

**MIDLAND COUNTY ROAD COMMISSION**  
**BID FORM**

Sealed Proposals will be received at the office of the Board of Road Commissioners, County of Midland, at 2334 N. Meridian Road, Sanford, Michigan, 48657 until:

**DATE: Friday, March 16, 2018 at 10:00 a.m.**

**Item No. 2 – HMA SKIP PATCH**

Skip Patching HMA 13A	Estimated Quantity <u>270</u> Tons	\$ _____/TON
Skip Patch Prep	Estimated Quantity <u>1000</u> SYD	\$ _____/SYD
HMA 13A, Parking Lot	Estimated Quantity <u>100</u> Tons	\$ _____/TON
HMA 36A, Parking Lot	Estimated Quantity <u>250</u> Tons	\$ _____/TON

**All quantities are estimated.** Projects may be deleted, changed or increased at no change in unit prices. The bid price of HMA\_\_\_ may also be used for work on MDOT, Village of Sanford, or City of Coleman jurisdictional roadways only if mutually agreed upon by the Contractor and MCRC.

**Skip Patching, HMA 13A**

A work map designating locations will be provided prior to starting work. Skip Patching item will apply to areas up to normal roadway width and not to exceed 50 feet long. The depth of the patch shall match the depth of the adjacent existing HMA, or minimum of 3", whichever is greater. HMA to be place in lifts not exceeding 2" per lift.

**Skip Patching Prep**

Pay item includes all preparatory work such as saw cutting straight edges, excavation and removal of existing material, and grading/compacting the base to the required contour prior to placing HMA course.

**HMA 13A/36A, Parking Lot**

Pay item for shall be used for expansion or overlay of existing parking lots at Township Halls, Midland County Parks and Recreation, and other Midland County unit of government locations. Bid price shall include all materials, equipment, and labor to place 1 lift HMA overlay of existing asphalt or 2 lifts of HMA on existing gravel.

**Maintaining Traffic – Included in pay item Skip Patch Prep**

In certain instances, coordination between County and Contractor may occur in that Skip Patch Prep and Traffic Control devices will be provided by the County.

A minimum of 1 lane 1 direction traffic shall be maintained at all times during construction in accordance with Section 812 of the MDOT 2012 Standard Specifications for Construction, and

as specified herein. In certain cases, with prior approval of the Engineer, a road closure/detour may be allowed.

The Contractor shall furnish, erect, and maintain barricades, drums and lights adjacent to the work and provide traffic regulators as detailed in attached Figure 6H-10 as a minimum standard for low volume roads. Medium and high volume roadways will require more extensive traffic control measures and traffic control plan must be submitted and approved by the Engineer prior to construction activities. The barricades, drums, and lights shall be furnished, erected and maintained in accordance with the requirements of Section 812 of the MDOT 2012 Standard Specifications for Construction.

All signs, barricades, warning lights, traffic regulators and other traffic control devices shall be in accordance with the 2011 edition of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD), as amended and shall be the responsibility of the Contractor.

A safety program shall be required of the successful bidder.

The above price shall include machine paving (or hand patching depending on patch size), hauling, signs, minor traffic control, temporary pavement marking (non-removable 2-foot dash) and all labor and equipment incidental hereto. All joints shall be constructed as butt joints.

Contractor shall provide a detailed billing for each road segment. MCRC will provide job numbers for each location and must be referenced on the invoice.

### **Specifications**

All materials, equipment, and construction methods used on the project(s) shall be in accordance with the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Construction (in particular section 501), supplemental specifications, Midland County Road Commission Special Provisions and the HMA Application Estimate.

### **Progress Schedule**

Begin work when notified by the engineer or otherwise arranged after receiving of Award of Contract. **All work shall be completed by November 14, 2018.**

All patches to be complete and open to traffic before sundown. No patches to be left "open" overnight. No night work is allowed.

Contractor is required to have a Preconstruction Meeting with Midland County Road Commission before any work begins.

### **Insurance Requirements**

The successful bidder shall furnish proof of insurance prior to beginning work on the project(s). The following minimum requirements must be included on the certificate of insurance.

1. \$1,000,000 - General Aggregate – General Liability
2. \$1,000,000 – Personal Injury – General Liability
3. \$500,000 – Policy Limit – Worker’s Compensation
4. \$100,000 – Each Accident – Worker’s Compensation

5. \$1,000,000 – Automobile Liability – 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.

The additional insured information must also be included to read as follows:

“ADDITIONAL INSURED: The Board of County Road Commissioners for Midland County, the Midland County Road Commission, and its officers, agents, and employees”.

**Delayed Acceptance, Final Inspection and Payment**

A minimum of 14 days after completion of the HMA paving work, the Road Commission Engineer and Construction Supervisor (or designated representatives) will inspect the project(s) with the Contractor. If deficiencies are found (including smoothness requirements per 501.03.H), corrective work is required. Complete all corrective work within seven working days of the inspection, or by an agreed upon date. All costs associated with completing this corrective work, to the satisfaction of the Road Commission, will be borne by the Contractor.

The successful bidder shall provide a certified check, cashier's check, bank money order or bid bond in the amount of 5% of the total bid (calculated based on estimated quantities) made payable to Midland County Road Commission, or may elect to allow 5% retainage from each billing cycle. In either case the funds will be released within 30 days after final acceptance of all paving projects in the program for the year.

COMPANY BIDDING \_\_\_\_\_

CONTACT PERSON \_\_\_\_\_

ADDRESS \_\_\_\_\_

PHONE/FAX \_\_\_\_\_

\_\_\_\_\_

AUTHORIZED SIGNATURE

TITLE

**INDICATE ON ENVELOPE:** Company Name, Item Number, Bid Item, Time and Date

MIDLAND COUNTY ROAD COMMISSION

SPECIAL PROVISION  
FOR  
MARSHALL HOT MIX ASPHALT MIXTURE, MODIFIED

MCRC:ALB

1 of 2

2/1/2018

**a. Description.** Furnish hot mix asphalt (HMA) mixture, designed using Marshall Mixture Design Methods, in accordance with the standard specifications except as modified by this special provision.

**b. Mix Design.** Submit the mix design for evaluation to County Engineer a minimum of 7 days prior to paving operations. Use a 50 blow Marshall hammer when compacting mixtures for developing Marshall mix designs.

**c. Recycled Mixtures.** Substituting reclaimed asphalt pavement (RAP) for a portion of the new material required to produce HMA mixture is allowed, provided that the mixture is designed and produced to meet all criteria specified herein, unless otherwise prohibited. RAP materials must be in accordance with the standard specifications. **Maximum RAP allowable is 20%.**

**d. Materials.** Table 1 provides the mix design criteria and volumetric properties. Table 2 provides the required aggregate properties. Use aggregates of the highest quality available to meet the minimum specifications. Use the mixture designation number shown in the contract item name when determining mix design properties from Tables 1 and 2.

**e. 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
HMA(type).....	Ton

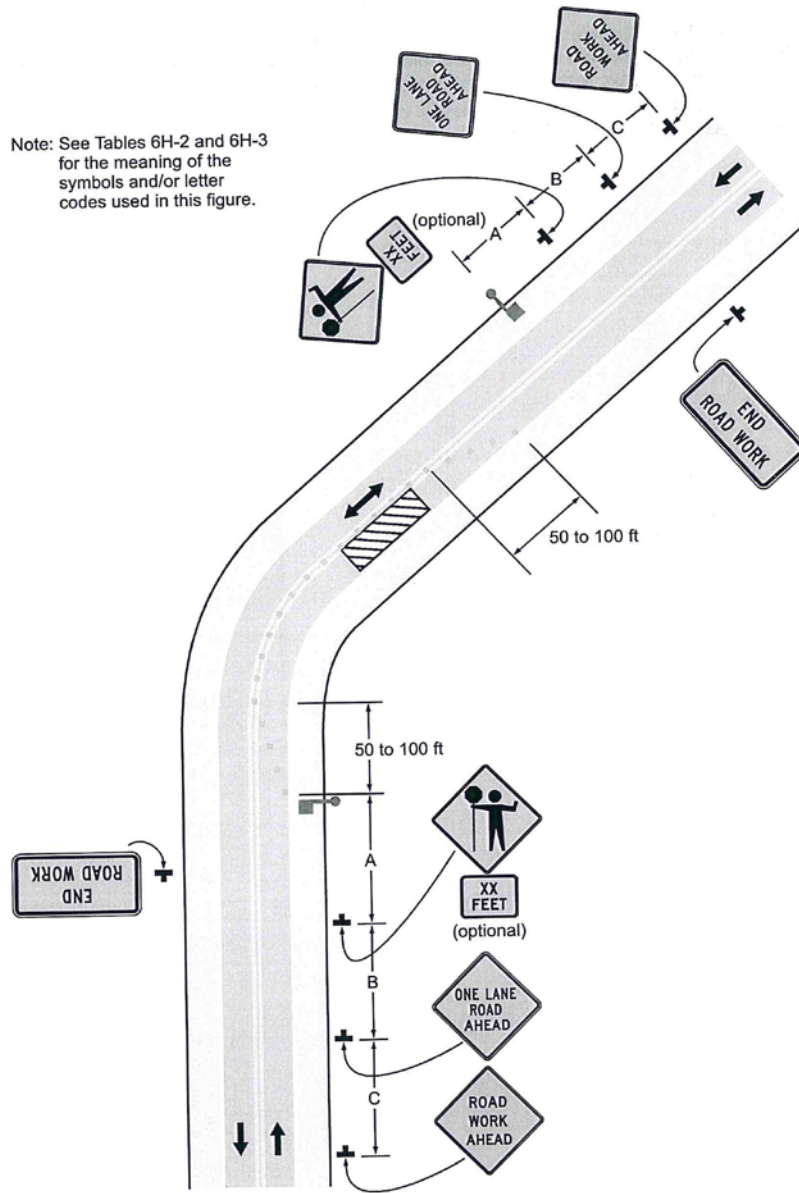
**Table 1: Mix Design Criteria and Volumetric Properties**

	Mixture No.				
	2C	3C	4C	13A	36A
Target Air Void, % (a)	3.00	4.00	4.00	4.00	4.00
VMA (min) (b)	11.00	13.00	14.00	14.00	15.00
VFA	65-78	65-78	65-78	65-78	65-78
Fines to Binder Ratio (max) (c)	1.2	1.2	1.2	1.2	1.2
Flow (0.01 inch)	8 -16	8 -16	8 -16	8 -16	8 -16
Stability (min), lbs	1200	1200	1200	900	900
a. Lower target air voids by 1.00% if used in a separate shoulder paving operation. Consider reducing air void targets to 3.00% for lower traffic volume roadways when designing 13A and 36A mixtures for local agency use. b. VMA calculated using Gsb of the combined aggregates. c. Ratio of the weight of aggregate passing the No. 200 sieve to total asphalt binder content by weight; including fines and binder contributed by RAP.					

**Table 2: Aggregate Properties**

	Mixture No.				
	2C	3C	4C	13A	36A
	Percent Passing Indicated Sieve or Property Limit				
1 1/2 inch	100				
1 inch	91-100	100			
3/4 inch	90 max.	91-100	100	100	
1/2 inch	78 max.	90 max.	91-100	75-95	100
3/8 inch	70 max.	77 max.	90 max.	60-90	92-100
No. 4	52 max.	57 max.	67 max.	45-80	65-90
No. 8	15-40	15-45	15-52	30-65	55-75
No. 16	30 max.	33 max.	37 max.	20-50	
No. 30	22 max.	25 max.	27 max.	15-40	25-45
No. 50	17 max.	19 max.	20 max.	10-25	
No. 100	15 max.	15 max.	15 max.	5-15	
No. 200	3-6	3-6	3-6	3-6	3-10
Crushed (min), % (MTM 117)	90	90	90	25	60
Soft Particle (max), % (a)	12.0	12.0	8.0	8.0	8.0
Angularity Index (min) (b)	4.0	4.0	4.0	2.5	3.0
L.A. Abrasion (max), % loss (c)	40	40	40	40	40
Sand Ratio (max) (d)	-	-	-	50	50
<p>a. The sum of the shale, siltstone, structurally weak, and clay-ironstone particles must not exceed 8.0 percent for aggregates used in top course. The sum of the shale, siltstone, structurally weak, and clay-ironstone particles must not exceed 12.0 percent for aggregates used in base and leveling courses.</p> <p>b. The fine aggregate angularity of blended aggregates, determined by MTM 118, must meet the minimum requirement. In mixtures containing RAP, the required minimum fine aggregate angularity must be met by the virgin material. NAA fine aggregate angularity must be reported for information only and must include the fine material contributed by RAP if present in the mixture.</p> <p>c. Los Angeles abrasion maximum loss must be met for the composite mixture, however, each individual aggregate must be less than 50</p> <p>d. Sand ratio for 13A and 36A no more than 50% of the material passing the No. 4 sieve is allowed to pass the No. 30 Sieve.</p>					

Figure 6H-10. Lane Closure on a Two-Lane Road Using Traffic Regulators (TA-10)



Typical Application 10