# **Attachment 9**

# **Special Notes – NYSDOT Specific Projects**

Bituminous Concrete Hot/Warm Mix Asphalt
(2021 VPP NYSDOT Specific Projects -2<sup>nd</sup> Letting)
(State & Federal Funds)

(Revised 4/14/2021)

IFB# 23233

# Table of Contents

SECTI 1.1	ON 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)	
1.2	Pre-Paving Meeting	
1.3	Supervision	
1.4	Work Hours	
1.5	Restoration of Disturbed Areas	
1.6	Tack Coat	
1.7	Construction Details	
1.8	Attention: Special Note - Conditioning	
1.9	Work Zone Traffic Control	
	Contract Bonds	
	ON 2: PROJECTS - SPECIAL NOTES (ALL NYSDOT REGIONS)	
2.1	Funding Source	
2.2	Project Locations	17
2.3	Special Note - Coordination with Cold Recycling Projects	17
2.4	Special Note – PG Binder and Mix Design Level	17
2.5	Special Note – Optional Use of Warm Mix Asphalt (WMA) Technologies	20
2.6	Special Note - Rail Road Involvement in Federal Funded Projects	21
2.7	Special Note - Rail Road Involvement in 100% State Funded Projects	22
2.8	Special Note – Asphalt Pavement Joint Adhesive	23
	ON 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 3)	
3.1	Holiday and Event Restrictions – Region 3 Projects	
3.2	Region 3 Projects (All Region 3 Sites)	
3.3	Pilot Vehicle – Region 3 Projects	
3.4	Project 360420 – Route 34, Tompkins County	
3.5	Project 360421 – Route 326, Cayuga County	
3.6	Project 360422 – Route 38, Cayuga County	
3.7	Project 360423 – Routes 34, 930F Tompkins County	
3.8	Project 360424 – Route 290, Onondaga County	
3.9	Project 360425 – Route 359, Onondaga County	
	Project 360426 – Routes 173, 175, Onondaga County	
	Project 360427 – Route 48, Oswego County	
	Project 360428 – Route 38, Cayuga County	
	Project 360429 – Routes 34B, Tompkins County	
	Project 360430 – Route 414, 96A Seneca County	
3.15	Project 360431 – Route 96A Seneca County	30

3.16	Project 360432 – Route 80, Onondaga County	40 <u>aaq</u>
3.17	Project 360433 – Route 89 Seneca County	41
3.18	Project 360434 – Route 90, Cayuga County	42
3.19	Project 360435 – Route 5, Onondaga County	43
3.20	Project 360436 - Route 11, Oswego County	44
3.21	Project 360437 – Routes 26 and 23, Cortland County	45
3.22	Project 360438 – Route 104, Oswego County	46
3.23	Project 360439 – Route 41, Cortland County	47
3.24	Project 360440 – Route 31, Onondaga County	48
3.25	Project 360441 – Route 281, Cortland County	49
3.26	HMA/WMA Mixture Evaluation Using Performance Testing – Region 3	50
3.27	Density Measurement Using A Rolling Density Meter	54
SECTI	ON 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 6)	
4.1	Special Note – Region 6 Projects	
4.2	Project 6V2118 - Allegany County	57
4.3	Project 6V2123 – Steuben County	
4.4	Project 6V2133 – Chemung County	59
4.5	Project 6V2251 – Yates County	60
4.6	Project 6V2231 – Schuyler County	61
4.7	Project 6V2213 – Allegany County	62
4.8	Project 6V2033 – Chemung County	63
4.9	Project 6V2124 – Steuben County	64
4.10	Project 6V2214 – Allegany County	65
4.11	Project 6V2243 – Steuben County	66
4.12	Project 6V2121 – Steuben County	67
	ON 5: SUPERPAVE HOT MIX ASPHALT	
5.1	Superpave Hot Mix Asphalt Design Criteria	
5.2	Project Dimensions	
5.3	Rebates Table	68

# 1.1 Material Descriptions

The following are the material descriptions of Superpave HMA items that may be included in this contract:

MATERIAL DESIGNATION	DESCRIPTION			
402.017904	Truing & Leveling F9, HMA, 70 Series Compaction			
402.018904	Truing & Leveling F9, HMA, 80 Series Compaction			
402.058904	Shim Course F9, HMA			
402.095204	9.5 F2 Top Course HMA, 50 Series Compaction			
402.096104	9.5 F1 Top Course HMA, 60 Series Compaction			
402.096204	9.5 F2 Top Course HMA, 60 Series Compaction			
402.096304	9.5 F3 Top Course HMA, 60 Series Compaction			
402.097104	9.5 F1 Top Course HMA, 70 Series Compaction			
402.097204	9.5 F2 Top Course HMA, 70 Series Compaction			
402.097304	9.5 F3 Top Course HMA, 70 Series Compaction			
402.098304	9.5 F3 Top Course HMA, 80 Series Compaction			
402.098904	9.5 F9 T&L or Shoulder Course HMA, 80 Series Compaction			
402.126104	12.5 F1 Top Course HMA, 60 Series Compaction			
402.126204	12.5 F2 Top Course HMA, 60 Series Compaction			
402.126304	12.5 F3 Top Course HMA, 60 Series Compaction			
402.127104	12.5 F1 Top Course HMA, 70 Series Compaction			
402.127204	12.5 F2, Top Course HMA 70 Series Compaction			
402.127304	12.5 F3, Top Course HMA 70 Series Compaction			
402.128904	12.5 F9 T&L or Shoulder Course HMA, 80 Series Compaction			
402.196904	19 F9 Binder Course HMA, 60 Series Compaction			
402.197904	19 F9 Binder Course HMA, 70 Series Compaction			
402.256904	25 F9 Binder Course HMA, 60 Series Compaction			
402.257904	25 F9 Binder Course HMA, 70 Series Compaction			
402.068104	6.3 F1 Top Course HMA, 80 Series Compaction			
402.068204	6.3 F2 Top Course HMA, 80 Series Compaction			
402.068304	6.3 F3 Top Course HMA, 80 Series Compaction			
402.000014	Plant Production Quality Adjustment to HMA Items			
402.000024	Pavement Density Quality Adjustment to HMA Items			
402.000034	Longitudinal Joint Density Quality Adjustment to HMA Items			
402.095201	9.5 F2 Top Course WMA, 50 Series Compaction			
404.096201	9.5 F2 Top Course WMA, 60 Series Compaction			
404.096301	9.5 F3 Top Course WMA, 60 Series Compaction			
404.097201	9.5 F2 Top Course WMA, 70 Series Compaction			
404.097301	9.5 F3 Top Course WMA, 70 Series Compaction			

# 1.1 Material Descriptions (Cont'd)

MATERIAL DESIGNATION	DESCRIPTION	
404.125201	12.5 F2 Top Course WMA, 50 Series Compaction	
404.126201	12.5 F2 Top Course WMA, 60 Series Compaction	
404.126301	12.5 F3 Top Course WMA, 60 Series Compaction	
404.127201	12.5 F2 Top Course WMA, 70 Series Compaction	
404.127301	12.5 F3 Top Course WMA, 70 Series Compaction	
404.068201	6.3 F2 Top Course WMA, 80 Series Compaction	
404.068301	6.3 F3 Top Corse WMA, 80 Series Compaction	
404.017901	Truing & Leveling F9, WMA, 70 Series Compaction	
404.018901	Truing & Leveling F9, WMA, 80 Series Compaction	
404.058901	Shim Course F9, Warm Mix Asphalt	
404.000011	Plant Production Quality Adjustment to WMA Items	
404.000021	Pavement Density Quality Adjustment to WMA Items	
404.000031	Joint Density Quality Adjustment to WMA Items	
404.06820409	6.3 F2 Top Course WMA with Polymer Fiber, 80 Series Compaction	

# 1.2 Pre-Paving Meeting

The vendor shall schedule a Pre-Paving Meeting with the affected Resident Engineer within one month after the award of the Contract and at least two weeks prior to the start of paving. At this meeting the vendor shall present Certificates of Insurance evidencing compliance with the additional insurance requirements, their proposed paving schedule, equipment, proposed tack coat application procedure and paving procedure, and Work Zone Traffic Control Plan to the State for approval. At least one week prior to the start of paving, the vendor shall coordinate the details of the paving with the Resident Engineer.

#### 1.3 Supervision

The Department of Transportation shall provide supervision for the paving operation. The Resident Engineer shall designate a Paving Supervisor and that person shall be in responsible charge of the operation. 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.

#### 1.4 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 (09/18). 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.

#### 1.5 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.

#### 1.6 Tack Coat

The vendor shall provide and apply bituminous tack coat to all existing hot mix asphalt pavement surfaces to be overlaid in this contract (and to all hot mix asphalt pavement surfaces included in this contract that will be overlaid by this contract). Tack coat shall meet the material requirements in Section 407-2 of the Standard Specifications. The application of tack coat shall comply with Section 407-3 of the Standard Specifications. **Tack coat shall be paid under its own item in gallons.** 

#### 1.7 Construction Details

The construction details shall comply with the requirements specified in Subsections 401-3.01, 402-3 and 407-3 of the Standard Specifications. The Paving Supervisor shall have sole responsibility for determining compliance with the specifications. All orders given to the vendor regarding construction details shall be considered final. The pavement thicknesses and lane and shoulder widths shall be as specified elsewhere in this Invitation for Bids.

#### 1.8 Attention: Special Note - Conditioning

The vendor 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 and the initial surface cleaning will be done by NYSDOT forces prior to the VPP project. However, once the VPP overlay placement begins, the vendor is responsible for keeping the pavement and shoulders clean until the overlay operations are completed, as per Section 633-3.01 of the NYSDOT Standard Specifications.

#### 1.9 Work Zone Traffic Control

The vendor shall be responsible for Work Zone Traffic Control. Traffic shall be controlled in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) and Sections 619-1 through 619-3 of the Standard Specifications as described herein including modifications to the Standard Specifications. The vendor shall submit a Work Zone Traffic Control Plan for approval to the Resident Engineer at the Pre-Paving Meeting. For two-way roadways, Figures TAST-C1, TAST-C2, TAST-C3OF, TAST-C3TF, TAST-C7 and TAST-CMF included in this document 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 vendor. For two-way roadways, a minimum of three flaggers shall be provided while the paving operation is underway. One shall be stationed at each end of the operation and one shall be stationed with the paver. For one-way roadways, a minimum of two flaggers shall be provided while the paving operation is underway. One shall be stationed at the beginning of the operation and one shall be stationed with the paver. The vendor 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 for Work Zone Traffic Control including flagging, temporary pavement marking and/or delineation, and construction signs are included in the price per ton. No separate payment shall be made.

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 contractor may provide portable signs as shown in Figure 6F-2 of the MUTCD for the DO NOT PASS and NO CENTER LINE signs referenced in Section <u>Special Note</u> - Temporary Pavement Markings. 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.

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

# 1.9 Work Zone Traffic Control (Cont'd)

SIGN	MINIMUM SIZE	LOCATION		
ROAD WORK NEXT_ MILES	<u>G20-1</u> 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	<u>W8-9</u> 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	<u>W8-15</u> 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.		

<sup>\*\*</sup>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.

### 1.9 Work Zone Traffic Control (Cont'd)

#### 1.9.1 **Special Note** - 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 pavement markings consisting of retro-reflective 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.

#### 1.9.2 Hot Mix Asphalt Overlay Splice (Rebate)

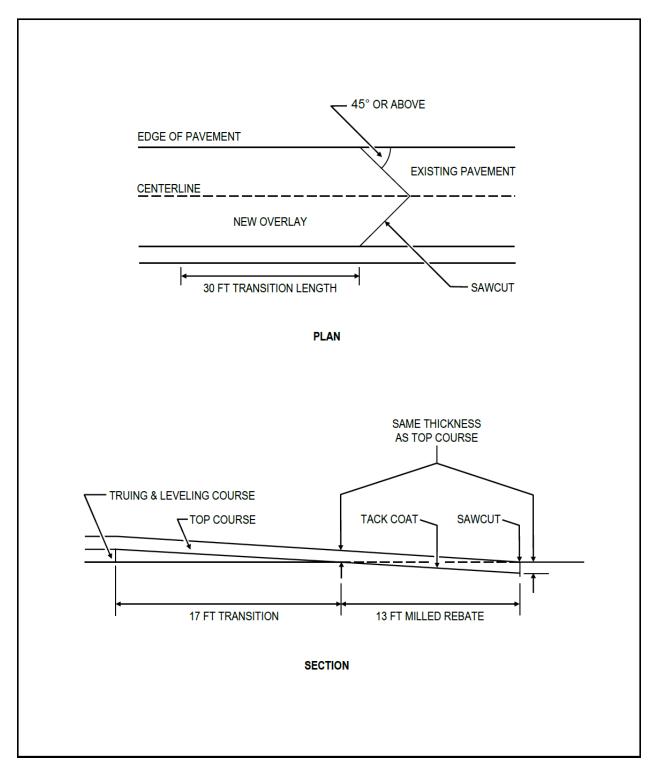
The vendor shall install hot mix asphalt overlay splices (pavement terminations) as per the Detail of Hot Mix Asphalt Overlay Splice (see next page). Hot mix asphalt overlay splices shall be installed at the areas indicated in the Location Table for Hot Mix Asphalt Overlay Splices. The cost for sawcutting, milling rebates and cleaning pavement in the splice area shall be included in the price bid per ton of bituminous concrete. Tack coat shall be paid under its own item as specified elsewhere. No separate payments shall be made for hot mix asphalt overlay splices.

Immediately after the hot mix asphalt overlay splices are milled, a temporary asphalt ramp shall be constructed. A cone or drum shall be installed at the ramp. If the rebate is left in place at night a drum equipped with a Type A flashing warning light shall be used and the ramp sloped in accordance with Table 619-1. No separate payment shall be made for the ramps. The cost shall be included in the price bid per ton of bituminous concrete.

Where rebates are milled and ramps are constructed and traffic is to ride on the milled pavement for more than the one work day in which the rebate is milled, GROOVED PAVEMENT signs (W8-15) shall be installed on the right side of the roadway, 500 feet upstream of the rebate location. No separate payment shall be made for the GROOVED PAVEMENT sign. The cost shall be included in the price bid per ton of bituminous concrete.

- 1.9 Work Zone Traffic Control (Cont'd)
  - 1.9.2 Hot Mix Asphalt Overlay Splice (Rebate)(Cont'd)

    DETAIL OF HOT MIX ASPHALT OVERLAY SPLICE



#### 1.9 Work Zone Traffic Control (Cont'd)

#### 1.9.3 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 feet shall be provided at stationary 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 feet from the work site, the 40 foot spacing shall be used in the taper as well.

Drums or vertical panels are preferred for long-term stationary and intermediate-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-foot intervals to discourage traffic from driving through the closed lane. Transversely placed devices are not required where pilot vehicles 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 required, the additional cones and flag tree shall also be used. If the flaggers move with the paving operation, the vendor shall ensure that appropriate distances are maintained between the flagger sign series, flag tree and the flaggers. The W20-7 flagger sign shall be a minimum of 300 feet and a maximum of 2,000 feet in advance of the flagger. If two or more sets of signs on an approach are used to maintain appropriate distances, when the operation progresses to the point where the next set of flagger warning signs is activated, the original signs shall be deactivated by removal, turning away from traffic or laying them down in a manner that does not pose a roadside hazard for passing vehicles. Only one series of flagger warning signs per approach shall normally be visible to traffic. For additional details on Flagger Station Enhanced Setups, see Work Zone Traffic Control Drawings in this Invitation for Bids.

#### 1.9.4 Temporary Rumble Strips

#### **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.

#### **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.

### 1.9 Work Zone Traffic Control (Cont'd)

#### 1.9.4 Temporary Rumble Strips (Cont'd)

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 Item 407.0102 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 45F 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.

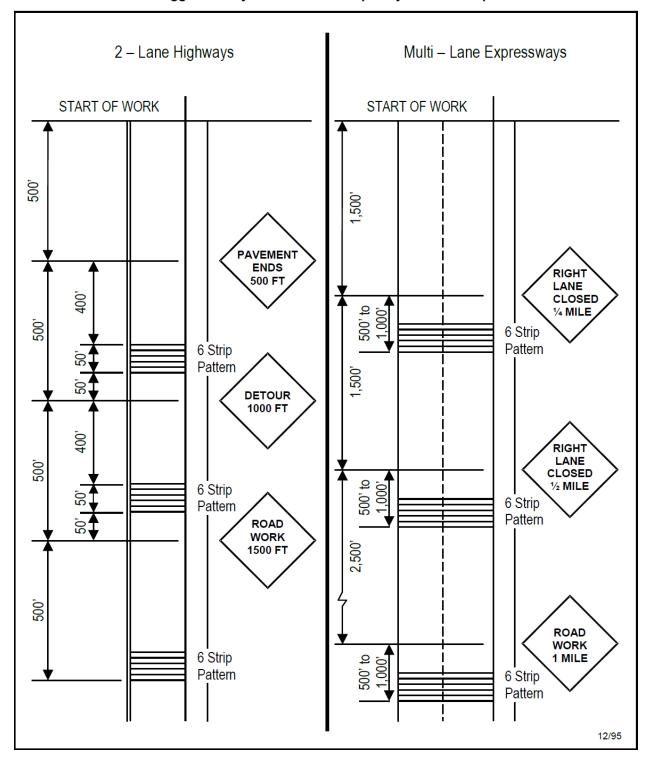
Any raised rumble strips that fail to adhere to the pavement, or become damaged or flattened such that, in the opinion of the Engineer, they are no longer performing their intended function, shall be replaced or repaired by the Contractor to the satisfaction of the Engineer. Any associated damage to 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.

#### **Basis of Payment**

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

- 1.9 Work Zone Traffic Control (Cont'd)
  - 1.9.4 Temporary Rumble Strips (Cont'd)
    Suggested Layout Details -- Temporary Rumble Strips



#### 1.10 Contract Bonds

The Contractor shall provide the State with a Labor and Materials Bond from a Surety Company listed on the U.S. Department of the Treasury listing of Approved Sureties (Treasury Department Circular 570) and licensed to do business in New York State, and with a minimum rating by A.M. Best of (A-) in the "best's Key Rating Guide". Treasury Department Circular 570 can be found on the U.S. Department of the Treasury website atwww.fms.treas.gov/c570/index.html.

The Contractor shall procure and deliver the bond to the State at the Pre-Paving Meeting referenced in Section *Pre-Paving Meeting* and shall maintain it at its own expense and without expense to the State during the Contract and until three months after the OGS contract ending date. If the contract is extended, the Labor and Materials Bond shall be extended until three months after the new contract ending date. The Surety Company shall append a statement of its financial condition and a copy of the resolution authorizing the execution of Bonds by the officers of the Company to the bond.

#### 1.10.1 Labor and Material Bond

The Contractor shall provide a bond in the form prescribed by the Commissioner of the New York State Department of Transportation (NYSDOT), shown in the NYSDOT Standard Specification for Design and Construction, Sub-Section 103-08 Sample Form of Labor and Material Bond, with sufficient sureties, approved by said Commissioner, guaranteeing prompt payment of monies due all persons supplying the Contractor with labor and materials employed and used in carrying out the contract, which bond shall inure to the benefit of the persons supplying such labor and materials. The amount of the Labor and Material Bond shall be 100% of the amount of the total contract bid price.

#### 1.10.2 Labor and Material Bond Example

See the sample Labor and Materials Bond language below.

# 1.10 Contract Bonds (Cont'd)

1.10.2 Labor and Material Bond Example (Cont'd)

# SAMPLE (page 1 of 2)

103-08 SAMPLE FORM OF LABOR AND MATERIAL BOND KNOW ALL PERSONS BY THESE PRESENTS, that

(Name of Contractor)
(Address)
(hereinafter called the "Principal") and the
a corporation created and existing under the law of the State ofhaving its principal office in the City of(hereinafter called
the "Surety"), are held and firmly bound unto the People of the State of New York (hereinafter called the "State") by and through its Department of Transportation (hereinafter called the "Department"), in the full and just sum of [Total Contract Bid Price or the "A Portion" of Total Contract Bid Price Dollars (\$)] good and lawful
money of the United States of America, for payment of which said sum of money, well and truly to be made and done, the said Principal binds itself, its heirs, executors and administrators, successors and assigns, and the said Surety binds itself, its successors and assigns jointly and severally, firmly by these presents:
WHEREAS, said Principal has entered into a certain written contract, on theday of, 20with the Department of
Transportation, 50 Wolf Road, Albany, New York 12232.
(Project Description)
In the county/counties of which constitutes Contract No. NOW, THEREFORE, the condition of this obligation is such, that if the said Principal shall promptly pay all monies due to all persons furnishing labor or materials to it or its SubContractors in the prosecution of the work provided for in said contract, then this obligation shall be void, otherwise to remain in full force and effect; Provided, however, that the Comptroller of the State of New York having required the said Principal to furnish this bond in order to comply with the provisions of Section 137 of the State Finance Law, all rights and remedies on this bond shall inure solely to such persons and shall be determined in accordance with the provisions, conditions and limitations of said Section to the same extent as if they were copied at length herein; and Further, provided, that the place of trial of any action on this bond shall be in the county in which the said contract was to be performed, or if said contract was to be performed in more than one county then in any such county, and not elsewhere.
IN TESTIMONY WHEREOF, the said Principal has hereunto set his/her (their, its) hand and the said Surety has caused this instrument to be signed by its authorized officer, the day and year above written.
Signed and deliveredday ofin the presence of
By

(The Surety Company shall append a single copy of a statement of its financial condition and a copy of the resolution authorizing the execution of Bonds by officers of the Company to the bond(s).

# 1.10 Contract Bonds (Cont'd)

1.10.2 Labor and Material Bond Example (Cont'd)

# SAMPLE (page 2 of 2)

103-08 SAMPLE FORM OF LABOR	AND MATERIAL BOND	
(Acknowledgment of principal, unless		
corporation) STATE OF NEW YORK COUNTY OF	SS.:	
On this day of	20, before me personally came	
	vn to me to be the person described in and who executed the	
foregoing instrument and acknowledge		
Notary Public	_	
(Acknowledgment of principal, if a		
corporation) STATE OF NEW		
YORK ss. :		
COUNTY		
On thisday of	, before me personally came	
1 ' 1 11 111	tome known and known to me to be the person, who	
being by me duly sworn, did depose a		of the
-	that he/she is the the corporation described in and which executed the	oi the
	signed his/her name thereto by order of the Board	
of Directors of said Corporation.	signed his her hame thereto by order of the Board	
of Birectors of said Corporation.		
	_	
Notary Public		
(Acknowledgment of		
Surety Company) STATE		
OF NEW YORK ss. :		
COUNTY OF		
On this day of		
	tome known and known to me to be the person, who	
being by me duly sworn, did depose an	nd say that he/she resides in	
-1	that he/she is theof	
the	4 2 1 1 1 4 6 1	
	the corporation described in the foregoing ner name thereto by order of the Board of Directors of	
said Corporation.	ier name thereto by order of the Board of Directors of	
said Corporation.		
Notary Public		
State Of New York Office of the Attor	rney General	
	et and bond as to form and manner of execution.	

### 2.1 Funding Source

The following projects will be funded by **Federal Aid**:

Projects 360421, 360422, 360427, 360428, 360430, 360431, 360433, 360434, 360437, 360438, 360439, 360441, 6V2033, 6V2118, 6V2121, 6V2122, 6V2123, 6V2124, 6V2133, 6V2213, 6V2214, 6V2231, 6V2243, and 6V2251.

The following projects will be 100% State funded:

Projects 360420, 360423, 360424, 360425, 360426, 360429, 360432, 360435, 360436, and 360440.

# 2.2 Project Locations

The specific locations for all projects listed in this Invitation for Bids can be found in Attachment 1 - *Pricing*.

#### 2.3 Special Note - Coordination with Cold Recycling Projects

Prior to HMA overlay, Projects 360422, 360439, 6V2033, 6V2121, and 6V2124 involve cold recycling and Projects 360420, 360423, 360425, 360429, 360430, 6V2123, and 6V2231 involve heater scarification through separate contractor(s). These VPP overlay projects require that the paving contractor coordinates their work with the corresponding cold recycling/ heater scarification contactor to allow required curing period before placing the HMA overlay as well as to minimize disruption to the traveling public and the time traffic is running over a recycled surface.

#### 2.4 Special Note – PG Binder and Mix Design Level

#### 2.4.1 PG 64S-22

Requirements of this note apply to all Section 402 and Section 404 Asphalt (HMA and WMA) items in this contract as outlined in Section *Superpave Hot Mix Asphalt Design Criteria* table.

#### **PG Binder**

Use a **PG 64S-22** (Standard) meeting the requirements of AASHTO M 332, *Standard Specification for Performance Graded Asphalt Binder using Multiple Stress Creep Recovery (MSCR)*, for the production of hot mix asphalt mixtures for this project.

Terminal Blend Crumb Rubber modifier may be used for this PG binder. When terminal blend CRM PG binder is used, the following shall apply:

- Crumb rubber particles shall be finer than #30 sieve size.
- The CRM PG binder shall be storage-stable and homogeneous.
- The Dynamic Shear Rheometer (DSR) shall be set at 2-mm gap.
- The CRM PG binder shall be 99% free of particles retained on the 600 μm sieve as tested in accordance with Section 5.4 of M 332.

#### 2.4 Special Note – PG Binder and Mix Design Level (Cont'd)

#### 2.4.1 PG 64S-22 (Cont'd)

Use of polyphosphoric acid (PPA) to modify the PG binder properties is prohibited for mixtures under this contract. This prohibition also applies to the use of PPA as a cross-linking agent for polymer modification.

#### Mix Design

The mixture designs must be developed in accordance with the criteria specified in the HMA items that are appropriate for an Estimated Traffic Level as noted in Section *Superpave Hot Mix Asphalt Design Criteria* table.

<u>Note:</u> The PG binder for this project may be modified with CRM additives to meet the requirements stated above. Handling of the HMA shall be discussed at the prepaving meetings.

#### 2.4.2 PG 64V-22

Requirements of this note apply to all Section 402 and Section 404 Asphalt (HMA and WMA) items in this contract as outlined in Section *Superpave Hot Mix Asphalt Design Criteria* table.

#### **PG Binder**

Use polymer or Terminal Blend Crumb Rubber modified **PG 64V-22** (Very High) meeting the requirements of AASHTO M 332, *Standard Specification for Performance Graded Asphalt Binder using Multiple Stress Creep Recovery (MSCR)*, for the production of hot mix asphalt mixtures for this project. In addition, the binder grade must also meet the **elastomeric** properties as indicated by one of the following equations for %R<sub>3.2</sub>:

- 1. For  $J_{nr3.2} \ge 0.1$ ,  $R_{3.2} > 29.371 * J_{nr3.2} 0.2633$
- 2. For  $J_{nr3.2} < 0.1$ ,  $\%R_{3.2} > 55$

Where: R<sub>3.2</sub> is % recovery at 3.2 kPa

 $J_{nr}$  3.2 is the average non-recoverable creep compliance at 3.2 kPa.

When terminal blend CRM PG binder is used, the following shall apply:

- Crumb rubber particles shall be finer than #30 sieve size.
- The CRM PG binder shall be storage-stable and homogeneous.
- The Dynamic Shear Rheometer (DSR) shall be set at 2-mm gap.
- The CRM PG binder shall be 99% free of particles retained on the 600 μm sieve as tested in accordance with Section 5.4 of M 332.

Use of polyphosphoric acid (PPA) to modify the PG binder properties is prohibited for mixtures under this contract. This prohibition also applies to the use of PPA as a cross-linking agent for polymer modification.

#### Mix Design

The mixture designs must be developed in accordance with the criteria specified in the HMA items that are appropriate for an Estimated Traffic Level as noted in Section *Superpave Hot Mix Asphalt Design Criteria* table.

<u>Note:</u> The PG binder for this project will be modified with polymer or CRM additives to meet the requirements stated above. Handling of the HMA shall be discussed at the pre-paving meetings.

#### 2.4 Special Note – PG Binder and Mix Design Level (Cont'd)

#### 2.4.3 PG 64H-22

Requirements of this note apply to all Section 402 and Section 404 Asphalt (HMA and WMA) items in this contract as outlined in Section *Superpave Hot Mix Asphalt Design Criteria* table.

#### **PG Binder**

Use a **PG 64H-22** (High) meeting the requirements of AASHTO M 332, *Standard Specification for Performance Graded Asphalt Binder using Multiple Stress Creep Recovery (MSCR)*, for the production of hot mix asphalt mixtures for this project. Terminal Blend Crumb Rubber modifier may be used for this PG binder.

When terminal blend CRM PG binder is used, the following shallapply:

- Crumb rubber particles shall be finer than #30 sieve size.
- The CRM PG binder shall be storage-stable and homogeneous.
- The Dynamic Shear Rheometer (DSR) shall be set at 2-mm gap.
- The CRM PG binder shall be 99% free of particles retained on the  $600 \mu m$  sieve as tested in accordance with Section 5.4 of M 332.

Use of poly-phosphoric acid (PPA) to modify the PG binder properties is prohibited for mixtures containing limestone, limestone as an aggregate blend component, limestone as a constituent in crushed gravel aggregate, or recycled asphalt pavement (RAP) that includes any limestone. This prohibition also applies to the use of PPA as a cross-linking agent for polymer modification.

#### Mix Design

The mixture designs must be developed in accordance with the criteria specified in the HMA items that are appropriate for an Estimated Traffic Level as noted in Section *Superpave Hot Mix Asphalt Design Criteria* table.

<u>Note:</u> The PG binder for this project may be modified with CRM additives to meet the requirements stated above. Handling of the HMA shall be discussed at the prepaving meetings.

#### 2.4.4 PG 64E-22

Requirements of this note apply to all Section 402 and Section 404 Asphalt (HMA and WMA) items in this contract as outlined in Section Superpave Hot Mix Asphalt Design Criteria table.

#### **PG Binder**

Use polymer or Terminal Blend Crumb Rubber modified **PG 64E-22** (Extreme) meeting the requirements of AASHTO M 332, *Standard Specification for Performance Graded Asphalt Binder using Multiple Stress Creep Recovery (MSCR)*, for the production of hot mix asphalt mixtures for this project. In addition, the binder grade must also meet the **elastomeric** properties as indicated by one of the following equations for %R<sub>3.2</sub>:

1. For 
$$J_{nr3.2}\!\geq\!0.1,\,\%R_{3.2}\!>\!\!29.371*J_{nr3.2}\!-\!0.2633$$

2. For  $J_{nr3.2} < 0.1$ ,  $\%R_{3.2} > 55$ 

Where:  $R_{3.2}$  is % recovery at 3.2 kPa

 $J_{nr}$  3.2 is the average non-recoverable creep compliance at 3.2 kPa.

# 2.4 Special Note – PG Binder and Mix Design Level (Cont'd)

# 2.4.4 PG 64E-22 (Cont'd)

When terminal blend CRM PG binder is used, the following shall apply:

- Crumb rubber particles shall be finer than #30 sieve size.
- The CRM PG binder shall be storage-stable andhomogeneous.
- The Dynamic Shear Rheometer (DSR) shall be set at 2-mm gap.
- The CRM PG binder shall be 99% free of particles retained on the 600 μm sieve as tested in accordance with Section 5.4 of M 332.

Use of poly-phosphoric acid (PPA) to modify the PG binder properties is prohibited for mixtures containing limestone, limestone as an aggregate blend component, limestone as a constituent in crushed gravel aggregate, or recycled asphalt pavement (RAP) that includes any limestone. This prohibition also applies to the use of PPA as a cross-linking agent for polymer modification.

#### Mix Design

The mixture designs must be developed in accordance with the criteria specified in the HMA items that are appropriate for an Estimated Traffic Level as noted in Section *Superpave Hot Mix Asphalt Design Criteria* table.

<u>Note:</u> The PG binder for this project will be modified with polymer or CRM additives to meet the requirements stated above. Handling of the HMA shall be discussed at the pre-paving meeting.

# 2.5 Special Note – Optional Use of Warm Mix Asphalt (WMA) Technologies

The contractor has the option of using an Approved WMA Technology in the production of all 402, Hot Mix Asphalt (HMA) items, except SUPERPAVE HMA with Ice Retardant items, Waterproofing Bridge Deck HMA items, and Paver-Placed Surface Treatment items, at no additional cost to the State.

If the contractor chooses to use a WMA technology, the provisions of §401 and §402 shall apply including the following:

- 1. Use an approved technology appearing on the Approved List for *Technologies for Warm Mix Asphalt*. Design a mixture using a WMA Technology in accordance with MM 5.16, *Superpave Hot Mix Asphalt Mixture Design and Mixture Verification Procedure*. At a minimum, a one-point verification of the mixture's volumetric properties is acceptable for the following situations:
  - When the WMA mix design is based on an existing Production Status HMA mix design.
  - When the WMA mix design is based on, and utilizes a different WMA technology than, an existing Production Status WMA mix design.
- 2. Comply with the latest manufacturer's "Production, Testing, and Compaction Details" from the Approved List for incorporating the WMA technology. Test specimens may be made from plant produced or laboratory prepared WMA. Test specimens must be made from plant produced WMA if adding the WMA technology in the lab does not simulate the production process. The Regional Materials Engineer (RME) may require a State representative be present during the fabrication and testing. Submit the WMA design to the RME for review and verification at least 14 calendar days before production, including:
  - Name of WMA technology and the target dosage rate.
  - If using an additive other than water,
    - o Submit a MSDS for the additive.

# 2.5 Special Note – Optional Use of Warm Mix Asphalt (WMA) Technologies (Cont'd)

- Submit either enough of the additive for the laboratory mix design verification, or the additive pre-blended in the PG Binder at the correct dosage. If the additive is not pre-blended into the PG Binder, include directions for properly incorporating the additive into the laboratory made mixture.
- Prior to the submission of any mix design, contact the RME to determine if there is an increased concern regarding the mixture's moisture susceptibility based on the WMA technology and/or the type of aggregate being used, or the performance of similar mixes. The RME may require AASHTO T 283 moisture susceptibility test results, meeting a minimum Tensile Strength Ration (TSR) of 80%, as part of the mix design submission.
- 3. Submit Production Quality Control Plan revisions incorporating the WMA technology if not previously submitted.
- 4. For 80 Series Compaction Method, complete all breakdown roller passes before the mat temperature falls below 230° F, unless approved by the Director, Materials Bureau.
- 5. When the asphalt mixture is being placed over a Sheet-Applied Waterproofing Membrane, maintain a minimum delivery temperature in accordance with the Material Detail Sheets prepared by the membrane manufacturer.

#### 2.6 Special Note - Rail Road Involvement in Federal Funded Projects

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
6V2251	Schuyler	224	Finger Lakes Railroad	RM 14-6603-1046

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.

### 2.7 Special Note - Rail Road Involvement in 100% State Funded Projects

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
360424	Onondaga	290	CSX	Appx. 350' east of Drott Drive
360432	Onondaga	80	NYS&W	About 0.2 mi east of Apulia Rd

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.

#### **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

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's 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 ton of bituminous concrete. No extra payment shall be made.

### 2.8 Special Note – Asphalt Pavement Joint Adhesive

The vendor shall apply Asphalt Pavement Joint Adhesive to all longitudinal and transverse construction joints including any curb and gutter faces prior to placing asphalt mixture in order to provide bonding with newly laid pavement. Joint adhesive shall be placed in accordance with the NYSDOT Standard Specifications. Care shall be taken to avoid damage to passing traffic. All damage to passing traffic caused by the vendor's operations shall be the vendor's responsibility.

All cost for Asphalt Pavement Joint Adhesive shall be included in the prices per ton of bituminous concrete. No separate payment shall be made.

### 3.1 Holiday and Event Restrictions – Region 3 Projects

All Region 3 Projects shall follow the following holiday restrictions:

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

- 6:00 am Friday, May 28, 2021 thru 6:00 am Tuesday, June 1, 2021 (Memorial Day Holiday)
- 6:00 am Friday, July 2, 2021 thru 6:00 am Tuesday, July 6, 2021 (July 4th Holiday)
- 6:00 am Friday, September 3, 2021 thru 6:00 am Tuesday, September 7, 2021 (Labor Day Holiday)
- 6:00 am Wednesday, November 24, 2021 thru 6:00 am Tuesday, November 30, 2021 (Thanksgiving Holiday)
- 6:00 am Thursday, December 23, 2020 thru 6:00 am Monday, January 3, 2022 (Christmas/New Year Holiday)

#### 2021 ADDITIONAL TEMPORARY LANE/SHOULDER CLOSURE RESTRICTIONS FOR OTHER HOLIDAYS AND/OR SPECIAL EVENTS

There shall be no temporary lane or shoulder closures on roadway facilities designated below on these additional holidays or special events.

Designated Roadway Facilities					
Facility	Holiday/Event				
I-690	All				
Routes 297, 931B (State Fair Blvd), 695, 5 Bypass	All				
I-81	I-90 (exit 25A) to I-690	Syracuse Nationals			
All state roadways	Onondaga County (pavement markings work only)				
Route 481	Oswego County				
Route 104	West Oswego County to I-81				
Routes 104A, 104B, 3	All	Oswego Harborfest			
Route 3	North of Route 104B				
Route 48	North of Route 690				
I-81	City of Cortland to City of Syracuse	Lafayette Apple Festival			
Route 11	Tully to Syracuse				
Route 11A	All				
Route 20	Route 174 to Madison County Line				
Route 20	Route I81 to Madison County Line	Empire Farm Days			
Route 91	Route 20 to Route 173	Empher and Days			
Route 31	tte 31 Cayuga County Line to Stevens Rd. Jordan Fall Fest				

# 3.1 Holiday and Event Restrictions – Region 3 Projects (Cont'd)

Construction activities that will result in temporary lane/shoulder closures on the abovementioned roadways shall be suspended to minimize travel delays associated with road work on these additional holidays or special events as follows (dates are subject to change):

Holiday or		Falls on	Temporary lane closures are
Special Event	Days	Date	NOT allowed from
Syracuse Nationals	All	07/16/2021 thru 07/19/2021	Beginning 6:00 AM Friday and ending 6:00 AM Monday
Oswego Harborfest	All	07/22/2021 thru 07/26/2021	Beginning 6:00 AM Thursday and ending 6:00 AM Monday
Lafayette Apple Festival	Saturday Sunday	10/9/2021 thru 10/10/2021	Beginning 6:00 AM Saturday and ending 6:00 AM Monday
Empire Farm Days	Monday - Friday	8/2/2021 thru 8/6/2021	Beginning 6:00 AM Monday and ending 6:00 PM Friday
Jordan Fall Festival	Friday- Sunday	9/17/2021 thru 9/19/2021	Beginning 6:00 AM Friday and ends 6:00 PM Sunday

# 2021 ADDITIONAL RESTRICTIONS FOR OTHER HOLIDAYS AND/OR SPECIAL EVENTS

There shall be no pavement marking paint work permitted during the Syracuse Nationals Weekend special event on the roadways designated below:

Onondaga County Projects PINs 360424, 360425, 360426, 360432, 360435 and 360440: Routes 290, 359, 173 & 175, 80, 5 and 31 (Syracuse Nationals Weekend). No pavement marking paint work permitted only. Beginning 6:00 am Friday, July 16, 2021 ending 6:00 am Monday, July 19, 2021.

Onondaga County Project PIN 360426, Routes 173 & 175: There shall be no temporary lane or shoulder closures permitted before and after events at Onondaga Community College (OCC). The contractor shall coordinate their work schedule with the Resident Engineer and the OCC campus schedule per the guidance below:

# 3.1 Holiday and Event Restrictions – Region 3 Projects (Cont'd)

HOLIDAY OR	Falls on		Temporary lane closures are
SPECIAL EVENT	Days	Date (mm/dd/yyyy)	NOT allowed from
Before Major Events held at OCC or in the SRC Arena	OCC football games, men's basketball games and commencement exercises, concerts, conventions, etc.		From two hours prior to the scheduled start until 30 minutes after the scheduled start of the event.
After Major Events held at OCC or in the SRC Arena	OCC football games, men's basketball games and commencement exercises, concerts, conventions, etc.		From two hours prior to the scheduled start until 30 minutes after the scheduled start of the event.

Exceptions can only be made under the following conditions:

- Emergency work.
- Work within long-term stationary lane closures.
- Safety work that does not adversely impact traffic mobility and has been authorized by the Regional Traffic Engineer.

#### 3.2 Region 3 Projects (All Region 3 Sites)

For projects with milling by State Forces or others, State Forces will perform initial sweeping of milled surfaces. It is the Contractor's responsibility to ensure the surface is clean prior to paving and sweep if necessary, before and during paving operation. Payment for sweeping shall be included in the price bid per ton for the HMA. No separate payment shall be made.

On specific projects listed below where noted the paving contractor shall be responsible for miscellaneous milling of side road intersections 1.5" depth and provide paving as noted beyond the edge of mainline shoulders, the contractor shall pave all milled intersections under the pay item for top course asphalt. The contractor shall also mill/trim rebates at the end of the project and around any bridge joints to provide a uniform edge for the paving joint.

### 3.3 Pilot Vehicle – Region 3 Projects

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 paving is done and rolled, controlled traffic may be permitted thereon. For Region 3 projects in this Invitation for Bids, the Contractors shall provide sufficient two-way radio equipped pilot vehicles to guide traffic around paving 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 of the Manual of Uniform Traffic Control Devices and a rotating amber beacon:

SIGN	MINIMUM SIZE	LOCATION
PILOT VEHICLE	G20-4	ON BACK OF PILOT
FOLLOW ME	CONVENTIONAL 36"x 18"	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 ton of bituminous concrete. No separate payment shall be made. The use of the pilot shall be as ordered by the Resident Engineer.

# 3.4 Project 360420 – Route 34, Tompkins County

This project will be heater scarified by others prior to paving. The paving contactor is responsible to coordinate their work schedule with the State's heater scarification contractor.

The paving contractor shall be responsible for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 34-3604-1000 to 1088, The south project limit to Rte 13, 8.8 CL miles, (46464 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete the CARDS, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

### 3.5 Project 360421 – Route 326, Cayuga County

This project requires production milling by others prior to paving. The paving contactor is responsible to coordinate their work schedule with the State's milling contractor.

The paving contractor shall be responsible for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 326-3101-1000 to RM 326-3101-1083, West project limit to Auburn City line, 7.9 CL Miles (41,712 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete the CARDS, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

### 3.6 Project 360422 – Route 38, Cayuga County

This project requires cold recycling by others prior to paving. The paving contactor is responsible to coordinate their work schedule with the State's cold recycling contractor.

The paving contractor shall be responsible for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 38-3104-3182 to 3266, 740 ft north of Rte 370 to the north project limit, 8.4 CL miles (44,352 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete the CARDS, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

### 3.7 Project 360423 – Routes 34, 930F Tompkins County

This project will be heater scarified by others prior to paving. The paving contactor is responsible to coordinate their work schedule with the State's heater scarification contractor.

The paving contractor shall be responsible for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) on Route 34 from RM 34-3604-3025 to 3039, south of Burdick Hill Rd. to south of Waterwagon Rd., 1.4 CL miles (7392 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete the CARDS, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

### 3.8 Project 360424 – Route 290, Onondaga County

The project includes production cold milling to be performed by the paving contractor or their designated sub-contractor within the project limits. The paving contractor will production mill the payement from Galster Rd. RM 2022 to North of N. Burdick St., RM 2040. The production cold milling includes milling an estimated 56,000 square yards at a milling depth of 1.5". The Paving contractor shall coordinate their paving schedule with their selected Production Cold Milling Contractor, such that the milled surface is not left open to traffic for a period longer than ten days. The contractor will be responsible to clean the milled area and keep the milled surface clean until paving. The contractor will also remove asphalt and clean around all DI's, manholes and valve boxes. The contractor shall provide the necessary work zones, work zone signage and clean-up effort, including sweeping of the milled surface during the milling operation. The contractor will be responsible for trucking and disposal of the milled materials. All disposal locations shall be approved by the Engineer prior to disposal. All disposal operations must be done in accordance with all Federal, State, and local rules and regulations. Material removed shall be disposed of in accordance with the provisions of section 107-10 of the Standard Specifications, or as ordered by the Engineer. The contractor shall provide temporary pavement markings on the milled surface in accordance with the requirements of Section 619.xx of the Standard Specifications. The costs shall be included in the bid prices for the VPP project. Production cold milling shall be included in the bid cost of the top course asphalt item.

The paving contractor shall be responsible to miscellaneous mill and pave the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

### 3.9 Project 360425 – Route 359, Onondaga County

This project will be heater scarified by others prior to paving. The paving contactor is responsible to coordinate their work schedule with the State's heater scarification contractor.

The paving contractor shall be responsible for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 359-3301-1000 to RM 359-3301-1013, West project limit to 1934 ft west of Route 41A, 1.3 CL Miles (6,864 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete the CARDS, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

### 3.10 Project 360426 – Routes 173, 175, Onondaga County

The project includes production cold milling to be performed by the paving contractor or their designated sub-contractor within the project limits. The paving contractor will production mill the payement on Rte 175 from Cedervale Rd. to the Syracuse City Line (RM 1091-1135) and on Rte 173 from the Intersection of Rte 175 to the Syracuse City Line (RM 1133-1144). The production cold milling includes milling an estimated 166,000 square yards at a milling depth of 2.0". The Paving contractor shall coordinate their paving schedule with their selected Production Cold Milling contractor, such that the milled surface is not left open to traffic for a period longer than ten days. The contractor will be responsible to clean the milled area and keep the milled surface clean until paving. The contractor will also remove asphalt and clean around all DI's, manholes and valve boxes. The contractor shall provide the necessary work zones, work zone signage and clean-up effort, including sweeping of the milled surface during the milling operation. The contractor will be responsible for trucking and disposal of the milled materials. All disposal locations shall be approved by the Engineer prior to disposal. All disposal operations must be done in accordance with all Federal, State, and local rules and regulations. Material removed shall be disposed of in accordance with the provisions of section 107-10 of the Standard Specifications, or as ordered by the Engineer. The contractor shall provide temporary pavement markings on the milled surface in accordance with the requirements of Section 619.xx of the Standard Specifications. The costs shall be included in the bid prices for the VPP project. Production cold milling shall be included in the bid cost of the top course HMA.

The paving contractor shall be responsible to miscellaneous mill and pave the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 30 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 2.0". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 30 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 175-3301-1091 to RM 175-3301-1121, West project limit to 200 ft east of Amann Dr., 2.5 CL Miles (14,700 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete the CARDS, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

The contractor shall schedule work to not restrict access to the Community General Hospital entrance within the project limits. See special event notes regarding lane closure restrictions for Onondaga Community College events.

# 3.11 Project 360427 – Route 48, Oswego County

This project requires production milling by others prior to paving. The paving contactor is responsible to coordinate their work schedule with the State's milling contractor.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 48-3402-1000 to 1054, The Onondaga County Line to the Fulton City Line, 5.4 CL miles (28,512 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete the CARDS, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

# 3.12 Project 360428 – Route 38, Cayuga County

This project requires production cold milling by others prior to paving. The paving contactor is responsible to coordinate their work schedule with the State's cold milling contractor.

The paving contractor shall be responsible for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 38-3104-3071 to 3123, 410 ft south of Berger Rd. to 1345 ft south of CR 22, 5.2 CL miles (27,456 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete the CARDS, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

#### 3.13 Project 360429 – Routes 34B, Tompkins County

This project will be heater scarified by others prior to paving. The paving contactor is responsible to coordinate their work schedule with the State's heater scarification contractor.

The paving contractor shall be responsible for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 34B-3601-1010 to 1088, 1 mile west of Route 34 to the Cayuga County Line, 7.8 CL miles (41,184 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete the CARDS, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

### 3.14 Project 360430 – Route 414, 96A Seneca County

This project will be heater scarified prior to paving with 1-1/2" HMA. The paving contactor is responsible to coordinate their work schedule with the heater scarification contractor.

The project includes production cold milling to be performed by the paving contractor or their designated sub-contractor within the project limits. The paving contractor will production mill the pavement on Rte 414 in the Village of Lodi from RM 414-3504-1057 to RM 414/96A-3501-1053 and in the Village of Ovid from RM 414/96A 3501-1089 to 414/96A-3501-1097. The production cold milling includes milling an estimated 60,000 square yards at a milling depth of 1.5". The Paving contractor shall coordinate their paving schedule with their selected Production Cold Milling contractor, such that the milled surface is not left open to traffic for a period longer than ten days. The contractor will be responsible to clean the milled area and keep the milled surface clean until paving. The contractor will also remove asphalt and clean around all DI's, manholes and valve boxes. The contractor shall provide the necessary work zones, work zone signage and clean-up effort, including sweeping of the milled surface during the milling operation. The contractor will be responsible for trucking and disposal of the milled materials. All disposal locations shall be approved by the Engineer prior to disposal. All disposal operations must be done in accordance with all Federal, State, and local rules and regulations. Material removed shall be disposed of in accordance with the provisions of section 107-10 of the Standard Specifications, or as ordered by the Engineer. The contractor shall provide temporary pavement markings on the milled surface in accordance with the requirements of Section 619.xx of the Standard Specifications. The costs shall be included in the bid prices for the VPP project. Production cold milling shall be included in the bid cost of the top course asphalt item.

The paving contractor shall be responsible to miscellaneous mill and pave the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 414-3504-1000 to RM 414-3504-1054, South project limit to 130 ft north of Farrs Lane, and From RM 96A-3501-1053 to RM 96A-3501-1089, 1070 ft north of Church St. to Gilbert Rd., 9.0 CL Miles (47,520 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete this work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

#### 3.15 Project 360431 – Route 96A Seneca County

This project requires production cold milling by others prior to paving. The paving contactor is responsible to coordinate their work schedule with the State's cold milling contractor.

The paving contractor is responsible to pave the Sampson State Park entrance/exit roads from Rte. 96A to 2200 feet from Rte. 96A.

The paving contractor shall be responsible for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

Note: NYSDOT's intent is to have the paving contractor mill the rebate at 2200 feet from Rte. 96A per the rebate table in Attachment 11 – Superpave HMA Tables and pave the 2200 feet. The contractor does not need to mill the 2200 feet as it will be an overlay.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 96A-3501-1099 to 1170, from Ovid to south of Kennedy Hill Rd., 7.1 CL miles (37,488 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete this work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

#### 3.16 Project 360432 – Route 80, Onondaga County

The project includes production cold milling to be performed by the paving contractor or their designated sub-contractor within the project limits. The paving contractor will production mill the pavement from RM 80-3301-2177 to 2298. The production cold milling includes milling an estimated 224,500 square yards at a milling depth of 1.5". The Paving contractor shall coordinate their paving schedule with their selected Production Cold Milling Contractor, such that the milled surface is not left open to traffic for a period longer than ten days. The contractor will be responsible to clean the milled area and keep the milled surface clean until paving. The contractor will also remove asphalt and clean around all DI's, manholes and valve boxes. The contractor shall provide the necessary work zones, work zone signage and clean-up effort, including sweeping of the milled surface during the milling operation. The contractor will be responsible for trucking and disposal of the milled materials. All disposal locations shall be approved by the Engineer prior to disposal. All disposal operations must be done in accordance with all Federal, State, and local rules and regulations. Material removed shall be disposed of in accordance with the provisions of section 107-10 of the Standard Specifications, or as ordered by the Engineer. The contractor shall provide temporary pavement markings on the milled surface in accordance with the requirements of Section 619.xx of the Standard Specifications. The costs shall be included in the bid prices for the VPP project. Production cold milling shall be included in the bid cost of the top course asphalt item.

The paving contractor shall be responsible to for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 80-3301: 2188-2205, 140 ft south of Meeker Hill Rd. to 645 ft south of CR 3, 1.7 CL miles (8,976 LF), RM 2210-2214, 590 ft north of South Street to 310 ft south of CR 186, 0.4 CL miles (2,112 LF), RM 2219-2250, (875 ft south of Apulia Truxton Rd to 365 ft south of Pompey Street, 3.1 CL miles (16,368 LF), and RM 2257-2298, 1325 ft south of Hills Rd to the Madison County Line, 4.1 CL miles (21,648 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete this work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

#### 3.17 Project 360433 – Route 89 Seneca County

This project requires production cold milling by others prior to paving. The paving contactor is responsible to coordinate their work schedule with the State's cold milling contractor.

The paving contractor shall be responsible for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 89 3502-1067 to 1177, from CR 141B to south of Ernsberger Rd., 11 CL miles (58,080 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete this work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

### 3.18 Project 360434 – Route 90, Cayuga County

This project requires production cold milling by others prior to paving. The paving contactor is responsible to coordinate their work schedule with the State's cold milling contractor.

The paving contractor shall be responsible for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 90-3102-1293 to 1342, from the north Aurora village line to the Union Springs south village line, 4.9 CL miles (25,872 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete the CARDS, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

#### 3.19 Project 360435 – Route 5, Onondaga County

The project includes production cold milling to be performed by the paving contractor or their designated sub-contractor within the project limits. The paving contractor will production mill the pavement from RM 5-3308-3051 to 3094. The production cold milling includes milling an estimated 102,000 square yards at a milling depth of 1.5". The Paving contractor shall coordinate their paving schedule with their selected Production Cold Milling Contractor, such that the milled surface is not left open to traffic for a period longer than ten days. The contractor will be responsible to clean the milled area and keep the milled surface clean until paving. The contractor will also remove asphalt and clean around all DI's, manholes and valve boxes. The contractor shall provide the necessary work zones, work zone signage and clean-up effort, including sweeping of the milled surface during the milling operation. The contractor will be responsible for trucking and disposal of the milled materials. All disposal locations shall be approved by the Engineer prior to disposal. All disposal operations must be done in accordance with all Federal, State, and local rules and regulations. Material removed shall be disposed of in accordance with the provisions of section 107-10 of the Standard Specifications, or as ordered by the Engineer. The contractor shall provide temporary pavement markings on the milled surface in accordance with the requirements of Section 619.xx of the Standard Specifications. The costs shall be included in the bid prices for the VPP project. Production cold milling shall be included in the bid cost of the top course asphalt item.

The paving contractor shall be responsible for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 5-3308-3062 to 3094, 420 ft east of White Heron Circle to east of Route 290, 3.2 CL miles (16,896 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete this work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item

### **3.20** Project 360436 – Route 11, Oswego County

This project requires production milling by others prior to paving. The paving contactor is responsible to coordinate their work schedule with the State's milling contractor.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 11-3404-1047 to 1090, 450 ft south of Hungry Lane Rd. to 1185 ft south of Weaver Rd., 4.3 CL miles (22,704 LF) and RM 11-3404-1096 to 1121, 1560 ft north of CR 45 to 510 ft south of Parish Woods Rd., 2.8 CL miles (14,784 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete the CARDS, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

#### 3.21 Project 360437 – Routes 26 and 23, Cortland County

The project includes production cold milling to be performed by the paving contractor or their designated sub-contractor within the project limits. The paving contractor will production mill the payement from RM 23-3208-1000 to 1018, RM 26-3202-1085 to 1098. The production cold milling includes milling an estimated 66,160 square yards at a milling depth of 2.0". The Paving contractor shall coordinate their paving schedule with their selected Production Cold Milling Contractor, such that the milled surface is not left open to traffic for a period longer than ten days. The contractor will be responsible to clean the milled area and keep the milled surface clean until paving. The contractor will also remove asphalt and clean around all DI's, manholes and valve boxes. The contractor shall provide the necessary work zones, work zone signage and clean-up effort, including sweeping of the milled surface during the milling operation. The contractor will be responsible for trucking and disposal of the milled materials. All disposal locations shall be approved by the Engineer prior to disposal. All disposal operations must be done in accordance with all Federal, State, and local rules and regulations. Material removed shall be disposed of in accordance with the provisions of section 107-10 of the Standard Specifications, or as ordered by the Engineer. The contractor shall provide temporary pavement markings on the milled surface in accordance with the requirements of Section 619.xx of the Standard Specifications. The costs shall be included in the bid prices for the VPP project. Production cold milling shall be included in the bid cost of the top course asphalt item.

The paving contractor shall be responsible for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) on Route 23 from RM 23-3208-1006 to 1018, 1325 ft north of Lower Cincinnatus Rd. (CR 166) to Route 26, 1.2 CL miles (6,336 LF), and on Route 26 from RM 26-3202-1085 to 1098, Route 41 to Route 23, 1.3 CL miles (6,864 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete this work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

### **3.22 Project 360438 – Route 104, Oswego County**

This project requires production milling by others prior to paving. The paving contactor is responsible to coordinate their work schedule with the State's milling contractor.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 104-3406-3183 to 3281, Route I81 to Route 13, 9.8 CL miles (51,744 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete the CARDS, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

#### 3.23 Project 360439 – Route 41, Cortland County

This project requires cold recycling by others prior to paving. The paving contactor is responsible to coordinate their work schedule with the State's cold recycling contractor.

The paving contractor shall be responsible for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 41-3203-1000 to 1040, Chenango County Line to 1440 ft east of CR 166/Route 26, 4.0 CL miles (21,120 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete the CARDS, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

#### 3.24 Project 360440 – Route 31, Onondaga County

The project includes production cold milling to be performed by the paving contractor or their designated sub-contractor within the project limits. The paving contractor will production mill the pavement from RM 31-3309-1000 to 1028. The production cold milling includes milling an estimated 61,000 square yards at a milling depth of 2.0". The Paving contractor shall coordinate their paving schedule with their selected Production Cold Milling Contractor, such that the milled surface is not left open to traffic for a period longer than ten days. The contractor will be responsible to clean the milled area and keep the milled surface clean until paving. The contractor will also remove asphalt and clean around all DI's, manholes and valve boxes. The contractor shall provide the necessary work zones, work zone signage and clean-up effort, including sweeping of the milled surface during the milling operation. The contractor will be responsible for trucking and disposal of the milled materials. All disposal locations shall be approved by the Engineer prior to disposal. All disposal operations must be done in accordance with all Federal, State, and local rules and regulations. Material removed shall be disposed of in accordance with the provisions of section 107-10 of the Standard Specifications, or as ordered by the Engineer. The contractor shall provide temporary pavement markings on the milled surface in accordance with the requirements of Section 619.xx of the Standard Specifications. The costs shall be included in the bid prices for the VPP project. Production cold milling shall be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 31-3309-1000-1006, Cayuga County Line to 2600 ft south of Route 317, 0.6 CL miles (3,168 LF), and RM 31-3309-1017 to 1028, 800 ft north of River Rd., to Stevens Rd., 1.2 CL miles (6,336 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete this work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

#### 3.25 Project 360441 – Route 281, Cortland County

The project includes production cold milling to be performed by the paving contractor or their designated sub-contractor within the project limits. The paving contractor will production mill the pavement from RM 281-3201-3010 to 3124. The production cold milling includes milling an estimated 247,000 square yards at a milling depth of 2.0". The Paving contractor shall coordinate their paving schedule with their selected Production Cold Milling Contractor, such that the milled surface is not left open to traffic for a period longer than ten days. The contractor will be responsible to clean the milled area and keep the milled surface clean until paving. The contractor will also remove asphalt and clean around all DI's, manholes and valve boxes. The contractor shall provide the necessary work zones, work zone signage and clean-up effort, including sweeping of the milled surface during the milling operation. The contractor will be responsible for trucking and disposal of the milled materials. All disposal locations shall be approved by the Engineer prior to disposal. All disposal operations must be done in accordance with all Federal, State, and local rules and regulations. Material removed shall be disposed of in accordance with the provisions of section 107-10 of the Standard Specifications, or as ordered by the Engineer. The contractor shall provide temporary pavement markings on the milled surface in accordance with the requirements of Section 619.xx of the Standard Specifications. The costs shall be included in the bid prices for the VPP project. Production cold milling shall be included in the bid cost of the top course asphalt item.

The paving contractor shall be responsible for miscellaneous milling and paving of the side road intersections from the edge of the mainline shoulder treatment to the rebate termination on the side road at locations listed in the rebate table. Intersections shall be milled and paved a length of 25 ft from the edge of the mainline shoulder treatment to the rebate termination location, nominal depth of 1.5". The rebates shall be milled by the paving contractor in accordance with the rebate table of widths. The 25 ft length of milling and paving of side road intersections will be included in the bid cost of the top course asphalt item.

As part of this contract, the contractor shall install Centerline Audible Roadway Delineators (CARDS) from RM 281-3201-3029 to 3124, Hook Ave. to the Onondaga County Line, 9.5 CL miles (50,160 LF). The contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. All work required to complete this work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid cost of the top course asphalt item.

### 3.26 HMA/WMA Mixture Evaluation Using Performance Testing – Region 3

This note shall apply to the sites listed below.

Project 360422 – Rte. 38, Cayuga County

The cost shall be included in the bid cost of the top course asphalt item

# PERFORMANCE ENGINEERED MIXTURES (PEM) EVALUATION USING PERFORMANCE TESTING

#### Description

This note covers the requirements of Performance Engineered mixes (PEM) for Hot Mix Asphalt (HMA) or Warm Mix Asphalt (WMA) for Top Course mixtures. The requirements are mixture design, verification, and production under a performance testing process. All provisions of Sections 401 Asphalt Production of the NYS Standard Specifications apply except as modified below.

#### **Mixture Design Process**

HMA mixtures shall be designed to meet the requirements of New York State Materials Method 5.16, *Hot Mix Asphalt (HMA) Mixture Design and Mixture Verification Procedures* and the performance testing requirements specified in Table 1.

Test Methods	Criteria	Design Value	Target COV
AASHTO TP124-18	Flexibility Index	6	≤40
Flexibility Index Test			
ASTM D6931-17	IDT Strength	30 psi	≤40
Indirect Tensile Strength Test	-		
ASTM D8225-19	CT Index	100	≤40
Determination of CT Index			

**Table 1 – Performance Testing Criteria** 

In no case shall the job mix tolerance fall outside the Control Points of the control sieves.

#### Sample Fabrication & Testing

- 1. **Producer** The Producer shall do the following:
  - a. Fabricate two sets of samples under the methods provided in Table 2 *Performance Testing Criteria*.
  - b. Test one set and submit the second set of samples to the Regional Materials Lab.
  - c. Submit sufficient plant-produced mixture to the Regional Materials Lab for fabrication of a third set of samples for performance testing.

The PEM mixture design, the plant-produced mixture, and the second set of samples shall be submitted to the Regional Materials Lab no less than 14 days prior to production.

- 2. **Regional Materials Lab (RML)** The RML will do the following:
  - a. Fabricate samples under the methods provided in Table 2 for performance testing using the plant produced mixture supplied by the Producer.
  - b. Test the fabricated samples and the Producer fabricated second set samples to determine if they meet the performance criteria referenced in Table 1.

#### 3.26 HMA/WMA Mixture Evaluation Using Performance Testing – Region 3 (Cont'd)

Table 2 – Summary of Testing Criteria for Performance Engineered Mixtures (PEM)

At	the Plant	High Temperature IDT	IDEAL CT index	SCB Flexibility Index
Tes	st Method	ASTM D6931-17 NCHRP 9-33 Report	ASTM D8225-19	AASHTO TP 124-18
No.	of Samples	3	3	3 min
Load R	ate (mm/min)	50±5	50±2	50±2
Не	ight (mm)	80±5	$<= 19 \text{ mm NAS} = 62\pm1$ >=25 mm NAS = 95\pm 1	50
Notch	Width (mm)	NA	NA	1.5±0.5
Aging	Lab mixed	2 hours loose mix volumetric Conditioning at Compaction Temperature	2 hours loose mix Volumetric Conditioning at Compaction Temperature, then 4 hours loose mix @ 135°C for Short-term Conditioning	2 hours loose mix Volumetric Conditioning at Compaction Temperature, then 4 hours loose mix @ 135°C for Short-term Conditioning
	Plant mixed	Reheat loose mix to Compaction Temperature and Compact Specimens	Reheat loose mix to Compaction Temperature and Compact Specimens	Reheat loose mix to Compaction Temperature and Compact Specimens
	Compaction	V Grade = $149$ °C $\pm 3$ °C	V Grade = $149$ °C $\pm 3$ °C	V Grade = $149$ °C $\pm 3$ °C
Temp	perature, °C	E Grade = $163$ °C $\pm 3$ °C	E Grade = $163$ °C $\pm 3$ °C	E Grade = $163$ °C $\pm 3$ °C
	Compaction perature, °C	V Grade = $132$ °C $\pm 3$ °C E Grade = $146$ °C $\pm 3$ °C	V Grade = $132$ °C $\pm 3$ °C E Grade = $146$ °C $\pm 3$ °C	V Grade = $132$ °C $\pm 3$ °C E Grade = $146$ °C $\pm 3$ °C
Air	Voids, %	$7 \pm 0.5$	$7 \pm 0.5$	$7 \pm 0.5$
Test 7	Cemperature, °C	$44$ °C $\pm 1.0$	$25^{\circ}\text{C} \pm 1.0$	$25^{\circ}\text{C} \pm 1.0$
Con	nditioning	$44^{\circ}$ C for 2 hrs $\pm$ 10 min.	$25^{\circ}$ C for 2 hrs $\pm$ 10 min.	$25^{\circ}$ C for 2 hrs $\pm$ 10 min

#### **Acceptance of the Design**

The RME will calculate the average and standard deviation of all representative samples tested by the Producer and the RML. The RME will determine the Coefficient of Variation for each criterion listed in Table 1. The RML will calculate the Coefficient of Variation (COV) using the following formula:

$$COV = \frac{Standard\ Deviation\ of\ Criteria\ (FI,IDT,CT\ Index)}{Average\ Criteria\ Value} *100$$

The Regional Materials Engineer (RME) will assign PEM Production Status and accept the design for use when the mix design satisfies the performance criteria covered in Table 1. If the design value and the COV for any criterion does not meet the value specified, the RME shall consult the Materials Bureau to determine if the mixture design should be allowed for use. The determination will be based on the previous performance of the similar volumetric mixture design.

Modification to the gradation targets or binder content will not be permitted after design acceptance.

#### 3.26 HMA/WMA Mixture Evaluation Using Performance Testing – Region 3 (Cont'd)

#### **Mixture Production**

The Producer shall perform Quality Control of the mixture in accordance with MP 401, *Quality Control and Quality Assurance Procedure for Hot Mix Asphalt (HMA) Production*. The Department will perform Quality Assurance consisting of paver sampling and review of Producer's control charts. Plant Quality Adjustment Factor (QAF) does not apply.

#### **Quality Control Process**

The Department's Quality Assurance Technician (QAT) may be present at the HMA plant during production at the discretion of the RME. The QAT will not be responsible for any activities at the production facility.

The results of all tests outlined in Table 3 shall be recorded by the Producer on the control charts daily during production and used to identify any changes in the mixture production. The Control Chart templates will be provided by the Department upon request.

Plant Test	Test	Producer	Department
Property	Method	Testing	Testing
1 0		Frequency <sup>1</sup>	Frequency <sup>2</sup>
PG Binder Content	Automation, Ignition Oven (NY 400-13C), or AASHTO T 164 Method A or B	One per sublot	One per Day (enough material for two tests)
Aggregate Gradation	AASHTO T27	One per Sublot	One per Day (enough material for two tests)
Aggregate Moisture	AASHTO T255	One per Lot	Monitor and Verify
Mix Temperature	-	Two per Sublot	-
Air Voids	MM 5.16, AASHTO T269	One per 3 Lots	One per 3 Days
Indirect Tensile Strength	ASTM D6931-17	One per 3 Lots	One per 3 Days
Semi-Circular Bending	AASHTO TP124-18	One per 3 Lots	One per 3 Days
Determination of CT Index	ASTM D8225-19	One per 3 Lots	One per 3 Days

**Table 3 - Testing and Sampling Table** 

1-All sampling at the plant; 2-All sampling at the paver

Material sampling points for Quality Control activities shall be at the discretion of the Contractor, within the provided ranges. Sampling points shall be identified on all control charts. All other testing covered under MP 401, but not addressed in Table 3, is required but will not be included on the control charts.

#### **Quality Assurance**

The RME, or their representative, will sample the mixture at the paver under NYS Method MP 402-03. The test results and sampling points will be recorded on RML Control Charts. The information from the control charts may be shared with the Producer.

For Producer, testing every 3 consecutive lots shall be considered a Test Cycle. For each full or partial Test Cycle, all testing in Table 3 shall be required over the course of that production. Only lots that consist of mainline paving with 500 tons or more will be included in a Test Cycle.

#### 3.26 HMA/WMA Mixture Evaluation Using Performance Testing – Region 3 (Cont'd)

#### **Mixture Production**

HMA Mixture requirements are as follows:

Table 4 - Mixture Gradation, Absolute Difference Value

Limits	Sieve Sizes		
(Test Value – JMF Value)	#50 and Larger #100 #200		#200
	(300 µm and Larger)	(150 µm)	(75 µm)
Production	0.0 - 5.0	0.0 - 4.0	0.0 - 2.0
Action	5.0 - 8.0	4.0 - 6.0	2.0 - 4.0
Evaluation	>8.0	>6.0	>4.0

#### **Gradation Limits During Production**

- **1. QC Production Limits** If the gradation absolute difference falls within the Production Limits as stated in Table 4 no corrective action is needed for gradation.
- **2. QC Action Limit** If the gradation absolute difference value falls within the Action Limits stated in Table 4 the Producer shall take corrective actions to bring the gradation back within the production limits. If test results for two consecutive sublots fall within the action limits, the production shall be immediately terminated and shall not resume until the Regional Materials Engineer is satisfied with the actions taken.
- **3. QA Evaluation/Rejection Limit** If the gradation absolute difference value falls outside the Evaluation Limits stated in Table 4 for any Department paver sample, the following will apply: The RML will fabricate samples according to AASHTO T-312 with material sampled at the paver. If paver samples are not available, pavement cores will be required. These samples/cores will be tested and evaluated by the RME against the performance criteria in Table 1. These performance results are for information only.

The RME will evaluate the subject material to determine if it will be left in place. The RME may require the Contractor to core the pavement at no additional cost to the State. When cores are required, the Engineer will divide the pavement area being evaluated into 4 sublots in accordance with the requirements of §402-3.08, *Pavement Density Samples*. The material will be left in-place when all the following conditions are met.

- The pavement section achieved field density greater than or equal to 92% of MMTD.
- There are no defects such as, but not limited to, cracking, raveling, rutting, shoving, or bleeding, and the asphalt content, based on automation, is within +/- 0.2% of production target.
- The average of all the QA gradation samples tested is within the general limits
- The % aggregate friction meets the requirements for the item specified in the project.

If the material does not meet the above conditions the RME will determine if the material in question may remain in-place considering, but not limited to, the following:

- Type of material produced
- The layer in which the material was placed
- The location and traffic volume
- Laboratory test results
- Field test results, such as density

If the subject material is left in-place, it will be paid in full at bid price. If it is determined the subject material will not be left in-place, the Contractor shall remove and replace the material at no additional cost to the Department.

### 3.27 Density Measurement Using A Rolling Density Meter

This note shall apply to the sites listed below.

### Project 360428 - Route 38, Cayuga County

#### Project 360441 – Route 281, Cortland County

The cost shall be included in the bid cost of the top course asphalt item.

These projects will require the final compacted pavement surface to be measured with a Rolling Density Meter (RDM). The RDM utilizes a ground-penetrating radar system to continuously measure asphalt mixture density.

The RDM will be capable of the following:

- Collecting and storing GPR data.
- Exporting data in .csv or similar format
- Collecting and storing GPS location information with dielectric measurement.

The Contractor shall sample enough material, at the HMA production facility, to fabricate 2 gyratory specimens at 86%, 88%, 90%, 92%, 94%, 96%, and 98% of Gmm (Maximum Theoretical Density). Specimens will be fabricated to 0.2% of targeted value. Fabricated specimens will available to the testing firm to calibrate the RDM to the asphalt mixture.

The Contractor shall perform all manufacturer's recommended calibration procedures prior to the collection of data.

The Contractor shall record data from the entire mat placed, including the longitudinal joint. Data will be collected and reported at a frequency of 1' or less. Measurements shall be recorded after the last pass of the finish roller and before the lane is opened for traffic. The Engineer will identify any density core locations to the operator of the RDM after the final pass of the roller. The RDM operator will record the GPS coordinates of the proposed core locations.

The Contractor shall provide the Engineer:

- .csv file with all recorded data
- A report indicating percent density achieved relative to the area paved
- .kml file which expresses the density recorded on a map of the project. Core locations will be identified in the .kml file.

#### 4.1 Special Note – Region 6 Projects

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

6:00 am Friday, May 28, 2021 thru 6:00 am Tuesday, June 1, 2021 - (Memorial Day Holiday)

6:00 am Friday, July 2, 2021 thru 6:00 am Tuesday, July 6, 2021 - (July 4<sup>th</sup> Holiday) 6:00 am Friday, September 3, 2021 thru 6:00 am Tuesday, September 7, 2021 - (Labor Day Holiday)

The Region requests all Preconstruction paperwork be submitted electronically as .pdf files to <u>Gary.Shepard@dot.ny.gov</u> prior to the pre-paving meeting, or all documentation be brought to the pre-paving meeting electronically as .pdf files on a CD or USB "thumb" drive that will not be returned to the contractor.

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.

#### Additional Notes:

- The only paint with beads required is for the 4' long stripes defining travel lanes at 40' intervals.
- The paving contractor is not responsible for edge lines and hatching.
- Only the centerline is required defining the travel lanes with the correct spacing and offsets.

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:

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

The following projects shall be completed no later than **September 1, 2021**: 6V2118, 6V2213, and 6V2214.

All other Region 6 HMA projects shall be completed no later than October 31, 2021. A schedule reflecting this shall be submitted before start of work to the Region's ARDO and Gary Shepard, for approval.

#### 4.1 Special Note – Region 6 Projects (Cont'd)

#### **HMA Overlay Splices (Rebates):**

All Region 6 hot mix asphalt overlay splices (pavement terminations) shall be installed as per NYSDOT Standard Sheet 402-01 issued under EB 08-036.

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 HMA treatment:

Project Number	BIN/CIN	Reference Marker
6V2133	BIN 1045940	328-6201-1010
6V2251	BIN 1010930	14-6603-1014
	BIN 1010940	14-6603-1018
6V2231	BIN 1042000	224-6302-1137
CV2212	BIN 1016280	21-6101-1075
6V2213	BIN 1016300	21-6101-1085
6V2033	BIN 1048030	414-6202-1002
0 V 2033	BIN 1048040	414-6202-1009
6V2122	BIN 1012580	36-6401-1105
	BIN 1023460	36-6401-1015
6V2243	BIN 1023470	36-6401-1016
	BIN 1023480	36-6401-1031
	BIN 1043160	248-6402-1074
	BIN 1043170	248-6402-1094
6V2121	BIN 1043180	248-6402-1098
	BIN 1012550	248-6402-1105
	BIN 1043190	248-6402-1111
	BIN 1043200	248-6402-1117
	BIN 1043210	248-6402-1134
	BIN 1043220	248-6402-1137
	BIN 1043250	248-6402-1176

#### 4.2 Project 6V2118 – Allegany County

This contract will include paving of three ramps and gore areas. Quantity reflects this.

Exit 28 EB on-ramp

Exit 28 WB off-ramp

Exit 29 EB off-ramp

This contract will include paving of the three U-turns and associated deceleration lanes within the project limits. Quantity reflects this.

This contract will include an approximate 1" lift on the shoulders to match existing lane elevation. This shoulder paving will need to be completed before the mainline paving. Quantity reflects this.

Any and all debris generated as part of the work shall be removed by the contractor within five days of completion of paving operations.

This project shall be completed no later than September 1, 2021.

#### Abrading Existing Pre-Formed & Epoxy Pavement Markings

The Contractor shall remove any pre-formed and epoxy pavement markings. 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. The contractor shall make every effort to expeditiously place the HMA in areas where the markings have been abraded. Under no circumstances will temporary pavement markings be allowed for more than five calendar days in areas where markings are abraded. In this event, the contractor shall be required to place full pavement markings at no cost to the State. During the abrading operation, traffic shall be controlled by the contractor in accordance with Work Zone Traffic Control requirements included herein. The contractor shall submit a proposed Work Zone Traffic Control Plan to the Resident Engineer for approval. The plan may be based on the Work Zone Traffic Control drawings included in the Invitation for Bids. Payment for abrading shall be included in the price bid per ton for the HMA. No separate payment shall be made.

Please refer to Section 1.9.2 - *Hot Mix Asphalt Overlay Splice (Rebate)* within this document and Attachment 11 – *Superpave HMA Tables* regarding HMA overlay splices (Rebates) for this project.

Payment shall be included in the price bid per ton for the HMA. No separate payment shall be made.

# 4.3 Project 6V2123 – Steuben County

Production cold milling will be performed by State Forces between RM 36-6401-3041 to 3047. This will require coordination between the Paving Contractor and State Forces.

This site will also be heater scarified under a separate contract. No paving can begin until the heater scarification project is complete.

#### 4.4 Project 6V2133 – Chemung County

The Roundabout's at RM 328-6201-1028 and RM 328-6201-1041 will not be paved.

BIN's 1045951 and 1045952 will receive a waterproof membrane prior to paving. Coordination with Region 6 Bridge Maintenance will be required.

#### **Abrading Existing Pre-Formed & Epoxy Pavement Markings**

The Contractor shall remove any pre-formed and epoxy pavement markings. 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. The contractor shall make every effort to expeditiously place the HMA in areas where the markings have been abraded. Under no circumstances will temporary pavement markings be allowed for more than five calendar days in areas where markings are abraded. In this event, the contractor shall be required to place full pavement markings at no cost to the State. During the abrading operation, traffic shall be controlled by the contractor in accordance with Work Zone Traffic Control requirements included herein. The contractor shall submit a proposed Work Zone Traffic Control Plan to the Resident Engineer for approval. The plan may be based on the Work Zone Traffic Control drawings included in the Invitation for Bids. Payment for abrading shall be included in the price bid per ton for the HMA. No separate payment shall be made.

# 4.5 Project 6V2251 – Yates County

At RM 14-6603-1046 the Finger Lakes Railroad crossing will be rebated and paved on both sides 25' from the tracks.

# 4.6 Project 6V2231 – Schuyler County

This site will also be heater scarified under a separate contract. No paving can begin until the heater scarification project is complete. The truck brake check pull-off will also be paved. Estimated quantities reflect.

#### 4.7 Project 6V2213 – Allegany County

Please refer to Section 1.9.2 - *Hot Mix Asphalt Overlay Splice (Rebate)* within this document and Attachment 11 – *Superpave HMA Tables* regarding HMA overlay splices (Rebates) for this project.

Payment for intersection and driveway paving shall be included in the price bid per ton for the HMA. No separate payment shall be made.

Any and all debris generated as part of the work shall be removed by the contractor within five days of completion of paving operations.

This project shall be completed no later than September 1, 2021

The paving contractor will be expected to rebate and pave to that rebate at all existing asphalt driveways within the project limits. The rebate should have a neat line and minimum 1" depth. The rebate will be approximately 21' from centerline or as far as the screed can reach. There are approximately 5 paved driveways within the project limits. Payment shall be included in the price bid per ton for the HMA. No separate payment shall be made.

# 4.8 Project 6V2033 – Chemung County

This site will be Cold in Place Recycled (CIPR) under a separate contract. No paving can begin until the CIPR is complete. Coordination with the CIPR contractor will be required.

# 4.9 Project 6V2124 – Steuben County

This site will be Cold in Place Recycled (CIPR) under a separate contract. No paving can begin until the CIPR is complete. Coordination with the CIPR contractor will be required.

#### 4.10 Project 6V2214 – Allegany County

Please refer to Section 1.9.2 - *Hot Mix Asphalt Overlay Splice (Rebate)* within this document and Attachment 11 – *Superpave HMA Tables* regarding HMA overlay splices (Rebates) for this project..

Payment for intersection and driveway paving shall be included in the price bid per ton for the HMA. No separate payment shall be made.

Any and all debris generated as part of the work shall be removed by the contractor within five days of completion of paving operations.

This project shall be completed no later than September 1, 2021.

# 4.11 Project 6V2243 – Steuben County

Production cold milling will be performed by State Forces between RM 36-6401-1043 to 1037. This will require coordination between the Paving Contractor and State Forces.

#### 4.12 Project 6V2121 – Steuben County

Production milling will be performed by State Forces between RM 248-6402-1096 to 1105. This will require coordination between the Paving Contractor and State Forces.

This site will be Cold in Place Recycled (CIPR) under a separate contract. No paving can begin until the CIPR is complete. Coordination with the CIPR contractor will be required.

BIN's **1043150**, **1043230**, and **1043240** will receive a waterproof membrane prior to paving. Coordination with Region 6 Bridge Maintenance will be required.

#### **SECTION 5: SUPERPAVE HOT MIX ASPHALT**

# 5.1 Superpave Hot Mix Asphalt Design Criteria

Design criteria for SUPERPAVE Hot Mix Asphalt Items for projects contained in the Invitation for Bids can be found in Attachment 11 – *Superpave Hot Mix Asphalt Tables*.

NOTE: Please Section 2.4 Special Notes - PG Binder and Mix Design Level

#### 5.2 Project Dimensions

Project Dimensions for projects contained in the Invitation for Bids can be found in Attachment 11 – Superpave Hot Mix Asphalt Tables.

#### 5.3 Rebates Table

Rebates for projects contained in the Invitation for Bids can be found in Attachment 11 – *Superpave Hot Mix Asphalt Tables*.