

**ALCONA COUNTY ROAD COMMISSION
301 N LAKE STREET
LINCOLN, MI 48742
F-30
WEDGE & OVERLAY SPECIFICATIONS**

The Alcona County Road Commission will accept bids until 4:00 p.m. local time on March 8, 2021 at 301 N Lake Street, Lincoln, MI 48742.

BID REQUIREMENTS:

The bidder attests to having examined the locations of the work described herein and is fully informed as to the nature of the work and the conditions relating to its performance and understands the quantities shown are approximate and are subject to increase or decrease. All township bids require Township approval and are subject to cancelation if the necessary funding is not available.

The bidder hereby proposes to furnish all necessary equipment, tools, apparatus, and other means of construction, do all the work, furnish all materials except as otherwise specified herein; and, for the unit prices named in the itemized bid, to complete the work herein described in strict accordance with the plans and the requirements of these bid documents. The bidder further proposes to perform extra work (for items not included with the itemized bid) that may be authorized by the Alcona County Road Commission. Compensation for extra work will be made on the basis of an agreed upon unit price prior to performing the extra work.

Bids shall be submitted on the blank bid form provided. **Bids shall be in a sealed envelope and identified on the outside as "F-30 OVERLAY PROJECT"**. Bids shall be mailed or delivered. Bids shall NOT be accepted by fax or email.

This project will be awarded contingent on township funding.

By signing the bid sheet the bidder understands, in addition to the Bid Requirements, that the Board reserves the right to cancel the project.

The Alcona County Road Commission reserves the right to reject any and all bids, to waive any irregularities therein, and to accept any bid, which in the opinion of the Road Commission may be most advantageous and in the best interest of the Road Commission.

All items of work are to be completed by **November 1, 2021**, unless otherwise authorized by the Alcona County Road Commission. Bidder shall contact the Alcona County Road Commission prior to paving the project to confirm preparation work is complete.

PROJECT OVERVIEW:

HMA Wedge & Overlay existing 22' foot wide surface (5.01 miles) of F-30 from Hubbard Lake Road west to Stout Road. Trenching existing shoulder material, placement of 23A limestone aggregate and pavement markings.

TRAFFIC CONTROL:

The contractor shall furnish all necessary traffic control during all work performed by utilizing proper signing and flaggers in accordance with Section 812 of the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction and Part 6 of the Michigan Manual on Uniform Traffic Control Devices (MMUTCD) and as directed by the Road Commission.

Payment for traffic control is included in the HMA pay items and will not be paid for separately.

HOT MIX ASPHALT (HMA):

All HMA mixtures shall meet the requirements of Division 5 of the MDOT 2012 Standard Specifications for Construction, the Special Provision for HMA Application Estimate, the Special Provision for Superpave Final Aggregate Blend Requirements, The Special Provisions for Acceptance of Hot Mix Asphalt Mixture on Local Agency Projects, and as herein modified.

All HMA mixtures shall meet an LVSP HMA mix design, performance grade 58-28, with **3% air voids**. There will be **NO RAS allowed**. The Contractor shall provide an acceptable Mix Design in accordance with the MDOT HMA Production Manual prior to the start of production of any mixture and shall provide manufacturer certifications for all asphalt cement used on the project per the Special Provision for Sampling Asphalt Binder on Local Agency Projects.

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

For each given day of production the Road Commission reserves the right to test one sample and obtain a second sample for future testing if necessary. The Road Commission may perform any of the following actions:

- a) Perform Full Quality Assurance Testing
- b) Perform Volumetric Testing Only (Ignition or Extraction AC/Gmm, Air Voids, VMA), if applicable.
- c) Retain custody of sample for future testing if desired

If the Road Commission elects not to perform Quality Assurance testing on a given day or project, the Contractor is still required to perform testing in accordance with Special Provision for Acceptance of Hot Mix Asphalt Mixture on Local Agency Projects. The Contractor's Quality Control test results shall be sent to the Road Commission within 2 working days of each day's production for a given HMA mixture.

For each job, the Alcona County Road Commission shall retain a sample of HMA that will be placed on site. The Alcona County Road Commission shall retain this sample and send for laboratory testing if chosen to do so. If the sample is sent for laboratory testing, then penalties (if any) will be assessed in accordance with Special Provision for Acceptance of Hot Mix Asphalt Mixture on Local Agency Projects.

The Contractor will perform pavement cleaning prior to application of the bond coat. **Pavement cleaning and application of bond coat will be included in the payment of HMA and will not be paid separately.**

Overlay existing HMA drives over 3' and certified road intersections over 6' to match existing elevation to create a smooth transition. **Payment for driveway paving will be included in mainline HMA pay items and will not be paid for separately.**

Place Shoulder, CI II on existing gravel drives over 3' to match existing drive elevation. **Payment for driveway material will be included in mainline shoulder pay items and will not be paid separately.**

The Alcona County Road Commission will not allow within the right-of-way of any county road or street the cleaning and/or maintenance of tools or equipment.

For all monument boxes encountered the Alcona County Road Commission will supply adjusting rings for the contractor to adjust during paving operations. **This will be included in the overall bid and will not be paid for separately.**

SHOULDER GRAVEL:

Existing shoulder gravel is to be trenched a minimum 2" in depth, width of 2' for placement 4" by 2' 23A limestone aggregate shoulders, gravel drives and intersections. All aggregates used for shoulder gravel shall meet the requirements of section 307 and 902 of the MDOT 2012 Standard Specifications for Construction and shall follow the requirements of 23A blend.

SPECIFICATIONS:

All work shall be done in accordance with the special provisions, plans and supplemental specifications that are included as part of this proposal as well as the MDOT 2012 Standard Specifications for Construction, as revised.

PREQUALIFICATION:

The Contractor and subcontractors shall be MDOT prequalified for the items of work they will be performing.

INSURANCE:

Upon notification of award and prior to execution of a contract, the Contractor shall furnish:

- a. General liability insurance in amounts not less than \$1,000,000 per occurrence and \$2,000,000 general aggregate.
- b. Automobile liability insurance in amounts not less than \$1,000,000 combined single limit for each accident, bodily injury per accident, and property damage per accident, and in an amount not less than \$500,000 for bodily injury per person.
- c. Workers compensation insurance in compliance with the statutes of the State of Michigan.

Proof of insurance shall include a valid certificate of insurance naming the Alcona County Road Commission as additional insured on the policy. Insurance shall cover a period not less than the term of the project and shall provide that coverage cannot be cancelled without 30 days advanced written notice to the Alcona County Road Commission, by certified mail, first class, return receipt requested. The contract will be invalid if insurance expires during the authorized period of work.

In addition to any liability or obligation by the Contractor that may otherwise exist, the Contractor shall, to the fullest extent permitted by law, indemnify and hold harmless the Alcona County Road Commission and its commissioners, officers, agents and employees from and against any and all claims, actions, proceedings, liabilities, losses, and damages thereof, and any and all costs and expenses, including legal fees, associated therewith which the Alcona County Road Commission may sustain by reason of claims for or allegations of negligence or violation of the terms and conditions of the Contract, arising out of the work which is subject of the Contract.

SPECIAL PROVISION

FOR
HMA APPLICATION ESTIMATE

a. Description.-This work shall be done in accordance with the requirements of Division 5 of the MDOT 2012 Standard Specifications for Construction except as herein specified.

b. Materials.-

The HMA, LVSP for top course shall have a yield of 220 pound per square yard.

Recycled Asphalt Shingles (RAS) will not be allowed to be used.

Target Air Voids shall be reduced to 3.0%.

The Aggregate Wear Index for all top course applications shall be 220 minimum.

The Performance Grade Asphalt Binder for the Mixture shall be 58-28.

The HMA bond Coat material shall be per Section 501.02. Coverage shall be complete, uniform, and have no pooling. HMA bond coat is included in the cost of HMA items.

c. Construction Methods.-The Direct Density Method and Roller Method of testing compaction shall apply as directed by the Alcona County Road Commission per location.

The HMA Bond Coat shall be constructed per subsection 501.03.D. The uniform rate of application shall be 0.05 to 0.15 gallons per square yard. This is for information only and is included in the cost of associated pay items.

SPECIAL PROVISION
FOR
SAMPLING ASPHALT BINDER ON LOCAL AGENCY PROJECTS

For informational purposes, original samples of asphalt binder will be taken by the Contractor and delivered to the Road Commission prior to incorporation into the mixture. The frequency of sampling will be determined by the Road Commission. The cost of obtaining and delivering the samples to the Road Commission will be included in the hot mix asphalt (HMA) pay items.

The Contractor must certify in writing that the materials used in the HMA mixture are from the same source as the materials used in developing the HMA mixture design and the bond coat is from an approved supplier as stated in the *Material Quality Assurance Procedures Manual*.

SPECIAL PROVISION
FOR
ACCEPTANCE OF HOT MIX ASPHALT MIXTURE ON LOCAL AGENCY PROJECTS

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a. Description. This special provision provides sampling and testing requirements for local agency projects using the roller method and the nuclear density gauge testing. Provide the hot mix asphalt (HMA) mixture in accordance with the requirements of the standard specifications, except where modified herein.

b. Materials. Provide aggregates, mineral filler (if required), and asphalt binder to produce a mixture proportioned within the master gradation limits shown in the contract, and meeting the uniformity tolerance limits in Table 1.

Table 1: Uniformity Tolerance Limits for HMA Mixtures

Parameter		Top and Leveling Course		Base Course		
Number	Description	Range 1 (a)	Range 2	Range 1 (a)	Range 2	
1	% Binder Content	-0.30 to +0.40	±0.50	-0.30 to +0.40	±0.50	
2	% Passing # 8 and Larger Sieves	±5.0	±8.0	±7.0	±9.0	
3		# 30 Sieve	±4.0	±6.0	±6.0	±9.0
		# 200 Sieve	±1.0	±2.0	±2.0	±3.0
	Crushed Particle Content (b)	Below 10%	Below 15%	Below 10%	Below 15%	
<p>a. This range allows for normal mixture and testing variations. The mixture must be proportioned to test as closely as possible to the Job-Mix-Formula (JMF).</p> <p>b. Deviation from JMF.</p>						

Parameter number 2 as shown in Table 1 is aggregate gradation. Each sieve will be evaluated on one of the three gradation tolerance categories. If more than one sieve is exceeding Range 1 or Range 2 tolerances, only the one with the largest exceedance will be counted as the gradation parameter.

The master gradation should be maintained throughout production; however, price adjustments will be based on Table 1. Aggregates which are to be used in plant-mixed HMA mixtures must not contain topsoil, clay, or loam.

c. Construction. Submit a Mix Design and a JMF to the Road Commission. Do not begin production and placement of the HMA until receipt of the Road Commission's approval of the JMF. Maintain the binder content, aggregate gradation, and the crushed particle content of the HMA mixture within the Range 1 uniformity tolerance limits in Table 1. For mixtures meeting the definition of top or leveling course, field regress air void content to 3.0 percent with liquid asphalt

SPECIAL PROVISION
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ACCEPTANCE OF HOT MIX ASPHALT MIXTURE ON LOCAL AGENCY PROJECTS

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cement unless specified otherwise on HMA application estimate. For mixtures meeting the definition of base course, field regress air void content to 3.0 percent with liquid asphalt cement unless specified otherwise on HMA application estimate.

Ensure all persons performing Quality Control (QC) and Quality Assurance (QA) HMA field sampling are “Local Agency HMA Sampling Qualified” samplers (if unable to accomplish please inform Alcona County Road Commission in writing with submitted bid). The Alcona County Road Commission will determine the method of sampling to be used. Ensure all sampling is done in accordance with *MTM 313 (Sampling HMA Paving Mixtures)* or *MTM 324 (Sampling HMA Paving Mixtures Behind the Paver)*. Samples are to be taken from separate hauling loads.

For production/mainline type paving, obtain a minimum of two samples, each being 20,000 grams, each day of production, for each mix type. The Road Commission will sample and maintain possession of the sample. Sampling from the paver hopper is prohibited. Each sample will be divided into two 10,000 gram parts. Obtain a minimum of three samples for each mix type regardless of the number of days of production.

Obtain samples that are representative of the day’s paving. Sample collection is to be spaced throughout the planned tonnage. One sample will be obtained in the first half of the tonnage and the second sample will be obtained in the second half of the tonnage. If planned paving is reduced or suspended, when paving resumes, the remaining sampling must be representative of the original intended sampling timing.

Ensure all persons performing testing are Bit Level One certified or Bit QA/QC Technician certified (if cannot be met please inform Alcona County Road Commission in writing submitted with bid).

Ensure daily test samples are obtained, and provided to the Road Commission.

All paving may be accepted by visual inspection regardless of the tonnage.

Pavement in-place density will be measured using one of two approved methods. The method used for measuring in-place density will be at the discretion of the Road Commission.

Pavement in-place density tests will be completed by the Road Commission during paving operations and prior to traffic staging changes. Pavement in-place density acceptance testing will be completed by the Road Commission prior to paving of subsequent lifts and being open to traffic. Testing will be at the discretion of the Road Commission.

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FOR
ACCEPTANCE OF HOT MIX ASPHALT MIXTURE ON LOCAL AGENCY PROJECTS

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Option 1 – Direct Density Method

Use of a nuclear density gauge requires measuring the pavement density using the Gmm from the JMF for the density control target. The required in-place density of the HMA mixture must be 92.0 to 98.0 percent of the density control target. Nuclear density testing and frequency will be in accordance with the *MDOT Density Testing and Inspection Manual*.

Option 2 – Roller Method

Use of the Roller Method will be at the discretion of the Road Commission, and meeting the requirements of Table 2. The Contractor is responsible for establishing and documenting an initial or QC rolling pattern that achieves the optimal in-place density.

Table 2: Minimum Number of Rollers Recommended Based on Placement Rate

Average Laydown Rate, Square Yards per Hour	Number of Rollers Required (a)	
	Compaction	Finish
Less than 600	1	1 (b)
601 - 1200	1	1
1201 – 2400	2	1
2401 – 3600	3	1
3601 and More	4	1
a. Number of rollers may increase based on density requirements. b. The compaction roller may be used as the finish roller also.		

After placement, roll the HMA mixture as soon after placement as the roller is able to bear without undue displacement or cracking. Start rolling longitudinally at the sides of the lanes and proceed toward the center of the pavement, overlapping on successive trips by at least half the width of the drum. Ensure each required roller is 8 tons minimum in weight unless otherwise approved by the Road Commission.

Ensure the initial breakdown roller is capable of vibratory compaction and is a maximum of 500 feet behind the paving operations. The maximum allowable speed of each roller is 3 miles per hour (mph) or 4.5 feet per second. Ensure all compaction rollers complete a minimum of two complete rolling cycles prior to the mat temperature cooling to 180 degrees Fahrenheit (F). Continue finish rolling until all roller marks are eliminated and no further compaction is possible. The Road Commission will verify and document that the roller pattern has been adhered to. The Road Commission can stop production when the roller pattern is not adhered to.

d. Measurement and Payment. The completed work, as described, will be measured and paid for using applicable pay items as described in subsection 501.04 of the Standard Specifications for Construction, or the contract, except as modified below.

SPECIAL PROVISION
FOR
ACCEPTANCE OF HOT MIX ASPHALT MIXTURE ON LOCAL AGENCY PROJECTS

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The Road Commission will maintain the samples and reserves the right to send the samples to an Independent AASHTO certified laboratory for testing if desired. If the mix is determined to be out of Uniformity Tolerances as stated in Table 1, a penalty for the individual job will be enforced in accordance with Table 3 below.

Table 3: Penalty Per Parameter

Mixture Parameter Out-of-Specification per Acceptance Tests	Price Adjustment per Parameter
NO	None
YES	Outside Range 1 but not Range 2: decrease by 10%
	Outside Range 2: decrease by 25%

**ALCONA COUNTY
F-30 PROJECT
ESTIMATED PROJECT QUANTITIES (Quantity May Vary)**

Item Number	Item Description	Pay Unit	Estimated Quantity	Unit Price	Extended Price
3077002	Shoulder, Trenching	Syd	11,760	\$	\$
3070121	Shoulder, Cl II	Ton	2,500	\$	\$
5010703	HMA, LVSP	Ton	7,500	\$	\$
8110232	Pavement markings, waterborne, Paint, 4 inch, Yellow permanent.	Ft	8,400	\$	\$

TOTAL \$ _____

Company Name: _____

Street Address: _____

Phone Number: _____

City: _____ State: _____ Zip Code: _____

Email Address: _____

Printed Name: _____

Signature: _____