



Calhoun County

Road Department

"Building A Better County Through Responsive Leadership"

13300 15 Mile Road
Marshall, MI 49068
(269) 781-9841 Voice
(800) 781-5512 Toll Free
(269) 781-6101 Fax

rdinfo@calhouncountymi.gov
www.calhouncountyroads.com

Invitation for Bids

2021 Countywide HMA Paving

Sealed bids will be received by the Calhoun County Road Department electronically and should be submitted to kparsons@calhouncountymi.gov no later than **12:00 PM EST on Tuesday, April 27, 2021** for the paving of multiple locations of roadway in Calhoun County, Michigan.

No pre-bid meeting will be held. Questions about this bid package must be submitted by **Tuesday, April 20th, at 12:00 PM** via email to bkernstock@calhouncountymi.gov.

The Calhoun County Road Department reserves the right to split this work between multiple contractors based on the bids that are received, to reject any and all bids, and to make the award in the best interest of the Calhoun County Road Department and Calhoun County.

Kristine Parsons Kristine O. Parsons
Apr 12 2021 12:50 PM

Kristine Parsons, PE
Director of Engineering

General Provisions & Instructions

Scope of Work

The work covered by this proposal consists of HMA paving and construction of gravel shoulders on multiple segments of roadway at various locations throughout Calhoun County.

All work shall be performed in accordance with the Michigan Department of Transportation's (MDOT) 2012 Standard Specifications for Construction or as modified by these General Provisions and Instructions.

Special Requirements

1. Persons wanting to submit a bid on this project shall submit the forms from Appendix A & Bid Security Requirements. Bid forms should be submitted to the Calhoun County Road Department. After the bid opening, a decision will be made to pursue what is in the best interest of the Calhoun County Road Department and Calhoun County
2. A preconstruction meeting will be held to finalize a progress schedule and to determine execution-administration of the contract. Work on the project shall begin on a date agreed upon with the Calhoun County Road Department and the Calhoun County. The completion date for all work included in this bid package shall be September 17, 2021. Work added after the bid opening will not adhere to this deadline.
3. Payment: The contractor shall submit invoices for completed contract items to the Calhoun County Road Department (Erin Cummings). The invoice will be processed and payment for approved contract items (less retainage, if necessary) will be made within thirty (30) calendar days or less of receiving the invoice.
4. The contractor shall furnish a statement to the Calhoun County Road Department certifying that all subcontractors and suppliers that furnished labor, equipment, and materials for the project have been paid before the final payment on the contract is made.

Questions/Additional Information

Questions regarding this project should be directed to:

Nicholas Lillrose, EIT
Project Engineer
Calhoun County Road Department
13300 15 Mile Road
Marshall, MI 49068
P: 269.781.0056
NLillrose@calhouncountymi.gov

PROGRESS CLAUSE

The Owner anticipates that construction can begin no earlier than

- **10 calendar days after award.**

In no case shall any work be commenced prior to receipt of formal notice of award by the Department.

The Contractor shall prepare and submit a detailed progress schedule.

The progress schedule shall include, at minimum, the controlling work items for the completion of the project as well as the planned dates or work days that these work items will be controlling operations. All contracts dates including open to traffic, project completion, interim completion and any other controlling dates in the contract, must be included in the progress schedule.

If the bidding Proposal specifies other controlling dates, these shall also be included in the Progress Schedule.

All work shall be conducted during daytime hours. No work on weekends unless pre-approved by the Engineer.

Work must be continuous and progressive.

The road shall be fully open to traffic within 7 calendar days of paving unless otherwise approved by the Engineer.

The Project shall be completed in its entirety including final site restoration and clean-up

- **On or before September 17, 2021**

After award and prior to the start of work, the Contractor must attend a preconstruction meeting with the Engineer. The Engineer will determine the day, time and place for the preconstruction meeting. The meeting will be conducted after project award and may be rescheduled if there are delays in the award of the project. The named subcontractor(s) for Designated and/or Specialty Items, as shown in the Proposal, should attend the preconstruction meeting if such items materially affect the work schedule.

Liquidated Damages shall be assessed in accordance with Section 108.10 of the 2012 Standard Specifications for Construction.

Project Log

2021 Countywide HMA Paving

PROJECT LOCATION

Project locations will be at various sites throughout Calhoun County. Please refer to the attached documents for reference. Locations and quantities may vary depending on budgetary constraints. CCRD reserves the right to adjust quantities and locations of all items of work.

The Engineer or Designated Agent will establish the final locations for all items of work.

PROJECT DESCRIPTION

The project proposes to resurface various segments of road throughout Calhoun County with HMA, 36A and replace the existing gravel shoulders. HMA, 5E1 may be substituted for HMA, 36A at contractor's discretion at no additional cost to the county.

In certain locations, butt joints will be milled at the beginning and end of the road segment, and at all intersecting roads marked by the Engineer or Designated Agent. Certain HMA driveways may also have butt joints milled in them. The driveways will then be tied back into the existing roadway using HMA during paving operations. The Engineer or Designated Agent shall be responsible for marking out all milling limits and butt joint locations prior to the work taking place. Butt joints may not be milled more than 7 calendar days in advance of paving, weather permitting. There will be a penalty of \$75.00 per butt joint for every day that the butt joints remain open after the seventh day. All butt joint work shall be paid for as *Pavt for Butt Joints, Rem.* Any asphalt driveways shall be milled in preparation for paving also paid for as *Pavt for Butt Joints, Rem.*

Some paving locations will not have butt joints. These locations will have ends that uniformly taper down to meet the existing HMA.

Prior to paving, all locations shall be swept of dirt and debris and have a uniform layer of bond coat (tack) applied at a rate of 0.05 to 0.15 gallons per square yard. The bond coat must be given time to cure before the surface is paved.

All paving locations shall be resurfaced with HMA between the limits marked by the Engineer or Designated Agent, paid for as *HMA, 36A*. This includes paving back into butt joints. The application rate shall be 110 pounds per square yard for every inch of HMA that is placed.

All gravel driveways within the paving limits shall have an HMA tab placed for a distance of 2-feet back in the driveway during paving operations, paid for as *HMA, 36A*. Certain concrete driveways within the paving limits may be saw cut and removed prior to paving, paid for as *Pavt, Rem.* These concrete driveways will be tied back into the road surface with HMA during paving operations. Bond coat will be placed on the saw cut face of the concrete driveways prior to paving. HMA and concrete driveways that are not milled or cut will be tied into the roadway with a 2-foot HMA tab that tapers back into the driveway.

HMA valley gutter shall be placed in locations where there is potential for water runoff to erode and wash away any proposed shoulder gravel. These locations will be marked out by the Engineer or Designated Agent. This work will be included in the item *HMA, 36A*.

3-foot gravel shoulders shall be placed along all paved segments within 7 calendar days of paving, weather permitting. 23A aggregate shall be used for the gravel shoulders, to be paid for as *Shoulder, CI II*. All gravel shoulders shall be blended in with the existing back of shoulder or ditch for proper drainage. Shouldering must be completed on a road segment before payment will be issued for any work at that location.

Any monument boxes located within the paving limits shall be raised with adjustment rings supplied by Calhoun County Road Department. The contractor will be responsible for placing the adjustment ring over the monument box prior to paving. The cost associated with this will be considered incidental to construction.

SURFACING ITEMS

Items of work are to be placed as directed by the Engineer or Designated Agent.

HMA, 36A	7800 Tons
Pavt, Rem	210 Syd
Pavt for Butt Joints, Rem	2200 Syd
Shoulder, CI II	2403 Tons

MAINTENANCE OF TRAFFIC

Maintain traffic in accordance with the special provision for traffic control and as directed by the Engineer or Designated Agent.

Traffic Regulator Control	1 LSUM
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2021 Paving Locations

Township	Road	Limits		Treatment	Paving Length (ft)	Estimated HMA Tonnage	Estimated Shoulder Tonnage
Athens	O Dr S	2 Mile Rd	Bridge	HMASKIP1.5	3900	1075	375
Eckford	D Dr S	22 Mile Rd	East POE	HMASKIP1.5	1061	250	50
Convis	Ackley Lake Rd	Junction Rd	Baseline Rd	HMASKIP1.5	3719	1000	350
Convis	16 Mile Rd	Junction Rd	Baseline Rd	HMASKIP1.5	1209	325	125
Eckford/Fredonia	18 Mile Rd	D Dr S	F Dr S	HMA2.0	5280	1700	550
Convis	P Drive N	12 Mile Rd	13 Mile Rd	HMASKIP1.5	465	125	50
Convis/Marshall	L Dr N	16 Mile	Old 27	HMASKIP1.5	1674	450	150
Marshall	15.5 Mile Rd	Tau Rd	Division Dr	HMA 2.0	1320	450	128
Albion	30 Mile Rd	F Dr S	H Dr S	HMA2.0	5301	1650	400
Eckford	23.5 Mile Rd	J Dr S	L Dr S	HMASKIP1.5	2882	775	225
Totals						7800	2403

CALHOUN COUNTY ROAD DEPARTMENT
SPECIAL PROVISION
FOR
HOT MIX ASPHALT (HMA) APPLICATION ESTIMATE

CCRD: ANK, BJK, NOL

1 of 1

02/25/2021

a. General. This work shall be done in accordance with the requirements of Section 501 of the Michigan Department of Transportation's 2020 Standard Specifications for Construction except as herein specified.

b. Construction Methods. HMA Mix shall be applied as shown in Section 501 of the Michigan Department of Transportation 2020 Standard Specifications.

- HMA, 36A and HMA, 5E1 shall have a yield of 110 pounds per square yard per inch of thickness.
- The Performance Grade asphalt binder range for the HMA, 36A and HMA, 5E1 shall be 58-28.
- The uniform rate of application of Bond Coat material shall be 0.05 to 0.15 gal. per syd. Bond Coat shall not be a separate pay item.

c. Materials. The HMA, 36A and HMA, 5E1 shall meet the gradation as specified in Special Provision 12SP 501(J)-05, except the air void shall be 3%.

AWI > 260

The Bond Coat material shall be SS-1h, per Section 501.03 of the Michigan Department of Transportation 2012 Standard Specifications.

d. Measurement and Payment. The complete work of HMA, 36A and HMA 5E1 shall be paid for at the contract unit price for the following

Pay Item	Pay Unit
HMA, 36A.....	Ton

CALHOUN COUNTY ROAD DEPARTMENT

SPECIAL PROVISION
FOR
TRAFFIC REGULATOR CONTROL

CCRD: SRC

1 of 1

02-25-19

a. Description. Traffic maintenance during construction shall be in accordance with Section 104.11 and section 812 of the Michigan Department of Transportation 2012 Standard Specifications for Construction. All signs, barricades, and other traffic control devices shall be in accordance with the 2011 Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

No work will be allowed on Sundays or holidays and all work must be performed during the daylight hours, unless otherwise approved by the Engineer.

b. Construction Influence Area. The Construction Influence Area (CIA) shall consist of the project right of way five-hundred (500) feet in all directions.

c. Traffic Control Devices and Restrictions. All traffic control devices and their usage must conform to Part 6 of the MMUTCD. The Contractor must review, adjust, and maintain all traffic control devices on a daily basis or as directed by the Engineer. The Contractor must notify the Engineer at least twenty-four (24) hours in advance of erecting construction zone signing. Access to all businesses and residences must be maintained at all times and work must be coordinated with the Engineer.

The Contractor shall furnish, erect, maintain, and upon completion of the work, remove all traffic control devices and barricade lights within the Construction Influence Area (CIA) for the safety and protection of local traffic. This includes, but is not limited to, advance, regulatory, and warning signs, barricades, channeling devices and all other traffic control devices required to maintain traffic. Traffic regulators and type NR temporary tape, where required by the Engineer, are included.

Traffic Regulators are required during paving operations, shouldering operations, and any time a lane closure used.

The Contractor is responsible for reviewing the adequacy and condition of all traffic control devices at least once per day for the duration of the project. Replacement and repair of the traffic control devices will be restricted to daylight hours. All signs damaged as a result of the Contractor's operations must be replaced by the Contractor at their expense.

d. Measurement and Payment. The item of "Traffic Regulator Control" will be paid for as a Lump Sum for all work specified herein.

Payments will be made as work progresses based on the percentage of work that has been completed. The final 25% of the lump sum will be withheld until all work has been completed and approved by the Engineer.

Pay Item

Pay Unit

Traffic Regulator Control LSUM

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
ACCEPTANCE OF HOT MIX ASPHALT MIXTURE ON LOCAL AGENCY PROJECTS

CFS:KPK

1 of 7

APPR:CJB:JWB:07-05-16

FHWA:APPR:07-05-16

a. Description. This special provision provides sampling and testing requirements for local agency projects using the roller method and the nuclear density gauge testing. Provide the hot mix asphalt (HMA) mixture in accordance with the requirements of the standard specifications, except where modified herein.

b. Materials. Provide aggregates, mineral filler (if required), and asphalt binder to produce a mixture proportioned within the master gradation limits shown in the contract, and meeting the uniformity tolerance limits in Table 1.

Table 1: Uniformity Tolerance Limits for HMA Mixtures

Parameter		Top and Leveling Course		Base Course		
Number	Description	Range 1 (a)	Range 2	Range 1 (a)	Range 2	
1	% Binder Content	-0.30 to +0.40	±0.50	-0.30 to +0.40	±0.50	
2	% Passing	# 8 and Larger Sieves	±5.0	±8.0	±7.0	±9.0
		# 30 Sieve	±4.0	±6.0	±6.0	±9.0
		# 200 Sieve	±1.0	±2.0	±2.0	±3.0
3	Crushed Particle Content (b)	Below 10%	Below 15%	Below 10%	Below 15%	
a. This range allows for normal mixture and testing variations. The mixture must be proportioned to test as closely as possible to the Job-Mix-Formula (JMF). b. Deviation from JMF.						

Parameter number 2 as shown in Table 1 is aggregate gradation. Each sieve will be evaluated on one of the three gradation tolerance categories. If more than one sieve is exceeding Range 1 or Range 2 tolerances, only the one with the largest exceedance will be counted as the gradation parameter.

The master gradation should be maintained throughout production; however, price adjustments will be based on Table 1. Aggregates which are to be used in plant-mixed HMA mixtures must not contain topsoil, clay, or loam.

c. Construction. Submit a Mix Design and a JMF to the Engineer. Do not begin production and placement of the HMA until receipt of the Engineer's approval of the JMF. Maintain the binder content, aggregate gradation, and the crushed particle content of the HMA mixture within the Range 1 uniformity tolerance limits in Table 1. For mixtures meeting the definition of top or leveling course, field regress air void content to 3.5 percent with liquid asphalt cement unless

specified otherwise on HMA application estimate. For mixtures meeting the definition of base course, field regress air void content to 3.0 percent with liquid asphalt cement unless specified otherwise on HMA application estimate.

Ensure all persons performing Quality Control (QC) and Quality Assurance (QA) HMA field sampling are "Local Agency HMA Sampling Qualified" samplers. At the Pre-Production or Pre-Construction meeting, the Engineer will determine the method of sampling to be used. Ensure all sampling is done in accordance with *MTM 313 (Sampling HMA Paving Mixtures)* or *MTM 324 (Sampling HMA Paving Mixtures Behind the Paver)*. Samples are to be taken from separate hauling loads.

For production/mainline type paving, obtain a minimum of two samples, each being 20,000 grams, each day of production, for each mix type. The Engineer will sample and maintain possession of the sample. Sampling from the paver hopper is prohibited. Each sample will be divided into two 10,000 gram parts with one part being for initial testing and the other part being held for possible dispute resolution testing. Obtain a minimum of three samples for each mix type regardless of the number of days of production.

Obtain samples that are representative of the day's paving. Sample collection is to be spaced throughout the planned tonnage. One sample will be obtained in the first half of the tonnage and the second sample will be obtained in the second half of the tonnage. If planned paving is reduced or suspended, when paving resumes, the remaining sampling must be representative of the original intended sampling timing.

Ensure all persons performing testing are Bit Level One certified or Bit QA/QC Technician certified.

Ensure daily test samples are obtained, except, if the first test results show that the HMA mixture is in specification, the Engineer has the option of not testing additional samples from that day.

At the Pre-Production or Pre-Construction meeting, the Engineer and Contractor will collectively determine the test method for measuring asphalt content (AC) using *MTM 319 (Determination of Asphalt Content from Asphalt Paving Mixtures by the Ignition Method)* or *MTM 325 (Quantitative Extraction of Bitumen from HMA Paving Mixtures)*. Back calculation will not be allowed for determining asphalt content.

Ensure all labs performing local agency acceptance testing are qualified labs per the *HMA Production Manual* and participate in the MDOT round robin process, or they must be *AASHTO Materials Reference Laboratory (AMRL)* accredited for *AASHTO T 30* or *T 27*, and *AASHTO T 164* or *T 308*. Ensure on non-National Highway System (NHS) routes, Contractor labs are made available, and may be used, but they must be qualified labs as previously stated. Contractor labs may not be used on NHS routes. Material acceptance testing will be completed by the Engineer within 14 calendar days, except holidays and Sundays, for projects with less than 5,000 tons (plan quantity) of HMA and within 7 calendars days, except holidays and Sundays, for projects with 5,000 tons (plan quantity) or more of HMA, after the Engineer has obtained the samples. QA test results will be provided to the Contractor after the Engineer receives the QC test results. Failure on the part of the Engineer or the laboratory to provide Quality Assurance test results within the specified time frame does not relieve the Contractor of their responsibility to provide an asphalt mix within specifications.

The correlation procedure for ignition oven will be established as follows. Asphalt binder content based on ignition method from MTM 319. Gradation (*ASTM D 5444*) and Crushed particle content (*MTM 117*) based on aggregate from *MTM 319*. The incineration temperature will be established at the Pre-Production Meeting. The Contractor will provide a laboratory mixture sample to the acceptance laboratory to establish the correction factor for each mix. Ensure this sample is provided to the Engineer a minimum of 14 calendar days prior to production.

For production/mainline type paving, the mixture may be accepted by visual inspection up to a quantity of 500 tons per mixture type, per project (not per day). For non-production type paving defined as driveways, approaches, and patching, visual inspection may be allowed regardless of the tonnage.

The mixture will be considered out-of-specification, as determined by the acceptance tests, if for any one mixture, two consecutive tests per parameter, (for Parameter 2, two consecutive aggregate gradations on one sieve) are outside Range 1 or Range 2 tolerance limits. If a parameter is outside of Range 1 tolerance limits and the second consecutive test shows that the parameter is outside of Range 2, then it will be considered to be a Range 1 out-of-specification. Consecutive refers to the production order and not necessarily the testing order. Out-of-specification mixtures are subject to a price adjustment per the Measurement and Payment section of this special provision.

Contractor operations will be suspended when the mixture is determined to be out-of-specification, but contract time will continue to run. The Engineer may issue a Notice of Non-Compliance with Contract Requirements (Form 1165), if the Contractor has not suspended operations and taken corrective action. Submit a revised JMF or proposed alterations to the plant and/or materials to achieve the JMF to the Engineer. Effects on the Aggregate Wear Index (AWI) and mix design properties will be taken into consideration. Production and placement cannot resume until receipt of the Engineer's approval to proceed.

Pavement in-place density will be measured using one of two approved methods. The method used for measuring in-place density will be agreed upon at a pre-production or pre-construction meeting.

Pavement in-place density tests will be completed by the Engineer during paving operations and prior to traffic staging changes. Pavement in-place density acceptance testing will be completed by the Engineer prior to paving of subsequent lifts and being open to traffic.

Option 1 – Direct Density Method

Use of a nuclear density gauge requires measuring the pavement density using the Gmm from the JMF for the density control target. The required in-place density of the HMA mixture must be 92.0 to 98.0 percent of the density control target. Nuclear density testing and frequency will be in accordance with the *MDOT Density Testing and Inspection Manual*.

Option 2 – Roller Method

The Engineer may use the Roller Method with a nuclear or non-nuclear density gauge to document achieving optimal density as discussed below.

Use of the density gauge requires establishing a rolling pattern that will achieve the required in-place density. The Engineer will measure pavement density with a density gauge using the Gmm from the JMF for the density control target.

Use of the Roller Method requires developing and establishing density frequency curves, and meeting the requirements of Table 2. A density frequency curve is defined as the measurement and documentation of each pass of the finished roller until the in-place density results indicate a decrease in value. The previous recording will be deemed the optimal density. The Contractor is responsible for establishing and documenting an initial or QC rolling pattern that achieves the optimal in-place density. When the density frequency curve is used, the Engineer will run and document the density frequency curve for each half day of production to determine the number of passes to achieve the maximum density. Table 5, located at the end of this special provision, can be used as an aid in developing the density frequency curve. The Engineer will perform density tests using an approved nuclear or non-nuclear gauge per the manufacturer's recommended procedures.

Table 2: Minimum Number of Rollers Recommended Based on Placement Rate

Average Laydown Rate, Square Yards per Hour	Number of Rollers Required (a)	
	Compaction	Finish
Less than 600	1	1 (b)
601 - 1200	1	1
1201 - 2400	2	1
2401 - 3600	3	1
3601 and More	4	1

a. Number of rollers may increase based on density frequency curve.
b. The compaction roller may be used as the finish roller also.

After placement, roll the HMA mixture as soon after placement as the roller is able to bear without undue displacement or cracking. Start rolling longitudinally at the sides of the lanes and proceed toward the center of the pavement, overlapping on successive trips by at least half the width of the drum. Ensure each required roller is 8 tons minimum in weight unless otherwise approved by the Engineer.

Ensure the initial breakdown roller is capable of vibratory compaction and is a maximum of 500 feet behind the paving operations. The maximum allowable speed of each roller is 3 miles per hour (mph) or 4.5 feet per second. Ensure all compaction rollers complete a minimum of two complete rolling cycles prior to the mat temperature cooling to 180 degrees Fahrenheit (F). Continue finish rolling until all roller marks are eliminated and no further compaction is possible. The Engineer will verify and document that the roller pattern has been adhered to. The Engineer can stop production when the roller pattern is not adhered to.

d. Measurement and Payment. The completed work, as described, will be measured and paid for using applicable pay items as described in subsection 501.04 of the Standard Specifications for Construction, or the contract, except as modified below.

Base Price. Price established by the Department to be used in calculating incentives and adjustments to pay items and shown in the contract.

If acceptance tests, as described in section c. of this special provision, show that a Table 1 mixture parameter exceeds the Range 1, but not the Range 2, tolerance limits, that mixture parameter will be subject to a 10 percent penalty. The 10 percent penalty will be assessed based on the acceptance tests only unless the Contractor requests that the 10,000 gram sample part retained for possible dispute resolution testing be tested. The Contractor has 4 calendar days from receipt of the acceptance test results to notify the Engineer, in writing, that dispute resolution testing is requested. The Contractor's QC test results for the corresponding QA test results must result in an overall payment greater than QA test results otherwise the QA tests will not be allowed to be disputed. The Engineer has 4 calendar days to send the dispute resolution sample to the lab once dispute resolution testing is requested. The dispute resolution sample will be sent to an independent lab selected by the Local Agency, and the resultant dispute test results will be used to determine the penalty per parameter, if any. Ensure the independent lab is a MDOT QA/QC qualified lab or an AMRL HMA qualified lab. The independent lab must not have conflicts of interest with the Contractor or Local Agency. If the dispute testing results show that the mixture parameter is out-of-specification, the Contractor will pay for the cost of the dispute resolution testing and the contract base price for the material will be adjusted, based on all test result parameters from the dispute tests, as shown in Table 3 and Table 4. If the dispute test results do not confirm the mixture parameter is out-of-specification, then the Local Agency will pay for the cost of the dispute resolution testing and no price adjustment is required.

If acceptance tests, as described in section c. of this special provision, show that a Table 1 mixture parameter exceeds the Range 2 tolerance limits, the 10,000 gram sample part retained for possible dispute resolution testing will be sent, within 4 calendar days, to the MDOT Central Laboratory for further testing. The MDOT Central Laboratory's test results will be used to determine the penalty per mixture parameter, if any. If the MDOT Central Laboratory's results do not confirm the mixture parameter is out-of-specification, then no price adjustment is required. If the MDOT Central Laboratory's results show that the mixture is out-of-specification and the Engineer approves leaving the out-of-specification mixture in place, the contract base price for the material will be adjusted, based on all parameters, as shown in Table 3 and Table 4.

In the case that the Contractor disputes the results of the test of the second sample obtained for a particular day of production, the test turn-around time frames given would apply to the second test and there would be no time frame on the first test.

The laboratory (MDOT Central Laboratory or independent lab) will complete all Dispute Resolution testing and return test results to the Engineer, who will provide them to the Contractor, within 13 calendar days upon receiving the Dispute Resolution samples.

In all cases, when penalties are assessed, the penalty applies to each parameter, up to two parameters, that is out of specification.

Table 3: Penalty Per Parameter

Mixture Parameter out-of-Specification per Acceptance Tests	Mixture Parameter out-of-Specification per Dispute Resolution Test Lab	Price Adjustment per Parameter
NO	N/A	None
YES	NO	None
	YES	Outside Range 1 but not Range 2: decrease by 10%
		Outside Range 2: decrease by 25%

The quantity of material receiving a price adjustment is defined as the material produced from the time the first out-of-specification sample was taken until the time the sample leading to the first in-specification test was taken.

Each parameter of Table 1 is evaluated with the total price adjustment applied to the contract base price based on a sum of the two parameter penalties resulting in the highest total price adjustment as per Table 4. For example, if three parameters are out-of-specification, with two parameters outside Range 1 of Table 1 tolerance limits, but within Range 2 of Table 1 limits and one parameter outside of Range 2 of Table 1 tolerance limits and the Engineer approves leaving the mixture in place, the total price adjustment for that quantity of material is 35 percent.

Table 4: Calculating Total Price Adjustment

Cost Adjustment as a Sum of the Two Highest Parameter Penalties		
Number of Parameters Out-of-Specification	Range(s) Outside of Tolerance Limits of Table 1 per Parameter	Total Price Adjustment
One	Range 1	10%
	Range 2	25%
Two	Range 1 & Range 1	20%
	Range 1 & Range 2	35%
	Range 2 & Range 2	50%
Three	Range 1, Range 1 & Range 1	20%
	Range 1, Range 1 & Range 2	35%
	Range 1, Range 2 & Range 2	50%
	Range 2, Range 2 & Range 2	50%

Table 5: Density Frequency Curve Development

Tested by: _____ Date/Time: _____

Route/Location:		Air Temp:
Control Section/Job Number:		Weather:
Mix Type:	Tonnage:	Gauge:
Producer:	Depth:	Gmm:

Roller #1 Type:

Pass No.	Density	Temperature	Comments
1			
2			
3			
4			
5			
6			
7			
8			
Optimum			

Roller #2 Type:

Pass No.	Density	Temperature	Comments
1			
2			
3			
4			
5			
6			
7			
8			
Optimum			

Roller #3 Type:

Pass No.	Density	Temperature	Comments
1			
2			
3			
4			
5			
6			
7			
8			
Optimum			

Summary: _____

Appendix A: Bid Security Requirements & Bid Forms

Bid Security

Bid security shall be made payable to the Calhoun County Road Department in an amount equal to 5% of the total bid. The bid security can be cash, certified check, or a bid bond issued by a surety.

The bid security of the successful low bidder will be retained by the Calhoun County Road Department until a contract is executed. The bid security shall be returned to the successful low bidder within ten (10) business days of the date the contract is executed.

The successful low bidder's bid security will be forfeited if the Calhoun County Road Department and the successful low bidder fail to reach agreement on a progress schedule or if the low bidder fails to return an executed contract to the Calhoun County Road Department within ten (10) business days of receiving notice of award.

The bid security of other bidders shall be returned within ten (10) business days of the bid opening.

Bonding

Performance and payment bonds with penal amounts equal to 100% and 50%, respectively, of the amount of the contract are required by law when the bid exceeds \$25,000. All subcontractors performing work under this contract are subject to bonding requirements. A bid bond of 5% is required, and performance and payment bonds are required with penal amounts equal to 100% and 50%, respectively, of the amount of the contract. Bonds are to be made payable to the Contractor. Corporate sureties offered for bonds furnished with this contract must be original documents and must appear on the list contained in the Department of Treasury Circular 570, entitled "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and Acceptable Reinsuring Companies".

- A. **Bid Bond:** 5% of amount of contract
- B. **Performance Bond:** 100% of amount of contract
- C. **Payment Bond:** 50% of amount of contract

Bid Sheet

Schedule of Items (Itemized Bid Sheet)

Letting Date: Tuesday, April 27, 2021 12:00 PM

Contract ID: 2021PPCW
Location: County Wide
Description:

Project Number: 2021PPCW	Project Engineer: Brian Kernstock
Estimate Number: 1	Date Created: 03/02/2021
Project Type: Miscellaneous	Fed/State #:
Location: County Wide	Fed Item:
	Control Section:

Description:

Instructions to Bidders:

IMPORTANT NOTICE:

If the proposal establishes a maximum price for any of the following work items, and if you bid a price higher than that maximum price, your bid will be considered to have quoted the maximum price and your bid total will be adjusted to reflect that maximum price.

If the proposal provides a specified price for any of the following work items, and if you bid a price higher or lower than that specified price, your bid will be adjusted to reflect that specified price.

If your bid is the lowest accepted bid, and if you refuse to accept the award of the contract due to the change in what you quoted as a maximum or specified price, you will forfeit your proposal guaranty.

Pay Item	Description	Quantity	Units	Unit Price		Bid Amount		
				Dollars	Cts	Dollars	Cts	
2040050	Pavt, Rem	210	Syd					
3070121	Shoulder, CI II	2,403	Ton					
5010008	Pavt for Butt Joints, Rem	2,200	Syd					
5010034	HMA, 36A	7,800	Ton					
8120370	Traf Regulator Control	1	LSUM					
Total Bid:								

Contractor: _____

 (Signature) (Date)