



Antrim County Road Commission

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June 24, 2015

REQUEST FOR BIDS - HOT MIX ASPHALT PAVING

Sealed bids will be received until **1:00 PM, Tuesday, July 14, 2015**, at which time they will be publicly opened and read. Bids shall be received at the office of the Antrim County Road Commission, PO Box 308, 319 E. Lincoln St, Mancelona, Michigan 49659-0308. Bids will be tabulated and a recommendation will be made to the Board of County Road Commissioners at their next regular meeting.

The Antrim County Road Commission (ACRC) requests bids for the following:

Alba Hwy (C 42): In Chestonia and Star Twps, beginning at US 131 thence east to East St and on Cinder Hill Rd between US 131 and Alba Hwy in accordance with the enclosed Log of Project. One lump sum bid for all required work will be accepted.

All mix shall be 4E1, PG 58 -28 liquid asphalt that complies with the enclosed Antrim County Road Commission Special Provision for Acceptance of HMA Mixture 4/13/2015. Bid price shall include all materials, labor, equipment, etc. to complete the job in accordance with the current MDOT Standard Specifications for Construction and the Antrim County Road Commission Special Provision for Acceptance of HMA Mixture 4/13/2015. Bid price shall also include traffic control in accordance with the current Michigan Manual of Uniform Traffic Control Devices.

Project shall be completed by September 30, 2015 unless otherwise agreed to by the contractor and road commission.

The successful bidder shall enter into a contract with and provided by the road commission.

Label bid "**ALBA HWY BID**" plainly on the outside of a sealed envelope.

Burt R. Thompson, P.E.
Engineer-Manager

encl: Bid Submittal Form
Log of Project
Special Provision for Acceptance of HMA Mixture 4-13-2015

**Antrim County Road Commission
Alba Highway Resurfacing
Bid Submittal**

Alba Hwy

lump sum price \$_____

ACKNOWLEDGMENT

I acknowledge that I have thoroughly read all the pages of this document, including the enclosed special provisions and that if awarded the bid, work will be done in full accordance with same.

Company name

Signature

Printed name

Title

Mailing address

City, State and zip

Date

Phone

Cell phone

Email

LOG OF PROJECT

LOCATION

Project is located on Alba Hwy (C-42) in Chestonia Township and Star Township. The project begins approximately 50 feet east of the centerline intersections of US-131 and C-42, Alba Hwy, Station 0+50, P.O.B., and extends easterly to East St. in Alba, Station 17+30. This project also includes Cinder Hill Rd. from C-42, Alba Hwy. northerly to the southeast side of the railroad crossing, Station 3+20.

DESCRIPTIONS OF WORK

Railroad Grade Crossing

The C-42, Alba Hwy crossing, the work shall consist of Cold Milling HMA Surface, full width of roadway to a depth of two inches (2") from the east edge of the proposed concrete snowmobile crossing to the east rail (including between rails). Also remove the existing HMA surface with mill for butt joint, full width of roadway to a depth of two inches (2") below the top of the southeast railroad rail (Station 1+30±) as per section 501.03.C.3 of the Standard Specifications for Construction or as directed by the Engineer.

The Cinder Hill Road crossing, the work shall consist of Cold Milling HMA Surface, full width of roadway to a depth of two inches (2") along the southeast railroad rail for a butt joint as per section 501.03.C.3 of the Standard Specifications for Construction or as directed by the Engineer.

C-42, Alba Hwy

The entire 34' wide existing HMA roadway will be overlaid with HMA, 4E1 mix and new shoulder aggregate 3' wide placed along each edge. (East edge of proposed concrete snowmobile crossing, station 0+90± to station 17+30±).

All government corners on this project, where necessary, shall be adjusted whether shown or not. Monument box adjustments shall be made prior to placing HMA top course.

The existing HMA roadway approaches, HMA commercial and residential drives shall be feathered to match existing as needed or as directed by the Engineer.

All HMA shall be 4E1, PG 58-28 liquid asphalt that complies with Antrim County Road Commission Special Provision for Acceptance for HMA Mixture, 04/13/2015.

Cinder Hill Road

The entire 23' wide existing HMA roadway will be overlaid with HMA, 4E1 mix and new shoulder aggregate 3' wide placed along each edge. (C-42 station 0+17± to Southeast

railroad rail, station 3+20±). Placement of HMA for Cinder Hill Road shall be completed after C-42 detour has been reopened.

All government corners on this project, where necessary, shall be adjusted whether shown or not. Monument box adjustments shall be made prior to placing HMA top course.

The existing HMA roadway approaches, HMA commercial and residential drives shall be feathered to match existing as needed or as directed by the Engineer.

All HMA shall be 4E1, PG 58-28 liquid asphalt that complies with Antrim County Road Commission Special Provision for Acceptance for HMA Mixture, 04/13/2015.

Snowmobile Crossing

Saw cut and remove existing HMA surface and base material to a depth of eight inches (8") below plan grade, (HMA Surface, Rem). Prepare the base in accordance with subsection 602.03.B, Standard Specification for Construction. Construct concrete snowmobile crossing as per detail.

ESTIMATE OF QUANTITIES

ITEM	QUANTITY	UNIT
Mobilization	1	LS
Shoulder, Cl II, (23A)	127	Ton
Cold Milling HMA Surface	478	Syd
HMA Surface, Rem	57	Syd
HMA, 4 E 1	803	Ton
Conc Pavt, Reinf, 8 inch	75	Syd
Pavt Mrkg, Waterborne, 4 inch, White	3,360	Ft
Pavt Mrkg, Waterborne, 4 inch, Yellow	3,920	Ft
Pavt Mrkg, Polyurea, 24 inch, Stop Bar	94	Ft
Pavt Mrkg, Polyurea, Railroad Sym	2	Ea
Traffic Regulator Control	1	LS

Quantities are for estimate purpose only. Contractor shall field verify.

A HMA material transfer device shall be use when placing mainline top course only.

Maintaining Traffic and Staging

General

Traffic shall be maintained in accordance with the 2012 Standard Specifications for Construction, including any supplemental specifications, and as herein specified. All traffic control devices and their usage shall comply with the 2011 edition of the Michigan Manual on Uniform Traffic Control Devices (MMUTCD). Personal safety equipment and their usage shall meet or exceed MIOSHA standards

Detour

The contractor will be responsible for constructing, maintaining and signing a detour route during the construction of the snowmobile crossing. Traffic will be rerouted onto Cinder Hill Rd. between US-131 and C-42 (Alba Hwy). Appropriate detour signage shall be placed along north and south bound US-131 and east and west bound C-42 (Alba Hwy.). Contractor shall submit a detour signing plan at the preconstruction meeting for approval by the Engineer.

Special Considerations at Railroad Crossings.

The contractor is responsible for contacting the applicable railroad to obtain a railroad watchperson at a minimum 48 hours prior to construction activities that are within 15 feet (4.6 m) from the outside rail on either crossing approach.

Contact:

Mark Russel

Great Lakes Central Railroad

(989) 666-2706

An intermediate traffic regulator will be needed at the railroad crossing while it is in a zone where traffic is maintained by traffic regulator control or while traffic shifted in a direction opposed to normal flow through signage. Every effort should be made by the contractor's construction methods as to not obstruct the right-hand display of the railroad signal to traffic approaching the crossing. The intermediate traffic regulator shall serve to stop traffic for vehicles traveling in the direction opposed to normal flow and prevent them entering the crossing upon a train approaching the crossing. The contractor shall place a temporary stop line to indicate the stopping point in advance of the crossing for vehicles traveling in a direction opposed to normal flow. The intermediate traffic regulator(s) and temporary stop line(s) are considered incidental to Traffic Regulator Control and Minor Traffic Devices and will not be paid for separately.

When the railroad crossing is in the influence zone of active construction work, but not in a lane closure, the traffic regulator shall give immediate preference to clearing any traffic which backs-up over the crossing as a result of the traffic regulator control away from the crossing.

No lane closure taper(s) may extend through the crossing. Traffic lane shifts cannot transition over the crossing.

No construction traffic control devices may be placed in the railroad crossing or closer than 15 feet (4.6 m).

MAINTAINING TRAFFIC

Traffic shall be maintained according to the Special Provision for Maintaining Traffic included in the proposal. Traffic control items are considered incidental to Traffic

Regulator Control and will not be paid for separately and shall include but not limited to the following items:

ITEMS	QUANTITY	UNIT
Lighted Arrow, Type C, Furn & Oper	2	Ea
Minor Traf Devices	1	LS
Sign, Type B, Temp, Prismatic, Furn & Oper	328	Sft
Pavt Mrkg, Type NR, Tape, 4 inch, Yellow, Temp	135	Ft

GENERAL PLAN NOTES

The improvements described in this proposal shall be done in accordance with the Michigan Department of Transportation 2012 Standard Specifications for Construction and other Special Provisions and Supplemental Specifications contained in this proposal.

PERMANENT PAVEMENT MARKINGS

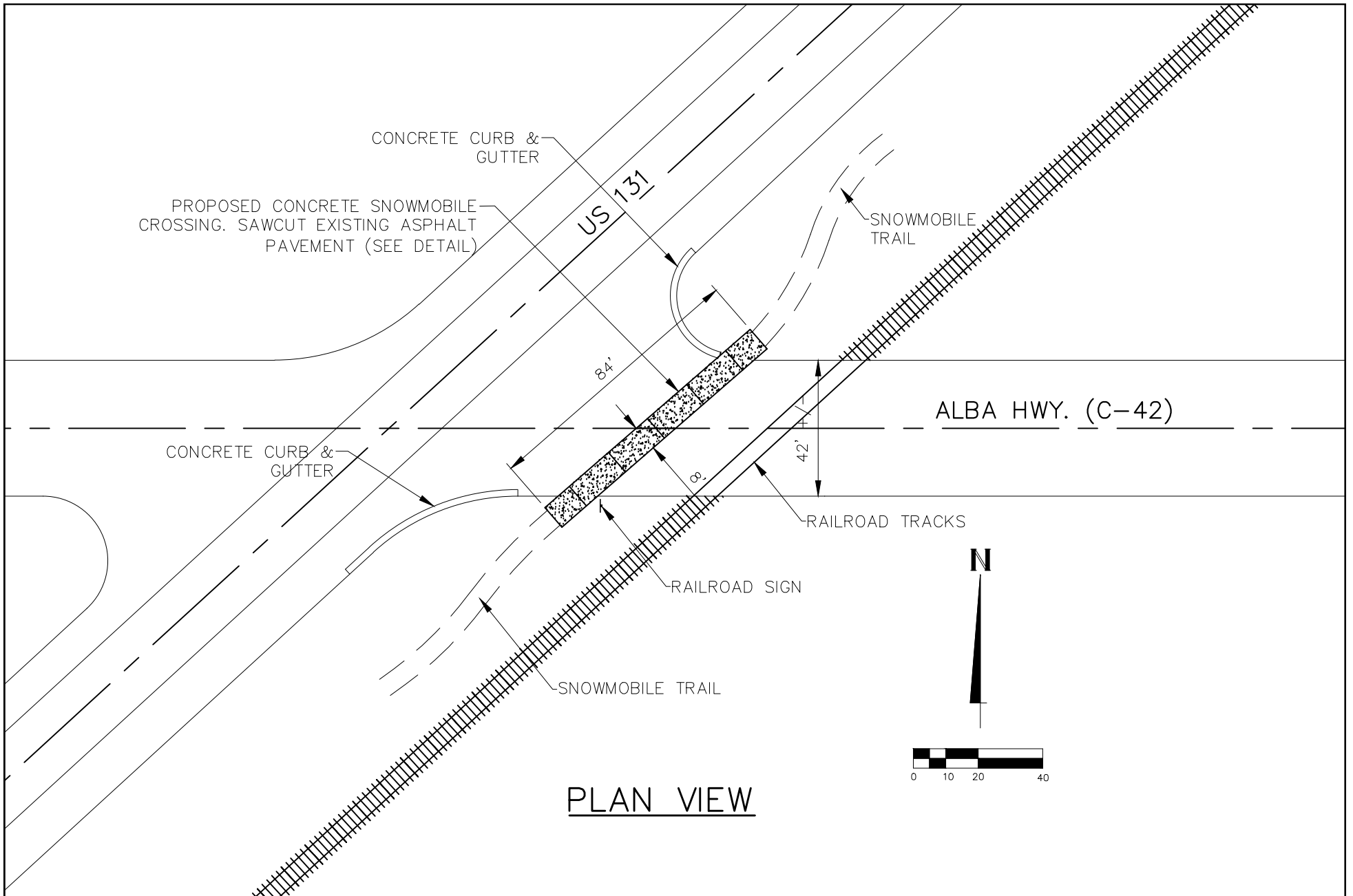
This work consists of providing and applying retroreflective permanent pavement markings in accordance with the Michigan Manual on Uniform Traffic Control Devices. Provide shapes, spacing, and dimensions that conform to the MDOT Pavement Marking Standard Plans. It shall be the Contractors responsibility to note and log locations of all markings prior to construction. All edge lines will be 4 inches wide.


Stationing

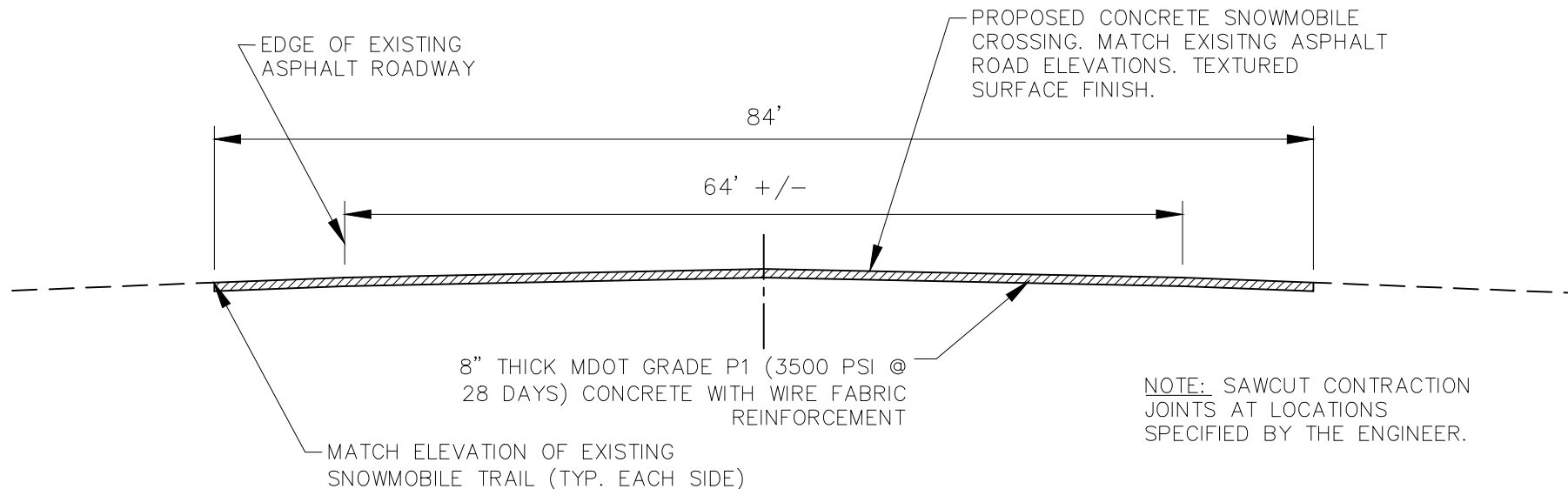
Stationing on this project is provided only for general reference. Stationing is based on measurements taken using a Distance Measuring Instrument (DMI) and old plans. The Engineer shall determine the actual limits in the field for the described work.

Underground Utilities

For the protection of underground utilities and in conformance with Public Act 174, 2013, the Contractor shall dial 811 or 1-800-482-7171 a minimum of three working days, excluding Saturdays, Sundays or Holidays, prior to beginning any excavation or sign post installation in areas where public utilities have been previously located. Members will thus be routinely notified. This does not relieve the Contractor of the responsibility of notifying utility owners who may not be part of the "MISS DIG" alert system.

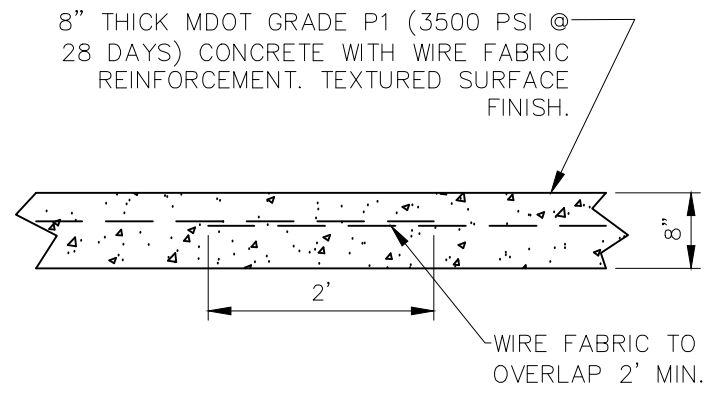


Date	Revisions	 <p>ANTRIM COUNTY ROAD COMMISSION 319 E. Lincoln St., P.O. Box 308 Manelona, MI. 49659-0308 ph. 231-587-8521 fax: 231-587-8156 E-mail: email@antrimcrc.org</p>	Proposed Work	CONCRETE SNOWMOBILE CROSSING AT ALBA HWY.	Drawn By	RJF	
			Waterway	N/A	Field Bk./Pg.		
			Sec., Town, Range	Sec. 24 & 25, T. 30 N.-R. 6 W.	Date		6/24/15
			Twp., Co., State	Chestonia Twp., Antrim Co., Michigan	Sheet No.		1 of 2




NOTE: SAWCUT CONTRACTION JOINTS AT LOCATIONS SPECIFIED BY THE ENGINEER.

CONCRETE SNOWMOBILE CROSSING ELEVATION N.T.S.



TYP. CONCRETE SECTION N.T.S.

Date	Revisions	 <p>ANTRIM COUNTY ROAD COMMISSION 319 E. Lincoln St., P.O. Box 308 Mancelona, MI. 49659-0308 ph. 231-587-8521 fax: 231-587-8156 E-mail: email@antrimcrc.org</p>	Proposed Work	Drawn By	
				CONCRETE SNOWMOBILE CROSSING AT ALBA HWY.	RJF
				Waterway	Field Bk./Pg.
				Sec., Town, Range	Date
				Twp., Co., State	6/24/15
			Chestonia Twp., Antrim Co., Michigan	Sheet No. 2 of 2	

ANTRIM COUNTY ROAD COMMISSION

SPECIAL PROVISION
FOR
ACCEPTANCE OF HMA MIXTURE
(non Federal)

ACRC: BRT

04/13/15

Description.

This special provision provides acceptance-testing requirements for use on this project. The HMA mixture and mixture quality assurance and acceptance shall conform to section 501 of the Michigan Department of Transportation 2012 Standard Specifications for Construction except where modified herein. The MDOT HMA Production Manual, current edition, applies to this work.

Submittals.

Submit a mix design previously approved by MDOT (or equivalent independent verification approved by the Engineer) from within 1 year of the project start date, for the Engineer's review and approval. The Contractor shall not place any HMA without an approved mix design by the Engineer.

Materials.

Aggregates, mineral filler (if required), and asphalt binder shall be combined as necessary to produce a mixture proportioned within the master gradation limits called for in the project and meeting the uniformity tolerances listed in Table 1 and the quality assurance testing tolerances in Table 2 of this special provision. The master gradation range is to be used for establishing mix design only. Topsoil, clay, or loam shall not be added to aggregates which are to be used in plant mixed HMA mixtures.

Asphalt Binder.

Liquid asphalt binder shall be a Performance Graded (PG) binder as specified in the bid requests and/or approved by the road commission.

Air Voids.

Design air voids will be 4.0% and shall be regressed to 3.0% in production by the addition of virgin liquid asphalt.

Recycled Asphalt Pavement.

Recycled asphalt pavement (RAP) percentage that represents the contribution of the RAP binder toward the total binder, by weight, SHALL NOT EXCEED 15%. No binder grade adjustment is required to compensate for the stiffness of the asphalt binder in RAP.

Recycled Asphalt Shingles.

Recycled asphalt shingles will NOT be allowed.

Construction.

After the job-mix-formula is established, the aggregate gradation and the binder content of the HMA mixture furnished for the work shall be maintained within the Range 1 uniformity tolerance limits permitted for the job-mix-formula specified in Table 1. However, if deviations are predominantly either below or above the job-mix-formula, the Engineer may order alterations in the plant to bring the mixture to the job-mix-formula. If two consecutive aggregate gradations on one sieve, or binder contents as determined by the field tests, are outside Range 1 but within Range 2 tolerance limits, the Contractor shall suspend all operations. Contract time will continue during these times when the plant is down. Before resuming any production, the Contractor shall propose, for the Engineer's approval, all necessary alterations to the materials or plant so that the job-mix-formula can be maintained. The Engineer, after evaluating for effects on AWI and mix design properties, will approve or disapprove such alterations.

At no time shall the asphalt binder content fall below 5.0% regardless of the tolerance listed.

Random liquid asphalt binder samples will be taken by the Engineer. The Engineer reserves the right to test any or all samples taken.

The crushed particle content of the aggregate used in the HMA mixture shall not be more than 10 percentage points above or below the crushed particle content used in the job-mix-formula nor less than the minimum specified for the aggregate in the project documents.

The Engineer will perform quality assurance sampling and testing, using the sampling and testing option selected by the Engineer. Mixture QA testing will be performed at the Contractor's facility, using the Contractor's equipment, at no additional cost to the Owner. Quality control measures to ensure job control are the responsibility of the Contractor. Quality assurance and acceptance testing will be as follows:

1. Sampling

Acceptance sampling and testing will be performed by the Engineer using the sampling method and testing option selected by the Engineer. Each day of production, random samples will be obtained for each mix type. Acceptance testing will be performed at a frequency specified by the Engineer.

2. Mixture Testing

Mixture samples will be tested to verify gradation, binder content and volumetric properties.

3. Density

Pavement density may be measured by the Engineer, with a Nuclear Density Gauge or by 6 inch core sampling. The Gmm from the JMF will be used for the density control target. The in place density of the HMA mixture shall be at least 92.0% of the density control target. In place density will be calculated by averaging a minimum of four QA density test locations.

Table 1: Uniformity Tolerance Limits for HMA Mixtures

Parameter	TOP & LEVELING COURSE	
	* Range 1	Range 2
% Passing # 8 and Larger Sieves	± 5.0	± 8.0
% Passing # 30 Sieve	± 4.0	± 6.0
% Passing # 200 Sieve	± 1.0	± 2.0
*This range allows for normal mixture and testing variations. The mixture shall be proportioned to test as closely as possible to the Job-Mix-Formula.		

Table 2: HMA Quality Assurance Testing Tolerances (±) from the JMF

Parameter	Double Test per Lot (c)	Lot Average
Air Voids	1.00%	0.60%
Voids in Mineral Aggregate VMA (a)	1.20%	0.75% (b)
Maximum Specific Gravity (G _{mm}) (a)	0.019	0.012
Binder Content (a) (d)	0.50%	0.35%
a. Parameters with target values b. Or less, determined by VMA value in contract documents c. “Double Tests per Lot” refers to any two subplot tests in any one lot d. Binder content shall not fall below 5.0% at any time regardless of the tolerance listed		

Rejected Mixtures.

1. Gradation

If for any one mixture, two consecutive aggregate gradations on one sieve as determined by field tests exceed the uniformity tolerance of Range 2 under Table 1, or do not meet the minimum requirements for crushed particle content specified in the project documents, the mixture will be rejected. If such mixtures are placed in a pavement, the remaining portions of the failing field samples (split sample) will be sent to an independent laboratory to confirm the field test results. If the laboratory’s results do not confirm the field test results and there are no price adjustments required due to test failures on the asphalt binder, then no price adjustments will be made for the mixture involved. If the laboratory’s results confirm the field test results and if, in the Engineer’s judgment, the defective mixture can remain in place and there are no price adjustments required due to test failures on the asphalt binder, the contract unit price for the defective mixture involved, as determined from field tests, will be decreased on the following basis:

The contract unit price for material outside of Range 2 or with a crushed particle content below that specified in the project documents will be decreased 25 percent.

If three consecutive aggregate gradations on one sieve, or asphalt binder contents as determined by field tests are outside Range 1 but within Range 2 tolerance limits, the mixture produced from the time the third sample was taken until the gradation, or asphalt binder content is corrected back into Range 1 will be decreased in contract unit price by 10 percent. Field tests indicating that mixtures are subject to the 10 percent penalty will be confirmed in the same manner as mixtures subject to the 25 percent penalty as described herein.

If a liquid asphalt binder sample does not meet the required specification, the mix produced from the point of the last liquid asphalt binder sample meeting specification to the failed sample shall be considered defective and shall be replaced at the sole expense of the contractor. This may also result in the termination of the contract and/or the right to bid on any future work.

2. Volumetric Properties

Acceptability tolerance for Air Void, VMA Gmm and Binder Content are shown in Table 2. Material produced outside of Table 2 tolerance limits will be rejected.

3. Pavement Density

A negative 10% adjustment in the HMA mixture unit contract price will be imposed on the lot or subplot if either the lot pavement density (average of all lot gauge readings or core results) is less than 92%, but equal to or greater than 91%; or if 2 or more readings or cores in any given subplot are less than 91%.

A negative 25% adjustment in the HMA mixture unit contract price will be imposed on the lot or subplot if either the lot pavement density (average of all lot gauge readings or core results) is less than 91%, but equal to or greater than 90%; or if 2 or more readings or cores in any given subplot are less than 90%.

If any subplot has an average density of less than 90%, the Contractor shall remove and replace the entire subplot at no cost to the owner.