



ADVERTISEMENT FOR BIDS
Clare County Road Commission
Harrison, Michigan

Bids will be received by the Board of Clare County Road Commissioners at their office at 3900 E. Mannsiding Road, Harrison, Michigan, 48625 (telephone 989/539-2151) until 10:00am June 29th 2023 and then publicly opened and read for the following:

BITUMINOUS AGGREGATE BASE COURSE
Full Depth Reclamation and Base Stabilization
Old State Road from Mannsiding Road to Jefferson Road, Lincoln Township,
Clare County

Bids shall be in accordance with the specifications, obtainable from the Road Commission Office and on our website www.clarecrc.com . Bids shall be submitted upon the form provided. Bids shall be submitted in sealed envelopes with a copy of your Liability Insurance with Clare County Road Commission as additional Insured in plainly marked on the outside as to their contents.

The Board reserves the right to reject any and all bids and waive any defects and accept the bid which in their opinion is in the best interests of the Clare County Road Commission.

Board of County Road Commissioners
of Clare County, Michigan

Karen Hulliberger
William Simpson
Max Schunk
Dave Coker
Merle Harmon



SPECIFICATIONS
FOR
BITUMINOUS AGGREGATE BASE COURSE Full
Depth Reclamation and Base Stabilization

Old State Road from Mannsiding Road to Jefferson Road, Lincoln Township,
Clare County

DESCRIPTION

A. EXISTING RECYCLED ASPHALT SURFACES. - This work shall be accomplished in place and shall consist of pulverizing an existing recycled asphalt surface, combining this pulverized material with a portion of the underlying aggregate base, blending this combined material with hot asphalt cement when required, shaping to the proper elevation and slope and compacting to the proper density.

MATERIALS

The various materials shall be as follows:

Bituminous Mixture: Asphalt Cement, Performance Grade SH 52-28

Fog Coat: SS-IH

Dust Palliative

Aggregate Material

The bituminous material for stabilizing shall be applied at the rate, and temperature, (Minimum 335° F.) as determined by the Engineer, so that the residual bitumen added

will be between two (2) and five (5) percent by weight of the bituminous material.

EQUIPMENT REQUIREMENTS

A. PULVERIZATION EQUIPMENT. - When pulverization is specified in the proposal, the pulverization shall be done in place. Pulverization equipment shall be a bi-directional rotary reduction machine capable of operating in either an up-cut or down-cut mode to insure reducing the existing asphalt to the specified size and gradation. The forward speed and depth of cut shall be automatically as well as manually controllable to produce a consistent gradation. Both front and rear material control gates shall be hydraulically adjustable from the operator's platform in increments of 1/8 inch in order to control the amount of material being processed to insure proper sizing.

B. STABILIZING EQUIPMENT. - The stabilizing plant shall be a single-pass, multi-drum, self-propelled machine combining a cutting rotor, a blending rotor and two mixing

rotors in the mixing chamber. The mixing chamber shall have a positive depth control to ensure a uniform depth of stabilized material and must be capable of loosening the base materials to the depth called for without disturbing the subbase. The stabilizing plant shall add the asphalt in predetermined and accurately metered quantities, while maintaining a constant and fixed rate of forward motion, thoroughly blend the asphalt with the road materials, and spread the mixture uniformly on the roadway. The spray bar shall have nozzles spaced at increments not to exceed six (6) inches and shall operate in such a manner that all asphalt will be uniformly applied throughout the mixing chamber at the time of injection. The asphalt additive system shall consist of a positive displacement pump and shall display the flow rate to accurately check the rate of application of the asphalt at any time. Note - Full width processing is required to eliminate longitudinal joints in the stabilized material necessitating the use of two (2) or more stabilizing plants; depending on the width of road to be processed.

CONSTRUCTION METHODS

PULVERIZING IN PLACE

When called for in the proposal, the existing asphalt surface shall be pulverized to a maximum size of two (2) inches, except that five (5) percent of the material may be oversized, provided that the oversized material is not so large as to adversely affect the stability and structural integrity of the mixture nor hamper the shaping operations. The existing asphalt surface shall be blended with a portion of the aggregate base material and moisture added to aid in obtaining density. The material will be graded and compacted to within $\frac{1}{2}$ inch of desired slope. A dust palliative can then be applied to preserve base surface.

When base stabilizing, rocks of three (3) inch size or larger have a devastating effect on the stabilization equipment. If rocks this size or larger are encountered below the surface and within the material to be stabilized, one of the following procedures will be instituted, either on an agreed unit price or force account basis, before construction commences.

- A. Removing the oversized rock and replacing with granular material.
- B. Placing enough additional granular material over the surface to ensure that the oversized rock is not encountered by the stabilization equipment.

The granular material shall be rough graded to the established grade and cross-section within a tolerance $\frac{3}{4}$ inch.

MIXING WITH BITUMINOUS MATERIAL

The bituminous material shall be added only to that material which can be completely mixed and compacted in one day. The bituminous material shall be added through the mixer at the rate and within the temperature range directed by the Engineer. The temperature shall be kept below the flash point of the asphalt cement but shall not fall below 335 °F.

MEASUREMENT AND PAYMENT

The completed work as measured for BITUMINOUS AGGREGATE PAVEMENT - STABILIZED IN PLACE will be paid for at the contract unit prices for the following contract items (Pay Items).

PAY ITEM

Pulverization _5_ inches in depth	15,300	Square Yard
Dust Palliative, applied (pulv. only)	0	Ton
Aggregate Base (as needed)	0	Ton
Stabilization _5_ inches in depth	7,650	Square Yard
Bituminous Material - Stabilization (PG 52-28)	11,500	Gallon
Bituminous Material - Fog Coat (SS-1 h)	0	Gallon
Water	0	Unit

PROJECT NOTES

- A. The surface of the road to be stabilized is asphalt millings
- B. The Clare County Road Commission personnel and equipment will perform the grading and compacting of the pulverized and stabilized material.
- C. Any water or brine material needed during the pulverizing or stabilizing operation will be provided by the Clare County Road Commission.
- D. All traffic control will be provided by the Clare County Road Commission. This project will be under a road closure for the duration of the work.

The main objective of this project is to pulverize and stabilize 0.5 miles of existing millings at a width of 26 feet. The other 1.5 miles of existing millings will only be pulverized.

PROPOSAL

BITUMINOUS AGGREGATE PAVEMENT – STABILIZED IN PLACE

The undersigned, as bidder, declares that he/she has familiarized themselves with the location of the proposed work and the conditions under which it must be performed, and agrees that they will contract with the owner to furnish all materials, labor, equipment and all things necessary to complete the entire work, in accordance with plans, specifications and related documents.

ITEM DESCRIPTION	QUANTITY	UNIT	AMOUNT
Pulverization _5_ inches in depth	15,300	SYD	_____
Dust Palliative, applied (pulv. only)	0	Ton	_____
Aggregate Base (as needed)	0	Ton	_____
Stabilization _5_ inches in depth	7,650	SYD	_____
Bituminous Material - Stabilization (PG 52-28)	11,500	Gallon	_____
Bituminous Material - Fog Coat (SS-1 h)	0	Gallon	_____
Water	0	Unit	_____

The price stated in this proposal is guaranteed for 120 days from the date hereof, and if authorized to proceed with construction within that period, we will agree to complete the work covered by the Proposal at said price, and within 90 calendar days next following date of contract.

Company: _____

Signed: _____

Date: _____

By: _____
