

*Limestone
County Commission*

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Collin Daly*

*Administrator
Pam Ball*



*Commissioners:
Daryl Sammet
Steve Turner
Jason Black
Ben Harrison*

February 21, 2019

**INVITATION FOR BIDS
PROPOSAL NO. 2678**

HIGH PERFORMANCE COLD MIX IN 50 LB. BAGS

Notice is hereby given that the Commission of Limestone County, Alabama will receive competitive bids on the following item:

HIGH PERFORMANCE COLD MIX IN 50 LB. BAGS. SEE ATTACHED SPECIFICATIONS.

This Bid will be effective April 1, 2019 until March 31, 2020.

BIDS: All applicable taxes must be included in the amount of unit bid price.

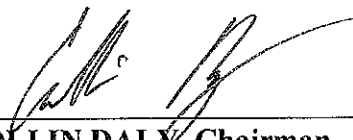
F.O.B.: **BID SHEET.** Date of Delivery: **AS REQUESTED.** Terms: **NET 30 DAYS.**

You are invited to bid on the attached specifications. Any substitutes offered must be submitted in detail. The right to reject any items or materials not of quality or under any provisions of this act is reserved. **The right to waive minor informalities, irregularities and errors is reserved.**

Bids will be opened on **Tuesday, the 12th day of March 2019 at 10:00 a.m.** and awarded on **Monday, the 18th day of March 2019, at 10:00 a.m.**

REQUIREMENT: Pursuant to Alabama Code 31-13-9, as a condition of the award of any contract, the business entity or employer, and any of its subcontractors, shall provide a sworn affidavit and documentation that it will not knowingly employ, hire for employment, or continue to employ an unauthorized alien; that it is enrolled in the E-Verify program; and, during the contract period, it will participate in the E-Verify program and will verify every employee that is required to be verified under applicable state and federal laws. During the performance of the contract, the business entity or employer shall participate in the E-Verify program and shall verify every employee that is required to be verified according to the applicable federal rules and regulations.

All bids must be sealed, and the word "BID," name of item, proposal number, and opening date must be marked on the outside of the envelope.



**COLLIN DALRYMPLE, Chairman
Limestone County Commission**

**Specifications for:
HIGH PERFORMANCE COLD MIX IN 50 LB. BAGS**

DESCRIPTION:

Bituminous patching materials should be provided in various seasonal grades for use when the outside ambient temperature is in the range of -15°F (-26°C) to 100°F (38°C). Each grade shall be manufactured specifically to accommodate anticipated climatic conditions. These grades shall consist of Winter Mix, Spring/Fall Mix and Summer Mix.

The plant, portable or stationary, shall be designed to accurately proportion the aggregate and bituminous material into the mix and produce uniform, thoroughly coated mixture. The finished cold mix will be supplied in 50-lb bags (22.7 kg) consisting of a ± 0.5% co-extruded skid resistant nylon. The bags shall be supplied as individual or pallet quantities. Pallets will include 56 bags. Bags must be labeled with seasonal grades.

MATERIALS:

1. BITUMEN: The liquid asphalt for this material shall have an anti-stripping agent. The bitumen content of the material shall be between 4.5% and 7%. The liquid asphalt shall conform to the following specific requirements.

<u>TEST</u>	<u>TEST METHOD</u>	<u>VALUE</u>
Kinematic Viscosity @ 140°F	ASTM D 2170	350-4000 cSt
Flash Point	ASTM D 1310	200°F (93.3C)
Coating & Stripping	Kentucky DDT 64-417-74	PASS
Extraction of Bituminous Material	ASTM D 2172	4.5% to 7%
Distillation	ASTM D 402	

<u>TEMPERATURE</u>	<u>VOLUME & TOTAL DISTILLATE</u>		<u>VOLUME & ORIGINAL SAMPLE</u>	
	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>
To 437°F (225C)	0	0.0	0	0
To 500°F (260C)	0	0.5	0	0
To 600°F (316C)	10	65	0	18
Residue from Distillation				
To 680°F (360°C) % of Volume by Difference			73%	95%

TEST ON RESIDUE

Absolute Viscosity @140°F	ASTM 2171	75 to 425 poises
Cone Penetration	ASTM D5°	180 minimum
Ductility	ASTM D 113 @ 77°F	100 minimum
Solubility in Trichloroethylene	D-2042	99.9% minimum
Percentage of Water	ASTM D-95	Less 0.2%

Make this test in accordance with ASTM Method D5, except utilize a penetration cone in place of the standard penetration needle. The cone shall conform to the requirements given in ASTM Method C217, except that the interior construction may be modified as one desires. The total moving weight of the cone and attachments must be 150 ± 0.1 gram. Also the level of water on the transfer dish shall be lowered to less than the height of the sample and decant water from the top of the sample before transferring from the bath to the penetrometer.

BITUMINOUS PATCH MIX

AGGREGATE:

The aggregate furnished under this specification shall conform to the following requirements.

SIEVE ANALYSIS, ASTM C 136

<u>SIEVE SIZE</u>	<u>#9 (PREFERRED) %PASS</u>	<u>COMBINATION #9 & #89 % PASS</u>
1/2	100	100
3/8	100	90-100
#4	85-100	55-85
#8	10-40	5-40
#16	0-10	0-10
#50	0-5	0-5
#100	-	-
#200	0-2.5	0-2.5

Soundness Loss (5 cycles of Sodium Sulfate):	12.0% maximum
Los Angeles Abrasion Loss:	45% maximum
Absorption:	3% maximum
#200 Sieve Wash:	2.5% maximum
Specific Gravity:	2.45 - 2.85

MIXTURE:

The mixture shall consist of an aggregate and combined in a pug mill in the following proportions:

Aggregate	93% to 95%
Asphalt	4.5% to 7.0%

Selection of aggregate must achieve a calculated surface area of 8-13 ft² / lb. and maintain at least three fractured surfaces. Aggregates in this range are preferred based on performance and asphalt required. Test results must be maintained through contract duration. Reports identifying quality variations of aggregate will be provided quarterly (ASTM C 136).

The ratio of aggregate to asphalt must be determined for each increment of 500 tons of finished mix during production. **TEST RESULTS MUST BE MAINTAINED THROUGH CONTRACT DURATION. SUMMARY REPORTS IDENTIFYING QUALITY VARIATIONS OF DELIVERED MIX WILL BE PROVIDED QUARTERLY.** Testing must include specific testing to determine water content in finished mix to minimize errors in measuring asphalt content. During production aggregate weight is determined as "wet weight". This includes aggregate and water on or in absorbed in the aggregate. Without complete testing of the finished mix, the water weight may be confused and counted as a part of the asphalt binder weight. If this occurs, the actual JMF may be out of range and premature failure may result. The following two procedures are required: ASTM D 2172 Standard Test Methods for Quantitative Extraction of Bitumen from Bituminous Paving Mixtures and ASTM D 1461 Standard Test Method for Moisture or Volatile Distillates in Bituminous Paving Mixtures.

PREPARATION OF MIXTURE

The finished cold mix shall be prepared whenever possible with no heat to the aggregate and the asphalt heated to the temperatures between 185°F and 265°F.

Heat may be applied to the aggregate under the following conditions:

- Frozen Aggregate
- The plant has a bag system for dust control
- It is determined through lab analysis; the aggregate to be used requires heat for adequate coating by the binder.

Under these conditions, moderate amounts of heat may be applied under the supervision of manufacturing representative. (No higher than 180°F.)

Mixing in the pug mill should be 15 to 30 seconds or until aggregate is uniformly covered. Additional mixing as finished mix is transported to or stacked in stock-pile location is optional

The percent asphalt in the finished mix should not be confused with the asphalt or asphalt blend applied during production. As an example; if an emulsion blend is used the asphalt blend will require greater than 5% applied to the aggregate, to achieve 4.5% asphalt binder film minimum in the finished bituminous patch mix. (Emulsified blends contain 35-40% water).

BITUMINOUS PATCH MIX

The asphalt cold mix shall meet the following specified requirements;

Coating 95%	ASTM D 2489	Greater than
Stripping in distilled water ¹	Visual	Less than 5%
Extraction of Bituminous Material max	ASTM 2172	4.5 min- 9%
Shelf Life minimum	Visual	18-Months
Minus 200 (0.075mm) of Extracted Aggregate	ASTM C 117 & C136	4% Maximum ²

Note 1: Place approximately 100 grams in a 250 ml glass beaker and cover with distilled water for 24 hours before observation.

Note 2: This value shall not be confused with the 2.5% maximum allowed for the minus 200 (0.075 mm) wash loss on the raw aggregate before the production of UPM mix. The 4% value is necessary to minimize the effect of the plant when producing the finished UPM mix.

All materials accepted for bid must have completed at least three multi-seasonal performance evaluation adequately documented to the satisfaction of the organization issuing the bid. Material must have been installed by a city, state or DOT maintenance crew using standard installation procedures. Performance monitoring using standard industry procedures including photographs will be agreed upon by the bidding organization and will be provided by material supplier at no cost to the bidding organization. THIS DOCUMENTATION SHALL BE SUBMITTED WITH THE BIDDERS PROPOSAL.

PERFORMANCE GUARANTEE:

The supplier of the material shall guarantee the performance of the mix to meet the following requirements:

- A. The material shall remain workable to accommodate climatic conditions for a minimum of 18 months in sealed bags.
- B. Repaired potholes shall not show any significant signs of shoving, rutting, tracking, kick-up or ravel-out within a period of 12 months from the time of repair.
In the event the material furnished does not meet all of the above requirements, the supplier shall replace the unsatisfactory with acceptable material. The acceptable material shall be provided at no additional cost to the bidding organization.

LABORATORY TESTING

- C. The organization issuing the bid reserves the right to test all finished material delivered during the life of the contract, at an independent laboratory. Where the result of such test shows the material is not equal to the specifications. The supplier will replace non-spec material with material meeting specification at no cost.
- D. **Supplier must supply "Compliance of Performance" reports for all material delivered. The report must include information linking delivered material to specific production event and analysis verifying specific QC criteria are achieved: Cohesiveness, Gradation/Sieve specs, Aggregate stripping, workability and minimum asphalt film relative to aggregate surface area.**

FAILURE TO MEET SPECIFICATIONS

The delivery of any material under the contract which does not conform to contract specifications will be rejected and the contractor notified immediately in writing of such rejection and the reason therefore. If acceptable, the contractor elects to remedy the deficient material; it may notify the bidding organization of its intention to cure and may within ten (10) days make a conforming delivery of replacement material at no charge to the bidding organization. If said contractor fails to replace such nonconforming materials or otherwise cure such deficient performance, the bidding organization may cancel the suppliers bid and re-bid the material barring the non-performing supplier from bidding the new proposal.

**BID SHEET
HIGH PERFORMANCE COLD MIX IN
50 LB BAGS MATERIAL**

HIGH PERFORMANCE ASPHALT COLD PATCH MATERIAL (50 lb. bags)

PRICE PER 50 lb. BAG \$ _____ DELIVERED

PRICE PER 50 lb. BAG \$ _____ PICKED-UP

Pick-Up Location: _____

Cost of transportation from the sales site to the job site may be considered in the award of the bid for "picked up" material.

Company Name: _____

Address: _____

Contact: _____

Please Print

E-mail: _____

Phone: _____