

June 9, 2022

Bolivar Repaving Bidders

RE: Addendum 001
Bolivar Repaving – Contract NO. STP-BOLIVAR-154
PIN 128201.00
City of Bolivar
Hardeman County, Tennessee

Dear Bidders,

The following items have been amended and are contained within as enclosures.

SPECIFICATIONS

- A) Proposal Contract Cover: The cover has been revised to reflect a revised completion date.
- B) Table of Contents: The table of contents has been revised to reflect the new page numbers, the addition of the 2021 Supplemental Specifications, Special Provision 109A, Special Provision 109B, and a new section date for the TDOT Minimum Wage Scales for Federal-Aid Highway Construction.
- C) Instructions to Bidders: This section was updated to match the updated bid date and contact information.
- D) 2021 Supplemental Specifications: Supplemental Specifications 100, Supplemental Specifications 400, Supplemental Specifications 600, Supplemental Specifications 700, and Supplemental Specifications 900 have been added to the specifications.
- E) Special Provision 109A: Special Provision 109A (Payment Adjustment for Fuel) has been added to the specifications.
- F) Special Provision 109B: Special Provision 109B (Price Adjustment for Bituminous Material) has been added to the specifications.
- G) AA-FED-WAGE: This section has been replaced with the latest version.

Please Staple the revised specifications into the bid book. Bidders must acknowledge receipt of this addendum on the Bid Form.

Sincerely,

Barge Design Solutions, Inc.



Lauren Gaines
Associate Project Manager

c: Mr. Chris Jenkins, PE (Barge), Ms. Meghan Wilson (TDOT LP), Mr. Seth Gordon (TDOT LP),
TDOT Local Programs

Enclosures: updated SPECIFICATIONS
Barge project #36969-01

PROPOSAL CONTRACT

FOR THE CONSTRUCTION OF

Contract No. STP-Bolivar-154

PIN: 128201.00
County: Hardeman
Federal Project No.: STP-M-9401(11)
State Project No.: 35LPLM-F3-008
Local Agency Reference No.: STP-Bolivar-154
Description Of Project: Resurfacing of N. Water St. from SR-18 to E. Market St.
and Lafayette St. from SR-125 to Madison St.
Project Length: 1.05 Miles
Completion Time: On or Before November 18, 2022
DBE Goal: 9.2%

By: _____

City, _____

St.: _____

Surety: _____

TDOT Version: 3/15/19

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ATTENTION

It shall be the bidders' responsibility to confirm that the Proposal Contract contains all the documents indicated on the Table of Contents.

Should any omissions occur, the appropriate documents may be obtained from the Construction Division upon request.

THE CITY OF BOLIVAR

INSTRUCTIONS TO BIDDERS

BIDS TO BE RECEIVED

6/22/2022

Sealed bids for the construction of the following projects will be received by the CITY OF BOLIVAR, **Barge Design Solutions, 65 Germantown Court, Suite 100, Memphis, Tennessee, 38018** until 2:00 PM 6/22/2022 and opened publicly at **Barge Design Solutions, 65 Germantown Court, Suite 100, Memphis, Tennessee, 38018, 2:01 PM 6/22/2022**. The reading of the bids will begin at 2:01 PM.

The proposed construction shall be performed in accordance with the most current version of the Standard Specifications for Road and Bridge Construction of the Tennessee Department of Transportation, and the Standard Roadway and Structures Drawings of the Tennessee Department of Transportation which are incorporated herein by reference and made a part hereof. In addition, only the Special Provisions contained within the applicable Proposal Contract will be considered binding. Any reference to any Special Provision not contained within the applicable Proposal Contract shall be disregarded. All questions related to the Proposal Contract, Plans, Specifications or Special Provisions shall be directed to the **Barge Design Solutions Project Manager, Lauren Gaines (615-252-4243)**. Information received from other offices of the CITY OF BOLIVAR strictly advisory.

IMPORTANT NOTICE TO BIDDERS:

Prospective bidders should read the following instructions carefully before submitting their bids. Special attention is called to the regulations of the CITY OF BOLIVAR that total bids, rather than unit prices, will be read. Proposals shall be rejected as being irregular if they fail to contain a unit price for each item listed. Extensions of the various items must be sub-totaled, carried forward, and shown as a grand total following the last proposal item. All entries must be in ink.

After a bidder has deposited a proposal with the CITY OF BOLIVAR, he can withdraw it only on written request in accordance with Subsection 102.07 of the Tennessee Department of Transportation Standard Specifications.

Totals read at the opening of the bids are not guaranteed to be correct and no final award of the contract will be made until bids and extensions have been checked and re-checked.

On all projects which are financed in whole or in part by funds received through Federal agencies and/or the Tennessee Department of Transportation, the awarding of contracts by the CITY OF BOLIVAR will be subject to approval by the Tennessee Department of Transportation. The CITY OF BOLIVAR reserves the right to reject any bid proposal which is not acceptable to the parties as listed, although such bid proposal would otherwise qualify as the lowest and best bid under the Tennessee Department of Transportation Standard Specifications.

The CITY OF BOLIVAR reserves the right to reject any or all Proposals, to waive technicalities or to advertise for new Proposals, if in the judgment of the awarding authority and subject to TDOT concurrence, the best interest of the CITY OF BOLIVAR will be promoted thereby.

The CITY OF BOLIVAR reserves the right to cancel the award of any Contract, at any time prior to execution of said Contract by all parties without any liability against the CITY OF BOLIVAR.

The awarding of the contract or rejection of all proposals will be made within 60 days after the formal opening of the proposals. Upon award, a detailed letter of instructions will be forwarded along with appropriate documents to the low bidder.

The CITY OF BOLIVAR hereby notifies all bidders, that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the basis of age, race, color, religion, national origin, sex or disability in consideration for an award.

The CITY OF BOLIVAR is an equal opportunity affirmative action employer, drug-free, with policies of nondiscrimination on the basis of race, sex, religion, color, national or ethnic origin, age, disability, or military service.

PREQUALIFICATION OF BIDDERS:

Each prospective bidder and subcontractor will be required to file a document entitled "Prequalification Questionnaire." The foregoing shall be filed on a form provided by the Tennessee Department of Transportation. The form must be filled out completely, and the truth and accuracy of the information provided must be certified by a sworn affidavit signed by an officer, partner, owner or other authorized representative of the applicant who has authority to sign contracts or other legal documents on behalf of the applicant. A prospective bidder must be prequalified by and in good standing with the Tennessee Department of Transportation prior to the issuance of a proposal form. A prospective subcontractor must be prequalified by and in good standing with the Tennessee Department of Transportation prior to being approved as a subcontractor. Each prospective bidder or subcontractor shall notify the Tennessee Department of Transportation if there is any subsequent change in the name, organization or contact information provided.

Prospective bidders' "Prequalification Questionnaire" shall be filed with the Tennessee Department of Transportation at least fourteen (14) days prior to the date of opening bids on any letting in which the applicant intends to submit a bid to the CITY OF BOLIVAR, or at least fourteen (14) days prior to the date on which the applicant requests approval as a subcontractor under a contract awarded by the CITY OF BOLIVAR. Bidders intending to submit proposals consistently shall complete and submit the prequalification application annually; however, this document may be changed during such period upon submission of additional favorable reports or upon receipt by the Tennessee Department of Transportation of substantiated evidence of unsatisfactory performance. The Tennessee Department of Transportation reserves the right to request additional information and documentation to clarify and/or verify any information submitted in an applicant's prequalification application.

**The prequalification form can be found at the web address
<http://www.tn.gov/tdot/section/tdot-construction-division>**

A proposal to be used for non-bidding purposes may be issued to any interested party regardless of prequalification. **This proposal Contract will be marked "Void for Bidding"**. A contractor that has purchased a proposal contract that was marked "void for bidding" can buy another book once they are fully prequalified before the bid date.

LICENSING REQUIREMENTS

According to the types of funds used, contractor bidding requirements differ. When using any Federal funds, proposals shall be completed as described below:

Proposals shall be submitted by a bidder licensed with the Tennessee Department of Commerce and Insurance (TDCI), Board for Licensing Contractors (BLC) within twenty-one (21) days of the bid opening, in accordance with Subsection 102.11 of the Tennessee Department of Transportation Standard Specifications.

Prior to recommending award of a contract, the Local Government will confirm that the lowest responsible bidder is licensed with the BLC. Because TDOT work classifications and the BLC licensing classifications slightly differ, the Local Government will verify only that the apparent low bidder is licensed in the general classification (e.g., Heavy Construction (HC), Highway, Railroad, Airport Construction (HRA), Specialty (S), Municipal and Utility Construction (MU), or Electrical Contracting (CE)) and not the specific subcategories of these classifications for the type of work involved in the project. This is in recognition that the prime contractor is required to complete 30% of the specific project work and may subcontract the remainder of the work.

Title 48 of Tennessee Code requires all contractors and subcontractors that are domestic or foreign Corporations, Limited Liability Companies, Limited Partnerships, or Limited Liability Partnerships to be in good standing with the Secretary of State (i.e., have a valid Certificate of Existence/Authorization). This includes being duly incorporated, authorized to transact business, and/or in compliance with other requirements as detailed by the Secretary of State.

Bidders that are domestic or foreign corporations, limited liability companies, limited partnerships, or limited liability partnerships, must be in good standing with the Secretary of State (i.e., have a valid Certificate of Existence/Authorization) on or before twenty-one (21) days after proposals are opened.

PROPOSAL BOND

Each proposal must be accompanied by a bidder's bond, or Cashier's Check, or Certified Check made payable to the CITY OF BOLIVAR in an amount equaling not less than five percent (5%) of the amount bid. In the case of optional items in the proposals, the amount of the bidder's bond or check must be in an amount equaling not less than five percent (5%) of the total amount of the bid based on the high option.

If the bidder's bond is offered as guaranty, the bond must be on the form furnished by the CITY OF BOLIVAR and made by a surety company, qualified and authorized to transact business in the State of Tennessee and must be acceptable to the CITY OF BOLIVAR.

If a check is offered as guaranty, the check of the successful bidder will be cashable at the discretion of the CITY OF BOLIVAR, pending the satisfactory execution and acceptance of the contract and the contract bond.

ISSUANCE OF BIDDING DOCUMENTS

This CITY OF BOLIVAR and the Tennessee Department of Transportation are on a cash basis for sales of Plans, Proposal Contracts, Standard Specifications, Standard Drawings, Standard Drawing Books and Tabulations of Bids. Requests for documents must be accompanied by cash, check, money order, or they may be mailed to the buyer C.O.D.

A charge of **\$35.00** will be made for each Proposal Contract. This charge is applicable regardless of whether the Proposal is to be used for bidding or non-bidding purposes. Proposals will be obtainable until the time set for opening bids. The charge for Plans and/or Cross-sections will be as specified in the Notice to Contractors and this charge will be applicable before the letting and for three months after the letting. Plans ordered after the three month period will be furnished at **\$1.00** per sheet. Individual Plan sheets and individual Standard Drawings will be furnished at **\$1.00** per sheet. Tabulations of bids will be furnished at **\$1.00** per sheet. Tennessee Department of Transportation Standard Drawing Books will be furnished by the Tennessee Department of Transportation at **\$100.00** per book plus **9.25%** sales tax, for in-state delivery. The most recent version of the Tennessee Department of Transportation Standard Specifications for Road and Bridge Construction will be furnished by the Tennessee Department of Transportation at **\$12.00** per book plus **9.25%** sales tax, for in-state delivery. There will be a minimum charge of \$2.00 on any purchase. All documents will be furnished without refund and transmitted at your risk.

When two or more contractors wish to bid together in a joint venture, each contractor will be required to make a written request for such a proposal to the CITY OF BOLIVAR. This request shall be signed by an authorized signatory of each firm.

Requests for joint venture proposals may be made in person or by telephone. However, the proposal for said joint venture will not be issued until the request in writing, as set forth above, is received by the CITY OF BOLIVAR.

REJECTION OF PROPOSALS

Proposals will be rejected as irregular if prior to the formal opening of the Proposal all of the following documents have not been signed: (1) the bidder shall sign by written signature the Proposal form, (2) the bidder shall sign by written signature the Proposal Certification form, (3) the bidder shall sign by written signature the Proposal Bond form or the Proposal Guarantee, whichever is applicable, (4) the Agent or Attorney-in-Fact representing a Surety Company shall sign by written signature the Proposal Bond, if applicable. In addition, Proposals will be rejected if any of the above signatures are a reproduced copy, such as, but not limited to a photostatic copy or a facsimile transmission. An original, dated and valid Power of Attorney for the Attorney-in-Fact must accompany the Proposal and the Contract. The accompanying Power of Attorney must be dated, and the date must be the exact same date as the date on the Proposal Bond. The Proposal and the Proposal Bond, including the attached Power of Attorney, shall be valid and binding for 60 days subsequent to the date of opening bids.

Proposals shall be completed on the forms as issued. Proposals will be rejected as being irregular if they are not prepared on the prescribed forms; if they show any omissions, alterations

of form, additions, or conditions not called for, unauthorized alternate bids, or irregularities of any kind; or if they fail to contain a unit price for each item listed. Proposals may be rejected if any of the unit prices contained therein are mathematically unbalanced, either excessive or below the Engineer's Estimate.

Written alterations to unit prices and extensions of the various items in the bid item sheets of the Proposal or, for computer assisted bids (CAB), in the CAB program generated set of bid item sheets will not be cause for rejection of the Proposal, provided each alteration is made in ink and is initialed by a duly authorized official of the company. In case of conflict between altered unit prices or extensions thereof, the unit price in numerals will govern.

The Plans and Specifications are as much a part of the proposal form as if they were bound therein. All of the documents contained therein are part of the proposal. Proposals shall not be taken apart. Proposals taken apart may be subject to rejection. Photostatic or facsimile copies of Proposal sheets may not be attached to the Proposal. Proposals containing forms not issued by the CITY OF BOLIVAR may be subject to rejection.

Proposals will be rejected as irregular if the bidder fails to acknowledge all addenda.

Proposals will be rejected as irregular when submitted by a bidder who is not prequalified and in good standing on the date of letting in accordance with Subsection 102.01 of the Tennessee Department of Transportation Standard Specifications and Chapter 1680-5-3, Prequalification of Contractors, of the Rules of the Tennessee Department of Transportation.

Proposals will be rejected as irregular when submitted by a bidder who is not licensed according to the requirements as detailed above.

Reasonable grounds for believing that there has been collusion among the Bidders will cause a rejection of all Proposals in which the Bidders involved are interested.

ADDENDA

Addenda to the Proposal will be acknowledged by all bidders. Failure to acknowledge receipt of Addendum Letters is grounds for rejection.

RETAINAGE

Effective for all contracts, the CITY OF BOLIVAR will not hold retainage. In addition, the Contractor will not be able to hold retainage from the subcontractor.

SUBCONTRACTS

Your special attention is called to Section 105 - Control of Work, and Section 108 - Prosecution and Progress of the Tennessee Department of Transportation Standard Specifications, concerning duties of the contractor and subletting of contracts.

CHANGED CONDITIONS

Your special attention is called to Section 104.02 of the Tennessee Department of Transportation Standard Specifications, concerning changed conditions on this contract.

The following information applies to Federal-Aid construction projects:

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

STATE

(Rev. 9-7-21)

(Rev. 12-15-21)

OF

TENNESSEE

January 1, 2021

Supplemental Specifications – 100SS

of the

Standard Specifications for Road and Bridge Construction

January 1, 2021

Subsection 104.03.B & C (pg. 23-24), 9-7-21; **Contract Change Notification; B & C**; Revise subsections:

B. Written Acknowledgement by Engineer

The Engineer will provide written acknowledgement of the Contractor's written notice within ten (10) calendar days.

C. Written Response by Engineer

The Engineer will provide a written response within the specified number of calendar days based on the requested contract change:

1. For requested changes to the contract time in excess of one hundred eighty (180) days or requested changes that alter the original contract amount by more than \$200,000, the Engineer will respond within thirty (30) days of receiving the Contractor's written notice.
2. For requested changes to the contract time in excess of ninety (90) days but less than or equal to one hundred eighty (180) days, or requested changes that alter the original contract amount by more than \$100,000 but less than or equal to \$200,000, or by more than ten percent (10%) of the original contract, whichever is less, the Engineer will respond within twenty-one (21) days of receiving the Contractor's written notice.
3. For all other requested changes to the contract, the Engineer will respond within fourteen (14) calendar days of receiving the Contractor's written notice.

The written response to the Contractor's written notice will include one of the following:

1. Confirmation that a change is necessary in accordance with **104.02**, and direction on how the Work will proceed.
2. A denial of the request for a change, which will include references to the Contract as to why the condition does not represent a change.
3. A request for additional information stating the specific information needed and the date by which it must be received. The Engineer will respond to the additional information provided within fourteen (14) calendar days.

When a change is necessary, the Engineer will make appropriate adjustments to the Contract price and time, if warranted, in accordance with **108.07**, **109.04**, **109.05.A**, and **109.06**. If the Contractor disagrees with the Engineer's decision or does not agree with the Contract adjustments, the Contractor may pursue the issue as a claim in accordance with **105.16**.

Subsection 106.06.A.1 (pg. 61), 12-15-21; **Field Laboratory, Type A**; Revise No. 1:

1. Scales of appropriate capacity and design to weigh the required samples. Scales are to be sensitive to within 0.1% of the sample to be weighed. Provide standard weights for scale calibration. Scale calibration shall ~~be~~ completed annually every six months, by an independent source ~~with no calibration exceeding 6 months to the day in~~.

Subsection 108.01 (pg. 79, 80), 12-15-21; **Subletting of Contract**; Revise Item list:

- Item 105-01 – Construction Stakes, Lines and Grades
- Item 202-01.~~02~~ – Removal of Asbestos
- Item 203-40 – Rock Anchors, Anchor Blocks, Tie Back Anchors
- Item 209 – ~~Project~~ EPSC
- Item 411-12 - ~~** Shoulder~~ Scoring
- Item 411-33 – Stamped Asphalt
- Item 501-03.~~12~~ – Concrete Shoulder Rumble Strip
- Item 503-01 – Grinding Concrete Pavement
- Item 602-03 – Steel Structures
- Item 602-04 – Steel Structures
- ~~Item 602-10.13 / .14 – Navigational Lighting~~
- Item 602-10.81 – Heat Straightening
- Item 603-02 – Repainting Steel Structures
- Item 603-05 – Containment and Disposal of Waste
- Item 604-04.01 – Applied Texture Finish (New Structures),
- Item 604-04.02 – Applied Texture Finish (Existing Structures)
- Item 604-04.10 – Graffiti Protection
- Item 604-04.20&.21 – Painting or Staining Concrete Surfaces
- Item 604-04.62 – Clean and Texture Finish Median Barrier
- Item 604-05.31 – Bridge Deck Grooving (Mechanical)

- Item 604.07 – Retaining Wall
- Item 604-42.01 – Underwater Divers
- Item 606-26.05 – Core Drilling for Piles (Abandoned)
- Item 617 – Bridge Deck Sealant
- Item 619 – Polymer Modified Concrete Overlay
- Item 624 – Retaining Wall ~~Items~~
- Item 625-01.08,10,11 – Inclinator, Camera Drilled Shaft Inspections
- ~~Item 640 – Weigh Station Items~~
- Item 705 – Guardrail, ~~Anchors, etc.~~
- Item 706 – Guardrail Adjusted, Removed and Reset~~Items~~
- Item 707 – Fence ing ~~Items~~
- Item 712 – Temporary Traffic Control ~~Items~~
- Item 713 – Highway Signing ~~Items~~
- Item 714 – Roadway and Structure Lighting ~~Items~~
- Item 716 – Pavement Markings ~~Items~~
- ~~Item 720-03, 720-04, 720-05, 720-06, 720-07, 720-08, 720-09 – Railroad Highway Crossing~~
- ~~Item 721-01.06 – Irrigation System Repair~~
- Item 721-10, 721-11.20, 721-11.30, 721-12 – Landscape and Irrigation
- Item 724 – Landscape Lighting
- Item 725 – ITS items
- Item 730 – Traffic Signals ~~Items~~
- Item 740 – Geosynthetics
- Item 79* – Utilities ~~Items~~
- ~~Item 750.01 – Mitigation Site~~
- Item 801 – Seeding
- Item 802 – Landscaping ~~Items~~ Plantings
- Item 803-01 – Sodding
- Item 805 – Erosion Control
- Item 806 – Project Mowing

Subsection 108.03.A, B, & C (pg. 81,82,85,87,88), 9-7-21; **Contract Change Notification; A & B**; Revise Heading,
C.1.c; Add new No.vi, **C.3**; Revise last paragraph, **C.4**; Revise last paragraph & add sentence:

A. Project Durations Less Than 9 Months

B. Project Durations 9 Months to 24 Months

C.1.c Narrative report in PDF file format fit to 8.5x11 inch paper and including:...

- vi. The quantity and estimated daily production rate for controlling activities;
- vii. Description of the calendars including identification of workdays per week, holidays, number of shifts per day, and number of hours per shift;
- viii. Description of how the schedule accommodates adverse weather days for each month; and

- ix. Description of execution plan, including number and type of crews, a list of subcontractors’ crews, and expected equipment, but not limited to large equipment transport and delivery, transportation permits for oversized/overweight loads, and availability.

3. Baseline CPM Schedule.

The Engineer and Contractor will review the draft baseline CPM schedule at a meeting specific for the review of the schedule. The Engineer will accept the draft baseline CPM schedule, provide review comments, or request additional information. Make appropriate adjustments or provide additional information within 14 calendar days. The Engineer’s acceptance is based solely on whether the baseline schedule meets the requirements of **108.03**. Review comments made by the Engineer on the initial schedule will not relieve the Contractor from compliance with the Contract. The Contractor is responsible for scheduling, sequencing, and prosecuting the Work to comply with the Contract requirements.

4. Schedule Updates.

Submit the updated schedule electronically to the Engineer in accordance with the requirements of this subsection. The Engineer reserves the right to reject any schedule updates because of changes in relationships between activities on the critical path, inadequate or inaccurate narrative updates, or other deficiencies in the schedule updates as required in this subsection.

The Department will measure and pay for CPM Project Schedule in accordance with **108.11** and **108.12** respectively.

Subsection 108.11 (pg. 99), 9-7-21; **Method of Measurement**; Add subsection **108.11**:

108.11 Method of Measurement

The Department will measure construction CPM Project Schedule as a percentage of the lump sum price bid for the completion of the work specified in **108.03.C** and partial payment will be made according to the schedule in Table 108.11-1.

Table 108.11-1: Payment Schedule for CPM Project Schedule

Estimate Number or Percent of Total Contract Amount of Previous Estimate	Total Percent of CPM Project Schedule Lump Sum Bid Item
Estimate # 1	20%
Estimate # 3	40%
20%	50%
40%	60%
60%	70%
80%	80%
95%	100%

Subsection 108.12 (pg. 99), 9-7-21; **Method of Measurement**; Add subsection **108.12**:

108.12 Basis of Payment

The Department will make partial payments for CPM Project Schedule on the basis of a percentage of the lump sum price bid in accordance with the schedule shown in Table 108.11-1.

If the Contractor fails to provide monthly schedule updates, or address the Engineer's comments regarding the monthly schedule update, within 10 calendar days following the progress estimate pay period cutoff date, the Engineer will withhold payment for CPM Project Schedule and may withhold up to an additional 5% of the monthly estimate payment, until such time as an acceptable update has been provided.

No additional payments will be made for schedule revisions as requested per **108.03.D**.

Such payment is full compensation for meeting all requirements of **108.03.C** and **D**.

STATE**OF****TENNESSEE**

(Rev. 12-15-21)

January 1, 2021

Supplemental Specifications – 400SS**of the****Standard Specifications for Road and Bridge Construction****January 1, 2021****Subsection 403.04** (pg. 286), 12-15-21; **Preparing Surface**; Revise Paragraph:

Prepare the designated surface as specified in **4054.05**. Ensure that the surface is dry when applying tack coat.

Subsection 403.05.C (pg. 286), 12-15-21; **Fog Sealing**; Revise 1st Paragraph:

When the Contract requires bituminous material for fog sealing of shoulders, provide emulsified asphalt meeting **403.02** or an item from QPL 40A. Apply diluted emulsified asphalt at a rate of 0.10 to 0.15 gallons per square yard based on a dilution rate of one part emulsified asphalt to one part water. This application may require two equal increments if run-off occurs. Apply fog seal when the ambient air temperature or the surface temperature is a minimum of 50°F.

Subsection 407.09 (pg. 326-327), 12-15-21; **Weather Limitations**; Revise No. 2 & 3:

2. The bituminous plant mix is placed according to the temperature limitations specified in Table 407.09-1 and when weather conditions otherwise allow the pavement to be properly placed, compacted, and finished. Placement may proceed if either the air or surface temperature is met except for 411-TL, 411-TLD, 411-TLE, and 411-OGFC mixtures.

Measurement of the surface temperature shall be done on pavement that is shaded from direct sunlight unless no shaded location exists. If paving based on the air temperature, stop work once the air temperature falls below the minimum threshold. Do not start paving if the surface temperature does not meet the requirements and the air temperature is forecast to fall below the minimum temperature within 4 hours of starting work.

Table 407.09-1: Temperature Limitations

Compacted Thickness	Minimum Air or Surface Temperature (°F)	
	Unmodified mixes (PG 64, 67)	Modified mixes (PG 70, 76, 82)
≤ 1.5 inches	45	55
> 1.5 inches to < 3.0 inches	40	50
≥ 3.0 inches	35	45

3. For 411-TL, 411-TLD, 411-TLE, and 411-OGFC mixtures, placement shall proceed only when the pavement surface temperature and the air temperature are a minimum of 55° F and rising. Stop paving if the air temperature falls below 55°F immediately. Placement of these mixtures is restricted to the period between April 1 and October 31.

For all other mixtures, Do not place bituminous plant mix, with a compacted thickness of 1.5 inches or less, between November 30 and April 1. Do not place bituminous plant mix, with a compacted thickness greater than 1.5 inches, between December 15 and March 16. Only place 411-TL, 411-TLD, 411-TLE, and 411-OGFC mixtures when the pavement surface temperature and the ambient air temperature are a minimum of 55° F and rising; limit placement to the period from April 1 to November 1. If the temperature meets the above requirements, outside of normal paving season, a request for a seasonal limitation waiver may be submitted for Departmental consideration. Requests shall be submitted in writing at least one week before the anticipated need.

Subsection 407.15.C (pg. 336-337), 12-15-21; **Test Strips**; Revise 1st Paragraph:

Construct test strips for all A, B, BM, BM-2, C, CW, D, and E mixtures that require density testing to establish rolling patterns, to accommodate the Department to calibrate nuclear gauges, to verify that the base course or surface course mixture meets the density requirements of the specifications, and for mix design and production verification as required. A test strip is not required for mixes AS, A-CRL, CS, TL, TLD, and TLE, but a adjustments to the roller pattern may be made at the direction of the Engineer for mixtures that do not require density testing.

Subsection 407.20.C.3 (pg. 346-347), 12-15-21; **Loss on Ignition (LOI)**; Revise 2nd & Remove 4th Paragraph:

If the percent of LOI in the aggregate differs by plus or minus 2% from the LOI indicated in the JMF, the Department will make a payment deduction in the price bid for the mix applied to the entire days production, not as a penalty but as liquidated damages. The percent of total payment to be deducted will be 5 times the percent that the LOI exceeds the JMF tolerance of plus or minus 2%.

To determine the deduction, the Department will use lots of approximately 5,000 square yards. The Department inspector will perform sampling and testing to establish the LOI according to the Department's sampling and testing procedures. If the initial tests indicate a variation in the LOI of plus or minus 2% than the value shown on the mix design, the Contractor shall perform the additional sampling necessary to establish the LOI of the aggregate in each lot, with the cost of the sampling being included in the contract unit prices bid for the paving items.

Subsection 411.03.B (pg. 353), 12-15-21; **Proportioning**; Revise Table 411.03-01:

Table 411.03-1: Proportions of Total Mixture, Percent by Weight

Surface Course	Effective Combined Mineral Aggregate	Asphalt Cement
Grading D	93.0 – 94.3	5.7 – 7.0 ⁽¹⁾
Grading E ⁽²⁾	93.0 – 94.3	5.7 – 7.0 ⁽¹⁾
Grading E (shoulders)	<u>93.5</u> – <u>94.0</u>	6.0 – 6.5 ⁽¹⁾
Grading TL	92.5 – 94.3	5.7 – 7.5 ⁽¹⁾
Grading TLD	93.0 – 94.3	5.7 – 7.0 ⁽¹⁾
Grading TLE	93.0 – 94.3	5.7 – 7.0 ⁽¹⁾
<u>Grading TLE (shoulders)</u>	<u>93.5 – 94.0</u>	<u>6.0 – 6.5 ⁽¹⁾</u>
Grading OGFC	92.0 – 94.0	6.0 – 8.0 ⁽¹⁾

⁽¹⁾ If the effective combined specific gravity of the aggregate exceeds 2.80, the above proportions may be adjusted as directed by the Engineer. The upper limit for flow values shall not apply to mixes with modified asphalt liquids.

⁽²⁾ The minimum allowable asphalt cement content for 411E low volume mixtures is 5.3%.

Subsection 411.03.C.1 (pg. 358), 12-15-21; **Recycled Asphalt Pavement**; Revise 2nd Paragraph:

All mixes shall contain at least 80% virgin asphalt, except for 411E Shoulder and 411TLE Shoulder Mixtures, which shall have at least 65% virgin asphalt.

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Subsection 602.04.A (pg. 429), 12-15-21; **Shop Inspection**; Revise A:

Fabricators of steel bridges shall hold the following certifications in accordance with the AISC Certification Program ~~– Bridge QMS Certification for Structural Steel Fabricators – Standard for Steel Bridges~~:

1. As a minimum, all fabricators shall be certified in the category of ~~intermediate bridges~~ Certified Bridge Fabricator – Intermediate Bridge (IBR) with applicable supplemental requirements.
2. Fabricators of advanced type bridges, as defined in the AISC Standard for Steel Bridges, shall be certified in the category of ~~advanced bridges~~ Certified Bridge Fabricator – Advanced (ABR) with applicable supplemental requirements.
3. Fabricators of diaphragms, cross-frames, floor beams, stringers (rolled beams) and laterals shall be certified in the category of Certified Bridge Fabricator – Intermediate Bridge (IBR) ~~Intermediate bridges~~, as a minimum.
4. Fabricators of bridge bearings, expansion joints, sign structures and other metal highway components as listed in the AISC standard shall hold certification ~~under the AISC Certification Program – Standard for Bridge and Highway Metal Component Manufacturers. As an alternative, fabricators of bridge bearing or expansion joints may hold certification in the category of Intermediate bridges under the Standard for Steel Bridges.~~ under the AISC Certification Program – Bridge Component QMS Certification (CPT). As an alternative, fabricators of bridge bearing or expansion joints may hold certification under the Bridge QMS Certification in the category of Certified Bridge Fabricator – Intermediate Bridge (IBR).

Subsection 607.02.B (pg. 579), 12-15-21; **Materials, Pipe Culverts, Cross Drains, Side Drains, & Storm Drains**; Remove 1st Sentence:

B. Pipe Culverts, Cross Drains, Side Drains, & Storm Drains

~~Where Pipe Culverts (Cross Drains & Median Drains) are specified, provide them in accordance with the following:~~

Subsection 607.07 (pg. 582), 12-15-21; **Joining Pipe:** Revise 5th paragraph.

HDPE, PP, SRTRP, and PVC pipe shall be joined in accordance with ASTM D3212 and meet the performance requirements for ~~soil tightness, unless~~ water-tightness is specified. Install joints so that the connection of pipe sections, for a continuous line, will be free from irregularities in the flow line.

Subsection 619.04.A (pg. 652-653), 12-15-21; **Volumetric Continuous Mixers;** Revise No. 3 & Ticket List:

3. The volumetric mixing plant shall be operated and calibrated by a Volumetric Mixer Operator ~~certified by VMMB and holds~~ with a TDOT Concrete Field Testing Technician Certification or equivalent. In the presence of the Engineer, perform the calibration of gate settings according to the manufacturer's recommendations for the mix design to be used before starting work. The calibration procedure shall account for the moisture content of the aggregates. The yield shall be maintained within a tolerance of plus or minus 1% and verified using a minimum 2 cubic feet container every 50 cubic yards. Recalibrations will be necessary when indicated by the yield checks, and at any other times the Engineer deems necessary to ensure proper proportioning of the materials.

Each load of concrete produced by a volumetric continuous mixing plant shall be accompanied by a Concrete Delivery Ticket. The ticket shall include as a minimum the following:

- a. Date
- b. Contract number
- c. County
- d. Class of concrete
- e. Concrete design number
- f. Number of cubic yards
- g. Load number
- h. Truck number
- i. Maximum water allowed by design
- j. Total water added
- k. Water-cementitious materials ratio
- l. Time loaded
- m. Time discharged
- n. Signature of producer's ~~VMMB-Certified~~ Volumetric Mixer Operator

Subsection 623.02.C.1 (pg. 673), 12-15-21; **Modular Roadway Expansion Joints, Fabrication and Construction;** Revise No. 1:

1. Construct the expansion joint systems as shown on the shop drawings. Meet the tolerance requirements included in AASHTO specifications. Perform all welding according to AWS specifications and by certified welders only. Ensure that fabricators are certified ~~under the AISC Quality Certification, Category I, Simple Steel Bridges, SBR-1B, under the AISC Certification Program – Bridge Component QMS Certification (CPT). As an alternative, fabricators of bridge bearing or expansion joints may hold certification under the Bridge QMS Certification in the category of Certified Bridge Fabricator - Intermediate Bridge (IBR).~~

Subsection 623.03.C.2 (pg. 676, 677), 12-15-21; **Strip Seal Expansion Joints, Fabrication and Construction**; Revise No. 2:

2. Shop drawings shall also supply information regarding material specifications, geometry, a table of variable temperature and dimensions, and a bill of material. The maximum joint opening shall be 4 inches. Construct the expansion joint systems in accordance with the details shown on the shop drawings. Tolerance requirements shall be in accordance with AASHTO Specifications. Perform all welding in accordance with AWS specifications and by certified welders only. Ensure that fabricators are certified ~~under the AISC Quality Certification, Category I, Conventional Steel Structures.~~ under the AISC Certification Program – Bridge Component QMS Certification (CPT). As an alternative, fabricators of bridge bearing or expansion joints may hold certification under the Bridge QMS Certification in the category of Certified Bridge Fabricator - Intermediate Bridge (IBR).

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Subsection 705.06 (pg. 698), 12-15-21; **Installation of Posts; Add new 7th Paragraph:**

When an underground structure or utility prevents proper post installation for a run of guardrail, posts may be omitted along the run of guardrail only as detailed in the Department's Standard Drawings. A post will not be omitted from any end terminal or transition. If the conditions noted for omitting posts cannot be used, then the use of a guardrail footing or weak post attachment to culvert may be used as detailed in the Department's Standard Drawings

Subsection 705.10 (pg. 700), 12-15-21; **Basis of Payment; Add new 7th Paragraph:**

When posts are omitted from a run of guardrail, payment shall be as noted in the Standard Drawings.

- a. For 1 post being omitted, the Department will pay the contract unit price for W Beam Guardrail (Type 2) MASH TL-3.
- b. For 2 or 3 posts being omitted, the Department will pay for the linear feet of nested W Beam rail as detailed in the Standard Drawings at a rate equal of 1.5 times the contract unit price for W Beam Guardrail (Type 2) MASH TL-3.
- c. If a guardrail footing or attachment to culvert was used, the Department will pay for work as noted in the Standard Drawings.

Subsection 712.02 (pg. 731-732), 12-15-21; **Materials; Revise List:**

Aluminum.....	916.02
Reflective Sheeting.....	916.06
Paint.....	910.026.09
Cold Rolled Carbon Steel -16 gauge	ASTM A1008
Non-metallic Drums and Barricades	QPL
Reflective Sheeting.....	916.06

Subsection 712.02.B (pg. 732), 12-15-21; **Temporary Pavement Marking Material; Revise 1st Paragraph:**

Unless otherwise specified, the material for pavement marking ~~line~~ shall be either temporary pavement marking tape listed on the Department’s QPL, or reflectorized paint with raised reflective pavement markers placed as shown on the Plans

Subsection 712.02.E (pg. 733), 12-15-21; **Portable Impact Attenuators; Revise Heading & 1st Paragraph:**

E. ~~Portable Impact Attenuators~~ Temporary Work Zone Crash Cushions

~~Portable impact attenuators~~ Temporary work zone crash cushions shall be in accordance with the Plans and Specifications, meet the requirements for the appropriate test level, and meet the requirements of and be listed on the Department’s QPL or Standard Drawings.

Subsection 712.04.B (pg. 735-736), 12-15-21; **THP Troopers and Uniformed Law Enforcement Officers; Revise 2nd Paragraph:**

When a THP Trooper is not available, the Contractor may provide a Uniformed Law Enforcement Officer if approved by the Engineer and the Regional Safety Coordinator or Regional Operations Office. All Uniformed Law Enforcement Officers shall provide a marked Federal, State, County, City, or Metropolitan government law enforcement vehicle equipped with blue lights and have the authority to write traffic tickets and make arrests within the project site. The Uniformed Law Enforcement Officer shall maintain a detailed written log of enforcement activities and shall submit the log to the Engineer for verification each month.

Subsection 712.06 (pg. 743), 12-15-21; **Temporary Marking; Revise Heading, Add No. 2, & Revise No. 1 & 3:**

712.06 Temporary Pavement Centerline and Lane Marking

Unless otherwise specified, install temporary pavement marking as follows:

1. Provide 4-inch wide pavement marking (line) for center, edge, lane and barrier lines as shown on the Plans for projects that will have traffic maintained overnight. For temporary pavement ~~line~~ markings (line) on intermediate layers of pavement, use reflective tape, reflectorized paint, and raised pavement markers, or a combination thereof as shown on the Plans or as required by the Engineer, and install meeting 716, 910.02, 919.04, or Department's QPL at the end of each day's work to permanent standards before dark hours. Short, unmarked sections will not be allowed. ~~The Department will measure and pay for these markings as Painted Pavement Marking (Line) in accordance with 716.08 and 716.09.~~ Preserve established no-passing zones, if any, on the existing pavement; if no-passing zones have not previously been established, establish them before beginning the work. Mark two-lane, two-way highways with 10-foot long center lines applied on 40-foot centers and appropriate no-passing barrier lines.
2. When required, provide temporary pavement markings at intersections for temporary pavement markings on intermediate layers of pavement. The Department will require temporary intersection pavement markings to be reflectorized paint, or removable pavement marking meeting 716, 910.02, 919.04, and or Department's QPL.
3. Where required on the completed permanent pavement surface, for 10-foot lane lines, no-passing barrier line, and edge line, use reflectorized paint applied as specified in 716 meet 716.03.

Subsection 712.09 (pg. 744, 745), 12-15-21; **Method of Measurement; Revise No. 5, 7, 8 & Add 9:**

5. Warning Lights and Flashing Arrow Boards by the unit, Changeable Message Signs per each for the type designated. Payment will be based on the maximum number in place at one time.
7. ~~Portable Impact Attenuators~~ Temporary Work Zone Crash Cushion based on the initial installation of each ~~portable impact attenuator~~. No additional payment will be made for removal, moving, and reinstalling ~~impact attenuators~~ at other locations on the Project as directed by the Engineer. Payment will be based on the maximum number ~~of portable impact attenuators~~ in place at one time.
8. Temporary pavement marking (line) for edge, center, lane and barrier lines will be measured as listed in the plans, as described for complete in place and accepted, as Painted Pavement Marking (Line) ~~in 716.07~~ regardless of whether the lines are painted, taped markings, or raised pavement markers, or a combination of the above as shown on the Plans or as required by the Engineer, ~~except that Removable Pavement Marking (Line) will be measured by the linear foot of installed line. Only the marked line will be measured for payment.~~
9. Temporary pavement markings at intersections will be measured as listed in the plans complete in place and accepted as Painted Pavement Marking (Description) or Removable Pavement Marking (Description)

Subsection 712.10 (pg. 746, 747), 12-15-21; Basis of Payment; Revise Item List & Paragraphs 4, 5, 9, Remove Paragraph 8:

<i>Item</i>	<i>Pay Unit</i>
Traffic Control	Lump Sum
Portable Barrier Rail	Linear Feet
Portable Impact Attenuator <u>Temporary Work Zone Crash Cushion</u>	Each
Signs	Square Feet
Vertical Panels	Square Feet
Flexible Drums	Each
Temporary Barricades (Type)	Linear Feet
Removable Pavement Marking (Description)	Linear Feet
Changeable Message Sign Unit	Each
Arrow Board (Type C)	Each
Barrier Rail Delineator	Each
Temporary Flexible Tubular Delineator	Each

Payment for ~~Portable Energy Absorbing Terminals~~ Temporary Work Zone Crash Cushion will be made at the contract price ~~per Portable Energy Absorbing terminal~~, complete in place, with total payment based on the maximum number ~~of portable energy absorbing terminals~~ in place at one time as specified in **712.09**.

Payment for Signs (Construction) ~~and Vertical Panels~~ is full compensation for providing sign panels with proper sheeting and legend, erecting on proper supports, furnishing all mounting hardware, covering when not in use, relocating, handling, and maintaining until Project completion. Vertical Panels will be paid as Signs (Construction).

~~The Department will pay for 10-foot lane line/center line and solid barrier line as Painted Pavement Marking (Line) in accordance with 716.08.~~

Payment for Removable Pavement Marking ~~items Line, 8-inch Barrier Line, Channelization Striping or Stop Line, is shall be~~ full compensation for the installation, maintenance, and removal of the marking line when it is no longer required.

Subsection 716.03.B (pg. 790), 12-15-21; **Application; Revise No. 3 & Add No. 4:**

3. **Temporary Pavement Marking (Line)**. When thermoplastic is used on the final pavement surface, the Contractor may use reflectorized paint for the center, edge, lane and barrier lines installed meeting 716.07 and 910~~to permanent standards~~ at the end of each day's work and then install the permanent pavement marking after the paving operation is completed. Short, unmarked sections are not allowed. The Department will not directly measure and pay for temporary markings for the final surface, and will consider the costs thereof to be incidental to the item for the permanent thermoplastic pavement markings (line).
4. **Temporary Pavement Markings at Intersections**. When required, temporary pavement markings at intersections are to be installed with reflectorized paint meeting 716.07 and 910. The Department will measure and pay as noted in 712.09 and 712.10,

Subsection 716.07.A (pg. 793), 12-15-21; **Application; Revise 11th Paragraph:**

When reflectorized paint is required for temporary or final marking, install the paint meeting 910.02~~to permanent standards~~ at the end of each day's work. Do not leave any short, unmarked sections.

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Subsection 904.03 (pg. 931-934), 12-15-21; **Emulsified Asphalt**; Revise Table 904.03-1(c):

Table 904.03-1(c): Test Requirements for Emulsified Asphalt

Practices	AASHTO Test Method	CRS-2P	RS-2	RS-1	CRS-1
Saybolt-Furol Viscosity @ 77 °F, seconds	T59	n/a	n/a	20-100	<u>n/a</u>
Saybolt-Furol Viscosity @ 122 °F, seconds	T59	100-400	75-400	n/a	<u>20-100</u>
Storage Stability Test, 24- h, %	T59	1 Max	1 Max	1 Max	<u>1 Max</u>
5-day Settlement, %	T59	n/a	n/a	n/a	<u>n/a</u>
Particle Charge	T59	Positive	n/a	n/a	<u>Positive</u>
Sieve Test, %	T59	0.1 Max	0.1 Max	0.1 Max	<u>0.1 Max</u>
Residue by	T59	Evaporation	Distillation	Distillation	<u>Distillation</u>
Residue, %	T59	65 Min	63 Min	55 Min	<u>60 Min</u>
Demulsibility, %	T59	40 Min	60 Min	60 Min	<u>40 Min</u>
Distillate, %	T59	n/a	n/a	n/a	<u>n/a</u>
Oil Test, %	T59	n/a	n/a	n/a	<u>3.0 Max</u>
Stone Coating	T59	n/a	n/a	n/a	<u>n/a</u>
Float Test, seconds	T50	n/a	n/a	n/a	<u>n/a</u>
Penetration	T49	75-175	100-200	100-200	<u>100-250</u>
Elastic Recovery, % ⁽¹⁾	T301	50 Min	n/a	n/a	<u>n/a</u>
Ductility @ 77 °F, cm	T51	40 Min	40 Min	40 Min	<u>40 Min</u>
Ductility @ 40 °F, cm	T51	n/a	n/a	n/a	<u>n/a</u>
R&B Softening Point, °F	T53	125 Min	n/a	n/a	<u>n/a</u>
Original G*/sind @ 82 °C	T315	n/a	n/a	n/a	<u>n/a</u>

⁽¹⁾ Straight-sided mold, 20-cm elongation, 5min hold, 25 °C

Subsection 916.06 (pg. 988), 12-15-21; **Reflective Sheeting**; Revise Subsection:

Provide reflective sheeting from the Department's QPL conforming to AASHTO M 268 and the supplementary requirements for fungus resistance of AASHTO M 268. The sheeting material shall have a precoated adhesive backing or a heat and pressure activated adhesive backing protected by a removable liner.

For all signs with a SILVER-WHITE and ORANGE background when used on temporary barricades and channelizing drums, provide reflective sheeting ~~of that meets or exceeds AASHTO M 268, Type B. or better as specified by AASHTO M 268.~~

For all permanent panel signs with a SILVER-WHITE, YELLOW, RED, GREEN, BROWN, or BLUE background, provide reflective sheeting ~~of Encapsulated Lens or Microprismatic Lens material that meets or exceeding the minimum requirements for AASHTO M 268, Type- DB, or better as specified by AASHTO M 268.~~

For overhead permanent signs attached to sign structures which overhang travel lanes and are not illuminated with sign lighting, provide reflective sheeting that meets AASHTO M 268, Type D.

For all other sign types, provide reflective sheeting that meets or exceeds AASHTO M 268, Type B.

For FLOURESCENT ORANGE background, material provide reflective sheeting that shall meet or exceeds the requirements for AASHTO M 268, Type B, as specified by AASHTO M 268.

Subsection 916.07 (pg. 988,989), 12-15-21; **Legends, Borders, and Accessories**; Revise Subsection:

Provide letters, numerals, symbols, borders, and route markers conforming to the MUTCD.

A. Type "A" Class I (Demountable)

Provide silver-white letters, numerals, symbols, borders, and route markers of a pre-coated pressure sensitive or a tack-free heat-activated adhesive reflective sheeting permanently adhered to the sign panel. ~~The reflective sheeting shall meet the requirements of 916.06 (Type B or better as specified by AASHTO M 268).~~

For all permanent panel signs, provide reflective sheeting that meets AASHTO M 268, Type D.

Mechanically apply the reflective sheeting to the properly prepared sign panel with the equipment and in a manner prescribed by the sheeting manufacturer. Letters, numerals, symbols, borders, and route markers shall be 0.032 inch thick aluminum sheet of 3003 H14 Alloy or approved composite material. Properly degrease and etch aluminum, or treat with a light, tight, amorphous chromate type coating.

Supply each letter, numeral, symbol, and route marker with mounting holes, and secure to the sign surface with corrosion-resistant screws, bolts, or rivets.

B. Type "A" Class 2 Cut-Out (Direct Applied Reflective Sheeting Copy)

Provide silver-white cut-out letters, numerals, symbols, borders, and route markers of a pre-coated pressure sensitive or a tack-free heat-activated adhesive reflective sheeting. ~~The reflective sheeting shall meet the requirements of 916.06 (Type B or better as specified by AASHTO M 268).~~

For all permanent panel signs, provide reflective sheeting that meets AASHTO M 268, Type D.

For all other sign types, provide reflective sheeting that meets or exceeds AASHTO M 268, Type B.

SPECIAL PROVISION
REGARDING
PAYMENT ADJUSTMENT FOR FUEL

This special provision covers the method of payment adjustment for fuel price increases or decreases. Payment adjustments will be made in monthly increments based on the estimated fuel consumed on major items of work, the estimated price per gallon of fuel at the time of letting, and the percentage change of the Producer Price Index for Light fuel oils, Series ID Number WPU0573, published by the U.S. Department of Labor, Bureau of Labor Statistics.

The estimated price per gallon of fuel for this contract is \$ 4.04 .

The April 2022 Price Index (Ib) for light fuel oils shall be used for this contract. Adjustments will be based on the price index in effect for the month in which the item was installed.

Fuel consumption for payment adjustment shall be based on the following:

Item Number	Description of Work	Gallons	Unit of measure
		per unit	
203	Any Road and Drainage Excavation	0.25	Cubic Yard
203	Any Borrow Excavation (Rock)	0.36	Cubic Yard
203	Any Borrow Excavation (Other than Solid Rock)	0.25	Cubic Yard
203	Any Borrow Excavation (Rock)	0.16	Ton
203	Any Borrow Excavation (Other than Solid Rock)	0.11	Ton
203-05	Undercutting	0.25	Cubic Yard
203	Any Embankment (in-place)	0.25	Cubic Yard
303, 309, 312	Any Aggregate Base	0.79	Ton
313, 501	Treated Permeable Base or Lean Concrete Base	0.10	Square Yard
307	Any Bituminous Plant Mix Base (HM)	2.98	Ton
411	Any Bituminous Concrete Surface (HM)	2.98	Ton
501	Any Portland Cement Concrete Pavement		
	≤ 10 in. thickness	0.25	Square Yard
	> 10 in. thickness	0.30	Square Yard

No payment adjustment for fuel shall be made on any item of work which is not listed above.

No payment adjustment for fuel shall be made unless the price index varies 5% or more from the index indicated in this Special Provision.

Where the price index varies 5% or more, the payment adjustment will be made as follows:

$$PA = [(Ic \div Ib) - 1] \times Fe \times Fp$$

Where:

PA = Payment Adjustment (may be plus or minus)

Ic = Index for Current Month

Ib = Index for Bidding

Fe = Estimated Fuel in Gallons used based on above table and work paid for during adjustment month. [\sum (Pay quantity x Gallons per unit) = Fe]

Fp = Fuel Price for Bidding

The Project Engineer will compute the payment adjustment for fuel on work sheets similar to the one attached and will furnish a copy of the calculations upon request to the prime contractor and approved subcontractors.

Upon the expiration of the allocated working time, as set forth in the original contract or as extended by Change Order, payment adjustments for fuel will continue to be made only when the "Index for Current Month" is **less** than the "Index for Bidding" and varies 5% or more.

Payment adjustment, for fuel provided after the expiration of the allocated working time and where the "Index for Current Month" **exceeds** the "Index for Bidding", will **not** be made until after the contract records have been approved by Final Records (FR)/Materials & Tests (MT) and a Final Estimate is ready to be processed. Upon contract record approval by FR/MT, fuel payment adjustments shall be calculated for each month where the allocated working time has expired, the "Index for Current Month" **exceeds** the "Index for Bidding", and the indices vary 5% or more. The calculation of the fuel payment adjustment shall be made using the "Index for Current Month" or the "Index for Contract Completion Date" in accordance with the following formulas:

The "Index for Contract Completion Date" is the fuel index in effect on the allocated Contract Completion date or the completion date as extended by Change Order.

"Index for Current Month" is **less** than "Index for Contract Completion Date"

$$PA = [(Ic \div Ib) - 1] \times Fe \times Fp$$

"Index for Current Month" is **greater** than "Index for Contract Completion Date"

$$PA = [(Icd \div Ib) - 1] \times Fe \times Fp$$

Where:

PA = Payment Adjustment (may be plus or minus)

- Ic = Index for Current Month
- Ib = Index for Bidding
- Icd= Index for Contract Completion Date (or as extended by Change Order)
- Fe = Estimated Fuel in Gallons used based on above table and work paid for during adjustment month. $[\sum (\text{Pay quantity} \times \text{Gallons per unit}) = \text{Fe}]$
- Fp = Fuel Price for Bidding

Payment Adjustment for fuel will be made under:

Item No.	Description	Pay Unit
109-01.01	Payment Adjustment for Fuel	Dollar

Monthly Payment Adjustment for Fuel Worksheet

Project No. _____ Contract No. _____

County _____

Fuel Price (Fp) _____ Price Index Bidding (Ib) _____ Current Price Index (Ic) _____

Index for Contract Completion Date (or as extended by Change Order) (Icd) _____

Estimate Period: Work Performed _____ Adjustment Paid _____
(Month/Yr)

Item	Unit	Quantity	Fuel Factor		Total Fuel
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____
_____	_____	_____	X	_____	_____

Total Fuel for Month (Fe) _____

$$PA = [(Ic \div Ib) - 1] \times Fe \times Fp$$

$$PA = [(Icd \div Ib) - 1] \times Fe \times Fp$$

S T A T E

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T E N N E S S E E

(Rev. 05-16-16)

(Rev. 04-01-19)

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January 1, 2021

SPECIAL PROVISION

REGARDING

PAYMENT ADJUSTMENT FOR BITUMINOUS MATERIAL

This Special Provision covers the method of payment adjustment for bituminous materials.

100% Virgin Bituminous Material

A payment adjustment will be made to compensate for increases and decreases of 5% or more in the contractor's bituminous material cost. The normal bid items in the contract covering the bituminous material shall not be changed. Payment adjustments (+/-) shall be paid under "Payment Adjustment for Bituminous Material" and calculated as described herein:

A "Basic Bituminous Material Index" will be established by the Tennessee Department of Transportation prior to the time the bids are opened. This "Basic Bituminous Material Index" is the average of the current quotations on P.G. 64-22 from suppliers furnishing asphalt cement to contractors in the State of Tennessee. These quotations are the cost per ton f.o.b. supplier's terminal.

The "Basic Bituminous Material Index" for this project is \$ 659.17 per ton.

The "Monthly Bituminous Material Index" is also established on the first day of each month by the same method. A payment adjustment shall be made provided the "Monthly Bituminous Material Index" varies 5% or more (+/-) from the "Basic Bituminous Material Index".

Where the price index varies 5% or more, the payment adjustment will be made as follows:

$$PA = [Ic - Ib] \times T$$

Where:

- PA = Price Adjustment for Adjustment Month
- Ib = Basic Bituminous Material Index
- Ic = Monthly Bituminous Material Index
- T = Tons bituminous material for Adjustment Month

Payment adjustment will be applied to all asphalt cement, asphalt emulsion, or bituminous material used for paving on this project.

Upon the expiration of the allocated working time, as set forth in the original contract or as extended by Change Order, payment adjustments for bituminous material will continue to be

made only when the "Monthly Bituminous Material Index" is **less** than the "Basic Bituminous Material Index" and varies 5% or more.

Payment adjustment, for bituminous material used after the expiration of the allocated working time and where the "Monthly Bituminous Material Index" **exceeds** the "Basic Bituminous Material Index", will **not** be made until after the contract records have been approved by Final Records (FR)/Materials & Tests (MT) and a Final Estimate is ready to be processed. Upon contract record approval by FR/MT, payment adjustments for bituminous material shall be calculated for each month where the allocated working time has expired, the "Monthly Bituminous Material Index" **exceeds** the "Basic Bituminous Material Index", and the indices vary 5% or more. The calculation of the bituminous payment adjustment shall be made using the "Monthly Bituminous Material Index" or the "Bituminous Material Index for Contract Completion Date" in accordance with the following formulas:

The "Bituminous Material Index for Contract Completion Date" is the Monthly Bituminous Material Index in effect on the allocated Contract Completion Date or on the completion date as extended by Change Order.

The "Monthly Bituminous Material Index" is **less** than the "Bituminous Material Index for Contract Completion Date".

$$PA = [Ic - Ib] \times T$$

The "Monthly Bituminous Material Index" is **greater** than the "Bituminous Material Index for Contract Completion Date".

$$PA = [Icd - Ib] \times T$$

Where:

- PA = Price Adjustment for Adjustment Month
- Ib = Basic Bituminous Material Index
- Ic = Monthly Bituminous Material Index
- Icd = Bituminous Material Index for Contract Completion Date (or as extended by Change Order)
- T = Tons

FOR REFERENCE ONLY

SiteManager calculates the price adjustment based on the actual amount of asphalt cement (residue) in the emulsion using the following percentages:

- tack coats and shoulder sealants (e.g. SS-1, SS-1h, CSS-1, Css-1h) 63% residue
- prime coats (e.g. AE-P) 54% residue
- scrub seals and microsurfacing (e.g. CQS-1HP) 65% residue
- chip seals (e.g. CRS-2, CRS-2P) 69% residue
- hot in-place recycle (ARA-3P) 63% residue

Mixes Containing Recycled Bituminous Material

The quantity of virgin asphalt cement in tons subject to payment adjustment in recycled mixes shall be the product of the total tons of each mix multiplied by the difference between (1) the percent of asphalt cement specified for bidding purposes and (2) the percent of asphalt cement obtained from the recycled asphaltic material (RAP) used in each mix. No payment adjustment under this special provision for increases and decreases in the contractor's cost for virgin asphalt cement in recycled mixes will be allowed for asphalt cement content in excess of the percent specified for bidding purposes, as all payment adjustments for asphalt cement in the mix design of recycled mixes in excess of the percent of asphalt cement specified for bidding purposes will be made in accordance with the Standard Specifications.

No payment adjustment for bituminous material containing RAP shall be made unless the "Monthly Bituminous Material Index" varies 5% or more from the "Basic Bituminous Material Index" indicated in this Special Provision.

Where the price index varies 5% or more, the payment adjustment will be made as follows:

$$PA = \frac{[Ic - Ib] \times [BA - RA]}{100} \times Tm$$

- PA = Price Adjustment for Adjustment Month
- Ib = Basic Bituminous Material Index
- Ic = Monthly Bituminous Material Index
- BA = Percent asphalt specified for bidding purposes
- RA = Percent asphalt obtained from recycled asphaltic material used in each mix
- Tm = Tons asphalt mix for adjustment month

Upon the expiration of the allocated working time, as set forth in the original contract or as extended by Change Order, payment adjustments for bituminous material containing RAP will continue to be made only when the "Monthly Bituminous Material Index" is **less** than the "Basic Bituminous Material Index" and varies 5% or more.

Payment adjustment, for bituminous material containing RAP provided after the expiration of the allocated working time and where the "Monthly Bituminous Material Index" **exceeds** the "Basic Bituminous Material Index", shall **not** be made until after the contract records have been approved by Final Records (FR)/Materials & Tests (MT) and a Final Estimate is ready to be processed. Upon contract record approval by FR/MT, payment adjustments for bituminous material containing RAP shall be calculated for each month where the allocated working time has expired, the "Monthly Bituminous Material Index" **exceeds** the "Basic Bituminous Material Index", and the indices vary 5% or more. The calculation of the bituminous payment adjustment shall be made using the "Monthly Bituminous Material Index" or the "Bituminous Material Index for Contract Completion Date" in accordance with the following formulas:

The "Bituminous Material Index for Contract Completion Date" is the Monthly Bituminous Material Index in effect on the allocated Contract Completion Date or on the completion date as extended by Change Order.

The “Monthly Bituminous Material Index” is **less** than the “Bituminous Material Index for Contract Completion Date”.

$$PA = [Ic - Ib] \times \frac{[BA - RA]}{100} \times Tm$$

The “Monthly Bituminous Material Index” is **greater** than the “Bituminous Material Index for Contract Completion Date”.

$$PA = [Icd - Ib] \times \frac{[BA - RA]}{100} \times Tm$$

Where:

PA =	Price Adjustment for Adjustment Month
Ib =	Basic Bituminous Material Index
Ic =	Monthly Bituminous Material Index
Icd =	Bituminous Material Index for Contract Completion Date (or as extended by Change Order)
BA =	Percent asphalt specified for bidding purposes
RA =	Percent asphalt obtained from recycled asphaltic material used in each mix
Tm =	Tons asphalt mix for adjustment month

(Rev. 01/07/22)

STATE

OF

TENNESSEE

Sheet 1 of 6

TENNESSEE DEPARTMENT OF TRANSPORTATION

MINIMUM WAGE SCALES FOR FEDERAL AID HIGHWAY CONSTRUCTION

General Decision Number: TN20220147 01/07/2022

Superseded General Decision Number: TN20210147

State: Tennessee

Construction Type: Highway

Counties: Tennessee Statewide.

HIGHWAY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022, Executive Order 14026 generally applies to the contract. The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022, Executive Order 13658 generally applies to the contract. The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

yd & over), Motor Patrol (finish), Piledriver, Dragline.....	\$ 19.14
GROUP 1A	
Drill Operator (Caisson)...	\$ 25.26
Farm Tractor Operator (Power Broom).....	\$ 13.50
GROUP 2	
Backhoe/Hydraulic Excavator (less than 3/4 yd), Bulldozer or Push Dozer, End Loader (less than 3 yd), Motor Patrol (rough), Tractor (crawler/ utility), Truck Driver (Heavy Duty, Off Road) Scraper, Shovel, or Trenching Machine.....	\$ 17.08
GROUP 3	
Asphalt Paver, Concrete Finishing Machine, Concrete Paver, Scale, Spreader (self- propelled), Concrete Grinder, Asphalt Milling Machine, Boring Machine (horizontal).....	\$ 17.75
GROUP 4	
Bobcat, Central Mining Plant, Concrete Pump, Concrete Saw, Curb Machine (automatic or manual), Dozer or Loader (stockpile), Drill (piling), Mulcher or Seeder, Rock Drill (truck mounted), Roller (asphalt), Roller (compaction self- propelled), Soil Stabilization Machine, Tractor (boom and hoist), Bituminous Distributor Machine, pump, Track Drill, Striping Machine....	\$ 16.48
Heavy Duty Mechanic.....	\$ 20.33
Light Duty Mechanic.....	\$ 19.53
Sweeping Machine (Vacuum) Operator.....	\$ 15.56
GROUP 5	
Crane (over 20 Tons).....	\$ 20.44
TRUCK DRIVER	
2 axles.....	\$ 15.36

3-4 axles.....	\$ 14.86
5 or more axles.....	\$ 16.27

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union, which prevailed in the survey for this classification, which in this example would be Plumbers 0198

indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Division National Office Branch of Wage Surveys. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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