Frank Zulski – Chair
Mark W. Hoffman – Vice Chair
Wade Williams – Member
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: 2024 County Wide Chip Seal Project

Single Chip Seal, Fog Seal and Pavement Markings

The Emmet County Road Commission will accept Bids until **9:00 a.m.** local time on **April 9, 2024** 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 <a href="https://www.emmetcrc.org">www.emmetcrc.org</a>.

ALL BIDS WILL BE SEALED AND PLAINLY MARKED AS TO THE PROJECT AND PROJECT NUMBER. MAILED BIDS MUST BE RECEIVED BY 3:30 P.M. THE PREVIOUS EMMET COUNTY ROAD COMMISSION BUSINESS DAY PRIOR TO BID OPENING.

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 COMMISSION 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.

The Emmet County Road Commission, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office the Secretary, Part 21, Nondiscrimination in Federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contact entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

## **2024 COUNTY WIDE CHIP SEAL PROJECT**

#### **Project Information:**

Job Location: Various Locations (see locations below)

Type of Work: Single Chip Seal, Fog Seal and pavement markings.

#### **Project Dates:**

Project Start Date: 10 Days after all Contracts are executed and not before May 16, 2022.

Project Completion Date: September 20, 2024

The project shall be completed within thirty (30) days of starting date.

A pre-construction meeting will be scheduled by the Emmet County Road Commission prior to project start. All project submittals are to be submitted for review at this meeting.

#### **Project Submittals:**

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

- Material Source List (MDOT Form 501)
- 2. Progress Schedule (must be submitted within 5 days of Contract award)

#### **Chip Sealing:**

All application rates, materials and all work for placement shall be done in accordance with the Michigan Department of Transportation 2020 Standard Specification for Construction. All materials shall meet the requirements of the Michigan Department of Transportation Materials Source Guide.

Contractor shall protect all castings on the project. The known castings are indicated in the project notes below, however, the Contractor is expected to verify that all castings are protected within the project limits.

#### Fog Seal:

See attached Special Provision for Fog Seal 20RC500(A035).

#### **Pavement Markings:**

Emmet County Road Commission will place the yellow reflective overlay markers to delineate centerline. White Lines shall be placed 11.0 feet from centerline unless otherwise noted.

All pavement markings, shapes and dimensions shall conform with the Michigan Department of Transportation Pavement Marking Typicals VIII-900E to VII-990E, 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.

All centerline markings shall have a second application completed 14 to 60 days after initial application.

#### **Traffic Control:**

Traffic shall be maintained during the project using lane closures, two-way traffic shall be open during non-working hours. The Contractor will place traffic regulators at all intersecting roads within the work zone. The Contractor shall coordinate operations with contractors performing work on other projects within or adjacent to the Construction Influence Area (CIA).

# At no time may Traffic Control Stop and Hold traffic, including loaded & unloaded trucks on the new chip seal 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**.

#### **Location Information:**

**1 Fisher Road** – State Road the west to turn around.

Length: 1.00 milesWidth: 23.0 FtProject Stations

0+00 State Road centerline
 0.19 P.O.B. (include aprons)
 53+08 P.O.E. (include turn around)

Pay Item	Quantity	Unit
Seal, Single Chip	13,846	Syd
Seal, Fog	13,846	Syd
Pavt Mrkg, Waterborne, 4 inch, Yellow	1,450	Ft
Pavt Mrkg, Waterborne, 2 <sup>nd</sup> Application, 4 inch, Yellow	1,450	Ft

**2** Fisher Road – State Road then east to turn around.

Length: 0.33 milesWidth: 25.0 FtProject Stations

0+00 State Road centerline
 0+16 P.O.B. (include aprons)
 17+63 P.O.E. (include turn around)

Pay Item	Quantity	Unit
Seal, Single Chip	5,456	Syd
Seal, Fog	5,456	Syd
Pavt Mrkg, Waterborne, 4 inch, Yellow	3,526	Ft
Pavt Mrkg, Waterborne, 2 <sup>nd</sup> Application, 4 inch, Yellow	3,526	Ft

**Boynton Road** – West Townline Road then east to turnaround.

Length: 0.51 milesWidth: 22.0 FtProject Stations

o 0+00 West Townline centerline

0+60P.O.B.27+45P.O.E.

Pay Item	Quantity	Unit
Seal, Single Chip	6,564	Syd
Seal, Fog	6,564	Syd

Pavt Mrkg, Waterborne, 4 inch, Yellow	5,370	Ft
Pavt Mrkg, Waterborne, 2 <sup>nd</sup> Application, 4 inch, Yellow	5,370	Ft

#### 4 Wressel Road – State Road then west to end of pavement.

Length: 0.74 milesWidth: 23.0 FtProject Stations

0+00 State Road centerline0+19 P.O.B. (include aprons)

o 39+02 P.O.E.

Pay Item	Quantity	Unit
Seal, Single Chip	9,984	Syd
Seal, Fog	9,984	Syd
Pavt Mrkg, Waterborne, 4 inch, Yellow	4,854	Ft
Pavt Mrkg, Waterborne, 2 <sup>nd</sup> Application, 4 inch, Yellow	4,854	Ft

#### 5 Island View Road – M-119 to State Road.

Length: 2.25 milesWidth: 22.0 FtProject Stations

o 0+00 P.O.B. – EOM M-119 (include aprons)

o 24+84 Wilkinson Road centerline

40+16 Vorce Road
 66+59 Gully Road

o 119+05 P.O.E. – EOM State Road (include aprons)

o 119+21 State Road centerline

Pay Item	Quantity	Unit
Seal, Single Chip	29,261	Syd
Seal, Fog	29,261	Syd
Pavt Mrkg, Waterborne, 4 inch, Yellow	11,905	Ft
Pavt Mrkg, Waterborne, 2 <sup>nd</sup> Application, 4 inch, Yellow	11,905	Ft

#### 6 Straits View Drive – Wilderness Park Drive to Wilderness Park Drive.

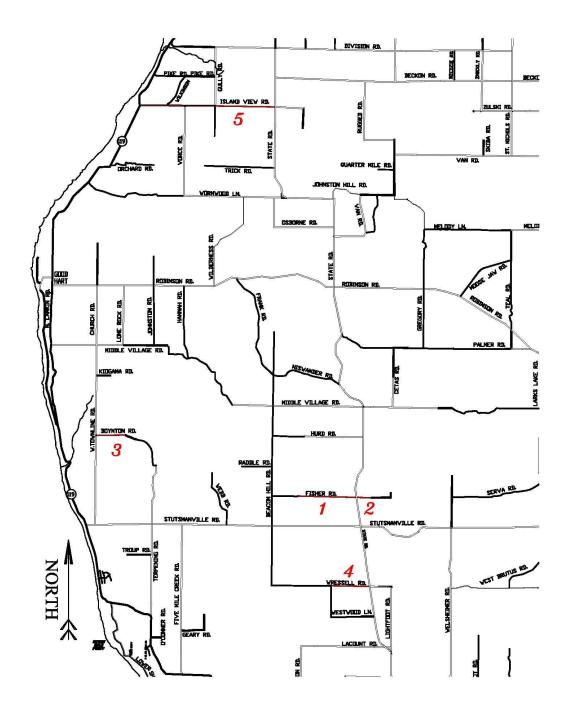
Length: 1.23 milesWidth: 22.0 FtProject Stations

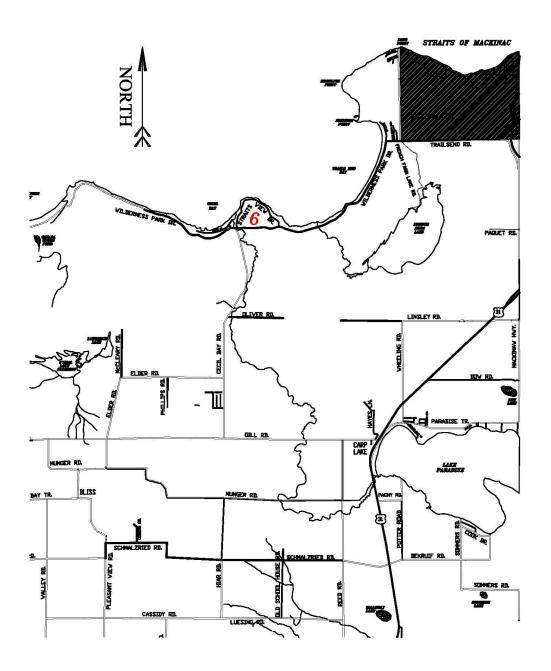
o 0+00 Wilderness Park Drive (west) centerline

0 +22
 P.O.B.-pave joint (include aprons)
 65+16
 P.O.E.-pave joint (include aprons)

### o 33+85 Wilderness Park Drive (east) centerline

Pay Item	Quantity	Unit
Seal, Single Chip	15,969	Syd
Seal, Fog	15,969	Syd
Pavt Mrkg, Waterborne, 4 inch, Yellow	12,988	Ft
Pavt Mrkg, Waterborne, 2 <sup>nd</sup> Application, 4 inch, Yellow	12,988	Ft





#### **General Note:**

All work shall be done in accordance with the Michigan Department of Transportation 2020 Standard Specification for Construction. All materials shall meet the requirements of the Michigan Department of Transportation Materials Source Guide.

For protection of underground utilities, and in conformance with Public act 174 of 2014, the contractor shall call MISS DIG a minimum of three full working days, excluding Saturdays, Sundays and Holidays, prior to beginning work in areas where public utilities have not been previously located. All MISS DIG participating members will be thus routinely notified. This does not relieve the Contractor from notifying utility owners who may not participate in the MISS DIG alert system.

#### **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 Cheboygan 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 Cheboygan 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 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 Cheboygan 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 Cheboygan 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.

#### **Liquidated Damages:**

Liquidated damages will be assessed for failure to complete this project by the specified date, unless waived by the Project Engineer. Damages will be assessed for the total contract cost for all awarded items, as shown in table 108-1 of section 108 of the above referenced MDOT specifications.

Bid Sheet				
Board of Emmet County Road Commissioner 2265 East Hathaway Road Harbor Springs, MI 49740	rs			
Gentlemen:				
The undersigned proposes to furnish all mat <u>County Wide Chip Seal Project</u> as spelled our				
The Emmet County Road Commission reserving the best interest of Emmet County.	ves the right to	reject an	y and/or all b	oids based on what is
Contractor Name:				
Project: 2024 County Wide Chip Seal I	Project			
Pay Item	Quantity	Unit	Unit Price	Total
Mobilization, Max 10%	1	LSUM		
Seal, Single Chip	81080	Syd		
Seal, Fog	81080	Syd		
Pavt Mrkg, Waterborne, 4 inch, Yellow	40093	Ft		
Pavt Mrkg, Waterborne, 2nd Application, 4 inch, Yellow	40093	Ft		
Traffic Control	1	LSUM		
			Total Bid	
Specify: Stone Type, Source and AWI				

Address:

Bidder:

Signature:	Phone No.:
Printed Name:	Date:
Title:	Email:

# MICHIGAN DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR FOG SEAL

CFS:RAG 1 of 4 APPR:KPK:CJB:04-22-20

- **a. Description.** This work consists of an application of a fog seal. A fog seal is a light application of a slow-setting emulsified asphalt diluted with water. Ensure all work and materials are in accordance with the standard specifications, except as modified herein.
- **b. Materials.** Provide materials in accordance with subsection 904.03 of the Standard Specifications for Construction with the following alternative:
  - 1. Asphalt Emulsion. Provide Cationic Quick Setting Emulsified Asphalt (CQSEA) meeting the requirements of Table 1.

Dilute asphalt emulsion, at a maximum of one part asphalt emulsion to one part water, at the emulsion plant.

- **c. Equipment.** Use equipment that is safe, environmentally acceptable, and capable of producing a quality product.
  - 1. Pressure Distributor. Ensure the pressure distributor has the following characteristics:
    - A. Has a ground speed computer-controlled device interconnected with the asphalt emulsion pump such that the specified application rate is supplied at any speed.
    - B. Is capable of maintaining the asphalt emulsion at the specified temperature.
    - C. Has spray bar nozzles capable of producing a uniform fan spray and with shutoff control that is instantaneous, with no dripping.
    - D. Is capable of maintaining the specified application rate within ±0.015 gallons per square yard (gal/syd) for each load.
  - 2. Miscellaneous. Provide a power broom and all necessary hand tools, thermometers, etc. Ensure distributors and power brooms are equipped with at least one visible approved flashing, rotating, or oscillating amber light.
- **d. Pre-Paving On-Site Meeting.** A pre-paving meeting between the Engineer and Contractor will be held prior to beginning work. The agenda for this meeting will include a review of the following:
  - 1. Work schedule,
  - 2. Traffic control plan.
  - 3. Equipment calibration and adjustments,
  - 4. Condition of materials and equipment, and

20RC500(A035) CFS:RAG

2 of 4

04-22-20

- 5. Quality control plan (job mix formula (JMF), Yield Check Methods, etc.).
- **e. Construction.** Place the longitudinal construction joint at the edge of metal of the driving lane; at a location requiring a minimal overlap onto the driving lane; or at a location requiring a minimal overlap of the new longitudinal joint resulting from milling and resurfacing.

Where corrugations are present longitudinal joints are to be constructed at the outside edge of the far side of the corrugation on the first pass. Place the longitudinal joint at the outside edge of the opposite side of the corrugation for the second application.

If applying fog seal to a chip seal, complete application of the fog seal within 48 hours of the completion of the chip seal, but not on the same day as the application of chip seal.

Apply the fog seal only when the pavement and air temperature is 55 degrees Fahrenheit (F) or above. Do not apply the fog seal if there is threatening weather and temperatures are forecast to be below 32 degrees F within 24 hours from the time of application.

Use pressure sufficient to apply emulsion at a uniform rate, but without splattering or drilling from the spray bar. Adjust nozzle angle and spray bar height to ensure correct spray pattern.

Apply fog seal at a rate of 0.07 to 0.15 gallons of diluted material per square yard of pavement treated. Ensure the fog seal application results in a uniform coverage of emulsion just sufficient to flow into and seal the pavement pores, small cracks, and voids. The asphalt emulsion application rate, as determined by a yield check, must not exceed a tolerance of ±0.015 gal/syd from the established JMF application rate.

If a condition is identified that causes an unsatisfactory fog seal, stop all production work and perform corrective action immediately at no additional cost to the contract. If there are adverse environmental conditions, provide the Engineer an action plan that clearly demonstrates how the fog seal operation will be adjusted for the actual environmental conditions.

Allow the Engineer access to all work in progress for the purpose of quality assurance review and testing.

**f. Quality Control.** Establish, maintain, and follow an effective quality control system in accordance with current Department procedures. The quality control system must detail plans, procedures, and organization necessary to furnish and apply a fog seal that complies with the contract. Follow the quality control system until work is accepted.

Establish, maintain, and follow a Contractor Quality Control (CQC) plan sufficient to ensure that the warranty related treatment complies with the contract. The CQC plan must cover all fog seal operations. Submit a copy of the plan to the Engineer, at the preconstruction meeting, for approval. Follow the approved plan throughout the project.

Include the following information, at a minimum, in the CQC plan:

Materials to be used on the project.

- 2. Sampling and testing methods used to determine compliance with material specifications.
- 3. Equipment to be used on the project.
- 4. Calibration method used to determine compliance with the application rates.
- 5. Procedures for pavement preparation.
- 6. Controls implemented by the Contractor to ensure that the fog seal material is cured or set up satisfactorily before opening to traffic.
- 7. Procedures implemented by the Contractor for monitoring initial acceptance requirements.
- **g. Documentation.** Provide the Engineer a daily report including the following information:
- 1. Control section, project number, county, route, Engineer;
- 2. Date, air temperature, pavement temperature, humidity;
- 3. Asphalt emulsion temperature;
- 4. Beginning and ending stations;
- 5. JMF: application and dilution rates (asphalt emulsion);
- 6. Yield checks on asphalt emulsion (3 per day, minimum);
- 7. Length, width, total square yards; and
- 8. Contractor's signature.

Provide asphalt emulsion documentation in accordance with current Department acceptance procedures.

**h. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item Pay Unit		
Seal, Fog	. Square	Yard

**Seal, Fog** includes placement of the asphalt emulsion including surface preparation, stationing, and documentation.

#### Table 1: Cationic Quick Setting Emulsified Asphalt (CQSEA)

rable 1. Oationic watch betting Emulsined Asphalt (Owola)	
	Requirements
	CQSEA
Viscosity, Saybolt Furol, AASHTO T59/ASTM D7496:	
At 25 °C, sec	20–100
Storage Stability Test, AASHTO T59/ASTM D6930, 24 hr, %	1
Difference, max	
Particle Charge Test, AASHTO T59/ASTM D7402 (a)	Positive
Sieve Test, AASHTO T59/ASTM D6933, % max (Distilled Water)	0.10
Residue, min	60
Tests on Distillation Residue:	
Penetration, 25 °C, 100 g, 5 sec, dmm, AASHTO T49/ASTM D5/D5M	40–90
Ductility, 25 °C, 5 cm/min, cm, min, AASHTO T51/ASTM D113	40
Solubility in Trichloroethylene, % min, AASHTO T44/ASTM D2042	97.5
Ash Content, % max, ASTM D128	2
a. If Particle Charge Test is inconclusive, material having a maximum pH	of 6.7 is
acceptable.	