater scarification operation, and pavement marking abrading if applicable. The Resident Engineer shall designate a Project Supervisor who shall be in charge of the operation. All orders pertaining to Work Zone Traffic Control plan from the Project Supervisor to the contractor shall be binding on the contractor. The following portions of Section 105 - CONTROL OF WORK of the Standard Specifications shall apply to these projects: 105-01 ENGINEER'S AUTHORITY, 105-05 VENDOR RESPONSIBILITY, 105-06 COOPERATION WITH UTILITIES AND OTHER CONTRACTORS.

SECTION 4: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

4.7 Work Hours

Work shall not be permitted on Sundays and NYS Holidays. If the contractors desire to work overtime on other days, dispensation from NYS Labor Department must be obtained using Department of Labor Form PW-30 (04/21). Night work is prohibited unless agreed to by the Contractor and NYS Department of Transportation. All Overtime Dispensations requests shall be submitted to the Resident Engineer or his/her designee at the preconstruction meeting.

4.8 Construction Details

The construction details shall comply with the requirements specified herein, including those appearing in the enclosed Attachment 10 - *Detailed Specifications – Liquid Bituminous Materials*. The project supervisor from the State shall have sole responsibility for determining compliance with the specifications. All orders given to the contractor regarding construction details shall be considered final.

4.9 Restoration of Disturbed Areas

During the course of the work the vendor shall take reasonable care not to disturb areas outside the existing pavement. Any areas disturbed by the vendor shall be returned to their original condition at no expense to the State. Any and all debris generated as part of the work shall be removed by the Vendor upon completion of the project.

4.10 Damaged or Deficient Areas

Prior to acceptance and payment by the State for work under this contract, any placed pavement that ravels, delaminates, fails to properly cure, or is in any way defective shall be redone to the satisfaction of the State at the contractor's expense.

4.11 Work Zone Traffic Control

The contractor shall be responsible for Work Zone Traffic Control. Traffic shall be controlled in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), Section 619-1 through 619-3 of the Standard Specifications as described herein including modifications to the Standard Specifications. The contractor shall submit a Work Zone Traffic Control Plan for approval to the Resident Engineer at the Pre-Work Meeting. For two-way roadways, Figures TAST-C1, TAST-C2, TAST-C3OF, TAST-C3TF, TAST-C7 and TAST-CMF included in this Invitation for Bids may be used as a basis for development of a Work Zone Traffic Control Plan. For one-way roadways, Figures TAST-CE1, TAST-CE2, and TAST-C8 may be used as a basis for development of a Work Zone Traffic Control Plan. For one-way Freeways or Expressways, Figures TAST-E1, TAST-CE1, TAST-E6, and TAST-E7 may be used as a basis for development of a Work Zone Traffic Control Plan.

All necessary flaggers for Work Zone Traffic Control shall be provided by the Contractor. For two-way roadways, a minimum of three flaggers shall be provided while the work operation is underway. One shall be stationed at each end of the applicable operation and one shall be stationed with the operation. For one-way roadways, a minimum of two flaggers shall be provided while the work operation is underway. One shall be stationed at the beginning of the applicable operation and one shall be stationed with the operation. The Contractor shall station flaggers such that communication is maintained between the flaggers. Hand signals, radios, pilot vehicles, or some other means of communication may be used subject to the approval of the Resident Engineer.

All costs of Work Zone Traffic Control as prescribed by this specification including flagging, temporary pavement marking and/or delineation, and construction signs, are to be included in the unit price bid. No separate payment shall be made.

4.11.1 Permanent Construction Signs

The Contractor shall provide construction signs as specified in Section 619-1 through 619-3 of the Standard Specifications and in the MUTCD. At minimum the Contractor shall install the following permanent construction signs found on the next page.

SECTION 4: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

SIGN	MINIMUM SIZE	LOCATION
ROAD WORK NEXT _____ MILES	G20-1 Conventional 36" x 18" Freeways 48" x 24"	On main line upstream of project in each direction.
END ROAD WORK	G20-2 Conventional 36" x 18" Freeways 48" x 24"	On main line after end of project in each direction.
ROAD WORK AHEAD	W20-1 Conventional 36" x 36" Freeways 48" x 48"	On main line in advance of the affected highway segment in each direction and on major intersecting roads 300 -500 feet in advance of main line. Sign should be covered if it conflicts with temporary signing in the vicinity. (Place between the G20-1 and the first warning sign that states condition- i.e. W8-12, W8-9 or W8-15).
DO NOT PASS	R4-1 Conventional 24" x 30"	If 2'x 4" temporary yellow markings are used instead of full barrier centerline pavement markings, place the first sign at or within 100 feet of the beginning of the unmarked area, second within 1,000 feet and subsequent signs, spaced every ½ mile along project in each direction.
NO CENTER LINE	W8-12 Conventional 36" x 36"	If 2'x 4" temporary yellow markings are used instead of full barrier centerline pavement markings, place the first sign in advance of the condition and the first "DO NOT PASS" sign: 300' urban is preferred (100' minimum), 500' rural is preferred (200' minimum). Place additional signs spaced every 2 miles on mainline in each direction and after every major intersecting road.
LOW SHOULDER	W8-9 Conventional 36" x 36" Freeways 48" x 48"	Place on mainline spaced every 2 miles along project in each direction and after every major intersecting road until shoulder back-up is installed (if conditions warrant use, place between the W8-12 and R4-1, maintaining a minimum of 200' between signs for rural roads and 100' on urban. The W8-12 can be moved upstream to accommodate the required spacing.)
GROOVED PAVEMENT	W8-15 Conventional 36" x 36" Freeways 48" x 48"	On any roadway 500 feet in advance of rebates milled under this contract, but not paved. Remove or cover after paving rebate.

**All signs should maintain an absolute minimum spacing of 200' rural or 100' urban. 500' is preferred on rural and 300' is preferred on urban. Double stacking of any of the above signs, or combination thereof, will NOT be permitted.

SECTION 4: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

Major intersecting roads are defined as through State, County, Town, Village, or City roads. The Contractor may provide portable signs as shown in Figure 6F-2 of the MUTCD and meeting the requirements of Section 619 of the Standard Specifications for lane closures during work hours. Signs left active at night shall be rigid and reflectorized in accordance with the Standard Specifications.

With prior permission of the State's Resident Engineer, the Vendor may provide portable signs as shown in Figure 6F-2 of the MUTCD for the above referenced DO NOT PASS and NO CENTER LINE signs. The Contractor shall be responsible for assuring that these signs will be in their upright, visible positions twenty-four hours a day, seven days a week while 2' X 4" temporary yellow markings are used instead of full barrier pavement markings.

4.11.2 Temporary Pavement Markings

The Contractor shall install and maintain temporary pavement markings on any paved surface without permanent pavement markings before opening it to traffic, before nightfall or before the end of the work day, whichever comes soonest except for areas that are open during the work shift with channelizing devices or flaggers. Temporary pavement markings shall meet the requirements of Section 619 of the Standard Specifications except that two-lane, two-way highways may be left without full barrier centerlines in no passing zones for a maximum of 7 calendar days provided that NO CENTER LINE (W8-12, black on orange), NO PASSING ZONE (W14-3, black on orange pennant shaped sign), and DO NOT PASS (R4-1) signs are used consistent with the MUTCD and in conjunction with yellow 2 foot by 4 inch temporary markings consisting of retroreflective removable pavement marking tape, paint or yellow temporary overlay markers installed on a 40 ft. cycle to delineate the centerline location.

The State is responsible for the final pavement markings unless otherwise indicated in the contract. If the vendor chooses to install NO CENTER LINE and DO NOT PASS signs and temporary yellow 2 foot by 4 inch pavement markings in lieu of full barrier centerline markings, the signs shall be left in place until the state has completed installing the final pavement markings. The state will normally complete final pavement markings within 7 days of the project completion. However, if unavoidable situations delay the pavement marking installation the signs shall remain in place for 14 calendar days after the project has been completed or until the state has completed installing the final pavement markings, whichever comes first. If permanent pavement marking cannot be installed within 14 days of the project completion, state must install interim pavement marking including center lines, edge lines, stop bars, and simple crosswalks with no hatching before the end of 14 days after project completion.

All costs for Work Zone Traffic Control including flagging, temporary pavement markings, delineation, and construction signs are to be included in the prices bid per ton or square yard as applicable.

4.11.3 Special Note: Work Zone Intrusion Initiative

As part of the Department of Transportation's Work Zone Intrusion Initiative, the following countermeasures shall apply to this Invitation for Bids:

Channelizing Device Spacing Reduction

A maximum channelizing device spacing of 40 ft. shall be provided at work sites where workers are exposed to traffic. This spacing shall be maintained a reasonable distance upstream of workers, and shall be used throughout the work zone.

Where tapers are located less than 500 ft. from the work site, the 40-ft. spacing shall be used in the tapers as well.

Drums or vertical panels are preferred for intermediate to long-term stationary work zones, and at any locations where the risk of intrusion is high. Traffic cones are normally adequate for work zones set up and removed on a daily basis.

In long lane or shoulder closures, at least two channelizing devices shall be placed transversely at maximum 800 ft. intervals to discourage traffic from driving through the closed lane. Transversely placed devices are not required where pilot cars are in use.

Frequent checks shall be made to reset channelizing devices dislodged by traffic.

SECTION 4: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

Flagger Station Enhanced Setups

Additional cones and a flag tree meeting Section 6F.62 of the MUTCD shall be used upstream of flagger stations to provide added warning to drivers. These devices shall be used for flagger stations except those that are constantly moving or are in use at one location for no more than a few minutes. If the W20-7a flagger sign is used, the additional cones and flag tree shall also be used.

For additional details on Flagger Station Enhanced Setups, see Work Zone Traffic Control drawings in this Invitation for Bids.

Temporary Rumble Strips

a. Description

This work shall consist of the installation, maintenance and subsequent removal of temporary rumble strips in paving work zones where indicated in the Invitation for Bids or as directed by the Engineer.

b. Materials

Rumble strips shall be either constructed in place from a raised strip of asphalt concrete or constructed in place with removable pavement marking tape. Raised removable tape rumble strips shall be formed by applying four layers of removable black non-reflectorized removable pavement marking tape. The tape shall be applied to a clean, dry pavement surface in accordance with the manufacturer's recommendations. The pavement surface shall be cleaned with compressed air just prior to application of the tape.

Raised asphalt rumble strips shall be formed from hot mix asphalt meeting the requirements of Items 402.058904 or 402.098904. Tack coat meeting the requirements of Materials Designation 702-XXXXT Asphalt Emulsion Diluted Tack Coat shall be used to adhere the rumble strip to the existing pavement. Temporary rumble strips shall be formed using a specially constructed rumble strip paver (drag box) pulled transversely across the pavement, or by hand placement between forms fixed to the pavement. If forms are used, they shall be removed prior to compaction of the asphalt mixture. Compaction shall be accomplished using a plate tamper or a static roller. The roadway surface on which the rumble strips are to be attached shall be dry, free of surface contaminants such as dust or oil, and shall be 45ºF or greater unless otherwise authorized by the Engineer. The pavement surface shall be cleaned with compressed air just prior to tack coating and subsequent installation of rumble strips.

Temporary rumble strips shall be placed in a succession of three 6-Strip Patterns according to the attached "Suggested Layout Details - Temporary Rumble Strips". Each strip shall be placed on 10 foot centers and traversing the full width of each travel lane. On curbed roadways, rumble strips shall end a minimum of 3 feet from the curb so as to not interfere with drainage. Rumble strips shall be between 6 inches and 9 inches in width and have a final compacted thickness of 0.4 inches $\pm$ 0.1 inches.

Any raised rumble strips that fail to adhere to the pavement, or become damaged or flattened such that, in the opinion of the Engineer, they are no longer performing their intended function, shall be replaced or repaired by the Contractor to the satisfaction of the Engineer. Any associated damage to the pavement shall also be repaired by the Contractor to the satisfaction of the Engineer. These replacements or repairs shall be made at no additional expense to the Purchasing Agency.

When directed by the Engineer, (e.g., prior to the start of the winter plowing season), or prior to the placement of successive pavement courses, the Contractor shall completely remove the rumble strips from the pavement. Rumble strips shall be removed upon completion of work and concurrently with the removal of other temporary traffic control signs and devices. Any pavement that is damaged in the process of removing the rumble strips shall be repaired by the Contractor to the satisfaction of the Engineer at no additional expense to the Purchasing Agency.

c. Basis of Payment

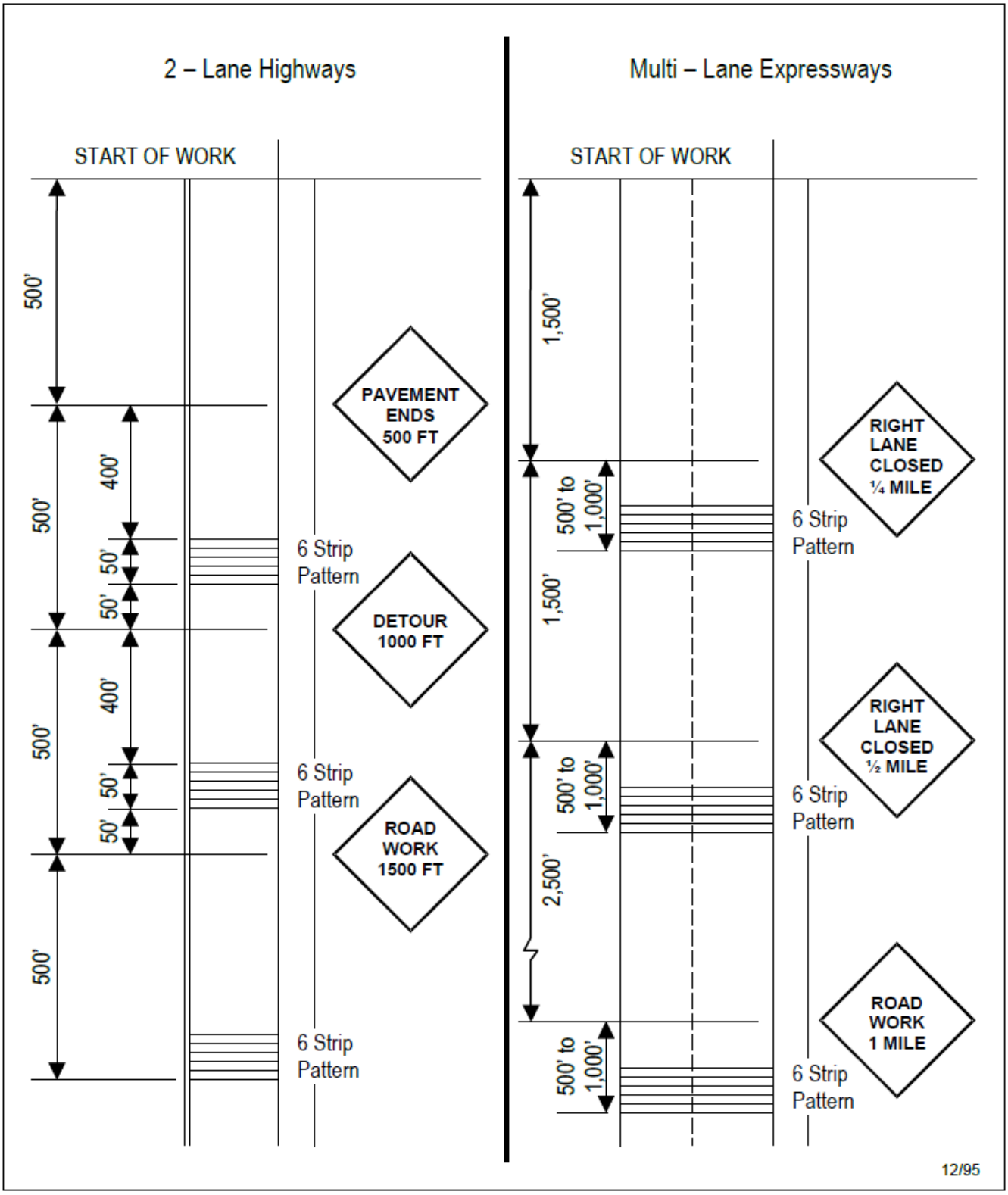
All costs for the installation, maintenance and removal of temporary rumble strips are included in the price per ton or square yard as appropriate. No separate payment shall be made.

d. Suggested Layout Details Drawing-- Temporary Rumble Strips

See the Suggested Layout Details Drawing on the **next page**.

SECTION 4: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

Suggested Layout Details -- Temporary Rumble Strips



SECTION 4: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

4.12 Special Notes – Heater Scarification

4.12.1 Funding Source (Heater Scarification)

Projects 2V2211, 2V2221, 2V2231, 360458, 7V2211, 7V2223, 7V2226, and 9S2270 will be funded by Federal Aid**.**

Projects, 360442, 6V2222, 6V2253, 7V2213, 7V2221, 7V2254, and 9S2250 are 100% State funded.

4.12.2 Special Note for Coordination with Other Projects (Heater Scarification)

All the projects in this Contract Award Notification involve HMA overlay or chip seal to the heater scarification through separate contract(s). All projects shall require that the heater scarification contractor coordinates their work with the top course contractor(s) to provide the required curing period before placing the next course as well as to minimize disruption to the traveling public and the time traffic is running over a recycled surface.

4.12.3 Special Note for Pilot Vehicle (Heater Scarification)

Unless otherwise specified, the highway shall be kept open to traffic at all times. Traffic shall be discontinued on the lanes where work is being performed on these projects; and as soon as heater scarification is done and rolled, controlled traffic may be permitted thereon. The Contractors shall provide sufficient two-way radio equipped pilot vehicles to guide traffic around heater scarification work at a speed not to exceed 15 mph. The pilot vehicles shall be equipped with construction signs meeting the requirements of Section 6F.58 and 6C.13 of the Manual of Uniform Traffic Control Devices and a rotating amber beacon. The delineation of the closed lane (cone placement) as required by Section 619-3.02J of the Standard Specifications shall be evaluated by the Resident Engineer based on the traffic control plan presented by the Contractor and, after consultation with the Regional Traffic Safety & Mobility Office, a determination will be made as to what will be required on the project. Daytime lane closures may be used in lieu of pilot vehicles on controlled access highways as deemed appropriate by the Resident Engineer at the time of Pre-Heater Scarification Meeting.

SIGN	MINIMUM SIZE	LOCATION
PILOT VEHICLE FOLLOW ME	G20-4 CONVENTIONAL 36"x18"	ON BACK OF PILOT VEHICLES

The pilot vehicle shall have the name of the Contractor prominently displayed.

All cost for Work Zone Traffic Control including flagging, temporary pavement markings, channelizing devices, construction signs, and pilot vehicles shall be included in the prices per square yard for heater scarification. No separate payment shall be made. **The use of the pilot vehicle shall be as ordered by the Resident Engineer**.

SECTION 4: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

4.12.4 NYSDOT REGION 2 Special Notes (Heater Scarification)

Project 2V2211 - Route 29 and 920C, Briggs Street over Cayadutta Creek to Route 30, Route 920D (Harrison Street), Route 30A to Route 29, Route 920J (Route 29A), Route 30A to Route 29
Project 2V2221 - Route 8/30 OLAP, Route 8 to Speculator
Project 2V2231 - Route 5S - Herkimer County Line to Ilion

1. It shall be the contractor's responsibility to inventory and document the existing pavement marking patterns prior to heater scarification and submit to the Engineer a copy of the inventory prior to beginning work. If the original markings are obliterated, the contractor shall contact the resident engineer for guidance on their location.
2. All Heater Scarification must be completed as follows:
   a. Projects 2V2211 and 2V2231 all heater scarification must be complete by 08/31/2022.
   b. Project 2V2221 all heater scarification must be complete by 7/31/2022.
3. The contractor will submit a schedule reflecting this requirement to the Resident Engineer upon award of the work.
4. Any gore area epoxy pavement markings within the limits of heater scarification are to be removed prior to the Heater Scarification process. The cost of this work shall be included in the heater scarification items.
5. The paver shall be capable of placing the material with a shoulder break in the same location that it currently exists.

Project 2V2211 - Route 29, Route 30A to Route 30, Route 920D (Harrison Street), Route 30A to Route 29, Route 920J (Route 29A), Route 30A to Route 29

1. The contractor shall note that this Project contains 3 routes as follows:
   a. Route 29 – RM 29-2101-2021 to 3075 – Route 30A to Route 30.
   b. Route 920D (Harrison Street) RM 920D-2101-1000 to 1006 – Route 30A to Route 29.
   c. Route 920J (Steel Street Extension) – RM 29A-2101-3000 to 3020 (+400') – Route 30A to Route 29.
2. Route 29 - Lane width of the heater scarification shall be 14'. (12' lane + 2' shoulder).
   a. Limits of HIPR – 29-2102-3007 to 3075.
   b. Loops are located at the following RMs. No heater scarification shall be done at loop locations.
      1. RM 29-2102-3010 – Hail Mills Road Extension (EB DL and WB DL and RT Turn Lane).
      2. RM 29-2102-3062 – Route 29A (EB DL and WB DL and RT Turn Lane).
   c. Crafco Mastic material exists at areas of the centerline from RM 29-2102-3036 to 3046. This material will require removal prior to heater scarification. The cost for the removal will be included in the price bid for item 417.01.
3. Route 920D - Lane width of the heater scarification shall be 14'. (10' lane + 4' shoulder).
   a. Limits of HIPR – 920D-2101-1000 to 1006.
   b. Loops are located at RM 920D-2101-1000 (-75'). No HIPR where loops are located.
4. Route 920J - Lane width of the heater scarification shall be 14'. (11' lane + 3' shoulder).
   a. Limits of HIPR – 29A-2102-3003 (+400') to 29A-2102-3020 (+400').
   b. Please note that Route 920J reference markers are labeled 29A.
5. It is the responsibility of the contractor to take the pavement cores to be used in developing the HIPR mix design for this site.

SECTION 4: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

Project 2V2221 - Route 8/30 OLAP, Route 8 to Speculator

1. Lane width of the heater scarification shall be 14'. (11' lane + 3' shoulder).
2. All equipment shall be washed and screened for spotted lantern fly, prior to entering the Adirondack Park. All associated cost shall be included in the price bid for item 417.01.
3. The centerline at this location is not visually apparent. The contractor shall locate and mark out the centerline in paint prior to the start of work. This shall be discussed at the pre-recycling meeting. All associated cost shall be included in the price bid for item 417.01.
4. Pavement cores to be used in developing the HIPR mix design for this site were taken by Region 2 Materials and are stored at the Technical Services Laboratory at 1701 Broad St Utica. Contact the Regional Materials Engineer at 315-734-9419 to arrange for pickup.

Project 2V2231 - Route 5S - Herkimer County Line to Ilion

1. Mainline lane width of the heater scarification shall be 14'. (12' lane + 2' shoulder).
2. Acceleration and Deceleration lane width of the heater scarification shall be 14'. (Full width of the lanes plus 2' onto the shoulders.)
3. Interchange ramps (Dyke Road, Cemetery Street and West Main Street) will not require heater scarification.
4. All gore striping within the limits of the heater scarification process will be removed prior to HIPR.
    a. This striping exists at the following locations:
        1. RM 5S-2302-1009 – EB Exit to Dyke Road.
        2. RM 5S-2302-1014 – WB Exit to South Side Road (Dyke Road Exit).
        3. RM 5S-2302-1061 - EB exit to Cemetery Street.
        4. RM 5S-2302-1064 - WB exit to Cemetery Street.
        5. RM 5S-2302-1082 to1085 WB Exit to West Main Street and median striping.
        6. RM 5S-2302-1387 WB Exit to West Main Street.
5. It is the responsibility of the contractor to take the pavement cores to be used in developing the HIPR mix design for this site.

SECTION 4: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

4.12.5 NYSDOT REGION 3 Special Notes (Heater Scarification)

Time Restrictions

All Region 3 Projects shall follow the holiday restrictions listed below:

There shall be no temporary lane closures permitted on the following dates:

- 6:00 am Friday, May 27, 2022 thru 6:00 am Tuesday, May 31, 2022 – (Memorial Day Holiday)
- 6:00 am Friday, July 1, 2022 thru 6:00 am Tuesday, July 5, 2022 – (July 4th Holiday)
- 6:00 am Friday, September 2, 2022 thru 6:00 am Tuesday, September 6, 2022 – (Labor Day Holiday)
- 6:00 am Wednesday, November 23, 2022 thru 6:00 am Monday, November 28, 2022 – (Thanksgiving Holiday)

Region 3 Projects – Pavement Markings

It shall be the Contractor's responsibility to inventory and document the existing pavement marking patterns prior to Heater Scarification or Cold-In-Place recycling and submit to the Engineer a copy of the inventory prior to beginning work. The contractor shall also document the existing lane widths and shoulder widths of the pavement marking patterns and any special markings. The Contractor shall be responsible for completing all pavement marking layout necessary for the installation of the final pavement markings. There may be the need for the contractor to make adjustments to the pavement marking layout including changes as indicated by the Regional Traffic and Safety Group or the Resident Engineer. If the original markings are obliterated, the contractor shall contact the Resident Engineer for guidance on their location.

Region 3 Projects – Project Completion

All heater scarification operations for Region 3 shall be completed by September 1, 2022. The Contractor shall submit a schedule to the Engineer, to this effect, prior to beginning operations.

Project 360442 – Route 318, Seneca County

This project will be paved after heater scarification. The heater scarification contactor is responsible to coordinate their work schedule with the State's paving contractor.

The heater scarification contractor shall remove existing pavement markings (centerline, edge line and special markings) prior to heater scarification. The pavement marking removal shall be included in the bid cost of the heater scarification item.

Project 360458 – Route 79, Tompkins County

This project will be paved after heater scarification. The heater scarification contactor is responsible to coordinate their work schedule with the State's paving contractor.

This project requires production milling by the paving contractor in the curbed section RM 79-3605-1034 to1043, the heater scarification contractor is responsible to coordinate their work schedule with the milling contractor.

The heater scarification contractor shall remove existing pavement markings prior to heater scarification. The pavement marking removal shall be included in the bid cost of the heater scarification item.

SECTION 4: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

4.12.6 NYSDOT REGION 6 Special Notes (Heater Scarification)

Region 6 Specific Special Notes:

To minimize travel delays associated with major holidays, no work shall be permitted during the following periods:

6:00 am Friday, May 27, 2022 thru 6:00 am Tuesday, May 31, 2022 - (Memorial Day Holiday)
6:00 am Friday, July 1, 2022 thru 6:00 am Tuesday, July 5, 2022 - (July 4th Holiday)
6:00 am Friday, September 2, 2022 thru 6:00 am Tuesday, September 6, 2022 - (Labor Day Holiday)

Heater scarification will be performed on the travel lanes and 1 foot over the white edge line. Shoulders will not be heater scarified.

The Region requests all Preconstruction paperwork be submitted electronically as .pdf files to Gary.Shepard@dot.ny.gov prior to the Pre-Heater Scarification Meeting, or all documentation be brought to the Pre- Heater Scarification Meeting electronically as .pdf files on a CD or USB "thumb" drive that will not be returned to the contractor.

In lieu of longitudinal cones full project length between open and closed lanes of traffic, the contractor may elect to substitute, when using pilot vehicles, use of cones placed transversely across the closed lane at intervals per section 619-3.02 J.2 (every 800') and at strategic locations, such as intersections and driveways. All work zone signs will be at a minimum of 5' tall from the bottom of sign panel.

All Region 6 Heater Scarify projects shall be completed no later than August 1, 2022. A schedule reflecting this shall be submitted before start of work to the ARDO and Gary Shepard, for approval. Region 6 desires a greater placement of Temporary Striping delineation than is required under Section 619 of the NYSDOT Standard Specifications. As outlined below, the following additional quantity/ placement will be required. There are no revisions to the time of placement from the specifications.

Divided Highway Paving Projects:

Temporary Pavement Markings per 619-3.06. A with the following Additions:

- Ticks defining travel lanes changed to 4' long instead of 2' long.
- Placement of channelizing devices per section 619-3.02.J.3 along edge of pavement for the duration commencing at beginning of milling and/ or paving operations and left in place until full permanent pavement markings are in place.

Paint with beads is the only option permitted in Region 6 for temporary and interim pavement markings, unless approved on a case by case basis by the Resident Engineer. Offset the centerline temporary/interim pavement markings so that the permanent markings will cover up the temporary/interim markings, as follows: 8" centerline offset for 2 lane roads, 6" centerline offset for multi-lane roadways.

All stockpile, spoils, and clean-out sites need to be preapproved by the Regional Maintenance Environmental Coordinator, Ruth Hart, prior to use.

SECTION 4: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

4.12.7 NYSDOT REGION 7 Special Notes (Heater Scarification)

Heater Scarification Operations:

All heater scarification operations for Region 7 shall be completed by **September 1, 2022**. The Contractor shall submit a schedule to the Engineer, to this effect, prior to beginning operations.

Heater Scarification Limits and Widths:

Project	County	Route	RM (To-From)	Mainline Lane Width Shall be 14' (Lane + Shoulder)
7V2211	Clinton	Route 11	1123-1212	14' (12' Lane + 2' Shoulder)
7V2213	Clinton	Route 22	1015-1061	14' (11' Lane + 3' Shoulder)
7V2221	Franklin	Route 30	1247-1283	14' (11' Lane + 3' Shoulder)
7V2223	Franklin	Route 11	1121-1146	14' (12' Lane + 2' Shoulder)
7V2226	Franklin	Route 37	1077-1113	14' (12' Lane + 2' Shoulder)
7V2254	St. Lawrence	Route 12	1115-1175	14' (12' Lane + 2' Shoulder)

4.12.8 NYSDOT REGION 9 Special Notes (Heater Scarification)

Region 9 Materials has already cored the highway and the cores for this project are stored at the Region 9 Technical Services building. The winning bidder will need to contact Region 9 Materials to arrange core pickup to develop the project's mix design.

If there are any areas of preformed tape or a buildup of epoxy striping that needs to be removed prior to heater scarification the heater scarification contractor shall remove any stripes prior to scarifying. The cost of all associated work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid price per square yard of heater scarification. No separate payment shall be made.

Project 9S2270 – Sullivan County – Region 9

BIN 1080120 is not to be heater scarified. The contractor shall stop at RM 209 9702 1120 and resume scarification operations 250' north of the bridge measured from the centerline of the roadway.

4.13 Detailed Specifications – Heater Scarification

Please see Attachment 10 – *Detailed Specifications – Liquid Bituminous Materials*.

4.13.1 Project Dimensions – Heater Scarification

Information on pavement widths for projects in this Invitation for Bids is listed for informational purposes only. The dimensions listed in Attachment 12 – Project Dimensions are the best information available, but 100% accuracy is not guaranteed. Bidders should visit the project site to confirm the dimensions given and familiarize themselves with the project particulars before submitting a bid. NYS OGS/NYSDOT assumes no responsibility for erroneous information listed herein.

Please refer to Attachment 12 – Project Dimensions for the Project Dimensions Data.