# COMMONWEALTH OF VIRGINIA
# DEPARTMENT OF TRANSPORTATION
# SEPARATE-COVER CONTRACT DOCUMENTS

## SPECIAL PROVISION COPIED NOTES, SPECIAL PROVISIONS, AND SUPPLEMENTAL SPECIFICATIONS FOR

# SURFACE TREATMENT SCHEDULES — STATEWIDE

# 2015 PAVING SEASON

| | |
|---|---|
| ORDER NO.: | See Bid Proposal and Contract |
| CONTRACT ID. NO.: | See Bid Proposal and Contract |
| ROUTE NUMBER: | VARIOUS |
| FHWA NUMBER: | See Bid Proposal and Contract |
| PROJECT NUMBER: | See Bid Proposal and Contract |
| COUNTY: | ALL |
| DISTRICT: | ALL |

| | |
|---|---|
| DESCRIPTION: | SURFACE TREATMENT SCHEDULES (VOLUME 2 OF 2) |
| LOCATION: | STATEWIDE |
| DATE BID SUBMITTED: | See Bid Proposal and Contract |

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# VOLUME 2 OF 2

## STANDARD PROVISIONS:

### 2015 SURFACE TREATMENT SCHEDULES

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**Please see Volume 1 (the "Bid Proposal and Contract") for forms, Schedule of Items, Surface Treatment Schedules, special provision copied notes (SPCNs), special provisions (SPs), supplemental specifications (SSs), sketches, drawings, general notes and other written information specific to the project that this document assembly (Volume 2) accompanies.**

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VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
**VOLUME 1 AND 2 CONTRACTS**

September 25, 2014

## GENERAL PROJECT REQUIREMENTS, SUPPLEMENTAL SPECIFICATIONS (SSs), SPECIAL PROVISIONS (SPs) AND SPECIAL PROVISION COPIED NOTES (SPCNs)

This project shall be constructed in accordance with: the plans; the *Virginia Department of Transportation Road and Bridge Specifications*, dated 2007; the *Virginia Department of Transportation Road and Bridge Standards*, dated 2008; the 2011 edition of the *Virginia Work Area Protection Manual*; the 2009 edition of the *MUTCD with Revision Numbers 1 and 2* incorporated, dated May 2012 and the 2011 edition of the *Virginia Supplement to the MUTCD with Revision Number 1* dated September 30, 2013; and the Supplemental Specifications, Special Provisions and Special Provision Copied Notes in this contract. The status in the Contract of each of these documents will be in accordance with Section 105.12 of the Specifications.

Special Provision Copied Notes in this contract are designated with "(SPCN)" after the date.

The information enclosed in parenthesis "()" at the left of each Special Provision Copied Note in this contract is file reference information for Department use only. The information in the upper left corner above the title of each Supplemental Specification and Special Provision in this contract is file reference information for Department use only.

The Department has identified the system of measurement to be used on this particular project as imperial. Any imperial unit of measure in this contract with an accompanying expression in a metric unit will be referred to hereinafter as a "dual unit" measurement. Such a "dual unit" measurement is typically expressed first in the imperial unit followed immediately to the right by the metric unit in parenthesis "()" or brackets "[]" where parenthesis is used in the sentence to convey other information. Where a "dual unit" of measure appears in this project, only the imperial unit will apply. The accompanying metric unit shown is not to be considered interchangeable and mathematically convertible to the imperial unit and shall not be used as an alternate or conflicting measurement.

## VOLUME 1 AND 2 CONTRACT DOCUMENTS STATUS

This contract consists of two "Volumes" of Supplemental Specifications (SSs), Special Provisions (SPs) and Special Provision Copied Notes (SPCNs). Volume 1 is the contract document assembly titled "Bid Proposal and Contract". Volume 2 is the contract document assembly titled "Separate-Cover Contract Documents". The SSs, SPs and SPCNs contained in Volume 1 and the accompanying Volume 2 are binding parts of the Contract. Each SS, SP, and SPCN in Volume 1 and Volume 2 shall carry the same status in the Contract as that stated in Section 105.12 of the Specifications.

## VOLUME 1 AMENDMENTS TO VOLUME 2

The Supplemental Specifications (SSs), and Special Provisions (SPs) in Volume 2 may be amended by a SPCN(s) in Volume 1 specifically written to amend Volume 2. Such Volume 1 SPCN(s) that amend provisions of Volume 2 may do so by any of the following:

- Specifying the Volume 2 text or drawing or portion of a drawing in a SS or SP that is deleted, appended, or replaced and specifying the provision(s) in Volume 1 that appends or replaces it.

- Specifying an entire Volume 2 SS(s) or SP(s) is deleted or replaced and specifying the SS(s), SP(s), or SPCN(s) in Volume 1 that replaces it.

Such Volume 1 amendments to Volume 2 or any other SSs, SPs and SPCNs in Volume 1 shall carry the same status in the Contract as that stated in Section 105.12 of the Specifications.

**VOLUME 2 SPECIFICATIONS SPECIFIC TO SURFACE TREATMENT SCHEDULES**

Certain Supplemental Specifications (SSs), SPs and SPCNs, which as standard practice, appear in contracts as published on the Departments website at http://www.virginiadot.org/business/const/spec-default.asp have been modified to specifically and more concisely address Surface Treatment Schedule requirements statewide. Such Supplemental Specifications (SSs), Special Provisions (SPs) and Special Provision Copied Notes (SPCNs) are listed with modifications identified as follows:

- SS for **SUPPLEMENTAL DIVISION I—GENERAL PROVISIONS** was redesignated as a SP and retitled **DIVISION I—GENERAL PROVISIONS (SURFACE TREATMENT SCHEDULES)** and modified as follows:

  — Text from SPCN for **SECTION 102.05—PREPARATION OF BID** dated 10-21-08 was added.

  — Text from SPCN for **SECTION 103.01—CONSIDERATION OF BIDS** dated 10-8-13 was added.

  — Text from SPCN for **SECTION 103.09—EXECUTION OF CONTRACT** (E-Verify) dated 11-20-13 was added.

  — Text from SPCN for **SECTION 104.01—INTENT OF CONTRACT** dated 10-21-08 was added.

  — Text from SPCN for **SECTION 105.06 SUBCONTRACTING** dated 12-19-08 was added.

  — Text from SPCN for **SECTION 105.19—SUBMISSION AND DISPOSITION OF CLAIMS** dated 9-18-14 was added.

  — Text from SP for **SECTION 107.15** dated 12-10-10 was added.

  — Existing text for paragraph revising **Section 107.21—Size and Weight Limitations** was replaced with text from SPCN for **SECTION 107.21—SIZE AND WEIGHT LIMITATIONS** dated 10-21-08.

  — Text from SPCN for **SECTION 108.01—PROSECUTION OF WORK** dated 8-17-10 was added.

  — Text from SPCN for **108.02—LIMITATION OF OPERATIONS** dated 9-7-12 was added.

  — Existing text for paragraphs revising **Section 109.09—Payment For Material On Hand** was replaced with text from SPCN for **SECTION 109.09—PAYMENT FOR MATERIAL ON HAND** dated 6-29-10.

**EXCEPTIONS SPECIFIC TO A DISTRICT, RESIDENCY OR COUNTY**

The Contractor's attention is directed to the Volume 1 contract document assembly, which contains Special Provisions (SPs) and Special Provision Copied Notes (SPCNs) with requirements written for and shall apply only to the specific district, residency, or county stated therein. The Contractor shall take note of and be governed by such requirements therein.

The Contractor's attention is also directed to this Volume 2 contract document assembly containing certain Supplemental Specifications (SSs), and Special Provisions (SPs) for Asphalt Surface Treatment Schedule contract requirements structured to address statewide requirements with exceptions or additions written specifically for a district, residency, or county within. The Contractor shall take note of and be governed by such requirements therein. Such are found in the following:

- SP for **VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS CONTROL AREAS**
- SP for **ASPHALT SURFACE TREATMENT**

**S100B00**-0708

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
**PROJECT COMMUNICATION AND DECISION MAKING**

January 3, 2005c
Reissued July 2008

## I. DESCRIPTION

The intent of this provision is to establish procedures, processes and guidelines for making decisions and managing communications regarding work under contract on construction and maintenance projects. The information contained herein is not meant to be all inclusive but to serve as a minimal general framework for promoting efficient and effective communication and decision making at both the project and, if needed, executive administrative level. It is also not meant to override the decision-making processes or timeframes of specific contract requirements.

## II. DEFINITIONS

For the purposes of this provision the following terms will apply and be defined as follows:

**Submittals** – Documents required by the contract that the Contractor must submit for the Department's review, acceptance or approval. These may include shop drawings, working drawings, material test reports, material certifications, project progress schedules, and schedule updates. The Contractor shall produce submittals as early as practicable when required by the contract so as not to delay review and determination of action.

**Confirmation of verbal instructions (COVI)** - Contractor requested written confirmation of agreements and instructions developed in negotiations with the Department concerning the Work under contract. Agreements must be able to be quantified using existing contract procedures and will, in the vast majority of cases, not impact contract time and cost. When time and/or cost are impacted, they must be clearly spelled out in the COVI.

**Requests for information (RFI)** – Requests generated by either the Contractor or the Department that the other party supplies information to better understand or clarify a certain aspect of the Work.

**Requests for owner action (ROA)** – Requests when the Contractor asks that the Department take certain action(s) the Contractor feels is required for proper completion of a portion of the Work or project completion.

**Contract change requests (CCR) -** Request where the Contractor asks the Department to make an equitable adjustment to the contract because of excusable and/or compensable events, instructions that have or have not been given or other work requiring time and/or cost beyond that specified or envisioned within the original contract.

**Requests for contractor action (RCA) –** Request generated by the Department where the Department asks the Contractor to take certain action that is in the best interests of the project and/or is required for proper completion of a portion of the Work or for project completion.

**Contract change directives (CCD) –** Directive by the Department which instructs the Contractor to perform work beyond that specified or envisioned in the original contract

and which may specify instructions, time, and cost(s) to make an equitable adjustment to the original contract.

**Responsible Person** – The individual in the normal or escalated resolution process, for either the Contractor or the Department, having the direct authority, responsibility and accountability to formulate and respond to each category of information request.

## III. PROCESS FOR DECISION MAKING

Project teams composed on responsible individuals directly involved in the administration, prosecution, and inspection of the Work from the Contractor and the Department shall define and agree upon the field decision-making process during the pre-construction conference. This information relative to the process should be written down and distributed to all parties of the process once it is established. Where there are responsibility, authority or personnel changes associated with this process such changes shall be distributed to all affected parties as quickly as practicable after they are effective so as not to delay or impede this process.

The process for making field decisions with respect to the Work detailed in the contract basically requires the following steps:

1. The Contractor and the Engineer agree on the decision-making process, the identity, authority and accountability of the individuals involved and on the cycle times for response for each category of decision.
2. The party requiring the information generates the appropriate request documents, and calls for a decision from the individual who is accountable for the particular facet of the Work under consideration within the agreed period.
3. The responding party has an internal decision-making process that supports the individual who is accountable and provides the information required within the agreed period for each category of request.
4. The party receiving the decision has an internal process for accepting the decision or referring it for further action within an agreed period of time.

The process also requires that clear and well-understood mechanisms be in place to log and track requests, document the age and status of outstanding requests and actions to be taken on requests that have not been answered within the agreed period.

Both the Department and the Contractor shall agree on the following:

- The documentation and perhaps format to be developed for each category of information requested,
- The name (as opposed to organizational position) of all individuals with the responsibility, authority and accountability to formulate and respond to each category of information requested. The District Administrator (DA) or Chief Executive Officer (CEO) of the Contractor may delegate the responsibility and authority for formulating and responding to requests, however, the accountability for meeting the established response time(s) remains with the District Administrator and CEO.
- The cycle times for each stage in the decision-making process,
- The performance measures to be used to manage the process,
- The action to be taken if cycle times are not achieved and information is not provided in a timely manner.

The following general guideline and timeframe matrix will apply to the various requests for action. Again, please note these guidelines are general in scope and may not apply to specific contract timeframes for response identified within the requirements of the Contract documents. In such cases, specific contract requirements for information shall apply.

## PROCESS GUIDELINES FOR REQUESTS GENERATED BY THE CONTRACTOR

| Process | Situation | Normal resolution process | | Escalated process | | Final resolution |
|---|---|---|---|---|---|---|
| | | By | Within (calendar days) | By | Within | |
| Submittal | Where the Contractor requests the Department's review, acceptance or approval of shop drawings, materials data, test reports, project progress schedules, or other submittals required by standard Specifications or other contract language. | Department's Designated Project Manager | • Acknowledge: 3 days[1]<br>• Accept or Return: 14 days<br>• Final Determination\Approve: 30 days or as outlined in contract documents. | DA or their designee* | 7 days | Submit ROA or CCR |
| Confirmation of Verbal Instruction (COVI) | Resolving routine field issues, within the framework of the Contract, in negotiation with Owner field personnel. | Department's Appropriate field personnel | • Confirmation: 1 day [2] | Submit RFI, ROA or CCR | 7 days | (See process for RFI, ROA, or CCR) |
| Request for Information (RFI) | Requests the Department to supply information to better understand or clarify a certain aspect of the work. | Department's Designated Project Manager | • Action: 14 days (or appropriate Action Plan) | DA or their designee* | 7 days | Submit ROA or CCR |
| Request for Owner Action (ROA) | Requests that the Department take certain action the Contractor feels is required for proper completion of a portion of the Work or project completion. | Department's Designated Project Manager | • Acknowledge: 3 days [1]<br>• Action: 14 days (or appropriate Action Plan) | DA or their designee* | 7 days | Submit CCR |
| Contract Change Request (CCR) | Requests the Department to make an equitable adjustment to the contract because of excusable and/or compensable events, instructions that have or have not been given or other work requiring time and/or cost beyond that specified or envisioned within the original contract. | Department's Designated Project Manager | • Acknowledge: 3 days [1]<br>• Action: 30 days (45 days if federal oversight project) | DA or their designee* | 7 days | Established dispute resolution and claims process |

[1] Process initiated on the last business day of a week shall be acknowledged before 5 pm on the next VDOT business day.

[2] The absence of a written confirmation from the Owner to a Contractor's written request for confirmation of a verbal instruction shall constitute confirmation of the verbal instruction.

## PROCESS GUIDELINES FOR REQUESTS GENERATED BY THE OWNER

| Process | Situation | Normal resolution process | | Escalated process | | Final resolution |
|---|---|---|---|---|---|---|
| | | By | Within (calendar days) | By | Within | |
| 1. RFI | Requests the Contractor to supply information to better understand or clarify a certain aspect of the work. (RFI) | Contractor's Project Superintendent | • Action: 14 days (or appropriate written Action Plan) | Contractor's Project Manager | 7 days | Submit RCA or CCD |
| 2. RCA | Requesting the Contractor take certain action(s) that is in the best interests of the project and/or is required for proper completion of a portion of the work or for project completion. (RCA) | Contractor's Project Superintendent | • Response or Action to safety and environmental issues: 1 day<br>• Otherwise acknowledge: 3 days [1]<br>• Action: 14 days (or appropriate Action Plan) | Contractor's Project Manager | 7 days | Submit CCD |
| 3. CCD | Instructs the Contractor to perform work beyond that specified or envisioned in the original contract and undertakes action(s) to make an equitable adjustment to the contract. (CCD) | Contractor's Project Superintendent | • Acknowledge: 3 days [1]<br>• Action: 30 days | CEO or their designee** | 7 days | Established dispute resolution and termination process |

[1] Process initiated on the last business day of a week shall be acknowledged before 5 p m on next project business day.

**S522B00**-1109

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
**INFORMAL PARTNERING**

January 14, 2008

## I. DECLARATION AND DESCRIPTION

The Virginia Department of Transportation (VDOT) is firmly committed to the formation of a partnering relationship with the Contractor, all subcontractors, suppliers, FHWA representatives; where appropriate, other federal agencies, local government officials, utilities representatives, law enforcement and public safety officials, consultants, and other stakeholders to effectively and efficiently manage and complete each construction or maintenance contract to the mutual and individual benefits and goals of all parties. Partnering is an approach to fulfilling this commitment where all parties to the contract, as well as individuals and entities associated with or otherwise affected by the contract, willingly agree to dedicate themselves by working together as a team to fulfill and complete the construction or maintenance contract in cost effective ways while preserving the highest standards of safety and quality called for by the contract documents combined with the goals of on time/on budget completion. The approach must still allow for the fact that the members of the team share many common interests yet have differing authorities, interests, and objectives that must be accommodated for the project to be viewed as successful by all parties. It is recognized by VDOT that partnering is a relationship in which:

- Trust and open communications are encouraged and expected by all participants
- All parties move quickly to address and resolve issues at the lowest possible level by approaching problems from the perspectives and needs of all involved
- All parties have identified common goals and at the same time respect each other's individual goals and values
- Partners create an atmosphere conducive to cooperation and teamwork in finding better solutions to potential problems and issues at hand

## II. INFORMAL PARTNERING STRUCTURE

It is the business intent of the Department that informal partnering will be required on this project, whereby the spirit and principles of partnering are practiced from onsite field personnel to executive level owners and employees. The VDOT Field Guide to Partnering available on the VDOT website http://www.virginiadot.org/business/resources/partnerfinalallowres.pdf will be the standard reference guide utilized to structure and guide partnering efforts. This guide will be systematically evaluated to incorporate better practices as our partnering efforts evolve. Of particular note is the need for effective and responsive communication between parties to the partnering relationship as emphasized by the Special Provision for Project Communication and Decision Making now included as standard provision in all contracts advertised by the Scheduling and Contract Division of VDOT.

Informal partnering need not require the services of a professional facilitator and may be conducted by the actual partnering participants themselves. Informal partnering, and more specifically the Partnering Charter, will not change the legal relationship of the parties to the Contract nor relieve either party from any of the terms of the Contract.

## III. PROCEDURES

The following are general procedures for informal partnering and are not to be considered as inclusive or representative of procedural requirements for all projects. Participants shall consult

the VDOT Field Guide for Partnering for assistance in developing specific guidelines to those efforts required for their individual projects.

At least 5 days prior to or in connection with the preconstruction conference the Contractor shall attend a conference with the Engineer at which time he and the Engineer shall discuss the extent of the informal partnering efforts required for the project, how these ha~~v~~e been accommodated in the Contractor's bid and the identity of expectations and stakeholders associated with the project. Informal partnering efforts require the Department and the Contractor to mutually choose a single person from among their collective staffs, or a trained facilitator to be responsible for leading all parties through the VDOT Field Guide to Partnering and any subsequent partnering efforts.

**Partnering Meetings During Project Construction**

In informal partnering efforts the Contractor shall provide a location for regularly scheduled partnering meetings during the construction period. Such meetings will be scheduled as deemed necessary by either party. The Contractor and VDOT will require the attendance of their key decision makers, including subcontractors and suppliers. Both the Contractor and VDOT shall also encourage the attendance of affected utilities, concerned businesses, local government and civic leaders or officials, residents, and consultants, which may vary at different times during the life of the Contract The Department and the Contractor are to agree upon partnering invitees in advance of each meeting. Follow-up partnering workshops may be held throughout the duration of the project as deemed necessary by the Contractor and the Engineer.

## IV. MEASUREMENT AND PAYMENT

**Informal Partnering**, because the extent to which certain partnering activities are pursed is at the Contractor's option, and may vary according to project complexity, work history between the parties, project duration, the Contractor's own unique methods, means, and schedule to execute and complete the work, etc.; will not be paid for as a separate bid item but the all costs associated with informal partnering efforts for the duration of the work shall be considered inclusive and incidental to the cost of other appropriate items.

**S107E03**-0214

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
**VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS CONTROL AREAS**

December 18, 2013

**VOC Emission Control Area** - The Contractor is advised that this project may be located in a volatile organic compound (VOC) emissions control area identified in the State Air Control Board Regulations (9 VAC 5-20-206) and in Table 1 below. Therefore, the following limitations may apply:

- Open burning is prohibited during the months of May, June, July, August, and September in VOC Emissions Control areas
- Cutback asphalt is prohibited April through October except when use or application as a penetrating prime coat or tack is necessary in VOC Emissions Control areas

Table 1. Virginia Department of Environmental Quality Volatile Organic Compound (VOC) Emissions Control Areas*

| VOC Emissions Control Area | VDOT District | Jurisdiction |
|---|---|---|
| Northern Virginia | NOVA | Alexandria City<br>Arlington County<br>Fairfax County<br>Fairfax City<br>Falls Church City<br>Loudoun County<br>Manassas City<br>Manassas Park City<br>Prince William County |
| Northern Virginia | Fredericksburg | Stafford County |
| Fredericksburg | Fredericksburg | Spotsylvania County<br>Fredericksburg City |
| Hampton Roads | Fredericksburg | Gloucester County |
| Hampton Roads | Hampton Roads | Chesapeake City<br>Hampton City<br>Isle of Wight County<br>James City County<br>Newport News City<br>Norfolk City<br>Poquoson City<br>Portsmouth City<br>Suffolk City<br>Virginia Beach City<br>Williamsburg City<br>York County |

| | | |
|---|---|---|
| Richmond | Richmond | Charles City County<br>Chesterfield County<br>Colonial Heights City<br>Hanover County<br>Henrico County<br>Hopewell City<br>Petersburg City<br>Prince George County<br>Richmond City |
| Western Virginia | Staunton | Frederick County<br>Winchester City |
| Western Virginia | Salem | Roanoke County<br>Botetourt County<br>Roanoke City<br>Salem City |

* Regulations for the Control and Abatement of Air Pollution (9 VAC 5-20-206)

See the Virginia Code 9 VAC 5-45, Article 7 (Emission Standards for Asphalt Paving Operations) and 9 VAC 5-130 (Regulation for Open Burning) for further clarification. In addition to the above requirements, the Contractor's attention is directed to the requirements of Section 107.16 of the Specifications, because other air pollution requirements may also apply.

**S108M00**-0808

VIRGINIA DEPARTMENT OF TRANSPORATION
SPECIAL PROVISION FOR
**SCHEDULE OF OPERATIONS FOR CATEGORY M PROJECTS**

May 12, 2008

**Section 103.06(e) Progress Schedule** of the Specifications is deleted and replaced by this provision.

**Section 108.03 Progress Schedule** of the Specifications is deleted and replaced by this provision.

**General Requirements –** The Contractor shall plan and schedule the work and shall submit his overall work plan in the form of a written Schedule of Operations as described herein, for the Engineer's review and acceptance. The accepted Schedule of Operations will be used by the Engineer for planning and coordination of the Department activities, resources, and expenditures.

When preparing the Schedule of Operations, the Contractor shall consider all known constraints and restrictions such as holidays, seasonal, weather, traffic, utility, railroad, right-of-way, environmental, permits, or other known or specified limitations to the work.

At the Pre-Construction Conference the Contractor shall be prepared to discuss his planned or contemplated operations relative to the contract requirements and this special provision.

Delays resulting from the Contractor's failure to provide the Schedule of Operations will not be considered just cause for extension of the contract time limit or for additional compensation.

**Schedule of Operations –** The Contractor shall submit to the Engineer three (3) copies of the written Schedule of Operations at least seven (7) calendar days prior to beginning work. The Schedule of Operations shall represent the Contractor's overall work plan to accomplish the entire scope of work in accordance with the requirements of the Contract. The Schedule of Operations shall include all work including, as applicable, the work to be performed by sub-contractors, the Department, or others. The Schedule of Operations submittal shall consist of a written Narrative to:

(a) Describe the Contractor's proposed general sequence to accomplish the work;

(b) Indicate the general schedule of work to be completed each month in terms of the major operations, routes, or segments of work as delineated in the contract documents or in the absence of such delineations, as agreed to by the Contractor and the Engineer. A bar-chart schedule may be substituted at the Contractor's option.

**Two Week Look-ahead (TWLA) Schedule of Operations –** At least seven (7) calendar days prior to beginning work, the Contractor shall submit to the Engineer, an initial written TWLA Schedule of Operations for any work planned for the first two weeks. Every week thereafter, on a day agreed to by the Contractor and the Engineer, the Contractor shall submit to the Engineer, a written TWLA Schedule of Operations for the following two-week period. The TWLA schedule shall provide a detailed list of operations to indicate the type of operation, location(s) of the work, proposed working days and hours, and the start and finish dates for any work planned, started, in progress, or scheduled for completion during the two-week period. The TWLA Schedule of Operations shall also indicate any critical stage(s) of work requiring VDOT oversight or inspection. The Contractor shall submit three (3) copies of the TWLA Schedule of Operations to the Engineer in any legible format.

The Contractor may revise his TWLA Schedule of Operations at his discretion. However, the Contractor shall notify the Engineer at least forty-eight (48) working hours in advance of any changes in the Contractor's planned operations or critical stage work requiring Department oversight or inspection. In the event of extenuating circumstances deemed by the Engineer to be beyond the Contractor's control, the

Engineer may grant verbal concurrence of changes in the Contractor's planned operations with less advance notice, as the need arises.

**Revised Schedule of Operations –** The Contractor may revise his overall plan of operations at any time, however, the Contractor shall submit a Revised Schedule of Operations to reflect any changes in his overall sequence of operations or general schedule. The Contractor may be required, as determined by the Engineer to submit a Revised Schedule of Operations. Circumstances that may prompt the Engineer's decision to request a Revised Schedule of Operations may include deviations from the overall sequence of operations or if the actual progress of work varies by one month or more from the currently accepted Schedule of Operations.

When required by the Engineer, the Revised Schedule of Operations shall be submitted within seven (7) calendar days of receipt of the Engineer's written request. The Revised Schedule of Operations shall be submitted in the form of the Schedule of Operations as defined herein, to reflect the changes in the Contractor's overall work plan. The accepted Revised Schedule of Operations will replace any previously accepted Schedule of Operations for the remainder of the work.

**Review and Acceptance –** The Engineer will review the Initial or subsequent Revised Schedule of Operations submittals for acceptance within seven (7) calendar days of receipt of the Contractor's complete submittal. Review and acceptance by the Engineer will be based on conformance with the requirements of this provision and the Contract.

Review and acceptance by the Engineer will not constitute a waiver of any contract requirements and will in no way assign responsibilities of the work plan, scheduling assumptions, and validity of the work plan or schedule to the Department. Failure of the Contractor to include in the Schedule of Operations any element of work required by the Contract for timely completion of the Contract shall not excuse the Contractor from his contractual obligations.

**Measurement and Payment –** Category M Schedule of Operations including the Initial and any subsequent Revised Schedule of Operations requested by the Engineer or originated by the Contractor, will not be measured or paid for separately. All associated costs to prepare, update, revise, and/or furnish the Schedule of Operations for Category M projects in accordance with the requirements herein shall be considered incidental to the work.

**S109F00**-0708

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
**OPTIONAL ADJUSTMENT FOR FUEL**

December 20, 2005c
Reissued July 2008c

The Department will adjust monthly progress payments up or down as appropriate for cost changes in fuel used on specific items of work identified in this provision. The Department will provide a master listing of standard bid items eligible for fuel adjustment on its website.

Included with this proposal is a listing of standard bid items the Department has identified as eligible for fuel adjustment on this project(s) as well as the respective fuel factors per pay unit for those items. Only items on this listing will be eligible for adjustment. The fuel usage factor for each item is considered inclusive of all fuel usage. Generally, non-standard pay items are not eligible for fuel adjustment.

The listing of eligible items applicable to this particular project is shown on Form C-21B "Bid Items Eligible for Fuel Adjustment" included with the bidding documents. The Bidder may choose to have fuel adjustment applied to any or all eligible items on this project's listing by designating the items for which the fuel adjustment will apply. The Bidder's selection of items for fuel adjustment may not be changed once he has submitted Form C-21B to the Department.

In order to be eligible for fuel adjustment under this provision, the apparent lowest responsive and responsible Bidder shall clearly identify on Form C-21B those pay items he chooses to have fuel adjustment applied on. Within 21 days after the receipt of bids the apparent successful Bidder shall submit his designated items on Form C-21B to the Contract Engineer. Items the successful Bidder chooses for fuel adjustment must be designated by writing the word "Yes" in the column titled "Option" by each bid item chosen for fuel adjustment. The successful Bidder's designations on Form C-21B must be written in ink or typed, and signed by this Bidder to be considered complete. Items not properly designated or left blank on the Bidder's C-21B "Bid Items Eligible for Fuel Adjustment" form will automatically not be considered for adjustment. If the apparent successful Bidder fails to return his Form C-21B within the timeframe specified, items will not be eligible for fuel adjustment on this project.

The monthly index price to be used in the administration of this provision will be calculated by the Department from the Diesel fuel prices published by the U. S. Department of Energy, Energy Information Administration on highway diesel prices, for the Lower Atlantic region. The monthly index price will be the price for diesel fuel calculated by averaging each of the weekly posted prices for that particular month.

For the purposes of this provision, the base index price will be calculated using the data from the month preceding the receipt of bids. The base index price will be posted by the Department at the beginning of the month for all bids received during that month.

The current index price will be posted by the Department and will be calculated using the data from the month preceding the particular estimate being vouchered for payment.

The current monthly quantity for eligible items of work selected by the Contractor for fuel adjustment will be multiplied by the appropriate fuel factor to determine the gallons of fuel to be cost adjusted. The amount of adjustment per gallon will be the net difference between the current index price and the base index price. Computation for adjustment will be made as follows:

$$S = (E - B)\ QF$$

Where; S = Monetary amount of the adjustment (plus or minus)
B = Base index price
E = Current index price
Q = Quantity of individual units of work
F = Appropriate fuel factor

Adjustments will not be made for work performed beyond the original contract time limit unless the original time limit has been changed by an executed Work Order.

If new pay items are added to this contract by Work Order and they are listed on Department's master listing of eligible items, the Work Order must indicate which of these individual items will be fuel adjusted; otherwise, those items will not be fuel adjusted. If applicable, designating which new pay items will be added for fuel adjustment must be determined during development of the Work Order and clearly shown on Form C-10 Work Order. The Base Index price on any new eligible pay items added by Work Order will be the Base Index price posted for the month in which bids were received for that particular project. The Current Index price for any new eligible pay items added by Work Order will be the Index price posted for the month preceding the estimate on which the Work Order is paid.

When quantities differ between the last monthly estimate prepared upon final acceptance and the final estimate, adjustment will be made using the appropriate current index for the period in which that specific item of work was last performed.

In the event any of the base fuel prices in this contract increase more than 100 percent (i.e. fuel prices double), the Engineer will review each affected item of work and give the Contractor written notice if work is to stop on any affected item of work. The Department reserves the right to reduce, eliminate or renegotiate the unit price for remaining portions of affected items of work.

Any amounts resulting from fuel adjustment will not be included in the total cost of work for determination of progress or for extension of contract time.

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**S109G03**-1109

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
**ASPHALT MATERIAL PRICE ADJUSTMENT**

July 30, 2008cc

All asphalt material contained in the attached master listing of eligible bid items and designated by pay items in the contract will be price adjusted in accordance with the provisions as set forth herein. Other items will not be adjusted, except as otherwise specified in the contract. If new pay items which contain asphalt material are established by Work Order, they will not be subject to Price Adjustment unless specifically designated in the Work Order to be subject to Price Adjustment.

Each month, the Department will publish an average state-wide PG 64-22 f.o.b. price per ton developed from the average terminal prices provided to the Department from suppliers of asphalt cement to contractors doing work in Virginia. The Department will collect terminal prices from approximately 12 terminals each month. These prices will be received once each month from suppliers on or about the last weekday of the month. The high and low prices will be eliminated and the remaining values averaged to establish the average statewide price for the following month. That monthly state-wide average price will be posted on the Scheduling and Contract Division website on or about the first weekday of the following month.

This monthly statewide average price will be the Base Index for all contracts on which bids are received during the calendar month of its posting and will be the Current Index for all asphalt placed during the calendar month of its posting. In the event an index changes radically from the apparent trend, as determined by the Engineer, the Department may establish an index which it determines to best reflect the trend.

The amount of adjustment applied will be based on the difference between the contract Base Index and the Current Index for the applicable calendar month during which the work is performed. Adjustment of any asphalt material item designated as a price adjustment item which does not contain PG 64-22, except PG 76-22, will be based on the indexes for PG 64-22. The quantity of asphalt cement for asphalt concrete pavement to which adjustment will be applied will be the quantity based on the percent of asphalt cement shown on the appropriate approved job mix formula.

The quantity of asphalt emulsion for surface treatments to which adjustment will be applied will be the quantity based on 65 percent residual asphalt.

Price adjustment will be shown as a separate entry on the monthly progress estimate; however, such adjustment will not be included in the total cost of the work for progress determination or for extension of contract time.

Any apparent attempt to unbalance bids in favor of items subject to price adjustment or failure to submit required cost and price data as noted hereinbefore may result in rejection of the bid proposal.

VIRGINIA DEPARTMENT OF TRANSPORTATION

**MASTER LISTING OF**

**ASPHALT MATERIAL ITEMS ELIGIBLE FOR PRICE ADJUSTMENT**

**(10-27-09)**

| ITEM | DESCRIPTION | UNITS | SPECIFICATION |
|---|---|---|---|
| 10062 | Asphalt-Stab. Open-Graded Material | Ton | 313 |
| 10416 | Liquid Asphalt | Gal | 311 312 |
| 10420 | Blotted Seal Coat Ty. B | Sy | ATTD |
| 10422 | Blotted Seal Coat Ty. C | Sy | ATTD |
| 10423 | Blotted Seal Coat Ty. C-1 | Sy | ATTD |
| 10424 | Blotted Seal Coat Ty. D | Sy | ATTD |
| 10598 | Ns Asphalt Concrete | Ton | 315 |
| 10606 | Asphalt Concrete Ty. SM-9.5 | Ton | 315 |
| 10607 | Asphalt Concrete Ty. SM-12.5A | Ton | 315 |
| 10608 | Asphalt Concrete Ty. SM-12.5D | Ton | 315 |
| 10609 | Asphalt Concrete Ty. SM-12.5E (76-22) | Ton | 315 |
| 10610 | Asphalt Concrete Ty. IM-19.0A | Ton | 315 |
| 10611 | Asphalt Concrete Ty. IM-19.0D | Ton | 315 |
| 10612 | Asphalt Conc. Base Cr. Ty. BM-25.0 | Ton | 315 |
| 10613 | Asphalt Concrete Ty. BM-37.5 | Ton | 315 |
| 10635 | Asphalt Concrete Ty. SM-9.5A | Ton | 315 |
| 10636 | Asphalt Concrete Ty. SM-9.5D | Ton | 315 |
| 10637 | Asphalt Concrete Ty. SM-9.5E (76-22) | Ton | 315 |
| 10639 | Asphalt Concrete Ty. SM-19.0 | Ton | 315 |
| 10642 | Asphalt Concrete Ty. BM-25.0A | Ton | 315 |
| 10643 | Asphalt Concrete Ty. BM-25.0D | Ton | 315 |
| 10650 | Stone Matrix Asphalt SMA-9.5(70-22) | Ton | 317 |
| 10651 | Stone Matrix Asphalt SMA-9.5(76-22) | Ton | 317 |
| 10652 | Stone Matrix Asphalt SMA-12.5(70-22) | Ton | 317 |
| 10653 | Stone Matrix Asphalt SMA-12.5(76-22) | Ton | 317 |
| 10654 | Stone Matrix Asphalt SMA-19.0(70-22) | Ton | 317 |
| 10655 | Stone Matrix Asphalt SMA-19.0(76-22) | Ton | 317 |
| 10701 | Liquid Asphalt Coating | Sy | ATTD |
| 12505 | Asphalt Concrete Curb Backup Material | Ton | 315 |
| 13240 | Asphalt Concrete Sidewalk | Ton | 504 |
| 16110 | Emul. Asph. Slurry Seal Type A | Sy | ATTD |
| 16120 | Emul. Asph. Slurry Seal Type B | Sy | ATTD |
| 16130 | Emul. Asph. Slurry Seal Type C | Sy | ATTD |
| 16144 | Latex Mod. Emul. Treat. Type B | Ton | ATTD |
| 16145 | Latex Mod. Emul. Treat. Type C | Ton | ATTD |
| 16146 | Latex Mod. Emul. Treat. Rutfilling | Ton | ATTD |
| 16161 | Modified Single Seal | Sy | ATTD |
| 16162 | Modified Double Seal | Sy | ATTD |
| 16249 | Nontracking Tack Coat | Gal. | ATTD |
| 16250 | Liquid Asphalt Matl. CMS-2 (Mod) | Gal | ATTD |
| 16251 | Liquid Asphalt Matl. CMS-2 | Gal | ATTD |
| 16252 | Liquid Asphalt Matl. CRS-2 | Gal | ATTD |
| 16253 | Liquid Asphalt Matl. CRS-2H | Gal. | ATTD. |

| | | | |
|---|---|---|---|
| 16254 | Liquid Asphalt Matl. RC-250 | Gal | ATTD |
| 16256 | Liquid Asphalt Matl. RC-800 | Gal | ATTD |
| 16257 | Ns Liquid Asphalt Matl. | Gal | ATTD |
| 16260 | Liquid Asphalt Matl. CRS-2L | Gal | ATTD |
| 16325 | NS Asphalt Concrete | Ton | N/A |
| 16330 | Asphalt Concrete Ty. SM-9.0A | Ton | 315 |
| 16335 | Asphalt Concrete Ty. SM-9.5A | Ton | 315 |
| 16337 | Asph. Conc. Ty. SM-9.5ASL (Spot Level) | Ton | 315 |
| 16340 | Asphalt Concrete Ty. SM-9.5D | Ton | 315 |
| 16342 | Asph. Conc. Ty. SM-9.5DSL (Spot Level) | Ton | 315 |
| 16345 | Asphalt Concrete Ty. SM-9.5E (76-22) | Ton | 315 |
| 16350 | Asphalt Concrete Ty. SM-12.5A | Ton | 315 |
| 16352 | Asph. Con. Ty. SM-12.5ASL (Spot Level) | Ton | 315 |
| 16355 | Asphalt Concrete Ty. SM-12.5D | Ton | 315 |
| 16357 | Asph. Con. Ty. SM-12.5DSL (Spot Level) | Ton | 315 |
| 16360 | Asphalt Concrete Ty. SM-12.5E (76-22) | Ton | 315 |
| 16365 | Asphalt Concrete Ty. IM-19.0A | Ton | 315 |
| 16370 | Asphalt Concrete Ty. IM-19.0D | Ton | 315 |
| 16373 | Asphalt Concrete Ty. IM-19.0A (T) | Ton | 315 |
| 16374 | Asphalt Concrete Ty. IM-19.0D (T) | Ton | 315 |
| 16377 | Asphalt Concrete Ty. BM-37.5 | Ton | 315 |
| 16379 | Asphalt Concrete Ty. IM-19.0T | Ton | 315 |
| 16390 | Asphalt Concrete Ty. BM-25.0A | Ton | 315 |
| 16392 | Asphalt Concrete Ty. BM-25.0D | Ton | 315 |
| 16395 | Asphalt Concrete Ty. BM-25.0A (T) | Ton | 315 |
| 16397 | Asphalt Concrete Ty. BM-25.0D (T) | Ton | 315 |
| 16400 | Stone Matrix Asphalt SMA-9.5(70-22) | Ton | ATTD |
| 16401 | Stone Matrix Asphalt SMA-9.5(76-22) | Ton | ATTD |
| 16402 | Stone Matrix Asphalt SMA-12.5(70-22) | Ton | ATTD |
| 16403 | Stone Matrix Asphalt SMA-12.5(76-22) | Ton | ATTD |
| 16404 | Stone Matrix Asphalt SMA-19.0(70-22) | Ton | ATTD |
| 16405 | Stone Matrix Asphalt SMA-19.0(76-22) | Ton | ATTD |
| 16490 | Hot Mix Asphalt Treatment | Ton | ATTD |
| 16500 | Surf.Preparation & Restoration Type I | Ton | ATTD |
| 16502 | Surf.Preparation & Restoration Type II | Ton | ATTD |
| 16504 | Surf.Preparation & Restoration Type III | Ton | ATTD |
| 67201 | NS Asphalt Concrete Overlay | Ton | 315 |
| 67210 | NS Asphalt Concrete | Ton | 315 |
| 68240 | NS Asphalt Concrete | Ton | 315 |

**SFV03AF**-0609 October 22, 2008c

**PREDETERMINED MINIMUM WAGE RATES LETTER (VOLUME 2)**

The predetermined minimum wage rates, required for this contract in the following letter, are contained in the Special Provision for **PREDETERMINED MINIMUM WAGE RATES (VOLUME 1)**. That special provision is contained in the contract document assembly titled "Bid Proposal and Contract" which this contract document assembly accompanies.

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U.S. DEPARTMENT OF LABOR
OFFICE OF THE SECRETARY
WASHINGTON
**DECISION OF THE SECRETARY**

This case is before the Department of Labor pursuant to a request for a wage predetermination as required by law applicable to the work described.

A study has been made of wage conditions in the locality and based on information available to the Department of Labor the wage rates and fringe payments listed are hereby determined by the Secretary of Labor as prevailing for the described classes for labor in accordance with applicable law.

This wage determination decision and any modifications thereof during the period prior to the stated expiration date shall be made a part of every contract for performance of the described work as provided by applicable law and regulations of the Secretary of Labor, and the wage rates and fringe payments contained in this decision, including modifications, shall be the minimums to be paid under any such contract and subcontractors on the work.

The contracting officer shall require that any class of laborers and mechanics which is not listed in the wage determination and which is to be employed under the contract, shall be classified or reclassified conformably to the wage determination, and a report of the action taken shall be sent by the Federal agency to the Secretary of Labor. In the event the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers and mechanics to be used, the question accompanied by the recommendation of the contracting officer shall be referred to the Secretary for determination.

Before using apprentices on the job the contractor shall present to the contracting officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U.S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U.S. Bureau of Apprenticeship and Training.

The contractor shall submit to the contracting officer written evidence of the established apprentice-journeyman ratios and wage in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

Fringe payments include medical and hospital care, compensation for injuries or illness resulting from occupational activity, unemployment benefits, life insurance, disability and sickness insurance, accident insurance (all designated as health and welfare), pensions, vacation and holiday pay, apprenticeship or other similar programs and other bona fide fringe benefits.

By direction of the Secretary of Labor

E. Irving Manger, Associate Administrator
Division of Wage Determinations
Wage and Labor Standards Administration

**SF010DF**-0712

May 1, 2012
FHWA-1273 (Electronic Version)

The following Form **FHWA-1273** titled **REQUIRED CONTRACT PROVISIONS, FEDERAL-AID CONSTRUCTION CONTRACTS** shall apply to this contract:

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FHWA-1273 – Revised May 1, 2012

**REQUIRED CONTRACT PROVISIONS**
**FEDERAL-AID CONSTRUCTION CONTRACTS**

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I. General
II. Nondiscrimination
III. Nonsegregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Compliance with Governmentwide Suspension and Debarment Requirements
XI. Certification Regarding Use of Contract Funds for Lobbying


ATTACHMENTS


A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)


## I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

   The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

   Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The

design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

## II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth

under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

> "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

**2.** **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3.** **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

**6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7.** **Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. **Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. **Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

   a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

   b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. **Assurance Required by 49 CFR 26.13(b):**

   a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

   b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

   a. The records kept by the contractor shall document the following:

      (1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

      (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

      (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

   b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This

information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

## III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

## IV. Davis-Bacon and Related Act Provisions

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are

deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(I) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(II) The classification is utilized in the area by the construction industry; and

(II) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

**2. Withholding**

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

**3. Payrolls and basic records**

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship

programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee ( e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a “Statement of Compliance,” signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(I) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(II) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(III) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the “Statement of Compliance” required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

**4. Apprentices and trainees**

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. **Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. **Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. **Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. **Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. **Certification of eligibility.**

    a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

    b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

    c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

## V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. **Violation; liability for unpaid wages; liquidated damages**. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. **Withholding for unpaid wages and liquidated damages.** The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

   a. The term “perform work with its own organization” refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

      (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

      (2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

## VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards

(29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

## VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

> "Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or
>
> Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or
>
> Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;
>
> Shall be fined under this title or imprisoned not more than 5 years or both."

## IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

## X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200.

### 1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

**2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local)

transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**2. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred,

suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

## XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

   a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

   b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2. The goals for female and minority participation, expressed in percentage terms of the Contractor's aggregate work force in each trade on all construction works in the covered area, are as follows:

   Females- 6.9%
   Minorities - See Attachment "A"

   The goals are applicable to all the Contractor's construction work performed in the covered area, whether or not it is Federal or federally assisted. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

   The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications, set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established herein. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executives Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs <u>within 10 workings days</u> the award of any construction subcontract in excess of $10,000 at any tier for construction works under this contract. The notification shall list the name, address and telephone number of the subcontractor, employer identification number, estimated dollar amount of the subcontract, estimated starting and completion dates of the subcontract and the geographical area in which the contract is to be performed.

**STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)**

1. As, used in this provision:

   a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;

   b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

   c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U. S. Treasury Department Form 941;

d. "Minority" includes:

(i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

(ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);

(iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

(iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation.

3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U. S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors and Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a through p of these specifications. The goals set forth m the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the coverer area. Covered construction Contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U. S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, shall assign two or more women to each construction project. The Contractor shall specifically ensure that all foreman, superintendents and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off the street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union, or if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or women sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources complied under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper or annual report; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents and General Foremen prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including in any news media advertisement that the Contractor is "An Equal Opportunity Employer" for minority and

female, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

i. Directs its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures and tests to be used m the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of Contractor's workforce.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for such opportunities through appropriate training or other means.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated, except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. Goals for women have been established. However, the Contractor IS required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner, that is even

thought the Contractor has achieved its goals for women, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex or nation origin.

11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246. as amended.

13. The Contractor, in fulfilling its obligations under these specifications shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from Its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director will proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate and make known to the Department a responsible official as the EEO Officer to monitor all employment related activity, to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, Contractors will not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

## ATTACHMENT A

| Economic Area | Goal (Percent) |
|---|---|
| Virginia: | |
| 021 Roanoke-Lynchburg, VA | |
| SMSA Counties: | |
| 4640 Lynchburg, VA | 19.3 |
| VA Amherst; VA Appomattox; VA Campbell; VA Lynchburg | |
| 6800 Roanoke, VA | 10.2 |
| VA Botetourt; VA Craig; VA Roanoke; VA Roanoke City; VA Salem | |
| Non-SMSA Counties | 12.0 |
| VA Alleghany; VA Augusta; VA Bath; VA Bedford; VA Bland; VA Carroll; VA Floyd; VA Franklin; VA Giles; VA Grayson; VA Henry; VA Highland; VA Montgomery; VA Nelson; VA Patrick; VA Pittsylvania; VA Pulaski; | |

VA Rockbridge; VA Rockingham; VA Wythe; VA Bedford City; VA Buena Vista:
VA Clifton Forge; VA Covington; VA Danville; VA Galax; VA Harrisonburg; VA Lexington; VA Martinsville; VA Radford; VA Staunton; VA Waynesboro; WV Pendleton.

022 Richmond, VA

SMSA Counties:

6140 Petersburg - Colonial Heights - Hopewell, VA ..... 30.6
VA Dinwiddie; VA Prince George; VA Colonial Heights; VA Hopewell; VA Petersburg.

6760 Richmond, VA ..... 24.9
VA Charles City; VA Chesterfield; VA Goochland, VA Hanover; VA Henrico; VA New Kent; VA Powhatan; VA Richmond.

Non-SMSA Counties ..... 27.9
VA Albemarle; VA Amelia; VA Brunswick; VA Buckingham, VA Caroline; VA Charlotte; VA Cumberland; VA Essex; VA Fluvanna; VA Greene; VA Greensville; VA Halifax; VA King and Queen; VA King William; VA Lancaster; VA Louisa; VA Lunenburg; VA Madison; VA Mecklenburg; VA Northumberland; VA Nottoway; VA Orange; VA Prince Edward; VA Richmond VA Sussex; VA Charlottesville; VA Emporia; VA South Boston

023 Norfolk - Virginia Beach - Newport News VA:

SMSA Counties:

5680 Newport News- Hampton, VA ..... 27.1
VA Gloucester; VA James City; VA York; VA Hampton; VA Newport News; VA Williamsburg.

5720 Norfolk - Virginia Beach - Portsmouth, VA - NC ..... 26.6
NC Currituck; VA Chesapeake; VA Norfolk; VA Portsmouth; VA Suffolk; VA Virginia Beach.

Non-SMSA Counties ..... 29.7
NC Bertie; NC Camden; NC Chowan; NC Gates; NC Hertford; NC Pasquotank; NC Perquimans; VA Isle of Wight; VA Matthews; VA Middlesex; VA Southampton; VA Surry; VA Franklin.

Washington, DC:

020 Washington, DC.

SMSA Counties:

8840 Washington, DC - MD - VA ..... 28.0
DC District of Columbia; MD Charles; MD Montgomery MD Prince Georges; VA Arlington; VA Fairfax; VA Loudoun; VA Prince William VA Alexandria; VA Fairfax City; VA Falls Church.

Non- SMSA Counties ..... 25.2
MD Calvert; MD Frederick; MD St. Marys: MD Washington; VA Clarke; VA Culpeper; VA Fauquier; VA Frederick; VA King George; VA Page; VA Rappahannock; VA Shenandoah; VA Spotsylvania; VA Stafford; VA Warren: VA Westmoreland; VA Fredericksburg; VA Winchester WV Berkeley; WV Grant; WV Hampshire; WV Hardy; WV Jefferson; WV Morgan.

Tennessee:

052 Johnson City - Kingsport - Bristol, TN - VA

SMSA Counties:

3630 Johnson City - Kingsport -Bristol, TN-VA ..... 2.6
TN Carter; TN Hawkins; TN Sullivan; TN Washington; VA Scott: VA Washington; VA Bristol.

Non-SMSA Counties ..... 3.2
TN Greene; TN Johnson; VA Buchanan; VA Dickenson; VA Lee; VA Russell; VA Smyth; VA Tazewell; VA Wise; VA Norton; WV McDowell; WV Mercer.

Maryland:

019 Baltimore MD

Non-SMSA Counties ..... 23.6

MD Caroline; MD Dorchester; MD Kent; MD Queen Annes; MD Somerset; MD Talbot; MD Wicomico; MD Worchester; VA Accomack; VA Northampton.

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
**DIVISION I—GENERAL PROVISIONS**
**(2015 SURFACE TREATMENT SCHEDULES)**

September 18, 2014

## SECTION 101—DEFINITIONS OF ABBREVIATIONS, ACRONYMS, AND TERMS

**Section 101.02—Terms** of the Specifications is amended to replace the definition for **Notice to Proceed** with the following:

> **Notice to Proceed.** A date selected by the Contractor that is no earlier than 15 nor later than 30 calendar days after the date of contract execution on which the Contractor intends to begin the work, or a contract specific date on which the Contractor may begin the work identified as the Notice to Proceed date in the Contract Documents.

**Section 101.02—Terms** of the Specifications is amended to add the following:

> **Storm Sewer System -** A drainage system consisting of a series of at least two interconnecting pipes and structures (minimum of two drop inlets, manholes, junction boxes, etc.) designed to intercept and convey stormwater runoff from a specific storm event without surcharge.

## SECTION 102—BIDDING REQUIREMENTS AND CONDITIONS

**Section 102.01— Prequalification of Bidders** of the Specifications is amended to replace the first paragraph of (a) with the following:

> All prospective Bidders, including all members of a joint venture, must prequalify with the Department and shall have received a certification of qualification in accordance with the Rules Governing Prequalification Privileges prior to bidding. These rules and regulations can be found within the Department's Rules Governing Prequalification Privileges via the Prequalification Application. This requirement may be waived by a project-specific provision in the bid proposal.
>
> All subcontractors must be prequalified prior to performing any work on the contract, except that prequalification will not be required for subcontractors only performing a service as defined by the Code of Virginia, or only performing work items noted in the proposal as "Specialty Items".
>
> In order to be eligible for DBE credit under Special Provision for Section 107.15, DBE federal-aid contract subcontractors must be VDOT prequalified and DMBE certified at the time of bid submission. The prequalification and certification status of a DBE may affect the award of the contract to the prime contractor and the award of the subcontract to the DBE at any point during the contract.

**Section 102.04**(c) **Notice of Alleged Ambiguities** of the Specifications is amended to replace the first paragraph with the following:

> If a word, phrase, clause, or any other portion of the proposal is alleged to be ambiguous, the Bidder shall submit to the State Contract Engineer a written notice of the alleged ambiguity not later than 10 days prior to the date of receipt of bids and request an interpretation thereof. This written notice shall be submitted via the CABB (Contractor Advertisement Bulletin Board) system located on the Construction website at www.VDOT.Virginia.gov. Authorized interpretations will be issued by the State Contract Engineer to each person who received a proposal and will be posted on the CABB system.

**Section 102.05—Preparation Of Bid** of the Specifications is amended to include the following:

The Bidder may bid on one or more individual contract schedule. The Bidder shall submit average unit prices in a contract schedule. Each contract schedule will be awarded and administered as a separate contract.

**Section 102.11— eVA Business-To-Government Vendor Registration** of the Specifications is replaced with the following:

Bidders are not required to be registered with "eVA Internet e-procurement solution" at the time bids are submitted, however, prior to award, the lowest responsive and responsible bidder must be registered with "eVA Internet e-procurement solution" or the bid will be rejected. Registration shall be performed by accessing the eVA website portal www.eva.state.va.us, following the instructions and complying with the requirements therein.

When registering with eVa it is the bidder's responsibility to enter or have entered their correct PA type address or addresses in eVa in order to receive payments on any contracts that the Department (VDOT) may award to them as the lowest responsive and responsible bidder. The Bidder shall also ensure their prequalification address(es) match those registered with eVa. Failure on the part of the bidder or Contractor to meet either of these requirements may result in late payment of monthly estimates.

## SECTION 103—AWARD AND EXECUTION OF CONTRACTS

**Section 103.01—Consideration of Bids** is amended to add the following:

The Department may, as part of its deliberations toward award of a contract, enter into a Memorandum of Understanding (MOU) with the apparent lowest responsive and responsible bidder if any of the following is determined to be necessary:

(a) Provide and document further clarification of a specification or drawing

(b) Establish an order of priority (ranking) where there are conflicting specification requirements

(c) Ensure proper understanding of the intent\meaning of a specification or drawing

(d) Document the inclusion of inadvertently excluded pages from the contract documents

(e) Document the correct unit of measurement where a conflict exists within the bid documents

(f) Document the elimination of an item(s)

(g) Limit the Department's exposure to contract overruns or potential unbalancing of a bid item.

This listing is not to be interpreted as all inclusive, but is provided to give examples of the types of issues that may be addressed in such an agreement. The MOU is not intended to be used to negotiate "as bid" unit prices\quantities or to renegotiate bid requirements with the apparent lowest responsive and responsible bidder, but merely to address intent, clarify points of confusion or limit the possible future effects of such issues on project budget. If the terms of the MOU are acceptable to both parties, the Department and the apparent lowest responsive and responsible bidder will document their acceptance of the terms of the MOU by both parties' signatures. In the case of

Federal Oversight projects, FHWA concurrence also required. The MOU will be added to and become part of the executed contract.

**Section 103.09—Execution of Contract** is amended to include the following:

According to Section 2.2-4308.2 of the *Code of Virginia*, any employer with more than an average of 50 employees for the previous 12 months entering into a contract in excess of $50,000 with the Department to provide work or provide services pursuant to such contract shall register and participate in the U.S. Department of Homeland Security's "E-Verify" system to verify information and work authorization of its newly hired employees performing work pursuant to such contract.

Contractors are not required to be enrolled with "E-Verify" at the time bids are submitted, however, prior to award, the lowest responsive and responsible bidder must be enrolled with "E-Verify". Contractors may use the following website to enroll in "E-Verify", http://www.uscis.gov/e-verify.

## SECTION 104—SCOPE OF WORK

**Section 104.01—Intent of Contract** of the Specifications is replaced by the following:

The intent of the Contract is to provide for the completion of all work specified therein.

The Contractor shall base his bid on the cost of completing all work specified in the Contract.

Budgetary constraints as deemed necessary by the Department may be imposed at any time during the life of the Contract. This may affect the number of routes paved and thus the final quantity of work to be performed.

If prior to initiating or during the performance of the work, the Engineer determines that the cost of completion of all work specified in the Contract will exceed the limits of the budgeted funds, the Contractor will be notified immediately. With such notice the Engineer will specify which routes will be deleted according to the Department's predetermined listing of priorities.

If after routes are deleted and work proceeds, budgets revisions indicate that the cost of work to be completed by the Contractor will fall below the limits of the budgeted funds, the Department will determine which of the previously deleted routes will be returned to the Schedule to be completed at the contract unit price.

## SECTION 105—CONTROL OF WORK

**Section 105.01—Notice to Proceed** of the Specifications is replaced with the following:

Unless otherwise indicated in the Contract, the Notice to Proceed date will be the date selected by the Contractor on which the Contractor intends to begin the work. That date shall be no earlier than 15 nor later than 30 calendar days after the date of contract execution. The State Contract Engineer will contact the Contractor on the date of contract execution to inform him that the contract has been executed. The State Contract Engineer will also confirm this date in the Letter of Contract Execution. Copies of the Letter of Contract Execution will be distributed to Department personnel involved in the administration of the Contract and to the Contractor. Within 10 calendar days after the date of contract execution the Contractor shall submit to the Engineer written notice of the date he has selected as his Notice to Proceed date. If the Contractor fails to provide written notice of his selected Notice to Proceed Date within 10 calendar days of contract execution, the selected Notice to Proceed Date will become the date 15 calendar days after the date of contract execution. The Contractor shall begin work no later than 10 calendar days after the date he has selected as his Notice to Proceed date, unless the Notice to Proceed date is otherwise indicated in the Contract, in which case

the Contractor shall begin work within 10 calendar days after the specific Notice to Proceed date indicated in the Contract.

Contract Time will commence on the date of the Notice to Proceed. The Letter of Contract Execution will identify the Chief Engineer's authorized representative, hereafter referred to as the Engineer, who is responsible for written directives and changes to the Contract. The Engineer will contact the Contractor after notice of award to arrange a pre-construction conference.

In the event the Contractor, for matters of his convenience, wishes to begin work earlier than 15 calendar days or later than 30 calendar days after the date of contract execution, he shall make such a request in writing to the Engineer within 10 calendar days of the date of contract execution or once a Notice to Proceed Date has been established, if he wishes to begin work more than 10 calendar days after his selected Notice to Proceed date or the Notice to Proceed Date indicated in the Contract, he shall make such a request to the Engineer in writing no later than 5 calendar days after the Notice to Proceed date. If this requested start date is acceptable to the Department, the Contractor will be notified in writing; however, the Contract fixed completion date will not be adjusted but will remain binding. The Contractor's request to adjust the start date for the work on the Contract will not be considered as a basis for claim that the time resulting from the Contractor's adjusted start date, if accepted by the Engineer, is insufficient to accomplish the work nor shall it relieve the Contractor of his responsibility to perform the work in accordance with the scope of work and requirements of the Contract. In no case shall work begin before the Department executes the Contract or prior to the Notice to Proceed date unless otherwise permitted by the Contract or authorized by the Engineer. The Contractor shall notify the Engineer at least 24 hours prior to the date on which he will begin the work.

**Section 105.02—Pre-Construction Conference** of the Specifications is amended to replace the first paragraph with the following:

After notification of award and prior to the Notice to Proceed date the Contractor shall attend a pre-construction conference scheduled by the Engineer to discuss the Contractor's planned operations for prosecuting and completing the work within the time limit of the Contract. At the pre-construction conference the Engineer and the Contractor will identify in writing the authorities and responsibilities of project personnel for each party. The pre-construction conference may be held simultaneously with the scheduling conference when the Engineer so indicates this in advance to the Contractor. When these are simultaneously held, the Contractor shall come prepared to discuss preparation and submittal details of the progress schedule in accordance with the requirements of the Contract.

**Section 105.06—Subcontracting** of the Specifications is amended to include the following:

Any distribution of work shall be evidenced by a written binding agreement on file at the project site. Where no field office exists, such agreement shall be readily available upon request to Department inspector(s) assigned to the project.

The provisions contained in Form FHWA-1273 specifically, and other federal provisions included with the prime Contract are generally applicable to all Federal-aid construction projects and must be made a part of, and physically incorporated into all contracts, as well as, appropriate subcontracts for work so as to be binding in those agreements.

**Section 105.10**(c)(1)**—Steel Structures** of the Specifications is replaced with the following:

Working drawings for steel structures, including metal handrails, shall consist of shop detail, erection, and other working drawings showing details, dimensions, sizes of units, and other information necessary for the fabrication and erection of metal work.

**Section 105.14—Maintenance During Construction** of the Specifications is amended to add the following:

The Contractor shall provide at least one person on the project site during all work operations who is currently verified either by the Department in Intermediate Work Zone Traffic Control, or by the American Traffic Safety Services Association (ATSSA) as a Traffic Control Supervisor (TCS). This person must have the verification card with them while on the project site. This person shall be responsible for the oversight of work zone traffic control within the project limits in compliance with the contract requirements involving the plans, specifications, the VWAPM, and the MUTCD. This person's duties shall include the supervision of the installation, adjustment (if necessary), inspection, maintenance and removal when no longer required of all traffic control devices on the project.

If none of the Contractor's on-site personnel responsible for the supervision of such work has the required verification with them or if they have an outdated verification card showing they are not currently verified either by the Department in Intermediate Work Zone Traffic Control, or by the American Traffic Safety Services Association (ATSSA) as a Traffic Control Supervisor (TCS) all work on the project will be suspended by the Engineer.

The Contractor shall provide at least one person on site who is, at a minimum, verified by the Department in Basic Work Zone Traffic Control for each construction and\or maintenance operation that involves installing, maintaining, or removing work zone traffic control devices. This person shall be responsible for the placement, maintenance and removal of work zone traffic control devices.

In the event none of the Contractor's on-site personnel of any construction/maintenance operation has, at a minimum, the required verification by the Department in Basic Work Zone Traffic Control, that construction/maintenance operation will be suspended by the Engineer until that operation is appropriately staffed in accordance with the requirements herein.

**Section 105.15**(b) **Mailboxes and Newspaper Boxes** of the Specifications is replaced with the following:

(b) **Mailboxes and Newspaper Boxes:** When removal of existing mailboxes and newspaper boxes is made necessary by construction operations, the Contractor shall place them in temporary locations so that access to them will not be impaired. Prior to final acceptance, boxes shall be placed in their permanent locations as designated by the Engineer and left in as good condition as when found. Boxes or their supports that are damaged through negligence on the part of the Contractor shall be replaced at his expense. The cost of removing and resetting existing boxes shall be included in other pay items of the Contract. New mailboxes designated in the plans shall be paid for in accordance with the provisions of Section 521 of the Specifications.

**Section 105.19—Submission and Disposition Of Claims** of the Specifications is amended to replace the first sentence of the third paragraph with the following:

Upon completion of the Contract, the Contractor may, within 60 days after the final estimate date established by the Department pursuant to Virginia Code, § 33.2-1101, deliver to the Department a written claim, which must be a signed original claim document along with three legible copies of the claim document, for the amount he deems he is entitled to under the Contract.

## SECTION 106—CONTROL OF MATERIAL

**Section 106.08—Storing Materials** of the Specifications is amended to replace the third paragraph with the following:

Chemicals, fuels, lubricants, bitumens, paints, raw sewage, and other harmful materials as determined by the Engineer and the VPDES *General Permit For Discharge of Stormwater From Construction Activities* shall not be stored within any floodplain unless no other location is available and only then shall the material be stored in a secondary containment structure(s) with an impervious liner. Also, any storage of these materials in proximity to natural or man-made drainage conveyances

or otherwise where the materials could potentially reach a waterway if released under adverse weather conditions, must be stored in a bermed or diked area or inside a container capable of preventing a release. Double-walled storage tanks shall meet the berm/dike containment requirement except for storage within flood plains. Any spills, leaks or releases of such materials shall be addressed in accordance with Section 107.16(b) and (e) of the Specifications. Accumulated rain water may also be pumped out of the impoundment area into approved dewatering devices. All proposed pollution prevention measures and practices must be identified by the Contractor in his Pollution Prevention Plan as required by the Specifications, other contract documents and/or the VDPES *General Permit for Discharge of Stormwater from Construction Activities.*

## SECTION 107—LEGAL RESPONSIBILITIES

**Section 107.02—Permits, Certificates, and Licenses** of the Specifications is amended to replace (f) with the following:

(f) **Virginia Department of Environmental Quality – VPDES General Permit For Discharge of Stormwater From Construction Activities (VPDES Construction Permit**): All construction activities undertaken by or for VDOT involving land disturbances equal to or exceeding one acre must be covered by the VPDES Construction Permit. According to IIM-LD-242 and Section 107.16 of the Specifications, VDOT is responsible for securing VPDES Construction Permit coverage for all applicable land disturbing activities performed on VDOT rights of way or easements, including off-site support facilities that are located on VDOT rights of way or easements that directly relate to the construction site activity. The Contractor shall be responsible for securing VPDES Construction Permit coverage for support facilities that are not located on VDOT rights of way or easements.

The Contractor shall be responsible for all costs to obtain VPDES Construction Permit coverage for all support facilities (both on-site and off-site) not included in the construction plans or contract documents for the project. The Department will not be responsible for any inconvenience, delay, or loss experienced by the Contractor as a result of his failure to gain access to any support facility areas at the time contemplated.

**Section 107.02—Permits, Certificates, and Licenses** of the Specifications is amended to replace last eleven paragraphs with the following:

The Contractor shall 1) stockpile excavated material in a manner that prevents reentry into the stream, 2) restore original streambed and streambank contours, 3) revegitate barren areas, and 4) implement strict erosion and sediment control measures throughout the project period.

The Contractor shall provide fill material that is clean and free of contaminants in toxic concentrations or amounts in accordance with all applicable laws and regulations. The Contractor shall comply with all applicable FEMA-approved state or local floodplain management requirements.

The Contractor shall adhere to any time-of-year restriction conditions as required by state and federal permitting agencies. No in-stream work shall be permitted during in-stream time-of-year restriction.

The Contractor shall prohibit wet or uncured concrete from entry into surface waters. The Contractor shall not dispose of excess or waste concrete in surface waters and prevent wash water from discharging into surface waters. The Contractor shall employ measures to prevent spills of fuels or lubricants into state waters. All pollution prevention measures and practices proposed by the Contractor shall be identified in the Contractor's Pollution Prevention Plan as required by the Specifications, other contract documents and/or the VPDES *General Permit For Discharge of Stormwater From Construction Activities.*

The Contractor shall not violate the water quality standards as a result of the construction activities. The Contractor shall not alter the physical, chemical, or biological properties of surface waters and wetlands

or make them detrimental to the public health, to animal or aquatic life, to the uses of such waters for domestic or industrial consumption, for recreation, or for other uses.

The Contractor shall not proceed with work covered by a permit until the work is released in writing by the Engineer.

If the Department has not released work covered by a U.S. Army Corps of Engineers permit and the Contractor has completed all other work within the limits of the project, the Contractor shall so advise the Engineer in writing. Upon receipt of the notification, the Engineer will evaluate the status of the project and advise the Contractor within 45 days of the portion of the project that is acceptable under Section 108.09 of the Specifications. If the Engineer determines that all of the work except that encumbered by the permit application is acceptable under the requirements of Section 108.09 of the Specifications, the Contractor will be notified accordingly. The Department or the Contractor may then elect to continue or terminate the remaining portion of the Contract.

The party electing to terminate the Contract shall so advise the other party in writing after the 45-day period. The terms of contract termination will be in accordance with the requirements of Section 108.08 of the Specifications. No compensation will be made for delays encountered or for work not performed except for an extension of time as determined in accordance with the requirements of Section 108.04 of the Specifications.

The Contractor shall submit a request to the Engineer in writing if he wants to deviate from the plans or change his proposed method(s) regarding any proposed work located in waterways or wetlands. Such work may require additional environmental permits. If the Engineer determines that the activities are necessary for completion of the work, the Contractor shall furnish the Engineer all necessary information pertaining to the activity. The Contractor shall be responsible for designing and supplying all plans, sketches and notes necessary to acquire any permit modification required for changes in the proposed construction methods. Such information shall be furnished at least 180 days prior to the date the proposed changed activity is to begin. For other than the VPDES *General Permit For Discharge of Stormwater From Construction Activities,* the District Environmental Manager will apply for the necessary permits modifications to the permits obtained by the Department. The Contractor shall not begin the activity until directed to do so by the Engineer. Additional compensation will not be made for delay to the work or change in the Contractor's proposed methods that result from jurisdiction agency review or disapproval of Contractor's proposed methods.

If additional permits are required to perform dredging for flotation of construction equipment or for other permanent or temporary work as indicated in the Contractor's accepted plan of operation, but have not been obtained by the Department, the Contractor shall furnish the Engineer, at least 75 days prior to the proposed activity, all necessary information pertaining to the proposed activity in order for the Department to apply for the permits. The Contractor shall not begin the proposed activity until the additional permits have been secured and the Engineer has advised the Contractor that the proposed activity may proceed.

The Contractor shall permit representatives of state and federal environmental regulatory agencies to make inspections at any time in order to insure that the activity being performed under authority of the permit(s) is in accordance with the terms and conditions prescribed herein.

**Section 107.13—Labor and Wages** of the Specifications is amended to add the following:

(c) **Job Service Offices:** In advance of the Contract starting date, the Contactor may contact the Job Service Office of the Virginia Employment Commission at the nearest location to secure referral of available qualified workers in all occupational categories. The closest office may be obtained by accessing the VEC website at http://www.vec.virginia.gov/vec-local-offices.

**Section 107.14**(f) **Training** of the Specifications is amended to replace 5 and 6 with the following:

5. If the Contract provides a pay item for trainees, training shall be in accordance with the requirements of Section 518 of the Specifications.

**Section 107.15** of the Specifications is replaced by the following:

**Section 107.15—Use of Disadvantaged Business Enterprises (DBEs)**

**A. Disadvantaged Business Enterprise (DBE) Program Requirements**

Any Contractor, subcontractor, supplier, DBE firm, and contract surety involved in the performance of work on a federal-aid contract shall comply with the terms and conditions of the United States Department of Transportation (USDOT) DBE Program as the terms appear in Part 26 of the Code of Federal Regulations (49 CFR as amended), the USDOT DBE Program regulations; and the Virginia Department of Transportation's (VDOT or the Department) Road and Bridge Specifications and DBE Program rules and regulations.

For the purposes of this provision, Contractor is defined as the Prime Contractor of the contract; and sub-contractor is defined as any DBE supplier, manufacturer, or subcontractor performing work or furnishing material, supplies or services to the contract. The Contractor shall physically include this same contract provision in every supply or work/service subcontract that it makes or executes with a subcontractor having work for which it intends to claim credit.

In accordance with 49 CFR Part 26 and VDOT's DBE Program requirements, the Contractor, for itself and for its subcontractors and suppliers, whether certified DBE firms or not, shall commit to complying fully with the auditing, record keeping, confidentiality, cooperation, and anti-intimidation or retaliation provisions contained in those federal and state DBE Program regulations. By bidding on this contract, and by accepting and executing this contract, the Contractor agrees to assume these contractual obligations and to bind the Contractor's subcontractors contractually to the same at the Contractor's expense.

The Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award, administration, and performance of this contract. Failure by the Contractor to carry out these requirements is a material breach of this contract, which will result in the termination of this contract or other such remedy, as VDOT deems appropriate.

All administrative remedies noted in this provision are automatic unless the Contractor exercises the right of appeal within the required timeframe(s) specified herein. Appeal requirements, processes, and procedures shall be in accordance with guidelines stated herein and current at the time of the proceedings. Where applicable, the Department will notify the Contractor of any changes to the appeal requirements, processes, and procedures after receiving notification of the Contractor's desire to appeal.

All time frames referenced in this provision are expressed in business days unless otherwise indicated. Should the expiration of any deadline fall on a weekend or holiday, such deadline will automatically be extended to the next normal business day.

**B. DBE Certification**

The only DBE firms eligible to perform work on a federal-aid contract for DBE contract goal credit are firms certified as Disadvantaged Business Enterprises by the Virginia Department of Minority Business Enterprise (DMBE) or the Metropolitan Washington Airports Authority (MWAA) in accordance with federal and VDOT guidelines. DBE firms must be certified in the specific work listed for DBE contract goal credit. A directory listing of certified DBE firms can

be obtained from the Virginia Department of Minority Business Enterprise and the Metropolitan Washington Airports Authority Internet websites: *http://www.dmbe.virginia.gov/* ; *http://mwaa.com/362.htm*

**C. Bank Services**

The Contractor and each subcontractor are encouraged to use the services of banks owned and controlled by socially and economically disadvantaged individuals. Such banking services and the fees charged for services typically will not be eligible for DBE Program contract goal credit. Such information is available from the VDOT's Internet Civil Rights Division website:
*http://insidevdot/C7/Civil%20Rights/default.aspx*

**D. DBE Program-Related Certifications Made by Bidders\Contractors**

By submitting a bid and by entering into any contract on the basis of that bid, the bidder/Contractor certifies to each of the following DBE Program-related conditions and assurances:

1. That the management and bidding officers of its firm agree to comply with the bidding and project construction and administration obligations of the USDOT DBE Program requirements and regulations of 49 CFR Part 26 as amended, and VDOT's Road and Bridge Specifications and DBE Program requirements and regulations.

2. Under penalty of perjury and other applicable penal law that it has complied with the DBE Program requirements in submitting the bid, and shall comply fully with these requirements in the bidding, award, and execution of the contract.

3. To ensure that DBE firms have been given full and fair opportunity to participate in the performance of the contract. The bidder certifies that all reasonable steps were, and will be, taken to ensure that DBE firms had, and will have, an opportunity to compete for and perform work on the contract. The bidder further certifies that the bidder shall not discriminate on the basis of race, color, age, national origin, or sex in the performance of the contract or in the award of any subcontract. Any agreement between a bidder and a DBE whereby the DBE promises not to provide quotations for performance of work to other bidders is prohibited.

4. As a bidder, good faith efforts were made to obtain DBE participation in the proposed contract at or above the goal for DBE participation established by VDOT. It has submitted as a part of its bid true, accurate, complete, and detailed documentation of the good faith efforts it performed to meet the contract goal for DBE participation. The bidder, by signing and submitting its bid, certifies the DBE participation information submitted within the stated time thereafter is true, correct, and complete, and that the information provided includes the names of all DBE firms that will participate in the contract, the specific line item(s) that each listed DBE firm will perform, and the creditable dollar amounts of the participation of each listed DBE. The specific line item must reference the VDOT line number and item number contained in the proposal.

5. The bidder further certifies, by signing its bid, it has committed to use each DBE firm listed for the specific work item shown to meet the contract goal for DBE participation. Award of the contract will be conditioned upon meeting these and other listed requirements of 49 CFR Part 26.53 and the contract documents. By signing the bid, the bidder certifies on work that it proposes to sublet; it has made good faith efforts to seek out and consider DBEs as potential subcontractors. The bidder shall contact DBEs to solicit their interest, capability, and prices in sufficient time to allow them to respond effectively, and shall retain on file proper documentation to substantiate its good faith

efforts. Award of the contract will be conditioned upon meeting these and other listed requirements of 49 CFR Part 26.53 and the contract documents.

6. Once awarded the contract, the Contractor shall make good faith efforts to utilize DBE firms to perform work designated to be performed by DBEs at or above the amount or percentage of the dollar value specified in the bidding documents. Further, the Contractor understands it shall not unilaterally terminate, substitute for, or replace any DBE firm that was designated in the executed contract in whole or in part with another DBE, any non-DBE firm, or with the Contractor's own forces or those of an affiliate of the Contractor without the prior written consent of VDOT as set out within the requirements of this provision.

7. Once awarded the contract, the Contractor shall designate and make known to the Department a liaison officer who is assigned the responsibility of administering and promoting an active and inclusive DBE program as required by 49 CFR Part 26 for DBEs. The designation and identity of this officer need be submitted only once by the Contractor during any twelve (12) month period at the preconstruction conference for the first contract the Contractor has been awarded during that reporting period. The Department will post such information for informational and administrative purposes at VDOT's Internet Civil Rights Division website.

8. Once awarded the contract, the Contractor shall comply fully with all regulatory and contractual requirements of the USDOT DBE Program, and that each DBE firm participating in the contract shall fully perform the designated work items with the DBE's own forces and equipment under the DBE's direct supervision, control, and management. Where a contract exists and where the Contractor, DBE firm, or any other firm retained by the Contractor has failed to comply with federal or VDOT DBE Program regulations and/or their requirements on that contract, VDOT has the authority and discretion to determine the extent to which the DBE contract regulations and\or requirements have not been met, and will assess against the Contractor any remedies available at law or provided in the contract in the event of such a contract breach.

9. In the event a bond surety assumes the completion of work, if for any reason VDOT has terminated the prime Contractor, the surety shall be obligated to meet the same DBE contract terms and requirements as were required of the original prime Contractor in accordance with the requirements of this specification.

**E. Disqualification of Bidder**

Bidders may be disqualified from bidding for failure to comply with the requirements of this Special Provision, the contract specifications, and VDOT Road and Bridge Specifications.

**F. Bidding Procedures**

The following bidding procedures shall apply to the contract for DBE Program compliance purposes:

1. **Contract Goal, Good Faith Efforts Specified:** All bidders evidencing the attainment of DBE goal commitment equal to or greater than the required DBE goal established for the project must submit completed Form C-111, Minimum DBE Requirements, and Form C-48, Subcontractor/Supplier Solicitation and Utilization, as a part of the bid documents.

   Form C-111 may be submitted electronically or may be faxed to the Department, but in no case shall the bidder's Form C-111 be received later than 10:00 a.m. the next

business day after the time stated in the bid proposal for the receipt of bids. Form C-48 must be received within ten (10) business days after the bid opening.

If, at the time of submitting its bid, the bidder knowingly cannot meet or exceed the required DBE contract goal, it shall submit Form C-111 exhibiting the DBE participation it commits to attain as a part of its bid documents. The bidder shall then submit Form C-49, DBE Good Faith Efforts Documentation, within two (2) business days after the bid opening.

The lowest responsive and responsible bidder must submit its properly executed Form C-112, Certification of Binding Agreement, within three (3) business days after the bids are received. DBEs bidding as prime contractors are not required to submit Form C-112 unless they are utilizing other DBEs as subcontractors.

If, after review of the apparent lowest bid, VDOT determines the DBE requirements have not been met, the apparent lowest successful bidder must submit Form C-49, DBE Good Faith Efforts Documentation, which must be received by the Contract Engineer within two (2) business days after official notification of such failure to meet the aforementioned DBE requirements.

Forms C-48, C-49, C-111, and C-112 can be obtained from the VDOT website at: *http://vdotforms.vdot.virginia.gov/*

Instructions for submitting Form C-111 can be obtained from the VDOT website at: *http://www.virginiadot.org/business/resources/const/Exp_DBE_Commitments.pdf*

2. **Bid Rejection:** The failure of a bidder to submit the required documentation within the timeframes specified in the **Contract Goal, Good Faith Efforts Specified** section of this Special Provision may be cause for rejection of that bidder's bid.

   If the lowest bidder is rejected for failure to submit the required documentation in the specified time frames, the Department may award the work to the next lowest bidder, or re-advertise the proposed work at a later date or proceed otherwise as determined by the Commonwealth.

3. **Good Faith Efforts Described:** In order to award a contract to a bidder that has failed to meet DBE contract goal requirements, VDOT will determine if the bidder's efforts were adequate good faith efforts, and if given all relevant circumstances, those efforts were made actively and aggressively to meet the DBE requirements. Efforts to obtain DBE participation are not good faith efforts if they could not reasonably be expected to produce a level of DBE participation sufficient to meet the DBE Program and contract goal requirements.

   Good faith efforts may be determined through use of the following list of the types of actions the bidder may make to obtain DBE participation. This is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts of similar intent may be relevant in appropriate cases:

   (a) Soliciting through reasonable and available means, such as but not limited to, attendance at pre-bid meetings, advertising, and written notices to DBEs who have the capability to perform the work of the contract. Examples include: advertising in at least one daily/weekly/monthly newspaper of general circulation, as applicable; phone contact with a completely documented telephone log, including the date and time called, contact person, or voice mail status; and internet contacts with supporting documentation, including dates advertised. The bidder shall solicit this interest no less than five (5) business days before the bids are due so that the

solicited DBEs have enough time to reasonably respond to the solicitation. The bidder shall determine with certainty if the DBEs are interested by taking reasonable steps to follow up initial solicitations as evidenced by documenting such efforts as requested on Form C-49, DBE Good Faith Efforts Documentation.

(b) Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to completely perform all portions of this work in its entirety or use its own forces;

(c) Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner, which will assist the DBEs in responding to a solicitation;

(d) Negotiating for participation in good faith with interested DBEs;

1. Evidence of such negotiation shall include the names, addresses, and telephone numbers of DBEs that were considered; dates DBEs were contacted; a description of the information provided regarding the plans, specifications, and requirements of the contract for the work selected for subcontracting; and, if insufficient DBE participation seems likely, evidence as to why additional agreements could not be reached for DBEs to perform the work;

2. A bidder using good business judgment should consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and should take a firm's price, qualifications, and capabilities, as well as contract goals, into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not sufficient reason for a bidder's failure to meet the contract goal for DBE participation, as long as such costs are reasonable and comparable to costs customarily appropriate to the type of work under consideration. Also, the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make diligent good faith efforts. Bidders are not, however, required to accept higher quotes from DBEs if the price difference can be shown by the bidder to be excessive, unreasonable, or greater than would normally be expected by industry standards;

(e) A bidder cannot reject a DBE as being unqualified without sound reasons based on a thorough investigation of the DBE's capabilities. The DBE's standing within its industry, membership in specific groups, organizations, associations, and political or social affiliations, and union vs. non-union employee status are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal for DBE participation;

(f) Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by VDOT or by the bidder/Contractor;

(g) Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services subject to the restrictions contained in these provisions;

(h) Effectively using the services of appropriate personnel from VDOT and from DMBE; available minority/women community or minority organizations; contractors' groups; local, state, and Federal minority/ women business assistance offices; and other

organizations as allowed on a case-by-case basis to provide assistance in the recruitment and utilization of qualified DBEs.

**G. Documentation and Administrative Reconsideration of Good Faith Efforts**

**During Bidding:** As described in the **Contract Goal, Good Faith Efforts Specified** section of this Special Provision, the bidder must provide Form C-49, DBE Good Faith Efforts Documentation, of its efforts made to meet the DBE contract goal as proposed by VDOT within the time frame specified in this provision. The means of transmittal and the risk for timely receipt of this information shall be the responsibility of the bidder. The bidder shall attach additional pages to the certification, if necessary, in order to fully detail specific good faith efforts made to obtain the DBE firms participation in the proposed contract work.

However, regardless of the DBE contract goal participation level proposed by the bidder or the extent of good faith efforts shown, all bidders shall timely and separately file their completed and executed forms C-111, C-112, C-48, and C-49, as aforementioned, or face potential bid rejection.

If a bidder does not submit its completed and executed forms C-111, or C-112, when required by this Special Provision, the bidder's bid will be considered non-responsive and may be rejected.

Where the Department upon initial review of the bid results determines the apparent low bidder has failed or appears to have failed to meet the requirements of the **Contract Goal, Good Faith Efforts Specified** section of this Special Provision and has failed to adequately document that it made a good faith effort to achieve sufficient DBE participation as specified in the bid proposal, that firm upon notification of the Department's initial determination will be offered the opportunity for administrative reconsideration before VDOT rejects that bid as non-responsive. The bidder shall address such request for reconsideration in writing to the Contract Engineer within five (5) business days of receipt of notification by the Department and shall be given the opportunity to discuss the issue and present its evidence in person to the Administrative Reconsideration Panel. The Administrative Reconsideration Panel will be made up of VDOT Division Administrators or their designees, none of who took part in the initial determination that the bidder failed to make the goal or make adequate good faith efforts to do so. After reconsideration, VDOT shall notify the bidder in writing of its decision and explain the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so.

If, after reconsideration, the Department determines the bidder has failed to meet the requirements of the contract goal and has failed to make adequate good faith efforts to achieve the level of DBE participation as specified in the bid proposal, the bidder's bid will be rejected.

If sufficient documented evidence is presented to demonstrate that the apparent low bidder made reasonable good faith efforts, the Department will award the contract and reduce the DBE requirement to the actual commitment identified by the lowest successful bidder at the time of its bid. The Contractor is still encouraged to seek additional DBE participation during the life of the contract.

However, such action will not relieve the Contractor of its responsibility for complying with the reduced DBE requirement during the life of the contract or any administrative sanctions as may be appropriate.

**During the Contract:** If a DBE, through no fault of the Contractor, is unable or unwilling to fulfill his agreement with the Contractor, the Contractor shall immediately notify the Department and provide all relevant facts. If a Contractor relieves a DBE subcontractor of

the responsibility to perform work under their subcontract, the Contractor is encouraged to take the appropriate steps to obtain a DBE to perform an equal dollar value of the remaining subcontracted work. In such instances, the Contractor is expected to seek DBE participation towards meeting the goal during the performance of the contract.

If the Contractor fails to conform to the schedule of DBE participation as shown on the progress schedule, or at any point at which it is clearly evident that the remaining dollar value of allowable credit for performing work is insufficient to obtain the scheduled participation, and the Contractor has not taken the preceding actions, the Contractor and any aforementioned affiliates may be subject to disallowance of DBE credit until such time as conformance with the schedule of DBE participation is achieved.

**Project Completion:** If the Contractor fails upon completion of the project to meet the required participation, the Contractor and any prime contractual affiliates, as in the case of a joint venture, may be enjoined from bidding as a prime Contractor, or participating as a subcontractor on VDOT projects for a period of 90 days.

Prior to enjoinment from bidding or denial to participate as a subcontractor for failure to comply with participation requirements, as provided hereinbefore, the Contractor may submit documentation to the State Construction Engineer to substantiate that failure was due solely to quantitative underrun(s), elimination of items subcontracted to DBEs, or to circumstances beyond their control, and that all feasible means have been used to obtain the required participation. The State Construction Engineer upon verification of such documentation shall make a determination whether or not the Contractor has met the requirements of the contract.

If it is determined that the aforementioned documentation is insufficient or the failure to meet required participation is due to other reasons, the Contractor may request an appearance before the Administrative Reconsideration Panel to establish that all feasible means were used to meet such participation requirements. The decision of the Administrative Reconsideration Panel shall be administratively final. If the decision is made to enjoin the Contractor from bidding on other VDOT work as described herein, the enjoinment period will begin upon the Contractor's failure to request a hearing within the designated time frame or upon the Administrative Reconsideration Panel's decision to enjoin, as applicable.

**H. DBE Participation for Contract Goal Credit**

DBE participation on the contract will count toward meeting the DBE contract goal in accordance with the following criteria:

1. Cost-plus subcontracts will not be considered to be in accordance with normal industry practice and will not normally be allowed for credit.

2. The applicable percentage of the total dollar value of the contract or subcontract awarded to the DBE will be counted toward meeting the contract goal for DBE participation in accordance with the **DBE Program-Related Certifications Made by Bidders\Contractors** section of this Special Provision for the value of the work, goods, or services that are actually performed or provided by the DBE firm itself or subcontracted by the DBE to other DBE firms.

3. When a DBE performs work as a participant in a joint venture with a non-DBE firm, the Contractor may count toward the DBE goal only that portion of the total dollar value of the contract equal to the distinctly defined portion of the contract work that the DBE has performed with the DBE's own forces or in accordance with the provisions of this Section. The Department shall be contacted in advance regarding any joint venture involving both a DBE firm and a non-DBE firm to coordinate Department review and approval of the joint

venture's organizational structure and proposed operation where the Contractor seeks to claim the DBE's credit toward the DBE contract goal.

4. When a DBE subcontracts part of the work of the contract to another firm, the value of that subcontracted work may be counted toward the DBE contract goal only if the DBE's subcontractor at a lower tier is a certified DBE. Work that a DBE subcontracts to either a non-DBE firm or to a non-certified DBE firm will not count toward the DBE contract goal. The cost of supplies and equipment a DBE subcontractor purchases or leases from the prime Contractor or the prime's affiliated firms will not count toward the contract goal for DBE participation.

5. The Contractor may count expenditures to a DBE subcontractor toward the DBE contract goal only if the DBE performs a Commercially Useful Function (CUF) on that contract.

6. A Contractor may not count the participation of a DBE subcontractor toward the Contractor's final compliance with the DBE contract goal obligations until the amount being counted has actually been paid to the DBE. A Contractor may count sixty (60) percent of its expenditures actually paid for materials and supplies obtained from a DBE certified as a regular dealer, and one hundred (100) percent of such expenditures actually paid for materials and supplies obtained from a certified DBE manufacturer.

   (a) For the purposes of this Special Provision, a regular dealer is defined as a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles, or equipment required and used under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a regular dealer, the DBE firm shall be an established business that regularly engages, as its principal business and under its own name, in the purchase and sale or lease of the products or equipment in question. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions will not be considered regular dealers.

   (b) A DBE firm may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business where it keeps such items in stock if the DBE both owns and operates distribution equipment for the products it sells and provides for the contract work. Any supplementation of a regular dealer's own distribution equipment shall be by a long-term lease agreement and not on an *ad hoc* or contract-by-contract basis to be eligible for credit to meet the DBE contract goal.

   (c) If a DBE regular dealer is used for DBE contract goal credit, no additional credit will be given for hauling or delivery to the project site goods or materials sold by that DBE regular dealer. Those delivery costs shall be deemed included in the price charged for the goods or materials by the DBE regular dealer, who shall be responsible for their distribution.

   (d) For the purposes of this Special Provision, a manufacturer will be defined as a firm that operates or maintains a factory or establishment that produces on the premises the materials, supplies, articles, or equipment required under the contract and of the general character described by the project specifications. A manufacturer shall include firms that produce finished goods or products from raw or unfinished material, or purchase and substantially alter goods and materials to make them suitable for construction use before reselling them.

   (g) A Contractor may count toward the DBE contract goal the following expenditures to DBE firms that are not regular dealers or manufacturers for DBE program purposes:

1. The entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant or managerial services, or for providing bonds or insurance specifically required for the performance of the federal-aid contract, if the fee is reasonable and not excessive or greater than would normally be expected by industry standards for the same or similar services.

2. The entire amount of that portion of the construction contract that is performed by the DBE's own forces and equipment under the DBE's supervision. This includes the cost of supplies and materials ordered and paid for by the DBE for contract work, including supplies purchased or equipment leased by the DBE, except supplies and equipment a DBE subcontractor purchases or leases from the prime Contractor or its affiliates.

(h) A Contractor may count toward the DBE contract goal one hundred (100) percent of the fees paid to a DBE trucker or hauler for the delivery of material and supplies required on the project job site, but not for the cost of those materials or supplies themselves, provided that the trucking or hauling fee is determined by VDOT to be reasonable, as compared with fees customarily charged by non-DBE firms for similar services. A Contractor shall not count costs for the removal or relocation of excess material from or on the job site when the DBE trucking company is not the manufacturer of or a regular dealer in those materials and supplies. The DBE trucking firm shall also perform a Commercially Useful Function (CUF) on the project and not operate merely as a pass through for the purposes of gaining credit toward the DBE contract goal. Prior to submitting a bid, the Contractor shall determine, or contact the VDOT Civil Rights Division or its district Offices for assistance in determining, whether a DBE trucking firm will meet the criteria for performing a CUF on the project. See section on **Miscellaneous DBE Program Requirements; Factors used to Determine if a DBE Trucking Firm is Performing a CUF**.

(i) The Contractor will receive DBE contract goal credit for the fees or commissions charged by and paid to a DBE broker who arranges or expedites sales, leases, or other project work or service arrangements provided that those fees are determined by VDOT to be reasonable and not excessive as compared with fees customarily charged by non-DBE firms for similar services. For the purposes of this Special Provision, a broker is defined as a person or firm that regularly engages in arranging for delivery of material, supplies, and equipment, or regularly arranges for the providing of project services as a course of routine business but does not own or operate the delivery equipment necessary to transport materials, supplies, or equipment to or from a job site.

## I. Performing a Commercially Useful Function (CUF)

No credit toward the DBE contract goal will be allowed for contract payments or expenditures to a DBE firm if that DBE firm does not perform a CUF on that contract. A DBE performs a CUF when the DBE is solely responsible for execution of a distinct element of the contract work and the DBE actually performs, manages, and supervises the work involved with the firm's own forces or in accordance with the provisions of the **DBE Participation for Contract Goal Credit** section of this Special Provision. To perform a CUF the DBE alone shall be responsible and bear the risk for the material and supplies used on the contract, selecting a supplier or dealer from those available, negotiating price, determining quality and quantity, ordering the material and supplies, installing those materials with the DBE's own forces and equipment, and paying for those materials and supplies. The amount the DBE firm is to be paid under the contract shall be commensurate with the work the DBE actually performs and the DBE credit claimed for the DBE's performance.

**Monitoring CUF Performance**: It shall be the Contractor's responsibility to ensure that all DBE firms selected for subcontract work on the contract, for which he seeks to claim credit toward the contract goal, perform a CUF. Further, the Contractor is responsible for and shall ensure that each DBE firm fully performs the DBE's designated tasks with the DBE's own forces and equipment under the DBE's own direct supervision and management or in accordance with the provisions of the **DBE Participation for Contract Goal Credit** section of this Special Provision. For the purposes of this provision the DBE's equipment will mean either equipment directly owned by the DBE as evidenced by title, bill of sale or other such documentation, or leased by the DBE, and over which the DBE has control as evidenced by the leasing agreement from a firm not owned in whole or part by the prime Contractor or an affiliate of the Contractor under this contract.

VDOT will monitor the Contractor's DBE involvement during the performance of the contract. However, VDOT is under no obligation to warn the Contractor that a DBE's participation will not count toward the goal.

**DBEs Must Perform a Useful and Necessary Role in Contract Completion:** A DBE does not perform a commercially useful function if the DBE's role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation.

**DBEs Must Perform The Contract Work With Their Own Workforces:** If a DBE does not perform and exercise responsibility for at least thirty (30) percent of the total cost of the DBE's contract with the DBE's own work force, or the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involve, VDOT will presume that the DBE is not performing a CUF and such participation will not be counted toward the contract goal.

**VDOT Makes Final Determination On Whether a CUF Is Performed:** VDOT has the final authority to determine whether a DBE firm has performed a CUF on a federal-aid contract. To determine whether a DBE is performing or has performed a CUF, VDOT will evaluate the amount of work subcontracted by that DBE firm or performed by other firms and the extent of the involvement of other firms' forces and equipment. Any DBE work performed by the Contractor or by employees or equipment of the Contractor shall be subject to disallowance under the DBE Program, unless the independent validity and need for such an arrangement and work is demonstrated.

**J. Verification of DBE Participation and Imposed Damages**

Within fourteen days after contract execution, the Contractor shall submit to the Responsible Engineer, with a copy to the District Civil Rights Office (DCRO), a fully executed subcontract agreement for each DBE used to claim credit in accordance with the requirements stated on Form C-112. The subcontract agreement shall be executed by both parties stating the work to be performed, the details or specifics concerning such work, and the price which will be paid to the DBE subcontractor. Because of the commercial damage that the Contractor and its DBE subcontractor could suffer if their subcontract pricing, terms, and conditions were known to competitors, the Department staff will treat subcontract agreements as proprietary Contractor trade secrets with regard to Freedom of Information Act requests. In lieu of subcontract agreements, purchase orders may be submitted for haulers, suppliers, and manufacturers. These too, will be treated confidentially and protected. Such purchase orders must contain, as a minimum, the following information: authorized signatures of both parties; description of the scope of work to include contract item numbers, quantities, and prices; and required federal contract provisions.

The Contractor shall also furnish, and shall require each subcontractor to furnish, information relative to all DBE involvement on the project for each quarter during the life of the contract in

which participation occurs and verification is available. The information shall be indicated on Form C-63, DBE and SWAM Payment Compliance Report. The department reserves the right to request proof of payment via copies of cancelled checks with appropriate identifying notations. Failure to provide Form C-63 to the District Civil Rights Office (DCRO) within five (5) business days after the reporting period may result in delay of approval of the Contractor's monthly progress estimate for payment. The names and certification numbers of DBE firms provided by the Contractor on the various forms indicated in this Special Provision shall be exactly as shown on the DMBE's or MWAA's latest list of certified DBEs. Signatures on all forms indicated herein shall be those of authorized representatives of the Contractor as shown on the Prequalification Application, Form C-32 or the Prequalification/Certification Renewal Application, Form C-32A, or authorized by letter from the Contractor. If DBE firms are used which have not been previously documented with the Contractor's bid and for which the Contractor now desires to claim credit toward the project goal, the Contractor shall be responsible for submitting necessary documentation in accordance with the procedures stipulated in this Special Provision to cover such work prior to the DBE beginning work.

Form C-63 can be obtained from the VDOT website at: *http://vdotforms.vdot.virginia.gov/*

The Contractor shall submit to the Responsible Engineer its progress schedule with a copy to the DCRO, as required by Section 108.03 of the Specifications or other such specific contract scheduling specification that may include contractual milestones, i.e., monthly or VDOT requested updates. The Contractor shall include a narrative of applicable DBE activities relative to work activities of the Contractor's progress schedule, including the approximate start times and durations of all DBE participation to be claimed for credit that shall result in full achievement of the DBE goal required in the contract.

On contracts awarded on the basis of good faith efforts, narratives or other agreeable format of schedule information requirements and subsequent progress determination shall be based on the commitment information shown on the latest Form C-111 as compared with the appropriate Form C-63.

Prior to beginning any major component or quarter of the work, as applicable, in which DBE work is to be performed, the Contractor shall furnish a revised Form C-111 showing the name(s) and certification number(s) of any current DBEs not previously submitted who will perform the work during that major component or quarter for which the Contractor seeks to claim credit toward the contract DBE goal. The Contractor shall obtain the prior approval of the Department for any assistance it may provide to the DBE beyond its existing resources in executing its commitment to the work in accordance with the requirements listed in the **Good Faith Efforts Described** section of this Special Provision. If the Contractor is aware of any assistance beyond a DBE's existing resources that the Contractor, or another subcontractor, may be contemplating or may deem necessary and that have not been previously approved, the Contractor shall submit a new or revised narrative statement for VDOT's approval prior to assistance being rendered.

If the Contractor fails to comply with correctly completing and submitting any of the required documentation requested by this provision within the specified time frames, the Department will withhold payment of the monthly progress estimate until such time as the required submissions are received VDOT. Where such failures to provide required submittals or documentation are repeated the Department will move to enjoin the Contractor and any prime contractual affiliates, as in the case of a joint venture, from bidding as a prime Contractor, or participating as a subcontractor on VDOT projects until such submissions are received.

**K. Documentation Required for Semi-final Payment**

On those projects nearing completion, the Contractor must submit Form C-63 marked "Semi-Final" within twenty (20) days after the submission of the last regular monthly progress

estimate to the DCRO. The form must include each DBE used on the contract work and the work performed by each DBE. The form shall include the actual dollar amount paid to each DBE for the accepted creditable work on the contract. The form shall be certified under penalty of perjury, or other applicable law, to be accurate and complete. VDOT will use this certification and other information available to determine applicable DBE credit allowed to date by VDOT and the extent to which the DBEs were fully paid for that work. The Contractor shall acknowledge by the act of filing the form that the information is supplied to obtain payment regarding a federal participation contract. A letter of certification, signed by both the prime Contractor and appropriate DBEs, will accompany the form, indicating the amount, including any retainage, if present, that remains to be paid to the DBE(s).

**L. Documentation Required for Final Payment**

On those projects that are complete, the Contractor shall submit a final Form C-63 marked "Final" to the DCRO, within thirty (30) days of the final estimate. The form must include each DBE used on the contract and the work performed by each DBE. The form shall include the actual dollar amount paid to each DBE for the creditable work on the contract. VDOT will use this form and other information available to determine if the Contractor and DBEs have satisfied the DBE contract goal percentage specified in the contract and the extent to which credit was allowed. The Contractor shall acknowledge by the act of signing and filing the form that the information is supplied to obtain payment regarding a federal participation contract.

**M. Prompt Payment Requirements**

The Contractor shall make prompt and full payment to the subcontractor(s) of any retainage held by the prime Contractor after the subcontractor's work is satisfactorily completed.

For purposes of this Special Provision, a subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished, documented, and accepted as required by the contract documents by VDOT. When VDOT has made partial acceptance of a portion of the prime contract, the Department will consider the work of any subcontractor covered by that partial acceptance to be satisfactorily completed. Payment will be made in accordance with the requirements of Section 107.01, Section 109.08, and Section 109.09 of the Specifications.

Upon VDOT's payment of the subcontractor's portion of the work as shown on the monthly progress estimate and the receipt of payment by the Contractor for such work, the Contractor shall make compensation in full to the subcontractor for that portion of the work satisfactorily completed and accepted by the Department. For the purposes of this Special Provision, payment of the subcontractor's portion of the work shall mean the Contractor has issued payment in full, less agreed upon retainage, if any, to the subcontractor for that portion of the subcontractor's work that VDOT paid to the Contractor on the monthly progress estimate.

The Contractor shall make payment of the subcontractor's portion of the work within seven (7) days of the receipt of payment from VDOT in accordance with the requirements of Section 107.01, Section 109.08, and Section 109.09 of the Specifications.

If the Contractor fails to make payment for the subcontractor's portion of the work within the time frame specified herein, the subcontractor shall contact the Responsible Engineer and the Contractor's bonding company in writing. The bonding company and VDOT will investigate the cause for non-payment and, barring mitigating circumstances that would make the subcontractor ineligible for payment, ensure payment in accordance with the requirements of Section 107.01, Section 109.08, and Section 109.09 of the Specifications.

By bidding on this contract, and by accepting and executing this contract, the Contractor agrees to assume these contractual obligations, and to bind the Contractor's subcontractors contractually to those prompt payment requirements.

Nothing contained herein shall preclude the Contractor from withholding payment to the subcontractor in accordance with the terms of the subcontract in order to protect the Contractor from loss or cost of damage due to a breach of agreement by the subcontractor.

**N. Miscellaneous DBE Program Requirements**

**Loss of DBE Eligibility:** When a DBE firm has been removed from eligibility as a certified DBE firm, the following actions will be taken:

1. When a Bidder/Contractor has made a commitment to use a DBE firm that is not currently certified, thereby making the Contractor ineligible to receive DBE participation credit for work performed, and a subcontract has not been executed, the ineligible DBE firm does not count toward either the contract goal or overall goal. The Contractor shall meet the contract goal with a DBE firm that is eligible to receive DBE credit for work performed, or must demonstrate to the Contract Engineer that it has made good faith efforts to do so.

2. When a Bidder/Contractor has executed a subcontract with a certified DBE firm prior to official notification of the DBE firm's loss of eligibility, the Contractor may continue to use the firm on the contract and shall continue to receive DBE credit toward its DBE goal for the subcontractor's work.

3. When VDOT has executed a prime contract with a DBE firm that is certified at the time of contract execution but that is later ruled ineligible, the portion of the ineligible firm's performance on the contract before VDOT has issued the notice of its ineligibility shall count toward the contract goal.

**Termination of DBE:** If a certified DBE subcontractor is terminated, or fails, refuses, or is unable to complete the work on the contract for any reason, the Contractor must promptly request approval to substitute or replace that firm in accordance with this section of this Special Provision.

The Contractor, as aforementioned in **DBE Program-Related Certifications Made by Bidders/Contractors**, shall notify VDOT in writing before terminating and/or replacing the DBE that was committed as a condition of contract award or that is otherwise being used or represented to fulfill DBE contract obligations during the contract performance period. Written consent from the Department for terminating the performance of any DBE shall be granted only when the Contractor can demonstrate that the DBE is unable, unwilling, or ineligible to perform its obligations for which the Contractor sought credit toward the contract DBE goal. Such written consent by the Department to terminate any DBE shall concurrently constitute written consent to substitute or replace the terminated DBE with another DBE. Consent to terminate a DBE shall not be based on the Contractor's ability to negotiate a more advantageous contract with another subcontractor whether that subcontractor is, or is not, a certified DBE.

1. All Contractor requests to terminate, substitute, or replace a certified DBE shall be in writing, and shall include the following information:

   (a) The date the Contractor determined the DBE to be unwilling, unable, or ineligible to perform.

(b) The projected date that the Contractor shall require a substitution or replacement DBE to commence work if consent is granted to the request.

(c) A brief statement of facts describing and citing specific actions or inaction by the DBE giving rise to the Contractor's assertion that the DBE is unwilling, unable, or ineligible to perform;

(d) A brief statement of the affected DBE's capacity and ability to perform the work as determined by the Contractor;

(e) A brief statement of facts regarding actions taken by the Contractor which are believed to constitute good faith efforts toward enabling the DBE to perform;

(f) The current percentage of work completed on each bid item by the DBE;

(g) The total dollar amount currently paid per bid item for work performed by the DBE;

(h) The total dollar amount per bid item remaining to be paid to the DBE for work completed, but for which the DBE has not received payment, and with which the Contractor has no dispute;

(i) The total dollar amount per bid item remaining to be paid to the DBE for work completed, but for which the DBE has not received payment, and over which the Contractor and/or the DBE have a dispute.

2. Contractor's Written Notice to DBE of Pending Request to Terminate and Substitute with another DBE.

   The Contractor shall send a copy of the "request to terminate and substitute" letter to the affected committed DBE firm, in conjunction with submitting the request to the DCRO. The affected DBE firm may submit a response letter to the Department within two (2) business days of receiving the notice to terminate from the Contractor. The affected DBE firm shall explain its position concerning performance on the committed work. The Department will consider both the Contractor's request and the DBE's response and explanation before approving the Contractor's termination and substitution request, or determining if any action should be taken against the Contractor.

   If, after making its best efforts to deliver a copy of the "request to terminate and substitute" letter, the Contractor is unsuccessful in notifying the affected DBE firm, the Department will verify that the affected, committed DBE firm is unable or unwilling to continue the contract. The Department will immediately approve the Contractor's request for a substitution.

3. Proposed Substitution of Another Certified DBE

   Upon termination of a DBE, the Contractor shall use reasonable good faith efforts to replace the terminated DBE. The termination of such DBE shall not relieve the Contractor of its obligations pursuant to this section, and the unpaid portion of the terminated DBE's contract will not be counted toward the contract goal.

   When a DBE substitution is necessary, the Contractor shall submit an amended Form C-111 with the name of another DBE firm, the proposed work to be performed by that firm, and the dollar amount of the work to replace the unfulfilled portion of the work of the originally committed DBE firm. The Contractor shall furnish all pertinent information including the contract I.D. number, project number, bid item, item description, bid unit and

bid quantity, unit price, and total price. In addition, the Contractor shall submit documentation for the requested substitute DBE as described in this section of this Special Provision.

Should the Contractor be unable to commit the remaining required dollar value to the substitute DBE, the Contractor shall provide written evidence of good faith efforts made to obtain the substitute value requirement. The Department will review the quality, thoroughness, and intensity of those efforts. Efforts that are viewed by VDOT as merely superficial or pro-forma will not be considered good faith efforts to meet the contract goal for DBE participation. The Contractor must document the steps taken that demonstrated its good faith efforts to obtain participation as set forth in the **Good Faith Efforts Described** section of this Special Provision.

**Factors Used to determine if a DBE Trucking Firm is performing a CUF:**

The following factors will be used to determine whether a DBE trucking company is performing a CUF:

1. To perform a CUF the DBE trucking firm shall be completely responsible for the management and supervision of the entire trucking operation for which the DBE is responsible by subcontract on a particular contract. There shall not be a contrived arrangement, including, but not limited to, any arrangement that would not customarily and legally exist under regular construction project subcontracting practices for the purpose of meeting the DBE contract goal;

2. The DBE must own and operate at least one fully licensed, insured, and operational truck used in the performance of the contract work. This does not include a supervisor's pickup truck or a similar vehicle that is not suitable for and customarily used in hauling the necessary materials or supplies;

3. The DBE receives full contract goal credit for the total reasonable amount the DBE is paid for the transportation services provided on the contract using trucks the DBE owns, insures, and operates using drivers that the DBE employs and manages;

4. The DBE may lease trucks from another certified DBE firm, including from an owner-operator who is certified as a DBE. The DBE firm that leases trucks from another DBE will receive credit for the total fair market value actually paid for transportation services the lessee DBE firm provides on the contract;

5. The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit for the total value of the transportation services provided by non-DBE lessees, *not to exceed the value of transportation services provided by DBE-owned trucks on the contract.* For additional participation by non-DBE lessees, the DBE will only receive credit for the fee or commission it receives as a result of the lease arrangement.

*EXAMPLE*

DBE Firm X uses two (2) of its own trucks on a contract. The firm leases two (2) trucks from DBE Firm Y and six (6) trucks from non-DBE Firm Z.

| **Firm X** | | **Value of Trans. Serv.** (For Illustrative Purposes Only) |
|---|---|---|
| Truck 1 | Owned by DBE | $100 per day |
| Truck 2 | Owned by DBE | $100 per day |

**Firm Y**

| | | |
|---|---|---|
| Truck 1 | Leased from DBE | $110 per day |
| Truck 2 | Leased from DBE | $110 per day |

**Firm Z**

| | | |
|---|---|---|
| Truck 1 | Leased from Non DBE | $125 per day |
| Truck 2 | Leased from Non DBE | $125 per day |
| Truck 3 | Leased from Non DBE | $125 per day |
| Truck 4 | Leased from Non DBE | $125 per day |
| Truck 5 | Leased from Non DBE* | $125 per day |
| Truck 6 | Leased from Non DBE* | $125 per day |

DBE credit would be awarded for the total transportation services provided by DBE Firm X and DBE Firm Y, and may also be awarded for the total value of transportation services by four (4) of the six (6) trucks provided by non-DBE Firm Z (not to exceed the value of transportation services provided by DBE-owned trucks).

**Credit = 8 Trucks**
**Total Value of Transportation Services = $820**

In all, full DBE credit would be allowed for the participation of eight (8) trucks (twice the number of DBE trucks owned and leased) and the dollar value attributable to the Value of Transportation Services provided by the 8 trucks.

* With respect to the other two trucks provided by non-DBE Firm Z, DBE credit could be awarded only for the fees or commissions pertaining to those trucks that DBE Firm X receives as a result of the lease with non-DBE Firm Z.

6. For purposes of this section, the lease must indicate that the DBE firm leasing the truck has exclusive use of and control over the truck. This will not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, provided the lease gives the DBE absolute priority for and control over the use of the leased truck. Leased trucks must display the name and identification number of the DBE firm that has leased the truck at all times during the life of the lease.

**Data Collection:** In accordance with 49CFR Section 26.11, all firms bidding on prime contracts and bidding or quoting subcontracts on federal-aid projects shall provide the following information to the Contract Engineer annually.

- Firm name
- Firm address
- Firm's status as a DBE or non-DBE
- The age of the firm and
- The annual gross receipts of the firm

The means of transmittal and the risk for timely receipt of this information shall be the responsibility of the bidder. However, the above information can be submitted by means of the Annual Gross Receipts Survey as required in the Prequalification/Certification application.

All bidders, including DBE prime Contractor bidders, shall complete and submit to the Contract Engineer the Subcontractor/Supplier Solicitation and Utilization Form C-48 for each bid submitted; to be received within ten (10) business days after the bid opening. Failure of bidders to submit this form in the time frame specified may be cause for disqualification of the bidder and rejection of their bid in accordance with the requirements of this Special Provision, the contract specifications, and VDOT Road and Bridge specifications.

**O. Suspect Evidence of Criminal Behavior**

Failure of a bidder, Contractor, or subcontractor to comply with the Virginia Department of Transportation Road and Bridge Specifications and these Special Provisions wherein there appears to be evidence of criminal conduct shall be referred to the Attorney General for the Commonwealth of Virginia and/or the FHWA Inspector General for criminal investigation and, if warranted, prosecution.

**Suspected DBE Fraud**

In appropriate cases, VDOT will bring to the attention of the U. S. Department of Transportation (USDOT) any appearance of false, fraudulent, or dishonest conduct in connection with the DBE program, so that USDOT can take the steps, e.g., referral to the Department of Justice for criminal prosecution, referral to the USDOT Inspector General, action under suspension and debarment or Program Fraud and Civil Penalties rules provided in 49CFR Part 31.

**P. Summary of Remedies for Non-Compliance with DBE Program Requirements**

Failure of any bidder\Contractor to comply with the requirements of this Special Provision for Section 107.15 of the Virginia Road and Bridge Specifications, which is deemed to be a condition of bidding, or where a contract exists, is deemed to constitute a breach of contract shall be remedied in accordance with the following:

**1. Disadvantaged Business Enterprise (DBE) Program Requirements**

The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award, administration, and performance of this contract. Failure by the Contractor to carry out these requirements is a material breach of this contract, which will result in the termination of this contract or other such remedy, as VDOT deems appropriate.

All administrative remedies noted in this provision are automatic unless the Contractor exercises the right of appeal within the required timeframe(s) specified herein.

**2. DBE Program-Related Certifications Made by Bidders\Contractors**

Once awarded the contract, the Contractor shall comply fully with all regulatory and contractual requirements of the USDOT DBE Program, and that each certified DBE firm participating in the contract shall fully perform the designated work items with the DBE's own forces and equipment under the DBE's direct supervision, control, and management. Where a contract exists and where the Contractor, DBE firm, or any other firm retained by the Contractor has failed to comply with federal or VDOT DBE Program regulations and/or their requirements on that contract, VDOT has the authority and discretion to determine the extent to which the DBE contract requirements have not been met, and will

assess against the Contractor any remedies available at law or provided in the contract in the event of such a contract breach.

**3. Disqualification of Bidder**

Bidders may be disqualified from bidding for failure to comply with the requirements of this Special Provision, the contract specifications, and VDOT Road and Bridge Specifications.

**4. Bidding Procedures**

The failure of a bidder to submit the required documentation within the timeframes specified in the **Contract Goal, Good Faith Efforts Specified** section of this Special Provision may be cause for rejection of that bidder's bid. If the lowest bidder is rejected for failure to submit required documentation in the specified time frames, the Department may either award the work to the next lowest bidder, or re-advertise and construct the work under contract or otherwise as determined by the Commonwealth.

In order to award a contract to a bidder that has failed to meet DBE contract goal requirements, VDOT will determine if the bidder's efforts were adequate good faith efforts, and if given all relevant circumstances, those efforts were to the extent a bidder actively and aggressively seeking to meet the requirements would make. Regardless of the DBE contract goal participation level proposed by the bidder or the extent of good faith efforts shown, all bidders shall timely and separately file their completed and executed Forms C-111, C-112, C-48, and Form C-49, as aforementioned, or face potential bid rejection. If a bidder does not submit it's completed and executed C-111, or C-112, when required by this Special Provision, the bidder's bid will be considered non-responsive and may be rejected. If, after reconsideration, the Department determines the bidder has failed to meet the requirements of the contract goal and has failed to make adequate good faith efforts to achieve the level of DBE participation as specified in the bid proposal, the bidder's bid will be rejected. If sufficient documented evidence is presented to demonstrate that the apparent low bidder made reasonable good faith efforts, the Department will award the contract and reduce the DBE requirement to the actual commitment identified by the lowest successful bidder at the time of its bid. The Contractor is encouraged to seek additional participation during the life of the contract.

If the Contractor fails to conform to the schedule of DBE participation as shown on the progress schedule, or at any point at which it is clearly evident that the remaining dollar value of allowable credit for performing work is insufficient to obtain the scheduled participation, the Contractor and any aforementioned affiliates may be enjoined from bidding for 60 days or until such time as conformance with the schedule of DBE participation is achieved. In such instances, the Contractor is expected to seek DBE participation towards meeting the goal during the prosecution of the contract.

If the Contractor fails upon completion of the project to meet the required participation, the Contractor and any prime contractual affiliates, as in the case of a joint venture, may be enjoined from bidding as a prime Contractor, or participating as a subcontractor on VDOT projects for a period of 90 days.

Prior to enjoinment from bidding or denial to participate as a subcontractor for failure to comply with participation requirements, as provided hereinbefore, the Contractor may submit documentation to the State Construction Engineer to substantiate that failure was due solely to quantitative underrun(s) or elimination of items subcontracted to DBEs, and that all feasible means have been used to obtain the required participation. The State

Construction Engineer upon verification of such documentation shall make a determination whether or not the Contractor has met the requirements of the contract.

If it is determined that the aforementioned documentation is insufficient or the failure to meet required participation is due to other reasons, the Contractor may request an appearance before the Administrative Reconsideration Panel to establish that all feasible means were used to meet such participation requirements. The decision of the Administrative Reconsideration Panel shall be administratively final. The enjoinment period will begin upon the Contractor's failure to request a hearing within the designated time frame or upon the Administrative Reconsideration Panel's decision to enjoin, as applicable.

**5. Verification of DBE Participation and Imposed Damages**

If the Contractor fails to comply with correctly completing and submitting any of the required documentation requested by this provision within the specified time frames, the Department will withhold payment of the monthly progress estimate until such time as the required submissions are received by VDOT. Where such failures to provide required submittals or documentation are repeated the Department will move to enjoin the Contractor and any prime contractual affiliates, as in the case of a joint venture, from bidding as a prime Contractor, or participating as a subcontractor on VDOT projects until such submissions are received.

In addition to the remedies described heretofore in this provision VDOT also exercises its rights with respect to the following remedies:

**Suspect Evidence of Criminal Behavior**

Failure of a bidder, Contractor, or subcontractor to comply with the Virginia Department of Transportation Road and Bridge Specifications and these Special Provisions wherein there appears to be evidence of criminal conduct shall be referred to the Attorney General for the Commonwealth of Virginia and/or the FHWA Inspector General for criminal investigation and, if warranted prosecution.

In appropriate cases, VDOT will bring to the attention of the U. S. Department of Transportation (USDOT) any appearance of false, fraudulent, or dishonest conduct in connection with the DBE program, so that USDOT can take the steps, e.g., referral to the Department of Justice for criminal prosecution, referral to the USDOT Inspector General, action under suspension and debarment or Program Fraud and Civil Penalties rules provided in 49CFR Part 31.

**Section 107.16**(a) **Erosion and Siltation** of the Specifications is replaced with the following

(a) **Erosion and Siltation**: The Contractor shall exercise every reasonable precaution, including temporary and permanent soil stabilization measures, throughout the duration of the project to control erosion and prevent siltation of adjacent lands, rivers, streams, wetlands, lakes, and impoundments. Soil stabilization and/or erosion control measures shall be applied to erodible soil or ground materials exposed by any activity associated with construction, including clearing, grubbing, and grading, but not limited to local or on-site sources of materials, stockpiles, disposal areas and haul roads.

The Contractor shall comply with the requirements of Sections 301.02 and 303.03 of the Specifications. Should the Contractor as a result of negligence or noncompliance, fail to provide soil stabilization in accordance with these specifications, the cost of temporary soil stabilization in accordance with the provisions of Section 303 of the Specifications shall be at the Contractor's

expense. If the delay in stabilizing an exposed area of land is due to circumstances beyond the Contractor's control, the Department will be responsible for the expense.

Temporary measures shall be coordinated with the work to ensure effective and continuous erosion and sediment control. Permanent erosion control measures and drainage facilities shall be installed as the work progresses.

For projects that disturb 10,000 square feet or greater of land or 2,500 square feet or greater in Tidewater, Virginia, the Contractor shall have within the limits of the project during land disturbance activities, an employee certified by the Department in erosion and sediment control who shall inspect erosion and sediment control and pollution prevention practices, devices and measures for proper installation and operation and promptly report their findings to the Inspector. Failure on the part of the Contractor to maintain appropriate erosion and sediment control or pollution prevention devices in a functioning condition may result in the Engineer notifying the Contractor in writing of specific deficiencies. Deficiencies shall be corrected immediately or as otherwise directed by the Engineer. If the Contractor fails to correct or take appropriate actions to correct the specified deficiencies within 24 hours (or as otherwise directed) after receipt of such notification, the Department may do one or more of the following: require the Contractor to suspend work in other areas and concentrate efforts towards correcting the specified deficiencies, withhold payment of monthly progress estimates, or proceed to correct the specified deficiencies and deduct the entire cost of such work from monies due the Contractor. Failure on the part of the Contractor to maintain a Department certified erosion and sediment control employee within the project limits when land disturbance activities are being performed will result in the Engineer suspending work related to any land disturbance activity until such time as the Contractor is in compliance with this requirement.

**Section 107.16**(b)1 **Water** of the Specifications is replaced with the following:

1. **Water:** The Contractor shall exercise every reasonable precaution throughout the duration of the project to prevent pollution of rivers, streams, and impoundments. Pollutants such as, but not limited to, chemicals, fuels, lubricants, bitumens, raw sewage, paints, sedimentation, and other harmful material shall not be discharged into or alongside rivers, streams, or impoundments or into channels leading to them. The Contractor shall provide the Engineer a contingency plan for reporting and immediate actions to be taken in the event of a dump, discharge, or spill within eight hours after he has mobilized to the project site.

   Construction discharge water shall be filtered to remove deleterious materials prior to discharge into state waters. Filtering shall be accomplished by the use of a standard dewatering basin or a dewatering bag or other measures approved by the Engineer. Dewatering bags shall conform to the requirements of Section 245 of the Specifications. During specified spawning seasons, discharges and construction activities in spawning areas of state waters shall be restricted so as not to disturb or inhibit aquatic species that are indigenous to the waters. Neither water nor other effluence shall be discharged onto wetlands or breeding or nesting areas of migratory waterfowl. When used extensively in wetlands, heavy equipment shall be placed on mats. Temporary construction fills and mats in wetlands and flood plains shall be constructed of approved nonerodible materials and shall be removed by the Contractor to natural ground when the Engineer so directs.

   If the Contractor dumps, discharges, or spills any oil or chemical that reaches or has the potential to reach a waterway, he shall immediately notify all appropriate jurisdictional state and federal agencies in accordance with the requirements of Section 107.01 and 107.16(e) of the Specifications and the VPDES *General Permit For Discharge of Stormwater From Construction Activities* and shall take immediate actions to contain, remove, and properly dispose of the oil or chemical.

Solids, sludges or other pollutants removed in the course of the treatment or management of pollutants shall be disposed of in a manner that prevents any pollutant from such materials from entering surface waters in compliance with all applicable state and federal laws and regulations.

Excavation material shall be disposed of in approved areas above the mean high water mark shown on the plans in a manner that will prevent the return of solid or suspended materials to state waters. If the mark is not shown on the plans, the mean high water mark shall be considered the elevation of the top of stream banks.

Constructing new bridge(s) and dismantling and removing existing bridge(s) shall be accomplished in a manner that will prevent the dumping or discharge of construction or disposable materials into rivers, streams, or impoundments.

Construction operations in rivers, streams, or impoundments shall be restricted to those areas where identified on the plans and to those that must be entered for the construction of structures. Rivers, streams, and impoundments shall be cleared of falsework, piling, debris, or other obstructions placed therein or caused by construction operations. Stabilization of the streambed and banks shall occur immediately upon completion of work or if work is suspended for more than 14 days.

The Contractor shall prevent stream constriction that would reduce stream flows below the minimum, as defined by the State Water Control Board, during construction operations.

If it is necessary to relocate an existing stream or drainage facility temporarily to facilitate construction, the Contractor shall design and provide temporary channels or culverts of adequate size to carry the normal flow of the stream or drainage facility. The Contractor shall submit a temporary relocation design to the Engineer for review and acceptance in sufficient time to allow for discussion and correction prior to beginning the work the design covers. Costs for the temporary relocation of the stream or drainage facility shall be included in the Contract price for the related pipe or box culvert, unless specifically provided for under another Pay Item. Stabilization of the streambed and banks shall occur immediately upon completion of, or during the work or if the work is suspended for more than 14 days.

Temporary bridges or other minimally invasive structures shall be used wherever the Contractor finds it necessary to cross a stream more than twice in a 6 month period, unless otherwise authorized by water quality permits issued by the U. S. Army Corps of Engineers, Virginia Marine Resources Commission or the Virginia Department of Environmental Quality for the Contract.

**Section 107.16**(b)2 **Air** of the Specifications is amended to include the following:

Reasonable precautions shall be taken at all times to prevent particulate matter from becoming airborne in accordance with the State Air Pollution Control Board regulation 9 VAC 5 Chapter 50, Article 1, Standards of Performance for Visible Emissions and Fugitive Dust/Emissions.

**Section 107.16**(e) **Storm Water Pollution Prevention Plan** of the Specifications is replaced with the following:

(e) **Storm Water Pollution Prevention Plan and VPDES General Permit for the Discharge of Stormwater from Construction Activities**

A Stormwater Pollution Prevention Plan (SWPPP) identifies potential sources of pollutants which may reasonably be expected to affect the stormwater discharges from the construction site and any on-site or off-site support facilities located on VDOT rights of way and easements. The SWPPP also describes and ensures implementation of practices which will be used to minimize or prevent pollutants in such discharges.

The SWPPP shall include, but not be limited to, the approved Erosion and Sediment Control (ESC) Plan, the approved Stormwater Management (SWM) Plan (if applicable), the approved Pollution Prevention Plan and all related Specifications and Standards and notes contained within all contract documents and shall be required for all land-disturbing activities that disturb 10,000 square feet or greater, or 2,500 square feet or greater in Tidewater, Virginia.

Land-disturbing activities that disturb one acre or greater require coverage under the Department of Environmental Quality's VPDES General Permit for the Discharge of Stormwater from Construction Activities (hereafter referred to as the VPDES Construction Permit). According to IIM-LD-242, VDOT will apply for and secure VPDES Construction Permit coverage for all applicable land disturbing activities on VDOT rights of way or easements for which it has contractual control, including off-site (outside the project limits) support facilities on VDOT rights of way or easements that directly relate to the construction activity.

The Contractor shall be responsible for securing VPDES Construction Permit coverage and complying with all permit conditions for all support facilities that are not located on VDOT rights of way or easements.

The required contents of a SWPPP for those land disturbance activities requiring coverage under the VPDES Construction Permit are found in Section II of the permit.

While a SWPPP is an important component of the VPDES Construction Permit, it is only one of the many requirements that must be addressed in order to be in full compliance with the conditions of the permit.

The Contractor and all other persons that oversee or perform activities covered by the VPDES Construction Permit shall be responsible for reading, understanding, and complying with all of the terms, conditions and requirements of the permit and the project's SWPPP including, but not limited to, the following:

1. Project Implementation Responsibilities

   The Contractor shall be responsible for the installation, maintenance, inspection, and, on a daily basis, ensuring the functionality of all erosion and sediment control measures and all other stormwater runoff control and pollution prevention measures identified within or referenced within the SWPPP, the construction plans, the specifications, all applicable permits, and all other contract documents.

   The Contractor shall be solely responsible for the temporary erosion and sediment control protection and permanent stabilization of all borrow areas and soil disposal areas located outside of VDOT right of way or easement.

   The Contractor shall prevent or minimize any stormwater or non-stormwater discharge that will have a reasonable likelihood of adversely affecting human health or public and/or private properties.

2. Certification Requirements

   In addition to satisfying the personnel certification requirements contained in Section 107.16(a) of the Specifications, the Contractor shall certify his activities by completing,

signing, and submitting Form C-45 VDOT SWPPP Contractor Certification Statement to the Engineer at least 7 days prior to commencing any project related land-disturbing activities, both within the project limits and any support facilities located on VDOT rights of way or easements outside the project limits.

3. SWPPP Requirements for Support Facilities

VDOT will secure VSMP Construction Permit coverage for support facilities located on VDOT rights of way or easements according to IIM-LD-242. The Contractor shall be responsible for securing separate VSMP Construction Permit coverage for support facilities that are not located on VDOT rights of way or easements.

Support facilities shall include, but not be limited to, borrow and disposal areas, construction and waste material storage areas, equipment and vehicle washing, maintenance, storage and fueling areas, storage areas for fertilizers, fuels or chemicals, concrete wash out areas, sanitary waste facilities and any other areas that may generate a stormwater or non-stormwater discharge directly related to the construction site.

Support Facilities located on VDOT rights of way or easements:

a. For those support facilities located within the project limits but not included in the construction plans for the project, the Contractor shall develop a SWPPP according to IIM-LD-246 which shall include, where applicable, an erosion and sediment control plan according to IIM-LD-11, a stormwater management plan according to IIM-LD-195 and a pollution prevention plan, according to these Specifications and the SWPPP General Information Sheet notes in the construction plans or other such contract documents. All plans developed shall be reviewed and approved by appropriate personnel certified through DEQ's ESC and SWM Certification program and shall be developed according to Section 105.10 of the Specifications and shall be submitted to the Engineer for review and approval. Once approved, the Engineer will notify the Contractor in writing that the plans are accepted as a component of the Project's SWPPP and VPDES Construction Permit coverage (where applicable) and shall be subject to all conditions and requirements of the VPDES Construction Permit and all other contract documents. No land disturbing activities can occur in the support area(s) until written notice to proceed is provided by the Engineer.

b. For support facilities located outside the project limits and not included in the construction plans for the project, the Contractor shall develop a SWPPP according to IIM-LD-246 which shall include, where applicable, an erosion and sediment control plan according to IIM-LD-11, a stormwater management plan (where applicable) according to IIM-LD-195, a pollution prevention plan according to these specifications and the SWPPP General Information Sheet notes in the construction plans or other such contract documents and all necessary documents for obtaining VPDES Construction Permit coverage according to IIM-LD-242. All plans developed shall be reviewed and approved by appropriate personnel certified through DEQ's ESC and SWM Certification program and shall be developed according to Section 105.10 of the Specifications and shall be submitted to the Engineer for review and approval. Once approved by the Engineer, VDOT will secure VPDES Construction Permit coverage according to IIM-LD-242. After VDOT secures VPDES Construction Permit coverage for the support facility, the Engineer will notify the Contractor in writing. The support facility shall be subject to all conditions and requirements of the VPDES Construction Permit and all other contract documents. No land disturbing activities can occur in the support area(s) until written notice to proceed is provided by the Engineer.

4. Inspection Procedures

a. Inspection Requirements

The Contractor shall be responsible for conducting site inspections in accordance with the requirements herein. Site inspections shall include erosion and sediment control and pollution prevention practices and facilities. The Contractor shall document such inspections by completion of Form C-107, Construction Runoff Control Inspection Form, in strict accordance with the directions contained within the form. Inspections shall include all areas of the site disturbed by construction activity, all on-site support facilities and all off site support facilities within VDOT right of way or easement. Inspections shall be conducted at least once every 7 calendar days (equivalent to once every five business days) and within 48 hours following any measureable storm event. In the event a measureable storm event occurs when there are more than 48 hours between business days, the inspection shall occur no later than the next business day. A business day is defined as Monday through Friday excluding State holidays. A measurable storm event is defined as one producing 0.25 inches of rainfall or greater over a 24 hour time period. The Contractor shall install a rain gage at a central location on the project site for the purposes of determining the occurrence of a measureable storm event. Where the project is of such a length that one rain gage may not provide an accurate representation of a the occurrence of a measurable storm event over the entire project site, the Contractor shall install as many rain gages as necessary to accurately reflect the amount of rainfall received over all portions of the project. The rain gage shall be observed no less than once each business day at the time prescribed in the SWPPP General Infromation Sheet notes in the construction plans or other contract documents to determine if a measureable storm event has occurred. The procedures for determining the occurrence of a measurable storm event are identified in the SWPPP General Information Sheet notes in the construction plans or other contract documents. For those areas of the site that have been temporarily stabilized or where land disturbing activities have been suspended due to continuous frozen ground conditions and stormwater discharges are unlikely, the inspection schedule may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make stormwater discharges likely, the Contractor shall immediately resume the regular inspection schedule. Those definable areas where final stabilization has been achieved will not require further inspections provided such areas have been identified in the project's Stormwater Pollution Prevention Plan.

b. Corrective Actions

If a site inspection identifies an existing control measure that is not being maintained properly or operating effectively or an existing control measure that needs to be modified or locations where an additional control measure is necessary or any other deficiencies in the erosion and sediment control and pollution prevention plan, corrective action(s) shall be completed as soon as practical and prior to the next anticipated measurable storm event but no later than seven days after the date of the site inspection that identified the deficiency.

5. Unauthorized Discharges and Reporting Requirements

The Contractor shall not discharge into state waters sewage, industrial wastes, other wastes or any noxious or deleterious substances nor shall he otherwise alter the physical, chemical, or biological properties of such waters that render such waters

detrimental for or to domestic use, industrial consumption, recreational or other public uses.

(1) Notification of non-compliant discharges

The Contractor shall immediately notify the Engineer upon the discovery of or the potential of any unauthorized, unusual, extraordinary, or non-compliant discharge from the land construction activity or any of support facilities located on VDOT right of way or easement. Where immediate notification is not possible, such notification shall be not later than 24 hours after said discovery.

(2) Detailed report requirements for non-compliant discharges

The Contractor shall submit to the Engineer within 5 days of the discovery of any actual or potential non-compliant discharge a written report describing details of the discharge to include a description of the nature and location of the discharge, the cause of the discharge, the date of occurrence, the length of time that the discharge occurred, the volume of the discharge, the expected duration and total volume if the discharge is continuing , a description of any apparent or potential effects on private and/or public properties and state waters or endangerment to public health, and any steps planned or taken to reduce, eliminate and prevent a recurrence of the discharge. A completed Form C-107 shall be included in such reports.

6. Changes and Deficiencies

The Contractor shall report to the Engineer when any planned physical alterations or additions are made to the land disturbing activity or deficiencies in the project plans or contract documents are discovered that could significantly change the nature of or increase the potential for pollutants discharged from the land disturbing activity to surface waters and that have not previously been addressed in the SWPPP.

7. Amendments, Modifications, Revisions and Updates to the SWPPP

a. The Contractor shall amend the SWPPP whenever site conditions, construction sequencing or scheduling necessitates revisions or modifications to the erosion and sediment control plan, the pollution prevention plan or any other component of the SWPPP for the land disturbing activity or onsite support facilities,

b. The Contractor shall amend the SWPPP to identify any additional or modified erosion and sediment control and pollution prevention measures implemented to correct problems or deficiencies identified through any inspection or investigation process.

c. The Contractor shall amend the SWPPP to identify any new or additional person(s) or contractor(s) not previously identified that will be responsible for implementing and maintaining erosion and sediment control and pollution prevention devices.

d. The Contractor shall update the SWPPP to include:

(1) A record of dates when, major grading activities occur, construction activities temporarily or permanently cease on a portion of the site and stabilization measures are initiated.

(2) Documentation of replaced or modified erosion and sediment control and pollution prevention controls where periodic inspections or other information have indicated that the controls have been used inappropriately or incorrectly.

(3) Identification of areas where final stabilization has occurred and where no further SWPPP or inspection requirements apply.

(4) The date of any prohibited discharges, the discharge volume released, and what actions were taken to minimize the impact of the release.

(5) A description of any measures taken to prevent the reoccurrence of any prohibited discharge.

(6) A description of any measures taken to address any issues identified by the required erosion and sediment control and pollution prevention inspections.

e. The Contractor shall update the SWPPP no later than seven days after the implementation and/or the approval of any amendments, modifications or revisions to the erosion and sediment control plan, the pollution prevention plan or any other component of the SWPPP.

f. Revisions or modifications to the SWPPP shall be approved by the Engineer and shall be documented by the Contractor on a designated plan set (Record Set) according to IIM-LD-246. All updates to the SWPPP shall be signed by the Contractor and the VDOT Responsible Land Disturber (RLD).

g. The record set of plans shall be maintained with other SWPPP documents on the project site or at a location convenient to the project site where no on site facilities are available.

**Section 107.21—Size And Weight Limitations** of the Specifications is amended to add the following:

(d) **Construction Loading of Structures:** In the course of planning and prosecuting the work for the asphalt maintenance schedules in the Contract, the Contractor shall consider the size and weight limitation of any existing structure(s) affecting the prosecuting the work in a schedule when contemplating construction loads, equipment access, haul and delivery routes of materials, and other related activities. If the size or weight limitation of an existing structure changes after the receipt of bid date for the Contract and remains so up to and including the actual prosecution of work for a schedule in the Contract, preventing or limiting access across the structure, and the Contractor determines this limitation impacts his operations; he shall notify the Engineer of such change. If the Engineer confirms such change has occurred, the change will be considered a change to the character of the work in accordance with the provisions of Section 104.03(a) of the Specifications and is eligible for adjustments in accordance with the provisions therein.

## SECTION 108—PROSECUTION AND PROGRESS OF WORK

**Section 108.01—Prosecution of Work** of the Specifications is amended to replace the first paragraph with the following:

The Contractor shall begin work on the Contract within 10 calendar days after the date selected by the Contractor as his Notice to Proceed date or within 10 calendar days after the specific Notice to Proceed date indicated in the Contract, unless otherwise altered or amended by specific language in

the Contract or as permitted by the provisions of Section 105.01 or Section 108.02 of the Specifications.

**Section 108.01—Prosecution Of Work** is amended to add the following:

Once the Contractor has begun work on a given schedule or portion thereof he shall endeavor to prosecute such work fully and continuously in accordance with the details and requirements of the Contract to its completion. In the event the Contractor has to temporarily suspend the work on a given schedule or portion thereof he shall notify the Engineer at least 24 hours in advance of the time and date he plans to pull off the work site. Prior to leaving the work site, the Contractor shall ensure the work site has been properly and safely secured to protect the traveling public in accordance with the provisions of the *Virginia Work Area Protection Manual*, the *MUTCD*, Section 512 of the Specifications, and other requirements included in the Contract documents.

**Section 108.02—Limitation of Operations** of the Specifications is replaced with the following:

(a) **General**

The Contractor shall conduct the work in a manner and sequence that will ensure its expeditious completion with the least interference to traffic and shall have due regard for the location of detours and provisions for handling traffic. The Contractor shall not open any work to the prejudice or detriment of work already started. The Engineer may require the Contractor to finish a section of work before work is started on any other section.

The Contractor shall also be governed by the limitations of operations specified herein and elsewhere in the contract documents including but not limited to pavement and shoulder planing operations, pavement and shoulder paving operations, trench widening, shoulder rehabilitation and restoration, removal and placement of traffic control items, and maintaining traffic.

The Contractor shall also schedule work, for paving sites designated in the Contract, so that it is completed on or before the dates and time restrictions specified herein or elsewhere in the Contract.

(b) **Holidays**

Except as is necessary to maintain traffic, work shall not be performed on Sundays or the following holidays without the permission of the Engineer: **January 1, Easter, Memorial Day, July 4, Labor Day, Thanksgiving Day, and Christmas Day**.

If any of these holidays occurs on a Sunday, the following Monday shall be considered the holiday.

In addition to the Sunday or Holiday work limitations, mobile, short duration, short-term stationary, or intermediate-term stationary temporary traffic control zone (as defined in the *Virginia Work Area Protection Manual*) lane closures on mainline lanes, shoulders, or ramps shall not be performed during the following Holiday time periods without the written permission of the Engineer. Additionally, a long-term stationary temporary traffic control zone (as defined in the *Virginia Work Area Protection Manual*) shall not be initially put in place, adjusted, or removed during the following Holiday time periods without the written permission of the Engineer:

- **January 1**: From Noon on the preceding day until Noon on the following day, except as indicated below.
- **Easter**: As indicated below.
- **Memorial Day**: As indicated below.

- **July 4:** From Noon on the preceding day until Noon on the following day, except as indicated below.

- **Labor Day**: As indicated below.

- **Thanksgiving Day**: From Noon on the Wednesday preceding Thanksgiving Day until Noon on the Monday following Thanksgiving Day.

- **Christmas Day**: From Noon on the preceding day until Noon on the following day, except as indicated below.

**If the Holiday occurs on a Friday or Saturday**: From Noon on the preceding Thursday to Noon on the following Monday.

**If the Holiday occurs on a Sunday or Monday**: From Noon on the preceding Friday to Noon on the following Tuesday.

**Section 108.04—Determination and Extension of Contract Time Limit** of the Specifications is amended to replace the second paragraph with the following:

With a fixed date contract when contract execution is not within 60 calendar days after the opening of bids, or when the Contractor is unable to commence work because of any failure of the Department, or when the Contractor is delayed because of the fault of the Department, the Contractor will be given an extension of time based on the number of days delayed beyond the 60 calendar days. No time extension will be allowed for a delay in the date of contract execution when the delay is the fault of the Contractor.

**Section 108.04**(a) **Fixed Date** of the Specifications is amended to add the following after the first paragraph as currently written:

If the Contract identifies a contract-specific Notice to Proceed date and the Contract is not executed by that date, the Contractor will receive an extension of time equal to the number of days between the contract-specific Notice to Proceed date and the eventual date of contract execution. If the Notice to Proceed date is selected by the Contractor and after prior approval the Engineer directs the Contractor not to begin work on that date, the Contractor will receive an extension of time equal to the number of days between the Contractor's selected Notice to Proceed date and the eventual date the Engineer informs the Contractor that he may commence the work.

**Section 108.07—Default of Contract** of the Specifications is amended to replace condition (a) with the following:

(a) fails to begin the work under the Contract within 10 calendar days after the Contractor's selected Notice to Proceed date, or within 10 calendar days after a contract specific Notice to Proceed date indicated in the Contract, except as otherwise permitted by specific contract language or the provisions of Section 105.01 or Section 108.02 of the Specifications.

## SECTION 109—MEASUREMENT AND PAYMENT

**Section 109.01**(a)**—Measurement by Weight** is amended to replace the first paragraph and second paragraph including subparagraphs 1-4 with the following:

(a) **Measurement by Weight:** Materials that are measured or proportioned by weight shall be weighted on accurate scales as specified in this Section. When material is paid for on a tonnage basis, personnel performing the weighing shall be certified by the Department and shall be bonded to the Commonwealth of Virginia in the amount of $10,000 for the faithful observance and

performance of the duties of the weighperson required herein. The bond shall be executed on a form having the exact wording as the Weighpersons Surety Bond Form furnished by the Department and shall be submitted to the Department prior to the furnishing of the tonnage material.

The Contractor shall have the weighperson perform the following:

1. Furnish a signed weigh ticket for each load that shows the date, load number, plant name, size and type of material, project number, schedule or purchase order number, and the weights specified herein.

2. Maintain sufficient documentation so that the accumulative tonnage and distribution of each lot of material, by contract, can be readily identified.

3. Submit by the end of the next working day a summary of the number of loads and total weights for each type of material by contract.

**Section 109.01**(a)**—Measurement by Weight** of the Specifications is also amended to delete the third paragraph.

**Section 109.01**(d)4 **Asphalt** of the Specifications is amended to replace the "formula" used in computing the volume of asphalt at temperatures other than 60 degrees F" with the following:

$$V^1 = V \times [1 - K(T - 60)]$$

**Section 109.08**(b)**—Payment to Sub-Contractors** of the Specifications is amended to replace the second paragraph with the following:

Payment to Sub-Contractors shall be in accordance with the provisions of §2.2-4354 of the *Highway Laws of Virginia:*

The Contractor shall take one of the following two actions within 7 days after receipt of payment from the Department for the subcontractor's portion of the work as shown on the monthly progress estimate:

1. Pay the subcontractor for the proportionate share of the total payment received from the agency attributable to the work performed by the subcontractor under that contract; or

2. Notify the Department and subcontractor, in writing, of his intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment.

The Contractor shall be obligated to pay interest in the amount 1 (one) percent per month on all amounts owed by the Contractor to the subcontractor that remain unpaid after 7 days following receipt by the contractor of payment from the Department for work performed by the subcontractor, except amounts withheld as allowed in section 2. The Contractor shall include in each of its subcontracts a provision requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements with respect to each lower tier subcontractor.

**Section 109.09—Payment for Material On Hand** of the Specifications is replaced with the following:

No payment for material on hand will be made for surface treatment materials in this contract.

**S315SM0**-1010

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
**SEALING CRACKS IN ASPHALT CONCRETE SURFACES OR HYDRAULIC CEMENT CONCRETE PAVEMENT**

August 1, 2010

## I. DESCRIPTION

This Specification covers the cleaning and sealing of cracks with Type A material for pavements which will not be overlaid with asphalt concrete (AC) within one year. Type B material shall be used to fill cracks in AC surfaces or hydraulic cement pavement (HCC) joints or cracks that will be overlaid within one year. Type C material shall be used to fill cracks in AC surfaces that may or may not be overlaid within one year. The Contract will designate which sites are to use each material.

In addition, this Specification covers the routing (Type C only), cleaning and sealing of cracks in existing surfaces including, but not limited to, cracks along the longitudinal joint(s) between lanes. Cracks ranging in width from 1/8 inch to 1 ½ inches shall be sealed. Cracks that exceed 1 ½ inches are not included in this contract.

## II. MATERIALS

All sealant materials shall be certified or tested and approved by the Department before being incorporated into the work. Where installation procedures or any part thereof are required to be in accordance with recommendations of the manufacturer of sealant compounds, the Contractor shall submit catalogue data and copies of recommendations to the Engineer prior to installation of the materials for review and approval. All such recommendations shall be adhered to unless directed otherwise by the Engineer.

### TYPE A

The crack sealant shall be of the following type and shall meet all the requirements of ASTM D-6690 and exceed all requirements of AASHTO M-173 and Federal Specification SS-S-164:

**A HOT-POURED MODIFIED ASPHALT RUBBER WITH GRANULATED CRUMB RUBBER AND LATEX PLASTICIZERS**. The proportions of the materials, by weight, shall be up to 80 percent maximum asphalt and up to 25 percent maximum crumb rubber.

The crumb rubber shall be 100 percent vulcanized rubber and meet the following gradation requirement:

| Sieve | Percent Passing |
|---|---|
| No. 10 | 100% |
| No. 40 | 0-40% |

### TYPE B

Type B material shall consist of PG 70-22 and polyester fibers from the Materials Division *Manual of Instructions* approved list of Stabilizers for Asphalt Mixtures (fibers only). The Contractor shall provide the PG 70-22 suppliers data for heating. Fibers shall not exceed 5 percent by weight.

Fiber loading will be determined at the project site in order to minimize/eliminate the need for over banding as described. The fiber loading will be approved by the Engineer.

**TYPE C**

Type C material shall consist of PG 70-22 and polyester fibers from the Materials Division Manual of Instructions approved list of Stabilizers for Asphalt Mixtures (fibers only) at 5 percent by weight. The Contractor shall provide the PG 70-22 suppliers data for heating.

## III. EQUIPMENT

Proper sealing equipment must be used for the specific material listed in accordance with the manufacturer's recommendations for the Sealant specified. The equipment for hot applied sealant compounds shall be a melting kettle of double boiler, indirect heating type, using oil as a heat-transfer medium. The kettle shall have an effective mechanically operated agitator, a re-circulation pump and shall be equipped with a positive thermostatic temperature control which shall be checked for calibration before beginning work. The unit shall be capable of maintaining the specified mixing temperature within 10 degrees F. Manufacturer's recommendations for mixing and application temperatures shall be followed with the latter being measured at the nozzle of the applicator wand. Overheating or direct heating of the sealant material shall not be permitted. The hoses, connectors and applicator wand shall all be insulated.

## IV. CONSTRUCTION

The sealant shall not be placed when the ambient or pavement temperatures fall below 45 degrees F, or when moisture is present in the crack to be sealed.

Prior to sealing, cracks shall be thoroughly cleaned as approved by the Engineer using an oil free hot air blasting heat lance capable of a velocity of 3000 fps at 3000 degrees F. Cracks shall be cleaned such that all dirt, debris, moisture and other foreign materials that will prevent bonding of the sealant are removed to a minimum depth of 1 inch. All foreign material (i.e., dirt, grass, rocks) shall be removed from the pavement to prevent re-contamination of the crack. Cracks shall be completely dry before sealing. Any crack not meeting the approval of the Engineer shall be re-cleaned and dried.

The sealant shall be pumped directly into the crack from the heater-melter unit at the temperature specified by the manufacturer **immediately following the cleaning of each crack**. Cracks shall be sealed in the following manner as approved by the Engineer:

TYPE A - Cracks shall be filled from the bottom up in a continuous manner such that the crack is completely filled level with the pavement surface, and the sealant shall overlay the crack at the pavement surface leaving a maximum “over-banded" appearance of 1-inch wide on each side of the crack. The material shall not continue to flow beyond these limits once a crack is sealed. The height of the sealant above the pavement surface shall not exceed 1/8 inch. For this method of sealing, the applicator wand shall be equipped with a shoe that will produce the extruded over-band as well as completely fill the crack.

TYPE B - Cracks shall be filled from the bottom up in a continuous manner such that the crack is completely filled level with the pavement surface. The sealant may overlay the surface on each side of the by no more than ½ inch or leave a no “over-banded" appearance. The material shall not continue to flow beyond these limits once a crack is sealed. The height of the sealant above the pavement surface shall not exceed 1/8 inch. For this method of sealing, the applicator wand shall be equipped with a shoe that will minimize the extruded over-band as well as completely fill the crack.

TYPE C – Prior to sealing, the cracks shall be routed to a minimum depth of 1 inch and to a minimal width of ½ inch. Cracks shall be filled from the bottom up in a continuous manner such that the crack is completely filled level with the pavement surface, and the sealant shall overlay the crack at the pavement surface leaving a no “over-banded" appearance. The material shall not continue to flow beyond these limits once a crack is sealed. The height of the sealant above the pavement surface shall not exceed 1/8 inch.

Prior to the start of each day’s operation, the applicator wand and hose shall be heated per the equipment manufacturer’s recommendations and the material in the heater-melter unit re-circulated.

The applicator wand shall be returned to the mixing unit and the sealant material re-circulated immediately upon completion of each crack sealing.

Any crack in hydraulic cement concrete pavement which cannot be filled due to the sealant draining into a large void, shall be plugged with a suitable material (i.e. backer rod) approved by the Engineer prior to the project, and then filled. After being plugged, recleaning of the crack may be required prior to filling with sealant.

During the heating and application of the crack sealing material, the temperature of the material shall be measured and recorded on two hour intervals by the Contractor. For Type A material, the material shall never be heated over 420 degrees F. For Type B and C material, the material shall not be heated above 375 degrees F. Any material heated above these temperatures shall be discarded (i.e. all material in the heater-melter unit) and not paid for by the Department. Additionally, if the material becomes lumpy or has poor flow at elevated temperature, then the material shall be discarded (i.e. all material in the heater-melter unit) and not paid for by the Department.

Traffic shall be kept off the pavement surface until the crack sealant has cured to the point it will not track or be distorted by traffic. The Contractor shall replace, at his or her expense, any sealant that pulls out within 96 hours after opening the pavement to traffic.

## V. METHOD OF MEASUREMENT

METHOD A – CONVERSION APPROACH

Sealant for cracks or joints will be measured by the pound. At the beginning of each workday, the Engineer, or his or her appointed representative, shall measure the amount of material in the heater-melter unit and log all additional material added during the day, and measure the amount of material remaining in the heater-melter to determine the total poundage used for that day. No payment will be made for waste material.

For the purpose of converting the liquid material in the heater-melter unit from gallons to pounds, the Contractor shall use a calibrated measuring rod to determine the actual quantity of material in gallons, and same shall be converted to pounds taking into consideration the temperature of the material at the time of measurement. A chart or other approved conversion method furnished by the sealant material manufacturer/supplier shall be used to perform the conversion from gallons to pounds.

METHOD B – DIRECT MEASUREMENT APPROACH

Sealant for cracks or joints will be measured by the pound. At the beginning of each workday, the Contractor shall provide the Engineer the certified weight of the heater-melter unit. During the day’s operation, the Engineer will log all additional material added to the heater-melter unit. At the end of the day’s operation, the Contractor shall provide the Engineer the certified weight of the heater-melter unit including the unused material in the heater-melter unit. The Engineer will

determine the pounds of material applied for payment purposes. No payment will be made for waste material.

## VI. BASIS OF PAYMENT

TYPE A and B

**Crack Sealant/Filler** will be paid for at the contract unit price per pound, which price shall be full compensation for providing the sealant/filler, complete-in-place, including cleaning and sealing the cracks and for all tools, labor, equipment, materials and incidentals related fully completing the installation.

TYPE C

**Crack /Sealant/Filler** will be paid for at the contract unit price per pound, which price shall be full compensation for providing the sealant/filler, complete-in-place, including routing, cleaning and sealing the cracks and for all tools, labor, equipment, materials and incidentals related fully completing the installation.

Payment will be made under:

| Pay Item | Pay Unit |
|---|---|
| Crack Sealant/Filler (Type A) | Pound |
| Crack Sealant/Filler (Type B) | Pound |
| Crack Sealant/Filler (Type C) | Pound |

VIRGINIA DEPARTMENT OF TRANSPORTATION
2007 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS

## SUPPLEMENTAL SECTION 200—GENERAL

**SECTION 200—GENERAL** of the Specifications is amended as follows:

**200.06-Technician and Batcher Certification** is replaced with the following:

Certification for technicians and batchers will be awarded by the Department upon a candidate's satisfactory completion of an examination.

(a) **Central Mix Aggregate Technician:** A Central Mix Aggregate Technician designs and makes necessary adjustments in job mixtures at the plant based on an analysis of the specified material. The technician also samples materials and conducts any tests necessary to put the plant into operation and produce a mixture in accordance with the applicable Specifications.

(b) **Asphalt Plant Level I Technician:** An Asphalt Plant Level I Technician samples materials.

(c) **Asphalt Plant Level II Technician:** An Asphalt Plant Level II Technician samples material and is capable of conducting any tests necessary to put the plant into operation.

(d) **Concrete Plant Technician:** A Concrete Plant Technician performs necessary adjustments in the proportioning of material used to produce the specified concrete mixtures

(e) **Concrete Batcher:** A Concrete Batcher performs the batching operation. The batcher implements adjustments only at the direction of a certified Concrete Plant Technician unless the batcher's certification authorizes otherwise.

(f) **Asphalt Field Level I Technician:** An Asphalt Field Level I Technician provides quality control of the placement operations of Asphalt Concrete.

(g) **Asphalt Field Level II Technician:** An Asphalt Field Level II Technician inspects asphalt concrete placement in accordance with applicable requirements.

(h) **Concrete Field Technician:** A Concrete Field Technician provides quality control of placement operations for hydraulic cement concrete in accordance with applicable requirements.

(i) **Asphalt Mix Design Technician:** An Asphalt Mix Design Technician is responsible for designing and adjusting mixes as needed, reviewing and approving all test results, having direct communication with the plant for making recommended adjustments and is capable of conducting any tests necessary to put the plant into operation.

(j) **Aggregate Properties Technician:** An Aggregate Properties Technician conducts all aggregate tests on aggregate used in asphalt concrete in accordance with applicable requirements

(k) **Slurry Surfacing Technician:** A Slurry Surfacing Technician inspects the placement of emulsified asphalt slurry seal and latex modified emulsion treatment (Micro-surfacing) in accordance with applicable requirements.

(l) **Surface Treatment Technician:** A Surface Treatment Technician inspects the placement of single seal and modified (blotted) seal coats in accordance with applicable requirements.

VIRGINIA DEPARTMENT OF TRANSPORTATION
2007 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS

**SUPPLEMENTAL SECTION 210—ASPHALT MATERIALS**

**SECTION 210—ASPHALT MATERIALS** of the Specifications is replaced with the following:

**210.01—Description**

These specifications cover the manufacturing and material requirements for asphalt material consisting of asphalt, asphalt cement, asphalt cutback, or asphalt emulsion as defined in ASTM D8.

**210.02—Materials**

Asphalt material shall be homogeneous and shall conform to the following:

(a) **Rapid curing and medium curing liquid asphalts used as surface treatments** shall contain a heat-stable additive conforming to the requirements of Section 211.

(b) **Liquid asphalt material** will be tested for coating ability in accordance with the requirements of AASHTO T182, with the following modifications:

1. Material that can coat 95 percent of a shady dolomite will be classified Type I.

2. Material that can coat 95 percent of a siliceous gravel wetted with 2 percent water by weight will be classified Type II.

(c) **Rapid curing cutback asphalts** shall conform to the requirements of AASHTO M81.

(d) **Medium curing cutback asphalts** shall conform to the requirements of AASHTO M82.

(e) **Cements** shall be viscosity graded and shall conform to the requirements of AASHTO M226, Table 2, except that the loss on heating shall be not greater than 1.0 for AC-5, 0.8 for AC-20, and 0.5 for all other grades.

(f) **Emulsions** shall conform to the requirements of AASHTO M208 and shall be Type I as specified herein except that CRS-2 shall be Type II as specified herein. CRS-1h shall conform to the requirements of AASHTO M208 for CRS-1 except that the penetration shall be 40 to 110. Emulsions will be sampled and tested in accordance with the requirements of AASHTO T59 except that viscosity will be tested in accordance with the requirements of VTM-64.

(g) **Polymer Modified Cationic Emulsified Asphalt** shall conform to the requirements of AASHTO M316.

(h) **Non-tracking tack** will be tested in accordance with the requirements set forth in Section 210.07.

**210.03—VDOT Asphalt Acceptance Program (VAAP)**

Acceptance into the VAAP

(a) Asphalt materials will be accepted under the VDOT Asphalt Acceptance Program (VAAP). This involves sampling, testing, documentation and certification of the product by the manufacturer in combination with a Department monitoring effort. Performance Graded Binder suppliers shall conform to AASHTO R-26 and Emulsion supplies shall conform to AASHTO PP-71 to be added to the VAAP, with provisions listed below.

(b) To have a new facility added to the VAAP, producers shall:

1. Submit a split sample of each material to be approved to VDOT Central Office Materials Division for testing.

(c) Approved shipping facilities from the VAAP that need to add a material to the approved list shall:

1. Submit a split sample of the material to be approved to VDOT Central Office Materials Division for testing.

**210.04—VDOT Asphalt Acceptance Program Requirements and Compliance**

The manufacturer shall ensure the following are performed:

(a) Asphaltic materials shall be sampled at a minimum frequency of once a month and when additional materials are added to existing material and tested in accordance with the specified methods in Section 210.07.

(b) A file or certified test reports representing the asphaltic material shall be maintained by the manufacturer.

(c) A copy of the certified test report shall be provided to the VDOT Central Office Materials Division at Elko within 30 days of sampling. Failure to comply with this requirement can result in removal from the VAAP and the approved materials list.

(d) Manufacturers shall supply to the Central Office Materials Division at Elko a summary sheet of quantities shipped to state work annually in January of the following year. This summary sheet will show the number of gallons of each type/grade of material shipped to Virginia addresses.

(e) The manufacturer shall submit to the Department a detailed plan of action describing the procedures to be taken to ensure tracking of sample test results and the material represented by these results.

**210.05—Sampling**

(a) Samples shall be taken in the presence of VDOT personnel or a VDOT representative.

(b) Samples taken for testing of asphaltic materials are to be not less than one quart (one liter) of material (0.5 gallons (2 liters) for asphalt emulsions).

(c) Care is to be taken to ensure that the samples are not contaminated and the sample containers are perfectly clean and dry before filling.

(d) Immediately after filling, sample containers are to be tightly closed, and properly marked for identification on the container itself.

**210.06—Testing**

(a) The Manufacturer shall conduct the standard control tests on asphaltic materials as detailed in Section 210.07.

(b) Testing for certified test reports shall be performed by the Manufacturer's personnel in the Manufacturer's VDOT approved laboratory or by a VDOT approved commercial testing facility.

(c) The Department shall conduct acceptance testing at a frequency of a minimum of 1 test per month per type/grade of asphaltic material that has been supplied to VDOT projects during the previous month at the VDOT Central Office Materials at Elko. This frequency is to be maintained during the construction season, with a lesser frequency during the remainder of the year.

(d) Laboratories conducting quality control must be certified by VDOT as meeting the requirements of certification:

1. All Binder Laboratories shall hold AASHTO Accreditation and provide VDOT with a copy of accreditation.

2. All Emulsion Laboratories shall be one of the following two levels:

   a. Level I: AASHTO Accreditation

      (1) Provide VDOT with a copy of accreditation.

   b. Level II: AMRL Proficiency Sample Program

      (1) Provide VDOT with copies of last "Round Robin" results, with ratings for each type of asphaltic material tested and copies of the lab's response for each sample.

      (2) Development of a calibration program and personnel record keeping procedure, with results being kept on file at site.

3. All laboratories under the VAAP shall be AASHTO accredited by January 1, 2016.

4. Test Reports

   a. The Manufacturer shall maintain a file of certified test reports for all asphaltic materials ultimately shipped to Contractors that perform work for VDOT.

   b. Test Reports shall indicate that the material shipped meets the requirements for that type/grade of asphaltic material and will show the test results that were obtained to determine compliance with the applicable specifications.

   c. Records shall be kept by the Manufacturer for at least 12 months and shall be available for verification by VDOT personnel.

d. Copies of certified test results shall also be sent to the VDOT Central Office Materials Division at ELKO.

e. Certified Test Reports shall be a company's standard form containing the following information:

(1) Manufacturer's name and address

(2) Type and grade of asphaltic material

(3) Testing performed (AASHTO or Virginia Test Method designation)

(4) Test results and date obtained

(5) Quantity represented

(6) Tank Number

(7) Unique Report Identifier

(8) Statement indicating that the Manufacturer "certified that these are the test results obtained on the material tested under the VAAP program".

**210.07—Tests**

(a) **PG Asphalt Binders:**

1. Certified Test Reports for **PG Asphalt Binders** shall be based upon the results of tests performed in accordance with AASHTO M332, Table 1. The Manufacturer is not required to perform the Direct Tension Test, AASHTO T314.

2. Certified test results for Superpave PG Asphalt Binders are to be based upon the results of tests performed in accordance with AASHTO R 29, as specified below:

a. Original Material

| | |
|---|---|
| Flash Point °C | AASHTO T 48 |
| Viscosity @ 135°C/100°C | AASHTO T316 |
| Dynamic Shear, 10 Rad/sec | AASHTO T 315 |

b. RTFO (AASHTO T 240) Material

| | |
|---|---|
| Mass Loss % | AASHTO T 240 |
| Dynamic Shear, 10 Rad/sec | AASHTO T 315 |
| Multiple Stress Creep Recovery (MSCR) Test | AASHTO T 350 |

c. Pressure Aging Vessel, Residue at 100°C (AASHTO R 28)

| | |
|---|---|
| Dynamic Shear, 10 Rad/sec | AASHTO T 315 |
| Creep Stiffness, 60 sec | AASHTO T 313 |
| M-Slope | AASHTO T 313 |

3. For asphalt binders tested in accordance with AASHTO T 350, indication of elastic response shall be determined using Figure X1.1 Nonrecoverable Creep Compliance Versus Percent Recovery in AASHTO M 332.

(b) **Cutback Asphalts:**

1. Certified Test Reports for **Cutback Asphalts** shall be based upon the results of tests performed in accordance with AASHTO M81 and M82. The Manufacturer is not required to perform the Flash Point, Ductility, and Solubility tests unless otherwise directed by the Engineer. VDOT shall perform Ductility and Solubility tests on all acceptance samples. Flash Point tests will be performed by VDOT periodically. When performed by VDOT, failure of either sample on Flash Point, Ductility, and Solubility will be considered sufficient reason to require the Manufacturer to perform this testing. If the Manufacturer elects to conduct these tests to better control production, the results shall be included on the certified test report.

2. When used in surface treatments, the Coating Ability test shall be conducted subject to the specifications listed in Section 210.02.

(c) **Emulsified Asphalts:**

1. Certified Test Reports for **Emulsified Asphalts** shall be based upon the results of tests performed in accordance with AASHTO M208 or AASHTO M316, as specified below:

   a. Cationic Emulsions- Table 1, specifically

      (1) Tests on Emulsions:
      - Saybolt Furol Viscosity
      - Sieve Test (if necessary)
      - Demulsibility or Classification test
      - Particle Charge Test
      - Residue by Distillation

      (2) Tests on residue from distillation:
      - Penetration

   b. CSS-1h (Quick Set):

      Same tests as Cationic Emulsions, as well as:
      - Quick set Emulsified Asphalt Setting Time (VTM-89)

   c. Latex Modified Cationic Emulsions (Quick Set)

      (1) CQS-1h Latex Modified (CQS-1hLM)

         a) Tests on Emulsions
         - Saybolt Furol Viscosity
         - Sieve Test (if necessary)
         - Particle Charge Test
         - Residue by Evaporation (VTM-78)

         b) Tests on residue
         - Penetration

- Ring and Ball Softening Point

(2) CRS-2 Latex

a) Tests on Emulsions
- Saybolt Furol Viscosity
- Sieve Test (if necessary)
- Particle Charge Test
- Residue by Distillation

b) Tests on residue by Distillation
- Penetration
- Ring and Ball Softening Point
- Elastic Recovery

2. The Manufacturer is not required to perform the Flash Point, Ductility, and Solubility tests unless otherwise directed by the Engineer. VDOT shall perform Ductility and Solubility tests on all independent assurance (monitor) and Q.A. samples. Flash Point tests will be performed by VDOT periodically. When performed by VDOT, failure of either sample on Flash Point, Ductility, and Solubility will be considered sufficient reason to require the Manufacturer to perform this testing. If the Manufacturer elects to conduct these tests to better control production, the results shall be included on the certified test report.

(d) **Non-Tracking Tack:**

1. Certified Test Reports for Non-Tracking Tack shall be based upon the results of tests performed, as specified below:

a. Tests on Non-Tracking Tack:
- Saybolt Furol Viscosity
- Residue by Distillation

b. Tests on residue by distillation:
- Ring and Ball Softening Point

**210.08—Storing and Shipping**

(a) **Shipping:**

1. Shipments of asphalt material shall be made in transporting media that are free from contamination. Tank trucks or trailers shall be equipped with an Engineer approved sampling device. The device shall have an inside diameter of 1/2 to 1 inch and a gate valve or petcock. The device shall be built into the tank or the recirculating or discharge line so that a sample can be drawn during circulation or discharge.

2. All Shipping documents shall contain sufficient information such that at any point, the material may be traceable back to the original test results. If the material is mixed with other approved material for storage, the record system will be such as to assure the traceability of all the material which is being mixed.

3. All shipping documents shall be accompanied by a statement similar to “We certify that all material being shipped on this invoice/bill of lading has been tested and approved under the Virginia Asphalt Acceptance Program and that the

material has been loaded under the supervision of our representative into carriers that are suitable for shipment of this material."

4. All shipping documents shall be kept by the recipient of the material for at least 12 months and are to be available for verification by VDOT personnel l.

5. Only material tested and certified in accordance with the VAAP shall be mixed and shipped to VDOT projects.

(b) **Storing:** Asphalt material shall be placed in storage tanks that are free from contamination.

**210.09—Payment Adjustment System**

If the asphalt material represented by any one sample does not conform to the requirements herein and the material is a pay item, the Engineer will reduce the contract unit price for the item by 4 percent for each property that does not conform to the Specifications for the quantity represented by the sample that was used on the project. The Engineer will reject any unused material represented by the failing sample.

The Engineer will consider any failed sampled asphalt material that is not a pay item unacceptable and subject to the requirements of Section 105.18 and Section 106.10.

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
**ASPHALT SURFACE TREATMENT**

September 13, 2012

## I. DESCRIPTION

This work shall consist of the application of a single or multiple course of asphalt surface treatment in accordance with the Specifications and as specified herein.

## II. DEFINITION OF TERMS

**Seal Treatment** is defined as one application of asphalt material and one application of cover aggregate.

**Modified Single Seal** is defined as two applications of asphalt material, one application of cover aggregate and one application of blot fine aggregate.

**Modified Double Seal** is defined as three applications of asphalt material, two applications of cover aggregate and one application of blot fine aggregate.

## III. MATERIALS

The Contractor shall demonstrate the compatibility of the asphalt emulsion and cover aggregate (excluding the blot seal) prior to construction of the surface treatment. This testing shall be conducted in accordance with VTM-65 in the presence of the Engineer for each asphalt and aggregate combination. In addition, the Contractor shall conduct the compatibility test at least once a week on stockpiled materials and any additional test, as deemed necessary by the Engineer. Compatibility test results shall be submitted to the Engineer. All material combinations shall pass the compatibility test unless waived in writing by the Engineer.

If during the life of this project excessive loss of cover aggregate occurs, the Engineer may suspend the work in accordance with the requirements of Section 108 of the Specifications until the cause of the loss of cover material is corrected.

(a) **Asphalt Materials** shall conform to Section 210 of the Specifications except as specified herein.

**CRS-2** shall be a rapid setting cationic emulsified asphalt when tested in accordance with ASHTO T59 Testing Emulsified Asphalt. CRS-2 shall meet the requirements of Type II coating ability.

**CRS-2h** shall conform to CRS-2 except that the penetration shall be 40 to 100.

**RC-250** when permitted during the period of May 1 to October 1 shall meet the requirements of Type I coating ability. When permitted during the period of October 1 to May 1 the requirements of Type II coating ability shall apply.

**CRS-2M** (Polymer Modified Cationic Emulsified Asphalt) shall meet the physical requirements of asphalt material per AASHTO M316 for CRS-2L or CRS-2P except as

modified herein. The minimum elastic recovery for CRS-2L, as tested in accordance to AASHTO T301, shall be 50 percent.

The Contractor shall provide written certification of the test results.

(b) **Cover Material** — Coarse and Fine aggregate shall conform to Section 203 and 202 of the Specifications. Coarse aggregate shall be a minimum Grade B. Lightweight aggregate shall conform to the requirements of Section 206 of the Specifications except as noted herein. For light weight aggregate when the material passing the No. 200 sieve by washing is dust of fracture, the percentage of deleterious material shall not exceed 1.7 percent. Crushed stone shall only be used on roads of Traffic Groups VI and above unless the surface treatment consists of modified single seal treatment or modified double seal treatment. Aggregates shall not be used within 24 hours of washing. Aggregate from more than one source shall not be furnished for a specified route or a group of sub-division routes unless permitted by the Engineer.

The following modifies the aggregate material as defined in Section 203 of the Specifications:

| Designation | Modification |
|---|---|
| N | Non-polishing material only |
| L | Lightweight |
| G | Washed gravel only |

Notes: Where 8N is specified, it shall meet the gradation requirements of No. 8P.
Where 8L is specified it shall meet the following gradation:

| Sieve Size | Percent Passing |
|---|---|
| 1/2 | 100 |
| 3/8 | 75-100 |
| No. 4 | 10-40 |
| No. 8 | max. 5 |

Where 8G is specified, it shall meet the gradation requirements of No. 8P.

## IV. PROCEDURES

Weather limitations for asphalt surface treatment work shall be in accordance with the requirements of Section 314 of the Specifications. The Contractor shall have a certified Surface Treatment Technician present during the surface treatment operation.

The Contractor shall use one steel wheel roller and one pneumatic-tire roller on modified single seal, modified double seal and seal treatments using CRS-2L asphalt material in a sequence approved by the Engineer. The Contractor is directed to the exceptions to these requirements found in IV.(c) of this special provision. These treatments shall be subjected to a minimum of one complete pass of each type of roller on either the cover aggregate or the blot seal coat.

(a) **Seal Treatment** shall conform to the requirements of Section 312 of the Specifications. When seal treatment is specified, the Contractor shall protect the cover aggregate from traffic until the asphalt material has sufficiently cured to carry traffic without damage to the treatment.

The rate of application shall be in accordance with VTM-66. The rate of application for the cover aggregate and asphalt emulsion shown in the contract are approximate and the actual rate shall be determined by the Contractor and approved by the Engineer.

After the roadway has been treated and cured, the Contractor shall lightly broom the surface to remove any excessive aggregate in accordance with the requirements of Section 312.04 of the Specifications and as directed by the Engineer. Brooming shall be performed in such a manner as not to damage the embedded aggregate material.

(b) **Modified Single Seal and Modified Double Seal Treatments**, when specified, shall be lightly broomed on the surface by the Contractor to remove any excessive aggregate in accordance with the requirements of Section 312.04 of the Specifications and as directed by the Engineer. Brooming shall be performed in such manner as not to damage the embedded aggregate material.

No traffic, including delivery trucks, shall be allowed on modified seal treatments until after the blot coat material has been placed and rolled.

1. **Modified Single Seal Treatment**

a. Approximately 0.17 gallons per square yard of asphalt material, of the type specified, shall be applied to the existing surface immediately followed by an application of approximately 15 pounds per square yard of aggregate size No. 8P. The aggregate shall be spread uniformly (one aggregate deep) over the treated surface.

The aggregate shall be rolled immediately at least once with a self-propelled roller of an approved design. When a continuous uninterrupted modified single seal treatment train method is employed, rolling of the initial aggregate course may be omitted.

b. Immediately after the seal coat has been rolled in accordance with IV.(b)1.a., herein a blot seal coat consisting of approximately 0.15 gallons per square yard of asphalt material, of the type specified, shall be applied to the surface treated pavement followed by a uniform application of approximately 10 pounds per square yard of fine aggregate. The fine aggregate shall be Grading A, B or F natural or manufactured in accordance with Section 202 or No. 9 aggregate in accordance with Section 203 of the Specifications, except that the material shall have no more than 5 percent passing the No. 200 sieve by washed analysis. The Contractor is directed to the exceptions to these requirements found in IV.(c) of this special provision. An increase in the application rate for blotter material may be necessary when using natural sand and if the desired results are not achieved with this material, the Engineer may require the use of manufactured sand. Fine aggregate from more then one source shall not be used intermittently. The fine aggregate shall be applied by the use of a self-propelled aggregate spreader of approved design. The blot coat shall be rolled immediately at least once with a self-propelled roller of an approved design. At least 48 hours after the blot coat application, the roadway surface shall be lightly broomed as directed by the Engineer.

2. **Modified Double Seal Treatment**

a. Two applications of asphalt material and cover aggregate shall be applied in accordance with Section IV.(b)1.a. herein, except that at least

one complete pass shall be made with the roller after each aggregate application.

b. A blot coat shall be applied in accordance with IV.(b)1.b. herein.

The application temperature for liquid asphalt material shall conform to Table III-1 of Section 310 of the Specifications, except that the minimum application temperature for CRS-2 and CRS-2L shall be 160 degrees F.

(c) **District-Specific Exceptions for Modified Single Seal and Modified Double Seal Treatments and Seal Treatment**

**Bristol District** — The blot coat for use in modified single seal and modified double seal shall be No. 9 aggregate conforming to Section 203 of the Specifications and applied at a rate of 12 pounds per square yard in lieu of sand. Two pneumatic-tire rollers shall be used on modified single seal, modified double seal and seal treatments using CRS-2L asphalt material.

**Lynchburg, Salem, and Staunton Districts** — The blot coat for use in modified single seal and modified double seal shall be No. 9 aggregate conforming to Section 203 of the Specifications and applied at a rate of 12 pounds per square yard in lieu of sand.

**Hampton Roads District** — The blot coat for use in modified single seal and modified double seal shall be manufactured sand only conforming to Section 202 of the Specifications.

**Fredericksburg District (only Caroline, Spotsylvania, and Stafford Counties)** — The blot coat for use in modified single seal and modified double seal shall be manufactured stone sand conforming to Section 202 of the Specifications.

(d) **Prime Coat**, when specified, shall be applied in accordance with Section 311 of the Specifications. When cover material is specified, rolling shall be performed in accordance with the requirements of Section 312 of the Specifications.

The prime coat shall be permitted to cure prior to the next application of asphalt.

During the period between application of the prime coat and the seal coat, the primed surface shall be kept in repair. Holes, ravels, and areas deficient in primer shall be patched and repaired with asphalt-treated materials by penetration methods or other approved procedures.

(e) **Maintenance, Protection and Performance of the Work** — The Contractor shall be responsible for the maintenance and protection of the seal treatment on the roadway for a period of 48 hours after application.

The Contractor shall exercise control of the delivery and application of the surface treatment materials to prevent damage to the roadway surface. The speed of the delivery equipment and pilot truck shall be limited to a maximum 15 miles per hour. The maintenance and protection shall include, but not be limited to, the placement of signs; the use of flaggers and pilot trucks; and placement of additional asphalt and aggregate material. In the event a failure occurs prior to acceptance, the Contractor shall repair or replace the failed treatment as directed by the Engineer, at no additional cost to the Department.

## V. EQUIPMENT

(a) **Asphalt Distributors and Aggregate Spreaders**

1. Distributors and spreaders shall be calibrated by the Contractor in the presence of the Engineer prior to placing surface treatment; to ensure an even and accurate spray, and aggregate distribution.

2. Asphalt distributors shall be equipped with proper spray nozzles including end nozzles for the application rate specified, to provide uniform coverage throughout the width of the application.

(b) **Rollers**

1. One steel wheel roller and one pneumatic-tire roller shall be used on modified single seal, modified double seal and seal treatment using CRS-2L asphalt material. The Contractor is directed to the exceptions to these requirements found in IV.(c) of this special provision. The steel wheel roller weight shall be between 6 and 8 tons for the tandem type and between 8 and 10 tons for the three-wheel type.

2. Two pneumatic-tire rollers shall be used on the conventional type seal treatment.

## VI. MEASUREMENT AND PAYMENT

**Liquid asphalt** material for seal treatment will be measured and paid for in accordance with Section 312 of the Specifications.

**Aggregate** for seal treatment will be measured and paid for in square yards on a plan quantity basis, which price bid shall include furnishing and applying aggregate, protection of the asphalt surface treatment and all incidentals necessary to complete the work. Authorized increases or decreases to the plan quantity will be adjusted in accordance with Section 109 of the Specifications.

**Modified single seal** and **modified double seal** treatments will be measured and paid for in square yard on a plan quantity basis, which price bid shall include all cost for furnishing and applying liquid asphalt material and cover aggregate, protection of the asphalt surface treatment and all incidentals necessary to complete the work. Authorized increases and decreases to the plan quantities will be adjusted in accordance with Section 109 of the Specifications.

**Brooming** shall be included in the price bid for other appropriate items.

Payment will be made under:

| Pay Item | Pay Unit |
|---|---|
| Aggregate (type) | Square Yard |
| Modified Single Seal | Square Yard |
| Modified Double Seal | Square Yard |

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
**BLOTTED SEAL COATS**

August 22, 2008c

## I. DESCRIPTION

This work shall consist of application of asphalt surface treatment in accordance with this provision and in conformity with the line and grades indicated in the contract documents or designated by the Engineer.

**Type B Blotted Seal** is defined as two applications of liquid asphalt material, one application of cover aggregate and one application of blot fine aggregate.

**Type C Blotted Sea**l is defined as three applications of asphalt material, two applications of cover aggregate and one application of blot fine aggregate.

**Type D Blotted Seal** is defined as four applications of asphalt material, three applications of cover aggregate and one application of blot fine aggregate.

## II. MATERIALS

**Liquid asphalt** materials shall conform to Section 210 of the Specifications.

**Cover aggregate** shall conform to Section 203 of the Specifications.

**Fine aggregate** for blotting shall conform to Section 202 minimum Grading B of the Specifications except that material shall have no more than 5 percent passing the 200 sieve by washing.

## III. APPLICATION

Application rates for asphalt and aggregate material shall be as indicated in the contract documents. These rates of application are approximate only and such rates may be altered at the direction of the Engineer. During application, liquid asphalt material shall be maintained between 160 to 175 degrees F. Cover material shall be applied to a complete coverage of only one aggregate depth over the treated surface.

## IV. PROCEDURES

Procedures shall be in accordance with the Asphalt Surface Treatment special provision and the following provisions:

Each coat of **liquid asphal**t material shall be applied to existing surface and immediately followed by an application of aggregate.

**Aggregate** shall be rolled one pass immediately with a self-propelled steel wheel roller. The roller weight shall be between 6 and 8 tons for tandem type and between 8 and 10 tons for the three wheel type.

**Blot coat** shall be applied with a self-propelled aggregate spreader of approved design and shall be rolled one pass immediately with a self-propelled roller.

## V. MEASUREMENT AND PAYMENT

**Blotted seal coat** will be measured and paid for in square yards for type specified complete-in-place, which price shall be full compensation for furnishing and applying liquid asphalt material, cover material and blot fine aggregate, protection of treatment, rolling, brooming and for all labor, tools, equipment and incidentals necessary to complete the work.

Payment will be made under:

| Pay Item | Pay Unit |
|---|---|
| Blotted Seal Coat (Type) | Square Yard |

**S314DM1**-1109

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
**MACRO-TEXTURE SURFACE TREATMENT**

November 6, 2009

## I. DESCRIPTION

This work shall consist of the production and placement of a polymer modified macro-texture surface treatment in accordance with the Contract, as specified herein, and as directed by the Engineer.

## II. MATERIALS

**A. Asphalt:** The asphalt emulsion shall be polymer modified conforming to the requirements of Section 210 of the Specifications except as noted herein:

| Tests | Method | Minimum | Maximum |
|---|---|---|---|
| | | | |
| Sieve Test, 20 mesh, percent | AASHTO T 59 | | 0.5 |
| Storage Stability Test, 24 hour, percent | AASHTO T 59 | | 1.0 |
| Viscosity, Sayboult Furol @ 122$^0$F, sec. | AASHTO T 59 | 50 | 600 |
| Particle Charge | AASHTO T 59 | Positive | |
| Classification Test | AASHTO T 59 | Pass | |
| | | | |
| Distillation: | | | |
| Oil distillate by volume of emulsion, percent | AASHTO T 55 | | 2 |
| Residue from distillation, percent | Note 1 | 65 | |
| | | | |
| Tests on Residue from Distillation: | | | |
| Penetration, 77$^0$F, 100g., 5 sec. | AASHTO T 59 | 60 | 140 |
| Ductility, 39.2$^0$F, 5cm/min., cm | AASHTO T 51 | 30 | |
| Softening Point, Ring & Ball, degrees F | AASHTO T 53 | 38 | |
| | | | |
| Elastic Recovery, 50$^0$F | Note 2 | 60 | |
| | | | |
| Note 1: AASHTO T 59 modified to maintain a 350$^0$F maximum temperature for 15 minutes. | | | |

Note 2: AASHTO T 301 Elastic Recovery Test: Condition the ductilometer and samples to be treated at $50^0$F. Prepare the brass plate, mold and briquette specimen in accordance with AASHTO T 51. The molds shall be the non-tapered type used for Force Ductility Testing. Keep the specimen at the specified test temperature for 85-90 minutes. Immediately after conditioning, place the specimen in the ductilometer and proceed to elongate the sample to 20 cm at a rate of pull of 5cm/min. After the 20 cm elongation has been reached, stop the ductilometer and hold the sample in it's elongated position for five minutes. After five minutes, clip the sample approximately in half by means of scissors or other suitable cutting device. Let the sample remain in the ductilometer in an undisturbed condition for one hour. At the end of this time period, retract the half sample specimen until the two broken ends touch. At this point note the elongation (E) in cm. Calculate the percent recovery by the following formula:

$$\% \text{ Recovery} = \frac{20 - E}{20} \times 100$$

Modifiers shall not be post-added to the finished emulsion. All modifiers shall be incorporated into the base asphalt prior to the emulsification process at the manufacturing facility. The emulsion, upon standing undisturbed for a period of 24 hours shall show no milky white colored substance on its surface. It shall have a homogeneous brown color throughout. The emulsion used for the sweep test shall be the same as that used on the jobsite.

**B.** **Aggregate:** Aggregate shall conform to the requirements of Section 203 of the Specifications except as noted herein.

1. All aggregate shall be crushed.

2. Moisture shall be maintained so that the surface is visibly moist by using methods as needed. The aggregate shall not be excessively moistened. If water is free draining from aggregate haul trucks, moisture will be considered excessive.

3. Fractured Faces – (ASTM D 5821)

| | |
|---|---|
| One Fractured Face | 98% minimum |
| Two or more Fractured Faces | 95% minimum |

4. Flakiness Index – (FLH T 508) 17% maximum
Federal Land Highways (FLH) Test Method T 508

5. Grading – (AASHTO T 27)

| Sieve Size | Percent Passing |
|---|---|
| 1/2 inch | 100 |
| 3/8 inch | 90-100 |
| No. 4 | 12 max. |
| No. 200 | 1.0 max. |

**C.** **Macro-Texture Surfacing Design.** At least 3 weeks before beginning this work, the Contractor shall submit a macro-surfacing wearing course design to the Engineer for review. The Contractor shall indicate on the design all material sources, emulsion and aggregate application rates, and certify that the emulsion and aggregate, when tested in accordance with the Macro-Surfacing Sweep Test available from the Central Office

Materials Division, Pavement Design and Evaluation Section, results in a maximum aggregate mass loss equal to or less than 15 percent.

## III. PROCEDURES

**A.** **Weather Limitations** shall conform to Section 314.03 of the Specifications.

**B.** **Surface Preparation:** Immediately prior to application of the macro-surfacing wearing course, clean the surface of vegetation, loose materials, dirt, mud, and other objectionable items. When sealing open cracks any over-banding of crack sealant shall not be left on either side of the crack. Thermoplastic and tape pavement markings shall be removed prior to placement. Protect existing raised/recessed pavement markers by methods acceptable to the Engineer.

**C.** **Macro-Texture Application:** Emulsion and aggregate shall be uniformly applied in a continuous variable width. Emulsion shall be applied with a self-propelled, front feed, continuous-loading vehicle. Emulsion shall be applied so that no more than 48 inches of emulsion is exposed without aggregate cover. The Contractor shall apply both the emulsion and aggregates in a single pass within $\pm$ 10 percent of the design application rates. Damp or moist aggregates may be used if no free water is evident in the support vehicles.

The emulsion shall be maintained at a minimum temperature of 140 degrees F in the transport vehicles. No emulsion shall be stored in the application or support units overnight. Material not used within 48 hours of initial delivery to the job site shall be returned to the production facility at no additional cost to the Department.

Transfer of emulsion and aggregates shall be done without spillage. Immediately stop application of the macro-texture if spillage occurs and remove the loose aggregate and/or emulsion.

The Contractor shall daily provide the Engineer with the gallons of emulsion applied and tons of aggregate and the area covered at the end of each day's work.

For inaccessible areas, portable pressurized units shall be used to spray the emulsion uniformly over the surface. Gage quantity of material placed at one time, according to facilities for handling, spreading, and rolling coarse aggregate, as well as the temperature of the surface and the bituminous material. Insure uniformity at the junction of the two applications both transversely and longitudinally.

Within 2 minutes of application, roll the entire surface of the macro-texture wearing course with a minimum of one pass of a roller. Use a sufficient number of rollers to keep pace with the continuous application operation. Complete additional passes of the roller, as needed, within 10 minutes of application.

Complete all rolling before sweeping. Use a sufficient number of sweepers to keep pace with the continuous application operation. When the surface temperature is less than 125 degrees F and the relative humidity no more than 75 percent, sweep the entire surface of the macro-texture to remove excess aggregate, without damage, within 1 hour after application. When the surface temperature is greater than 125 degrees F and the relative humidity is greater than 75 percent, sweep the macro-texture to remove excess aggregate when recommended by the bituminous material producer. Sweep the entire surface of the macro-texture a minimum of three times.

## IV. PROTECTION OF SURFACE

Traffic will not be allowed on the newly completed surface until adequate stability and adhesion has been attained and the material is sufficiently cured to prevent distortion, flushing of bituminous material to the surface, or loss of aggregate. Do not allow vehicular traffic on the newly completed surface until excess aggregate is removed.

## V. EQUIPMENT

**A. Asphalt Distributor:** Shall be calibrated by the Contractor in the presence of the Engineer prior to placement to ensure an even and accurate spray. Calibration will be considered acceptable when the spray rate is within 0.02 gallon per square yard of the design application rate.

The asphalt distributor shall have an insulated tank with access for cleaning, a functional volume measuring device or calibrated tank, and a thermometer for measuring emulsion temperature in the tank. It shall have dual, full circulation spray bars that are adjustable laterally and vertically and spray nozzles, including end nozzles that have individual control valves for adjustment. The asphalt distributor shall be capable of synchronizing the emulsion spray bar width to the aggregate spreader width to prevent exposed emulsion.

**B. Aggregate Distributor:** Shall be calibrated by the Contractor in the presence of the Engineer prior to placement to ensure an even and accurate distribution of material. Calibration will be considered acceptable when the application rate is within 1.0 pound per square yard of the design application rate.

The aggregate distributor shall have an integrated, aggregate hopper and variable width spreader, including power-driven augers and spread rolls to uniformly deliver the aggregate to the spreader gate openings. It shall also have a continuous conveyor to feed the hopper, and full-width screen to reject oversize aggregate and foreign objects from entering the hopper.

**C. Rollers:** The Contractor shall use either a steel wheel or pneumatic-tire roller or combination of rollers to seat the aggregate. The pneumatic-tire roller shall have a minimum contact pressure of 80 pounds per square inch and maximum speed of 5 miles per hour. The steel wheel roller weight shall be between 6 and 8 tons for the tandem type.

**D. Sweeper:** Shall be vehicle mounted with variable speed, angle, and contact pressure. Sweepers shall have rotary brooms with bristles of not less than 5 inches in length. Other types of sweeping devices may be used if acceptable to the Engineer. No sweeping vehicles equipped with tractor tires shall be used.

**E. Support Vehicles:** Use support vehicles as necessary to continuously load emulsion and aggregates to allow for a continuous, non-stop operation.

**F. Flagger Service and Pilot Vehicles:** When needed, the Contractor shall provide in accordance with Section 512 of the Specifications.

## VI. TEST SECTION

At the start of this work, unless waived by the Engineer, the Contractor shall construct at least a 400-foot test section at no cost to the Department. Construct the test section at a location designated by the Engineer. Construct the test section using the same equipment, and the same material sources and application rates indicated on the design and that will be used on the project. During construction of the test section, demonstrate that the macro-texture wearing

course is capable of final sweeping, without damage, within one hour after application. If the demonstration is unsuccessful, corrective actions shall be taken until results are acceptable to the Engineer. Additional test section(s) shall be placed at no cost to the Department until the demonstration is satisfactory to the Engineer.

## VII. DEFECTIVE WORK

Where the Engineer deems work defective, the Contractor shall remove and replace, apply additional applications of macro-texture, or repair such areas using methods acceptable to the Engineer at no cost to the Department.

## VIII. MEASUREMENT AND PAYMENT

**Macro-texture surface treatment** will be measured and paid for at the contract unit price per square yard on a plan quantity basis, complete-in-place, which price bid shall include furnishing and applying aggregate and modified polymer asphalt emulsion, protection of the macro-texture surface treatment and all incidentals necessary to complete the work.

**Sweeping** shall be included in the price bid for other appropriate items.

| Pay Item | Pay Unit |
|---|---|
| Macro-Texture Surface Treatment | Square Yard |

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
**SECTION 512—MAINTAINING TRAFFIC**
**(ASPHALT SCHEDULES)**

September 25, 2014c

**SECTION 512—MAINTAINING TRAFFIC** of the Specifications is amended as follows:

**Section 512.01—Description** is replaced by the following:

This work shall consist of maintaining and protecting traffic through areas of construction, maintaining public and private entrances and mailbox turnouts, and protecting the traveling public within the limits of the project in accordance with the requirements of the *Virginia Work Area Protection Manual* (*VWAPM)*, the "Typical Traffic Control" notes and drawings herein, and the Contract documents or as directed by the Engineer.

**Section 512.03—Procedures** is amended to include the following after the second paragraph:

The Contractor shall use the requirements in the traffic control layout details in the *VWAPM*, the "Typical Traffic Control" notes and drawings herein, and the Contract for control of traffic during the resurfacing of roadway pavements. The "Typical Traffic Control" notes and drawings herein shall be considered as amendments added to the *Virginia Work Area Protection Manual.* In the event the work site requires a different layout or a modification of the aforementioned layouts, the Engineer must approve the Contractor's design prior to use.

Traffic Groups based on the vehicles per day (ADT) are as follows:

| Traffic Group | ADT | Traffic Group | ADT |
|---|---|---|---|
| I | 0-9 | X | 2,000-2,999 |
| II | 10-24 | XI | 3,000-3,999 |
| III | 25-49 | XII | 4,000-4,999 |
| IV | 50-99 | XIII | 5,000-5,999 |
| V | 100-249 | XIV | 6,000-9,999 |
| VI | 250-399 | XV | 10,000-14,999 |
| VII | 400-749 | XVI | 15,000-19,999 |
| VIII | 750-999 | XVII | 20,000-29,999 |
| IX | 1,000-1,999 | XVIII | 30,000-39,999 |
| | | XIX | 40,000 & over |

**Section 512.03—Procedures** is amended to replace (a) and (b) with the following:

(a) **Signs:** The Contractor shall furnish and install temporary sign panels necessary for the project which shall include but not be limited to, maintenance of traffic, and begin and end of construction. The Contractor shall also furnish and install those signs not listed in the *VWAPM*, the "Typical Traffic Control" notes and drawings herein, or the Contract (such as "**Grooved Pavement Ahead", "Begin Right Turn Lane, Begin Left Turn Lane"** that may be required by the Engineer to ensure the safety of the traveling public for this project.

Signs and their placement shall conform to the requirements of the *Virginia Work Area Protection Manual*, the *MUTCD*, the "Typical Traffic Control" notes and drawings herein, the Contract documents and as directed by the Engineer. The Contractor shall submit to

the Engineer a sketch of his proposed construction sign layout for approval prior to installation. The Contractor shall furnish supports, i.e., wood posts and barrier and wall attachments, and hardware for use with the temporary sign panels. In lieu of using wood posts, the Contractor may request permission from the Engineer to use alternate products on the Special Products Evaluation List. The request shall contain all information related to the manufacturer's installation requirements, including but not limited to, post spacing and the square footage of sign panel the product can support based on AASHTO's requirements for a wind speed of 60 miles per hour. The Contractor shall be responsible for covering, uncovering, or removing and reinstalling existing signs that conflict with the signs needed for maintenance of traffic. Covering of existing signs shall be accomplished in accordance with the requirements of Section 701.03(d) of the Specifications. The Contractor shall furnish and install flags for the temporary sign panels as directed by the Engineer except flags will not be required for use on portable sign supports. Signs shall be installed and attached to wooden supports in accordance with Standard WSP-1 of the Department's *Road and Bridge Standards.* The size and number of wooden supports shall be in accordance with the standard drawings. When alternate products for supports are approved for use by the Engineer, the supports, including size and number, and signs shall be installed in accordance with the manufacturer's recommendation.

Retroreflective flexible sign base materials conforming to the requirements of Section 247 of the Specifications for material that is not Type VI material may be used both day and night up to a maximum of three continuous days.

The Contractor may furnish portable sign stands for mounting temporary sign panels in accordance with the following:

1. Portable sign stands for sign installations, their placement and allowed time of use in lieu of post installation shall conform to the requirements of the *Virginia Work Area Protection Manual*, the *MUTCD*, , the "Typical Traffic Control" notes and drawings herein, the Contract documents and as directed by the Engineer.

2. Portable sign stands shall be used with signs having a substrate material of the type required in Section 512.02(e) of the Specifications and only those that were tested and found to be in compliance with the requirements of *NCHRP Report 350,* Test Level 3, or the Manual for Assessing Safety Hardware, or otherwise accepted in an FHWA acceptance letter for the specific sign stand.

Portable sign stands shall conform to the requirements of *NCHRP Report 350,* Test Level 3, or the Manual for Assessing Safety Hardware, and shall be selected from those shown on the Department's Approved List or the Contractor shall submit a certification letter submitted prior to their use stating the brands and models of portable sign stands to be used along with a copy of the FHWA acceptance letter indicating compliance with *NCHRP Report 350,* Test Level 3 or Manual for Assessing Safety Hardware,. Portable sign stands shall be self-erecting and shall accommodate signs of the shape being used. Portable sign stands shall support a 20-square-foot sign panel in sustained winds of 50 miles per hour without tipping over, walking, or rotating more than ±5 degrees about its vertical axis. Additional weight consisting of no more than one 25-pound sandbag placed on each leg or two drum collar positioned on the center of the sign stand and around the mast may be used to comply with this requirement. When used on uneven surfaces, the portable sign stand shall be capable of adjusting to those surfaces to allow the signs to be installed in their normal upright position ±15 degrees. Portable sign stands shall include decals, stenciling, or other durable marking system that indicates the manufacturer and model number of the stands. Such marking shall be of sufficient size so it is legible to a person in a standing position.

The Contractor shall erect, maintain, move, and be responsible for the security of sign panels and shall ensure an unrestricted view of sign messages for the safety of traffic. The Contractor shall maintain and store signs furnished by the Department in a manner approved by the Engineer until they are returned to the Department.

When construction signs are covered to prevent the display of the message, the entire sign shall be covered with silt fence or other materials approved by the Engineer such that no portion of the message side of the sign shall be visible. When used, plywood shall only be attached to ground-mounted construction signs. Attachment methods used to attach the covering material to the signs shall be of a durable construction that will prevent the unintentional detachment of the material from the sign. At no times shall a construction sign and/or post be rotated to prevent the display of the message. In addition, the posts where the signs are being covered shall have two ED-3 Type II delineators mounting vertically on the post below the signs at a height of 4 feet to the top of the topmost delineator. The bottom delineator shall be mounted 6 inches below the top delineator.

(b) **Flagger Service and Pilot Vehicles:** The Contractor shall provide flagger in accordance with the requirements of Section 105.14(c) of the Specifications.

1. **Interstate routes:** When one-way traffic is approved, the Contractor shall provide flagger service and, where necessary, pilot vehicles to maintain traffic. Each vehicle shall be equipped with at least one roof-mounted rotating amber flashing light and shall display required signs while in service.

   The Contractor may be permitted to use two-way radio communications in lieu of pilot vehicles in appropriate traffic conditions, when approved by the Engineer.

   Portable traffic control signals conforming to the requirements of Section 512.03(h)2 of the Specifications may be used in lieu of flagger service when specified or approved by the Regional Traffic Engineer. When portable traffic control signals are used in lieu of flagger service the portable traffic control signals will be measured and paid for separately.

2. **Non-Interstate routes:** When one-way traffic is approved, the Contractor shall provide flagger service and, where necessary, pilot vehicles to maintain traffic. Each vehicle shall be equipped with at least one roof-mounted rotating amber flashing light and shall display required signs while in service.

   The Contractor may be permitted to use two-way radio communications in lieu of pilot vehicles in appropriate traffic conditions, when approved by the Engineer.

   The contractor may be allowed to use Automatic Flagger Assistance Devices (AFAD) in lieu of flaggers on two-lane roadways when approved by the Engineer. When AFAD units are allowed, they shall be controlled by a certified flag person.

   Portable traffic control signals conforming to the requirements of Section 512.03(h)2 of the Specifications may be used in lieu of flagger service when specified or approved by the Regional Traffic Engineer. When portable traffic control signals are used in lieu of flagger service the portable traffic control signals will be measured and paid for separately.

   The Contractor shall have no less than one flagger at the beginning and one flagger at the ending of each work site on roadways having less than 2,000 vehicles per day (ADT). The Contractor shall have no less than two flaggers at the beginning and two flaggers at the ending of each work site on roadways having over 2,000 ADT. When the Engineer determines additional flaggers are

necessary at the work site, the Contractor shall furnish them. On a divided highway the Engineer will instruct the Contractor where flaggers shall be stationed. Pilot trucks shall be used on all roads where modified seal treatments, seal treatments using latex modified emulsified asphalt (CRS-2L) and other seal treatments on roads having more than of 49 ADT are being placed, unless otherwise directed by the Engineer.

**Section 512.03**(q) **Portable Changeable Message Signs** (PCMS) is amended to replace the last sentence of the fifth paragraph the following:

In these circumstances, the cost for such additional units that are authorized by the Engineer shall be in accordance with the requirements of Section 512.04 herein.

**Section 512.03**(q) **Portable Changeable Message Signs** (PCMS) is amended to delete the last paragraph.

**Section 512.03 Procedures** is amended to add (r) **Work Zone Traffic Control** as the following:

(r) **Work Zone Traffic Control**: The Contractor shall provide individuals trained in Work Zone Traffic Control in accordance with the requirements of Section 105.14 of the Specifications.

**Section 512.04—Measurement and Payment** is replaced as follows:

**Maintenance of Traffic in accordance with traffic control layout detail items required by the *VWAPM*, the "Typical Traffic Control" notes and drawings herein, and the Contract** will be paid for at the lump sum price per schedule as designated in the Contract. Such traffic control shall include furnishing, erecting, installing or employing and maintaining traffic control devices. Payment for traffic control will be made incrementally as a percentage on the lump sum price based on the percentage of tonnage or square yards (as with slurry seal, latex and surface treatment contracts) and placed on the schedule for the payment period covered by the appropriate progress estimate.

**Additional traffic control layout detail items** that are determined and authorized by the Engineer to be necessary to ensure the safety of the traveling public and are **in addition** to the number required by the traffic control layout details in the *VWAPM*, the "Typical Traffic Control" notes and drawings herein, and the Contract, will be measured and paid for as follows, therefore, the provisions of Section 104.02 of the Specifications will not apply:

- **Flagger service** shall include furnishing certified flagger, **STOP/SLOW** paddles and safety equipment. Where additional flagger service is required, as determined and authorized by the Engineer, flagger service will be measured in hours and paid for at the rate of **$15** per hour of use.

  When flagger service is used for the Contractor's convenience, such as for ingress and egress of construction equipment or materials, payment will not be made. **Note:** The required flaggers described in the two flagging conditions in Section 512.03(b)2 herein will not be measured as a separate pay item but will be considered incidental to the traffic control operations described.

- **Pilot vehicles** shall include furnishing vehicles, necessary warning devices, drivers, fuel and maintenance. Where additional pilot vehicles are required as determined and authorized by the Engineer, such vehicles will be measured in hours of actual use and will be paid for at the rate of **$23** per hour of employed use.

- **Electronic arrows** shall include furnishing arrow panels, fuel, maintenance, and a truck or trailer having flashing amber warning lights for mobility of the electronic arrow. Where additional electronic arrows are required as determined and authorized by the Engineer, electronic arrows will be measured in hours of actual use and will be paid for at the rate of **$5** per hour for each hour of employed use.

- **Warning lights** for use on sign panels or installed on traffic barrier service will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include maintaining, relocating, and removing.

- **Group 1 channelizing devices** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items.

- **Group 2 channelizing devices**, not designated in the Contract as a separate pay item but where additional Group 2 channelizing devices are required as determined and authorized by the Engineer, these will be measured in days and paid for at the rate of **$1** per day per device. This price shall include furnishing and maintaining devices, removing devices when no longer required and signs. When group 2 channelizing devices are moved to a new location or are removed and re-installed at the same location, they will be measured for separate payment. However, when group 2 channelizing devices are moved within the lane or from one lane to another by simply moving the devices across the lane edge line without removal from the roadway, no additional payment will be made.

- **Traffic barrier service** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include warning lights, delineators, barrier vertical panels, fixed object attachments, patching restraint holes, fixed object attachments used on traffic barrier service in locations where existing guardrail is in place including restoring existing guardrail to its original condition, maintaining, and removing traffic barrier service when no longer required.

- **Traffic barrier service guardrail terminal** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include furnishing, installing, moving to a new location as directed or approved by the Engineer, and removing when no longer needed.

- **Impact attenuator service** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include Impact attenuators used with barrier openings for equipment access.

- **Aggregate material** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include preparing the grade and furnishing, placing, maintaining, and removing material as required.

- **Type III barricades** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include furnishing and placing barricades, retroreflective sheeting, maintaining, relocating to new locations and removing when no longer required.

  Type III barricades specified in this contract shall refer to the Type 3 barricades in the 2011 edition of the *Virginia Work Area Protection Manual*, the 2009 edition of the *MUTCD* and the current *Virginia Supplement to the MUTCD*. Materials, procedures, measurement and payment for the Type 3 barricades specified in these publications shall be in accordance with the Type III barricades specified in this contract.

- **Construction signs** except those already required by the Contract (which includes those signs required by the *VWAPM*, the "Typical Traffic Control" notes and drawings herein, and such signs "**Grooved Pavement Ahead," "Begin Right Turn Lane, "Begin Left Turn Lane"** that may be required by the Engineer to ensure the safety of the traveling public due to the nature of the Contractor's operations) when determined and authorized by the Engineer, will be measured in square feet and paid for at **$20** per square foot. This payment, based on square footage, shall be compensation for furnishing, placing, relocating, covering, uncovering, and removing the sign(s) when no longer needed for the duration of the project; multiple payments for the same sign used more than once will not be allowed. Such extra signs will consist of either a greater number of the standard signs already listed in the applicable traffic control layout details in the *VWAPM*, the "Typical Traffic Control" notes and drawings herein, and the Contract, or other signs included in the *VWAPM* but not originally considered applicable for use on this Contract.

- **Truck mounted attenuators**, not designated in the Contract as a separate pay item but where additional Truck Mounted Attenuators are required as determined and authorized by the Engineer, these will be measured in hours of actual use required, and will be paid for at the rate of **$22** per employed hour. This price shall include furnishing the truck mounted attenuator, mounting vehicle, lights, electronic arrows, if allowed but not required, and maintenance. When electronic arrows are used at the option of the Contractor in lieu of the rotating or high intensity amber strobe light, the cost of the electronic arrow shall be included in the price for truck mounted attenuators. When electronic arrows are required and authorized as determined by the Engineer and not incidentally mounted (and permitted) on such truck mounted attenuator support vehicles, they will be paid for separately as specified herein.

- **Portable traffic control signal** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include portable traffic control signal equipment, installation, energy source, maintaining, adjusting, aligning, removing and relocating equipment.

- **Portable Changeable Message Signs (PCMS)**, not designated in the Contract as a separate pay item but where additional Portable Changeable Message Signs are required as determined and authorized by the Engineer, these will be measured in hours of actual use and paid for at the rate of **$15** per hour for each hour of employed use. This price shall be full compensation for furnishing or mobilizing the unit(s) to the project, maintenance, operation, and repositioning the unit(s).

**Eradication of existing pavement markings** will be measured in linear feet of a 6-inch width or portion thereof as specified herein. Widths that exceed a 6-inch increment by more than 1/2 inch will be measured as the next 6-inch increment. Measurement and payment for eradication of existing pavement markings specified herein shall be limited to linear pavement line markings. Eradication of existing pavement markings will be paid for at the contract unit price per linear foot. This price shall include removing linear pavement line markings and disposing of residue.

**Eradication of existing nonlinear pavement markings** will be measured in square feet based on a theoretical box defined by the outermost limits of the nonlinear pavement marking. Nonlinear pavement markings shall include but not be limited to stop bars, arrows, images and messages. Eradication of existing nonlinear pavement markings will be paid for at the contract unit price per square foot. This price shall include removing nonlinear pavement markings and disposing of residue.

**Basic Work Zone Traffic Control** – Separate payment will not be made for providing a person to meet the requirements of Section 105.14 of the Specifications. The cost thereof shall be included in the price of other appropriate pay items.

**Intermediate Work Zone Traffic Control** - Separate payment will not be made for providing a person to meet the requirements of Section 105.14 of the Specifications. The cost thereof shall be included in the price of other appropriate pay items.

**Temporary construction pavement markings**, including **flexible temporary pavement markers (FTPMs)** used in substitution of temporary construction pavement markings, will be measured and paid for in accordance with the *Special Provision for* ***SECTION 704—PAVEMENT MARKINGS AND MARKERS*** included in the Contract.

Payment will be made under:

| **Pay Item** | **Pay Unit** |
|---|---|
| Maintenance of Traffic (Schedule) | Lump Sum |
| Eradication of existing pavement marking | Linear foot |
| Eradication of existing nonlinear pavement marking | Square foot |

## Typical Traffic Control
## *End of Day Signing for Partial Road Width Plant Mix Paving Operations on a Multi-Lane Highway (Uneven Travel Lanes)*
## (Figure TTC-57.0)
## NOTES

**Standard:**

1. **On roadways having a median wider than 8', right and left sign assemblies shall be used. Median barrier is considered to be part of the shoulder and its measurement shall be used to determine the total width of the shoulder.**

2. **The maximum pavement edge drop-off between traffic lanes shall be 2.0 inches or less.**

3. **Open travel lane(s) shall not be exposed to more than 2 to 4 mile sections of milled or uneven surface.**

4. **A portable changeable message sign (PCMS) with "ROUGH ROAD AHEAD" and other appropriate messages shall be used.**

5. **A BUMP sign (W8-1) shall be placed approximately 1000 feet in advance of the end of the pavement drop-off on Limited Access Highways. See Note 10 for sign spacing on all other roadways.**

6. **The Regional Traffic Engineer shall determine speed reductions.**

7. **The UNEVENS LANE (W8-11), STAY IN LANE (R4-9) and BUMP (W8-1) signs shall be adjusted daily with the work operation and their sign stands shall be weighted with a 25 ± pound sand bag on each leg or two (2) drum collar weights positioned on the center of the sign stand. Additional UNEVEN LANES signs shall be installed every 2 miles and on entrance ramps.**

8. **Where conditions warrant, ROUGH ROAD (W8-8) and BUMP signs shall be installed 500'± in advance of the affected roadway surface on entrance ramps and BUMP signs shall be installed 500'+ in advance of the unaffected roadway surface on exit ramps.**

9. **All signs shall be post mounted at locations after 72 consecutive hours of non-work activities.**

*Guidance:*

10. *Sign spacing distance should be 1300'-1500' for Limited Access Highway, and on all other roadways 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.*

11. *Portable barrier mounted sign stands should be considered for use on median barrier to meet requirements of Note 1 for double indicating signs.*

Option:

12. Only traffic control signing for partial road width pavement resurfacing resulting in uneven travel lanes is shown. Other devices may be used for the control of traffic through the work area.

13. The LOW SHOULDER (W8-9) sign may be used to warn of a shoulder condition where there is an elevation difference of less than 2 inches between the shoulder and the travel lane.

**Standard:**

14. **If used, the LOW SHOULDER sign shall be repeated at 1-mile intervals if the condition extends over a distance in excess of 1-mile.**

15. **The SHOULDER DROP OFF (W8-V5) sign shall be used to warn of a shoulder condition where there is an elevation difference of 2 inches or greater between the shoulder and the travel lane. Where the condition extends over a distance in excess of 1 mile, the sign shall be repeated at 1 mile intervals.**

Option:

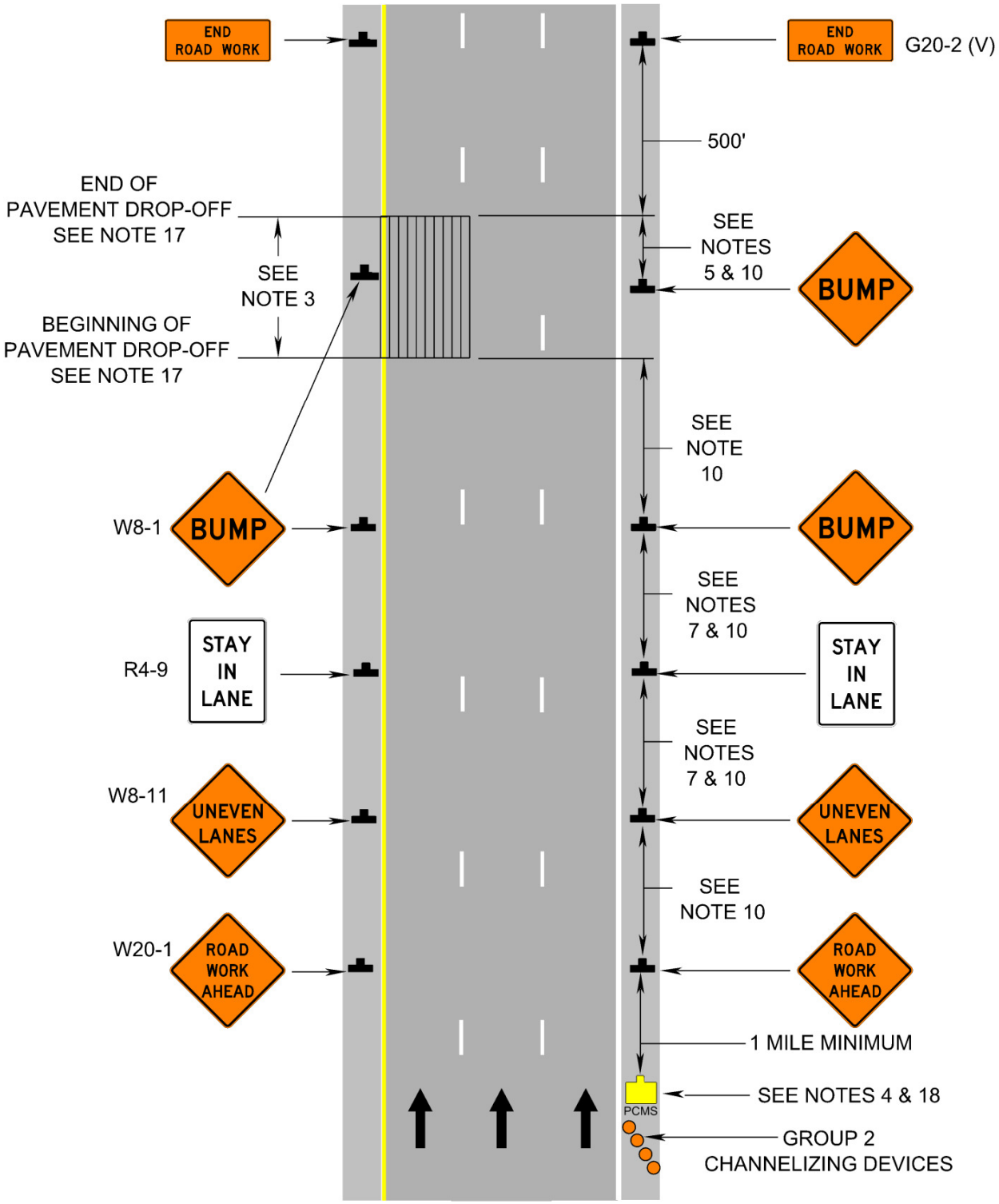
16. The SHOULDER DROP OFF sign may be eliminated if a 6:1 (desirable) to 4:1 (minimum) wedge is used between the travel lane and the shoulder.

**Standard:**

17. **A temporary pavement wedge shall be constructed of surface mix asphalt a minimum of three (3) feet in length for every inch of depth of pavement milling on the approach and departure end of the milled travel lane(s).**

18. **A minimum of four (4) Group 2 channelizing devices shall be placed on the shoulder in advance of the PCMS in a taper for delineation.**

19. **If temporary construction or permanent pavement markings cannot be installed in accordance with the *Special Provision for SECTION 704—PAVEMENT MARKINGS AND MARKERS* then flexible temporary pavement markers (FTPMs) spaced at 20-foot centers for two-way traffic shall be placed in between the two centerlines stripes or three FTPMs shall be installed per skip line for lane division lines. No Edge line markers will be required.**




***End of Day Signing for Partial Road Width Plant Mix Paving Operations on a Multi-Lane Highway (Uneven Travel lanes)***
**(Figure TTC-57.0)**

## Typical Traffic Control

### *End of Day Signing for Plant Mix Paving Operations Across the Entire Width of a Multi-Lane Highway*
### (Figure TTC-58.0)
### NOTES

**Standard:**

1. **On roadways having a median wider than 8', right and left sign assemblies shall be used. Median barrier is considered to be part of the shoulder and its measurement shall be used to determine the total width of the shoulder.**

2. **The maximum pavement edge drop-off between traffic lanes shall be 2.0 inches or less.**

3. **Open travel lane(s) shall not be exposed to more than 2 to 4-mile sections of milled or uneven surface.**

4. **A portable changeable message sign (PCMS) with "ROUGH ROAD AHEAD" and other appropriate messages shall be used.**

5. **A BUMP sign (W8-1) shall be placed approximately 1000 feet in advance of the end of the pavement drop-off on Limited Access Highways. See Note 10 for sign spacing on all other roadways.**

6. **The Regional Traffic Engineer shall determine speed reductions.**

7. **The ROUGH ROAD (W8-8) and UNMARKED PAVEMENT AHEAD (W8-V4) signs shall be adjusted daily with the work operation and their sign stands shall be weighted with a 25 ± pound sand bag on each leg or two (2) drum collar weights positioned on the center of the sign stand. Additional ROUGH ROAD and UNMARKED PAVEMENT AHEAD signs shall be installed every 2 miles.**

8. **Where conditions warrant, ROUGH ROAD and BUMP signs shall be installed 350'± in advance of the affected roadway surface on entrance ramps and BUMP signs shall be installed 500'+ in advance of the unaffected roadway surface on exit ramps.**

9. **All signs shall be post mounted at locations after 72 consecutive hours of non-work activities.**

*Guidance:*

10. *Sign spacing distance should be 1300'-1500' for Limited Access Highways, and on all other roadways 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.*

11. *Portable barrier mounted sign stands should be considered for use on median barrier to meet requirements of Note 1 for double indicating signs.*

Option:

12. Traffic control signing for multiple lane full roadway width pavement resurfacing is shown. Other devices may be used for the control of traffic through the work area.

13. The LOW SHOULDER (W8-9) sign may be used to warn of a shoulder condition where there is an elevation difference of less than 2 inches between the shoulder and the travel lane.

**Standard:**

**14. If used, the LOW SHOULDER sign shall be repeated at 1-mile intervals if the condition extends over a distance in excess of 1-mile.**

**15. The SHOULDER DROP OFF (W8-V5) sign shall be used to warn of a shoulder condition where there is an elevation difference of 2 inches or greater between the shoulder and the travel lane. Where the condition extends over a distance in excess of 1 mile, the sign shall be repeated at 1 mile intervals.**

Option:

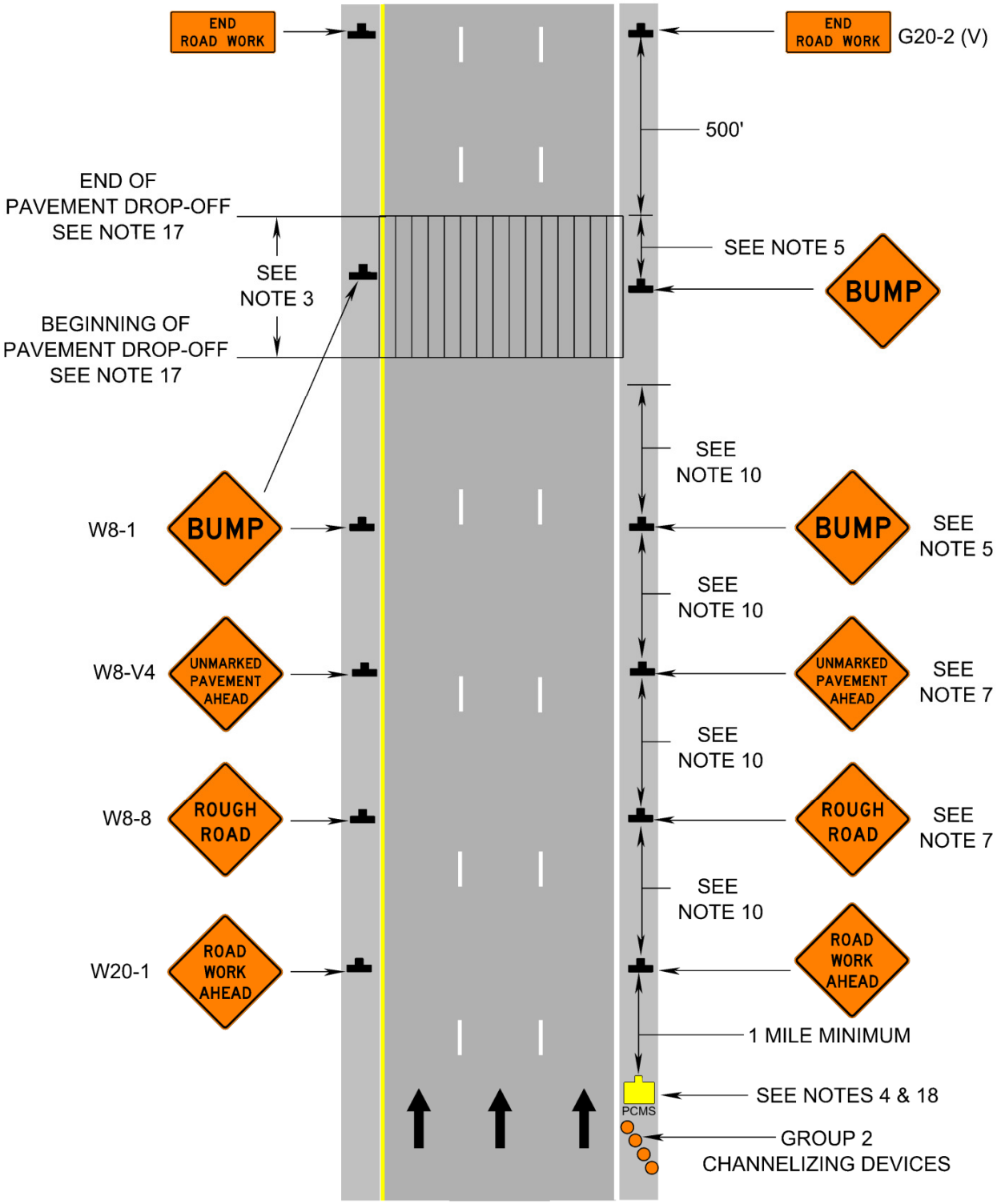
16. The SHOULDER DROP OFF sign may be eliminated if a 6:1 (desirable) to 4:1 (minimum) wedge is used between the travel lane and the shoulder.

**Standard:**

**17. A temporary pavement wedge shall be constructed of surface mix asphalt a minimum of three (3) feet in length for every inch of depth of pavement milling on the approach and departure end of the milled travel lane(s).**

**18. A minimum of four (4) Group 2 channelizing devices shall be placed on the shoulder in advance of the PCMS in a taper for delineation.**

**19. If temporary construction or permanent pavement markings cannot be installed in accordance with the *Special Provision for SECTION 704—PAVEMENT MARKINGS AND MARKERS* then flexible temporary pavement markers (FTPMs) spaced at 20-foot centers for two-way traffic shall be placed in between the two centerlines stripes or three FTPMs shall be installed per skip line for lane division lines. No Edge line markers will be required.**




**Typical Traffic Control**
***End of Day Signing for Plant Mix Paving Operations Across the Entire Width of a Multi-Lane Highway***
**(Figure TTC-58.0)**

## Typical Traffic Control
## *End of Day Signing for Plant Mix Paving Operations on a Two-Lane Roadway*
## (Figure TTC-59.0)
## NOTES

**Standard:**

1. **Open travel lane(s) shall not be exposed to more than 2 to 3 mile sections of milled or uneven surface.**

2. **The maximum pavement edge drop-off shall be 2.0 inches or less.**

3. **NO CENTER LINE sign (W8-12) shall be installed whenever the centerline has been obliterated or until permanent pavement markings have been installed. The sign shall be installed in both directions when the centerline is not present. In addition, NO CENTER LINE signs shall be installed every mile if the unmarked area is less than 3 miles, or every 2 miles is the unmarked area is longer than 4 miles.**

4. **A DO NOT PASS sign (R4-1) shall be used when the centerline has been obliterated or until pavement markings have been installed. The DO NOT PASS sign shall be located after the NO CENTER LINE sign. Thereafter the DO NOT PASS sign shall be installed every mile if the unmarked area is less than 3 miles or every 2 miles if the unmarked area is longer than 4 miles.**

5. **In the vicinity of a turning lane, a BUMP sign (W8-1) shall be installed.**

6. **The UNEVENS LANE sign (W8-11) and BUMP sign shall be adjusted daily with the work operation and their sign stands shall be weighted with a 25 ± pound sand bag on each leg or two (2) drum collar weights positioned on the center of the sign stand. Additional UNEVEN LANES signs shall be installed every mile.**

7. **Signs shall be post mounted at locations after 72 consecutive hours of non-work activities.**

*Guidance:*

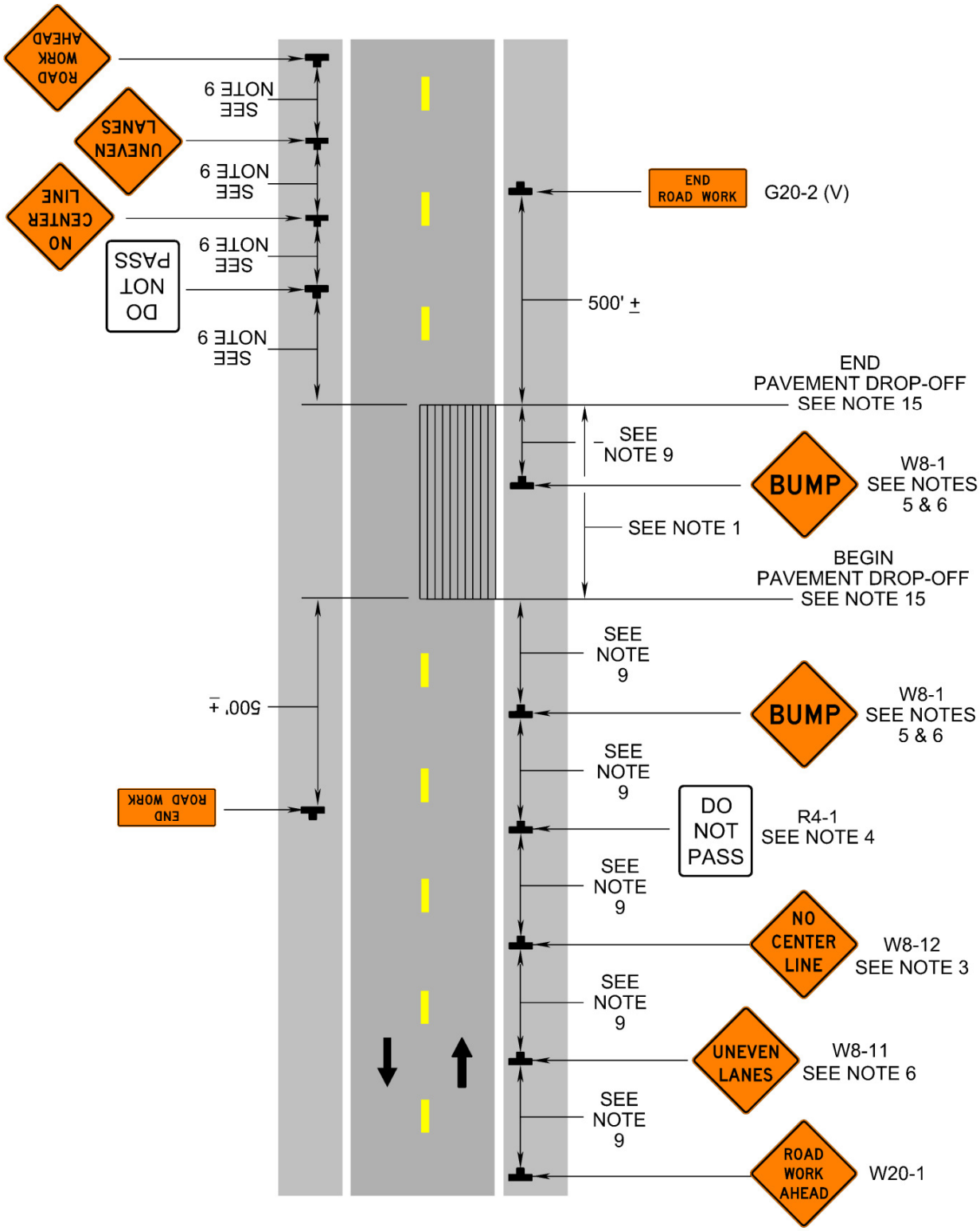
8. *(Reserved for future use.)*

9. *Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less and 500'-800' where the posted speed limit is greater than 45 mph.*

Option:

10. Only traffic control signing for pavement resurfacing is shown. Other devices may be used for the control of traffic through the work area.

11. The LOW SHOULDER (W8-9) sign may be used to warn of a shoulder condition where there is an elevation difference of less than 2 inches between the shoulder and the travel lane.




**Typical Traffic Control**
***End of Day Signing for Plant Mix Paving Operations on a Two-Lane Roadway***
**(Figure TTC-59.0)**

## Typical Traffic Control
## *End of Day Signing for Surface Treatment, Slurry Seal and Latex Emulsion Treatment Operations*
## NOTES

**Standard:**

1. **LOOSE GRAVEL (W8-7) signs shall be installed on surface treated roadways and shall be removed when the roadway has been swept or loose gravels have been removed from the roadway.**

2. **NO CENTER LINE (W8-12) signs shall be installed whenever the centerline has been obliterated or until permanent pavement markings have been installed. The sign shall be installed in both directions when the centerline is not present. In addition, NO CENTER LINE signs shall be installed every mile if the unmarked area is less than 3 miles, or every 2 miles if the unmarked area is longer than 4 miles.**

3. **A DO NOT PASS (R4-1) sign shall be used when the centerline has been obliterated or until pavement markings have been installed. The DO NOT PASS sign shall be installed after the NO CENTER LINE sign and their sign stand shall be supported with a sand bag weighing approximately 25-pounds on each leg or two (2) drum collar weights positioned on the center of the sign stand. Thereafter, the DO NOT PASS sign shall be installed every mile if the unmarked area is less than 3 miles or every 2 miles if the unmarked area is longer than 4 miles.**

4. **Signs shall be post-mounted at locations after 72 consecutive hours of non-work activities.**

5. **If temporary construction or permanent pavement markings cannot be installed in accordance with the *Special Provision for SECTION 704—PAVEMENT MARKINGS AND MARKERS*, then yellow flexible temporary pavement markers (FTPMs) spaced at 20-foot centers for two-way traffic shall be placed along the centerline for lane division. No edge markers will be required**.

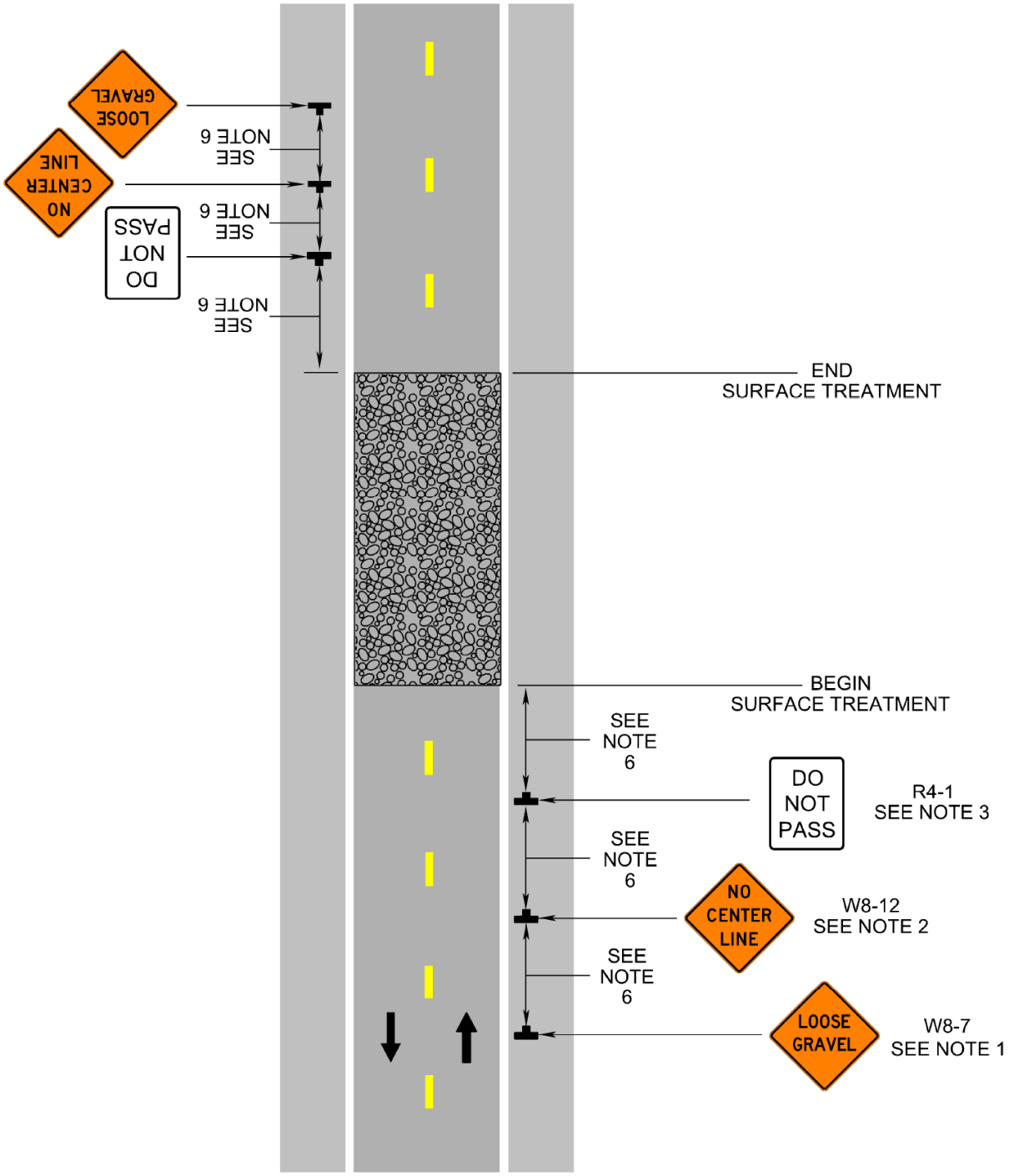
*Guidance:*

6. *Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, and 500'-800' where the posted speed limit is greater than 45 mph.*

*Option:*

7. Only traffic control signing for surface treatment/slurry seal/latex emulsion treatment operations is shown. Other devices may be used for the control of traffic through the work area.

8. The advanced warning signs shown may also be used on multi-lane roadways, replacing the NO CENTER LINE signs with UNMARKED PAVEMENT AHEAD (W8-V4) signs and adding a ROAD WORK AHEAD (W20-1) sign as the first advanced warning sign.




***End of Day Signing for Surface Treatment,***
***Slurry Seal and Latex Emulsion Treatment Operations***

**S704M05**-1014

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
**SECTION 704—PAVEMENT MARKINGS AND MARKERS**

September 12, 2014

**SECTION 704—PAVEMENT MARKINGS AND MARKERS** of the Specifications is amended as follows:

**Section 704.02—Materials** is amended to add the following:

(d) **Flexible temporary pavement markers (FTPMs)** are pavement markings that the Contractor may choose to substitute for Type D or Type F pavement markings. FTPMs may be used on surface treatment, slurry seal, latex emulsion treatment, and plant mix. FTPMs may be used to simulate skip-line and solid-line centerline markings and to simulate skip-line and solid-line lane-division markings (in accordance with the details furnished herein) installed on the newly-placed roadways once the surface has cured. **Please note:** Temporary edge-line markings will not be required.

The color of FTPM units and their reflective surfaces (white or yellow) shall be the same as the temporary pavement markings for the type of application (skip-line, solid line) they are being used in substitution.

**Flexible temporary pavement markers (FTPMs)** shall consist of products from the Department's current Approved List found in the Materials Division's *Manual of Instructions* (See Flexible temporary pavement marker (FTPM) or web site http://www.virginiadot.org/business/materials-download-docs.asp. All FTPMs shall be new product. FTPMs are suitable for use one year after the date of receipt when stored in accordance with the manufacturer's recommendations.

**Section 704.03—Procedures** is amended to replace the first 6 paragraphs:

**PAVEMENT MARKING AND FLEXIBLE TEMPORARY PAVEMENT MARKER (FTPM) OPERATIONS**

The Contractor shall have a Pavement Marking Technician, certified in accordance with the Department's Materials Certification Program for Pavement Marking, present during all pavement marking and marker operations except FTPM operations. When the Contractor chooses to substitute FTPMs for temporary pavement markings, a certified Pavement Marking Technician will not be required for the FTPM operation.

- **Temporary pavement markings:** The type, class, installation procedures and time limits of temporary pavement markings shall be in accordance with the provisions specified herein and Section 704 of the Specifications.

  Temporary pavement markings, including skip lines and solid lines, shall be installed at the same locations that permanent pavement markings shall be installed.

  Once temporary pavement marking operations have begun, all skip-line and solid-line centerline markings, and skip-line and solid-line lane-division markings shall be completed before the marking operation is stopped. The installation of temporary edge-line markings

will not be required unless otherwise specified in the notes section of the schedule of routes, within the contract documents.

Installation and refreshing of (as authorized by the Engineer, if necessary) temporary pavement markings shall not affect the 30 calendar-day time limitation between pavement placement and completion of permanent pavement marking installation.

- **Flexible temporary pavement markers (FTPMs):** The type, installation procedures and time limits for the use of FTPMs shall be in accordance with the manufacturer's recommendations, the provisions specified herein and Section 704 of the Specifications.

  Prior to installing FTPMs the Contractor shall submit a plan for substituting FTPMs for temporary pavement markings to the Engineer for approval. The Contractor's plan for FTPMs shall be in accordance with the requirements and drawings designated as "**TYPICAL PLAN FOR FTPM PLACEMENT**" included herein.

  FTPMs shall include skip-line and solid-line centerline markings, and skip-line and solid-line lane-division line markings installed on the newly-placed surfaces, once the surface has cured or on milled surfaces within the time limits for unmarked pavement for the respective volumes of vehicles herein.

  The pavement surface shall be free of dirt, dust, debris, moisture, oil, and any residue that may be detrimental to successful application. If such is present, the Contractor shall prepare the pavement surface by air blowing or a thorough brushing. FTPMs used to simulate skip lines and solid lines shall be installed at the same locations that permanent pavement markings shall be installed.

  Once FTPM operations have begun, all skip-line and solid-line centerline markings, and skip-line and solid-line lane-division markings shall be completed <u>before</u> the operation is stopped. Temporary edge-line markings will not be required.

  FTPMs shall be removed and properly disposed of when permanent pavement markings are accomplished as required in accordance with the time limits specified herein. Used FTPMs removed from the pavement when no longer needed or permitted, including all containers, packaging, damaged FTPMs and all other miscellaneous items of waste shall be appropriately disposed of in a properly permitted waste container in accordance with applicable local, state and federal laws and regulations.

  Replacement of FTPMs, required to maintain temporary markings, shall not affect the 30 calendar-day time limitation between pavement placement and completion of permanent pavement marking installation.

  **For surface treatment, slurry seal or latex emulsion treatment operations**, the appropriate FTPMs shall be installed <u>prior</u> to placing new pavement or treatment. Upon completion of surface treatment, slurry seal or latex emulsion treatment placement, the Contractor shall remove the protective covering from the reflective lens of the FTPM prior to leaving the work site. Failure to remove such covering may result in the non-payment for that portion type (skip or solid) of temporary pavement marking.

  **For plant mix operations**, the appropriate FTPMs shall be installed on the newly-placed pavement <u>after</u> the pavement is thoroughly compacted, has cooled to the FTPMs manufacturer's recommended temperature for installation, and the surface has cured.

- **Permanent Pavement Markings:** The type, class, installation procedures and time limits of permanent pavement markings shall be in accordance with the provisions specified herein and Section 704 of the Specifications.

For newly-placed asphalt surfaces (including plant mix, surface treatment, latex slurry, etc), permanent pavement marking, temporary pavement marking or FTPM installation shall be completed in accordance with the time limits specified below unless otherwise directed by the Engineer. Exceptions to the below time limits will be granted only for weather restrictions and for installation of Type B, Class VI and epoxy resin or polyurea pavement markings, on plant mix roadways. Installation of Type B, Class VI, pavement markings on plant mix roadways are not applicable to these requirements if they are inlaid with the last pass of the asphalt roller or directly after the asphalt roller using a separate roller. Installation of epoxy resin or polyurea pavement markings on newly placed plant mix pavement shall not commence until after 24 hours of final surface placement.

**PERMANENT AND TEMPORARY PAVEMENT MARKINGS AND FLEXIBLE TEMPORARY PAVEMENT MARKERS (FTPMs)**

- **Permanent pavement markings** are durable pavement markings that, when installed, provide final traffic guidance after all operations related to the project are complete in accordance with the provisions herein, Section 704 of the Specifications and as specified elsewhere in the Contract.

  Permanent pavement markings shall include skip-line and solid-line centerline markings, skip-line and solid-line lane-division markings and, solid-line edge-line markings installed on the newly-placed roadways once the surface has cured.

- **Temporary pavement markings** are pavement markings that, when installed, provide limited-duration traffic guidance until permanent pavement markings are installed in accordance with Section 704 of the Specifications, as specified elsewhere in the Contract, and as follows:

  The VTM-94 moisture test is optional for temporary pavement marking. However, if the VTM-94 moisture test is not performed, the Contractor shall make a qualitative surface wetness assessment and note the result on the C-85.

  If the surface is visibly dry and does not have puddling or free-standing water present, the Contractor is responsible for installing and maintaining the temporary pavement markings. If the Contractor opts not to perform the VTM-94 moisture test and the temporary markings applied to a visibly dry surface do not sufficiently adhere to the surface, no additional payment will be made by VDOT for temporary pavement marking reapplication.

  If the surface has puddling or free-standing water present or, if a VTM-94 moisture test result indicates that the condition of the surface is not suitable for temporary pavement marking application, the Engineer may direct the Contractor to install temporary pavement markings on the surface in order to avoid having traffic operate on an unmarked road. In such circumstances VDOT will pay for one subsequent reapplication of the temporary markings once the surface has dried if the previous installation did not satisfactorily adhere to the road.

  The Contractor may employ approved methods of drying the pavement surface that will not damage the pavement. Methods that may damage the pavement, such as “torching” of the pavement, will not be allowed.

  Temporary pavement markings applied to planed (milled) surfaces or other non-final surfaces shall consist of an application of Type F, temporary traffic paint 15 mils thick, representing 100 percent of the final pavement marking width and length with 6 pounds of glass beads per gallon of material.

Type F for final paved surfaces shall be modified. Such modification shall consist of the application of Type F, temporary traffic paint, 8 to 10 mils thick representing 75 percent of the final pavement marking width and with 3 pounds of glass beads per gallon of material. Skip lines shall be applied in 8-foot lengths and approximately 32 foot gaps. Temporary Type F, pavement markings shall be arranged and spaced on their installation so as to be completely covered by the application of permanent pavement markings. Failure to place Type F, temporary markings at the application rate and spacing specified herein may result in the non-payment for such markings. No eradication of such modified Type F, temporary markings will be required when the Contractor installs such temporary pavement markings as detailed herein and such markings have been in place for no less than 3 days prior to the application of permanent pavement markings.

Temporary pavement markings for plant mix shall also include:

- Type D pavement markings in accordance with the requirements of Section 704 of the Specifications.

**Premarking (or layout marking) is NOT acceptable for use as a temporary pavement marking.**

**MAINTENANCE OF TEMPORARY PAVEMENT MARKINGS AND FLEXIBLE TEMPORARY PAVEMENT MARKERS (FTPMs)**

**Maintenance of Temporary pavement markings applied to paved surfaces** shall be in accordance with the following requirements:

While in place, temporary pavement markings sizes, shapes and retroreflectivity shall be maintained at adequate visibility and retroreflectivity, as defined in Section 512 of the Specifications. If temporary pavement markings meet these requirements, no additional application (refreshing) is required. If temporary pavement markings are Type F and these markings do not meet these requirements prior to the time limit for the application of permanent markings, such temporary markings shall be refreshed by the application of a lighter application (applied so as to enhance visibility but not as to require eradication before application of permanent markings) of Type F marking at the Contractor's expense when required by the Engineer. Under such circumstances no payment for the eradication of temporary pavement markings will be permitted if required before the application of permanent markings. If other types of permitted temporary pavement markings are used and these fail the visual evaluation or in any other respect are deficient prior to the time for the installation of permanent markings, these types shall be reapplied at the Contractor's expense when required by the Engineer. These requirements will apply until permanent pavement markings are installed in accordance with the time restrictions herein.

**FTPMs shall be installed and maintained** in accordance with the manufacturer's recommendations and the following requirements:

The Contractor shall maintain FTPMs for the time period specified herein or until permanent pavement markings are installed in accordance with Section 704 of the Specifications. Damaged or missing FTPMs shall be replaced with new FTPMs of the same manufacturing type, color and model. No more than one FTPM may be damaged or missing out of every broken line simulated segment. No two consecutive FTPMs may be damaged or missing on a simulated solid line application, and no more than 30 percent of the FTPMs may be damaged or missing on any measured 100-foot segment of simulated solid line.

The acceptable ambient air temperature, ambient moisture condition and pavement surface condition prior to the installation of the appropriate FTPMs shall be in accordance with the manufacturer's recommendations, a copy of which shall be provided to the Engineer prior to installation.

Once applied, FTPMs will be considered for a single use. If a FTPM is lost before permanent markings are installed, it shall be replaced with a new FTPM. FTPMs may remain in place, undamaged, after installation for up to 30 consecutive days. When FTPMs are applied prior to pavement placement, such as with surface treatment, slurry seal and latex emulsion treatment, this 30 consecutive-day time limit shall begin at the time of actual installation of the FTPMs, not at the time of pavement placement completion. In no case shall any installed FTPMs be permitted to remain once time limits require permanent pavement marking installation.

**FTPMs used for surface treatment, slurry seal or latex emulsion treatment operations** shall include a removable material covering the reflective lens to protect the lens from being obscured or damaged by the paving operation.

**PERMANENT PAVEMENT MARKINGS, TEMPORARY PAVEMENT MARKINGS AND FLEXIBLE TEMPORARY PAVEMENT MARKERS (FTPMs) INSTALLATION TIME LIMITS ON ROADWAYS OPEN TO TRAFFIC:**

**Surface Treatment Operations**

The Contractor shall maintain temporary pavement markings until the permanent pavement markings are installed. The Contractor shall sweep surface treated roadways prior to installation of permanent pavement markings as directed by the Engineer but no earlier than 7 days after completion of surface treatment placement. Permanent pavement marking installation shall be completed after sweeping but within 30 calendar days after the end of the workday when the surface treatment pavement surface to be marked was placed.

The following governs the installation time limits for temporary markings or FTPMs:

- **Non-interstate roads having traffic volumes of 10,000 ADT or more:** Temporary pavement markings shall be installed within 24 hours after the end of the workday the new surface treatment is placed and maintained until the permanent pavement markings are installed. If FTPMs are used they shall be installed prior to placement of surface treatment.

- **Roads having traffic volumes between 3,000 and 10,000 ADT:** Temporary pavement markings shall be installed within 48 hours after the end of the workday the new surface treatment is placed and maintained until the permanent pavement markings are installed. If FTPMs are used they shall be installed prior to placement of surface treatment.

- **Roads having traffic volumes of 3,000 ADT or less:** Temporary pavement markings or FTPMs will not be required unless determined and authorized by the Engineer to be necessary to ensure the safety of the traveling public. If the Engineer requires FTPMs, such markers shall be installed prior to placement of surface treatment.

**Slurry Seal or Latex Emulsion Treatment Operations**

Permanent pavement marking installation shall be completed within 30 calendar days after the end of the workday when the slurry seal or latex emulsion treatment pavement surface to be marked was placed.

The following governs the installation time limits for temporary markings or FTPMs. The Contractor shall maintain temporary pavement markings until the permanent pavement markings are installed:

- **Interstate roads:** Temporary pavement markings shall be installed prior to opening to traffic, and maintained by the Contractor until the permanent markings are installed.

- **Non-interstate roads having traffic volumes of 10,000 ADT or more:** Temporary pavement markings shall be installed within 24 hours after the end of the workday the new slurry seal or latex emulsion is placed and maintained until the permanent pavement markings are installed. If FTPMs are used they shall be installed prior to placement of slurry seal or latex emulsion treatment.

- **Roads having traffic volumes between 3,000 and 10,000 ADT:** Temporary pavement markings shall be installed within 48 hours after the end of the workday the new slurry seal or latex emulsion is placed and maintained until the permanent pavement markings are installed. If FTPMs are used they shall be installed prior to placement of slurry seal or latex emulsion treatment.

- **Roads having traffic volumes of 3,000 ADT or less:** Temporary pavement markings shall be installed within 72 hours after the end of the workday the new slurry seal or latex emulsion is placed and maintained until the permanent pavement markings are installed. If FTPMs are used they shall be installed prior to placement of slurry seal or latex emulsion treatment.

**Plant Mix Operations**

Prior to the end of the workday the Contractor shall determine whether permanent pavement markings can be installed within 24 hours after the end of the workday. If the Contractor determines that permanent pavement markings can be installed within such time limits, the permanent pavement markings shall be installed. If the Contractor determines that permanent pavement markings cannot be installed within such time limits he shall install and maintain temporary pavement markings or FTPMs until the permanent pavement markings are installed. **Permanent pavement marking installation shall be completed within 30 calendar days after the end of the workday when the plant mix pavement surface to be marked was placed, unless otherwise noted below.**

- **Interstate roads:** Temporary pavement markings shall be installed prior to opening to traffic, and maintained by the Contractor until the permanent markings are installed.

- **Non-interstate roads having traffic volumes of 10,000 ADT or more:** Permanent pavement markings, temporary pavement markings or FTPMs shall be installed within 24 hours after the end of the workday the plant mix is placed.

- **Roads having traffic volumes between 3,000 and 10,000 ADT:** Permanent pavement markings, temporary pavement markings or FTPMs shall be installed within 48 hours after the end of the workday the plant mix is placed.

- **Roads having traffic volumes of 3,000 ADT or less:** Permanent pavement markings, temporary pavement markings or FTPMs shall be installed within 72 hours after the end of the workday the plant mix is placed.

**TABLE VII-1 PAVEMENT MARKINGS** is replaced with the following:

**TABLE VII-1**
**Pavement Markings**

| Type | Class | Name | Temp/ Perm | Surface Temp. at Time of Application | Film Thickness (mils) | Pavement Surface | Application Limitations |
|---|---|---|---|---|---|---|---|
| A | | Traffic paint | Permanent | 50°F+ | 15 ± 1 when wet | AC HCC | May be applied directly after paving operations |
| B | I | Thermoplastic Alkyd | Permanent | 50°F+ | 90 ± 5 when set | AC | May be applied directly after paving operations |
| | I | Thermoplastic Hydrocarbon | Permanent | 50°F+ | 90 ± 5 when set | AC | Do not apply less than 30 days after paving operations |
| | II | Preformed Thermoplastic | Permanent | 50°F+ | 120-130 | AC HCC | Manufacturer's recommendations |
| | III | Epoxy resin | Permanent | 50°F+ | 20 ± 1 when wet | AC HCC | Pavement surface needs to be at least 1 day old |
| | IV | Plastic-backed preformed Tape | Permanent | (Note 1) | 60 - 90 | AC HCC | Manufacturer's recommendations |
| | VI | Profiled preformed Tape | Permanent | (Note 1) | (Note 1) | AC HCC | Manufacturer's recommendations |
| | VII | Polyurea | Permanent | (Note 1) | 20 ± 1 when wet | AC HCC | Manufacturer's recommendations |
| D | I & II | Removable tape | Temporary | (Note 1) | (Note 1) | AC HCC | Construction zone pavement marking |
| E | | Removable Black tape (Non-Reflective) | Temporary | (Note 1) | (Note 1) | AC | Construction zone pavement marking for covering existing markings |
| F | I & II | Temporary markings | Temporary | (Note 1) | 15 max | AC HCC | May be applied directly after paving operations |
| FTPM | | Temporary markings | Temporary | (Note 1) | | AC HCC | Manufacturer's recommendations |

**Note 1:** In accordance with manufacturer's recommendation.

**Section 704.04—Measurement and Payment** is amended to add the following:

**Permanent pavement markings** will be measured and paid for as the appropriate pavement line marking or pavement message marking pay items and pay units specified in the Contract. For roadways that are surface treated, the cost of sweeping the roadway prior to installing permanent pavement markings shall be included in the price bid for such pavement line or message marking items.

**Temporary pavement line markings** will be measured and paid for at the contract unit price per linear foot for the type and/or class and width specified. This price shall include furnishing and installing the pavement marking material, surface preparation, quality control tests, daily log, guarding devices, primer/adhesive, glass beads, and disposal.

If temporary line markings require refreshing, reapplication, or replacement before the final surface or the permanent markings are installed, all cost for refreshing, reapplication, or replacement shall be at the Contractor's expense, unless the Contractor was directed to apply the temporary markings to a visibly wet surface at the direction of the Engineer as specified herein.

In the event the Contractor uses FTPMs in lieu of Type F-temporary paint to simulate a longitudinal line marking as allowed herein, the Contractor will be paid at the linear foot pay unit for the length of simulated line marking at the Type F-temporary paint unit price. That measurement shall represent all FTPMs required for that simulated line marking. This cost shall include furnishing and installing and maintaining the FTPMs, removable covers, surface preparation, quality control tests, daily log, guarding devices, FTPM removal, and disposal.

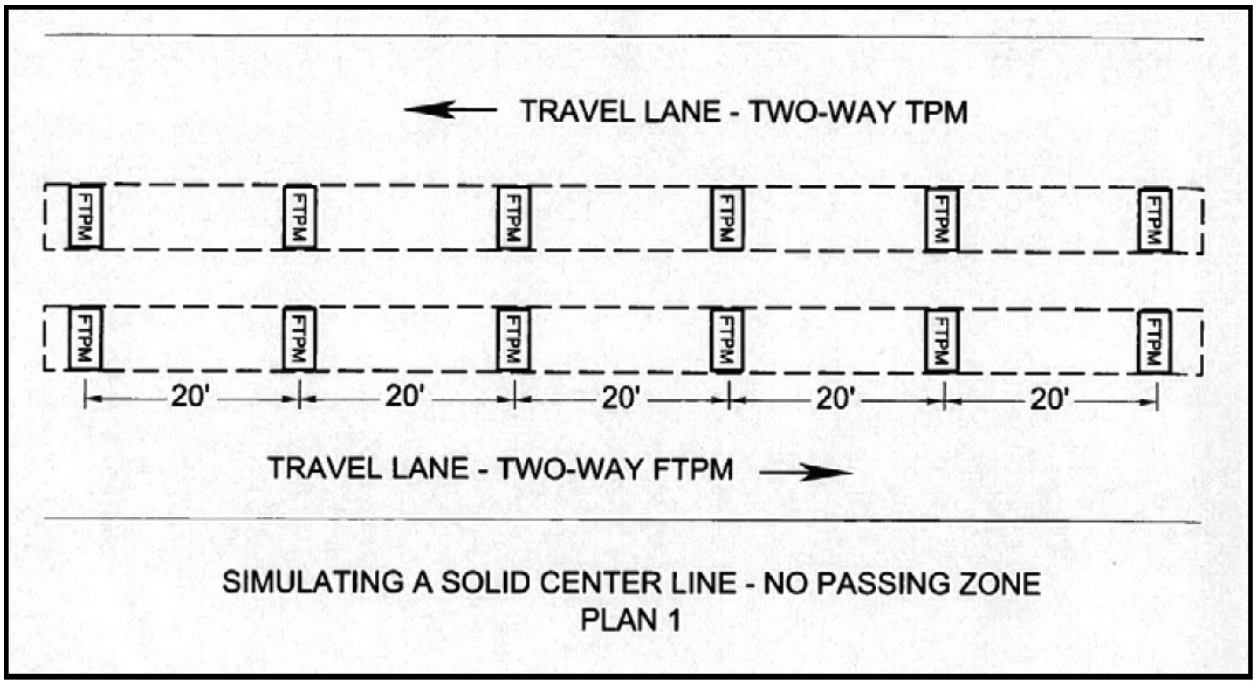
**Temporary pavement message markings** will be measured and paid for at the contract unit price per each per location or per linear foot for the appropriate pay items and pay units specified in the Contract. This price shall include the pavement marking material, surface preparation, quality control tests, daily log, guarding devices, primer/adhesive, glass beads, when required reflective optics materials, and warranty.

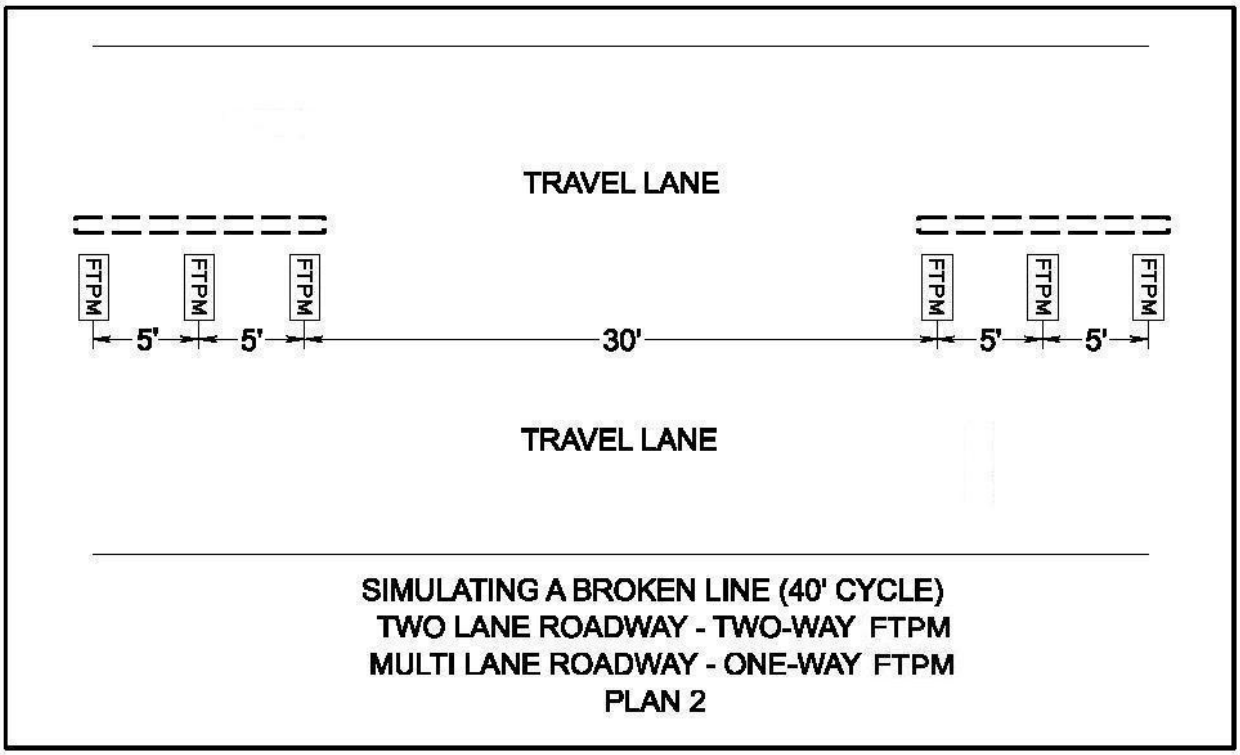
If temporary pavement message markings require refreshing, reapplication, or replacement before the final surface or the permanent markings are installed, all cost for refreshing, reapplication, or replacement (including Maintenance of Traffic costs) shall be at the Contractor's expense <u>unless the Contractor was directed to apply the temporary markings to a non-dry surface at the direction of the Engineer as specified herein</u>.

Payment will be made under:

| **Pay Item** | **Pay Unit** |
|---|---|
| Temporary pavement line markings (type and/or class and width) | Linear Foot |
| Temporary pavement message markings (Message/symbol), type and/or class | Each of Linear Foot |

# TYPICAL PLAN FOR FTPM PLACEMENT



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# END OF VOLUME 2 OF 2

## STANDARD PROVISIONS:

### 2015 SURFACE TREATMENT SCHEDULES

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