

Attachment 9

Special Notes – NYSDOT Specific Projects

Bituminous Concrete Hot Mix Asphalt **(2021 VPP NYSDOT Specific Projects)** **(State & Federal Funds)**

(Revised 11/27/2020)

IFB# 23225

Table of Contents

SECTION 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)	6
1.1 Material Descriptions	6
1.2 Pre-Paving Meeting	7
1.3 Supervision	7
1.4 Work Hours	8
1.5 Restoration of Disturbed Areas	8
1.6 Tack Coat.....	8
1.7 Construction Details	8
1.8 Attention: Special Note - Conditioning	8
1.9 Work Zone Traffic Control.....	9
1.10 Contract Bonds.....	16
SECTION 2: PROJECTS - SPECIAL NOTES (ALL NYSDOT REGIONS)	19
2.1 Funding Source	19
2.2 Project Locations	19
2.3 Special Note - Coordination with Cold Recycling Projects.....	19
2.4 Special Note – PG Binder and Mix Design Level	19
2.5 Special Note – Optional Use of Warm Mix Asphalt (WMA) Technologies	22
2.6 Special Note - Rail Road Involvement in Federal Funded Projects	23
2.7 Special Note - Rail Road Involvement in 100% State Funded Projects.....	24
2.8 Special Note – Asphalt Pavement Joint Adhesive	25
SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)	26
3.1 Holiday Restrictions – Region 1 Projects.....	26
3.2 Pilot Vehicle – Region 1 Projects	26
3.3 Paving Operations – Region 1 Projects.....	26
3.4 Moisture Susceptibility Testing – Region 1 Projects	27
3.5 Paving Markings – Region 1 Projects	27
3.6 Non-Vibratory Rolling – Region 1 Projects.....	27
3.7 HMA Pavers – Spreading and Finishing Requirement	27
3.8 Project 1V2121 – Essex County	28
3.9 Project 1V2122 – Essex County	29
3.10 Project 1V2123 – Essex County	30
3.11 Project 1V2124 – Essex County	31
3.12 Project 1V2125 – Essex County	32
3.13 Project 1V2131 – Greene County	33
3.14 Project 1V2132 – Greene County	34
3.15 Project 1V2133 – Greene County	35

3.16 Project 1V2151 – Saratoga County	36
3.17 Project 1V2152 – Saratoga County	38
3.18 Project 1V2171 – Warren County	39
3.19 Project 1V2181 – Washington County	40
3.20 Project 1V2182 – Washington County	41
3.21 Project 1V2183 – Washington County	43
SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)	44
4.1 Special Notes (ALL REGION 2 SITES) – Region 2 Projects.....	44
4.2 2V2013 - Route 29 – Route 10A to Johnstown City Line	45
4.3 2V2014 - Route 29A and Route 10/29A Overlap – Gloversville to Pine Lake	46
4.4 2V2022 - Route 28 – Indian Lake to Warren County Line	47
4.5 2V2032 - Route 51 –RM 1129 to Ilion Village Line.....	48
4.6 2V2042 - Route 13 – DeRuyter to Sheds	49
4.7 2V2052 - Route 10 – Schoharie CL to Canajoharie	50
4.8 2V2053 - Route 80 – Herkimer County Line to Fort Plain	51
4.9 2V2062 - Route 12 – Route 8 to Putnam Rd. and Trenton Rd. Ramps.....	52
4.10 Material Transfer Vehicle (MTV) - Region 2.....	54
4.11 HMA/WMA Mixture Evaluation Using Performance Testing – Region 2	55
SECTION 5: PROJECTS - SPECIAL NOTES (NYSDOT REGION 3)	59
5.1 Holiday and Event Restrictions – Region 3 Projects	59
5.2 Pilot Vehicle – Region 3 Projects	61
5.3 Region 3 Projects (All Region 3 Sites).....	61
5.4 Project 360415 – Route 90 – Cayuga County	62
5.5 Project 360416 – Route 13 – Tompkins and Cortland Counties.....	63
5.6 Project 360417 – Route 20 – Onondaga County.....	64
5.7 Project 360418 – Route 31 – Onondaga County.....	65
5.8 Project 360419 – Route 3 – Oswego County	66
SECTION 6: PROJECTS - SPECIAL NOTES (NYSDOT REGION 4)	67
6.1 Special Note – Region 4 Projects	67
6.2 Special Note – Temporary Lane/Shoulder Closure Restrictions for Major Holidays- Region 4	68
6.3 Project 410498 – Route 104A – Route 104 to Cayuga CL – Wayne County.....	69
6.4 Project 409856 – Route 98 – US 20 to City of Batavia, South City Boundary – Genesee County.....	70
6.5 Project 409855 – Route 98 – US 20A to Route 354 – Wyoming County	71
6.6 Project 409674 – Route 96 – Village of Phelps to Village of Manchester – Ontario County	72
6.7 Project 423712 – Route 237 – Genesee CL to Village of Holly – Orleans County.....	73

SECTION 7: PROJECTS - SPECIAL NOTES (NYSDOT REGION 5)	74
7.1 General Special Note – Region 5 Projects	74
7.2 Effective PG Binder Content – Region 5 Projects	74
7.3 Moisture Susceptibility Testing – Region 5 Projects	75
7.4 Dust (Minus 0.075 mm Aggregate) to Effective PG Binder Content Ratio – Region 5 Projects	75
7.5 Polymer Modified PG Binder – Region 5 Projects	75
7.6 Pavement Markings – Region 5 Projects	75
7.7 Abrading Existing Pre-Formed & Epoxy Pavement Markings – Region 5 Projects	75
7.8 Milled Surfaces – Region 5 Projects	76
7.9 Time Restrictions – Region 5 Projects	76
7.10 Project 5V2111 – Cattaraugus County	77
7.11 Project 5V2112 – Cattaraugus County	78
7.12 Project 5V2121 – Chautauqua County	79
7.13 Project 5V2131 – Erie County	80
7.14 Project 5V2141 – Erie County	81
7.15 Project 5V2151 – Niagara County	82
7.16 Project 5V2152 – Niagara County	83
7.17 Project 5V2153 – Niagara County	84
SECTION 8: PROJECTS - SPECIAL NOTES (NYSDOT REGION 6)	85
8.1 Special Note – Region 6 Projects	85
8.2 Project 6V2016 – Allegany County	87
8.3 Project 6V2046 – Steuben County	88
8.4 Project 6V2112 – Allegany County	89
8.5 Project 6V2132 – Schuyler County	90
8.6 Project 6V2241 – Steuben County	91
SECTION 9: PROJECTS - SPECIAL NOTES (NYSDOT REGION 7)	92
9.1 Special Work Zone Traffic Control – Pilot Vehicle – Region 7 Projects	92
9.2 Project 7V2113 – Vibratory Compaction Restrictions within the Village/City Limits	92
9.3 Additional Paving Areas/Parking Areas/Cross Overs/Snow Plow Turnarounds – Region 7 Projects	92
9.4 Projects 7V2131 & 7V2143 – Non-Tracking Tack Coat	93
9.5 Projects 7V2141 & 7V2151 – Paving Operations	93
9.6 Project 7V2132 – Performance Engineered Mixtures (PEM) Evaluation using Performance Testing	94
SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)	98
10.1 Special Notes – Region 9 Projects	98
10.2 Projects 9V2124, 9V2141, 9V2143, 9V2146, 9V2165, 901452 & 904715 – Various Counties	100

10.3 Projects 905651 & 9V2172 – Chenango and Sullivan Counties.....	101
10.4 Projects 9V2121, 9V2161, 9V2162, 9V2165 and 904715 – Production Cold Micro Milling to be Performed by the Paving Contractor	102
10.5 Project 935847 – Schoharie County	103
10.6 Project 9V2181 – Tioga County	104
10.7 Projects 9V2111, 9V2121, 9V2161, 9V2162, 9V2181 and 935847 – Various Counties	105
10.8 Project 9V2141 – Delaware County	106
10.9 HMA/WMA Mixture Evaluation Using Performance Testing – Region 9	107
10.10 Density Measurement Using A Rolling Density Meter	111
SECTION 11: SUPERPAVE HOT MIX ASPHALT	112
11.1 Superpave Hot Mix Asphalt Design Criteria.....	112
11.2 Project Dimensions	112
11.3 Rebates Table	112

SECTION 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)

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

SECTION 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)

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.

SECTION 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)

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.

SECTION 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)

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 *Special Note - 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.

SECTION 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)

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	<u>G20-2</u> Conventional 36" x 18" Freeways 48" x 24"	On main line after end of project in each direction.
ROAD WORK AHEAD	<u>W20-1</u> 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	<u>R4-1</u> 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	<u>W8-12</u> 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.

**All signs should maintain an absolute minimum spacing of 200' rural or 100' urban. 500' is preferred on rural and 300' is preferred on urban.

Double stacking of any of the above signs, or combination thereof, will NOT be permitted.

SECTION 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)

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.

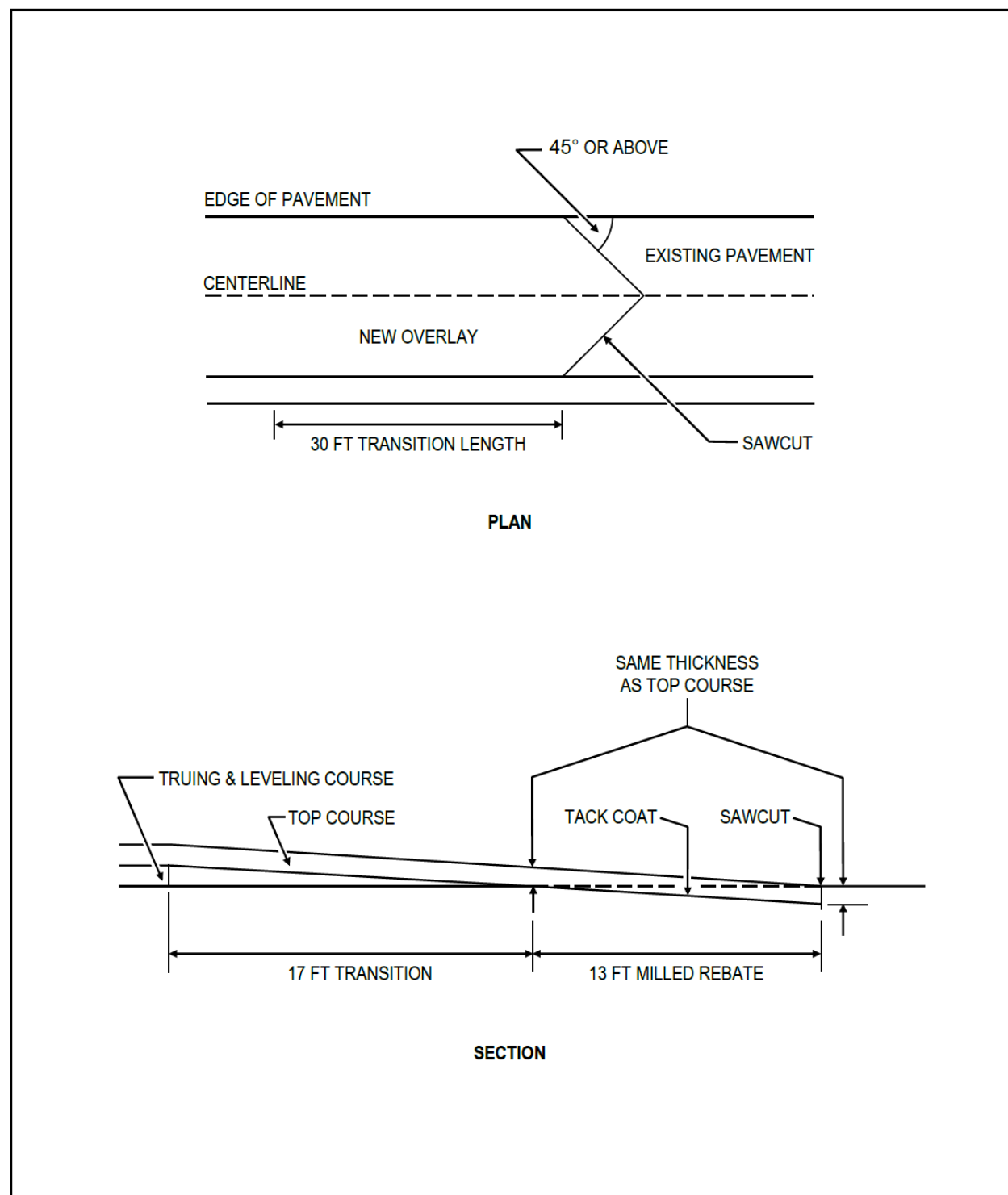
Where rebates are milled and ramps are constructed and traffic is to ride on the milled pavement for more than the one work day in which the rebate is milled, GROOVED PAVEMENT signs (W8-15) shall be installed on the right side of the roadway, 500 feet upstream of the rebate location. No separate payment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

SECTION 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)

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



SECTION 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)

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.

SECTION 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)

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 45°F 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

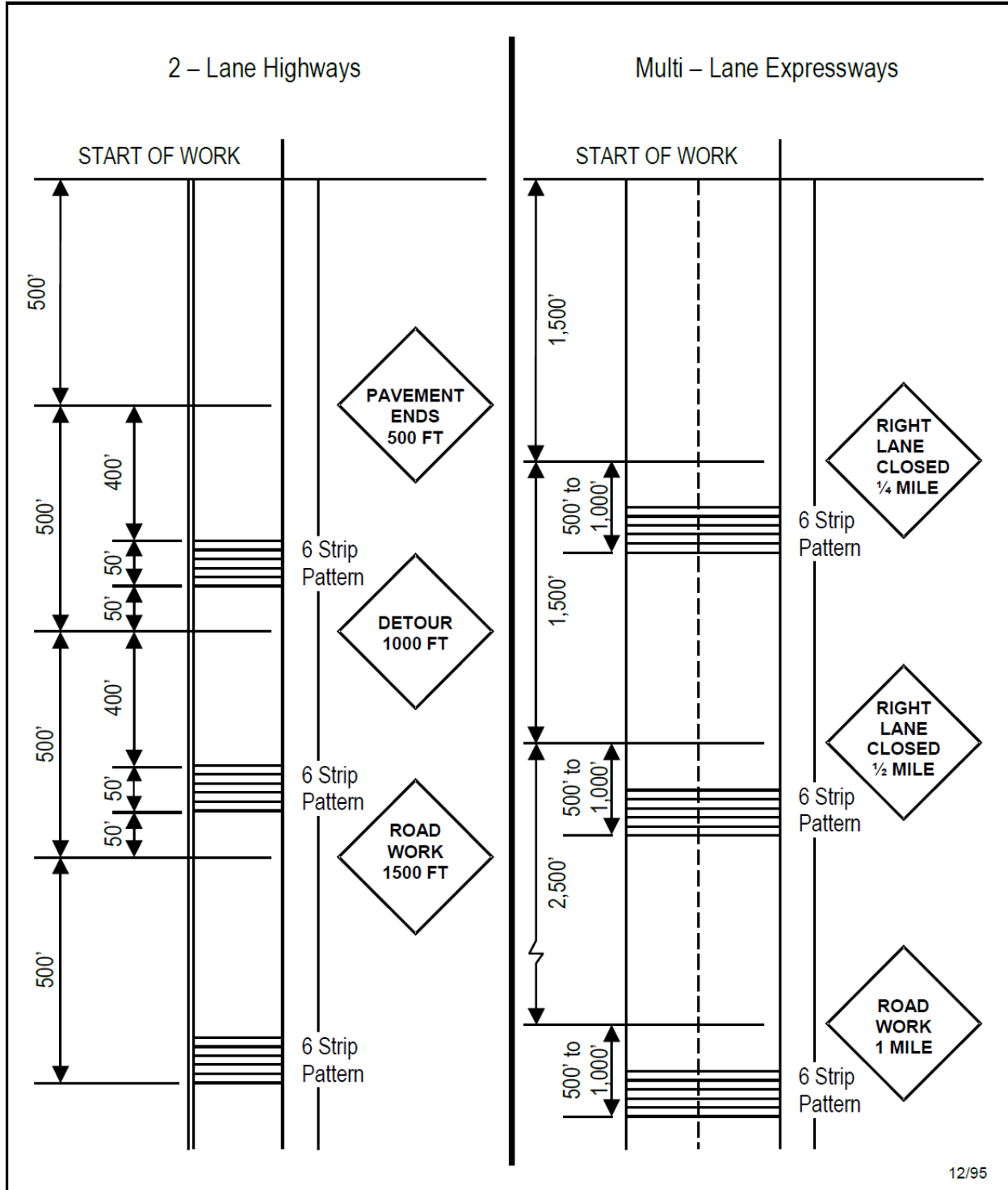
All costs for the installation, maintenance and removal of temporary rumble strips are included in the price per ton. No separate payment shall be made.

SECTION 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)

1.9 Work Zone Traffic Control (Cont'd)

1.9.4 Temporary Rumble Strips (Cont'd)

Suggested Layout Details -- Temporary Rumble Strips



SECTION 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)

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 at www.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.

SECTION 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)

1.10 Contract Bonds (Cont'd)

1.10.2 Labor and Material Bond Example (Cont'd)

S A M P L E (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 laws of the State of _____ having 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 the _____ day of _____, 20____ with 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 delivered _____ day of _____, 20____ in the presence of

_____) (Company)
By _____) Principal (Signature)
_____) (Title)
_____) (Company)
By _____) Surety (Signature)
_____) (Title of Authorized Officer)

(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).

SECTION 1: HOT MIX ASPHALT – (SPECIFIC CLAUSES)

1.10 Contract Bonds (Cont'd)

1.10.2 Labor and Material Bond Example (Cont'd)

S A M P L E (page 2 of 2)

103-08 SAMPLE FORM OF LABOR AND MATERIAL BOND

(Acknowledgment of principal, unless it be a
corporation) STATE OF NEW YORK ss. :

COUNTY OF _____

On this _____ day of _____, 20____, before me personally came
_____ to me known and known to me to be the person described in and who executed the
foregoing instrument and acknowledged that he/she executed the same.

Notary Public

(Acknowledgment of principal, if a
corporation) STATE OF NEW
YORK ss. :

COUNTY _____

On this _____ day of _____, 20____, before me personally came
_____ to me known and known to me to be the person, who
being by me duly sworn, did depose and say that he/she resides in
_____ that he/she is the _____ of the
_____ the corporation described in and which executed the
foregoing instrument; and that he/she signed his/her name thereto by order of the Board
of Directors of said Corporation.

Notary Public

(Acknowledgment of
Surety Company) STATE
OF NEW YORK ss. :

COUNTY OF _____

On this _____ day of _____, 20____, before me personally came
_____ to me known and known to me to be the person, who
being by me duly sworn, did depose and say that he/she resides in
_____ that he/she is the _____ of
the
_____ the corporation described in the foregoing
instrument; and that he/she signed his/her name thereto by order of the Board of Directors of
said Corporation.

Notary Public

State Of New York Office of the Attorney General

I hereby approve the foregoing contract and bond as to form and manner of execution.

SECTION 2: PROJECTS - SPECIAL NOTES (ALL NYSDOT REGIONS)

2.1 Funding Source

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

Projects 1V2121, 1V2122, 1V2123, 1V2124, 1V2125, 1V2131, 1V2132, 1V2133, 1V2152, 1V2171, 1V2181, 1V2182, 1V2183, 2V2032, 2V2062, 360415, 360416, 360317, 360318, 360319, 5V2111, 5V2112, 5V2121, 5V2141, 5V2151, 5V2152, 5V2153, 6V2016, 6V2046, 6V2047, 6V2112, 6V2132, 6V2241, 7V2111, 7V2113, 7V2121, 7V2122, 7V2123, 7V2124, 7V2131, 7V2132, 7V2133, 7V2141, 7V2142, 7V2143, 7V2151, 7V2152, 7V2153, 7V2154, 7V2155, 7V2161, 7V2162, 9V2111, 9V2121, 9V2124, 9V2141, 9V2143, 9V2146, 9V2161, 9V2162, 9V2165, 905651, and 935847.

The following projects will be 100% **State funded**:

Projects 1V2151, 2V2013, 2V2014, 2V2022, 2V2042, 2V2052, 2V2053, 410498, 409856, 409855, 409674, 423712, 5V2131, 9V2172, 9V2181, 901452, and 904715.

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 1V2131, 1V2151, 1V2152, 1V2182, 1V2183, 2V2013, 2V2042, 2V2052, 2V2053, 6V2046, 6V2047 7V2141, 7V2151, **9V2124, 9V2141, 9V2143, 9V2146, 9V2165, 901452, and 904715** involve cold recycling and Projects 2V2014, 2V2022, 2V2062, 360415, 360416, 410498, 409856, 409674, 423712, 6V2016, 6V2112, 6V2241, 7V2123, **9V2172, and 905651** 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 contractor 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.

SECTION 2: PROJECTS - SPECIAL NOTES (ALL NYSDOT REGIONS)

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.

Note: 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 pre-paving 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_{3.2}:

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.

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.

Note: 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.

SECTION 2: PROJECTS - SPECIAL NOTES (ALL NYSDOT REGIONS)

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 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 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.

Note: 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 pre-paving 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_{3.2}:

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.

SECTION 2: PROJECTS - SPECIAL NOTES (ALL NYSDOT REGIONS)

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 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 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.

Note: 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,
 - Submit a MSDS for the additive.

SECTION 2: PROJECTS - SPECIAL NOTES (ALL NYSDOT REGIONS)

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 Ratio (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
1V2183	Washington	149	CP RR	RM 149-1802-1107+200'
5V5252	Niagara	62	CSX	RM 62-5404-2003 (NY 425)
6V2046	Steuben	415	Bath & Hammondsport RR	RM 15-6401-1373
7V2151	St. Lawrence	310	NYOG	RM 310 7501 1102
904715	Tioga	96	Owego-Harford RR	RM 96 6501-1018

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.

SECTION 2: PROJECTS - SPECIAL NOTES (ALL NYSDOT REGIONS)

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
2V2022	Hamilton	28	Saratoga – North Creek RR	RM 28-2209-1489 (+250')
409674	Ontario	96	Finger Lakes Railway	RM 96 4404 1062 RM 96 4404 1085

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 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.

SECTION 2: PROJECTS - SPECIAL NOTES (ALL NYSDOT REGIONS)

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.

SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.1 Holiday Restrictions – Region 1 Projects

All Region 1 Projects shall follow the following holiday restrictions:

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

- 6:00 am Friday, May 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 Friday, October 1, 2021 thru 6:00 am Tuesday, October 5, 2021
- 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 Tuesday, January 4, 2022 – (Christmas/New Year Holiday)

3.2 Pilot Vehicle – Region 1 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 1 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 FOLLOW ME	G20-4 CONVENTIONAL 36"x 18"	ON BACK OF PILOT VEHICLES

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

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

3.3 Paving Operations – Region 1 Projects

Paving operations shall progress in the opposite direction of traffic when paving on Cold Recycled roadways. This provision may only be waived by the Region 1 Materials Engineer, and this waiver will be rescinded if damage to the top course occurs.

SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.4 Moisture Susceptibility Testing – Region 1 Projects

Any HMA mix design where the primary aggregate component by weight is granite or crushed gravel will be subject to moisture susceptibility testing by the producer during design, unless this requirement is waived by the RME. TSR testing may be required by the RME when there is a change to the asphalt binder source.

Moisture susceptibility will be determined by calculating the tensile strength ratio (TSR) of each specimen according to AASHTO T 283, Resistance of Compacted Asphalt Mixtures to Moisture-Induced Damage, except as modified in Section VI.D. of NYSDOT Materials Method 5.16.

If the TSR of the HMA gyratory specimens is less than 80%, as required in AASHTO M 323, corrective action is required. Corrective action to improve the moisture susceptibility of the HMA mixture can include the use of anti-strip additives or blending of other aggregate materials to reduce the proportion of granite or gravel aggregates in the mix. When corrective action is necessary, any changes made to the design must be noted on the JMF, and all other volumetric and mechanical properties must be evaluated for compliance with NYSDOT Materials Method 5.16 using a one-point design. The results must be reported to the RME prior to production.

3.5 Paving Markings – Region 1 Projects

It shall be the Contractor's responsibility to inventory and document the existing pavement marking patterns prior to milling and/or resurfacing and submit to the Engineer a copy of the inventory prior to beginning work. The Contractor shall be responsible for completing all layout work necessary for the installation of all final pavement markings. If the original markings are obliterated, the contractor shall contact the Resident Engineer for guidance on their location.

3.6 Non-Vibratory Rolling – Region 1 Projects

Contractor shall use non-vibratory rolling over any bridge structure, large culvert or known utility within the project limits or as ordered by the engineer in charge.

3.7 HMA Pavers – Spreading and Finishing Requirement

The Contractor shall provide a paver(s) capable of spreading and finishing courses of HMA plant mix material in lane widths, shoulders, or similar construction applicable to the specified typical section and thicknesses shown on the plans. In addition, the speed of the paver must remain constant to ensure a uniform thickness of the course (mat) being placed. The speed of the paver must match the production rate of the HMA plant, proposed HMA rollers and to the thickness and width of the course (mat) being placed. The **MAXIMUM PAVER SPEED allowed will be and 35 feet per minute.**

Note: The Contractor should be prepared to discuss at the HMA Pre-Pave Meeting the paver speed and the maximum paver speed for the project based the plant production rate, rollers(s) speed and course (mat) thickness being placed.

SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.8 Project 1V2121 – Essex County

Site Specific Lane Closure Restrictions:

- There shall be no temporary lane closures permitted between Thursday July 22 and Monday, July 26, 2021 (Ironman).
- There shall be no temporary lane closures permitted between Thursday September 2 and Monday, September 6, 2021 (Ironman).

Item **404.058901 (Shim Course)** is being utilized at an average thickness of ½". Region 1 is requiring the use of either:

- 6.3 HMA mix meeting the requirements of 404.068301, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 404.058901 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 included in the currently active OGS centralized contract Group 31502, Award 23148 - Comprehensive Bituminous Concrete (Hot Mix Asphalt and Cold Patch) (All State Agencies and Political Subdivisions). OGS HMA FOB Contract, Comprehensive Bituminous Concrete.

The following intersections shall be paved approximately 50 feet from the edge of the mainline in each direction:

Location	Roadway Width
Lacy Rd	30
Irish Hill Rd	30
Styles Brook Rd	30
Old Rte. 9N (South)	30
Old Rte. 9N (North)	30
Trumbells Rd	30

SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.9 Project 1V2122 – Essex County

Site Specific Lane Closure Restrictions:

- There shall be no temporary lane closures permitted between Thursday July 22 and Monday, July 26, 2021 (Ironman).
- There shall be no temporary lane closures permitted between Thursday September 2 and Monday, September 6, 2021 (Ironman).
- There shall be no temporary lane closures permitted on Sundays between 11:00AM and 4:00PM.

Item **404.058901 (Shim Course)** is being utilized at an average thickness of ½". Region 1 is requiring the use of either:

- 6.3 HMA mix meeting the requirements of 404.068301, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 404.058901 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 included in the currently active OGS centralized contract Group 31502, Award 23148 - Comprehensive Bituminous Concrete (Hot Mix Asphalt and Cold Patch) (All State Agencies and Political Subdivisions). OGS HMA FOB Contract, Comprehensive Bituminous Concrete.

The following intersections shall be paved approximately 50 feet from the edge of the mainline in each direction:

Location	Roadway Width
Ausable Rd (South)	30
Ausable Rd (North)	30
St. Huberts Rd (South)	30
St. Huberts Rd (North)	30
Beer's Bridge Way	30
Evergreen Lane	30
Holt Rd (South)	60
Holt Rd (North)	60
Airport Rd (South)	30
Airport Rd (North)	30
10 DEC Trailheads	Quantity 10 150 ft long by 12 ft wide

SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.10 Project 1V2123 – Essex County

Site Specific Lane Closure Restrictions:

- None

Item **404.058901 (Shim Course)** is being utilized at an average thickness of ½". Region 1 is requiring the use of either:

- 6.3 HMA mix meeting the requirements of 404.068301, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 404.058901 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 included in the currently active OGS centralized contract Group 31502, Award 23148 - Comprehensive Bituminous Concrete (Hot Mix Asphalt and Cold Patch) (All State Agencies and Political Subdivisions). OGS HMA FOB Contract, Comprehensive Bituminous Concrete.

The following intersections shall be paved approximately 50 feet from the edge of the mainline in each direction:

Location	Roadway Width
Pyramid Rd	30
Letsonville Rd (East)	30
Letsonville Rd (West)	30
Adams Way (East)	30
Adams Way (West)	30
Daniels Rd	30
Whits End Way	30
Severance Rd	30
Sawmill Rd (East)	30
River Rd	30
Sawmill Rd (West)	30
Stowell Rd	30

SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.11 Project 1V2124 – Essex County

Site Specific Lane Closure Restrictions:

- There shall be no temporary lane closures permitted between Thursday July 22 and Monday, July 26, 2021 (Ironman).
- There shall be no temporary lane closures permitted between Thursday September 2 and Monday, September 6, 2021 (Ironman).

Item **404.058901 (Shim Course)** is being utilized at an average thickness of ½". Region 1 is requiring the use of either:

- 6.3 HMA mix meeting the requirements of 404.068301, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 404.058901 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 included in the currently active OGS centralized contract Group 31502, Award 23148 - Comprehensive Bituminous Concrete (Hot Mix Asphalt and Cold Patch) (All State Agencies and Political Subdivisions). OGS HMA FOB Contract, Comprehensive Bituminous Concrete.

The following intersections shall be paved approximately 50 feet from the edge of the mainline in each direction:

Location	Roadway Width
Hardy Rd	30
Bilhuber Rd / Mulvey Rd (West)	75
Mulvey Rd (East)	30
Ausable Dr	40
Danielle Ln (West)	30
Danielle Ln (East)	30
Bills Ln	30

SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.12 Project 1V2125 – Essex County

Site Specific Lane Closure Restrictions:

- There shall be no temporary lane closures permitted between Friday June 4 and Monday June 14, 2021 (Americade).

Item **404.058901 (Shim Course)** is being utilized at an average thickness of ½". Region 1 is requiring the use of either:

- 6.3 HMA mix meeting the requirements of 404.068301, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 404.058901 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 included in the currently active OGS centralized contract Group 31502, Award 23148 - Comprehensive Bituminous Concrete (Hot Mix Asphalt and Cold Patch) (All State Agencies and Political Subdivisions). OGS HMA FOB Contract, Comprehensive Bituminous Concrete.

The following intersections shall be paved approximately 50 feet from the edge of the mainline in each direction:

Location	Roadway Width
Trout Brook Rd	30
Lower Bullrock Rd	30
Price Rd	30
Alexandria Ave	75
Lord Howe Estates	30

SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.13 Project 1V2131 – Greene County

Site Specific Lane Closure Restrictions:

- None

Item **404.058901 (Shim Course)** is being utilized at an average thickness of ½". Region 1 is requiring the use of either:

- 6.3 HMA mix meeting the requirements of 404.068301, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 404.058901 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 included in the currently active OGS centralized contract Group 31502, Award 23148 - Comprehensive Bituminous Concrete (Hot Mix Asphalt and Cold Patch) (All State Agencies and Political Subdivisions). OGS HMA FOB Contract, Comprehensive Bituminous Concrete.

The following intersections shall be paved approximately 75 feet from the edge of the mainline in each direction:

Location	Roadway Width
Both sides of Clay Hill Rd	2 @ 30
Hillcrest Rd	30
Stonich Rd (2 legs)	2 @ 30
CR 22 (three legs)	30
Allen Teator Rd (2 legs) (rm 1220)	2 @ 30
Allen Teator Rd (2 legs) (rm 1227)	2 @ 30

SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.14 Project 1V2132 – Greene County

Project Limits

The section of Route 23A between RM 1286 and 1291 will not be resurfaced as part of this project. This section is represented by the 0.6 Mile section immediately East of Route 32.

Milling Contractor Coordination:

A portion of Route 23A in the vicinity of Palenville will be milled under a separate contract and will require contractor coordination.

Site Specific Lane Closure Restrictions:

- None

Item **402.058904 (Shim Course)** is being utilized at an average thickness of ½". Region 1 is requiring the use of either:

- 6.3 HMA mix meeting the requirements of 402.068304, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 402.058904 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 included in the currently active OGS centralized contract Group 31502, Award 23148 - Comprehensive Bituminous Concrete (Hot Mix Asphalt and Cold Patch) (All State Agencies and Political Subdivisions). OGS HMA FOB Contract, Comprehensive Bituminous Concrete.

The following intersections shall be paved approximately 50 feet from the edge of the mainline in each direction:

Location	Roadway Width
Whites Rd	30
Bograt Rd	30
Intersection of Rte 32 A	40
Birchwood Park	30
Gary Lane	30
Dakota Ln	30
Pennsylvania Ave (2 legs)	2 @ 30
Stony Brook Rd 2 legs	2 @ 30
Stony Brook Rd Ext.	30
Farm Rd	25
Mountain Turnpike	60
High Falls Rd Ext	30
Mosey Hill Rd	30
Grove School Rd	30
Underhill Rd	60

SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.15 Project 1V2133 – Greene County

Site Specific Lane Closure Restrictions:

- None

Item **402.058904 (Shim Course)** is being utilized at an average thickness of ½". Region 1 is requiring the use of either:

- 6.3 HMA mix meeting the requirements of 402.068304, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 402.058904 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 included in the currently active OGS centralized contract Group 31502, Award 23148 - Comprehensive Bituminous Concrete (Hot Mix Asphalt and Cold Patch) (All State Agencies and Political Subdivisions). OGS HMA FOB Contract, Comprehensive Bituminous Concrete.

The following intersections shall be paved approximately 75 feet from the edge of the mainline in each direction:

Location	Roadway Width
Brick Row Rd	30
Sleepy Hollow Rd	32
River Rd	30
Park Rd	75
Madarasz Rd	40
Adams Rd	50
4 Mile Point Rd	30
Beecher Rd	30
Adams Rd	35
Meadow Ridge Ln	25
Ely St	40
Smith Pl	30
Holister St	30

SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.16 Project 1V2151 – Saratoga County

Site Specific Lane Closure Restrictions:

- None

Item **404.058901 (Shim Course)** is being utilized at an average thickness of ½". Region 1 is requiring the use of either:

- 6.3 HMA mix meeting the requirements of 404.068301, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 404.058901 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 included in the currently active OGS centralized contract Group 31502, Award 23148 - Comprehensive Bituminous Concrete (Hot Mix Asphalt and Cold Patch) (All State Agencies and Political Subdivisions). OGS HMA FOB Contract, Comprehensive Bituminous Concrete.

The following intersections shall be paved approximately 75 feet from the edge of the mainline in each direction:

Location	Roadway Width
Bemis Heights Kiosk	28
Old State Rte 32	22
Old State Rte 32	22
Saratoga National Battlefield Rd	22
Saratoga National Battlefield Rd	22
Durham Rd	26
Munger Hill Rd	22
Saratoga National Battlefield Rd	24
Lohnes Rd	25
County Rd 71	28
Wilbur Rd	22
Duell Rd	22
County Rd 67	28
Spring Rd	22
Blodgett Rd	22
Spring Rd	22
Ruckytucks Rd	22
County Rd 69	28
County Rd 68	30
County Rd 68	30
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SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.16 Project 1V2151 – Saratoga County (Cont'd)

The following intersections shall also be paved approximately 75 feet from the edge of the mainline in each direction:

Location	Roadway Width
Hayes Rd	26
Casey Rd	22
Town Garage Rd	12
Town Garage Rd	12
Town Garage Rd	26
Hathaway Rd	24
Patterson Rd	20
Degarmo Rd	26
Bridge over Fish Creek	30
Bridge over Fish Creek	30
Mennen Rd	24

SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.17 Project 1V2152 – Saratoga County

Site Specific Lane Closure Restrictions:

- None

Item **404.058901 (Shim Course)** is being utilized at an average thickness of ½". Region 1 is requiring the use of either:

- 6.3 HMA mix meeting the requirements of 404.068301, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 404.058901 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 included in the currently active OGS centralized contract Group 31502, Award 23148 - Comprehensive Bituminous Concrete (Hot Mix Asphalt and Cold Patch) (All State Agencies and Political Subdivisions). OGS HMA FOB Contract, Comprehensive Bituminous Concrete.

The following intersections shall be paved approximately 75 feet from the edge of the mainline in each direction:

Location	Roadway Width
Woodlake Dr	42
Walden Cir	60
Arnold Rd	24
County Rd 70	26
Brightman Rd	26
Jack Halloran Rd	26
County Rd 75	30
Gronczniak Rd	22
Blizzard Rd	22

SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.18 Project 1V2171 – Warren County

Site Specific Lane Closure Restrictions:

- There shall be no temporary lane closures permitted between Friday June 4 and Monday June 14, 2021 (Americade).

Item **404.058901 (Shim Course)** is being utilized at an average thickness of ½". Region 1 is requiring the use of either:

- 6.3 HMA mix meeting the requirements of 404.068301, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 404.058901 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 included in the currently active OGS centralized contract Group 31502, Award 23148 - Comprehensive Bituminous Concrete (Hot Mix Asphalt and Cold Patch) (All State Agencies and Political Subdivisions). OGS HMA FOB Contract, Comprehensive Bituminous Concrete.

SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.19 Project 1V2181 – Washington County

Site Specific Lane Closure Restrictions:

- None

Item **404.058901 (Shim Course)** is being utilized at an average thickness of ½". Region 1 is requiring the use of either:

- 6.3 HMA mix meeting the requirements of 404.068301, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 404.058901 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 included in the currently active OGS centralized contract Group 31502, Award 23148 - Comprehensive Bituminous Concrete (Hot Mix Asphalt and Cold Patch) (All State Agencies and Political Subdivisions). OGS HMA FOB Contract, Comprehensive Bituminous Concrete.

The following intersections shall be paved approximately 75 feet from the edge of the mainline in each direction:

Location	Roadway Width
At Rte 22	85
Rockside Ln	20
Furnace Ln	25
East Main St. Slip Ramp	20
East Main St	30
County Rte 67	30
Pine Ln	25
Pine Ln	25
Spring St	30
Planes Rd	30
Bowen Hill Rd	30
Fish Hatchery Rd	35
At RM 1046	34

3.20 Project 1V2182 – Washington County

Site Specific Lane Closure Restrictions:

- None

Item **404.058901 (Shim Course)** is being utilized at an average thickness of ½". Region 1 is requiring the use of either:

- 6.3 HMA mix meeting the requirements of 404.068301, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 404.058901 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 included in the currently active OGS centralized contract Group 31502, Award 23148 - Comprehensive Bituminous Concrete (Hot Mix Asphalt and Cold Patch) (All State Agencies and Political Subdivisions). OGS HMA FOB Contract, Comprehensive Bituminous Concrete.

The following intersections shall be paved approximately 75 feet from the edge of the mainline in each direction:

Location	Roadway Width
@ Rte 32	1 @ 71', 1 @ 50'
Rte 4 Bridge (South & North)	2 @ 22
River Rd	25
County Rte 113	35
Ft. Miller Rd (South)	25
County Rte 77	30
Green St (West)	25
Green St (East) / Blodgett Rd	25
Blodgett Rd Ext	25
Lock 6 Rd	2 @ 25
Duer Rd	30
Ft. Miller Rd (North)	25
County Rte 46 (South)	30
West Park Ent. (South)	35
West Park Ent. (North)	30
East Park Ent. (South)	45
East Park Ent. (North)	30
North River Rd	25
Glen Rd	30
Patterson Rd	30
Cary Rd	30
DeGroot Rd (South)	25
DeGroot Rd (North)	25
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SECTION 3: PROJECTS - SPECIAL NOTES (NYSDOT REGION 1)

3.20 Project 1V2182 – Washington County (Cont'd)

The following intersections shall also be paved approximately 75 feet from the edge of the mainline in each direction:

Location	Roadway Width
Blackhouse Rd	30
Breton Ln	30
County Rte 46 (North)	32
Lock 7 Rd	22
Bridge over the Slocum Kill	2@42
At Bridge over Canal V/O Ft. Edward	49

3.21 Project 1V2183 – Washington County

Site Specific Lane Closure Restrictions:

- None

Item **404.058901 (Shim Course)** is being utilized at an average thickness of ½". Region 1 is requiring the use of either:

- 6.3 HMA mix meeting the requirements of 404.068301, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 404.058901 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 included in the currently active OGS centralized contract Group 31502, Award 23148 - Comprehensive Bituminous Concrete (Hot Mix Asphalt and Cold Patch) (All State Agencies and Political Subdivisions). OGS HMA FOB Contract, Comprehensive Bituminous Concrete.

The following intersections shall be paved approximately 75 feet from the edge of the mainline in each direction:

Location	Roadway Width
At Rte. 4 North Ramp	107
At Rte. 4 West Ramp	180
O'Connor Ln	30
Kingsbury Rd	35
County Rte 41	30
Slipway	20
County Rte 41	30
At Railroad Crossing	2@30
Lock 9 Rd	20
At Bridge over Canal	2@30
County Rte 43	25
Reynolds Rd	25
Strainer Ln	30
County Rte 17	30
Hall Rd	30
Northup Ln	30
Outhaway Ln	20
Townsend Rd	25
Christian Hill Rd	30
Main St	35
At Rte 40	62

SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)

4.1 Special Notes (**ALL REGION 2 SITES**) – Region 2 Projects

1. It shall be the Contractor's responsibility to inventory and document the existing pavement marking patterns prior to milling and/or resurfacing and submit to the Engineer a copy of the inventory prior to beginning work. The Contractor shall be responsible for completing all layout work necessary for the installation of all final pavement markings. If the original markings are obliterated, the contractor shall contact the Resident Engineer for guidance on their location.
2. Prior to paving operations, the contractor will lay out the centerline with paint. In addition, the contractor will arbitrarily station the pavement at 100 ft intervals beginning at 0+00. The cost of this is to be included in the WMA items. No separate payment will be made.
3. RAP PG Binder Contribution - When greater than 10% of recycled asphalt pavement (RAP) is utilized in the production of hot mix asphalt (HMA) Top Course for this contract, the following minimum asphalt content will be utilized in the final mixture design calculation for optimum asphalt content:

HMA Mixture	Minimum Asphalt Content (%)
6.3 HMA	6.2
9.5 HMA	6.0
12.5 HMA	5.4
19.0 HMA	4.7

The mixture design will be formulated such that all the volumetric properties are within the criteria specified in the latest Material Method 5.16. The total targeted asphalt content of virgin binder and the accepted RAP asphalt contribution shall not be less than the minimum asphalt content of the mix design during production indicated in the above table.

4. **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 of <0.3 Million ESALs.
 - a. The Gradation Design Control Points outlined in MM 5.16, Table 1 shall be modified as follows: For 9.5 Top Course HMA, the minimum passing the 12.5 mm sieve shall be 100%.
5. Intersections at all sites will require a separate paving operation from mainline (top course only). The rebate width for sideline intersections listed in the VPP Table of Rebates is the distance measured from the edge of the main line shoulder along the centerline of the intersecting road to the rebate terminus. All State Highway intersections require 64V-22. For all other sidelines and driveways, a 64S-22 may be used in lieu of the required 64V-22 at the contractor's discretion. The cost of this is to be included in the WMA items. No separate payment will be made.
6. Mainline pavement overlay splices will be in accordance with Standard Sheet 402-01. This will be discussed at the pre-paving meeting. <https://www.dot.ny.gov/main/business-center/engineering/cadd-info/drawings/standard-sheets-us-repository/402-01.pdf>
7. Tack coat is to be overlapped a minimum of 8" at all longitudinal paving joints.

SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)

4.2 2V2013 - Route 29 – Route 10A to Johnstown City Line

1. This site will be cold in place recycled under a separate contract. This will require coordination between the awarded paving contractor under this contract and the recycling contractor. The overlay cannot be placed until the 10 Day CIPR cure period is complete.
2. Paving operations shall progress in the opposite direction of traffic.
3. Item 404.017901 will be placed full width on the travel lanes and the shoulders. The mixture used for item 404.017901 (T&L) shall be 19mm. No wedge joint will be allowed for this mix. Lanes must be matched up daily.
4. As part of this contract, the contractor is required to install Centerline Audible Roadway Delineators, (CARDS) for the full length of the project in accordance with Item 649.11 and 649.21 and NYS Standard Sheets 649-03 and 649.04. The cost of all associated work, including any additional temporary pavement striping as well as work zone traffic control, is to be included in the WMA items. No separate payment will be made.
5. **A Material Transfer Vehicle** meeting the requirements of the MATERIAL TRANSFER VEHICLE (MTV) note shall be required. The cost of this is to be included in the WMA items. No separate payment will be made.

SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)

4.3 2V2014 - Route 29A and Route 10/29A Overlap – Gloversville to Pine Lake

1. The **“HMA/WMA Mixture Evaluation Using Performance Testing”** Note shall apply to this site. All mix will be paid at a QAF of 1.0 in accordance with the note.
2. The following locations will be Hot in Place Recycled (HIPR) under a separate contract. No paving can begin until the HIPR is complete.
 - a. RM 10-2104-1145 – 1174
 - b. RM 29A-2102-1147 - 1233
3. The following locations will require a full width, 2” depth micro mill a minimum of 1 week prior to paving. The micro milled surface will not be paved for a minimum of 5 days. The cost of this is to be included in the WMA items. No separate payment will be made.
 - a. RM 29A-2102-1147 – 10-2104-1145
 - b. RM 10-2104-1174 – 10-2104-1181
 - c. RM 29A-2102-1090 (+200’) & 10-2104-1181 (+200’) (Entire Y intersection 10 & 29A) to 10-2104-1178 (+300’)
4. The following locations will require a micro mill 2” depth at the gutter / curb edge feathered to 0” at the edge of the travel lane. The micro milled surface will not be paved for a minimum of 5 days. The cost of this is to be included in the WMA items. No separate payment will be made.
 - a. RM 10-2104-1162 (NB side only – Gutter – 450’)
 - b. RM 10-2104-1161 (SB Side only – Curb/Gutter – 350’)
5. The parking area at RM 10-2104-1153 shall be paved with 1-1/2” of item 404.09630108. 80 Series Compaction may be used in lieu of 60 series methods at this location.
6. Item 404.058901 will be placed full width on the travel lanes and the shoulders.
7. CARDS and SHARDS shall be installed in accordance with Item 649.11 and 649.21 and NYS Standard Sheets 649-03 and 649.04. The cost of all associated work, including any additional temporary pavement striping as well as work zone traffic control is to be included in the WMA items. No separate payment will be made.
8. Centerline Audible Roadway Delineators, (CARDS) at these locations:
 - a. RM 10-2102-1146 to 1181
 - b. RM 29A-2102-1159 to 1233
9. As part of this contract, the contractor is required to install Secondary Highway Audible Roadway Delineators (SHARDS) at this location:
 - a. RM 10-2102-1146 to 1181
10. **A Material Transfer Vehicle** meeting the requirements of the MATERIAL TRANSFER VEHICLE (MTV) note shall be required. The cost of this is to be included in the WMA items. No separate payment will be made.

SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)

4.4 2V2022 - Route 28 – Indian Lake to Warren County Line

1. This site will be Hot in Place Recycled (HIPR) under a separate contract. No paving can begin until the HIPR project is complete.
2. The pull off at Lake Abanakee (RM 28-2209-1385 – 1386) will be paved with 1-1/2" of Item 404.068301. This area will be swept and tacked prior to paving. The cost of this is to be included in the WMA items. No separate payment will be made.
3. The Hudson Gorge Wilderness Area parking area at RM 28--2209-1446 will be paved with 1-1/2" of Item 404.068301. This area will be swept and tacked prior to paving. The cost of this is to be included in the WMA items. No separate payment will be made.
4. The following location will require a full width, Minimum 1-1/2" depth micro mill a minimum of 1 week prior to paving. This location will also require profile milling to remove the dip at the RR tracks. The intent is to provide a better transition on and off the RR tracks. This may require the use of a string line or automation at the contractor discretion. It will also include milling more than 1-1/2" as needed. The contractor will submit their milling plan to the Hamilton County Resident Engineer 1 week prior to the pre-paving meeting. The micro milled surface will not be paved for a minimum of 5 days. The cost of this is to be included in the WMA items. No separate payment will be made.
 - a. RM 28-2209-1489 – 28-2209-1493
5. Item 404.058901 will be placed full width of the travel lanes and shoulders.
6. As part of this contract, the contractor is required to install Centerline Audible Roadway Delineators, (CARDS) for the full length of the project and Secondary Highway Audible Roadway Delineators (SHARDS) from RM 28-2209-1428 to 1493 accordance with Item 649.11 and 649.21 and NYS Standard Sheets 649-03 and 649.04. The cost of all associated work, including any additional temporary pavement striping as well as work zone traffic control, is to be included in the WMA items. No separate payment will be made.
7. A **Material Transfer Vehicle** meeting the requirements of the MATERIAL TRANSFER VEHICLE (MTV) note shall be required for all mixture s placed on this site. The cost of this is to be included in the WMA items. No separate payment will be made.

SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)

4.5 2V2032 - Route 51 –RM 1129 to Ilion Village Line

1. This site will be milled under a separate contract. The milled surface will be initially swept by DOT Forces. The milled surface will require re-sweeping immediately prior to paving by the paving contractor. The cost of this is to be included in the WMA items. No separate payment will be made.
2. The mixture used for item 404.017901 (T&L) shall be 12.5 Top and shall be placed the full width of the pavement and shoulders. No wedge joint will be allowed for this mix. Lanes must be matched up daily.

SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)

4.6 2V2042 - Route 13 – DeRuyter to Sheds

1. The **“HMA/WMA Mixture Evaluation Using Performance Testing”** Note shall apply to this site. Item 404.017901 will NOT require the IDT, SCB or CT Index testing. All other testing included in Table 4 of the note will apply to 404.017901. All mix including T&L will be paid at a QAF of 1.0 in accordance with the note.
2. This site will be cold in place recycled under a separate contract. This will require coordination between the awarded paving contractor under this contract and the recycling contractor. The overlay cannot be placed until the 10 Day CIPR cure period is complete.
3. Paving operations shall progress in the opposite direction of traffic.
4. Item 404.017901 will be placed full width on the travel lanes and the shoulders. The mixture used for item 404.017901 (T&L) shall be 19mm. No wedge joint will be allowed for this mix. Lanes must be matched up daily.

SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)

4.7 2V2052 - Route 10 – Schoharie CL to Canajoharie

1. This site will be cold in place recycled under a separate contract. This will require coordination between the awarded paving contractor under this contract and the recycling contractor. The overlay cannot be placed until the 10 Day CIPR cure period is complete.
2. Paving operations shall progress in the opposite direction of traffic.
3. Item 404.017901 will be placed full width on the travel lanes and the shoulders. The mixture used for item 404.017901 (T&L) shall be 19mm. No wedge joint will be allowed for this mix. Lanes must be matched up daily.
4. The following locations will require a full width, 3” depth micro mill a minimum of 1 week prior to paving. The micro milled surface will not be paved for a minimum of 5 days. The cost of this is to be included in the WMA items. No separate payment will be made.
 - a. RM 10-2503-1012 (+300’) (BIN 1007920) TO RM 10-2503-1015(+250’)
 - b. RM 10-2503-1064 to 1069
5. A Material Transfer Vehicle meeting the requirements of the MATERIAL TRANSFER VEHICLE (MTV) note shall be required for this site. The cost of this is to be included in the WMA items. No separate payment will be made.

SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)

4.8 2V2053 - Route 80 – Herkimer County Line to Fort Plain

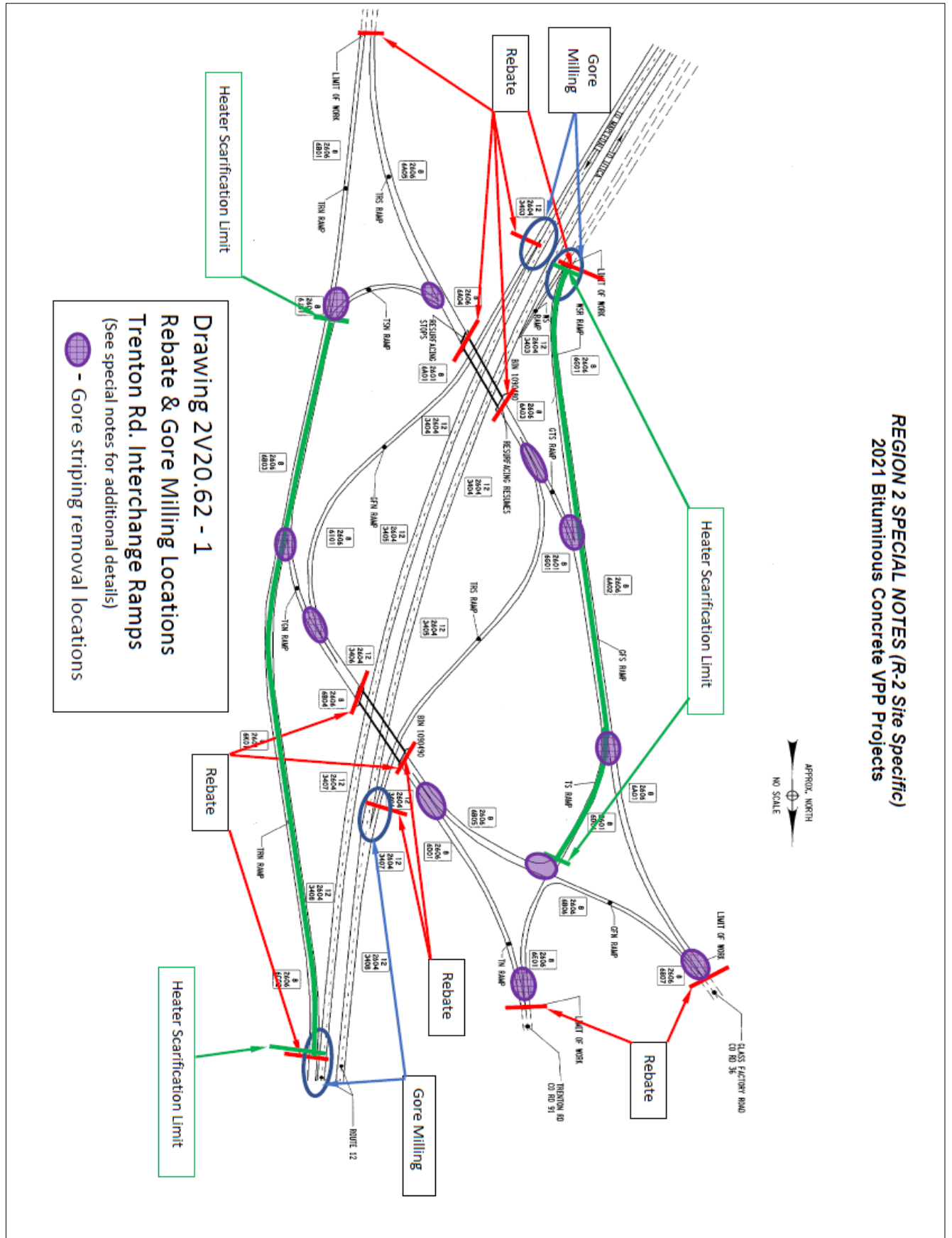
1. The “**HMA/WMA Mixture Evaluation Using Performance Testing**” Note shall apply to this site. Item 404.017901 will NOT require the IDT, SCB or CT Index testing. All other testing included in Table 4 of the note will apply to 404.017901. All mix including T&L will be paid at a QAF of 1.0 in accordance with the note.
2. This site will be cold in place recycled under a separate contract. This will require coordination between the awarded paving contractor under this contract and the recycling contractor. The overlay cannot be placed until the 10 Day CIPR cure period is complete.
3. Paving operations shall progress in the opposite direction of traffic.
4. Item 404.017901 will be placed full width on the travel lanes and the shoulders. The mixture used for item 404.017901 (T&L) shall be 19mm. No wedge joint will be allowed for this mix. Lanes must be matched up daily.
5. At the following locations the contractor shall mill the pavement full width (travel lanes and shoulders) at a 3” depth to maintain the existing gutter elevation. A minimum 75’ transition from 0” to 3” will be required to provide a smooth transition. The cost of this is to be included in the WMA items. No separate payment will be made.
 - a. RM 80-2506-1045 (approximately 250’)
 - b. RM 80-2506-1027 (approximately 125’ ML + 40’ Brookmans Corners Rd.). This gutter wraps around the radius at the SE corner of Brookmans Corners Rd. The milling shall include the mainline and intersection approximately 40’ beyond the edge of the mainline Rte. 80 shoulder.
 - c. RM 80-2506-1059-1062 (BIN 1030940 to Village of Fort Plain)
6. The following pull-off locations shall be paved with 1-1/2” T&L 404.017901 and 1-1/2” – Top Course - 404.096301. “80” series compaction may be used in these locations.
 - a. RM 80-2506-1001 NB – 19’ W x 150’ L
 - b. RM 80-2506-1009 NB – 19’ W x 306’ L
 - c. RM 80-2506-1048 NB – 25’ W x 115’ L
7. A Material Transfer Vehicle meeting the requirements of the MATERIAL TRANSFER VEHICLE (MTV) note shall be required for this site. The cost of this is to be included in the WMA items. No separate payment will be made.

SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)

4.9 2V2062 - Route 12 – Route 8 to Putnam Rd. and Trenton Rd. Ramps

1. The “HMA/WMA Mixture Evaluation Using Performance Testing” Note shall apply to this site. All mix will be paid at a QAF of 1.0 in accordance with the note.
2. This site will be Hot in Place Recycled (HIPR) under a separate contract. No paving can begin until the HIPR project is complete.
3. Item 404.058901 will be placed full width of the travel lanes and feathered 6’ onto the shoulders. Where the shoulders are 4’ or less the shim shall extend the full width of the shoulder.
4. The Trenton Rd. interchange limits of paving and rebate locations are in accordance with drawing number 2V20.62 - 1.
5. A **Material Transfer Vehicle** meeting the requirements of the **MATERIAL TRANSFER VEHICLE (MTV)** note shall be required for this site. The cost of this is to be included in the WMA items. No separate payment will be made.
6. The U-turn areas at RM 12-2604-3436, 3445 (+250), 3462 and 3468 (+100’) will be paved with 1-1/2” of item 404.068201.
7. The following gore areas (See drawing 2V20.62-1 on next page) will be micro milled 5 days prior to paving. The cost of this is to be included in the WMA items. No separate payment will be made.
 - a. Rte. 12 NB to Trenton Rd./Glass factory Rd. (@ 245’ long)
 - b. Trenton Rd. to Rte. 12 NB (@ 290’ long)
 - c. Rte. 12 SB to Trenton Rd. (@ 235’ long)
 - d. Glass Factory Rd. to Rte. 12SB (@ 110’ long)
8. The Resident Engineer will require all temporary long line markings matching the current configuration (yellow and white) to be installed daily upon completion of paving and before opening to traffic. Gore cross hatching will not be required.

REGION 2 SPECIAL NOTES (R-2 Site Specific)
2021 Bituminous Concrete VPP Projects



SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)

4.10 Material Transfer Vehicle (MTV) - Region 2

This note shall apply to the sites listed below.

2V2013 - Rte. 29 – Rte. 10A to Johnstown City Line

2V2014 - Rte. 29A and Rte. 10/29A Overlap – Gloversville to Pine Lake

2V2022 - Rte. 28 – Indian Lake to Warren County Line

2V2062 - Rte. 12 – Rte. 8 to Putnam Rd. and Trenton Rd. Ramps

2V20.52 - Rte. 10 – Schoharie County Line to Canajoharie

2V20.53 - Rte. 80 – Herkimer County Line to Fort Plain

The Contractor is required to use a self-propelled Material Transfer Vehicle (MTV) to transfer hot mix asphalt (HMA) from the hauling units to the paving equipment when placing HMA for mainline paving.

The MTV shall be specifically designed and constructed for the purpose of unloading delivery vehicles, storing and remixing HMA materials, and transferring materials to the paver. No substitutes such as pick-up machines will be allowed. The MTV shall have a storage bin and a conveyor system to deliver the HMA mixture to the paving equipment. In addition to the MTV, the HMA paver shall be equipped with a paver hopper insert. The paver hopper insert, or MTV shall have a remixing auger system capable of continuously blending the HMA to eliminate segregation in the finished mat. The combined minimum storage capacity of the MTV and paver hopper insert shall be 30 tons. The equipment shall be approved by the Engineer prior to commencement of paving.

Use of the MTV system for paving on bridge structures is not required. The MTV system shall not exceed maximum legal loadings when crossing structures.

An MTV will be required for all mixtures placed on mainline, mainline shoulders and all ramps. An MTV will not be required for parking areas, U-turn areas and sideline intersections.

Operation of the MTV shall be non-contact with the paver and controlled by an auto tracking mechanism which synchronizes the machine's forward speed with the paver. The MTV shall provide continuous flow of HMA to the paver during daily paving operations. If a discontinuous flow of HMA occurs or if excessive segregation is evident in the finished surface, paving shall be halted, and the Contractor must take necessary corrective actions prior to the resumption of paving.

Any water used on the MTV tires to prevent tack coat pickup shall be minimized. If water drips onto the unpaved/tacked surface, the water must be turned down or off.

General operation and cleaning restrictions of the MTV shall meet the requirements of Section 402 for Pavers.

The cost for the MTV and paver hopper insert shall be included under the appropriate hot/warm mix asphalt items.

SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)

4.11 HMA/WMA Mixture Evaluation Using Performance Testing – Region 2

This note shall apply to the sites listed below. All mixture placed will receive a QAF of 1.0 in accordance with the note.

2V2014 - Rte. 29A and Rte. 10/29A Overlap – Gloversville to Pine Lake

2V2042 - Rte. 13 – DeRuyter to Sheds

2V2053 - Rte. 80 – Herkimer County Line to Fort Plain

2V2062 - Rte. 12 – Rte. 8 to Putnam Rd. and Trenton Rd. Ramps

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.

Table 1 – Performance Testing Criteria

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

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.

SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)

4.11 HMA/WMA Mixture Evaluation Using Performance Testing – Region 2 (Cont'd)

The Regional Materials Engineer (RME) may request raw aggregate and liquid asphalt binder as a substitute to plant-produced mixture.

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

At the Plant		High Temperature IDT	IDEAL CT index	SCB Flexibility Index
Test Method		ASTM D6931-17 NCHRP 9-33 Report	ASTM D8225-19	AASHTO TP 124-18
No. of Samples		3	3	3 min
Load Rate (mm/min)		50±5	50±2	50±2
Height (mm)		80±5	<= 19 mm NAS = 62±1 >=25 mm NAS = 95±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
HMA Compaction Temperature, °C		V Grade = 149°C ± 3°C E Grade = 163°C ± 3°C	V Grade = 149°C ± 3°C E Grade = 163°C ± 3°C	V Grade = 149°C ± 3°C E Grade = 163°C ± 3°C
WMA Compaction Temperature, °C		V Grade = 132°C ± 3°C E Grade = 146°C ± 3°C	V Grade = 132°C ± 3°C E Grade = 146°C ± 3°C	V Grade = 132°C ± 3°C E Grade = 146°C ± 3°C
Air Voids, %		7 ± 0.5	7 ± 0.5	7 ± 0.5
Test Temperature, °C		44°C ± 1.0	25°C ± 1.0	25°C ± 1.0
Conditioning		44°C for 2 hrs ± 10 min.	25°C for 2 hrs ± 10 min.	25°C for 2 hrs ± 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:

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

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.

SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)

4.11 HMA/WMA Mixture Evaluation Using Performance Testing – Region 2 (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.

Table 3 - Testing and Sampling Table

Plant Test Property	Test Method	Producer Testing Frequency ¹	Department Testing Frequency ²
PG Binder Content	Automation, Ignition Oven (NY 400-13C), or AASHTO T 164 Method A or B	One per subplot	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

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.

SECTION 4: PROJECTS - SPECIAL NOTES (NYSDOT REGION 2)

4.11 HMA/WMA Mixture Evaluation Using Performance Testing – Region 2 (Cont'd)

Mixture Production

HMA Mixture requirements are as follows:

Table 4 - Mixture Gradation, Absolute Difference Value

Limits (Test Value – JMF Value)	Sieve Sizes		
	#50 and Larger (300 µm and Larger)	#100 (150 µm)	#200 (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.

SECTION 5: PROJECTS - SPECIAL NOTES (NYSDOT REGION 3)

5.1 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 Tuesday, January 4, 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	Limits	Holiday/Event
I-690	All	Syracuse Nationals
Routes 297, 931B (State Fair Blvd), 695, 5 Bypass	All	
I-81	I-90 (exit 25A) to I-690	
All state roadways	Onondaga County (pavement markings work only)	
Route 481	Oswego County	Oswego Harborfest
Route 104	West Oswego County to I-81	
Routes 104A, 104B, 3	All	
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	

SECTION 5: PROJECTS - SPECIAL NOTES (NYSDOT REGION 3)

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

Construction activities that will result in temporary lane/shoulder closures on the above-mentioned 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 Special Event	Falls on		Temporary lane closures are NOT allowed from
	Days	Date	
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

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.

2021 ADDITIONAL RESTRICTIONS FOR OTHER HOLIDAYS AND/OR SPECIAL EVENTS

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

Onondaga County Projects 360417 and 360418: Routes 20 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.

SECTION 5: PROJECTS - SPECIAL NOTES (NYSDOT REGION 3)

5.2 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 FOLLOW ME	G20-4 CONVENTIONAL 36"x 18"	ON BACK OF PILOT VEHICLES

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

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

5.3 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 milling side road intersections 1.5" depth and provide paving 25 ft beyond the edge of mainline shoulders, the contractor shall pave all milled intersections under the pay item for top course HMA.

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.

SECTION 5: PROJECTS - SPECIAL NOTES (NYSDOT REGION 3)

5.4 Project 360415 – Route 90 – Cayuga County

The majority of this project will be heater scarified prior to paving with 1-1/2" HMA. The paving contractor will need 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 in the Hamlet of Genoa RM 1155 to RM 1161 and the Hamlet of King Ferry RM 1198 to RM 1200 or as ordered by the Engineer. The production cold milling includes milling an estimated 15,000 square yards at a milling depth of 1.5". The Paving contractor shall coordinate their paving schedule with the 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 clean until paving. The contractor will also 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 contemporaneous with 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. The contractor shall mill all intersections that will be paved. Production cold milling and intersection milling shall be included in the bid cost of the top course HMA.

The paving contractor shall be responsible to 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 HMA.

SECTION 5: PROJECTS - SPECIAL NOTES (NYSDOT REGION 3)

5.5 Project 360416 – Route 13 – Tompkins and Cortland Counties

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

The paving contractor shall be responsible to 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 HMA.

SECTION 5: PROJECTS - SPECIAL NOTES (NYSDOT REGION 3)

5.6 Project 360417 – Route 20 – 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 the Lafayette Town Line RM 1230 to the Madison County Line RM 1316. The production cold milling includes milling an estimated 242,000 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. The contractor shall mill all intersections that will be paved. Production cold milling and intersection milling shall be included in the bid cost of the top course HMA.

The paving contractor shall be responsible to 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 HMA.

SECTION 5: PROJECTS - SPECIAL NOTES (NYSDOT REGION 3)

5.7 Project 360418 – 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 E. Oneida St. (RM 1143) to the Belgium bridge (RM 1166). The production cold milling includes milling an estimated 90,000 square yards at a milling depth of 2.25". 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. The contractor shall mill all intersections that will be paved. Production cold milling and intersection milling shall be included in the bid cost of the top course HMA.

The paving contractor shall be responsible to 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 2.25".

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 HMA.

SECTION 5: PROJECTS - SPECIAL NOTES (NYSDOT REGION 3)

5.8 Project 360419 – Route 3 – Oswego County

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

SECTION 6: PROJECTS - SPECIAL NOTES (NYSDOT REGION 4)

6.1 Special Note – Region 4 Projects

1. Local fire, police, ambulance, and school authorities shall be notified by the Contractor prior to commencing work in order to maintain sufficient emergency services and to allow school officials sufficient time to plan alternative bus routes, if necessary.
2. Prior to the start of work, the contractor shall inventory all pavement markings and provide the engineer with a copy of the inventory. As part of a pavement marking program update, the Regional Traffic and Safety group is reviewing all pavement markings within the limits of paving projects. Upon their review, there may need to be adjustments to the pavement marking layout. The contractor shall be responsible for completing striping layout, including changes as indicated by the Regional Traffic and Safety Group.
3. The contractor shall remove any plowable reflective markers in the pavement, if present, prior to paving. The hole left in the existing pavement, shall then be filled with a hot mix asphalt material; 9.5 mixture, or mixture approved by the Resident Engineer. Cost to be included in the bid price for the associated project.
4. Contractor shall use non-vibratory rolling over culverts or known utilities within the project limits or as ordered by the engineer in charge. Specific locations for non-vibratory rolling will be discussed at the pre-pave meeting.
5. Some projects may require loop detectors to be re-established prior to or once paving has been completed. This will be done by others and coordinated by the Resident Engineer.
6. The installation of temporary rumble strips at the beginning of each project work zone shall be at the discretion of the engineer.
7. Any and all debris generated as part of the work shall be removed by the contractor within five days of completion paving operations.

SECTION 6: PROJECTS - SPECIAL NOTES (NYSDOT REGION 4)

6.2 Special Note – Temporary Lane/Shoulder Closure Restrictions for Major Holidays-Region 4

There shall be no temporary lane/shoulder closures on roadway facilities owned and/or maintained by NYSDOT on the major holidays listed below.

Construction activities that will result in temporary lane/shoulder closures shall be suspended to minimize travel delays associated with road work for major holidays as follows:

HOLIDAY	FALLS ON	TEMPORARY LANE CLOSURES ARE NOT ALLOWED DURING THE FOLLOWING TIMES
	Sunday or Monday	From 6:00 AM on the Friday before the holiday to 6:00 AM on the Tuesday after the holiday
New Year's Day	Tuesday	From 6:00 AM on the Saturday before the holiday to 6:00 AM on the Wednesday after the holiday.
Independence Day	Wednesday	From 6:00 AM on the Tuesday before the holiday to 6:00 AM on the Thursday after the holiday
Christmas Day	Thursday	From 6:00 AM on the Thursday before the holiday to 6:00 AM on the Monday after the holiday
	Friday or Saturday	From 6:00 AM on the Thursday before the holiday to 6:00 AM on the Monday after the holiday
Memorial Day Labor Day	Monday	From 6:00 AM on the Friday before the holiday to 6:00 AM on the Tuesday after the holiday
Thanksgiving Day	Thursday	From 6:00 AM on the Wednesday before the holiday to 6:00 AM on the Monday after the holiday

Exceptions can only be made under the following conditions:

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

Note: The Department reserves the right to cancel any work operations, including lane closures and/or total road closures, that would create traffic delays by unforeseen events. The Contractor would be notified at least seven (7) calendar days prior to the proposed work.

SECTION 6: PROJECTS - SPECIAL NOTES (NYSDOT REGION 4)

6.3 Project 410498 – Route 104A – Route 104 to Cayuga CL – Wayne County

1. This project is a hot-in-place recycling (heater scarification) with single course overlay. The overlay will be applied to the full pavement width, from curb to curb, including travel lanes, parking lanes, and shoulders.
2. The Contractor will be required to cut terminus and side street **rebates, clean the surface, inventory existing pavement marking, place production and miscellaneous (side street apron) HMA**, temporary and long line (paint) **pavement markings, CARDS installation**, and associated **Work Zone Traffic Control shall be included in the bid price for the overlay item**. Heater scarification, curb milling, shoulder backup, and special pavement markings will be completed by others. Coordination will be required between the Contractor and NYSDOT to schedule work operations.

Side street apron / offset from existing edge of pavement:

- a. None
3. WZTC typicals are expected to be 619-60 – Single lane closure with flagging and 619-61 – intersection flagging.
4. Time Restrictions:
 - a. Major Holiday Lane Restriction Special Note applies to this project.
 - b. No flagging restrictions
5. At the commencement of HMA placement, the Contractor's paver shall remain onsite until final demobilization.
6. HMA series specifications shall be 50 gyrations.
7. The Contractor is advised that approximately 3.6 miles of Centerline Audible Roadway Delineators (CARDS) exist within the proposed project limits on NYS Rte. 104A. The Contractor is required to record the existing locations of CARDS and re-establish them, after the completion of the overlay, in accordance with Item 649.11 and NYS Standard Sheet 649-03. The cost of all associated work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid price of the overlay Item.

SECTION 6: PROJECTS - SPECIAL NOTES (NYSDOT REGION 4)

6.4 Project 409856 – Route 98 – US 20 to City of Batavia, South City Boundary – Genesee County

1. This project is a hot-in-place recycling (heater scarification) with single course overlay. The overlay will be applied to the full pavement width, from gutter to gutter, including travel lanes and shoulders.
2. The Contractor will be required to cut terminus and side street **rebates, clean the surface, inventory existing pavement markings, place production and miscellaneous (side street apron) HMA, temporary and long line (paint) pavement markings, CARDS installation, and associated Work Zone Traffic Control shall be included in the bid price for the overlay item.** Heater scarification, gutter, bridge underpass, and Village of Alexander milling, shoulder backup, and special pavement markings will be completed by others. Coordination will be required between the Contractor and NYSDOT to schedule work operations.
Side street apron / offset from existing edge of pavement:
 - a. Railroad Ave. / 44'
 - b. Buffalo St. / 50'
 - c. Sprague Rd. / 49'
 - d. Peaviner Rd. / 72'
3. The Contractor shall coordinate their work so as not to conflict with other projects occurring within or abutting the contract limits. This includes but is not limited to any work by other contractors, utility companies, municipalities or maintenance operations. It is expected that the following projects will be under construction during construction of this contract:
 - a. A Watermain permit installation will mill and overlay Rt. 98 **Northbound**, from Alexander Elementary School Service Road to Rt. 20. **Contractor shall resurface 98 Southbound** milled surface within the permit limits.
4. WZTC typicals are expected to be 619-60 – Single lane closure with flagging, 619-61 – intersection flagging, and 619-30 - Single Lane Closure Multi lane Highway.
5. Time Restrictions:
 - a) Major Holiday Lane Restriction Special Note applies to this project.
 - b) No Flagging Restrictions
6. At the commencement of HMA placement, the Contractor's paver shall remain onsite until final demobilization.
7. HMA series specifications shall be 50 gyrations.
8. The Contractor is advised that approximately 6.4 miles of Centerline Audible Roadway Delineators (CARDS) exist within the proposed project limits on NYS Rte. 98. The Contractor is required to record the existing locations of CARDS and re-establish them, after the completion of the overlay, in accordance with Item 649.11 and NYS Standard Sheet 649-03. The cost of all associated work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid price of the overlay Item.
9. ROUTE 98 IS A BYPASS ROUTE TO DARIEN LAKE AMPHITHEATER. ALL OPERATIONS UNDER THIS PROJECT SHALL BE REMOVED FROM PAVEMENT OF RTE. 98 BY 15:00, ON DATES DARIEN LAKE THEME PARK HAS SPECIAL EVENTS. CONTRACTOR SHALL CONTACT PETE RIEDY, REGIONAL OPERATIONS MANAGER, UPSTATE NY DARIEN LAKE AMPHITHEATER AT 716- 428-5932, Ex. 29532, peterriedy@livenation.com FOR AN UPDATED SPECIAL EVENT SCHEDULE.

Contractor shall adhere to the provisions of the COVID-19 Guidance for NYSDOT Construction Projects, Memo from Wahid Albert, Chief Engineer, Dated March 19, 2020.

SECTION 6: PROJECTS - SPECIAL NOTES (NYSDOT REGION 4)

6.5 Project 409855 – Route 98 – US 20A to Route 354 – Wyoming County

1. This project is a 1.5” HMA mill and inlay project. HMA inlay will include travel lanes and shoulders.
2. The Contractor will be required to **clean** milled surface, **inventory existing pavement markings**, place **production and miscellaneous (side street apron) HMA**, temporary and long line (paint) **pavement markings**, **CARDs installation**, and associated **Work Zone Traffic Control shall be included in the bid price for the overlay item**. Milling, shoulder backup, and special pavement markings will be completed by others. Coordination will be required between the Contractor and NYSDOT to schedule work operations.
3. Time Restrictions:
 - a) Major Holiday Lane Restriction Special Note applies to this project.
 - b) No Flagging Restrictions
4. At the commencement of HMA placement, the Contractor’s paver shall remain onsite until final demobilization.
5. HMA series specifications shall be 50 gyrations.
6. The Contractor is advised that approximately 6.7 miles of Centerline Audible Roadway Delineators (CARDs) exist within the proposed project limits on NYS Rte. 98. The Contractor is required to record the existing locations of CARDs and re-establish them, after the completion of the overlay, in accordance with Item 649.11 and NYS Standard Sheet 649-03. The cost of all associated work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid price of the overlay Item.

SECTION 6: PROJECTS - SPECIAL NOTES (NYSDOT REGION 4)

6.6 Project 409674 – Route 96 – Village of Phelps to Village of Manchester – Ontario County

1. This project is hot-in-place recycling (heater scarification) with single coarse overlay. The overlay will be applied to the full pavement width, from gutter to gutter, including travel lanes and shoulders.
2. The Contractor will be required to cut terminus and side street **rebates, clean the surface, inventory existing pavement markings, place production and miscellaneous (side street apron) HMA, temporary and long line (paint) pavement markings, CARDS installation, and associated Work Zone Traffic Control shall be included in the bid price for the overlay item.** Heater scarification, gutter and bridge underpass milling, shoulder backup, and special pavement markings will be completed by others. Coordination will be required between the Contractor and NYSDOT to schedule work operations.
Side street apron / offset from existing edge of pavement:
 - a. CR13 (E. Main St.) / 22'
 - b. Bankert Rd. / 51'
 - c. Kendall St. (south) / 31' or AOB to capture signal loops
 - d. Kendall St. (north) / 32' or AOB to capture signal loops
 - e. Brown Rd. / 32'
 - f. Springbrook Mhp / 14'
 - g. Fall Brook Cir / 8'
 - h. CR7 (south) / 60' or AOB to capture signal loops
 - i. CR7 (north) / 60' or AOB to capture signal loops
 - j. North Ave. / 16'
3. This project will require coordination with signal loop detectors at the CR7, Kendall St., and Rt. 488 intersections. Signal loop detector installation will be done by others and will be coordinated by the Resident Engineer or designee.
4. WZTC typicals are expected to be 619-60 – Single lane closure with flagging and 619-61 – intersection flagging.
5. Time Restrictions:
 - a) Major Holiday Lane Restriction Special Note applies to this project.
 - b) Flagging prohibited 7-8am and 3-6pm
6. At the commencement of HMA placement, the Contractor's paver shall remain onsite until final demobilization.
7. HMA series specifications shall be 50 gyrations.
8. The Contractor is advised that approximately 7.4 miles of Centerline Audible Roadway Delineators (CARDS) exist within the proposed project limits on NYS Rte. 96. The Contractor is required to record the existing locations of CARDS and re-establish them, after the completion of the overlay, in accordance with Item 649.11 and NYS Standard Sheet 649-03. The cost of all associated work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid price of the overlay item.
9. The Contractor shall coordinate their work so as not to conflict with other projects occurring within or abutting the contract limits. This includes but is not limited to any work by other contractors, utility companies, municipalities or maintenance operations. It is expected that the following projects will be under construction during construction of this contract:
 - PIN 4096.74 – Heater Scarification from Phelps to Manchester
 - PIN 4934.02 – RR/Rt. 96, Intersection at Grade Reconstruction (50' from nearest rail)

SECTION 6: PROJECTS - SPECIAL NOTES (NYSDOT REGION 4)

6.7 Project 423712 – Route 237 – Genesee CL to Village of Holly – Orleans County

1. This project is a hot-in-place recycling (heater scarification) with single course overlay. The overlay will be applied to the full pavement width, from gutter to gutter, including travel lanes and shoulders.
2. The Contractor will be required to cut terminus and side street **rebates, clean the surface, inventory existing pavement markings, place production and miscellaneous (side street apron) HMA**, temporary and long line (paint) **pavement markings, CARDS installation, and associated Work Zone Traffic Control shall be included in the bid price for the overlay item**. Heater scarification, milling in curb areas, shoulder backup, and special pavement markings will be completed by others. Coordination will be required between the Contractor and NYSDOT to schedule work operations.

Side street apron / offset from existing edge of pavement:

- a. None
3. WZTC typicals are expected to be 619-60 – Single lane closure with flagging and 619-61 – intersection flagging.
4. Time Restrictions:
 - a) Major Holiday Lane Restriction Special Note applies to this project.
 - b) RM 1042 – 1044, Flagging prohibited from 6-8am and 4-6pm
5. At the commencement of HMA placement, the Contractor's paver shall remain onsite until final demobilization.
6. HMA series specifications shall be 50 gyrations.
7. The Contractor is advised that approximately 6.44 miles of Centerline Audible Roadway Delineators (CARDS) exist within the proposed project limits on NYS Rte. 237. The Contractor is required to record the existing locations of CARDS and re-establish them, after the completion of the overlay, in accordance with Item 649.11 and NYS Standard Sheet 649-03. The cost of all associated work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid price of the overlay item.
8. The contractor will coordinate with the Rt 237 maintenance paving project in the Village of Holley, PIN 4237.10.
9. Contractor shall adhere to the provisions of the COVID-19 Guidance for NYSDOT Construction Projects, Memo from Wahid Albert, Chief Engineer, Dated March 19,2020.

SECTION 7: PROJECTS - SPECIAL NOTES (NYSDOT REGION 5)

7.1 General Special Note – Region 5 Projects

The paving operations shall be progressed in a segment by segment basis. No longitudinal paving joints shall be allowed at the end of the workday. The segments shall be based on the Contractor's daily work capacity and shall not end within an intersection.

7.2 Effective PG Binder Content – Region 5 Projects

9.5 HMA Mixture Design:

The mixture design shall be formulated in accordance with Materials Method 5.16. Additionally, the mixture shall meet the minimum effective asphalt, P_{be} , in the table below. The P_{be} shall be calculated using the specific gravities of aggregates tested within 14 days prior to production.

Minimum Effective AC	
Aggregate SG, G_{sb}	P_{be}
2.250 to 2.274	6.2
2.275 to 2.324	6.1
2.325 to 2.374	6.0
2.375 to 2.424	5.9
2.425 to 2.474	5.8
2.475 to 2.524	5.7
2.525 to 2.574	5.6
2.575 to 2.624	5.5
2.625 to 2.674	5.4
2.675 to 2.724	5.3
2.725 to 2.774	5.2
2.775 to 2.824	5.1
2.825 to 2.874	5.0
2.875 to 2.924	4.9
2.925 to 2.974	4.8
2.975 to 3.024	4.7
3.025 to 3.074	4.6

Mixture Production:

- At no point, shall the mixture be produced below the design asphalt content with a production tolerance of 0.1%. If the design asphalt content falls below the allowable target, the subplot will be given a QAF of 1.00 or less, and necessary changes shall be made to the production to meet the target.
- The effective asphalt shall be calculated for every subplot during production. If the effective asphalt falls below the minimum, the subplot will be given a QAF of 1.00 or less.

SECTION 7: PROJECTS - SPECIAL NOTES (NYSDOT REGION 5)

7.3 Moisture Susceptibility Testing – Region 5 Projects

The Contractor will be required to submit to the Regional Material Engineer (RME) AASHTO T-283 moisture susceptibility test results prior to production of HMA Top Course. The results shall be a minimum Tensile Strength Ratio (TSR) of 80%. If the asphalt binder source is changed after being tested for moisture susceptibility, the mixture may require testing again at the RME's discretion. The NYSDOT may sample and test the above mixture during production to verify the moisture susceptibility requirement is met. If the results do not meet the production requirement (minimum TSR of 80%), the producer will need to take corrective action. If during production, the TSR test results fall below 70%, the RME will immediately suspend production for this project according to Section 105, Control of Work, and Section 106, Control of Material, of the Standard Specifications.

7.4 Dust (Minus 0.075 mm Aggregate) to Effective PG Binder Content Ratio – Region 5 Projects

In addition to AASHTO T283 testing, the NYSDOT will verify the Contractor's Dust (Minus 0.075 mm Aggregate) to Effective PG Binder Content Ratio during production. The minus 0.075 mm material will be determined using washed aggregate analysis and the ratio result shall be within the limits of 0.8 to 1.6.

7.5 Polymer Modified PG Binder – Region 5 Projects

All Region 5 Projects require the use of Polymer Modified (64V-22) PG Binder.

7.6 Pavement Markings – Region 5 Projects

It shall be the contractor's responsibility to inventory and document the existing pavement marking patterns prior to milling and/or resurfacing and submit to the Engineer a copy of the inventory prior to beginning work. The contractor shall also document the existing lane widths and shoulder widths of the pavement marking patterns. The contractor shall be responsible for completing all layout work necessary for the installation of all final pavement markings. If the original markings are obliterated, the contractor shall contact the Resident Engineer for guidance on their location.

7.7 Abrading Existing Pre-Formed & Epoxy Pavement Markings – Region 5 Projects

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. Waste material generated by the abrading operation shall be cleaned up and disposed of by the contractor. When the contractor abrades the existing pre-formed and epoxy pavement markings, the contractor shall place temporary pavement markings as specified elsewhere in this Invitation for Bids under Work Zone Traffic Control, unless the HMA will be placed the same day as the markings are abraded. 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 this Invitation for Bids. Payment for abrading shall be included in the price bid per ton for the HMA. No separate payment shall be made.

SECTION 7: PROJECTS - SPECIAL NOTES (NYSDOT REGION 5)

7.8 Milled Surfaces – Region 5 Projects

State Forces will perform initial sweeping of milled surface. It is the Contractor's responsibility 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.

7.9 Time Restrictions – Region 5 Projects

All Region 5 Projects shall follow the time restrictions outlined in the "Work Zone Traffic Control - for Design/Construction on State Highways in Region 5" available on the NYSDOT website or through the Regional Transportation Systems Operations group.

SECTION 7: PROJECTS - SPECIAL NOTES (NYSDOT REGION 5)

7.10 Project 5V2111 – Cattaraugus County

The traveled way, shoulders, and center median turning lanes, when present, will be production milled at full width prior to HMA overlay. This project will begin at north joint of BIN 1011790 over Elton Creek and ends at the south joint of BIN 1011810 over Cattaraugus Creek.

SECTION 7: PROJECTS - SPECIAL NOTES (NYSDOT REGION 5)

7.11 Project 5V2112 – Cattaraugus County

The traveled way, shoulders, and center median turning lanes, when present, will be production milled at full width prior to HMA overlay. This project will begin at Rte. 98 (RM 16 5101 3210) and ends at the pavement joint near to RM 16 5101 3278. This will require coordination between the awarded paving contractor under this contract and the milling contractor, in order to minimize time between milling and paving.

The Contractor is advised that Centerline Audible Roadway Delineators (CARDS) shall be installed from RM 16-5101-3210 to RM 16-5101-3278. As part of this contract, the contractor is required to install the CARDS, in accordance with Item 649.11 and NYS Standard Sheet 649-03. The cost of all associated work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid price per ton of HMA.

SECTION 7: PROJECTS - SPECIAL NOTES (NYSDOT REGION 5)

7.12 Project 5V2121 – Chautauqua County

This project will begin at the PA Line (RM20 5201 1000) and ends at the west bridge joint of BIN 1015370 (RM 20 5201 1108).

The traveled way, shoulders, and center median turning lanes, when present, will be production milled at full width prior to the HMA overlay through the following three sections:

- From Loomis St. (RM 20 5201 1025 to Wiley St. (RM 20 5201 1074) in the Town of Ripley
- From RM 20 5201 1060 to RM 20 5201 1074 in Forsyth
- From the Westfield Village line (RM 20 5201 1100) to the west joint of BIN 1015370 (RM 20 5201 1108) in the Village of Westfield

The remainder of the project will be paved without milling. These sections are listed below:

- From the PA Line (RM 20 52011000) to Loomis St. (RM 20 52011025)
- From Wiley St. (RM 20 52011060) to RM 20 52011060
- From RM 20 52011074 to the Westfield Village line (RM 2052011100)

SECTION 7: PROJECTS - SPECIAL NOTES (NYSDOT REGION 5)

7.13 Project 5V2131 – Erie County

The traveled way, shoulders, and center median turning lanes, when present, will be production milled at full width prior to HMA overlay. This project will begin at NY Route 270 and ends at NY Route 78.

In addition to the main line there will be minor intersection paving at Dodge Rd up to the stop bar, North French Rd up to the entire crosswalk width, I-990 Southbound on ramp up to the concrete pavement, and New Rd up to the entire crosswalk width.

Contractor shall be required to tandem pave the roadway.

SECTION 7: PROJECTS - SPECIAL NOTES (NYSDOT REGION 5)

7.14 Project 5V2141 – Erie County

The traveled way, shoulders, and center median turning lanes, when present, will be production milled at full width prior to HMA overlay. This project will begin at the existing pavement joint at the East Aurora East Village Line where the center turn lane starts and ends at the existing pavement joint just east of the Erie/Wyoming County Line.

The Contractor is advised that Centerline Audible Roadway Delineators (CARDS) exist along the project corridor which will be removed with the milling operation. As part of this contract, the contractor is required to install new CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03 from RM 20A-5301-1120 to 1147 and RM 20A-5301-1152 to 1183. The cost of all associated work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid price per ton of HMA.

SECTION 7: PROJECTS - SPECIAL NOTES (NYSDOT REGION 5)

7.15 Project 5V2151 – Niagara County

The traveled way, shoulders, and center median turning lanes, when present, will be production milled at full width prior to HMA overlay. This project will begin at the existing pavement joint at the Niagara Fall East City Line where the concrete bridge pavement starts and ends at Packard Rd.

SECTION 7: PROJECTS - SPECIAL NOTES (NYSDOT REGION 5)

7.16 Project 5V2152 – Niagara County

This Project is a mill and overlay job, but milling will be done by a separate contract.

In addition to the main line there will be minor intersection paving up to the side street curb radii at the intersection of:

- Connecting Blvd approx. 35' from the eastern pavement edge
- Crescent Dr approx. 20' from the eastern pavement edge
- Arnold Dr approx. 22' from the western pavement edge
- Old Falls Blvd approx. 38' from the western pavement edge
- Pierce Ave. approx. 27' from the western pavement edge
- NY 425 approx. 88' from the western pavement edge
- NY 425 approx. 30' from the eastern pavement edge
- Kingston Ave approx. 30' from the western pavement edge
- Melody Ln approx. 33' from the western pavement edge
- Ohio St approx. 20' from the western pavement edge
- Ruie Rd approx. 61' from the western pavement edge
- Klemer Rd approx. 20' from the eastern pavement edge
- Forbes St approx. 67' from the western pavement edge

A railroad crossing at RM 62-5404-2003 (NY 425) will require coordination with the railroad owner, in this case CSX.

SECTION 7: PROJECTS - SPECIAL NOTES (NYSDOT REGION 5)

7.17 Project 5V2153 – Niagara County

The traveled way, shoulders, and center median turning lanes, when present, will be HMA overlay full width. This project will begin at the existing pavement joint at the southern pavement edge projection of Stone Rd and ends at the northern pavement edge projection of Upper Mountain Rd.

In addition to the main line there will be minor intersection paving at Shunpike Rd approx. 21' from the eastern pavement edge and approx. 30' from the western pavement edge.

The roadway will be micro-milled by a separate contract under the Lower Mountain Road Bridge (BIN 3034720) prior to the 1" overlay. Contractor shall verify clearance height under the bridge prior to the micro-mill and after paving to ensure that the clearance is not less than what currently exists.

The Contractor is advised that Centerline Audible Roadway Delineators (CARDS) shall be installed from RM 93-5401-1160 to RM 93-5401-1189. As part of this contract, the contractor is required to install the CARDS in accordance with Item 649.11 and NYS Standard Sheet 649-03. The cost of all associated work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid price per ton of HMA.

SECTION 8: PROJECTS - SPECIAL NOTES (NYSDOT REGION 6)

8.1 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 4th 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 Gary.Shepard@dot.ny.gov 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.

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

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

The following projects shall be completed no later than September 1, 2021: 6V2016 and 6V2112.

All other Region 6 HMA projects shall be completed no later than October 31, 2020. A schedule reflecting this shall be submitted before start of work to the Region’s ARDO and Gary Shepard, for approval.

SECTION 8: PROJECTS - SPECIAL NOTES (NYSDOT REGION 6)

8.1 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
6V2016	BIN 1012390	17-6103-1034
6V2046	BIN 1011370	15-6401-1385
	BIN 1011390	15-6401-1400
6V2047	BIN 1012600	17-6404-1166
	BIN 1012610	17-6401-1192
6V2112	BIN 1012410	17-6103-1104+200'

SECTION 8: PROJECTS - SPECIAL NOTES (NYSDOT REGION 6)

8.2 Project 6V2016 –Allegany County

The following intersections shall be rebated as noted and then paved to these rebates.

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

Street Name	Rebate from Centerline(feet)	Roadway Width(feet)
High Street	36	20
Low Street	32	30
Powerhouse Rd	40	35
BIN 1012390	2 @ 45'	
Sanford Hollow	35	35
Streeter Brook	50	24
Willow Brook	44	26
Wells Rd East	32	20
CR 5	45	30
CR 5C	45	45
Coyle Rd	35	45
Horse Run	35	30
Refinery Rd	45	20
RM 1085	Standard Sheet 402-01	

This site will be Hot in Place Recycled (HIPR) under a separate contract. No paving can begin until the HIPR is complete.

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 25 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.

SECTION 8: PROJECTS - SPECIAL NOTES (NYSDOT REGION 6)

8.3 Project 6V2046 – Steuben County

The HMA will only take place between:

RM 15-6401-1339 to RM 15-6401- 1352,

RM 15-6401- 1357 to RM 15-6401-1380 and,

RM 15-6401-1385 to RM 15-6401-1400.

SECTION 8: PROJECTS - SPECIAL NOTES (NYSDOT REGION 6)

8.4 Project 6V2112 – Allegany County

The following intersections shall be rebated as noted and then paved to these rebates.

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

Street Name	Rebate from CL (feet)	Width (feet)
BIN 1012410		45
Kossuth Rd (Olive St)	47	32
Kossuth Rd	30	49
Phillips Hill Rd	49	28
Old State Rd (Western)	61	21
Old State Rd	41	17
Homestead Rd (Western)	38	41
Homestead Rd	45	31
RM 1142	Standard Sheet 402-01	

This site will be Hot in Place Recycled (HIPR) under a separate contract. No paving can begin until the HIPR is complete.

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.

SECTION 8: PROJECTS - SPECIAL NOTES (NYSDOT REGION 6)

8.5 Project 6V2132 – Schuyler County

BIN 1010230 (MM 13-6302-1012 +200') will receive a waterproof membrane prior to paving. Purchase and installation of the waterproof membrane will be performed under a separate contract. This will require coordination between the awarded paving contractor under this contract and Region 6 Bridge Maintenance in order to minimize the time taken.

SECTION 8: PROJECTS - SPECIAL NOTES (NYSDOT REGION 6)

8.6 Project 6V2241 – Steuben County

BIN's 1016390, 1079590, and 1016400 will receive a waterproof membrane prior to paving. Purchase and installation of the waterproof membrane will be performed under a separate contract. This will require coordination between the awarded paving contractor under this contract and Region 6 Bridge Maintenance in order to minimize the time taken.

SECTION 9: PROJECTS - SPECIAL NOTES (NYSDOT REGION 7)

The following Special Notes for Region 7 Projects shall supersede any other sections of this Award or the Standard Specifications referenced herein.

9.1 Special Work Zone Traffic Control – Pilot Vehicle – Region 7 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 HMA is applied and rolled, controlled traffic may be permitted thereon. For Region 7 VPP projects in this solicitation, 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 G20-4 “PILOT CAR FOLLOW ME” signs meeting the requirements of Sections 6F.58 and 6C.13 of the Manual on Uniform Traffic Control Devices. The delineation of the closed lane (cone placement) as required by Section 619-3.02J of the Standard Specifications shall be evaluated by the Resident Engineer based on the traffic control plan presented by the Contractor and, after consultation with the Regional Traffic Safety & Mobility Office, a determination will be made as to what will be required on the project. **Daytime lane closures may be used in lieu of pilot vehicles on controlled access highways as deemed appropriate by the Resident Engineer at the time of preconstruction meeting.**

SIGN	MINIMUM SIZE	LOCATION
PILOT VEHICLE FOLLOW ME	G20-4 CONVENTIONAL 36”x 18”	ON BACK OF PILOT VEHICLES

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

All cost for Work Zone Traffic Control including flagging, temporary pavement markings, channelizing devices, construction signs, and pilot vehicles shall be included in the prices per ton for the bituminous concrete. No separate payment shall be made.

9.2 Project 7V2113 – Vibratory Compaction Restrictions within the Village/City Limits

Due to the age and proximity of the existing buildings and underground facilities, **no vibratory compaction will be allowed for project 7V2113 (Clinton County) within the village/city limits.**

Oscillation Compaction will be allowed for this project. The Contractor must demonstrate to the Resident Engineer that the proposed roller(s) will compact with a lateral drum movement and meet the requirements of 402-3.07 Compaction.

9.3 Additional Paving Areas/Parking Areas/Cross Overs/Snow Plow Turnarounds – Region 7 Projects

The following location shall be included in the paving limits for the respective project:

7V2111 (Clinton County) – Interstate Cross Overs - RM 87I 7105 1300, 1318 & 1319

7V2153 (St Lawrence County) – Project End On/Off Ramps with Route 37

7V2154 (St Lawrence County) – Snow Plow Turnarounds at Project End (Franklin County Line)

7V2155 (St Lawrence County) – Parking Area at RM 3 7504 1142

SECTION 9: PROJECTS - SPECIAL NOTES (NYSDOT REGION 7)

9.4 Projects 7V2131 & 7V2143 – Non-Tracking Tack Coat

This note applies to following projects:

7V2131 (Jefferson County)

7V2143 (Lewis County)

This project will require the substitution of Non-Tracking Tack Coat for Diluted Tack Coat, Item 407.0102. The work will consist of preparing and treating the pavement surface with non-tracking tack coat in accordance with the Contract documents and as directed by the Engineer.

Non-Tracking Tack Coat emulsion shall meet the requirements below:

Saybolt Furol Viscosity @ 77 deg F	AASHTO T 59	100 max
Residue by Distillation	AASHTO T 59	50 min
Oil Distillate, Volume of Total	AASHTO T 59	2 max
Penetration on Residue from Distillation @ 77 deg F,		
100 g, 5 sec	AASHTO T 49	40 max
Softening Point on Residue from Distillation	AASHTO T 53	140 deg F min
<u>Approved Suppliers</u>		

- Seaboard Asphalt Products Company, EM-50-TT
- Midland Asphalt Materials Inc., CNTT

Equivalent Non-Tracking Tack Coat as approved by the Director of Materials Engineering Bureau.

All requirements under Section 407-3, 407-4, and 407-5 of the New York State Department of Transportation Standard Specifications shall apply. Application must be within the ranges specified for Diluted Tack Coat in Table 407-1.

The Contractor will provide the Engineer a copy of the manufacturer's technical data sheet as well as recommendations for surface preparation, application temperature, and set time.

9.5 Projects 7V2141 & 7V2151 – Paving Operations

This note applies to following projects:

7V2141 (Lewis County)

7V2151 (St. Lawrence County)

In areas that have been Cold Recycled, the Paving Operations shall progress in the opposite direction of travel from the Cold Recycling operation. This provision may only be waived by the Region 7 Materials Engineer, and this waiver will be rescinded if damage to the top course occurs.

SECTION 9: PROJECTS - SPECIAL NOTES (NYSDOT REGION 7)

9.6 Project 7V2132 – Performance Engineered Mixtures (PEM) Evaluation using Performance Testing

This note applies to following projects:

7V2132 – Jefferson County

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.

Table 1 – Performance Testing Criteria

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

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.

The Regional Materials Engineer (RME) may request raw aggregate and liquid asphalt binder as a substitute to plant-produced mixture.

SECTION 9: PROJECTS - SPECIAL NOTES (NYSDOT REGION 7)

9.6 Performance Engineered Mixtures (PEM) Evaluation using Performance Testing
(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
Test Method		ASTM D6931-17 NCHRP 9-33 Report	ASTM D8225-19	AASHTO TP 124-18
No. of Samples		3	3	3 min
Load Rate (mm/min)		50±5	50±2	50±2
Height (mm)		80±5	<= 19 mm NAS = 62±1 >=25 mm NAS = 95±1	50
Notch Width (mm)		NA	NA	15±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
HMA Compaction Temperature, °C		V Grade = 149°C ± 3°C E Grade = 163°C ± 3°C	V Grade = 149°C ± 3°C E Grade = 163°C ± 3°C	V Grade = 149°C ± 3°C E Grade = 163°C ± 3°C
WMA Compaction Temperature, °C		V Grade = 132°C ± 3°C E Grade = 146°C ± 3°C	V Grade = 132°C ± 3°C E Grade = 146°C ± 3°C	V Grade = 132°C ± 3°C E Grade = 146°C ± 3°C
Air Voids, %		7 ± 0.5	7 ± 0.5	7 ± 0.5
Test Temperature, °C		44°C ± 1.0	25°C ± 1.0	25°C ± 1.0
Conditioning		44°C for 2 hrs ± 10 min.	25°C for 2 hrs ± 10 min.	25°C for 2 hrs ± 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:

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

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.

SECTION 9: PROJECTS - SPECIAL NOTES (NYSDOT REGION 7)

9.6 Performance Engineered Mixtures (PEM) Evaluation using Performance Testing (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.

Table 3 - Testing and Sampling Table

Plant Test Property	Test Method	Producer Testing Frequency ¹	Department Testing Frequency ²
PG Binder Content	Automation, Ignition Oven (NY 400-13C), or AASHTO T 164 Method A or B	One per subplot	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

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.

SECTION 9: PROJECTS - SPECIAL NOTES (NYSDOT REGION 7)

9.6 Performance Engineered Mixtures (PEM) Evaluation using Performance Testing (Cont'd)

Mixture Production

HMA Mixture requirements are as follows:

Table 4 - Mixture Gradation, Absolute Difference Value

Limits (Test Value – JMF Value)	Sieve Sizes		
	#50 and Larger (300 µm and Larger)	#100 (150 µm)	#200 (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

- 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.
- 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.
- 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.

SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)

10.1 Special Notes – Region 9 Projects

Centerline Audible Roadway Delineators (CARDS) – Region 9

As part of the contracts listed in the table below, the contractor is required to install Centerline Audible Roadway Delineators (CARDS), within the specified limits. The CARDS shall be installed following the paving operations and shall be in accordance with Item 649.11 and NYS Standard Sheet 649-03. The cost of all associated work, including any additional temporary pavement markings and work zone traffic control, shall be included in the price per ton of the WMA (Warm-Mix Asphalt) items.

Region 9 Projects: Table of CARDS Locations									
PIN	Route and Project Description	From MP	To MP	From RM	To RM	No. Lanes	County	Municipality	CL Miles
9V2111	NY 369 WMA Overlay, Osborne Creek Bridge to NY 79	0.61	6.28	369 9101-1006	1063	2	Broome	Town of Fenton	5.67
9V2121	NY 8 WMA Overlay, Mt. Upton to Norwich	8.87	11.19	8 9203-1089	1112	2	Chenango	Town of Guilford	2.32
9V2124	NY 12 WMA Overlay, Greene Town Line to Village of Oxford	13.39	20.00	12 9202-1133	1199	2	Chenango	Town of Oxford	6.61
9V2146	NY 8 WMA Overlay, Bundy Hollow Creek to I-88	16.97	19.80	8 9301-1145	1216	3	Delaware	Towns of Masonville and Sidney	2.83
9V2172	US 209 WMA Overlay, Orange County Line to Village of Wurtsboro	0.00	6.32	209 9602-1000	1063	2	Sullivan	Town of Mamakating	6.32
9V2181	NY 17C WMA Overlay, NY 990J to RM 1035	21.83	22.35	17C 6501-1030	1035	2	Tioga	Town of Owego	0.52
905651	NY 8 WMA Overlay, Sidney to Mt. Upton	0.08 4.30	3.85 7.75	8 9203-1000 9 9204-1043	1038 1077	2	Chenango	Towns of Bainbridge and Guilford	7.22
901452	NY 206 WMA Overlay, Trout Creek to Village of Walton	8.02	17.34	206 9303-1080	1173	2	Delaware	Towns of Tompkins and Walton	9.32
904715	NY 96 WMA Overlay, Owego to Candor	2.56	10.23	96 6501-1017	1093	2	Tioga	Towns of Owego, Tioga, and Candor	7.67
								Total	48.48

Joint Density– Region 9

The Contractor should be aware that for any 60 or 50 series paving the Contractor is responsible for compacting the mainline longitudinal joint as detailed in the Standard Specification §402-3.09 subsection C for Item 404.000031. The Contractor must be prepared to select, operate, and control the paving and compaction equipment, to monitor the results, and make necessary adjustments to achieve the specified density results.

The cost of all associated work, including any additional work zone traffic control, shall be included in the price per ton of the WMA (Warm-Mix Asphalt) items.

SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)

10.1 Special Notes – Region 9 Projects

404.058901 Shim Course– Region 9

Item 404.058901 (Shim Course) is being utilized at an average thickness of ½” to ¾”. Region 9 is requiring the use of either:

- 6.3 asphalt top course mix meeting the requirements of 404.068301, but meeting F9 Friction requirements, and PG 64S-22 may be utilized in lieu of PG 64V-22. (This applies only as a substitution to Item 404.058901 for this contract only).
- Misc. Patching HMA mix meeting the requirements of Item 402.03890218 in the currently active OGS HMA Contract, Comprehensive Bituminous Concrete.

Special Work Zone Traffic Control – Pilot Vehicle– Region 9

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 9 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 FOLLOW ME G20-4 CONVENTIONAL 36”x 18” ON BACK OF PILOT VEHICLES. The pilot vehicle shall have the name of the Contractor prominently displayed. All cost for Work Zone Traffic Control including flagging, temporary pavement markings, channelizing devices, construction signs, and pilot vehicles shall be included in the prices per ton of bituminous concrete. No separate payment shall be made. The use of the pilot shall be as ordered by the Resident Engineer.

SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)

10.2 Projects 9V2124, 9V2141, 9V2143, 9V2146, 9V2165, 901452 & 904715 – Various Counties

These projects will be cold-in-placed recycled prior to the overlay. The cold-in-placed recycle will be performed under a separate contract. This will require coordination between the awarded paving contractor under this contract and the cold-in-place contractor, in order to minimize the time between cold-in-placed recycling and paving. The contractor shall sweep ahead of the tack coat operation to ensure a clean surface. The cost of this work shall be incorporated in the cost per ton of asphalt pavement, no separate payment shall be made for this operation.

SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)

10.3 Projects 905651 & 9V2172 – Chenango and Sullivan Counties

These projects will be heater scarified prior to the overlay. The heater scarification will be performed under a separate contract. This will require coordination between the awarded paving contractor under this contract and the heater scarification contractor, in order to minimize the time between heater scarification and paving. The contractor shall sweep ahead of the tack coat operation to ensure a clean surface. The cost of this work shall be incorporated in the cost per ton of asphalt pavement, no separate payment shall be made for this operation.

SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)

10.4 Projects 9V2121, 9V2161, 9V2162, 9V2165 and 904715 – Production Cold Micro Milling to be Performed by the Paving Contractor

The projects below include production cold micro milling to be performed by the paving contractor or their designated sub-contractor within the project limits specified in the contract documents or as ordered by the Engineer. Milling depth and approximate centerline miles required are in the tables below. The Paving contractor shall coordinate their paving schedule with the selected Production Cold Micro milling contractor, such that the milled surface is not left open to traffic for a period longer than 10 days. The contractor may have to allow up to one week for the installation of traffic loops by others if the contractor's milling operation will remove loops, this will be discussed at the preconstruction meeting. The contractor shall provide the necessary work zones, work zone signage and clean-up effort, including sweeping of the milled surface contemporaneous with the milling operation. Clean-up effort includes milling or using other tools to remove pavement around drainage inlets, manholes, water valves and other obstructions in the roadway to facilitate paving the full depth of the proposed pavement lift against those structures. The contractor will be responsible for 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 similar to the requirements for paving. An additional cleaning will be required ahead of the tack coat operation prior to paving. The cost of all associated work, including any additional temporary pavement striping as well as work zone traffic control, shall be included in the bid price per ton of WMA. No separate payment shall be made.

Project	Location	Depth	Centerline Miles
9V2121	RM 8 9203 1078 to 1084 & RM 51 9201 1000 to 1001	2.0"	0.77
9V2161	RM 10 9301 1435 to 1446	1.5"	1.1
9V2162	RM 10 9301 1642 to 1661 & RM 23 9303 1228 to 1242	1.5"	3.3
9V2165	RM 28 9302 1189 to 1199	2.0"	1.0
904715	RM 96 6501 1018 to 1019 & RM 96 6501 1093 to 96B 6501 1000	2.0"	0.5

SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)

10.5 Project 935847 – Schoharie County

The Contractor should be aware that this is a performance-related project in which the Contractor is responsible for compacting the mainline pavement under the 50 Series requirements as detailed in §402-3.07 of the Standard Specifications.

Specifications for Item 404.12520409 can be found in Attachment 10.

As part of the WZTC, overnight lane closures are allowed. Traffic is not to be placed in lanes that have an open transverse joint or be allowed on an open longitudinal joint. An exception is a longitudinal joint to exit for a ramp.

As part of this contract, the contractor is required to install Milled In Audible Roadway Delineators (MIARDs) for the full length of the project, in accordance with Item 649.01 and NYS Standard Sheet 649-02. The total length of MIARDs to be installed is approximately 115,400 Linear Feet. The cost of all associated work, including any additional temporary pavement markings, sweeping and work zone traffic control, shall be included in the price bid per ton of asphalt. No separate payment shall be made.

SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)

10.6 Project 9V2181 – Tioga County

This project includes paving the 4 ramps from 960J to Route 17C:

- From 17C to 960J, a distance of 1000 feet +/-.
- From 960J to 17C East, a distance of 1100 feet +/-.
- From 17C W to 960J, a distance of 1400 feet +/-.
- From 960 J to 17C, a distance of 1200 feet +/-.

SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)

10.7 Projects 9V2111, 9V2121, 9V2161, 9V2162, 9V2181 and 935847 – Various Counties

These projects shall be completed by **August 31^S, 2020.**

SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)

10.8 Project 9V2141 – Delaware County

This project will involve coordination with the contractor for 9056.42 Route 8 over East Branch Cold Spring Creek.

SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)

10.9 HMA/WMA Mixture Evaluation Using Performance Testing – Region 9

This note shall apply to the sites listed below.

Project 9V2124 – Rte. 12

Project 9V2172 – Rte. 209

Project 901452 – Rte. 206

Project 904715 – Rte. 96

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.

Table 1 – Performance Testing Criteria

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

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.

SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)

10.9 HMA/WMA Mixture Evaluation Using Performance Testing – Region 9 (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
Test Method		ASTM D6931-17 NCHRP 9-33 Report	ASTM D8225-19	AASHTO TP 124-18
No. of Samples		3	3	3 min
Load Rate (mm/min)		50±5	50±2	50±2
Height (mm)		80±5	<= 19 mm NAS = 62±1 >=25 mm NAS = 95±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
HMA Compaction Temperature, °C		V Grade = 149°C ± 3°C E Grade = 163°C ± 3°C	V Grade = 149°C ± 3°C E Grade = 163°C ± 3°C	V Grade = 149°C ± 3°C E Grade = 163°C ± 3°C
WMA Compaction Temperature, °C		V Grade = 132°C ± 3°C E Grade = 146°C ± 3°C	V Grade = 132°C ± 3°C E Grade = 146°C ± 3°C	V Grade = 132°C ± 3°C E Grade = 146°C ± 3°C
Air Voids, %		7 ± 0.5	7 ± 0.5	7 ± 0.5
Test Temperature, °C		44°C ± 1.0	25°C ± 1.0	25°C ± 1.0
Conditioning		44°C for 2 hrs ± 10 min.	25°C for 2 hrs ± 10 min.	25°C for 2 hrs ± 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:

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

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.

SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)

10.9 HMA/WMA Mixture Evaluation Using Performance Testing – Region 9 (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.

Table 3 - Testing and Sampling Table

Plant Test Property	Test Method	Producer Testing Frequency ¹	Department Testing Frequency ²
PG Binder Content	Automation, Ignition Oven (NY 400-13C), or AASHTO T 164 Method A or B	One per subplot	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

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.

SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)

10.9 HMA/WMA Mixture Evaluation Using Performance Testing – Region 9 (Cont'd)

Mixture Production

HMA Mixture requirements are as follows:

Table 4 - Mixture Gradation, Absolute Difference Value

Limits (Test Value – JMF Value)	Sieve Sizes		
	#50 and Larger (300 µm and Larger)	#100 (150 µm)	#200 (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

- 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.
- 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.
- 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.

SECTION 10: PROJECTS - SPECIAL NOTES (NYSDOT REGION 9)

10.10 Density Measurement Using A Rolling Density Meter

This note shall apply to the sites listed below.

Project 9V2141 – Rte. 8

Project 9V2165 – Rte. 28

Project 905651 – Rte. 8

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 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, including offset in lane, location, and corresponding density.
- A report indicating percent density achieved relative to the area paved.
- .kml file.
- Core location in the exported files.

SECTION 11: SUPERPAVE HOT MIX ASPHALT

11.1 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 12 – *Superpave Hot Mix Asphalt Tables*.

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

11.2 Project Dimensions

Project Dimensions for projects contained in the Invitation for Bids can be found in Attachment 12 – *Superpave Hot Mix Asphalt Tables*.

11.3 Rebates Table

Rebates for projects contained in the Invitation for Bids can be found in Attachment 12 – *Superpave Hot Mix Asphalt Tables*.