Wade Williams Mark W. Hoffman Frank Zulski, Jr. Brent Shank, PE Engineer-Manager Lisa Kleeman Finance Director



2265 E. Hathaway Road Harbor Springs, MI 49740 Office: (231) 347-8142 Fax: (231) 347-5787 www.emmetcrc.org

PROPOSAL

Project: P40 – Wheeling Road

HMA Ultrathin overlay, gravel shoulders, snowmobile trail crossing protective overlay and pavement markings.

The Emmet County Road Commission will accept Bids until **9:00 a.m.** local time on **June 20, 2023** at: 2265 E. Hathaway Road, Harbor Springs, MI 49740. Bid packages are available at the Emmet County Road Commission Office or on Emmet County Road Commission website at <u>www.emmetcrc.org</u>.

ALL BIDS WILL BE SEALED AND PLAINLY MARKED AS TO THE PROJECT AND PROJECT NUMBER.

The bidder has examined the plans, specification, special provisions and related materials in the proposal, as well as the location of the work described in the proposal for this project and is fully informed as to the nature of the work and conditions relating to its performance and understands that the quantities shown are approximate only and are subject to either increase or decrease.

The bidder hereby proposes to furnish all necessary machinery, tools, apparatus and other means of construction, do all the work, furnish all the materials except as otherwise specified and, or each unit price, lump sum, or one each named in the itemized bid, to complete the work in strict conformity with the plans therefore and the entire proposal which is incorporated by reference in these pages, and in strict conformity with the requirements of the 2020 Standard Specifications for Construction, Michigan Department of Transportation and such other special provisions and supplemental specifications as may be part of the proposal for this project.

The bidder further proposes to do such extra work as may be authorized by the Emmet County Road Commission, prices for which are not included in the itemized bid. Compensation shall be made on the basis agreed upon before such extra work is begun.

THE BIDDER UNDERSTANDS AND AGREES THAT THE EMMET COUNTY ROAD COMMISION RESERVES THE RIGHT TO REJECT ANY AND ALL BIDS; TO WAIVE IRREGULARITIES OR INFORMALITIES; AND NO CONTRACTUAL RELATIONSHIP SHALL EXIST BETWEEN THE BIDDER AND THE EMMET COUNTY ROAD COMMISSION FOR THE WORK DESCRIBED HEREIN UNTIL SUCH TIME AS THE CONTRACT HAS BEEN FORMALLY EXECUTED BY BOTH THE BIDDER AND THE EMMET COUNTY ROAD COMMISSION.

Wheeling Road Ultrathin Overlay

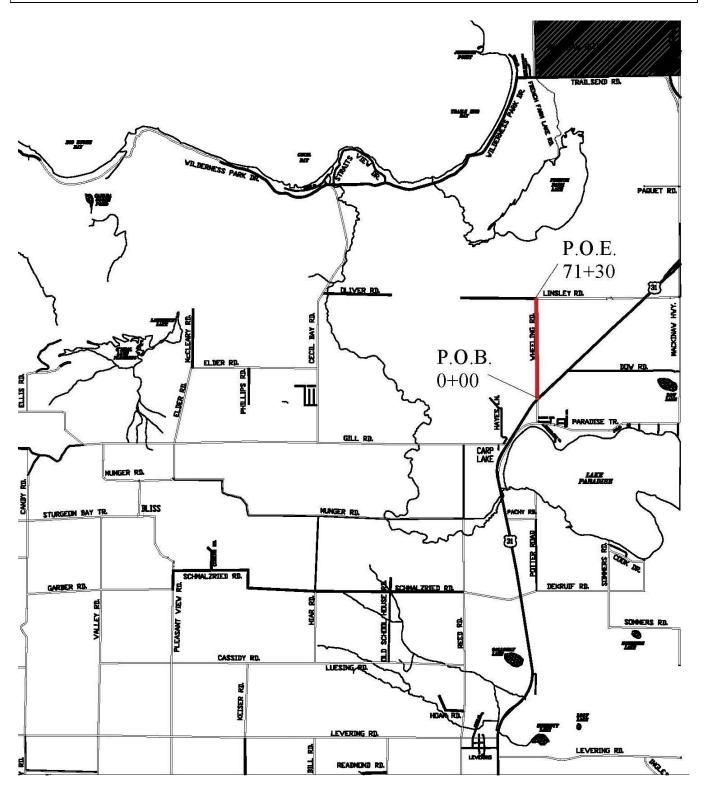
Project Inform	Project Information:				
Job Number:	P40				
Job Location:	Wheeling Roa	Wheeling Road – US-31 to Linsley Road			
Type of Work:		HMA Ultrathin overlay, gravel shoulders, snowmobile trail crossing protective overlay and pavement markings.			
Owner:	Emmet County Road Commission				
Project Dates:					
Project Start D	Project Start Date: 10 Days after all Contracts are executed.				
Project Completion Date: October 1, 2023 (All HMA Paving Items) October 15, 2023 (All Project Items)					
The project shall be completed within fifteen (15) days of the starting date.					

Project Submittals:

The following shall be submitted to the Road Commission Engineer for approval prior to project start:

- 1. Material Source List (MDOT Form 501)
- 2. Progress Schedule (must be submitted within 5 days of Contract award)
- 3. See the Special Provision for HMA Ultra-thin Overlay for submittal requirements (must be submitted prior to paving).
- 4. Damage Claim Program
- 5. Traffic Control Plan

Upon project completion, the Contractor shall submit a written "Notice of Completion" to the Engineer. After the Engineer receives the Notice of Completion, the Engineer will inspect the project. The Engineer will provide a list of any deficient items (Punch List) to the Contractor. Final acceptance will only be issued when any deficient items are addressed to the satisfaction of the Engineer. Final acceptance will be provided to the Contractor in writing.



Paving Joints:

The Contractor shall cold mill a butt joint at the P.O.B., P.O.E., intersecting roads, and paved driveways. The Engineer shall mark all locations. All labor, equipment, and materials necessary to construct the joint shall be paid for as **Pavt for Butt Joints, Rem (Syd)**.

Locations for the Paving Joint:	
Station	Location
0+00	P.O.B.

Size (L x W) 20' x 22' (50 Syd)

HMA Paving:

See the attached Special Provision for HMA Ultra-thin Overlay for HMA mixture specifications.

	HMA APPLICATION TABLE					
Label	Mix	Application Rate (Lbs/Syd)	Design Performance Grade	Comments	Pay Item	
	HMA, Ultra-thin	85	58-28		HMA, Ultra-thin	
1	AWI = 220 for HMA,Ultra-thin.					
2	Apply HMA Bond Coat at 0.11 to 0.15 gallons per square yard or as directed by the Engineer. Paid for as part of other HMA items.					

Driveways:

The Contractor is responsible to ensure positive drainage in all approaches. The Contractor will be responsible for repairing, at the Contractor's expense, standing water or other drainage related issues.

The Contractor shall be responsible to maintain access to driveways after paving. On any driveway that has more than 4 inches of drop off the Contractor shall provide a gravel apron that reduces the drop off to a maximum of 4 inches on the day of paving or the next calendar day. If the Contractor fails to provide such access, the Road Commission will levy liquidated damages of \$200.00 per calendar day that a drop off exceeds 4 inches in any driveway.

Gravel Driveways:

Place Approach, Cl II material in gravel driveways as part of the gravel shoulder operation. Driveways shall be blended 2.0' - 4.0' from the edge of the roadway to a slope no greater than 10%, or as directed by the Engineer.

Paved Driveways:

Paved driveways shall be blended when the HMA Ultra-thin is placed. Material shall be placed 2.0' to 4.0', or as directed by the Engineer, outside the edge of pavement for the road, paid for as part of HMA, Ultra-thin.

Gravel Shoulders:

Contractor shall place ShId, CI II material 2.0 feet wide or as specified by the engineer. When placing shoulder aggregate, material shall be placed directly on the shoulder. Shoulder material may <u>not</u> be placed on the asphalt. Shoulder material shall be flushed to the edge of pavement and blended to the existing shoulder on the outside. Shoulders shall be wheel rolled with heavy equipment for density. The Contractor is responsible to ensure positive drainage on gravel shoulders. The Contractor will be responsible for repairing, at the Contractor's expense, standing water or other drainage related issues.

Extend shoulder gravel out to mailbox posts as to not leave a drop off between the edge of the gravel shoulder and the face of the mailbox.

Shld, Cl II material shall be a Dense-Graded Aggregate, 23A or 23AA, 100% crushed limestone.

All Approach, Cl II material shall be paid for as Shld, Cl II, unless otherwise noted or directed by Engineer.

The Contractor shall provide a scale ticket for each load delivered to the job at the time of delivery or at the end of the day to the owner's representative. All scale tickets shall meet MDOT requirements. The Contractor shall provide current scale certification to the Road Commission prior to hauling material. Loader scales will not be accepted. Any exceptions shall be noted on the bid sheet for the project.

The Contractor shall schedule shoulder material placement in a timely manner to reduce the time that an edge drop off exists. The Contractor shall place shoulder material within 7 calendar days of paving completion. If the Contractor fails to place shoulder material, the Road Commission will levy liquidated damages of \$200.00 per calendar day that the edge drop off exists.

Pavement Markings:

All pavement markings, shapes and dimensions shall conform with the Michigan Department of Transportation Pavement Marking Typicals PAVE-905-SERIES, unless otherwise indicated.

Pavement Markings shall be placed in accordance with the 2011 Michigan Manual of Uniform Traffic Control Devices. All zoning shall be the responsibility of the contractor. Payment for zoning shall be included in the items for pavement markings.

EXISTING PAVEMENT MARKINGS – For informational purposes only.					
Station	Double Yellow	Lt. Barrier/ Skip	Skip/Rt. Barrier	Skip	White
0+00 to 71+30				Х	

Traffic Control:

Traffic shall be maintained during the project through the use of lane closures, two way traffic shall be open during non-working hours. The Contractor shall coordinate operations with contractors performing work on other projects within or adjacent to the Construction Influence Area (CIA). The Construction Influence Area for this project shall consist of the width of the project right of way, and the width of the right of way on intersecting roads, from a point where advance construction warning signing begins to a point where it ends.

At no time may Traffic Control Stop and Hold traffic, including loaded & unloaded asphalt trucks on the new HMA surface.

Advanced Warning signs shall be in place before any work begins.

Traffic will be maintained by the Contractor in accordance with the 2011 Michigan Manual of Uniform Traffic Control Devices.

Payment for all traffic control, signing and traffic control items shall be paid for as Traffic Control.

General Note:

All work being performed will be conducted in the safest manner possible and appropriate PPE shall be used at all times. All work shall be done in accordance with the Michigan Department of Transportation 2020 Standard Specification for Construction. Contractor assumes all responsibilities for Quality Control (QC) to assure the plans and specifications are met per the contract and to provide professional craftsmanship in each task being performed. Any errors in plans or discrepancies found in the field shall be brought to the engineer's attention immediately. All materials shall meet the requirements of the Michigan Department of Transportation Materials Source Guide.

Insurance Requirements:

The Contractor shall furnish proof of general liability insurance in amounts not less than \$2,000,000 each occurrence and general aggregate, proof of automobile liability in amounts not less than \$2,000,000 combined single limit for each accident, bodily injury per accident, and property damage per accident, and in amount not less than \$1,000,000 for bodily injury per person. Such proof of insurance shall include a valid certificate of insurance demonstrating that the Emmet County Road Commission is additional insured party on the policy. Such insurance shall cover a period not less than the term of the project and shall provide that it cannot be cancelled without 30 days advanced written notice to the Emmet County Road Commission, by certified mail, first class, return receipt requested. The Contract/Project Agreement will be invalid if insurance expires during the authorized period of work described.

In addition to any liability or obligation by the Contractor that may otherwise exist, Contractor shall, to the fullest extent permitted by law, indemnify and hold harmless the Emmet 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 Emmet County Road Commission may sustain by reason of claims for or allegations of negligence or violation of the terms and conditions of the Contract/Project Agreement, arising out of the work which is subject of the Contract.

Bonding Requirements:

The successful Contractor shall furnish a performance bond equal to the contract price as assurance for faithful contract performance.

The Contractor shall also furnish a separate *surety bond* equal to the contract price as security for payment to all persons performing labor and furnishing materials in connection with this contract. The Contractor shall pay the premium for all bonds.

The bonds must meet requirements of Michigan Law.

Bonds shall be submitted and approved before contract execution.

Liquidated Damages:

Liquidated damages will be assessed for failure to complete this project by the specified date, or by the allowed number of days specified once work begins, due to lack of effort, poor organization or ability to perform on the Contractor's part. Liquidated Damages may be waived by the Project Engineer. Liquidated damages will be assessed according to the table below:

Project Award Amount	Liquidated Damages
\$0 - \$150,000	\$500 per Calendar Day
\$150,001 - \$500,000	\$750 per Calendar Day
Over \$500,000	\$1,000 per Calendar Day

Soil Erosion and Sediment Control (SESC):

The Contractor shall implement and maintain the soil erosion control measures as shown on the plans before and at all times during construction of this project. All SESC measures shall conform to current MDOT standards, manufacture guidelines and established best practices.

Daily inspections shall be made by the Contractor; periodic inspections shall be made by the Engineer to determine the effectiveness of the SESC measures. Any required corrections shall be made without delay.

All permanent erosion control measures shall be permanently maintained by the Emmet County Road Commission.

Stations:

0+00	P.O.B. – End of US-31 apron.
71+18	Centerline of Linsley Road
71+30	P.O.E.

Project Quantities:

Total Project Quantities

Item	Quantity	Unit
Mobilization, Max \$13,000	1	LSUM
Shld, Cl II	282	Ton
Pavt for Butt joints, Rem	60	Syd
HMA Ultra-thin Overlay	830	Ton
Pavt Mrkg, Waterborne, 4 inch, Yellow	2000	Ft
Protective Ovly, Snowmobile Trail Crossing	60	Syd
Traffic Control, Max \$5,800	1	LSUM
Monument Box Adj	3	Ea

Bid Sheet

Board of Emmet County Road Commissioners 2265 East Hathaway Road Harbor Springs, MI 49740

Gentlemen:

The undersigned proposes to furnish any and all materials, labor, and equipment necessary for the resurfacing of Wheeling Road as spelled out in the "Invitation to Bid" for the prices below.

The Emmet County Road Commission reserves the right to reject any and/or all bids based on what is in the best interest of Emmet County.

Contractor Name:_____

Project:

Wheeling Road Ultra thin Overlay

Item	Quantity	Unit	Unit Price	Total
Mobilization, Max \$13,000	1	LSUM		
Shld, Cl II	282	Ton		
Pavt for Butt joints, Rem	60	Syd		
HMA Ultra-thin Overlay	830	Ton		
Pavt Mrkg, Waterborne, 4 inch, Yellow	2000	Ft		
Protective Ovly, Snowmobile Trail Crossing	60	Syd		
Traffic Control, Max \$5,800	1	LSUM		
Monument Box Adj	3	Ea		
			Total Bid	

Bidder:	Address:	
-		
Signature:	Phone No.:	
Printed Name:	Date:	
-		
Title:	Email:	
	 Linuil.	

Emmet County Road Commission Special Provision For HMA Ultra-thin Overlay

ECRC: RBS

03/07/22

a) **Description**

This Special Provision provides for the supply and placement of HMA Ultra-thin overlay. The HMA mixture shall be provided to meet the requirements of the standard specifications for construction except where modified herein. The HMA mixture quality assurance and acceptance shall conform to Section 501 of the 2020 Michigan Department of Transportation Standard Specifications for Construction except where modified herein. The MDOT HMA Production Manual, current edition, applies to this work.

b) Submittals

The contractor shall submit the following:

- 1. Job Mix Formula (MDOT Form 1911 or equivalent) for the project for review and approval by the Engineer. The Contractor shall not place any HMA without an approved JMF. Below are specific values that are required on the JMF (in addition to the normal requirements).
 - a. Fine Aggregate Angularity
 - b. Fines to Asphalt Ratio (based on Effective Asphalt Content)
 - c. Soft Particle Percentage of each JMF Aggregate Type
- 2. Quality Control Plan.
- 3. A copy of all Contractor Quality Control Tests submitted within 7 working days of projection completion.
- 4. A copy of the Bill of Lading or Delivery Ticket for the Asphalt Binder for the project. The Bill of Lading must include the type of material that was previously hauled in the delivery tank.

c) Materials

Provide HMA and materials meeting the following requirements:

1. Bond Coat

The bond coat material will be an emulsified asphalt conforming to the requirements of Section 904 of the Standard Specifications for Construction, Type SS-1h.

2. HMA Ultra-thin Overlay

The HMA Ultra-thin overlay shall be composed of a mixture of aggregate, asphalt binder, and if required, mineral filler, to meet the requirements listed in Table A, B, and section c(3) of this Special Provision.

HMA Mix Type	VMA Minimum on any given Test (a,c)	VMA Target (c)	Asphalt Binder Content Minimum on JMF	Asphalt Binder Content Minimum on any given Test (a)	Fines to Asphalt Ratio Maximum on JMF (b)
Ultra-Thin	15.0	15.5	6.00	5.70	1.20
a. The HMA parameter minimum is per any given QC/QA test, regardless of Tolerances listed in Table 2 of this Special Provision.					

Table A: HMA Mixture Targets and Parameters

b. Value based on Pbe (Effective Asphalt Percent) for each given mix and JMF.

c. VMA values are based on the Gsb (Bulk Specific Gravity) of the given HMA mixture not the Gse (Effective Specific Gravity).

Aggregate Gradation, Physical Properties, and Recycled Asphalt Materials
 The combined gradation of the aggregate portion of the mixture, including the mineral filler, and
 physical properties of the mixture shall follow the limits of Table B below. A maximum of 17%
 Recycled Asphalt Pavement (RAP) binder by total weight of AC binder is allowed in the mixture.
 (MDOT Tier 1 only). Recycled Shingles (RAS) is not allowed in mixture.

O	
Superpave Air Voids (%)	4.5
Superpave Gyrations	35
Fine Aggregate Angularity (Min.)	40.0
Percent Crush (Min. %)	50.0
Aggregate Wear Index (AWI)	220
Sieve Size	Total %
	Passing
1/2 inch	100
3/8 inch	99-100
No. 4	75-95
No. 8	55-75
No.30	25-45
No. 200	3-8

Table B: HMA Mixture Targets and Parameters

In addition, the sum of shale, siltstone, ochre, coal, clay-ironstone and particles which are structurally weak or are found to be non-durable in service shall not exceed **5.0** percent.

4. Performance Graded (PG) Asphalt Binder

The HMA Ultra-thin mix shall use a PG 58-28 binder. The binder shall meet all the requirements in Section 904 of the Standard Specifications for Construction.

d) Construction

1. Bond Coat Application

The bond coat material will be applied to completely cover the prepared surface at a rate of 0.11 to 0.15 gallons/Syd.

- 2. Mixture Application Rate The target application rate shall be 85 lbs/Syd.
- Density Thoroughly compact the mixture immediately after placement.

e) Mixture Testing

Mixture samples will be tested to verify gradation, binder content, and volumetric properties per Table 1 and Table 2 listed below.

If the Engineer elects not to perform Quality Assurance testing on a given day or a given project, the Contractor is still required to perform testing in accordance with Table 1 and Table 2 below. The Contractor's Quality Control test results shall be sent to the Engineer within 2 working days of each day's productions for a given HMA mixture.

Table 1: Quality Assurance/Control Tolerance Limits for HMA Mixtures

Table 1. Quality Assurance/control rolerance Limits for TimA mixtures					
Parameter	Action Limits (Range 1)	Suspension Limits (Range 2)			
% Passing the #8 and Larger Sieves	+/- 5.0%	+/- 8.0%			
% Passing the #30 Sieve	+/- 4.0%	+/- 6.0%			
% Passing #200 Sieve	+/- 1.0%	+/- 2.0%			

Table 2: Quality Assurance/Control Testing Tolerance (+/-) from JMF or Target Values

Parameter	Action Limits (Range 1)	Suspension Limits (Range 2)
Binder Content (a)	0.30% (a)	0.50% (a)
Maximum Specific Gravity (Gmm)	0.013	0.020
Voids in Mineral Aggregate VMA (a,b)	0.75% (a,b)	0.80% (a,b)
Air Voids (c)	0.60%	0.90%
Fines to Effective Asphalt Ratio	0.65-1.25	0.60-1.30
a Refer to minimum narameters	in Table A of this special provis	sion

a. Refer to minimum parameters in Table A of this special provision.

b. These given limits are (+/-) from given targets in Table A of this special provision.

c. Limits are (+/-) from JMF/Target Values listed Table B of this special provision.

f) Measurement and Payment

The completed work will be measured and paid for at the contract unit price for the following pay item. Payment includes furnishing, placing, and compacting the HMA Ultra-thin overlay.

Pay Item	Pay Unit
HMA Ultra-thin Overlay	Ton