



**CONSTRUCTION
CIRCULAR LETTERS**

LAST REVISION DATE: 2/29/2016

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CIRCULAR LETTER

SECTION: 102.01 PREQUALIFICATION STATEMENTS AND COMPETENCY OF BIDDERS
NUMBER: 102.01-01
SUBJECT: CONTRACTOR PERFORMANCE EVALUATION
DATE: JANUARY 11, 2016

As required in the prequalification rules, prime contractors are to be evaluated on all contracts using the attached form. The Contractor Performance Evaluation shall be completed at the end of each calendar year and/or upon the completion of each contract.

The evaluation shall be prepared by the District Supervisor and reviewed by the District Operations Engineer and the Operations Engineer or Director of Regional Operations. For contracts with consultant engineering and inspection (CEI), the consultant should prepare and sign the evaluation after reviewing it with the TDOT District Supervisor.

The contractor shall be provided a copy of the completed report by the Regional Operations Office. The contractor shall be given an opportunity to meet and discuss any rating.

The overall rating for each evaluation period shall be entered in the Contract Administration>Contractor Management>Contractor Evaluation window of SiteManager. An electronic copy of the approved evaluation form shall be attached to each rating in the Contractor Evaluation window and the original shall be maintained in the project files.

A contractor's overall performance rating will be determined and maintained by the Headquarters Construction Office. It will be based on a weighted score of all of current prime contracts and any prime contract completed within two years of the rating period. The overall weighted score will be calculated using the original contract amount and the relative score for each respective contract.

CONTRACTOR PERFORMANCE EVALUATION—RATINGS GUIDELINES

Evaluate the contractor based on the following guidelines. The full range of values should be used. Intermediate values in the range may be used. Place the points in the appropriate box on the front of this form. For items that do not apply to a particular contractor, no points should be allowed. A final percentage should be based on the total number of points rated by the Project Supervisor divided by the total possible points for the items that apply.

PROJECT ORGANIZATION AND MANAGEMENT:

A. Superintendent in charge with authority.

5 Contractor has knowledgeable superintendent on project, start to finish, with authority to solve problems and schedule the work.

3 Contractor superintendent available most of the time, with limited authority.

0 Contractor failed to properly designate authority for project supervision or superintendent is routinely unavailable on the project site.

B. Coordination with suppliers, other contractors and utilities.

5 All coordinating done at proper time by contractor.

3 Some coordinating necessary by contracting authority with timely notification in all instances.

0 Lack of timely coordination.

C. Adequate and competent labor force.

5 Contractor has adequate number of people; labor force is knowledgeable of proper procedures and consistently does complying work with limited supervision.

3 Number of people is adequate, some training is needed, supervision of routine items is occasionally necessary.

0 Insufficient number of people or inadequate training or lack of proper supervision for many portions of the project.

D. Processing paperwork/certifications.

5 All paperwork completed and submitted in a timely manner throughout project. Pay item disputes and change orders are resolved with no delay to progress of the work.

3 Minor delays in finalizing out the project, some disputes have delayed resolution, but most of paperwork is consistent and timely.

0 Contractor was unable to provide all required paperwork.

E. Attitude and cooperation.

5 Quick response to concerns of the contracting authority, extra effort made by contractors personnel in public relations, problems are resolved amicably.

3 Periodic delays in responding to engineer/inspector, public concern. Most problems resolved friendly.

0 Pattern of slow response of concerns, or poor public relations effort.

WORK PERFORMANCE

F. Completion on schedule.

10 Project is currently on schedule or was completed on schedule.

7 Project is currently slightly behind schedule or was completed slightly behind schedule (after adjusting for excusable delays).

4 Project is currently moderately behind schedule or was completed moderately behind schedule (after adjusting for excusable delays).

0 Project is currently extremely behind schedule or was completed extremely behind schedule (after adjusting for excusable delays).

G. Compliance of work.

10 All work complies with the plan and specifications and no price adjustments are assessed.

5 Minor non-compliances, with some delays in resolution or some repeated violations.

0 Corrective work required on much of the project.

H. Quality of the finished product.

10 Excellent appearance of all portions of the work. No deducts for deficient work. Only one final check necessary on each portion of the work.

7 Adequate appearance of the work with some non-uniformity. No more than 5% of the items have deficient work in the finished product.

4 Poor appearance of work or more than 5% of the items have deficient work or repeated final checks necessary.

0 Much of the work is borderline acceptable or life of finished product has been shortened due to poor quality of work.

I. Completion on Budget

- 10** Project completed below or at contract award amount or revised contract amount
- 7** Project completed between 0%-3% above contract award amount or revised contract amount
- 5** Project completed between 3% - 8% above contract award amount or revised contract amount
- 3** Project completed between 8%-10% above contract award amount or revised contract amount
- 0** Project completed more than 10% above contract award amount or revised contract amount

SAFETY PRACTICES

J. Administration and general project safety.

- 5** Active safety officers. Timely inspection and reports without prompting. No non-complying equipment. Safety concerns are addressed and corrected promptly. All personnel trained and following good safety practices.
- 3** Safety is adequate. Minor problems with paperwork, equipment, training or practices.
- 0** Documented need for improvement that did not occur by completion of the contract, or any failure to immediately repair/correct unsafe equipment, or any repeat violation of a safety rule or practice.

K. Accidents/Fatalities/Safety violations

- 15** There are no accidents, either vehicular or workers, no fatalities, or no TOSHA/OSHA citations
- 10** Only 1 accident on the project
- 5** No more than 2 accidents on the project
- 0** More than 2 accidents, a fatality occurs or there is a TOSHA/OSHA citation

L. Signing and traffic control.

- 10** Signing is properly placed and maintained at all times. Signing material is above average. Contractor makes documented routine and night checks of signs. No non-compliances for signing or traffic control.
- 7** Some minor problems with sign placement or maintenance, or lack of consistent documented routine and night sign checks.
- 4** One or more major problems with signing or traffic control, or failure to document signing, or any repeat non-compliance on a safety item.
- 0** Contractor showed repeated total disregard of signing and traffic control.

ENVIRONMENT

M. Compliance with erosion control plan and permits

- 10** No erosion control issues. No environmental violation notices were issued.
- 5** Only minor erosion control issues. No environmental violation notices were issued.
- 0** Several severe erosion control issues. Multiple environmental violation notices were issued.

N. Responsiveness to erosion control issues

- 10** Contractor responded quickly (within 24 hours per SP107FP) to erosion and sediment control issues.
- 5** Contractor responded fairly quickly (within 72 hours) when notified of erosion control issues.
- 0** Contractor frequently failed to address erosion control issues in a timely manner.

CIRCULAR LETTER

SECTION: 102.01 PREQUALIFICATION STATEMENTS AND COMPETENCY OF BIDDERS
NUMBER: 102.01-02
SUBJECT: ATTESTATION FOR ILLEGAL IMMIGRANTS
DATE: OCTOBER 2, 2015

Effective with the October 27, 2006 letting, all contracts will include Special Provision 102I. Special Provision 102I, "Employing and Contracting with Illegal Immigrants" requires the Contractor to attest, certify, and assure that they are not knowingly utilizing the services of illegal immigrants in the performance of each contract. The Prime Contractor makes this initial attestation when they accept and sign the proposal contract.

The Prime Contractor must reaffirm this requirement semi-annually for each contract by completing the attached "attestation" form. To assure consistent and timely attestation, the Prime Contractor shall submit a completed attestation form for each awarded contract on January 1st and July 1st each calendar year in which work has not been completed.

The District Supervisor shall maintain a file for each project with the completed Attestation forms for proper documentation. If a Prime Contractor fails to submit the required attestation form, the partial progress payment shall be withheld until the attestation is submitted by the contractor.

For projects with Consultant Engineering and Inspection services (including Erosion Prevention and Sediment Control Inspection), the project file shall include the completed Attestation forms for the CEI consultant. The consultant shall submit a completed attestation form for each project CEI contract agreement on January 1st and July 1st each calendar year in which work has not been completed. If a Consultant fails to submit the required attestation form, Monthly Progress Billings shall be withheld until the completed attestation form is submitted by the consultant.

ATTACHMENT 1

**ATTESTATION REGARDING PERSONNEL USED IN
CONTRACT/AGREEMENT PERFORMANCE**

SUBJECT CONTRACT/AGREEMENT NUMBER:	
ENGINEER/CONTRACTOR LEGAL ENTITY NAME:	
FEDERAL EMPLOYER IDENTIFICATION NUMBER: (or Social Security Number)	

The Engineer/Contractor, identified above, does hereby attest, certify, warrant, and assure that the Engineer/Contractor shall not knowingly utilize the services of an illegal immigrant in the performance of this Contract/Agreement and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant in the performance of this Contract/Agreement.

SIGNATURE & DATE: _____

NOTICE: This attestation MUST be signed by an individual empowered to contractually bind the Engineer/ Contractor. If said individual is not the chief executive or president, this document shall attach evidence showing the individual's authority to contractually bind the Engineer/Contractor.

CIRCULAR LETTER

SECTION: 104.04 MAINTENANCE OF TRAFFIC
NUMBER: 104.04-01
SUBJECT: LANE/STRUCTURE WIDTH RESTRICTIONS
DATE: SEPTEMBER 15, 2015

When routing trucks and/or oversize traffic around or detouring through a work zone, the District Supervisor shall advise the District Operations Engineer, Regional Operations Office, and the Overweight and Over Dimensional Permit Office approximately two weeks prior to the hard barrier restriction of lane width and/or closing of a structure on the State or Interstate Highway System. Soft barrier restrictions would not fall under the notice. This will allow the Regional Operations Office and the Overweight and Overdimensional Office ample time to make advisements of the lane restrictions. Once the restriction or closure has terminated, the District Supervisor shall again advise the Regional Operations Office and the Overweight and Overdimensional Office.

The District **Supervisor** will be responsible for completing and submitting the 104.04-01 form and a location map to the Overweight and Overdimensional Permit Office at the email address shown on the form. A copy will also be submitted to the Regional Operations Office. The lane width restriction shall also be entered into SWIFT. Once the restriction has ended, the **District Supervisor** will be responsible for submitting the form again to notify of the restriction termination end date. (Please submit the excel document, Width Restriction Notice CL 104-04-01.xls, located in File Management.)

The Permits Section may be reached at the following address:

Overweight and Overdimensional Permit Office
Tennessee Department of Transportation
Suite 300 James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0331
Phone: (615) 741-3821
Tdot.permitoffice@tn.gov

**STRUCTURE and/or RESTRICTION of WIDTH
CLOSING or REOPENING NOTICE**

Regional/District Location Address:

Contract No. :

Project No. :

County:

Project No. :

Project Supervisor:

Phone No:

LANE CLOSURE:

Date:

Route:

Log Mile:

RESTRICTION:

Horizontal:

Vertical:

DESCRIPTION OF LOCATION AND MAP(ATTACHED):

RESTRICTION OR CLOSURE TERMINATED:

Date:

Send to:

Tdot.permitoffice@tn.gov

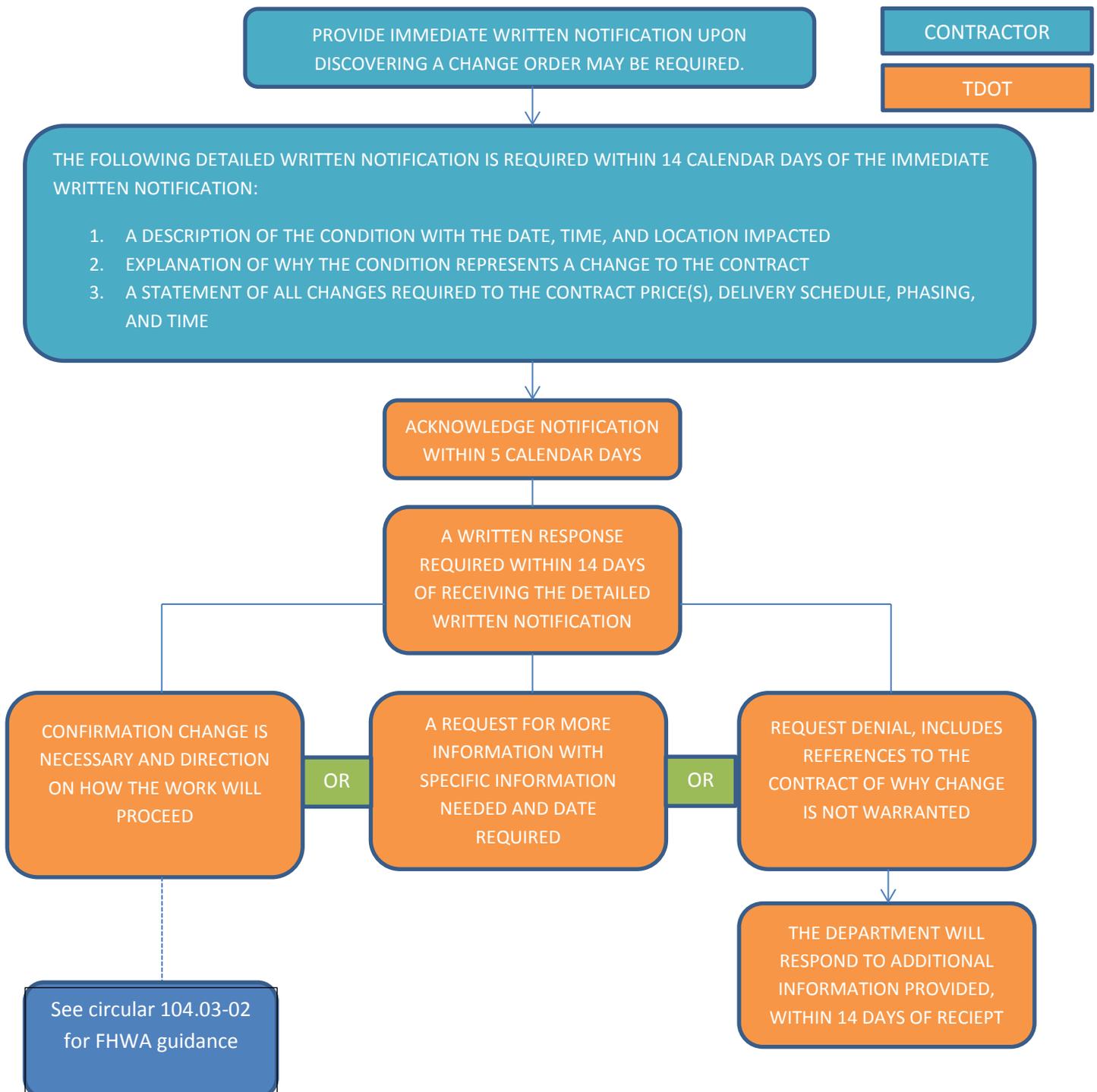
615-532-9289

CIRCULAR LETTER

SECTION: 104.03 CONTRACT CHANGE NOTIFICATION
NUMBER: 104.03-01
SUBJECT: CONTRACT CHANGE
DATE: JULY 1, 2015

CONTRACT CHANGE NOTIFICATION

The following flow chart is to provide guidance for the new contract change order notification process. Ensure all documentation has been reported in SiteManager as required.



Change Order Guidance for Notification Requirements

The following flow chart directs when and who to submit the change order documentation as well as notification requirements.

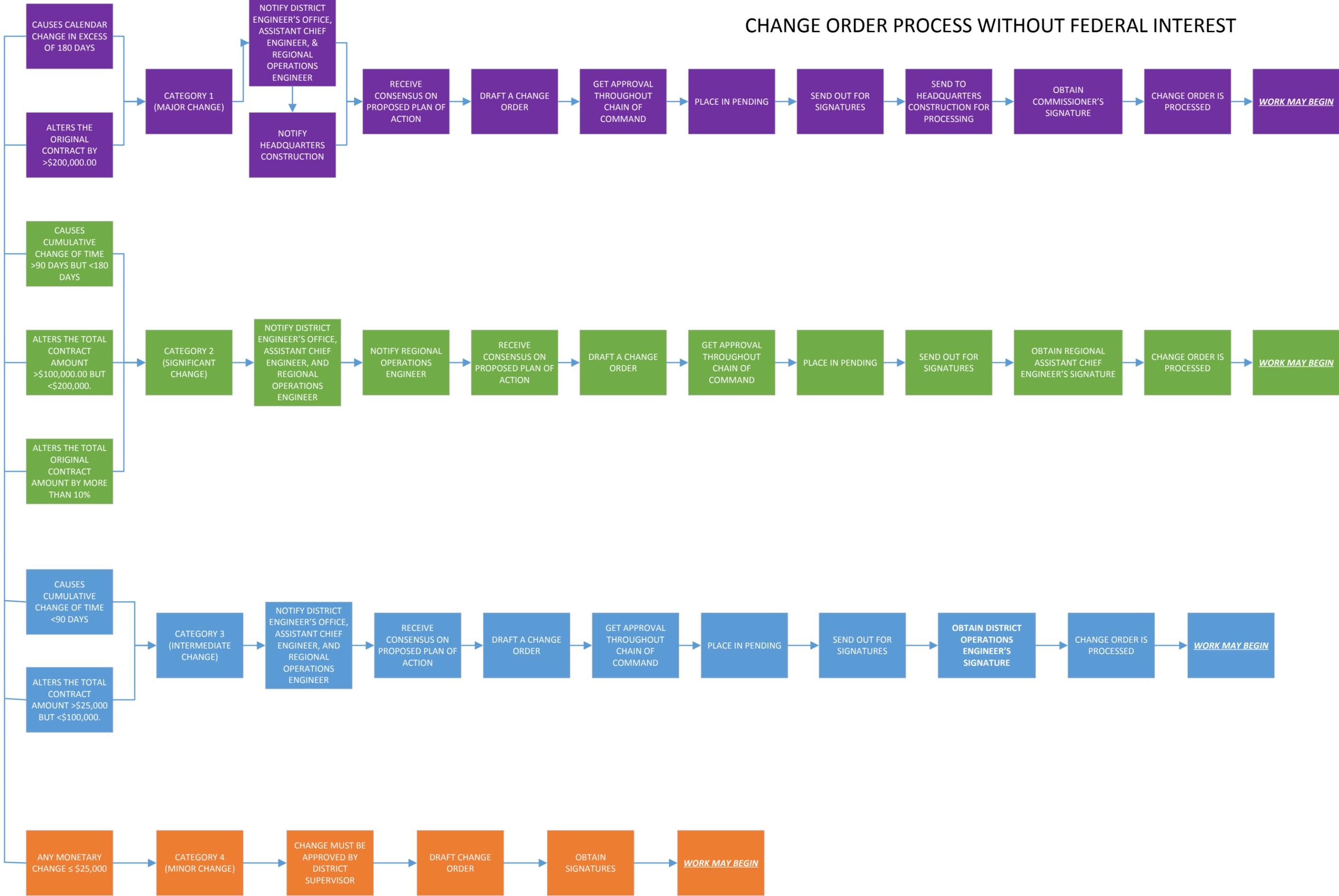
Policy 355-01 must be adhered to when compiling and processing a change request / change order. The **last** signature on all change orders will be a TDOT signature. Distribute copies as stated in the policy.

After consensus is achieved, verbal approval may be obtained from Final Signatory to allow work to begin before executing the official change order.

All potential change orders on any alternative contract project shall be sent to headquarters construction for approval as soon as the potential change has been identified.

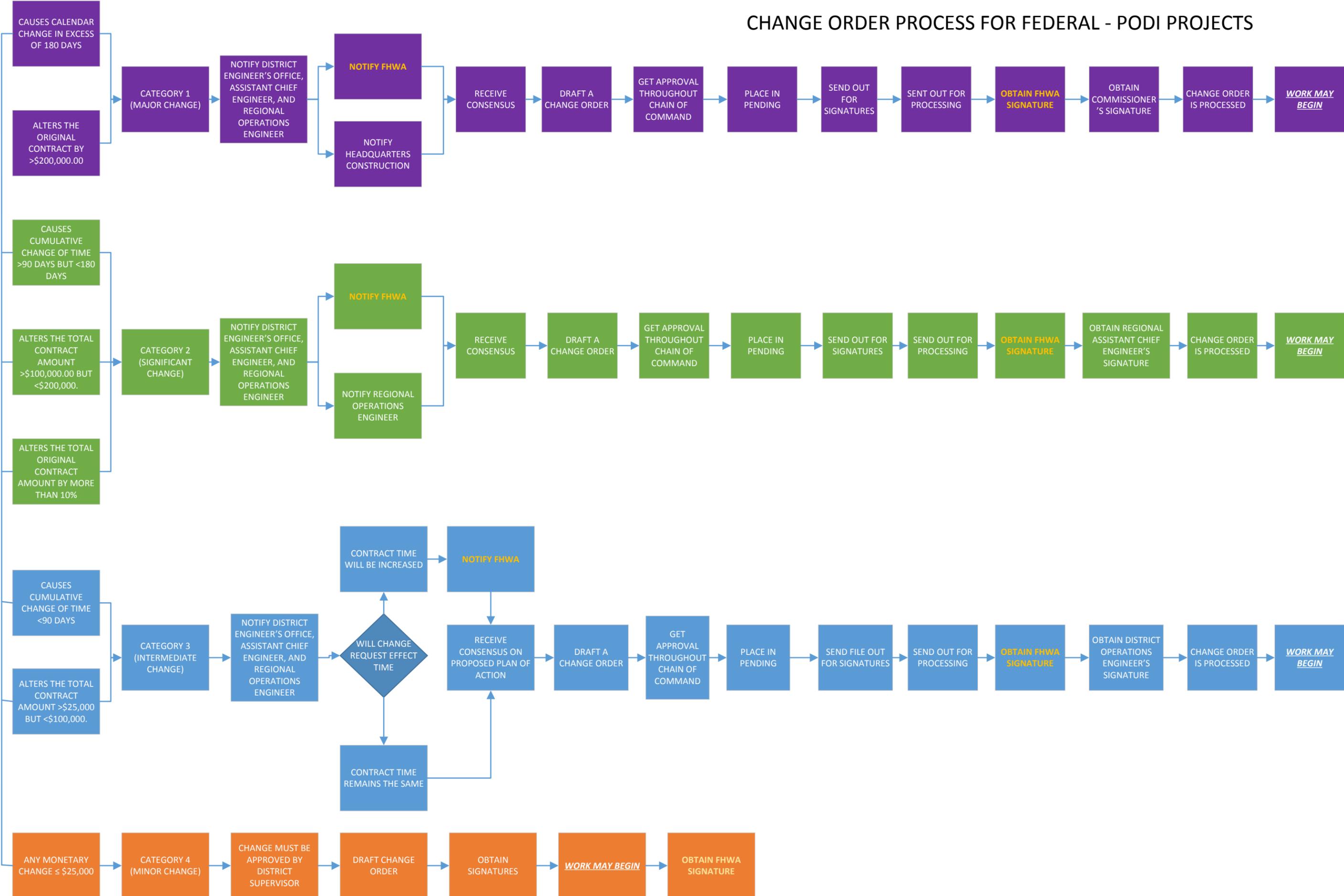
CHANGE ORDER PROCESS WITHOUT FEDERAL INTEREST

CHANGE ORDER REQUIRED



CHANGE ORDER PROCESS FOR FEDERAL - PODI PROJECTS

CHANGE ORDER REQUIRED



CIRCULAR LETTER

SECTION: 104.11 VALUE ENGINEERING CHANGE PROPOSAL
NUMBER: 104.11-01
SUBJECT: VALUE ENGINEERING CHANGE PROPOSAL (VECP)
DATE: OCTOBER 2, 2015

The purpose of this Circular Letter is to establish requirements for the proper submittal and approval of Contractor **Value Engineering Change Proposals (VECP)**.

Unless otherwise directed, a Contractor may submit a VECP on any project as long as the total estimated savings is greater than \$25,000. VECP's that propose a total savings of less than \$25,000 (twenty-five thousand dollars) will normally not be considered unless there are other non-monetary savings or benefits to be realized.

All VECP's must be reviewed by the appropriate TDOT Divisions to assure all original design, structural, environmental, geotechnical, safety, etc. intentions are not compromised. The attached form shall be completed with each VECP submittal to verify acceptability with the appropriate Divisions.

It will be the responsibility of the Headquarters Construction Division to assure all Category 1 Change Orders for VECP are acceptable by the applicable divisions (and FHWA when applicable), Category 2 Change Orders shall be submitted to Regional Operations Office, and District Supervisors to assure the appropriate Divisions (and FHWA when applicable) accept the VECP for Category 3 Change Orders.

Before any VECP "Concept" or VECP is to be considered, the Contractor must provide all the minimal information required in the specifications.

Contract bid unit prices shall be carefully reviewed. Any prices exceeding average prices by more than 10% should have sufficient data and calculations supporting the increased prices..

The Contractor and TDOT will split the actual net savings. The actual savings will be determined when all the work outlined in the VECP and Change Order is completed and final quantities are known. The quantities of other items not in the Change Order that change as a result of the VECP shall be considered in the actual savings calculation. The contractor shall be paid 50% of the actual savings only when all the VECP work is completed.

In accordance with standard specification 104.11, any VECP's that result in an increase greater than the original contract amount will be paid at a rate of 50% of the contract prices for all costs above the original contract amount.

Contract No.:	Project No.:
Date Submitted:	County:
Contractor:	Estimated Savings: \$
Project Description:	
VECP Description:	

Review needed	Division	Acceptable	Reviewed By:	Date:
	Design	YES NO		

Comments:

Review needed	Division	Acceptable	Reviewed By:	Date:
	Structures/ Hydraulics	YES NO		

Comments:

Review needed	Division	Acceptable	Reviewed By:	Date:
	Environmental Permits	YES NO		

Comments:

Review needed	Division	Acceptable	Reviewed By:	Date:
	Geotechnical Engineering	YES NO		

Comments:

Review needed	Division	Acceptable	Reviewed By:	Date:
	FHWA	YES NO		

Comments:

Review needed	Division	Acceptable	Reviewed By:	Date:
	Maintenance/ Traffic	YES NO		

Comments:

EXAMPLE

Contract No.: CNE 520	Project No.: 40172-4585-04
Date Submitted: July 4, 2006	County: Washington
Contractor: Uncle Sam Grading Co.	Estimated Savings: \$ 67,000
Project Description: The grading and paving of U.S. 76 from East of Atlantic Ave. to Pacific Coast Rd.	
VECP Description: Revise the drainage plans to replace the 6'x4' box culvert at STA 17+76 and STA 20+06 with a 72" RCP-Class III pipe, and the 45"X73" arch pipe with a 60" RCP pipe at STA 25+50	

Review needed	Division	Acceptable	Reviewed By:	Date:
YES	Design	<input checked="" type="radio"/> YES <input type="radio"/> NO	Alfred E. Newman	July 12, 2006

Comments: VECP is satisfactory as submitted

Review needed	Division	Acceptable	Reviewed By:	Date:
YES	Structures/ Hydraulics	<input checked="" type="radio"/> YES <input type="radio"/> NO	Howdy D. Doody	July 13, 2006

Comments: New pipe sizes are satisfactory as proposed with equivalent capacity

Review needed	Division	Acceptable	Reviewed By:	Date:
YES	Environmental Permits	<input checked="" type="radio"/> YES <input type="radio"/> NO	Sierra P. Nevada	July 13, 2006

Comments: Will revise permit with TDEC to show new pipe sizes

Review needed	Division	Acceptable	Reviewed By:	Date:
NO	Geotechnical Engineering	<input type="radio"/> YES <input type="radio"/> NO		

Comments:

Review needed	Division	Acceptable	Reviewed By:	Date:
NO	FHWA	<input type="radio"/> YES <input type="radio"/> NO		

Comments:

Review needed	Division	Acceptable	Reviewed By:	Date:
NO	Maintenance/ Traffic	<input type="radio"/> YES <input type="radio"/> NO		

Comments:

CIRCULAR LETTER

SECTION: 105.02 AS-BUILT PLANS
NUMBER: 105.02-01
SUBJECT: AS-BUILT PLANS
DATE: OCTOBER 2, 2015

All significant changes not included in a change order or plans revision shall be documented by the District Supervisor and submitted to the appropriate stakeholders as well as the project file. A significant change would include, but not necessarily be limited to, pavement section thickness and/or width, utility relocations, drainage size and/or routing, rights-of-way, ITS, and structure modifications. If there is a question of the significance of the change, a final determination shall be determined by the District Engineer.

The District Supervisor will submit with the final records a letter advising if there were no significant deviations.

CIRCULAR LETTER

SECTION: 105.06 NUMBER: 105.06-01

SUBJECT: REQUIRED NOTIFICATIONS

DATE: OCTOBER 2, 2015

PRECONSTRUCTION NOTICES AND STARTING NOTICES

Preconstruction Notices and Starting Notices shall be sent to the following:

Original - Director of Construction
Suite 700, James K. Polk Building
Nashville, TN 37243-0326

Copies - Regional Operations Engineer
District Operations Engineer/Manager
Regional Materials Engineer
Regional Environmental Coordinator
Regional Project Development Manager

Manager, Comprehensive Inspections Program
4005 Cromwell Road
P.O. Box 22368
Chattanooga, TN 37422

Manager, Natural Resources Office
James K. Polk Building, Suite 900
505 Deaderick Street
Nashville, Tennessee 37243-0334

Director, Materials and Tests Division
6601 Centennial Blvd.
Nashville, TN 37209

Director, Small Business Development Office
Suite 1800, James K. Polk Building
Nashville, TN 37243-0347

Manager, Program Operations Office
Suite 600, James K. Polk Building
Nashville, TN 37243-0341

Manager, Program Development & Scheduling Office
Suite 600, James K. Polk Building
Nashville, TN 37243-0341

Director, Labor Standards Division
Prevailing Wage Commission
220 French Landing Dr., Suite 1B
Nashville, TN 37243
e-mail: Mark.Finks@tn.gov, and Mary.Ledbetter@tn.gov

Director, Division Workers' Compensation
220 French Landing Dr., Suite 1B
Nashville, TN 37243
e-mail: Carol.D.Duncan@tn.gov

Contract Payments Section
Suite 800, James K. Polk Building
Nashville, TN 37243-0329

NOTIFICATION TO LOCAL OFFICIALS:

Local Officials are to be notified in writing of the proposed schedule of construction before work is started on any facilities that may fall within their jurisdiction. If desired by said officials, a meeting could be scheduled to fully apprise them of the impact of the proposed construction.

The Highway Patrol and/or local law enforcement shall be invited to the preconstruction meeting on all projects on the interstate system.

NOTIFICATION TO PRIME CONTRACTOR:

Notification of the Preconstruction Conference to the Prime Contractor should contain:

- 1) An emphasis that project level supervisors need to be in attendance. The contractor's EPSC representative should attend as well.
- 2) The Prime Contractor is to notify all subcontractors advising them of the date, time and place soliciting their attendance.

NOTIFICATION TO CONTRACTOR CONCERNING ARCHAEOLOGICAL CERTIFICATION OF WASTE AND BORROW SITES:

On projects where multiple parties are involved (i.e. Railroads, utility companies, other DOT personnel, etc.), all parties should be notified at least one week prior to the Preconstruction Conference.

The Contractor shall be notified at the preconstruction conference that he shall obtain an archaeological certification for any exclusive waste and/or borrow site located outside the project rights-of-way, in accordance with Section 107.06 of the Specifications and the Waste and Borrow Manual. The certification shall be obtained and a copy forwarded to the Project Supervisor prior to the movement of any material from or to the site.

The Contractor shall make his request for certification in writing (Faxed requests will not be accepted) to:

Ms. Jennifer Barnett
Federal Programs Archaeologist
TN Division of Archaeology
Cole Building #3
1216 Foster Ave
Nashville, TN 37243
615-741-1588, ext.105

and shall include the following:

- 1) Name and address of Contractor.
- 2) Description of construction project, including Project Number and Contract Number.

CIRCULAR LETTER

SECTION: 105.07 COOPERATION WITH UTILITIES (RAILROADS)
NUMBER: 105.07-01
SUBJECT: UTILITY RELOCATION PROCEDURES
DATE: February 29, 2016

1. Utility relocations and adjustments are to be made in accordance with FHWA's FHPM 6-6-3-1 dated September 6, 1985.
2. Advise all utilities in writing at the preconstruction conference that work performed without prior notification to allow Department verification will not be reimbursed. Due to the fact that State Project Work within a railroad's rights-of-way must receive approval of the railroad being impacted by such project, and the fact that a railroad's rights-of-way is private property and must be treated as such, that in cases where work to accommodate such project has been performed by a railroad on a State Highway Project and/or State Managed Utility Relocation Project, and such work is performed for some reason without prior notification to the Department, the work performed shall be inspected and verified by the Field Construction Office and/or the Department's Railroad Inspection Office prior to any reimbursement to a railroad for such work. This letter should also include instructions as to how, where and when the Project Supervisor or his representative may be reached.
3. Project Supervisors should emphasize the need for proper traffic control by the utility companies during construction. Closer monitoring by field personnel of the utility companies is needed.
4. Project Supervisors should notify the Regional Utilities Engineer if assistance is needed in setting up proper records.
5. Project Supervisors should advise the utility companies in writing as to the need for inspection of all salvaged materials. These inspections will now be performed by the Project Supervisors.
6. When personnel changes are made Project Supervisors must ensure that new utility inspectors are aware of their job responsibilities and have all pertinent materials.
7. All utility/railroad activities are to be recorded daily on Form DT-0667 regardless of whether said relocations are reimbursable or not.

8. Plans should be reviewed and possible utility conflicts with proposed construction investigated. (Ex. Underground utilities and guardrail)
9. The Regional Construction Office is to develop a system of periodic random review of each Project Supervisor's utility relocation procedure to ensure compliance.

CIRCULAR LETTER

SECTION: 105.07 COOPERATION WITH UTILITIES (RAILROADS)
NUMBER: 105.07-03
SUBJECT: RAILROAD/HIGHWAY GRADE CROSSING SAFETY PROJECTS
DATE: MAY 15, 2002

The following procedures for project control and inspection for Safety Projects programmed under Section 203 and 230 of the 1973 Highway Safety Act and TCA 65-11-113 and 114 (Prefix RRP, RRO).

1. The Utilities Engineer will provide the District Operations Engineer with the approved plans and specifications, approved estimate of costs and agreement executed between Tennessee Department of Transportation and Railroad Company and approved by Federal Highway Administration.
2. The Regional Operations Engineer will assign a District Operations Engineer to represent the Bureau of Operations and work directly with the railroad. The project supervisor will be provided copies of material outlined in paragraph one above e.
3. The District Operations Engineer will hold a pre-construction meeting with railroad company representatives when he is notified they are ready to begin installation of signals to discuss the scope of work and establish the date the railroad is to begin work. Daily inspection of the work by the railroad will not be performed, instead, a close out or final inspection will be held by the regional construction supervisor and the project supervisor with the railroad company to insure that the signals and related equipment have been installed in accordance with approved plans and specification and that required signing and markings have been installed by the Maintenance Division or local Government. Any extraordinary problems encountered by the railroad that will increase the cost of the project shall be discussed at this time, and an explanation written by the project supervisor for attachment to the railroad's invoice.
4. The District Operations Engineer will be required to endorse the railroad billing to the effect that work has been completed in accordance with approved plans and specifications.
5. These railroad billings will be handled for audit and payment as other railroad and utility bills. Final bills are not to be approved unless all work has been completed.
6. Upon project completion the attached form is to be filled out and transmitted to those individuals noted. On projects consisting of both signals and crossing work, completion notices are to be submitted only after all work is finished. On notices for projects consisting of signals only "N/A" is to be entered for the crossing pad.

Use of these procedures is limited to projects for the installation of flashing light signals and/or related highway markings and signing not a part of a highway construction project. Railroad adjustments and installation necessary to accommodate highway construction projects will be handled as they have been, and will be subject to inspection and record keeping as other utility adjustments.

CIRCULAR LETTER

SECTION: 105.07 COOPERATION WITH UTILITIES
NUMBER: 105.07-04
SUBJECT: UTILITY DIARIES AND INSPECTION PROCEDURES
DATE: ~~DECEMBER 15, 2007~~ February 29, 2016

On all projects requiring utility relocations, Form DT-0667 "Project Utility Diary" is to be used to document said relocations whether the work is reimbursable or not. When a utility is relocating at its own expense or under a lump sum reimbursement contract, the "Description of Work Performed" section will be the only notation required. The notation shall indicate if the relocation is a non-reimbursable or lump sum reimbursable contract. ~~Form DT-0667 fulfills the requirements for documentation detailed in Section 109.05 of the Department of Transportation Construction Manual and Section 18.7 of the Standard Utility Procedures Manual.~~

1. Form DT-0667 is to be completed in the field by the utility inspector.
2. The original or white sheet is to be transmitted to the TDOT Project Supervisor's office ~~and bound.~~
3. The first copy or yellow sheet is to be transmitted to the utility company on reimbursable relocations.
4. The second copy or pink sheet is to be retained in the utility diary.

If the utility relocation is included in the state contract, the utility will be responsible for inspecting all phases of the relocation, per TCA 54-5-804, 2003 Public Chapter 86. The TDOT inspector shall document the utility work activities performed on the Daily Work Report in SiteManager. ~~the daily project diaries.~~ The inspector provided by the utility company will:

1. Complete Form DT-0667 as described above and submit it each estimate period, as directed by the TDOT Project Supervisor. Along with the item descriptions, the inspector will include the quantities and stations of installed items.
2. Complete "Installed Item Certification" portion of Form DT-1716 and submit it each estimate period, as directed by the TDOT Project Supervisor. This form will be signed to certify that the items installed during that estimate period met all applicable specifications.
3. Complete and attach Form DT-1716A to DT-1716 and submit it each estimate period, as directed by the TDOT Project Supervisor. This form will be used to summarize, by project number, the utility items installed during that estimate period. The TDOT inspector shall sign Form DT-1716A after ensuring it is consistent with the utility diaries and daily project diaries. The completed Form DT-1716A shall be referenced in the progress pay quantity documentation.
4. Complete "Final Acceptance of Work" portion of Form DT-1716 and submit it to the TDOT Project Supervisor's office when the utility relocation work is complete.

UTILITY ITEM CERTIFICATION/FINAL ACCEPTANCE

Contract Number: _____ **Utility Company:** _____

Project Number(s): _____ **Utility Inspector:** _____
Print

County(ies): _____

Instructions: Please check appropriate box (or boxes) and fill out required information. For **Installed Item Certification**, attach **Summary of Installed Utility Items** sheet(s) for each project number and submit each estimate period as directed by the TDOT Project Supervisor. [Include completed copies of DT-0667, Project Utility Diary for the associated estimate period, \(Diaries must include quantities and Station Numbers\)](#)

Installed Item Certification

On behalf of the above utility company, I certify that the materials used for the item(s) listed on the following page(s) meet and were installed in accordance with all applicable specifications. Any pertinent shop drawings or engineering changes have been approved.

Estimate Period: _____ **to** _____

Utility Inspector Signature

Date

Final Acceptance of Work

I certify that the utility relocation work is complete and is accepted by the above utility company.

Utility Inspector Signature

Date

CIRCULAR LETTER

SECTION: 105.07 COOPERATION WITH UTILITIES (RAILROADS)
NUMBER: 105.07-05
SUBJECT: CSX RAILROAD
DATE: DECEMBER 1, 2006 (01/01/2010)

In order to finalize handling and updating records concerning overpass projects, CSX Transportation, Inc. would like to be advised of the final inspection date in order to participate if desired.

They also wish to be advised in writing, as to the date the structure was completed and opened to traffic.

In order for the Structures Division to certify "As Built" clearances, upon completion of the structure the Project Supervisor shall request the Regional Bridge Inspection Supervisor to conduct his initial inspection of the bridge.

Correspondence relative to the above should be directed as follows with copies to appropriate Department personnel:

Mr. Shelby Stevenson
Principal Engineer – Public Projects
CSX Transportation, Inc.
500 Water Street, J301
Jacksonville, FL 32202

CIRCULAR LETTER

SECTION: 105.07 COOPERATION WITH UTILITIES (RAILROADS)
NUMBER: 105.07-06
SUBJECT: RAILROAD FLAGGING SERVICES
DATE: ~~DECEMBER~~JANUARY 11, 2006~~2010~~

The railroad flagging services for certain projects will be paid by the Department effective for the December 3, 1993 letting. The payment, when required, for flagging services will be specified by Special Provision 105C. The Department will pay for all verified flagging required up to the number of specified flagging days stipulated in Special Provision 105C. The Special Provision states that the Contractor and the Department shall sign the Railroad's time sheets in order to verify the presence of the flagman for a particular day. The Engineer's verification of the time sheets should check for the need of a flagman on a particular day, confirm that the contractor has provided proper notification for the presence of a flagman and confirming the actual flagging hours as noted in the Special Provision. **At all times and in all cases, the Railroad reserves the right and authority to determine when, where and if flagging services are required on a State Highway Project.** Flagging services for work that is not required by the contract (temporary crossings, etc.) will not be paid by the Department. The Utilities section will receive and forward all billing information to the Project Engineer for verification. The payment to the Railroad for flagging will be the responsibility of the utilities Section. However, if the days of flagging services required extend beyond the number of days allotted, the costs of such additional flagging shall be deducted from the Contractor as specified in the Special Provision. The Project Engineer shall make this deduction when he receives the billing information from the Utilities Section. This deduction should be clearly defined in the billing information.

In addition, on projects where the flagging will be paid by the Department, a final inspection in accordance with Subsection 105.13 of the Standard Specifications shall be made for the work that is within the limits of the Railroad. This inspection shall include a representative of the Railroad and once the work is accepted the Railroad shall sign the attached completion notice on the date of final inspection. It is imperative that this inspection is documented because the Railroad has 365 days after this date to submit all billing that is reimbursable by the Department.

Date: _____

Utility Manager
Utilities Section
600 James K. Polk Building
Nashville, TN 37219

Re: Completion Notice of Work within the limits of the Railroad

Federal Project No. _____
State Project No. _____
County _____

Dear Sir:

This notice is to confirm the acceptance of all work within the limits of the Railroad in accordance with Subsection 105.13 of the Standard Specifications.

Date of Railroad Inspection _____
Inspected by Railroad Representative _____
Inspected by D.O.T. Representative _____

Sincerely,

Project Supervisor

cc: Regional Construction Supervisor
Railroad
Contractor
Director of Construction
Finance Office

CIRCULAR LETTER

SECTION: 105.07 COOPERATION WITH UTILITIES
NUMBER: 105.07-07
SUBJECT: FINAL INVOICES FROM UTILITIES AND RAILROADS
DATE: JUNE 29, 1998

In order to enforce the timely receipt of final invoices from Utilities and Railroads for their work performed on highway construction projects, Project Supervisors are hereby advised to notify the appropriate Regional Utility Engineer of the date the Utility or Railroad work was completed on the project immediately following completion of said work. Once the Regional Utility Engineer is notified of the completion date, the Utility or Railroad will be notified that a final invoice for the work performed is needed. This will be identified as the official beginning of the one year time limit for reimbursement which will be monitored and enforced.

CIRCULAR LETTER

SECTION: 105.07 COOPERATION WITH UTILITIES
NUMBER: 105.07-08
SUBJECT: CONSTRUCTION UTILITY COMPLIANCE/NON-COMPLIANCE WITH UTILITY CONTRACT
DATE: JANUARY 15, 2013

TCA 54-5-804 Allows for TDOT and Utility Companies to enter into a contract to move utility facilities ~~which~~ are in conflict with TDOT Construction Projects.

During the development of Right-of-Way plans, the Utility Division begins the process of utility coordination with all Utilities that will be affected by the proposed construction project. There are several steps that the Utility must take regarding reimbursement and some Utilities may decide to relocate prior to construction, at no cost to the State. For those who do request reimbursement, TDOT will enter into one of the following types of contracts:

- Percentage Contract (Move Prior or Move in State Contract) %Public/% Private
- Chapter 86 Move Prior
- Chapter 86 Move in State Contract
- Easement Replacement
- Pipelines (special contracts for transmission pipelines)

For all Move Prior Contracts, the Utility is responsible for:

- Notifying TDOT Construction (Project Supervisor or Regional Construction) of the intended date to begin utility relocation construction no less than 3 days prior to beginning work
 - Surveying (including, but not limited to staking the ROW)
 - Clearing and grubbing (must have TDOT authorization)
 - Coordinating the relocation
 - Constructing the relocation
 - Providing all environmental permits (Notice of Coverage, etc.)
 - Providing environmental inspection as required by permits
 - Providing EPSC
 - Disposing of waste
 - Traffic Control
 - Providing utility easements
 - Meeting Buy America requirements
 - Moving all utility services prior to the letting date of the construction contract (proposed letting date provided to utility in the Go-to-Work Authorization)
- NOTE: This only applies to CH86 projects move prior to letting date. All contracts are subject to the approved Schedule of Calendar Days.

Once the Utility has completed the CH86 Move Prior work, in order to receive reimbursement, the Utility must submit:

1. Invoice to the Regional Utility Office
2. Contract Obligation Certification to both the Project Supervisor and the Regional Utility Office

The Project Supervisor has three options when signing the Contract Obligation Certification:

1. Accepting Certification as submitted.
2. Accepting Certification pending Final Verification by project staking: the Utility will not be reimbursed until Construction work begins and project staking has verified that the Utility has been relocated in accordance with the approved Utility plans.
3. Denying Certification as submitted with documented reasons.

The Regional Utility office will not pay for the relocation until receipt of approval from the Project Supervisor (approval of the invoice and a signed Contract Obligation Certification).

Schedule of Calendar Days Violations – ALL Utility Relocation Contracts

When the Utility fails to complete work within the approved schedule of calendar days, creating a conflict or delay to the construction project, TCA 54-5-854 (h)(1)(A) allows for TDOT to collect a civil penalty from the Utility Owner:

If the owner fails to complete the required installation, relocation or adjustment of its utility facilities within the approved schedule of calendar days as approved by the department, the commissioner of transportation shall have the authority to assess and collect from the owner a civil penalty in the amount of five hundred dollars (\$500) for each calendar day after the scheduled completion date that the owner fails to complete the required installation, relocation or adjustment. Owners having less than three thousand (3,000) customers shall be subject to the assessment of a civil penalty not to exceed two hundred fifty dollars (\$250) per calendar day when the owner fails to complete the required installation, relocation or adjustment of its utility facilities within the approved schedule of calendar days.

To enforce the civil penalty, due process must be provided. To fulfill this requirement, notification must be provided to the utility, specifically the utility management such as the General Manager, that they are considered to be in violation and provide a deadline date for the utility to take corrective action. This should be done by certified mail, FEDEX/UPS, or verified receipt delivery.

The Project Supervisor is the project site authority who determines the utility is causing delays to the project and who acts as the on-site authority to coordinate the work necessary to rectify the deficiencies. It is imperative that the Project Supervisor document utility delays and all coordination with the utilities in preparation for assessing any civil penalties against the utilities for causing delay to the project.

The following steps should be considered minimum documentation in this process (more information may be found in Utility Instructional Bulletin 01-10-2012 Construction Utility Non-Compliance):

1. The Project Supervisor should not sign the “Certification Contract Obligation” if the utility has not met its obligation to Move Prior. Doing so will limit the ability to enforce civil penalties. (NOTE: When there are multiple utilities on one pole, TDOT does not recognize joint use ownership transfer so, if the state permit is issued to a power company, for instance, it is their pole until removed. If the pole is not out of the ground by the Move Prior Day, then none of the joint users are eligible for reimbursement under Chapter 86). If the Project Supervisor is uncertain whether the utility has met its obligation, he/she should contact the Regional Utility Office for assistance.
2. Once the Project Supervisor determines the utility relocation is delaying the project, a notification should be given to the utility. This notification should be documented and placed in the project files (email, letter, meeting minutes, etc.)
3. The Project Supervisor should then notify the Regional Utility Office of these issues. The Regional Utility Office can assist in providing contact information for the utilities’ management above the utility field personnel, coordination documentation, Put to Work date, etc.
4. The Project Supervisor will then arrange a project meeting via verified receipt mail, to discuss utility conflicts delaying the project. Representatives from all utility companies as well as the Prime Contractor should be invited to attend. Inviting ALL participants will provide the opportunity to address coordination issues collectively. This meeting will seek to clarify the issues and provide a deadline date for completion of the utility relocation to prevent continued delay to the project.
5. After the meeting, the Project Supervisor will issue meeting minutes via verified receipt mail, summarizing actions to be taken by the utilities, deadline for completing relocation and consequences for not meeting the deadline (site TCA 54-5-854(h)). This letter should be sent to both the on-site utility representative and the utility management via return receipt mail. (see attached example)
6. If the deadline is not met, the Project Supervisor will transmit a request to the Regional Utility Office to proceed with actions to fine the utility per the state statute.
7. The Regional Utility Office will then submit the request to the State Utility Coordinator if the request has been properly documented.
8. The State Utility Coordinator will review the request, and if properly documented, will submit a request to TDOT Legal recommending that action be taken to fine the utility per state statute.

The Project Supervisor should contact the Regional Utility Office if any conflicts or questions arise during installation, relocation or adjustment of utility facilities. The Regional Utility Office can assist with coordination efforts and can provide technical guidance related to Utility contracts, requirements, etc. If the Regional Utility Office is unable to provide the needed assistance, then the Project Supervisor (with approval from the Regional Construction Office) may contact the Headquarters Utility Office for assistance.

CIRCULAR LETTER

SECTION: 105.11 INSPECTION OF WORK
NUMBER: 105.11-01
SUBJECT: TDOT INSPECTION RESPONSIBILITIES ON LOCAL PROGRAMS PROJECTS
DATE: OCTOBER 2, 2015

In accordance with the TDOT and FHWA Stewardship Agreement, for Local Agency Projects:

“TDOT is responsible for assuring that all Federal-aid projects administered by local agencies comply with all applicable Federal and State requirements. TDOT is not relieved of this responsibility even though the project may be delegated to the local agency. In accordance with 23 CFR 1.11, TDOT is responsible for ensuring that the local agency is qualified and equipped to administer the project and has processes in place to ensure compliance with federal requirements.”

In order to assure adequate construction and materials acceptance and testing, TDOT will have an active oversight responsibility in the pre-construction and construction of these local projects.

The **Regional Operations Engineer** will assign a **TDOT representative** to participate in the project pre-construction meeting, to conduct routine project reviews, to attend quarterly progress meetings, and to participate in the final inspection as required in the Oversight and Frequency table below. When TDOT is conducting the routine project review and final inspection, the **Local Government Representative** responsible for the project shall be present. It is also preferable that the CEI be present during the reviews. The TDOT representative shall assure the quality of construction, completion of contract requirements, and project record keeping are satisfactory.

Required oversight and frequency (note these are minimum frequencies and more inspections may be needed if problems persist):

Project Amount	Pre-construction meeting	Project Reviews/Inspections during construction	Final Inspection
< \$250,000	Required	Required- 1 inspection minimum	Required
\$250,000 - \$2,000,000	Required	<ul style="list-style-type: none"> • Duration < 4 months- Recommend 1 per month, but must do at least 1 •Duration 4-8 months, recommend 1 per month, but must do at least 3 inspections at least 1 month apart • Duration > 8 months, Required every 4-6 weeks 	Required
>\$2,000,000	Required	Required 1 per month minimum.	Required

To document TDOT's oversight activities, the attached inspection form shall be completed during each project review. All findings, satisfactory or not, shall be documented in the inspection report. The inspector must document what was observed and its acceptability in the "comments" section (e.g. all certified payrolls were on file and wage rates comply with contract). It is required to attach supporting documentation when a negative finding is made. A closeout meeting with the Local Government Representative and CEI (if applicable) will be required to discuss the findings.

A representative from the **TDOT Regional Materials and Tests** section shall conduct all verification and Independent Assurance testing on the local project in accordance with TDOT SOP 1-2.

The assigned **TDOT representative and Materials and Tests representative** shall work together and shall attend and participate in the mandatory preconstruction meeting to explain TDOT expectations. These TDOT representatives are the "eyes and ears" for TDOT and must assure that the project is completed in accordance with the federal regulations just as though it is a TDOT project with federal funds.

The local entity and their CEI will have the day to day responsibility and authority for construction inspection and material acceptance.

The **TDOT Local Programs Office**, is responsible for project oversight on Enhancement Projects (except the construction of bicycle and pedestrian facilities) and buildings.

Additional inspection requirements and guidelines:

- As noted the Local Government Representative shall be present during the project review
- Once the review is completed, there shall be a close out meeting with the Local Government Representative and the CEI to discuss and explain the findings needing to be resolved and the expectations of TDOT. A copy of the completed inspection report should be distributed at that time, if not complete, a copy shall be provided as soon as available, preferably within 2 business days.
 - o All findings should be resolved on the project site if possible
 - o Findings that cannot be resolved on the project site should be raised to the District Operations Engineer / Regional Operations Engineer. The Local Programs Office and Headquarters Construction should be used to resolve problems that cannot be resolved at the Regional level
- The Local Government Representative will be responsible for responding, in writing, to the findings made in the inspection report. Corrective actions taken need to be documented.



**Tennessee Department of Transportation
Construction Monitoring Report
of Local Programs Projects**

Inspection Made By: In Company With:	Inspection Date: Inspection Number:
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PROJECT LOCATION

Local Entity: County: Route/Street/Other:
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PROJECT DETAILS

Project Identification Number: Project Description: Contractor: Award Date: Date Work Began:	Completion Date: <small>(Original contract)</small> Completion Date: <small>(current, including any post-award changes)</small>
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PROJECT PROGRESS

Contract Amount: \$ <small>(in original contract)</small>	Current Contract Amount: \$ <small>(including change orders to date)</small>
Percent Time:	Percent Money:

Work Completed To Date:

Work Performed During the Inspection (Include comments on quality/acceptability of work, testing, etc.)

Summary of Findings: (Recommendations and Resolutions)

| Other Comments -(also include that previous inspection findings have/have not been resolved satisfactorily):

Inspection Checklist

Date _____

Project Number _____

*Please provide a comment for ALL answers and resolution to any questions answered "NO"

General Documentation	Yes	No	NA	Comments
Are all Federally required posters on a board in a place accessible to employees? (Circular Letter 1273-01)				
How many inspectors are on the project? Does construction staffing appear to be sufficient enough to insure that adequate inspection and testing is being performed?				
Is the project on schedule? If no, discuss why-				
Is a daily diary being kept and updated? The diary should be of sufficient detail to get a general picture of activities taking place each day.				
Davis-Bacon/ TN Prevailing Wages				
Are employee interviews performed? (Check interview forms)				
Are certified payrolls being submitted, stamped, dated, and kept on file?				
Are the interviewed employees properly classified and are they paid the appropriate Davis-Bacon minimum wage rate for their classification, if required?				
Disadvantage Business Enterprise (DBE)				
Does the project have a DBE goal? If yes state goal and DBE's used to meet the goal.				

Are DBE Subcontractors on the job? List them.				
Has/have the CUF Checklist(s) been completed?				
Work Zone Traffic Control				
Is WZTC set up in accordance with plans and MUTCD?				
Are all signs properly placed and visible to motorists?				
Are all workers wearing safety vests and hard hats, if applicable? (Vests should meet ANSI Class 2 or 3 standards)				
Acceptance of Materials and Independent Assurance				
Is the project in compliance with the Buy America Requirements (SP106A, 23 CFR 635.410) Check steel items for proper certifications.				
Is a certified CEI/Local Gov't inspector performing the acceptance tests?				
Is acceptance testing being performed in accordance with TDOT SOP 1-1 (Test, Frequency, Location)				
Has the local government requested Independent Assurance tests to be completed as required? What requires IA on this project?				
Erosion Prevention/Sediment Control and Permits				
Has all erosion control been set up properly on the project? If no, what is incorrect? Are EPSC Inspections being performed?				

<p>Has the project received a notice of violation from TDEC? If so, what was the violation for? (Attach plan for mitigation of findings.)</p>				
<p>Progress Payments and Change Orders</p>				
<p>Have there been any Change Orders on this project? If yes, how many and for what reasons? Is there supporting documentation for approval and costs (CL 104.03-02)?</p>				
<p>Review most recent progress estimate. Select at least 3 pay items (2 large cost items and 1 random) and confirm there is proper documentation to support the payment. (i.e calculations, material certifications, test reports, etc.) Complete the form and use additional sheets if more than 3 items are reviewed.</p>				

Fill Out Documentation Form Below

Pay Item	Quantity Reviewed	Estimate #	SOP 1-1 Required Documentation	Was Required SOP 1-1 Documentation on File?	Do All Required Acceptance Tests Meet Minimum Requirements?
1)					
COMMENTS/RESOLUTIONS					
2)					
COMMENTS/RESOLUTIONS					
3)					
COMMENTS/RESOLUTIONS					

Distribution:
 TDOT Local Programs Administration Office (email to Local.Programs@tn.gov)
 TDOT Regional Director
 TDOT Regional Construction Supervisor
 Local Government Project Administrator

CIRCULAR LETTER

SECTION: 105.15
NUMBER: 105.15-01
SUBJECT: COMPLETION NOTICES
DATE: OCTOBER 2, 2015

Completion Notices shall be sent to the following:

Original

Director of Construction Division
Suite 700, James K. Polk Bldg.
Nashville, TN 37243-0326

Copies

Contractor
Surety
District Operations Engineer/Manager
Regional Operations Engineer
Regional Utilities Engineer
Regional Bridge Engineer

Director of Design Division
Suite 1300, James K. Polk Bldg.
Nashville, TN 37243-0340

Director, Materials and Tests Division
6601 Centennial Blvd.
Nashville, TN 37209

Director, Small Business Development Office
Suite 1800, James K. Polk Bldg.
Nashville, TN 37243-0347

Director, Maintenance Division
Suite 400, James K. Polk Bldg.
Nashville, TN 37243-0333
(Maintenance contracts only)

Director, Structures Division
Suite 1100, James K. Polk Bldg.
Nashville, TN 37243-0339

Manager, Program Operations Office
Suite 600, James K. Polk Bldg.
Nashville, TN 37243-0341

Manager, Mapping & Statistics
Suite 1100, James K. Polk Bldg.
Nashville, TN 37243-0344

Manager, Trans. Planning Office
Suite 900, James K. Polk Bldg.
Nashville, TN 37243-0334

Manager, Prog. Dev. & Sched. Office
Suite 600, James K. Polk Bldg.
Nashville, TN 37243-0341

Director, Labor Standards Division
220 French landing Drive, Suite 1B
Nashville, TN 37243
e-mail: Mark.Finks@tn.gov and
and Mary.Ledbetter@tn.gov

Roadway Specialist Supervisor 2
Utilities Section
Suite 600, James K. Polk Bldg.
Nashville, TN 37243-0337

Accounting Tech. 2
Contract Payment Section
Suite 800, James K. Polk Bldg.
Nashville, TN 37243-0329

Manager 2, TDOT Natural Resources Office
(via email)

Manager 1, TDOT Environmental Permits Section
Suite 900, James K. Polk Bldg
Nashville, TN 37243
Environmental.NPDES.TDOT@tn.gov

Manager 1, TDOT Ecology Section
Suite 900, James K. Polk Bldg
Nashville, TN 37243
E-Mail to : B.M.Richards@tn.gov

Manager, Comprehensive Inspection Office
James K. Polk Building, Suite 900
Nashville, Tennessee 37243
E-Mail to: Gregory.Russell@tn.gov

CIRCULAR LETTER

SECTION: 107.01 LAWS TO BE OBSERVED
NUMBER: 107.01-01
SUBJECT: CONTRACTOR EMPLOYEE SAFETY AND HEALTH PROGRAM
DATE: MARCH 15, 2010

Construction Contracts:

At the preconstruction meeting, the Contractor shall submit to the Project Supervisor written certification of an Employee Safety and Health Program (ESHP). The ESHP shall be developed by a safety professional with a minimum of 30 hours OSHA Construction Training. The Project Supervisor shall verify that the certification letter includes (at a minimum) the following:

1. Certification that the ESHP meets or exceeds all Federal, State, and local Safety and Health Standards.
2. Listing of the qualifications of the **safety professional** responsible for developing and maintaining the ESHP.
3. Name and 24/7 contact information of the **management level personnel** responsible for managing and implementing the ESHP for the contractor.
4. Name and 24/7 contact information for the **supervisory level personnel** responsible for implementing and monitoring the ESHP at the construction site.
5. Name and 24/7 contact information of the **Traffic Control Coordinator**.
6. Certification that all **sub-contractors** have a safety program.

The Certification letter must be submitted to the Project Supervisor before any work commences on the project.

Maintenance Contracts:

Includes on-call guardrail, sweeping, on-call striping/retracing, litter removal, tree services, mowing, and work performed at Welcome Centers and Rest Stops.

Prior to work beginning, the Maintenance Contractor must submit a Certification of an ESHP to the Project or Maintenance Supervisor. The Certification shall include (at a minimum):

1. Certification that the ESHP was developed by a safety professional with 30 hours of OSHA Construction Training.
2. Certification that the ESHP covers the unique and specific hazards for the type of work listed above and that a Hazard Communication Program is part of the ESHP.
3. Name and 24/7 contact information of the Safety professional responsible for developing and maintaining the ESHP.
4. Name and 24/7 contact information of the Traffic Control and Safety Supervisor who has the authority to stop work on the project.

For all Contracts:

If an incident occurs on a construction/maintenance project that requires hospitalizations, or TOSHA Citation to be submitted, the Contractor shall send notification of the incident to the Project Supervisor who will forward to the Regional Safety Coordinator.

CIRCULAR LETTER

SECTION: 107.08 PROTECTION OF STREAMS, LAKES AND RESERVOIRS
NUMBER: 107.08-01
SUBJECT: PROJECTS CONTAINING PERMITS
DATE: OCTOBER 2, 2015

Projects Containing Storm Water Permits

For all projects with Stormwater Permits where land disturbing activities are complete, the District Operations Supervisor or designee shall check that:

1. All slopes are stabilized as required by the contract;
2. All disturbed areas have met the requirements for final stabilization; and
3. The contractor has removed all temporary erosion prevention and sediment control (EPSC) practices such as silt fences or other measures that are not a part of permanent stormwater management or that the regional operations unit has not requested to be left in place.

When these criteria are satisfied, the District Operations Supervisor or designee shall contact the TDOT Regional Environmental Coordinator, the Contractor's EPSC inspector, the TDOT inspector (either in-house or consultant hired) to determine if final stabilization has been reached. If the Regional Environmental Coordinator determines that final stabilization has been reached, the TDOT Quality Assurance Auditor for the specific project will be contacted to set the final QA audit for concurrence of final stabilization. If concurrence is reached by all parties, the QA auditor will document this concurrence within the final QA audit report, including a photo record and the signed Finding of Final Stabilization.

Final Stabilization means that the construction project is stabilized with a permanent groundcover. This means that the use of EPSC measures to alleviate concerns of erosion control and sediment transport to surface water conveyances or to waters of the state is no longer necessary. The Tennessee Construction General Permit includes the following definition for final stabilization:

'Final Stabilization' means that all soil disturbing activities have been completed and one of the three following criteria is met:

- a) A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a uniform density of at least 70 percent of the (preferably) native vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, and all slopes and channels have been permanently stabilized against erosion, or
- b) Equivalent permanent stabilization measures (such as the use of riprap; permanent geotextiles, hardened surface materials including concrete, asphalt, gabion baskets, or Reno mattresses) have been employed, or
- c) For construction project on land used for agricultural or silvicultural purposes, final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural or silvicultural use."

Further, final stabilization means that permanent controls, hard surfaces and/or vegetation, employed at the site are deemed adequate to prevent erosion and sediment transport. For slopes with rock cover, final stabilization means cover with 100% non-erodible rock material.

Once the final QA audit report (including the Finding of Final Stabilization) is posted, the TDOT District Operations Supervisor shall notify the TDOT Regional Director of Operations within one week of this

posting. If the TDOT Regional Engineer agrees with this concurrence, s/he, or their designate, shall sign and submit the Notice of Termination (NOT). The termination request shall be made on the attached form. The original shall be submitted within 30 calendar days of the posting of the Finding of Final Stabilization, to the Tennessee Department of Environment and Conservation (TDEC) Headquarters office, with copies sent to the following parties:

- TDOT District Operations Supervisor,
- TDOT Stormwater Coordinator,
- TDOT Director of Construction,
- TDOT Manager 2 of the Natural Resources Office (via email),
- TDOT Manager 1, Ecology Section
- TDOT Manager 1 of the Permits Section (via email Environmental.NPDES.TDOT@tn.gov),
- TDOT Regional Environmental Coordinator

The description of the project for the NOT shall include the language as it appears on the Notice of Coverage (NOC) (including the NPDES tracking number and contract number) in the contract proposal, and the information requested on the attached form.

If concurrence is not achieved, one of the following options shall be chosen:

- The TDOT District Operations Supervisor and the Contractor shall complete all repairs necessary to achieve final stabilization and again start the process stated above
or
- The TDOT District Operations Supervisor shall start the TDOT elevation process to reach concurrence or departmental decision.

Once final stabilization is achieved, a NOT is appropriate. The submission of the NOT to TDEC is a statement of accountability. If the project is subsequently found not to be permanently stabilized, TDEC may initiate formal enforcement action to ensure that the particular site is addressed, as well as to prevent future premature certifications of permanent stabilization at other construction projects.

The TDOT District Operations Supervisor will notify the contractor, EPSC Inspector and QA auditor Stormwater and Regional Environmental Coordinator once the NOT has been signed and submitted to TDEC. The Contractor will not be released from the project site until the NOT is submitted to TDEC by the TDOT Regional Engineer, or their designee and TDEC sends a letter concurring with close out of permit. At the appropriate time, after the NOT is submitted to TDEC and accepted, the Region shall request the final acceptance for the project. EPSC inspections shall continue until the NOT has been submitted to TDEC. If the NOT is not accepted by TDEC, EPSC inspections must resume immediately until the NOT is accepted.

Projects Containing Water Quality Permits

This Circular Letter establishes the procedures for changing the site information provided with the TDEC ARAP, USACE 404, or TVA 26a (Tennessee River Basin map is attached) water quality permits issued on a project, including the application package (letter, permit sketches, construction plans, supporting information, etc.). It also establishes the process for the identification of new features that may be impacted by construction activities and require water quality permits. Water quality permits are issued for physical alterations to properties of “waters of the state” or “waters of the United States” (i.e., perennial, intermittent, & ephemeral streams, wetlands, springs, sinkholes, etc), and are based on the applicant’s demonstration of aquatic resource alteration avoidance, minimization, and mitigation. Site

conditions, construction techniques, and construction materials may warrant modifications to water quality permits issued for a TDOT construction project: however, modifications should be avoided, minimized, and mitigated to the maximum extent possible.

A TDOT construction project may have one or more water quality permit sites within its termini. Any change to the information submitted with these permit applications, including any previously undiscovered aquatic resources found during construction, require notification to and/or approval of the respective regulatory agencies. A water quality permit modification is any change to the site information provided with the permit application, including any changes to the construction plans submitted with the application on previously permitted sites.

Refer to the contract SP107FP and standard specifications **Subsection 107.08 and Section 209** for additional information.

Most water quality permits for TDOT construction projects are issued through the regulatory agencies to the TDOT Environmental Division, Natural Resources Office (NRO). Permit modifications shall be addressed through Natural Resources Office. In order to expedite the modification/new permit process once a project goes to construction, these steps shall be followed:

A. The Regional Director of Operations (or their designee) shall be the single point of contact for the region and shall coordinate any request with the Regional Environmental Coordinator.

B. So that little or no delay will occur in the construction process, the Regional Engineer, or designee, shall submit information to the Regional Environmental Coordinator regarding the proposed modification as soon as possible after discovery. The information shall be submitted to the Regional Environmental Coordinator by email, to the Natural Resources Office, (with the subject line to include Contract Number, Project PIN, Route and County) and shall include:

- Cover Letter (signed by the Regional Engineer, or their designee) as follows:
 1. Address to the Regional Environmental Coordinator;
 2. A description of the basic nature of the modification;
 3. Permit Identification Numbers – Located on the USACE 404, TDEC ARAP and TVA 26a permits.
 4. Latitude/Longitude location of aquatic resource. This can be found within the original application or permit issued, on the Internet (e.g., www.topozone.com), with a GPS unit or on the topographic quadrangle map. This shall be in the form of Latitude XX.XXXX N, Longitude XX.XXXX W;
 5. The reason for the modification;
 6. Alternative considerations to modification;
 7. Proposed revisions to site mitigation resulting from the modification;
 8. The proposed modification construction schedule.

- Attachment to the cover letter containing:
 - a. A 7½-minute USGS Topographic Quadrangle Map identifying the location of modification or permit requested. This can be found in the appendix of the Storm Water Pollution Prevention Plan (SWPPP) as the Vicinity Map or within the original Water Quality Permit Application. A SWPPP will not be provided on all projects. A SWPPP is only provided on construction projects with the potential of causing one (1) acre or more of total land disturbance. For permit modifications: A drawing(s), sketch(s), or marked up plan sheet(s) showing the currently permitted location and the proposed modification.

The Design Division shall be consulted to determine if the alteration will significantly change the hydraulics of the structure or require additional ROW.

- b. For new features/permits: A drawing(s), sketch(es), or marked up plan sheets(s) showing the location of the newly identified feature that will be impacted and a description of the proposed impact (Regional biologist should be notified to verify feature). The Design Division shall be consulted to determine if the alteration will significantly change the hydraulics of the structure or require additional ROW.

C. The Regional Environmental Coordinator shall review the request to ensure all required information necessary for the notification/modification/new permit request is complete. Once the information packet is complete, the Regional Environmental Coordinator shall submit the packet to the Environmental Division. The anticipated timeframe for the Regional Environmental Coordinator to send notifications/modification requests/permit requests is approximately one week. The Environmental Division will put together regulatory requests and send to the appropriate contact person with each respective regulatory agency. The anticipated timeframe for the Environmental Division to send notifications/modification requests/permit requests is approximately one week. The response time from the regulatory agencies on ARAP or Section 404, and/or TVA Section 26a modification request may take from 45 to 120 days, depending upon impact.

D. The contractor shall take measures to protect the environmental feature. However, work in the area will cease until approvals are obtained from the respective agencies. Note that measures must be implemented to prevent further degradation or damage to the environmental features. The Regional Environmental Coordinator can be contacted for assistance regarding these measures.

Notes:

1. The current permit applications state that if competent bedrock is encountered on-site, box bridges or culverts under a current water quality permit can be field adjusted to a slab bridge without any permit modification or notification.
Groundwater exposed during construction can be altered by directing it underground (via engineered rock fill, French drain, pipe or other appropriate conveyance) without any permit modification or notification. The groundwater must be protected from construction activities through the use of appropriate EPSC measures.

Construction work cannot commence on the following until the Environmental Division distributes the regulatory agencies' permits and/or approvals to the Construction Division:

- **Modification request**
 - a. Box or slab bridge or culvert lengths under an ARAP permit requiring more than five (5) feet of modification at either end of the structure (on a single stream), including transitions.
 - b. Slab culverts or bridges under a current water quality permit, regardless of length, requiring a change to a box culvert, bridge culvert or pipe culvert. (Any change of structure type)
 - c. Inlet/Outlet protection of structures.
 - d. Bank stabilization on a stream under a current water quality permit, where the method of stabilization differs from that required by the permit or approval.
 - e. Any modification to the length of a box or slab bridge or culvert under a current TVA 26a water quality permit.
- **New permit request**
 - a. Discovery of a previously unknown aquatic resource (streams, wetlands, spring heads, etc.).
 - b. Bank stabilization on a stream not under a current water quality permit.

Once the modification approval or the new permit is received from the regulatory agencies the Environmental Division shall distribute all applicable permits/approvals to the Regional Environmental Coordinator, Regional Director of Operations (or their designee), and the Regional Stormwater Coordinator.



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)
 Division of Water Resources
 William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243
 1-888-891-TDEC (8332)

Notice of Termination (NOT) for General NPDES Permit for Stormwater Discharges from Construction Activities (CGP)

This form is required to be submitted when requesting termination of coverage from the CGP. The purpose of this form is to notify the TDEC that either all stormwater discharges associated with construction activity from the portion of the identified facility where you, as an operator, have ceased or have been eliminated; or you are no longer an operator at the construction site. Submission of this form shall in no way relieve the permittee of permit obligations required prior to submission of this form. Please submit this form to the local DWR Environmental Field Office (EFO) address (see table below). For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC).

Type or print clearly, using ink.

Site or Project Name:		NPDES Tracking Number: TNR	
Street Address or Location:		County(ies):	
Name of Permittee Requesting Termination of Coverage:			
Permittee Contact Name:		Title or Position:	
Mailing Address:		City:	State: Zip:
Phone:		E-mail:	

Check the reason(s) for termination of permit coverage:

<input type="checkbox"/>	Stormwater discharge associated with construction activity is no longer occurring and the permitted area has a uniform 70% permanent vegetative cover OR has equivalent measures such as rip rap or geotextiles, in areas not covered with impervious surfaces.
<input type="checkbox"/>	You are no longer the operator at the construction site (i.e., termination of site-wide, primary or secondary permittee coverage).

Certification and Signature: (must be signed by president, vice-president or equivalent ranking elected official)

I certify under penalty of law that either: (a) all stormwater discharges associated with construction activity from the portion of the identified facility where I was an operator have ceased or have been eliminated or (b) I am no longer an operator at the construction site. I understand that by submitting this notice of termination, I am no longer authorized to discharge stormwater associated with construction activity under this general permit, and that discharging pollutants in stormwater associated with construction activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act.

For the purposes of this certification, elimination of stormwater discharges associated with construction activity means that all stormwater discharges associated with construction activities from the identified site that are authorized by a NPDES general permit have been eliminated from the portion of the construction site where the operator had control. Specifically, this means that all disturbed soils at the portion of the construction site where the operator had control have been finally stabilized, the temporary erosion and sediment control measures have been removed, and/or subsequent operators have obtained permit coverage for the site or portions of the site where the operator had control.

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Permittee name (print or type):	Signature:	Date:
---------------------------------	------------	-------

EFO	Street Address	Zip Code	EFO	Street Address	Zip Code
Memphis	8383 Wolf Lake Drive, Bartlett, TN	38133	Cookeville	1221 South Willow Ave.	38506
Jackson	1625 Hollywood Drive	38305	Chattanooga	1301 Riverfront Parkway, Ste. 206	37402
Nashville	711 R. S. Gass Boulevard	37243	Knoxville	3711 Middlebrook Pike	37921
Columbia	1421 Hampshire Pike	38401	Johnson City	2305 Silverdale Road	37601

CIRCULAR LETTER

SECTION: 107.22
NUMBER: 107.22-01
SUBJECT: AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE ON RESURFACING
AND OTHER MAINTENANCE TYPE PROJECTS
DATE: OCTOBER 2, 2015

The Department of Transportation's goal is to provide an accessible transportation network to all users; this includes ensuring the safety of pedestrians and individuals with disabilities. Any project that includes the construction or alteration of a facility that provides access to pedestrians must be made accessible to persons with disabilities.

Projects with existing pedestrian facilities must provide an adequate traffic detour for pedestrian movement in compliance with the Americans with Disability Act.

Resurfacing is an alteration that triggers the requirement to add curb ramps if it involves work on a street or roadway spanning from one intersection to another, and includes overlays of additional material to the road surface, with or without milling.

It is not practical for the project designer on small projects, such as resurfacing, to survey and design each and every curb cut adjustment. In most cases, the construction project engineer will be able to utilize standard drawings and accommodate the accessibility requirements easily.

If a resurfacing project is extended where it will impact an intersection with pedestrian crossings, the crossings must comply with ADA requirements where technically feasible. Standard drawings should be utilized by field construction staff to adjust the intersection as required.

In some cases, our standard drawings may call for a larger sidewalk than currently exists, or it may be technically infeasible to meet the grade requirements stipulated. When adherence to the standard drawing is technically infeasible, field engineering solutions are appropriate. In these cases, the construction project engineer shall document via **both** before and after photos and a written explanation (and sketches if appropriate) of why it was technically infeasible to meet the requirement of the standard drawing and what was done to maximize access. The solution should be well thought out prior to its implementation.

If further assistance is required, the TDOT ADA Coordinator should be contacted for assistance.

CIRCULAR LETTER

SECTION: 108.01 SUBLETTING OF CONTRACT
NUMBER: 108.01-01
SUBJECT: SUBLETTING OF CONTRACTS
DATE: OCTOBER 2, 2015

SECOND TIER CONTRACTS

When work to be performed under an approved subcontract is sublet by the subcontractor to a second (or more) tier subcontractor, a list of the work included in the second (or more) tier subcontract shall be submitted on the Department's Second Tier Subcontract Form to the Headquarters Construction Division for approval prior to performance of any work covered by the second tier subcontract.

APPROVAL AND DISTRIBUTION OF SUBCONTRACTS

Effective immediately, approval and distribution of subcontracts will be handled as follows:

1. The Prime Contractor will be responsible for submitting subcontracts to the Headquarters Construction Division for review and approval.
2. Subcontractors will be responsible for submitting Tier Subcontracts to the Headquarters Construction Division for review and approval.
3. The Headquarters Construction Division will forward DBE Tier Subcontracts to the Civil Rights Office for review.
4. The Headquarters Construction Division will email copies of approved subcontracts to the appropriate Regional Operations Offices and the Civil Rights Office.
5. Regional Operations Office or designated representative will distribute one copy of the approved subcontract to the following:
 1. District Supervisor
 2. Prime Contractor
 3. Subcontractor
 4. Audit Support Unit
TDOR Audit Division
6th Floor, Andrew Jackson Bldg.
Nashville, TN 37242
 5. Employment Security Division
Employer Acct. – Large Audit
220 French Landing Dr.
Nashville, TN 37243

SUBCONTRACTORS AND DISADVANTAGED BUSINESS ENTERPRISES (DBE)

As stated in sections 108.01 and 102.01 of the specifications, all work to be sublet must be approved, and must be performed by a subcontractor that is prequalified with the Department.

All required contractual work that is performed by a contractor other than the prime contractor will be considered a subcontractor (or tier subcontractor), and therefore must be prequalified, must submit subcontract forms for approval, receive approval, and must submit certified payrolls (section 107.20).

No subcontractor work shall begin work until the subcontract has been approved by TDOT and the contract is put into effect. Any work completed before approval and without other prior authority of TDOT will be considered unauthorized and may not be paid for as stated in 105.12 of the specifications.

The actual, legal subcontract between contractors shall physically include the following and it cannot be referenced:

- FHWA 1273
- DBE Assurance Statement

Any work involving “laborers and mechanics”, as defined by the Federal and/or State classification of workers and prevailing wage rates, will be required to be a subcontractor to verify compliance with Davis-Bacon Act and State prevailing wage laws. Therefore, a subcontract will be required for flagging, drilling/blasting, sweeping, surveying, trucking/hauling (see below) and all other standard work items.

When labor is subcontracted or the contractor enters into an employee lease agreement, the procedures in Circular Letter 1273-05 or 1273-05.01 must be adhered to.

Hauling/Trucking firms must have a subcontract when they are working and hauling material “on the project site” as defined in Circular Letters 1273-04 and 1273-04.01. When hauling/trucking firms are not working “on the project site”, and are hauling from a non-project specific or a commercial site, a subcontract is not required. However, if a hauling/trucking firm is a DBE, then a subcontract and certified payrolls will be required for documentation purposes. (The prevailing wages under Davis-Bacon or TN Prevailing Wage Act are *not* required if the hauling/trucking firm is not working “on the project site” but the certified payroll will serve as proof the DBE hauling subcontractor was working on the project and the drivers are employees of the DBE)

Any DBE who is performing work, or providing materials, must enter into a subcontract so TDOT can accurately monitor both race conscious and race neutral DBE participation. However, if the DBE is a manufacturer or regular dealer/material supplier *ONLY* (as defined in SP 1247) they are not required to be pre-qualified. They must state on the Sub-contract form that they are a MANUFACTURER ONLY or MATERIAL SUPPLIER ONLY.

Reference:

From the Standard Specifications:

101.50-Subcontractor. Any individual, firm, partnership, or corporation to whom the Contractor sublets any part of the *Work* under the Contract.

101.59-Work. The Work shall mean the furnishing of all labor, materials, equipment, and any incidentals necessary to the satisfactory completion of the project, including the carrying out of all duties and obligations imposed by the Contract.

From the TDOT Rules Chapter 1680-5-3 Prequalification of Contractors:

“Subcontractor” means any individual person, partnership, limited liability company, corporation, or other business entity, acting directly or through a duly authorized representative, that has entered or may seek to enter into a contract with a contractor to perform some part of the work under a contract with the Department; provided, however, that this definition of subcontractor does not include any such person or business entity that only provides or delivers materials to a contractor or subcontractor performing work under a contract with the Department.

From FHWA 1273:

GENERAL

1. 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.
2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. **The Required Contract Provisions shall not be incorporated by reference in any case.** The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

From 49 CFR Part 26.13:

Each contract you sign with a contractor (**and each subcontract the prime contractor signs with a subcontractor**) must include the following assurance:

“The contractor, sub recipient 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 recipient deems appropriate.”

CIRCULAR LETTER

SECTION: 108.02
NUMBER: 108.02-01
SUBJECT: CONSULTANT INSPECTION NOTICE (WORK ORDERS)
DATE: OCTOBER 2, 2015

Work Orders sent to the Contractors for Contracts that utilize Consultant Engineering and Inspection (CEI) shall include the following language:

This project has been assigned to “Name of District Operations Supervisor”, whose address is “Location”, and he is being requested by copy of this letter to notify the proper officials of this Department as to the date on which work is actually begun and the date from which time will be charged on the Contract. “Name of Consultant” will be performing the Inspection services on this Contract in accordance with Subsection 105.10 and 105.11 of the Standard Specifications. “Name of Consultant” will be the duly authorized representative of the Department and will work under the direction of “Name of District Operations Supervisor”. Conflicts or interpretation involving the inspection of the work or the Standard Specifications shall be resolved through “Name of District Operations Supervisor” or the Regional Operations Office.

Circular Letter 108.03(C) Critical path method (CPM) Schedules

CIRCULAR LETTER

SECTION: 108.03 PROSECUTION OF CONSTRUCTION
NUMBER: 108.03 (C)
SUBJECT: CRITICAL PATH METHOD (CPM) SCHEDULES
Date: OCTOBER 2, 2015

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All projects after January 1, 2015 must follow the scheduling process outlined within this Circular Letter and the 2015 Standard Specifications.

1 Receiving and Storing Schedule Files

Once a schedule and related materials are received by the contractor, these files shall be stored under the respective contract folder on the CMS/File Management Drive (a.k.a. Unit Drive).

Within the contract's folder, create a folder titled "*CPM Schedules*".

Example: `\Unit ##### - CITY C\A###\CPM Schedules`

Save all schedule files and narratives in this folder.

2 Conducting the Baseline CPM Schedule Review Meeting

Within fifteen (15) calendar days after the Notice to Proceed, the contractor shall arrange a meeting to review and submit a draft baseline CPM schedule. The purpose of the meeting is to discuss the Contractor's plan to execute the work by the completion date set forth in the Proposal. This meeting also allows discussion of potential conflicts that may affect the schedule and how they might be mitigated.

The deliverables expected from the Contractor include the electronic schedule file (.xer, .xml, .xls format), and hard copies (Printed or PDF) of:

- *Logic Diagrams/bar charts (11" x 17")*
- *Tables or Tabular Sorts of Activity Details*
- *Narrative Report*
- *Optional or available through Regional Power-User:*
 - *The Schedule Log (SchedLog)*

Circular Letter 108.03(C) Critical path method (CPM) Schedules

- *Relationship Report Table including: Predecessor ID, Successor ID, Relationship Type, Predecessor Activity Name, Successor Activity Name, and Lag.*

During the meeting, use **FORM 108.03(C)(1) BASELINE CPM SCHEDULE REVIEW CHECKLIST** to ensure a complete CPM schedule has been submitted to the Engineer in accordance with **Section 108.03** of the Specifications. The Checklist is divided into categories of requirements, namely:

- *General*
- *Submission Requirements*
- *CPM Schedule Identifies, Includes, or Uses*
- *CPM Schedule Shall NOT Include*

The following is select supporting information on each category to assist the District **Supervisor** in completing **FORM 108.03(C)(1) BASELINE CPM SCHEDULE REVIEW CHECKLIST** and determining whether the baseline schedule meets the requirements of **108.03**.

2.1 General

Schedule begins with the date of the Notice to Proceed: The schedule should begin on the same date as the Notice to Proceed (NTP). This can be confirmed on the Log File under Scheduling/Leveling Results, *Data Date*, as shown below.

Scheduling/Leveling Results:	
# Projects Scheduled/Leveled.....	1
# Activities Scheduled/Leveled.....	672
# Relationships with other projects.....	0
Data Date.....	3-31-15
Earliest Early Start Date.....	3-31-15
Latest Early Finish Date.....	8-31-18

Figure 1) Log File - Scheduling/Leveling Results:

Float: The amount of time that an activity can be delayed without affecting the overall schedule. Float must be calculated as $float = late\ start - early\ start$. This can be confirmed on the Log File under Scheduling/Leveling Settings. *Compute Total Float As* should be set as *Start Float*, as shown in the figure below.

Scheduling/Leveling Settings:	
General	
Scheduling	Yes
Leveling	No
Ignore relationships to and from other projects	No
Make open-ended activities critical	No
Use Expected Finish Dates	Yes
Schedule automatically when a change affects dates	No
Level resources during scheduling	No
Recalculate assignment costs after scheduling	No
when scheduling progressed activities use	Progress Override
calculate start-to-start lag from	Early Start
Define critical activities as	Longest Path
Compute Total Float As	Start Float
Calculate float based on finish date of	Each project
calendar for scheduling Relationship Lag	Predecessor Activity Calendar

Figure 2) Log File - Scheduling/Leveling Settings:

Circular Letter 108.03(C) Critical path method (CPM) Schedules

2.2 Submission Requirements

2.2.1 Logic Diagram

Match data for diagram correlation: The diagram should be labeled so that each activity can be correlated with the corresponding data.

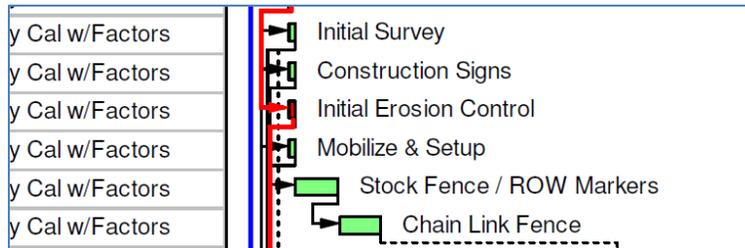


Figure 3) Match Data Example

Key: The logic diagram should contain a key that adequately describes all bar types.

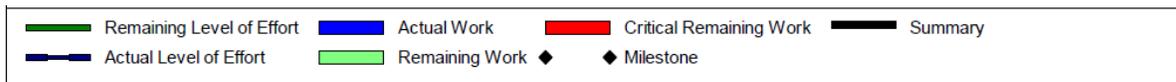


Figure 4) Sample Key

2.2.2 Tabular sorts of activities

Tables should be submitted that show the required details for each activity in accordance with Section 108.03(C)(2)(b) of the Specifications.

SR-01 Classic Schedule Report - Sort by ES, TF										
Activity ID	Orig Dur	Rem Dur	%	Activity Name	Early Start	Early Finish	Late Start	Late Finish	Total Float	
A3110	0	0	0	Notice to Proceed	04/13/2015		06/01/2015		49	
A3115	2	2	0	Mobilization	04/13/2015	04/14/2015	10/27/2015	10/29/2015	198	
A3350	5	5	0	Lines and Grades for Walls	04/13/2015	04/20/2015	06/01/2015	06/08/2015	29	

Figure 5) Tabular Sort Example

2.2.3 Bar Chart

See Attachment A for a sample 60-day look-ahead bar chart [sorted] by early start.

2.2.4 Narrative Report

The written Narrative shall describe the Contractor’s complete overall work plan and sequence in which the Work will be accomplished. The schedule narrative adds and supports understanding of the basis and assumptions in the schedule. The Narrative shall be prepared in accordance with Section 108.03-(C)(2)(d) of the Specifications.

Approach to sequencing the work: An outline of the plan on which the schedule is based, including the proposed overall approach and sequence of work.

Circular Letter 108.03(C) Critical path method (CPM) Schedules

Critical or longest path: The sequence of activities that must be all be started and finished exactly on time in order to not delay the project. The critical activities detailed in the narrative should be consistent with those listed on the Log File, as illustrated in the following Figure.

Critical Activities				100
Project:	CNP079-02	Activity:	1305	Clear & Grubb/Pipe Reml - 31w/41 E
Project:	CNP079-02	Activity:	1308	Rd & Drain Exc Unc1 - 31w/41 E
Project:	CNP079-02	Activity:	1310	Storm Drainage Pt 1 - 31w/41 E
Project:	CNP079-02	Activity:	1311	Storm Drainage Pt 2 - 31w/41 E
Project:	CNP079-02	Activity:	1320	Borrow Unc1 - 31w/41 E
Project:	CNP079-02	Activity:	1328	Rip-Rap - 31w/41 E
Project:	CNP079-02	Activity:	1330	Topsoil - 31w/41 E
Project:	CNP079-02	Activity:	2015	Rd & Drain Exc Unc1 - Ramp A & B
Project:	CNP079-02	Activity:	2020	Borrow GSR-UCut-Geotex - Ramp A & B
Project:	CNP079-02	Activity:	2028	Borrow Unc1 - Ramp A & B
Project:	CNP079-02	Activity:	2029	Rip-Rap - Ramp A & B
Project:	CNP079-02	Activity:	2030	Topsoil - Ramp A & B

Figure 6) Critical Activities

Workdays per week: The assumed number of workdays per week for all activities. The number of workdays per week may vary depending on the activity work types. The Contractor should clarify all assumptions. (Note: Some Contractors will assume 5 workdays per week, and then use additional days during the week if progress falls behind schedule.)

Holidays: All Holidays in which work is not planned or allowed.

Number of shifts per day: The assumed number of shifts per day, including any exceptions.

Number of hours per shift: The assumed number of hours per shift, including any exceptions.

Equipment use: A generic statement regarding the use of proper equipment for each activity will suffice. Standard machinery and equipment does not need to be listed individually. The Contractor should comment on any unique or special equipment that they plan to use.

How the schedule accommodates adverse weather days for each month: A monthly breakdown of the number of Nonwork days anticipated due to adverse weather conditions, by work type if applicable.

2.3 CPM Schedule Identifies, Includes, or Uses...

Working days: This refers to the use of Standard, Nonwork, and Exception calendar days in conjunction with duration dependent activities to calculate the schedule.

Planned start and completion dates for each activity: Start and Finish Dates should be listed for every activity on the Tabular Report submitted. (Note: Milestones will only contain one date.)

Duration of each activity: Schedules are required to be updated monthly. In order to determine whether progress is on schedule with each update, activities durations should be 30 days or less. Longer activities shall be broken up into two or more. Long lead activities lasting more than 30 days, such as procurement activities may be approved by the **District Supervisor**.

Finish-to-start relationships among activities, without leads or lags: Relationships, which form the logic of the project network, are used together with activity durations to determine schedule dates. In order to check all relationship types and leads/lags together, the data must be exported to Excel.

Circular Letter 108.03(C) Critical path method (CPM) Schedules

The *Relationship Report* may be obtained from the Contractor or Regional Power-user. The use of leads or lags must be approved by the **District Supervisor**. See [Attachment C](#) for a sample Activity Relationship Report.

Constraints: Network logic alone cannot reflect all project situations. Sometimes activities must be accomplished according to specific dates rather than on dates determined by other activities in the project. In such cases, constraints (start, finish, mandatory, & late) may be applied. Activities with constraints are identified on the Log File under Statistics, as shown below.

Statistics:	
# Projects.....	1
# Activities.....	672
# Not Started.....	672
# In Progress.....	0
# Completed.....	0
# Relationships.....	808
# Activities with Constraint.....	6

Figure 7) Log File – Statistics/Constraints

Critical or longest path: The sequence of activities that must be all be started and finished exactly on time in order to not delay the project. The critical activities are listed on the Log File, as shown in the following Figure.

Critical Activities.....				
Project:	CNP079-02	Activity:	1305	Clear & Grubb/Pipe Reml - 31w/41 E
Project:	CNP079-02	Activity:	1308	Rd & Drain Exc Uncl - 31w/41 E
Project:	CNP079-02	Activity:	1310	Storm Drainage Pt 1 - 31w/41 E
Project:	CNP079-02	Activity:	1311	Storm Drainage Pt 2 - 31w/41 E
Project:	CNP079-02	Activity:	1320	Borrow Uncl - 31w/41 E
Project:	CNP079-02	Activity:	1328	Rip-Rap - 31w/41 E
Project:	CNP079-02	Activity:	1330	Topsoil - 31w/41 E
Project:	CNP079-02	Activity:	2015	Rd & Drain Exc Uncl - Ramp A & B
Project:	CNP079-02	Activity:	2020	Borrow GSR-UCut-Geotex - Ramp A & B
Project:	CNP079-02	Activity:	2028	Borrow Uncl - Ramp A & B
Project:	CNP079-02	Activity:	2029	Rip-Rap - Ramp A & B
Project:	CNP079-02	Activity:	2030	Topsoil - Ramp A & B

Figure 8) Critical Activities

Activities related to Procurement: Procurement activities are unique in that they are not constrained by weekends, holidays, weather, or other non-workday restrictions. These activities will therefore utilize a standard 7-day work calendar. Similar activities include, but are not limited to fabrication of long lead materials, curing, load test, and settlement or surcharge periods.

Furthermore, procurement activities lasting more than 30 days cannot be subdivided into shorter activities. Such activities still impact the project’s schedule, so it is necessary to include related activities in the schedule.

Activities related to Submittals: Administrative activities associated with the work shall be defined and included in the schedule. These include activities related to the submission of working drawings, plans, and other data specified for review or approval by the Engineer.

Circular Letter 108.03(C) Critical path method (CPM) Schedules

Activities related to Department inspections and approvals: The Department’s activities associated with the work shall also be defined and included in the schedule, such as inspections or approvals.

Specified activities performed by others: Any work performed by parties other than the prime contractor that can be defined as discrete work task and other time-based tasks necessary to complete the project shall be included.

2.4 CPM Schedule Shall NOT Include

Float suppression techniques, such as preferential sequencing: Float suppression techniques include arranging critical path through activities more susceptible to a Department-caused delay. (Note: this is more applicable to A+B contracts)

Special lead/lag logic restraints: Leads and lags can be identified on the *Relationship Report*, which may be obtained from the Contractor or Regional Power-user. The use of leads or lags must be approved by the **District Supervisor**.

Zero total or free float constraints: Zero total or free float constraints (also known as “as late as possible”) are used to make the activity finish immediately prior to its successors. This constraint consumes float by setting the Early Dates to equal the Late Dates, and as a result is prohibited.

Constraint dates other than required by the Contract: Network logic alone cannot reflect all project situations. Sometimes activities must be accomplished according to specific dates rather than on dates determined by other activities in the project.

For example, 407.09-03 of the Specifications restricts placing bituminous plant mix, with a compacted thickness greater than 1.5 inches, between December 15 and March 16. In such cases, constraints (start, finish, mandatory, & late) may be applied. Activities with constraints are identified on the Log File under Statistics, as shown below.

Statistics:	
# Projects.....	1
# Activities.....	672
# Not Started.....	672
# In Progress.....	0
# Completed.....	0
# Relationships.....	808
# Activities with Constraint.....	6

Figure 9) Log File – Statistics/Constraints

The CPM schedule shall not include any constraints other than required by the “Contract Documents”.

Circular Letter 108.03(C) Critical path method (CPM) Schedules

3 Schedule Updates

The CPM schedule will be updated on a monthly basis to determine the current status of the project. As the schedule is updated, it is critically important to ensure that the schedule accurately reflects how the work is being performed.

IMPORTANT: TO VERIFY THAT THE SCHEDULE UPDATES ARE CORRECT, IT IS NECESSARY FOR FIELD STAFF TO COLLECT AS-BUILT INFORMATION THROUGH A VARIETY OF SOURCES. SOURCES INCLUDE, BUT ARE NOT LIMITED TO: DAILY WORK REPORTS (DWRs), MEETING MINUTES, AND PROGRESS PHOTOGRAPHS/VIDEOS. (NOTE: IT IS RECOMMENDED TO DOCUMENT THE ACTUAL FINISH DATES FOR COMPLETED ACTIVITIES IN THE DAILY WORK REPORTS (DWRs)).

Use **FORM 108.03(C)(3) CPM SCHEDULE UPDATE CHECKLIST** to analyze the current progress, ensure compliance with **Section 108.03** of the Specifications, and determine potential needs for a schedule revision. The Checklist is divided into categories of requirements, namely:

- *General*
- *Submission Requirements*
- *Narrative Report*
- *Progress Assessment*
- *Circumstances that May Lead to Requesting a Revised Schedule*

The following is select supporting information on each category to assist the **District Supervisor** in completing **FORM 108.03(C)(3) CPM SCHEDULE UPDATE CHECKLIST** and determining whether the baseline schedule meets the requirements of **108.03**.

3.1 General

Activity Status Report: It is important for schedule updates to provide the as-built status of the project. The Contractor is required to provide actual start and finish dates of each activity or remaining durations of activities started but not yet completed. This information is often produced by running the Activity Status Report in the scheduling software, as shown in the following figure.

AD-01 Activity Status Report						
WBS	Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Start Finish
TDOT	TDOT					
Test Projects	Test Projects					
WD AR-JPS2	Access Road Bridge Across Auxiliary Lock Bascule Bridge Replacement					
A1030	NTP		0	0	100%	8-20-09 A
R1040	RECORD AS-BUILTS		1	1	0%	2-14-11 2-14-11
R1080	RECORD AS-BUILTS		1	1	0%	2-14-11 2-14-11
B1000	DEMO & CLEARING PREP MEETING		1	1	0%	4-27-10* 4-27-10
M800	EROSION PREP MEETING		1	0	100%	2-17-10 A 2-17-10 A
N1000	FOUNDATION PREP MEETING		1	1	0%	4-21-10* 4-21-10

Figure 10) Activity Status Report

Circular Letter 108.03(C) Critical path method (CPM) Schedules

Updated critical or longest path: The critical path (shortest duration in which the project may be completed) may change if non critical activities are delayed more than the available float. A change in the critical path may extend the completion date of an interim milestone or the project. If a scheduled milestone or project completion date is delayed 15% or more behind schedule, the **District Supervisor** may request a revised schedule that reflects timely completion.

3.2 Submission Requirements

3.2.1 Logic Diagram

Refer to Section 2.1.1 *Logic Diagram*

3.2.2 Bar Chart

See [Attachment B](#) for a sample 60-day look-ahead bar chart [sorted] by early start.

3.2.3 Tabular sorts of activities by...

See [Attachment B](#) for a sample tabular sort of activities by Total Float and Early Start.

3.3 Narrative Report

Each schedule update shall include a narrative report meeting the requirements of **Section 108.03-(C)(3)(a)** of the Specifications. (Note: It is recommended to have the Contractor comment on the narrative report regarding progress of any on-going activities greater than 30 days in duration.)

3.4 Progress Assessment

Upon receiving each schedule update, progress will need to be assessed to determine if actual construction has fallen behind the plan of operations or schedule by more than 15%. When this occurs, the Contractor shall offer for approval a revised schedule that reflects timely completion. Otherwise, the **District Supervisor** may request a revised schedule.

A quick calculation of time versus money can be calculated using TIME COMPLETE (%) and WORK COMPLETE (%) from the most recent ESTIMATE in SiteManager. TIME COMPLETE (%) minus WORK COMPLETE (%) will result in the delay based on the straight line method.

TIME COMPLETE	4.2%	WORK COMPLETE	0.4%
TIME COMPLETE - WORK COMPLETE = 4.2% - 0.4% = 3.8% DELAYED			

Figure 11) Example Progress Assessment

3.5 Circumstances that May Lead to Requesting a Revised Schedule

The **District Supervisor** may request a revised schedule under the following circumstances:

- *15% or more behind schedule.*
- *Difference in actual sequence or duration of work.*
- *Alteration by Change Order.*

Circular Letter 108.03(C) Critical path method (CPM) Schedules

3.5.1 15% or more behind schedule.

A delay (actual or projected) to a scheduled milestone or project completion date of 15% or more warrants requesting a revised schedule. The delay may be calculated using the following equation.

Equation:

$$\frac{\text{Delay (actual or projected) in days}}{\text{Total Calendar days from Notice to Proceed to scheduled milestone or completion date}} \times 100\%$$

Example:

Notice to proceed: 8/7/2013

Original Completion Date: 05/30/2016

Estimated Completion Date: 11/6/2016 (no prior time extensions)

Projected Delay: 160 days

$$\frac{160 \text{ days}}{1027 \text{ days}} \times 100\% = 15.6\% , \text{ therefore a revised schedule should be requested.}$$

3.5.2 Difference in actual sequence or duration of work.

A difference between the actual sequence or duration of work and that depicted in the schedule warrants requesting a revised schedule. The revision is necessary to correct unrealistic activity durations or a significant number of activities that are being performed out-of-sequence.

3.5.3 Alteration by Change Order.

The issuance of a Change Order that alters the planned sequence of work or the method and manner of its performance by adding, deleting, or revising activities warrants requesting a revised schedule.

4 Schedule Revisions

A revision of the baseline CPM schedule is required when the schedule has been significantly impacted by a change in the Work or condition or the Contractor has deviated significantly from his baseline plan or schedule.

The Contractor may offer a revised schedule, or the **District Supervisor** may request one. Circumstances that may lead to requesting a revised schedule are addressed in **FORM 108.03(C)(3) CPM SCHEDULE UPDATE CHECKLIST** and in **Section 108.03(D)** of the Specifications.

If the Contractor cannot justify unsatisfactory progress, administrative actions can be made in accordance with **Section 108.03(D)** of the Specifications.

Circular Letter 108.03(C) Critical path method (CPM) Schedules

5 Communication with the Contractor

Upon review of the CPM schedule and related materials, the **District Supervisor** will either:

- *Provide review comments,*
- *Request additional information,*
- *Accept the CPM schedule, or*
- *Reject the CPM schedule*

5.1 Providing review comments

General review comments may be provided verbally, or in writing. No formal letter is required.

5.2 Template Letters

Template Letters are available on the Construction Division's Website.

Purpose	File
Requesting additional information	108 03 - CPM Schedule Request Additional Information Letter
Accepting a CPM Schedule	108 03 - CPM Schedule Acceptance Letter
Rejecting a CPM Schedule	108 03 - CPM Schedule Rejection Letter

6 Time Impacts and Delays

Delays on construction projects are unavoidable. If the contractor has been delayed because of conditions beyond their control and they are without fault, then a time extension may be justified.

The Contractor shall notify the **District Supervisor** in accordance with **Section 104.03** of the Specifications and submit a written request for a time extension. The written request shall include a Time Impact Analysis and supporting documentation showing the impact of the delay on the critical path.

In accordance with **Section 108.07** of the Specifications, the **District Supervisor** may extend the contract time or completion date only if an excusable delay affects the critical path of the work as shown on the accepted progress schedule.

6.1 Time Impact Analysis (TIA)

Time Impact Analysis (TIA) is a 'forward-looking,' prospective schedule analysis technique that adds a modeled delay to an accepted CPM schedule to determine the possible impact of that delay to project completion. A TIA is performed to evaluate the most likely results of an unplanned event.

The TIA provides a reasonable assessment of a delay when applied appropriately. The TIA must be calculated quickly, while the project is on-going, and is best when modeling the effects of a single change or delay event.

Circular Letter 108.03(C) Critical path method (CPM) Schedules

TIA relies on the CPM calculations to show the differences between two schedules:

- *A schedule that does not include a delay, and*
- *A schedule that does include an activity modeling the delay event.*

The difference in project completion dates is considered to be the impact of the delay for time duration considerations.

There are two assumptions that make TIA possible. The first assumption is that the most recent schedule update, just before the delay, accurately displays the status a sequence of work on the project at the time of delay. Therefore, timely acceptance of schedule updates is critical to the TIA success. The second assumption is that actual delay will not change the remaining work plan. Essentially, the work both prior to and following the delay remain unchanged, or 'frozen'.

When TIA is appropriate and all assumptions are met, it is a simple and effective method for modeling the effects of a delay.

6.1.1 Steps of TIA

According to **Section 108.07** of the Specifications, the Contractor is responsible for performing the TIA. These are the steps they are expected to perform:

1. Create activity/s to represent delay.
2. Insert into most recent update, but w/ zero duration.
3. Run network calculations. Dates should remain unchanged.
4. Input Approved durations into delay activity/s.
5. Recalculate CPM.
6. Determine total time impact, and then remove any delays already awarded.

6.1.2 TIA Deliverables

The support is very important when processing a time extension using TIA. At a minimum, the deliverables of a TIA should include:

- *A written request for a time extension.*
- *Two schedules with supporting documents (narrative, tables, reports):*
 - *The most recent schedule update, just prior to the delay.*
 - *A schedule that includes an activity modeling the delay event.*

Circular Letter 108.03(C) Critical path method (CPM) Schedules

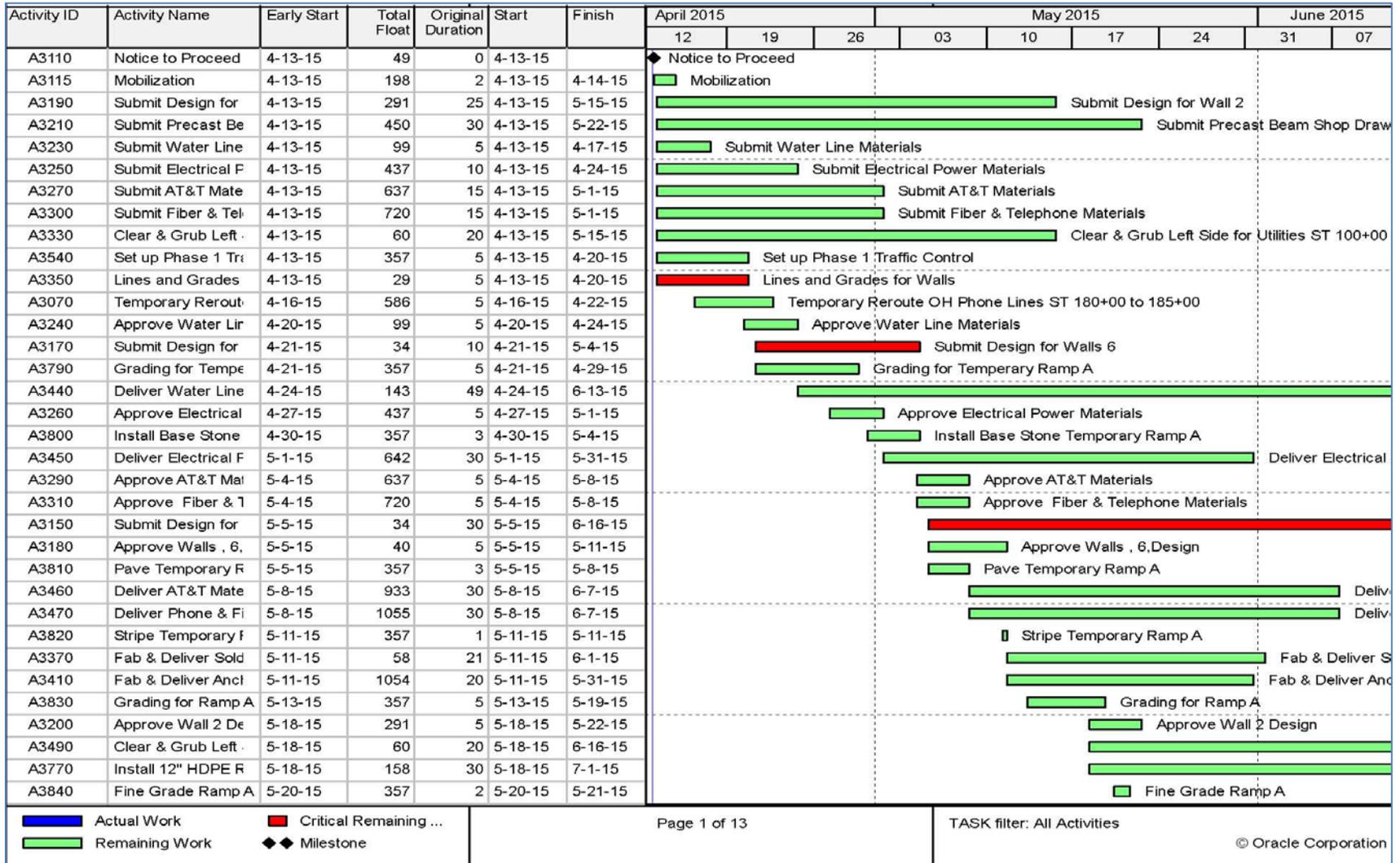
7 Support: Primavera Power-Users

Primavera Professional is the leading project management software used in the Construction Industry for scheduling. Within the Construction Division, both at Headquarters and regionally, there are Power-Users who have access to Primavera software, and advanced knowledge in CPM schedules. These Power-Users are available as a resource to provide assistance (such as running reports, or checking the TIA) as needed. To identify each Power-User and their contact information, visit the Construction Division Website, under Construction Division Resources, and select CPM Schedules.

Circular Letter 108.03(C) Critical path method (CPM) Schedules

Attachment A

Sample 60-Day Look-Ahead Bar Chart [Sorted] by Early Start



Circular Letter 108.03(C) Critical path method (CPM) Schedules

Attachment B

Sample Classic Schedule Report

SR-01 Classic Schedule Report - Sort by ES, TF

Activity ID	Activity Name	Original Duration	Remaining Duration	Units % Complete	Start	Finish	Late Start	Late Finish	Total Float
A1050	SETUP PROJECT TRAILER	3	0	100%	11-9-09 A	11-9-09 A	2-15-11	2-15-11	
A1020	SUBMITTAL APPROVAL	140	0	100%	8-20-09 A	1-6-10 A	4-19-10	4-19-10	
M800	EROSION PREP MEETING	1	0	100%	2-17-10 A	2-17-10 A	4-19-10	4-19-10	
A1030	NTP	0	0	100%	8-20-09 A		4-19-10		
A1070	DRAFT / SUBMIT SAFETY PLAN	141	0	100%	8-20-09 A	2-23-10 A	4-19-10	4-19-10	
A1000	CONTRACT AWARD	0	0	100%	8-3-09 A		4-19-10		
A1010	SAFETY PLAN APPROVAL	0	0	100%	2-23-10 A		4-19-10		
A1090	FABRICATE GIRDERS	10	0	100%	11-12-09 A	12-4-09 A	8-14-10	8-14-10	
A1110	FABRICATE BEARING PADS	50	0	100%	12-18-09 A	3-2-10 A	8-19-10	8-19-10	
A1100	SANDBLAST AND PAINT GIRDERS	22	10	0%	3-8-10 A	3-29-10	8-14-10	8-24-10	148
A1080	SECURITY CLEARANCE	272	60	0%	8-20-09 A	5-18-10	12-17-10	2-15-11	272
C1000	FORMWORK, REINFORCING, JOINTS, & CIP PREP MEETING	1	1	0%	3-22-10	3-22-10	5-10-10	5-11-10	36
P1010	DRILLED SHAFT, PILING, & ROCK ANCHOR PREP MEETING	1	1	0%	3-22-10	3-22-10	5-10-10	5-11-10	36
M1000	SITE EROSION CONTROL	3	9	0%	3-18-10 A	4-2-10	3-29-10	4-13-10	5
X0001	MOBILIZATION	20	10	0%	3-1-10 A	4-6-10	5-11-10	5-28-10	30
A1080	FURNISH AND DELIVER PILES	5	5	0%	3-23-10	3-29-10	7-8-10	7-15-10	78
P1030	P1 EXPLORATION BELOW SHAFT	15	0	100%	3-8-10 A	3-19-10 A	5-11-10	5-11-10	
P1050	P2 FOUNDATION EXPLORATION	15	0	100%	3-8-10 A	3-19-10 A	5-18-10	5-18-10	
N1010	P1 FOOTING EXCAVATION & PREP	4	4	0%	4-6-10	4-9-10	4-13-10	4-20-10	5
N1050	P2 FOOTING EXCAVATION & PREP	4	4	0%	4-13-10	4-18-10	5-18-10	5-24-10	22
Y1000	ELECTRICAL & FENCING PREP MEETING	1	1	0%	4-19-10	4-19-10	6-15-10	6-15-10	41
K1010	EARTHWORK & RIP RAPPREP MEETING	1	1	0%	4-19-10	4-19-10	6-15-10	6-15-10	41
1050	P2 PLACE FOOTING REBAR	2	2	0%	4-20-10	4-21-10	5-24-10	5-26-10	22
B1120	ROADWAY CLEARING	5	5	0%	4-20-10	4-27-10	6-16-10	6-22-10	34
N1000	FOUNDATION PREP PREPARATORY MEETING	1	1	0%	4-21-10*	4-21-10	4-19-10	4-20-10	-1
01020	P1 CONSTRUCT TEMP SHORING	7	7	0%	4-22-10	5-4-10	4-20-10	4-30-10	-1
01040	P2 FORM AND POUR FOOTING	4	4	0%	4-22-10	4-28-10	5-26-10	6-1-10	22
B1000	DEMO & CLEARING PREP MEETING	1	1	0%	4-27-10*	4-27-10	2-9-11	2-10-11	206

Circular Letter 108.03(C) Critical path method (CPM) Schedules

Attachment C

Sample Activity Relationship Report

pred_task_id	task_id	pred_type	PREDTASK_status_c	TASK_status_code	predtask__task_name	task__task_name	lag_hr_cnt
Predecessor	Successor	Relationship	(*)Predecessor Activity Status	(*)Successor Activity Status	(*)Predecessor Activity Name	(*)Successor Activity Name	Lag(d)
A1000	A1010	FS	Not Started	Not Started	BR 1R Construct Bent 1 Cofferdam & Seal	BR 1R Construct Bent 1 Columns	0
A1000	A1005	FS	Not Started	Not Started	BR 1R Construct Bent 1 Cofferdam & Seal	BR 1R Construct Bent 1 Footings	0
A1000	A1025	FS	Not Started	Not Started	BR 1R Construct Bent 1 Cofferdam & Seal	BR 1R Construct Bent 2 Cofferdam & Seal	0
A1005	A1010	FS	Not Started	Not Started	BR 1R Construct Bent 1 Footings	BR 1R Construct Bent 1 Columns	0
A1010	A1020	FS	Not Started	Not Started	BR 1R Construct Bent 1 Columns	BR 1R Construct Bent 1 Cap	0
A1020	A1030	FS	Not Started	Not Started	BR 1R Construct Bent 1 Cap	BR 1R Construct Bent 2 Footings	0
A1020	A1065	FS	Not Started	Not Started	BR 1R Construct Bent 1 Cap	BR 1R Core Drill and Install Abutment 1 Piles	0
A1025	A1030	FS	Not Started	Not Started	BR 1R Construct Bent 2 Cofferdam & Seal	BR 1R Construct Bent 2 Footings	0
A1030	A1050	FS	Not Started	Not Started	BR 1R Construct Bent 2 Footings	BR 1R Construct Bent 2 Columns	0
A1050	A1060	FS	Not Started	Not Started	BR 1R Construct Bent 2 Columns	BR 1R Construct Bent 2 Cap	0
A1060	A1070	FS	Not Started	Not Started	BR 1R Construct Bent 2 Cap	BR 1R Construct Abutment 1 Grade Beam	0
A1060	A1077	FS	Not Started	Not Started	BR 1R Construct Bent 2 Cap	BR 1R Core Drill and Install Abutment 2 Piles	0
A1065	A1070	FS	Not Started	Not Started	BR 1R Core Drill and Install Abutment 1 Piles	BR 1R Construct Abutment 1 Grade Beam	0
A1065	A1077	FS	Not Started	Not Started	BR 1R Core Drill and Install Abutment 1 Piles	BR 1R Core Drill and Install Abutment 2 Piles	0
A1070	A1075	FS	Not Started	Not Started	BR 1R Construct Abutment 1 Grade Beam	BR 1R Construct Abutment 1 Backwall	0
A1075	A1110	FS	Not Started	Not Started	BR 1R Construct Abutment 1 Backwall	BR 1R Set Precast Beams	0
A1075	A1080	FS	Not Started	Not Started	BR 1R Construct Abutment 1 Backwall	BR 1R Construct Abutment 2 Grade Beam	0
A1077	A1080	FS	Not Started	Not Started	BR 1R Core Drill and Install Abutment 2 Piles	BR 1R Construct Abutment 2 Grade Beam	0
A1080	A1100	FS	Not Started	Not Started	BR 1R Construct Abutment 2 Grade Beam	BR 1R Construct Abutment 2 Backwall	0
A1100	A1110	FS	Not Started	Not Started	BR 1R Construct Abutment 2 Backwall	BR 1R Set Precast Beams	0
A1100	A1170	FS	Not Started	Not Started	BR 1R Construct Abutment 2 Backwall	BR 2R Construct Bent 1 Foundation Prep & Fc	0
A1110	A1120	FS	Not Started	Not Started	BR 1R Set Precast Beams	BR 1R Form Deck	0
A1120	A1130	FS	Not Started	Not Started	BR 1R Form Deck	BR 1R Install Deck Rebar	0
A1130	A1140	FS	Not Started	Not Started	BR 1R Install Deck Rebar	BR 1R Place and Finish Deck	0
A1140	A1150	FS	Not Started	Not Started	BR 1R Place and Finish Deck	BR 1R Construct Bridge End Slabs	0
A1150	A1160	FS	Not Started	Not Started	BR 1R Construct Bridge End Slabs	BR 1R Slipform Parapet Rails	0
A1160	A1485	FS	Not Started	Not Started	BR 1R Slipform Parapet Rails	Demo Existing Bridge 1L	0
A1170	A1180	FS	Not Started	Not Started	BR 2R Construct Bent 1 Foundation Prep & Fc	BR 2R Construct Bent 1 Columns	0
A1180	A1190	FS	Not Started	Not Started	BR 2R Construct Bent 1 Columns	BR 2R Construct Bent 1 Cap	0
A1190	A1200	FS	Not Started	Not Started	BR 2R Construct Bent 1 Cap	BR 2R Construct Bent 2 Foundation Prep & Fc	0
A1190	A1225	FS	Not Started	Not Started	BR 2R Construct Bent 1 Cap	BR 2R Core Drill and Install Abutment 1 Piles	0
A1200	A1210	FS	Not Started	Not Started	BR 2R Construct Bent 2 Foundation Prep & Fc	BR 2R Construct Bent 2 Columns	0
A1210	A1220	FS	Not Started	Not Started	BR 2R Construct Bent 2 Columns	BR 2R Construct Bent 2 Cap	0
A1220	A1230	FS	Not Started	Not Started	BR 2R Construct Bent 2 Cap	BR 2R Construct Abutment 1 Grade Beam	0
A1220	A1225	FS	Not Started	Not Started	BR 2R Construct Bent 2 Cap	BR 2R Core Drill and Install Abutment 1 Piles	0
A1220	A1245	FS	Not Started	Not Started	BR 2R Construct Bent 2 Cap	BR 2R Core Drill and Install Abutment 2 Piles	0
A1225	A1230	FS	Not Started	Not Started	BR 2R Core Drill and Install Abutment 1 Piles	BR 2R Construct Abutment 1 Grade Beam	0
A1225	A1245	FS	Not Started	Not Started	BR 2R Core Drill and Install Abutment 1 Piles	BR 2R Core Drill and Install Abutment 2 Piles	0
A1230	A1240	FS	Not Started	Not Started	BR 2R Construct Abutment 1 Grade Beam	BR 2R Construct Abutment 1 Backwall	0
A1240	A1270	FS	Not Started	Not Started	BR 2R Construct Abutment 1 Backwall	BR 2R Set Precast Beams	0
A1240	A1250	FS	Not Started	Not Started	BR 2R Construct Abutment 1 Backwall	BR 2R Construct Abutment 2 Grade Beam	0

CPM Schedule Update Checklist

Project Information

Contract ID: _____

Reviewer

Name: _____

Title: _____

Date: _____

Schedule Update Date: ____ / ____ / ____

General

	<u>Meets Specification</u>	
	Yes	No
One hard copy of the schedule update received (PDF)?	<input type="checkbox"/>	<input type="checkbox"/>
One electronic copy of the schedule update received? <i>Acceptable file types: .xer, .xml, .xls</i>	<input type="checkbox"/>	<input type="checkbox"/>
Table including actual start and finish dates of each activity or remaining durations of activities started but not yet completed (Activity Status Report)?	<input type="checkbox"/>	<input type="checkbox"/>
Updated critical or longest path? Does it make sense?	<input type="checkbox"/>	<input type="checkbox"/>

Submission Requirements

Logic Diagram

	<u>Meets Specification</u>	
	Yes	No
In color?	<input type="checkbox"/>	<input type="checkbox"/>
Depicting no more than 50 activities on each page (11 x 17 inch format)?	<input type="checkbox"/>	<input type="checkbox"/>
Each sheet including title, match data for diagram correlation, and a key?	<input type="checkbox"/>	<input type="checkbox"/>

Bar Chart

	<u>Meets Specification</u>	
	Yes	No
60-day look-ahead bar charts [sorted] by early start?	<input type="checkbox"/>	<input type="checkbox"/>

Tabular sorts of activities by...

	<u>Meets Specification</u>	
	Yes	No
Total float?	<input type="checkbox"/>	<input type="checkbox"/>
Early start?	<input type="checkbox"/>	<input type="checkbox"/>

Narrative Report

	<u>Meets Specification</u>	
	Yes	No
Progress during the month?	<input type="checkbox"/>	<input type="checkbox"/>

CPM Schedule Update Checklist

Shifts in the critical activities from the previous update?	<input type="checkbox"/>	<input type="checkbox"/>
Sources of delay?	<input type="checkbox"/>	<input type="checkbox"/>
Potential problem areas?	<input type="checkbox"/>	<input type="checkbox"/>
Work planned for the succeeding update period?	<input type="checkbox"/>	<input type="checkbox"/>
Changes made to the CPM schedule? (Changes include additions, deletions, or revisions to activities due to the issuance of a change order, changes to an activity duration, changes to relationships between activities, or changes to the planned sequence of work or the method and manner of its performance.)	<input type="checkbox"/>	<input type="checkbox"/>

Progress Assessment

TIME COMPLETE (%)	
WORK COMPLETE (%)	
DIFFERENCE (%)	≤ 15 %, otherwise see note.

Note: If actual construction falls behind the plan of operations or schedule by more than 15%, the Contractor shall offer for approval a revised schedule that reflects timely completion. Otherwise, the District Supervisor may request a revised schedule.

Circumstances that May Lead to Requesting a Revised Schedule

	<u>Circumstance Present</u>	
	Yes	No
A delay (actual or projected) to scheduled milestone or project completion dates 15% or more behind schedule?	<input type="checkbox"/>	<input type="checkbox"/>
A difference between the actual sequence or duration of work and that depicted in the schedule?	<input type="checkbox"/>	<input type="checkbox"/>
The issuance of a Change Order that alters the planned sequence of work or the method and manner of its performance by adding, deleting, or revising activities?	<input type="checkbox"/>	<input type="checkbox"/>

If any of the above circumstances are met, the District Supervisor has the discretion to request a revised schedule from the contractor. See Section 108.03-D of the Specifications.

CIRCULAR LETTER

SECTION: 108.07 DETERMINATION OF TIME FOR COMPLETION
NUMBER: 108.07-01
SUBJECT: DETERMINATION OF TIME BASED ON QUANTITY INCREASES
DATE: OCTOBER 2, 2015

For projects let after February 1, 2009, Section 108.07 of the Standard Specifications was revised such that if satisfactory fulfillment of the Contract requires performance of work in greater quantities than those set forth in the proposal, the contract time allowed for performance **may be** proportionally increased. This increase in contract time applies **only** to major items of work as defined in Section 101.03 of the Standard Specifications and **only** if the Engineer determines that the increase in quantities affected the critical path of the project and **only** if the time due to the increase of the major item has not been previously addressed by Change Order. For Projects containing a required CPM, incentive clause, or bonus clause for early completion, the Engineer shall not increase the working time by this method.

The determination of contract completion dates assumes the critical path items and normal production rates depending on the type and size of contract. It also assumes that many items of work are completed concurrently with the critical path items. Based on these assumptions, the contractor is expected to provide an adequate workforce and equipment, and sound scheduling and managing of resources to complete the project on schedule, with the realization that the quantities as bid are approximate only and the Department reserves the right to alter the quantities as specified in Section 104.02 of the Standard Specifications.

If the Engineer determines that the increase in quantities for major items affected the critical path of the project, thus affecting project completion, then additional time allowance shall be made as follows:

$$AT = (MI / OCA) * OCT$$

Where AT = Additional contract time (days)
MI = sum of the additional cost of the major items (\$)
OCA = Original contract amount (\$)
OCT = Original contract time (days)

Example:
Original contract amount (OCA) = \$1,000,000.00
Original contract time (OCT) = 150 days
Sum of additional cost (MI) = \$150,000.00

$$AT = (\$150,000.00/\$1,000,000.00)*150 \text{ days} = 22.5, \text{ say } 23 \text{ days}$$

The above calculation can be used to revise the completion date without issuance of a Change Order.

Any other changes in contract time due to quantities will need to be justified and approved by Change Order. (e.g. significant changes to quantities of minor items, addition of items, etc.)

For Projects let prior to February 1, 2009, in accordance with Section 108.07 of the Standard Specifications, contract working time may be increased based on the increase in quantities of the project. The basis of increase in quantities shall be solely on material quantity variations and not price adjustments. The basis for the determination of the project total shall not include the following:

- Fuel Adjustments (Item 109-01.01)
- Bituminous Adjustments (Item 109-01.02)
- Rideability Adjustments (Items 411-03.30, 411-03.31, 411-03.32, 501-11.01, 604-23.01, 501-05.02, 501-05.03)
- Material Variation (LOI) Adjustments (Item 411-03.40)
- Density Deductions (Item 407-07)
- Incentives (108-10.0_ Items)
- Disincentives (108-10.1_ Items)
- Liquidated Damages (108-07 or 108-08 Items)
- A.C. Content and Gradation Deduction (Items 407-09)
- Steel inspection cost (Item 602-04)
- Rideability deduction (bridges) (Item 604-23.01)
- Flagging adjustment (Item 105-02)
- Railroad flagging (Item 105-03)

CIRCULAR LETTER

SECTION: 109.01 MEASUREMENT OF QUANTITIES
NUMBER: 109.01-02
SUBJECT: TRUCK WEIGHT LIMITS
DATE: OCTOBER 2, 2015

The Department now will require that all weight tickets conform to the new limits outlined on these sheets as required by law.

Interstate weight limits shall apply when hauling on any of the following:

- a) Ramps entering or exiting the interstate system.
- b) Any portion of an existing interstate open or previously opened to traffic.
- c) The surface course of a new interstate facility (never opened to public traffic). However, Non-Interstate Highway limits will apply to hauling on the subgrade or base courses of newly constructed interstate widening projects if accessed by non-interstate routes.
- d) New and existing structures on interstates.

In consideration of the status of construction, relative to the present federal interstate system, it is considered that the above determinations provide adequate guidance as to the applicability of interstate truck weights.

SECTION I: Non-Interstate Highway

- 1) Two axle truck (one front, one rear)
20,000# each axle
Maximum gross weight = 40,000# *
- 2) Three axle straight (one front, tandem rear)
Front axle = 20,000#
Tandem axle = 34,000#
Maximum gross weight = 54,000# *

Exception: Class 9 tag or zone tag
Maximum gross weight = 66,000# *
- 3) Four axle straight (one front, three rear)
Front axle = 20,000#
Single axle rear = 20,000#
Tandem axle = 34,000#
Maximum gross weight = 74,000# *
- 4) Three axle truck tractor and trailer (one axle front of tractor, one rear of tractor, one rear of trailer)
Front axle = 20,000#
Rear axle Tractor = 20,000#
Rear axle Trailer = 20,000#
Maximum gross weight = 60,000# *
- 5) Four axle truck tractor and trailer (one front of tractor, one rear of tractor, tandem rear of trailer)
Front axle Tractor = 20,000#
Rear axle Tractor = 20,000#
Tandem axle Trailer = 34,000#
Maximum gross weight = 74,000# *
- 6) Four axle truck tractor and trailer (one front of tractor, tandem rear of tractor, one rear of trailer)
Front axle Tractor = 20,000#
Tandem rear Tractor = 34,000#
Single axle Trailer = 20,000#
Maximum gross weight = 74,000# *
- 7) Five axle tractor and trailer (one front of tractor, tandem rear of tractor, tandem rear of trailer)
Maximum gross weight = 80,000# *

* A tolerance of up to 500 pounds will be allowed over the maximum gross weight.

SECTION II: Interstate Highway (Contracts Let On or After October 31, 2008)

Per Section 107.02 of the Standard Specifications, all trucks delivering material (rock, asphalt, concrete, etc.) to construction projects shall display the allowable gross weight for the Interstate System on the side of the truck. The Bridge Formula shall be used to determine Interstate System gross weights as defined below and in the attached Bridge Formula Weights brochure:

Weight Distribution Formula (Bridge Formula)

$$W = 500 \left(\frac{L N}{N-1} + 12N + 36 \right)$$

W = overall gross weight

N = number of axles under consideration

L = distance in feet between extremes of axles under consideration

Copy of Bridge Formula Weights brochure is attached.

Note

This pamphlet paraphrases the provisions in 23 U.S.C. 127 and 23 CFR 658 for the sake of clarity. In case of a dispute, the statute and regulations take precedence.

Previous editions of this pamphlet, entitled *Bridge Gross Weight Formula* (April 1984) and *Bridge Formula Weights* (January 1994), remain valid. Neither the Bridge Formula nor any resulting maximum gross weight values (table entries) has been changed.

U.S. Department of Transportation
Federal Highway Administration

Office of Freight Management and Operations
Phone: 202-366-9210
Fax: 202-366-3302
Web site: <http://www.ops.fhwa.dot.gov/freight>

August 2006

FHWA-HOP-06-105

**Bridge
Formula
Weights**

August 2006



U.S. Department of Transportation
Federal Highway Administration

Bridge Formula Weights

With a few exceptions noted in this pamphlet, the Bridge Formula establishes the maximum weight any set of axles on a motor vehicle may carry on the Interstate highway system. This pamphlet describes the Bridge Formula, why it was established, and how it is used.

What Is It?

Congress enacted the Bridge Formula in 1975 to limit the weight-to-length ratio of a vehicle crossing a bridge. This is accomplished either by spreading weight over additional axles or by increasing the distance between axles.

Compliance with Bridge Formula weight limits is determined by using the following formula:

$$W = 500 \left[\frac{LN}{N-1} + 12N + 36 \right]$$

W = the overall gross weight on any group of two or more consecutive axles to the nearest 500 pounds.

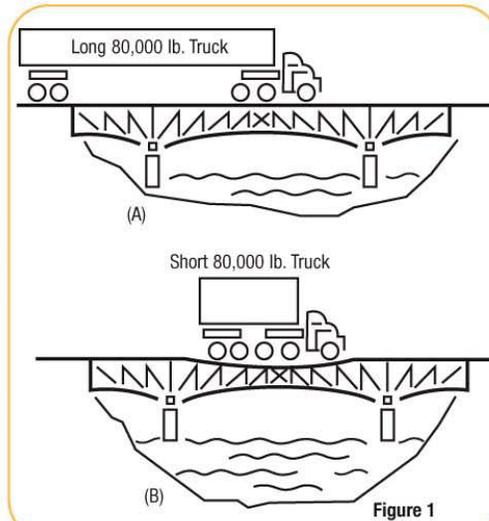
L = the distance in feet between the outer axles of any group of two or more consecutive axles.

N = the number of axles in the group under consideration.

In addition to Bridge Formula weight limits, Federal law states that single axles are limited to 20,000 pounds, and axles closer than 96 inches apart (tandem axles) are limited to 34,000 pounds. Gross vehicle weight is limited to 80,000 pounds (23 U.S.C. 127).

Is the Formula Necessary?

Bridges on the Interstate System highways are designed to support a wide variety of vehicles and their expected loads. As trucks grew heavier in the 1950s and 1960s, something had to



be done to protect bridges. The solution was to link allowable weights to the number and spacing of axles.

Axle spacing is as important as axle weight in designing bridges. In Figure 1A, the stress on bridge members as a longer truck rolls across is much less than that caused by a short vehicle as shown in Figure 1B, even though both trucks have the same total weight and individual axle weights. The weight of the longer vehicle is spread out, while the weight of the shorter vehicle is concentrated on a smaller area.

How Is the Formula Used?

The weight on various axle configurations must be checked to determine compliance with the Bridge Formula. Three definitions are needed to use the Bridge Formula correctly.

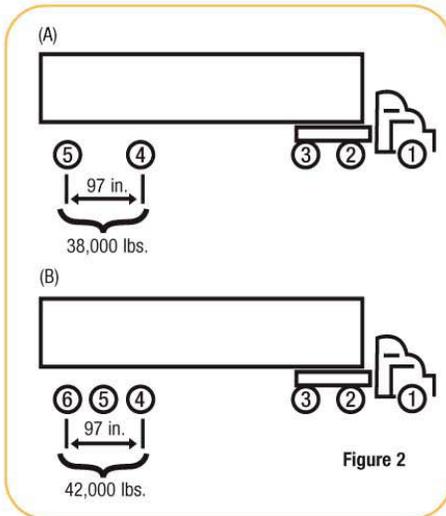
Gross Weight—the weight of a vehicle or vehicle combination and any load thereon. The Federal gross weight limit on the Interstate System is 80,000 pounds unless the Bridge Formula dictates a lower weight limit.

Single-Axle Weight—The total weight on one or more axles whose centers are spaced not more than 40 inches apart. The Federal single-axle weight limit on the Interstate System is 20,000 pounds.

Tandem-Axle Weight—The total weight on two or more consecutive axles whose centers are spaced more than 40 inches apart but not more than 96 inches apart. The Federal tandem-axle weight limit on the Interstate System is 34,000 pounds.

Interstate System weight limits in some States may be higher than the figures noted above due to "grandfather" rights. When the Interstate System axle and gross weight limits were first adopted in 1956, and amended in 1975, States were allowed to keep or "grandfather" weight limits that were higher.

Bridge Formula calculations yield a series of weights (Bridge Table, pages 5-6). It is important to note that the single-axle weight limit replaces the Bridge Formula weight limit on axles not more than 40 inches apart, and the tandem-axle weight limit replaces the Bridge Formula weight limit for axles over 40 but not more than 96 inches apart. At 97 inches apart, for example, two axles may carry 38,000 pounds (Figure 2A), and three axles may carry 42,000 pounds, as shown in Figure 2B.



Federal law states that any two or more consecutive axles may not exceed the weight computed by the Bridge Formula even though single axles, tandem axles, and gross weight are within legal limits. As a result, the axle group that includes the entire truck—sometimes called the "outer bridge" group—must comply with the Bridge Formula. However, interior combinations of axles, such as the "tractor bridge" (axles 1, 2, and 3) and "trailer bridge" (axles 2, 3, 4, and 5), must also comply with weights computed by the Bridge Formula (Figure 3).

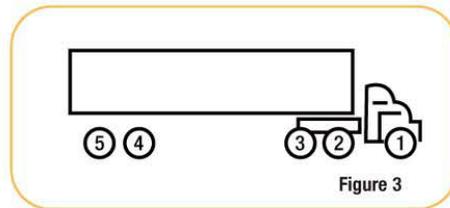
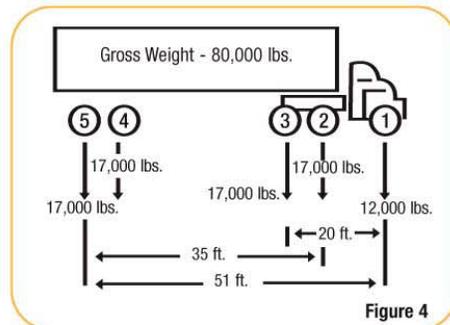


Figure 3 shows the most common vehicle checked for compliance with weight limit requirements. Although the Bridge Formula applies to each combination of two or more axles, experience shows that axle combinations 1 through 3, 1 through 5, and 2 through 5 are critical and must be checked. If these combinations are found to be satisfactory, then all of the others on this type of vehicle normally will be satisfactory.

The vehicle with weights and axle dimensions shown in Figure 4 is used to illustrate a Bridge Formula check.



Permissible Gross Loads for Vehicles in Regular Operation¹

Based on weight formula

$$W = 500 \left[\frac{LN}{N-1} + 12N + 36 \right]$$

Distance in feet (L) between the extremes of any group of 2 or more consecutive axles

Maximum load in pounds carried on

any group of 2 or more consecutive axles²

Tandem Axle Weight (see pages 3 & 4)	L	N=	Maximum load in pounds carried on any group of 2 or more consecutive axles ²									
			2 AXLES	3 AXLES	4 AXLES	5 AXLES	6 AXLES	7 AXLES	8 AXLES	9 AXLES		
	4.....		34,000									
	5.....		34,000									
	6.....		34,000									
	7.....		34,000									
	8.....		34,000	34,000								
	More than 8/less than 9		38,000	42,000								
	9.....		39,000	42,500								
	10.....		40,000	43,500								
	11.....			44,000								
	12.....			45,000	50,000							
	13.....			45,500	50,500							
	14.....			46,500	51,500							
	15.....			47,000	52,000							
	16.....			48,000*	52,500	58,000						
	17.....			48,500	53,500	58,500						
	18.....			49,500	54,000	59,000						
	19 Example (see page 7)			50,000	54,500	60,000						
	20			51,000	55,500	60,500	66,000					
	21.....			51,500	56,000	61,000	66,500					
	22.....			52,500	56,500	61,500	67,000					
	23.....			53,000	57,500	62,500	68,000					
	24.....			54,000	58,000	63,000	68,500	74,000				
	25.....			54,500	58,500	63,500	69,000	74,500				
	26.....			55,500	59,500	64,000	69,500	75,000				
	27.....			56,000	60,000	65,000	70,000	75,500				
	28.....			57,000	60,500	65,500	71,000	76,500	82,000			
	29.....			57,500	61,500	66,000	71,500	77,000	82,500			
	30.....			58,500	62,000	66,500	72,000	77,500	83,000			
	31.....			59,000	62,500	67,500	72,500	78,000	83,500			
	32.....			60,000	63,500	68,000	73,000	78,500	84,500	90,000		
	33.....				64,000	68,500	74,000	79,000	85,000	90,500		
	34.....				64,500	69,000	74,500	80,000	85,500	91,000		
	35.....				65,500	70,000	75,000	80,500	86,000	91,500		
	36.....					70,500	75,500	81,000	86,500	92,000		
	37.....		Exception (see page 9)	66,000	71,000	76,000	81,500	87,000	93,000			
	38.....			66,500	71,500	77,000	82,000	87,500	93,500			
	39.....			67,500	72,000	77,500	82,500	88,500	94,000			
	40.....			68,000	72,000	78,000	83,000	89,000	94,500			
	41.....			68,500	73,000	78,500	83,500	89,500	95,000			
	42.....			69,500	73,500	79,000	84,000	90,000	95,500			
	43.....			70,000	74,000	79,000	84,500	90,500	96,000			
	44.....			70,500	75,000	80,000	85,000	91,000	96,500			
	45.....			71,500	75,500	80,500	85,500	91,500	97,000			
	46.....			72,000	76,000	81,000	86,000	92,000	97,500			
	47.....			72,500	76,500	81,500	87,000	92,500	98,000			
	48.....			73,500	77,500	82,000	87,500	93,000	98,500			
	49.....			74,000	78,000	83,000	88,000	93,500	99,000			
	50.....			74,500	78,500	83,500	88,500	94,000	99,500			
	51.....			75,500	79,000	84,000	89,000	94,500	100,000			
	52.....			76,000	80,000	84,500	89,500	95,000	100,500			
	53.....			76,500	80,500	85,000	90,000	95,500	101,000			
	54.....			77,500	81,000	86,000	91,000	96,500	101,500			
	55.....			78,000	81,500	86,500	91,500	97,000	102,000			
	56.....			78,500	82,500	87,000	92,000	97,500	102,500			
	57.....		Interstate Gross Weight Limit (see page 2)	79,500	83,000	87,500	92,500	98,000	103,000			
	58.....			80,000	83,500	88,000	93,000	98,500	104,000			
	59.....				84,000	89,000	94,000	99,000	104,500			
	60.....				85,000	89,500	94,500	99,500	105,000			
					85,500	90,000	95,000	100,500	105,500			

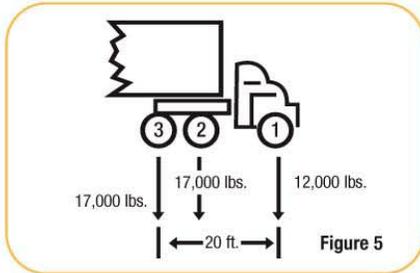
¹The values in this table reflect FHWA's policy of rounding down when calculated weights fall exactly halfway between 500-pound increments. Because the Bridge Formula is designed to protect highway infrastructure, FHWA determined that this conservative policy is consistent with the statutory mandate.

²The following loaded vehicles must not operate over H15-44 bridges; 3-S2 (5-axle tractor

semitrailer with a wheelbase of less than 38 feet), 2-S1-2 (5-axle semitrailer combination with a wheelbase of less than 45 feet), 3-3 (6-axle truck trailer combination with a wheelbase less than 45 feet), and any truck with 7 or more axles.

H15-44 bridges are designed for a specific vehicle load; H15 refers to a 15-ton 2-axle truck; 44 refers to the year AASHTO published the loading information. See AASHTO Standard Specifications for Highway Bridges.

Before checking for compliance with the Bridge Formula, a vehicle's single-axle, tandem-axle, and gross weight should be checked. Here the single axle (number 1) does not exceed 20,000 pounds, tandems 2-3 and 4-5 do not exceed 34,000 pounds each, and the gross weight does not exceed 80,000 pounds. Thus, these preliminary requirements are satisfied. The first Bridge Formula combination is checked as follows:



Check axles 1 through 3 (Figure 5)

Actual weight = 12,000 + 17,000 + 17,000 = 46,000 pounds.

N = 3 axles

L = 20 feet

$$W = 500 \left[\frac{LN}{N-1} + 12N + 36 \right]$$

$$W = 500 \left[\frac{(20 \times 3)}{(3 - 1)} + (12 \times 3) + 36 \right] = 51,000 \text{ lbs.}$$

Maximum weight (W) = 51,000 pounds, which is more than the actual weight of 46,000 pounds. Thus, the Bridge Formula requirement is satisfied.

Example From the Bridge Table (pages 5 & 6)

The same number (51,000 pounds) could have been obtained from the Bridge Table by reading down the left side to L = 20 and across to the right where N = 3.

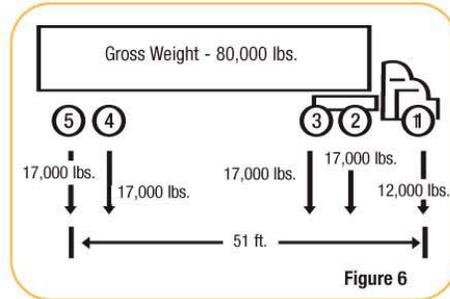


Figure 6

Now check axles 1 through 5 (Figure 6)

Actual weight = 12,000 + 17,000 + 17,000 + 17,000 + 17,000 = 80,000 pounds.

Maximum weight (W) = 80,000 pounds (Bridge Table for "L" of 51 feet and "N" of 5 axles).

Therefore, this axle spacing is satisfactory.

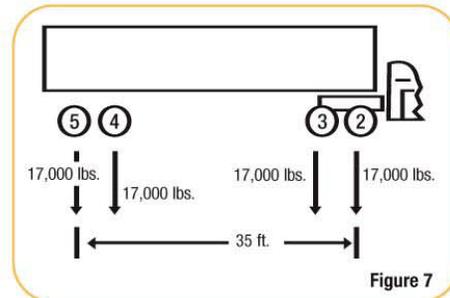


Figure 7

Now check axles 2 through 5 (Figure 7)

Actual weight = 17,000 + 17,000 + 17,000 + 17,000 = 68,000 pounds.

Maximum weight (W) = 65,500 pounds (Bridge Table for "L" of 35 feet and "N" of 4 axles).

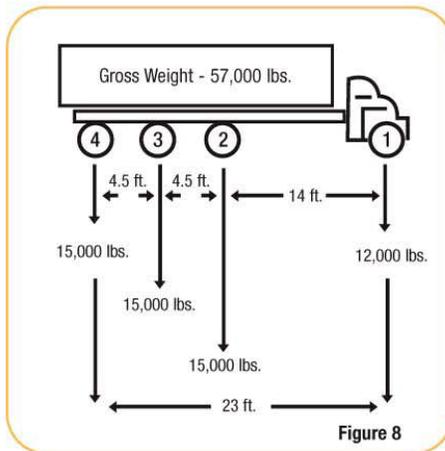
This is a violation because the actual weight exceeds the weight allowed by the Bridge Formula. To correct the situation, some load must be removed from the vehicle or the axle spacing (35 feet) must be increased.

Exception to Formula and Bridge Table

In addition to the grandfather rights noted on page 3, Federal law (23 U.S.C. 127) includes one other exception to the Bridge Formula and the Bridge Table—two consecutive sets of tandem axles may carry 34,000 pounds each if the overall distance between the first and last axles of these tandems is 36 feet or more. For example, a five-axle tractor-semitrailer combination may carry 34,000 pounds both on the tractor tandem (axles 2 and 3) and the trailer tandem (axles 4 and 5), provided axles 2 and 5 are spaced at least 36 feet apart. Without this exception, the Bridge Formula would allow an actual weight of only 66,000 to 67,500 pounds on tandems spaced 36 to 38 feet apart.

Bridge Formula Application to Single-Unit Trucks

The procedure described above could be used to check any axle combinations, but several closely spaced axles usually produce the most critical situation.



The truck shown in Figure 8 satisfies the single-axle weight limit (12,000 pounds are less than 20,000 pounds), the tandem-axle limit (30,000 pounds are less than 34,000 pounds) and the gross-weight limit (57,000 pounds are less than 80,000 pounds). With these restrictions satisfied, a check is done for Bridge Formula requirements, axles 1 through 4.

Actual Weight = 12,000 + 15,000 + 15,000 + 15,000 = 57,000 pounds.

Maximum weight (W) = 57,500 pounds (Bridge Table for "L" of 23 feet and "N" of 4 axles).

Since axles 1 through 4 are satisfactory, check axles 2 through 4:

Actual weight = 15,000 + 15,000 + 15,000 = 45,000 pounds.

Maximum weight (W) = 42,500 pounds (Bridge Table for "L" of 9 feet and "N" of 3 axles).

This is a violation because the actual weight exceeds the weight allowed by the Bridge Formula. The load must either be reduced, axles added, or spacing increased to comply with the Bridge Formula.

Quality Assurance Statement

The Federal Highway Administration (FHWA) provides high-quality information to serve Government, industry, and the public in a manner that promotes public understanding. Standards and policies are used to ensure and maximize the quality, objectivity, utility, and integrity of its information. FHWA periodically reviews quality issues and adjusts its programs and processes to ensure continuous quality improvement.

CIRCULAR LETTER

SECTION: 109.02 SCOPE OF PAYMENT
NUMBER: 109.02-01
SUBJECT: PRICE ADJUSTMENTS
DATE: OCTOBER 2, 2015

Upon receiving monthly indices for price adjustment items, the proper payment adjustment should be reflected on the next current estimate.

When any adjustments are made on estimates due to penalties, content or price variations, the contractor should be furnished a copy of the computations and explanation therefore. All documentation should be uploaded into SiteManager.

CIRCULAR LETTER

SECTION: 109.02 SCOPE OF PAYMENT
NUMBER: 109.02-02
SUBJECT: TEST REPORTS
DATE: APRIL 1, 2006

On all estimates, compare all pay quantities to the test reports or required certifications to assure that all items on the estimate are covered by the necessary in hand test reports or certifications.

Payment for stockpiled material may still be made as per Section 109.06 of the Standard Specifications.

Using this procedure should not delay the processing of estimates or change the cu off dates for the estimate period since materials used in the work are supposed to show evidence of having been inspected or tested prior to their being used. Thus a Test Report or Certification should be readily available.

If the test report or certification is produced by the Department, payment for an item may be made based on a verbal approval from the Region. However, the respective Test Report or Certification shall be "in hand" on the subsequent estimate period or payment for the item shall be removed from the progress payment.

CIRCULAR LETTER

SECTION: 109.02 SCOPE OF PAYMENT
NUMBER: 109.02-04
SUBJECT: DOCUMENTATION OF QUANTITIES FOR PROGRESS PAYMENT
DATE: MAY 15, 2002

The Engineer will keep a book (either hardcopy or electronic) in which the current quantities for each item in the contract is shown. He is to show the calculations for each item in this book or if copied from other records he is to reference back by book and page or sheet to the original notes. All calculations for hardcopy documentation either original or copied are to be signed and dated.

CIRCULAR LETTER

SECTION: 109.02 SCOPE OF PAYMENT
NUMBER: 109.02-05
SUBJECT: CERTIFICATION OF PROMPT PAYMENT AND DBE/SBE SUMMARY
DATE: SEPTEMBER 1, 2012

The Standard Specifications, in accordance with **TCA, Section 12-4-707**, and 49 CFR 26.29 requires the Prime Contractor to pay each subcontractor and material supplier no later than 30 days from receipt of each payment the Prime Contractor receives from the Department. In addition, all subcontractors, at all tiers, must make payment no later than 30 days to each subcontractor and material supplier for work and/or material provided for the project once they receive payment from the prime contractor or subcontractor.

In order to validate this payment, the Prime Contractor shall certify each month that these payments have been made. The certification shall run no more than 2 months in arrears. If circumstances arise where payment to the subcontractors has not been made, the Prime Contractor shall list reasons for nonpayment and note whether or not the subcontractors are Disadvantaged Business Enterprises (DBE) or Small Business Enterprises (SBE)* in the exception block. Also, the Prime Contractor shall be required to list all subcontractors or material suppliers where joint checks are utilized and note whether or not the subcontractors or material suppliers are DBEs/SBEs in the joint checks box.

Once completed by the contractor, the Certification Regarding Prompt Payment to Subcontractors and Material Suppliers and DBE/SBE Payment Summary shall be submitted electronically to the Project Supervisor. If DBEs/SBEs are utilized on the project and listed on the Certification Regarding Prompt Payment to Subcontractors and Material Suppliers and DBE/SBE Payment Summary, then the completed form shall also be submitted by email to the Small Business Development/DBE Office (DBE.runningtally@tn.gov). Copies of joint checks for DBEs/SBEs shall be attached to the email.

When exceptions or joint check subcontractors are listed, the Project Supervisor shall forward copies of the Certification to the Director of Construction and the Regional Construction office.

Monthly progress payments shall not be processed without this certification.

Use of the form Certification Regarding Prompt Payment to Subcontractors and Material Suppliers and DBE/SBE Payment Summary is required for contracts beginning with the September 14, 2012 Letting.

* Small Business Enterprise (SBE) as certified with the Governor's Office of Diversity Business Enterprise's Go-DBE System. All small businesses are encouraged to apply for certification with the Go-DBE System. More information is available at www.tennessee.gov/diversity.

CIRCULAR LETTER

SECTION: 109.03 COMPENSATION FOR ALTERED QUANTITIES
NUMBER: 109.03-01
SUBJECT: OVERRUN AND UNDERRUN EXPLANATIONS
DATE: OCTOBER 2, 2015

Explanations for overruns and underruns on revised estimates are to be provided in accordance with the following guidelines:

1. Explanations are to be given if an item is not used.
2. Explain items covered by a Supplemental Agreement by referring to the Supplemental Agreement, e.g., "See Supplemental Agreement No.--."
3. Explain items covered by a Plans Revision by referring to the Plans Revision, e.g., "See Plans Revision dated -----."
4. Explanations are to be given for overruns or underruns on major items (as defined in Subsection 101.03 of the Standard Specifications) if the quantity varies from the original quantity by 10% or more.
5. Explanations are to be given if the Engineer extends time due to overruns in accordance with Subsection 108.07 of the Standard Specifications.
6. Explanations are to be given for overruns and underruns due to other factors considered significant by the District Supervisor.

Explanations for changes not consistent with the above will be required if deemed significant by the Regional Operations Office, Headquarters Construction Office or Federal Highway Administration.

CIRCULAR LETTER

SECTION: 109.04 ADDITIONAL OR ALTERED WORK
NUMBER: 109.04
SUBJECT: DOCUMENTATION AND METHOD OF PAYMENT
DATE: OCTOBER 2, 2015

All price adjustments must be submitted in accordance with **Subsections 104.02 and 104.03.**

1. Change Order – This method is applicable when the Department and the Contractor can agree on equitable prices for the extra work. The procedures relating to major and minor changes in the Department’s **Policy Number 355-01, Approval of Construction Change Orders and Force Account Work**, are to be followed for extra work covered by Change Order. The descriptions of the bid items, bid item numbers, and units of measure in the Change Orders should be obtained from the SiteManager Item Master and submitted with Change Order documentation. If an item of extra work is not covered in the SiteManager Item Master, the necessary bid item descriptive data shall be obtained from the Headquarters Construction Division.
2. Force Account – This method is applicable when the Department and the contractor are unable to agree on equitable prices for the extra work. The extra work must prove to be more cost effective than bidding the work. Prior approval for extra work performed by force account also is required in accordance with the procedures relating to major and minor changes in the Department’s **Policy Number 355-01, Approval of Construction Change Orders and Force Account Work**. In all cases, detailed cost records must be kept by the Operations District Supervisor as prescribed in **Subsection 109.04** to fully support all billings for the work. The line item for the force account work on the Estimate Summary to Contractor should show the following information:

Bid Item Number:	109-04
Description:	Force Account
Unit of Measurement:	Dollar

CIRCULAR LETTER

SECTION: 109.05 ELIMINATED OR ALTERED ITEMS

NUMBER: 109.05-01

SUBJECT: UNUSED OR SERVICEABLE MATERIAL REMOVED FROM THE PROJECT

DATE: OCTOBER 2, 2015

1. Payment for Items which have been approved by the District Operations Supervisor for delivery to the project and not used, will be paid to the contractor in accordance with Subsection 109.05 of the Standard Specifications.
2. The Contractor should submit to the District Operations Supervisor a letter detailing all the materials to be removed from the project. This letter should contain the information required in Subsection 109.05 of the Standard Specifications. After the District Operations Supervisor has received the letter, he/she shall forward a copy to the District Operations Engineer. After this has been accomplished the responsibility for the removal and disposition of the material belongs to the District Operations Engineer.

CIRCULAR LETTER

SECTION: 109.08 PARTIAL PAYMENT
NUMBER: 109.08-01
SUBJECT: PARTIAL PAYMENTS
DATE: OCTOBER 2, 2015

Concrete Retaining Walls:

Where concrete retaining walls are paid for by the square foot (square meter) or lump sum, partial payment for work performed during the estimate period may be made provided that no stockpile payment has been made for materials incorporated into the work. The partial payment will be paid for under the actual pay item for the respective retaining wall.

For walls in both cut and fill sections, the District Supervisor will estimate the percentage of the completed wall that is represented by:

1. Footing excavation and/or undercutting and select backfill, if required.
2. Concrete, reinforcing steel and piling in the footing(s).
3. Concrete and reinforcing steel, or precast panels and columns in the wall.
4. Drains and backfill.
5. Texture coat or other finish.

A partial payment quantity will be computed based on the percentages assigned above.

Method: $\text{Partial Payment Quantity} = \frac{\% \text{ complete}}{100\%} \times \text{plans quantity}$

Where, % complete = sum of percentages assigned for the estimate period

Calculations as indicated above will be shown in the field book for each progress estimate that partial payments are made.

CIRCULAR LETTER

SECTION: 209-01
NUMBER: 209.01-02
SUBJECT: EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) INSPECTION REPORT
DATE: OCTOBER 2, 2015

The inspection report and monthly rain gauge log identified in the Tennessee Department of Transportation Erosion Prevention Sediment Control (EPSC) Inspection Manual, November 14 2014 or most current version, located on the TDOT Construction Division website, shall be utilized as the standard statewide report for the evaluation of EPSC measures on all Department projects that are subject to the requirements of the NPDES General Permit for Storm Water Discharges from Construction Activities (CGP). This report should also be used to document Contractor compliance with EPSC requirements in conformance with ARAP, Corps of Engineers, and/or TVA permits. The report shall be completed according to guidance provided by the Tennessee Department of Transportation EPSC Inspection Manual, November 2014 or most current version.

CIRCULAR LETTER

SECTION: 209-01
NUMBER: 209.01-03
SUBJECT: CONSTRUCTION RELATED SEDIMENT REMOVAL
DATE: October 2, 2015

This Circular Letter establishes the procedures for removal and/or stabilization of sediment discharges caused by active construction projects to non-jurisdictional areas (e.g., grassed or treed areas, wet weather conveyances, etc.), as well as jurisdictional areas (e.g., streams (including ephemeral streams), wetlands, sinkholes, etc.), within or beyond the project construction limits. Sediment caused by active construction projects must be removed and/or stabilized when it has accumulated beyond the last Erosion Prevention Sediment Control (EPSC) measure on the construction site before leaving the construction limits. Any sediment beyond the TDOT project right-of-way (ROW) is considered sediment discharge regardless of whether or not it is in a jurisdictional area. The District Operations Supervisor shall notify the Regional Environmental Coordinator (EC) immediately after it is discovered that a sediment release has occurred. The District Operations Supervisor or his/her designee shall complete all applicable information on the attached "Sediment Release Form". The District Operations Supervisor or his designee shall email the completed "Sediment Release Form" to the Regional EC, who will determine the appropriate course of action.

The Regions will only apply for activities included in the TDEC General Aquatic Resources Alteration Permit (ARAP) for Sediment Removal and Stream Remediation. This general permit authorizes certain stream remediation activities that serve the purpose of removing recently deposited sediment from stream beds, stream banks and riparian lands that result from construction related sediment releases from construction sites. These deposits shall be confined within areas that can be readily accessed and removed (stream restored or repaired) without additional harm to the shape or stability of the stream channel. Also, refer to standard specifications **Subsection 107.08 (Protection of Streams, Lakes and Reservoirs)** for additional information. The Nashville USACE District does not require notification of these activities since they do not regulate the removal of material from Waters of the U.S. The Memphis USACE District does not require notification prior to sediment removal activities. If TDOT sends a follow-up notification to TDEC after the sediment is removed, the Memphis USACE District would like to be copied on the notification letter. TVA does not need notification of these activities.

Attached are the Standard Operating Procedure (SOP), permit requirements, and sediment release form to use for this activity. The issuance of a permit does not authorize trespassing or discharges of storm water or non-stormwater across private property.

Work shall not commence in jurisdictional areas until TDOT has been notified by TDEC that the proposed activities may proceed under a general permit or that an individual permit has been issued. Email or verbal communication is an acceptable form of notification, if necessary.

Time is of the essence so that the extent of sediment migration is minimized and little or no delay is caused in construction progress.

Standard Operating Procedures (SOP) for Sediment Removal for Stream Remediation

Non-jurisdictional areas and waters:

Action to prevent the potential for additional discharges of sediment beyond the EPSC measures shall be started immediately. The removal and/or stabilization process for a sediment discharge in non-jurisdictional areas shall be started within twenty-four (24) hours after discovery. Since these accumulations of sediment have not yet reached a jurisdictional area, approval from the regulatory agencies is not necessary, but the terms and conditions of the TDEC General ARAP for the Alteration of Wet Weather Conveyances shall be followed. Removal of this sediment is the preferred method. The Regional Environmental Coordinator must approve the sediment cleanup activities if the contractor desires to stabilize and leave in place the sediment discharge. However, there cannot be a potential for the sediment to migrate into jurisdictional areas or for any other negative impact from leaving the sediment in place,

Attempts to remove and/or stabilize any off-site sediment discharges to non-jurisdictional areas outside of the ROW will require permission of the landowner. Arrangements concerning removal or stabilization of sediment on adjoining property must be settled by the contractor with the adjoining landowner before removal or stabilization can occur. If permission is not allowed, the EPSC inspector shall document the effort to remove and/or stabilize the sediment discharge in the EPSC inspection report, and the District Operation Supervisor shall contact the Regional Director of Operations, TDOT HQ Construction Office, the Regional Environmental Coordinator and the Compliance and Field Services of this effort.

For sediment releases beyond the last measure and off ROW, the District Operations Supervisor or designee shall complete the TDOT Sediment Release Form attached to this circular.

Jurisdictional waters:

The Regional Environmental Coordinator shall call the TDEC Environmental Field Office to report the release and go through the plan to remove and stabilize or clean up the area. Once verbal or written approval from TDEC has been given, the sediment can be removed and the area stabilized, as agreed upon with TDEC. Immediately following the sediment release and removal, the District Operations Supervisor or Regional Environmental Coordinator shall complete the TDOT Sediment Release Form attached to this circular for all sediment releases to streams and/or wetlands.

Actions to prevent the potential for additional discharges of sediment beyond the EPSC measures and into the stream or wetland shall be taken immediately. The removal and/or stabilization process of a sediment discharge in jurisdictional areas shall be started as soon as approval is received from the appropriate regulatory agencies. The Regional Environmental Coordinator shall be notified immediately after it is discovered that sediment has discharged to a

jurisdictional area. Approval by the regulatory agencies will be required for removal of all construction related sediment discharges to jurisdictional waters.

For situations where the General ARAP is not authorized for coverage, the sediment removal and/or stabilization activity must be covered by an Individual ARAP.

General ARAP:

For sediment releases covered by the TDEC General ARAP for Sediment Removal and Stream Remediation, the Regional Environmental Coordinator shall receive approval to proceed before removing the sediment deposits as well as prepare and submit an application package to the appropriate regulatory agencies. The District Operations Supervisor (or designee) or Regional Environmental Coordinator must also complete the TDOT Sediment Release Form attached to this circular.

In the event sediment releases are covered under the TDEC General ARAP for Sediment Removal and Stream Remediation, the following steps shall occur.

1. The Regional Environmental Coordinator shall be the single point of contact for this activity and shall coordinate with all regulatory agencies and TDOT personnel.
2. The District Operations Supervisor (or their designee) shall notify the Regional Environmental Coordinator and the Regional Director of Operations of all sediment releases with the locations of sediment release identified on site sketches or plans, an explanation why the discharge occurred, a topographic map of location(s), a completed TDEC Form CN-1091 (located on TDEC's website), a summary of the impacts, and description of what will be done to prevent the further or continued loss of sediment from the site.
3. The Regional Environmental Coordinator shall notify the TDOT HQ Construction Office, the Regional Director of Operations, and the Compliance and Field Services with the information received from the District Operations Supervisor (or their designee) and the coordination efforts proposed with the regulatory agencies.
4. The Regional Environmental Coordinator shall contact the TDEC Environmental Field Office to report the release and discuss removal and remediation. Once TDEC has given verbal or written approval of the removal and remediation plan, sediment removal can begin. The Regional Environmental Coordinator shall complete the TDOT Sediment Release Form attached to this circular and include all necessary information. The package of information shall then be sent to TDEC with a copy to the Compliance and Field Services.
5. If necessary, the Regional Environmental Coordinator may request an on-site field visit with the appropriate regulatory agencies and the District Operations Supervisor (or their designee) to determine the appropriate course of action. If, after the on-site visit, TDEC requires a more detailed plan than proposed by the Regional Environmental Coordinator or requires an Individual Permit, the Regional Environmental Coordinator shall provide the sediment release and site visit information to the TDOT Natural Resources Office for further action. A more detailed plan is known as a Sediment Assessment and Remediation Plan

(SARP) which will be prepared, submitted to the regulatory agencies and overseen by the TDOT Natural Resources Office. In the case an Individual ARAP is required, instead of the Regions, the TDOT Natural Resources Office will be responsible for the next steps (#6 & #7 below). The TDOT Natural Resources Office shall provide this application package and regulatory approval to the Regional Environmental Coordinator in order to continue the next process step (#8).

6. The District Operations Supervisor (or their designee) shall submit to the Regional Environmental Coordinator the application package, including the materials required within this Circular Letter, for each sediment release off ROW or into a jurisdictional area. These include the following items: completed TDOT Sediment Release Form, completed TDEC CN-1091 form, and the items listed in the "Permit Information Required With General ARAP Application" section below.
7. The Regional Environmental Coordinator shall review the application package to ensure all required information necessary for the permit acquisition is accurate and complete. The Regional Environmental Coordinator shall submit the application package to the appropriate TDEC Environmental Field Office.
8. Once approval is received (either written or verbal with written follow-up) from TDEC, the Regional Environmental Coordinator shall distribute all applicable permits/approvals to the HQ Construction Office, the Compliance and Field Services and the District Operations Supervisor (or their designee).
9. The District Operations Supervisor (or their designee) shall oversee the sediment removal and/or stabilization activities of the contractor until complete. If a SARP is processed by the TDOT Natural Resources Office on this project, the TDOT Natural Resources Office and the Memphis USACE shall also be involved with the coordination of this activity.
10. The District Operations Supervisor (or their designee) shall notify the Regional Environmental Coordinator within two (2) calendar days after the sediment removal and /or stabilization is complete.
11. At this time, the Regional Environmental Coordinator shall visit the locations identified in the application and provide written and photographic documentation of the location where removal and/or stabilization was performed. This shall also be included in the EPSC inspection report.
12. Within seven (7) calendar days after the completion of each activity, the Regional Environmental Coordinator shall submit the documentation above, electronic color copy via email, to the regulatory agencies, TDOT HQ Construction Office and TDOT Compliance and Field Services. An electronic color copy (e.g. .pdf) shall be sent via email and one color copy shall be mailed to TDEC. Please be aware that TDEC may impose a fee (Natural Resource Damage Assessment) to cover the damages to the affected jurisdictional area if a significant amount of damage was done to the area and total recovery of the sediment was not achieved. This fee shall only be imposed following a SARP conducted by the TDOT Natural Resources Office, in conjunction with, or approved by, TDEC.

Individual ARAP:

If the sediment release to jurisdictional waters meets one of the exceptions to the General ARAP coverage listed above, the Regional EC shall provide sediment release information to the TDOT Natural Resources Office for the application for an Individual Permit. The District Operations Supervisor or designee will also complete the TDOT Sediment Release Form attached to this circular for submittal to the Regional Environmental Coordinator.

PERMIT INFORMATION REQUIRED WITHARAP APPLICATIONS

- **Cover Letter** – Description of the basic nature and scope of the project, including events that lead to the discharge, the characteristics of the discharge and the proposed method of sediment removal/stabilization. This application letter and any forms shall be signed by the Regional Construction Supervisor (or their designee).
- **7½-minute USGS Topographic Quadrangle Map** – Located in the appendix of the Storm Water Pollution Prevention Plan (SWPPP)* as the Vicinity Map or within the Water Quality Permit Application.
- **Permit Identification Numbers** – Located on the NPDES Notice of Coverage (NOC), the USACE, TDEC and TVA permits.
- **Latitude/Longitude** – In-stream location of sediment accumulation. This can be found on the internet (e.g., www.topozone.com), with a GPS unit or on the topographic quadrangle map. In the form of (Latitude XX.XXXX N, Longitude XX.XXXX W)
- **Receiving Stream** – Located within the text of the SWPPP* or in the Ecology information within the Appendix of the SWPPP* or within the Water Quality Permit Application.
- **Threatened or Endangered Species** – Located in the Ecology information within the appendix of the SWPPP* or within the Water Quality Permit Application.
- **Photos** – Before sediment removal work (to submit with the application) and, once the work has been completed, after sediment cleanup (to submit after completion of the activity) representative photos.
- **Plan sheets and/or sketches** –Use Erosion Prevention and Sediment Control (EPSC) Sheet from within the Appendix of the SWPPP* to show EPSC methods being maintained. Provide sketch showing the approximate dimensions of the sediment deposit, the proposed diversion methods and any additional EPSC measures needed for sediment removal, if appropriate.
- **Provide copies of the TDOT Standard Drawings, as appropriate**
- **Proposed Commencement Date** – Upon issuance of permit
- **Proposed Completion Date** – (e.g., 30 days) from issuance of permit. The permit will state the expiration date based upon the proposed completion date. If additional time is needed after the stated expiration date within the permit, the Regional EC shall contact the regulatory agencies at least one week before the expiration date with a request for time extension and the amount of time requested.
- **Identify if the stream is listed as one of the following waters** - This information is available on TDEC’s website.
 - National Wild and Scenic Rivers in TN**
 - Tennessee’s Designated State Scenic Rivers**
 - Outstanding National Resource Waters**

*A SWPPP will not be provided on all projects. A SWPPP is only provided on construction projects that disturb one (1) acre or more of land.

TENNESSEE DEPARTMENT OF TRANSPORTATION
 EROSION PREVENTION/SEDIMENT CONTROL
 SEDIMENT RELEASE FORM
 FOR USE FOR SEDIMENT RELEASES OFF ROW AND/OR INTO STREAMS/WETLANDS

State Route (SR) / US Route or Road Name and Description:		
County(ies):	TDOT PIN:	NPDES Permit (NOC) #:
Other Applicable Permits (ARAP, TVA, etc.)		
TDOT Contract No.:	Contractor:	
Date of Sediment Release:	Did sediment leave the ROW or discharge into a stream or wetland? Yes/No If No, no further documentation beyond the EPSC inspection report is required.	
TDOT/Consultant EPSC Inspector:		
Form Completed By: (TDOT Project Supervisor/Designee)		Date
Received and Reviewed By: (Regional Environmental Coordinator)		Date
Forwarded to Local TDEC EFO (if applicable) _____ (Initial and Date)		
Forwarded back to Local TDOT Construction Office _____ (Initial and Date)		
<p>Location of Sediment Release (Outfall and STA): <i>[Record the approximate stationing, which side of centerline and nearest Outfall (if release is not at an Outfall). Example: Sediment release to Clear Creek at Outfall 2, Sta. 1+250 LT]</i></p>		
<p>Cause of Sediment Release: <i>[Describe what caused sediment release. Include relative rainfall totals, installed BMPs in area and if they were installed per the site erosion control plan and SWPPP requirements, etc. Example: A 1.25" rain event (three hour duration) occurred on October 1, 2009. Sediment trap above Outfall 2 was in working condition and installed per the updated erosion control plans in the SWPPP; however, 3 rock check dams in ditch leading to outfall were over 50% capacity. Sediment-laden runoff from active cut slope exceeded check dams' capacity in ditch and overtopped sediment trap, causing a sediment release into Clear Creek]</i></p>		

TENNESSEE DEPARTMENT OF TRANSPORTATION
EROSION PREVENTION/SEDIMENT CONTROL
SEDIMENT RELEASE FORM
FOR USE FOR SEDIMENT RELEASES OFF ROW AND/OR INTO STREAMS/WETLANDS

Environmental Impacts of Sediment Release: *[Describe the environmental impacts of the sediment release including impacts to habitat (i.e. fish kills), dimensions of the sediment impacts, and potential impacts to Threatened and Endangered Species list in the Ecology Report and SWPPP. State if any jurisdictional waters were impacted by sediment. Example: A sediment release impacted permitted stream of Clear Creek (STR-3). The observed impacts are sediment deposition approximately 750 ft downstream and approximately 2 ft wide, culminating at log weir. Average sediment depth was 3", ranging from 12" to ½" thick. No endangered species are noted in the area and no signs of aquatic life was impacted]*

Plans to Remove off-ROW Sediment: *[Describe how TDOT plans on removing sediment and who will be involved in removal. Example: TDOT notified TDEC Environmental Field Office on October 2, 2009 about sediment release to Clear Creek. TDOT plans to install a sandbag cofferdam upstream of sediment release and pipe stream flow around impacted area, discharging back into stream below log weir. Sediment will be removed from stream with hand tools and disposed of per requirements outlined in project SWPPP. Once sediment is removed, sandbag cofferdam will be removed; returning flow to stream. The contractor will perform sediment removal under supervision of Region Environmental Coordinator.]*

Plans to Prevent Future Impacts: *[Describe additional EPSC measure or change in drainage planned (or completed) to prevent repetitive sediment release in this location. Example: EPSC measures will be increased at and above Outfall 2. Two additional rock check dams have been constructed in ditch leading to Outfall 2 and sediment trap storage capacity has been increased. In addition, seed and erosion control blanket are scheduled to be installed on the cut slope at the end of the week.]*

Attach Additional Information: *such as Photographs and Erosion Control Plans indicating location of sediment release. For sediment releases to jurisdictional waters that qualify for coverage under General ARAP for Sediment Removal and Stream Remediation, the TDEC CN-1091 form must also be completed.*

CIRCULAR LETTER

SECTION: 209.01
NUMBER: 209.01-04
SUBJECT: TDOT INSPECTION OF CONTRACTOR WASTE & BORROW SITES
DATE: OCTOBER 2, 2015

Effective with the June 18, 2010 Letting, Waste & Borrow Sites for TDOT projects will be subject to the requirements of the Procedures for Providing Offsite Waste and Borrow on TDOT Construction Projects.

After the contractor has secured approval for use of a waste and/or borrow site, he/she is responsible for performing twice weekly EPSC Inspections of that site, if applicable. The contractor must have a certified EPSC inspector as required by the TDEC Construction General Permit (CGP). The certified EPSC inspector must document the inspections on the inspection form in the CGP or on TDOT's inspection report (see CL 209.01-02).

All aspects of the oversight and inspection of Waste and Borrow sites associated with TDOT construction projects shall follow the terms and conditions of the Procedures for Providing Offsite Waste and Borrow on TDOT Construction Projects dated June 2012, or most current version.

TDOT Construction Exclusive Waste/Borrow Site Weekly EPSC Inspection Review Report

Date of Review:	County :
TDOT Project Description:	
TDOT Contract Number:	Contractor:
Contractor's Waste/Borrow Area Name/Description:	
Waste/Borrow NPDES Number:	
Contractor's Certified EPSC Inspector:	Inspector's Certification Number:
Location of Contractor's Waste/Borrow Area Permits:	
Dates of Contractor's EPSC inspections (since last review):	
Name of TDOT Representative Completing Documentation Review:	

Instructions: This checklist covers the basic erosion prevention and sediment control and other stormwater construction requirements for Exclusive Waste/Borrow Areas used for TDOT projects. This report shall be completed weekly by the TDOT EPSC Representative verifying the documentation of the contractor's previous week's twice weekly EPSC inspection reports. Questions that are not applicable for the site must be marked as "N/A". Checks placed under the "No" column that indicate a deficiency requires a written explanation and/or a written corrective action and required completion date in the "TDOT EPSC Representative's Comments and Corrective Actions" section of this form. Both the TDOT EPSC Representative and the Contractor's Certified EPSC Inspector should sign the form immediately following each review.

General Information – Only need to complete during first review unless there are changes to report at subsequent reviews

- | | Yes | No | N/A | |
|-----|--------------------------|--------------------------|--------------------------|--|
| 1. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the waste/borrow area exclusive to the above referenced TDOT project? (If not exclusive or if exempt exclusive, do not complete or answer any other questions.) |
| 2. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the NOC posted on site? |
| 3. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are the SWPPP and other required CGP information available on site? |
| 4. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are rain gages present and installed per requirements? |
| 5. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are Streams/Wetlands/Sinkholes present on site? |
| 6. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | If 5 is "Yes", have the applicable permits been obtained for the impacts (ARAP, USACE, TVA)? |
| 7. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | If 5 is "Yes", are Streams/Wetlands/Sinkholes shown in the SWPPP with appropriate buffers noted? |
| 8. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do the EPSC measures shown in the SWPPP and installed in the field appear adequate for the site? |
| 9. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are outfall locations shown in the SWPPP? Are there outfalls in the field that aren't included in the SWPPP? |
| 10. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are on-site outfall drainage areas included in the SWPPP? |
| 11. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is a sediment basin required at any on-site outfalls per the TN CGP? |
| 12. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | If 11 is "Yes", are a sediment basin and its calculations included in the SWPPP? |
| 13. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Does the SWPPP limit the disturbed area of the Waste/Borrow site to less than 50 acres at one time? |
| 14. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Does the SWPPP include at least two separate EPSC plan sheets (sites disturbing < 5 acres) or at least 3 separate EPSC plan sheets (sites disturbing > 5 acres) as required by TN CGP? |

Site Specific Information – Complete during each review

Yes No N/A

- 15. Have EPSC inspections been documented twice weekly and at least 72 hours apart?
- 16. Do the EPSC inspection reports document daily rainfall for the site?
- 17. Do the EPSC inspection reports document that the project outfalls have been inspected?
- 18. Did the EPSC inspection report document sediment deposits off the permitted area?
- 19. If 18 is "Yes", did the EPSC inspection report the sediment release was into a Stream or Wetland?
- 20. If 19 is "Yes", did the EPSC inspection report document that contractor self-reported the sediment release to TDEC EFO?
- 21. If 19 is "No", did the EPSC inspection report document that the off site sediment was removed or stabilized?
- 22. Have any new project outfalls been added according to the EPSC inspection reports?
- 23. If 22 is "Yes", have new project outfalls been updated in the SWPPP?
- 24. Do the EPSC inspection reports document that EPSC measures have been installed per the SWPPP in all active areas?
- 25. Do the EPSC inspection reports document that the installed EPSC measures appear to be adequate for the site?
- 26. Do the EPSC inspection reports document that the EPSC measures are being maintained according to the SWPPP and the CGP?
- 27. Do the EPSC inspection reports document any new EPSC measures being installed?
- 28. If 27 is "Yes", has the SWPPP been updated to reflect the new EPSC measures?
- 29. Have the dates of major grading activities been documented in accordance with the SWPPP?
- 30. Have the dates when construction activities temporarily or permanently ceased been documented in accordance with the SWPPP?
- 31. Do the EPSC inspection reports document that disturbed areas idle for more than 14 days have been temporarily or permanently stabilized?
- 32. Do the EPSC inspection reports document that temporary stabilization has been applied to any areas of the site?
- 33. Do the EPSC inspection reports document that permanent stabilization has been applied to any areas of the site?
- 34. Do the EPSC inspection reports document that steep slope areas have been stabilized in 7 days?
- 35. Do the inspection reports document the total disturbed acreage, including haul roads, stockpile areas, and other disturbances?

TDOT EPSC Representative's Comments and Corrective Actions

Signatures - Complete during each review

I certify that I have completed the inspection review documented in this report.

TDOT EPSC Representative's Signature

Date

I certify that any EPSC deficiency noted in the twice-weekly inspection report will be addressed in conformance with the requirements of the TN CGP. I also agree that items listed above are accurate and that any discrepancies to this report are listed below in the comments section.

Contractor's Certified Inspector Signature

Date

Contractor's Certified Inspector's Comments

CIRCULAR LETTER

SECTION: 209.01 PROJECT EROSION AND SILTATION CONTROL
NUMBER: 209.01-05
SUBJECT: UTILITIES AND ENVIRONMENTAL CONSTRUCTION PERMITS
DATE: OCTOBER 2, 2015

This circular letter addresses utility work within or adjacent to the TDOT right-of-way (ROW) and the associated environmental construction permits. The “Guidebook for Utility Relocation Related to TDOT Construction Projects” produced by the TDOT ROW Division Utilities Office contains additional information related to oversight of utility work on TDOT ROW or in TDOT Construction projects. Utilities are responsible for obtaining any needed easements or right-of-way for utility construction that extends beyond the TDOT ROW. All utility work that occurs within or adjacent to TDOT’s ROW may be classified in one of the two following categories:

1. In Contract Moves: Utility work included in a TDOT Construction contract; or
2. Prior to Moves: Utility work not included in a TDOT Construction contract, including utility relocations performed by the utility prior to the beginning of a TDOT Construction contract.

The Project Supervisor should coordinate with the TDOT Regional Utility Office to determine which of these categories applies to each type of associated utility work and to obtain contact names and information for each utility. The Project Supervisor should discuss In-Contract Moves at the pre-construction meeting and at the environmental pre-construction meeting. This discussion should address areas where In-Contract Moves and Prior-To Moves extend outside the TDOT ROW. In addition, the Project Supervisor may direct the TDOT EPSC Inspector to conduct a pre-disturbance EPSC inspection before the utility work begins.

In-Contract Moves

For In-Contract Moves, the Prime Contractor for the construction project will coordinate all construction work activities (including utility work) for the contract. The utility work will be performed by either the Prime Contractor’s forces or a subcontractor’s forces. Any issues related to the utility construction process need to be brought to the Project Supervisor’s and the Prime Contractor’s attention immediately to allow for corrective action.

For In-Contract Moves, the TDOT Environmental Division’s Natural Resources Office (NRO) obtains the environmental construction permits for the construction project, including the utility construction or installation work. Utility companies remain responsible for obtaining their own railroad permits, TDEC water or sewer approval permits or other operational permits for the utility facilities. The utility completes and signs the “Memorandum of Understanding (For Environmental Permits Required by Utility Construction)” (Form 2011-19) for the TDOT Right-of-Way Division. If the utility construction or installation work extends off the TDOT ROW, the utility is responsible for obtaining easements or additional right-of-way for areas adjacent to the TDOT ROW. In addition, the utility supplies the needed permit submittal information for all

utility construction or installation work to the Regional Utility Office and/or the Project Supervisor, who then provides the permit information to the TDOT NRO. Any environmental construction permit modifications or changes for In-Contract Moves should be coordinated with the TDOT NRO. The TDOT NRO will work with the regulatory agencies to obtain the permit modifications or changes.

For In-Contract Moves, the utility work cannot begin until the following steps are completed:

- (1) the TDOT project's pre-construction meeting has been completed and
- (2) notice has been given by the Prime Contractor to the TDOT Project Supervisor that utility work will commence and the Project Supervisor has approved the commencement. This notification process allows the Project Supervisor to arrange for personnel to conduct the required EPSC inspections.

The Prime Contractor will be responsible for installing the EPSC measures based on the TDOT EPSC plans and before construction starts. If the utility construction and installation extends outside the TDOT ROW, the Prime Contractor shall also be responsible for installing EPSC measures for the utility construction and installation. The TDOT EPSC plans for roadway construction may or may not be suitable or sufficient for the utility construction and installation. If installing the roadway construction EPSC measures at the time of utility relocation is not practical or suitable, the Prime Contractor may develop and submit an EPSC plan specifically for the utility relocation. Where an EPSC plan is developed specifically for utility relocation, the Prime Contractor must submit this EPSC plan to the TDOT District Operations Supervisor, or their designee, for acceptance. This specific EPSC plan for utility relocation should address utility construction and installation areas within the TDOT ROW and outside of the TDOT ROW. The cost for additional EPSC measures for specific EPSC plans for utility relocations shall be paid as increases in TDOT's roadway construction EPSC items.

EPSC inspections and Quality Assurance (QA) Audits shall include utilities in their routine inspections and assessments where the utilities are included in the Construction contract or where utility work is being performed at the same time as the construction project. The project's EPSC Inspector will be responsible for inspecting all areas included in the TDOT Construction contract. This includes roadway construction within the TDOT ROW and utility work on and off TDOT ROW. All EPSC recommendations related to utility work will be communicated to the Prime Contractor as directed by the TDOT District Operations Supervisor, or their designee. The QA Audit Team should include all areas included in the environmental construction permits in the QA Audit, including off-ROW utility work performed on utility easements or ROW. If the QA Auditor observes an issue related to the utility construction or installation work, the issue will be identified as a field observation or as a nonconformance according to the QA Audit procedures. Where necessary, the District Operations Supervisor, or their designee, will coordinate with the Prime Contractor, utility if performing the work, and/or the Regional Field Services Specialist to resolve the issue

Following construction completion, TDOT will terminate environmental construction permit coverage using TDOT's standard procedures. The utility is required to promptly complete Form DT-1716 following work completion and to submit the completed form to the Project Supervisor.

Prior-To Moves and Other Utility Work Not Included in a TDOT Construction Contract

When utility work is not included in a TDOT Construction contract, the Utility will perform the utility work separately from the construction project, but within or adjacent to TDOT's ROW. For these activities, the work will be performed by the Utility's contractor or work forces. The "Guidebook for Utility Relocation Related to TDOT Construction Projects" produced by the TDOT ROW Division Utilities Office instructs Utilities to notify TDOT Construction no less than three (3) days before beginning utility construction.

The Utility will be responsible for obtaining and complying with all environmental construction permits for Prior-To Moves and other utility work. The Utility will submit a completed and signed "Environmental Agreement for Utility Projects" form to the TDOT Right-of-Way Division prior to being released by TDOT to begin utility work on TDOT's ROW. The Utility will be responsible for installing EPSC measures and for performing EPSC inspections and other permit compliance items relative to its environmental construction permits. These projects are divided into two groups based on the following: (1) project disturbing more than one acre and (2) disturbed acreage less than one acre.

- (1) projects disturbing more than one acre – the Utility must submit a copy of the TDEC Notice of Coverage (NOC), SWPPP, any applicable water quality/resource alteration permits, and the completed "Environmental Agreement for Utility Projects" form (Form 2011-20) to the Regional Utility Office.
- (2) Projects disturbing less than one acre – the Utility must submit the "Environmental Agreement for Utility Projects" form (Form 2011-20) to the Regional Utility Office.

If the utility relocation work is ongoing when the TDOT construction project begins construction, the TDOT EPSC Inspector will inspect all areas within TDOT's ROW (including utility work areas), but excluding any utility work areas that are outside the TDOT ROW. If directed by the TDOT District Operations Supervisor, or designee, and if the Utility is in agreement, the TDOT EPSC Inspector will attempt to conduct joint EPSC inspections with the Utility's EPSC Inspector. If the TDOT EPSC inspector's observations note an EPSC issue or other permit issue related to the utility work, the TDOT EPSC inspector will notify the TDOT District Operations Supervisor, or their designee. The TDOT District Operations Supervisor, or their designee, will coordinate with the Regional Utility Office and the Regional Field Services Specialist. The utility will be required to coordinate erosion control measures with the Project Supervisor in order that the Prime Contractors' erosion control and the Utility's erosion control are not disturbed, duplicated, or compromised by activities of the other.

The project's QA Auditor will begin QA Audits after the Prime Contractor starts TDOT project construction work using the QA Audit procedures. The QA Auditor will assess all areas within TDOT's ROW, but will not assess off-ROW utility work areas. If the QA Auditor observes an issue related to the utility construction or installation work at the QA Audit, the issue will be identified as a field observation or as a nonconformance according to the QA Auditor. Where necessary, the District Operations Supervisor, or their designee, will coordinate with the Right-of-Way Division Utilities Coordinator and/or the Regional Field Services Specialist to resolve the issue.

Following construction completion, the utility will be responsible for following the permit conditions to terminate the environmental construction permit coverage.

CIRCULAR LETTER

SECTION: 209-06
NUMBER: 209.06-01
SUBJECT: UNDERGROUND INJECTION CONTROL (UIC) PERMIT PROCEDURE (PERMIT DURING CONSTRUCTION)
DATE: OCTOBER 2, 2015

This Circular Letter establishes the procedures for applying for a **Class V Underground Injection Control (UIC) Permit** on an active construction project in the event that depressions (sinkholes with open throats) are encountered on or bordering the project site during construction activities. Karst landscapes are typically characterized by an irregular land surface usually formed on limestone from the surface and subsurface removal of rock mass by dissolution of calcite or dolomite. Karst areas normally have caves that developed as a result of dissolution along joints, bedding planes, or other openings. As ground water dissolves subsurface limestone, cave systems enlarge and eventually the overburden causes roofs of caves to collapse creating, on the surface, a bowl shaped land feature called a sinkhole. Sinkholes are a direct conduit to ground water.

When constructing in a Karst area, it is important to be aware of the potential for cave collapse and development of sinkholes and to be prepared to protect the Karst environment from storm water runoff.

When a sinkhole develops during active construction, it may be necessary to perform operation, maintenance, or repair work of an extraordinary or emergency nature which, if not performed promptly might result in risk of serious damage to the Karst environment or project. Immediately following sinkhole discovery, storm water diversion and Erosion Prevention and Sediment Control (EPSC) measures shall be installed at the sinkhole in an effort to minimize any deleterious effects of the construction project to the Karst environment.

Anyone who discharges industrial/commercial wastes into a subsurface system other than city sewers or who discharges storm water to an improved sinkhole is required to submit a UIC application to TDEC. For a TDOT construction project with no UIC Permit, a UIC Permit must be obtained for any sinkholes identified during construction prior to discharging storm water to the sinkhole.

Refer to the contract SP107FP and standard specifications **Subsection 107.08** and **Section 209** for additional information.

Most UIC permits for TDOT construction projects are issued through TDEC to the TDOT Environmental Division, Natural Resources Office (NRO). In order to expedite this process for an active construction site; the following steps shall be adhered to in the event a UIC permit is needed during the construction phase for the discovery of a previously unknown/uncovered open-throated sinkhole.

The Regional Operations Engineer (or their designee) shall be the single point of contact for this activity. The Regional Environmental Coordinator (REC) can be used as a resource or designee, if necessary.

Immediately following a sinkhole discovery and notification to the Regional Construction Supervisor (or their designee), the Project Supervisor (or their designee) shall implement appropriate EPSC measures and storm water diversion.

On projects with existing UIC permits:

- A. Within seven (7) days (or as soon as possible) after discovery, the Regional Operations Engineer(or their designee) shall notify the TDOT Regional Environmental Coordinator by email. The email notification shall include the following information:
1. Subject line “Sinkhole on TDOT Construction Project” with the existing UIC permit number, Contract Number, and County.
 2. Information as to whether there is an emergency (imminent threat to public safety).
 3. Date of sinkhole discovery.
 4. Description of the location of the sinkhole, including Latitude and Longitude. This can be found within the original application or permit issued, on the internet (e.g., www.topozone.com), with a GPS unit or on the topographic quadrangle map. This shall be in the form of Latitude XX.XXXX N, Longitude XX.XXXX W.
 5. Picture of the sinkhole.
 6. Actions taken to protect the sinkhole and corresponding Karst environment.
 7. Any intent to treat the sinkhole and the anticipated treatment plan (with drawing).
Note: Treatment can be as per the approved sinkhole treatment plan or an applicable sinkhole treatment plan provided on TDOT’s Geotechnical Website, <http://www.tdot.state.tn.us/materials/geotech/drawspecs.htm>.
 8. A copy of the current EPSC Plan from the field SWPPP with the approximate sinkhole location (A SWPPP will not be provided on all projects. If a SWPPP is not available for the project, then submit the EPSC construction plans).
- B. The TDOT Regional Environmental Coordinator shall review the email to ensure that all required information is included and then will email the information listed above to the Environmental Division with a request to begin work. The Environmental Division will coordinate with the TDEC UIC Permit Coordinator, and the TDOT Geotechnical Division. A long term maintenance plan may be needed to maintain the structural and hydraulic integrity of the sinkhole. Treatment can begin after notification from the Environmental Division.

For projects without existing UIC permits:

- A. As soon as possible after sinkhole discovery, the Regional Operations Engineer (or their designee) shall notify, by email, the TDOT Regional Environmental Coordinator with the following information:

1. Subject line must include the words “Sinkhole on TDOT Construction Project” with the Contract Number and County.
 2. Information as to whether there is an emergency (imminent threat to public safety).
 3. Date of sinkhole discovery.
 4. Description of the location of the sinkhole, including Latitude and Longitude. This can be found within the original application or permit issued, on the internet (e.g., www.topozone.com), with a GPS unit or on the topographic quadrangle map. This shall be in the form of Latitude XX.XXXX N, Longitude XX.XXXX W.
 5. Picture(s) of the subject sinkhole.
 6. Actions taken to protect the sinkhole and corresponding Karst environment.
 7. Any intent to treat the sinkhole and the anticipated treatment plan (with drawing).
 8. The treatment plan, if any, obtained from the TDOT Geotechnical Office.
 9. A copy of the current EPSC Plan from the field SWPPP with the approximate sinkhole location (A SWPPP will not be provided on all projects. If a SWPPP is not available on the project, then submit the EPSC construction plans).
 10. The completed UIC (Class V Underground Injection Well) permit application form. (form found at: <http://www.state.tn.us/environment/permits/injetwel.shtml>)
- B. The TDOT Regional Environmental Coordinator shall send a complete packet of information to the Environmental Division. The Environmental Division, Permits Section, will coordinate with the TDEC UIC Permit Coordinator. The anticipated timeframe for receipt of TDEC UIC permit coverage is within 30 days of receipt of a complete permit application. Sinkhole treatment shall not be initiated until the Environmental Division distributes authorization to TDOT Construction. Sinkhole treatment should occur immediately after receipt of permit.
- C. Once the written approval/permit coverage or confirmed notification is received from TDEC, the Environmental Division, Permits Section, shall send a copy to the TDOT Regional Environmental Coordinator, the Regional Operations Engineer (or their designee), and the TDOT Compliance and Field Services.

CIRCULAR LETTER

SECTION: 407.04 BITUMINOUS MIXING PLANT
NUMBER: 407.04-01
SUBJECT: HOT MIX ASPHALT PLANT INSPECTOR CHECKLIST
DATE: October 2, 2015

See Form 407.04 to obtain the checklist for Asphalt Plant Inspectors is to be completed at the beginning of each project and periodically reviewed during the project to ensure compliance.

TDOT Hot Mix Asphalt Plant Checklist

Contract No.: _____ Project No.: _____

County: _____ Producer & Location: _____

Plant Make and Type: _____

Are adequate stockpile areas provided? Are they separated with Bins, Stalls, Partitions or Walkways? (407.04)	
Are bituminous storage tanks adequately equipped to heat and circulate during operating period?	
Are there suitable sampling outlets for AC and Anti-strip?	
Are there separate feeders for each size of aggregate?	
Is there a thermometer or other temperature recording instrument at the discharge end of the dryer?	
Is there an approved anti-stripping additive in-line blending equipment installed on the plant?	
Is there a flow-meter and can the flow meter be calibrated?	
Is there a Pyrometer for recording temperature and temperature regulating apparatus for control of aggregate temperature?	
Is there a safe platform provided for access to top of truck beds for inspection and sampling of the hot mix?	
Is there safe access to storage tanks, control Platforms and Mixer Platforms?	
What date were platform scales checked for accuracy?	
Are weight limits posted or on file in the control room?	
What date were aggregate scales checked for accuracy?	
What date were AC scales checked for accuracy?	
Is all Test Equipment properly tagged by TDOT Regional Materials within a 2 year period?	
Is the Producer maintaining a log of his interim equipment calibrations, correlations, and/or repair work?	
Is the process control plan posted or filed at the lab?	
Are Control Charts posted and kept current?	
Has a Certified Weigher Review been performed?	

Are Acceptance Tests being performed independently of the QA/QC tests?	
Are samples being collected and performed on a random basis?	
Are samples for Acceptance Tests being split for further testing at the Regional Materials Lab?	
Are contingency and referee samples being obtained?	
Do the Stockpiled Aggregates match the Gradations on the JMF (within tolerances)?	
Is this plant producing mix consistently within tolerances for gradation, AC percentage and Temperature?	

Additional Remarks:

Inspector Signature: _____

Inspector's Title: _____

Date of Inspection: _____

Xc: Regional Materials
District Supervisor

CIRCULAR LETTER

SECTION: 407.09 WEATHER LIMITATIONS
NUMBER: 407.09-01
SUBJECT: PROCEDURE FOR “PAVING AND COMPACTION PLAN FOR COLD WEATHER ASPHALT PAVING”
DATE: JANUARY 15, 2013

TDOT Supplemental Specification 407.09 allows the contractor to request approval for a variance from specified temperature and seasonal limitations to pave at lower temperatures when there is a benefit to the public. The request shall be in writing, be submitted at least one week prior to the anticipated need, and must include a “Paving and Compaction Plan for Cold Weather Asphalt Paving” in accordance with the attached procedure.



January 10, 2013

Tennessee Department of Transportation

Procedure for “Paving and Compaction Plan for Cold Weather Asphalt Paving”

Purpose- The purpose of this document is to establish the TDOT requirements for a “Paving and Compaction Plan for Cold Weather” as specified in **subsection 407.09** of the TDOT Standard Specifications.

Background- TDOT supplemental specification 407.09 allows paving below the specified surface and air temperatures if the Contractor submits a “Paving and Compaction Plan for Cold Weather” when there is a benefit to the public. The temperature limitations are:

TEMPERATURE LIMITATIONS

Compacted Thickness	Minimum Air or Surface Temperature	
	Unmodified mixes (PG 64, PG 67)	Modified mixes (PG 70, 76, 82)
1.5 in. (40 mm) or less	45° F (7° C)	55° F (13° C)
> 1.5 in. (40 mm) to < 3.0 in. (75 mm)	40° F (5° C)	50° F (10° C)
≥ 3.0 in. (75mm)	35° F (2° C)	45° F (7° C)

Requirements- As noted in **subsection 407.09**, Cold Weather Paving Plans shall identify what practices and precautions the contractor intends to utilize to assure all mixtures meet standard specifications. Plans shall include/address all of the following:

- Mix type(s)
- Tonnage intended to be placed
- Compaction cooling curves estimating the time available for compaction (TAC).

PaveCool software is available for such calculations at:

<http://www.dot.state.mn.us/app/pavecool/>

(NOTE- When estimating the TAC for PG 70-22 or PG 76-22 or PG 82-22 you must adjust the default values (Options→User Defined→Stop rolling

temperature) for Stop temperature to 200°F for PG 70, to 215°F for PG 76 and 240°F for PG 82 for a more accurate TAC)

- Intended production rates
- Anticipated haul times
- Anticipated paver speed
- Estimated roller speed
- Estimated air temperature
- Estimated surface temperature
- Estimated wind speed
- Production temperature range

Additionally, plans shall include some or all of the following measures to ensure mixtures being placed meet standard specifications:

- Insulated truck beds
- Additional rollers
- Automated measurement of existing surface temperature
- Automated measurement of mix temperature immediately behind screed
- Automated temperature measurement on rollers
- Surface heaters
- Compaction aids or warm mix asphalt additives (must be listed on TDOT Qualified Products List for WMA)
- Additional third-party testing documenting all mixtures placed meet density requirements.
- Reduced production and paving rates

The Contractor's request shall be approved by the TDOT Regional Director. If approved, all other Departmental specifications for testing requirements, payment, and deduction except for limitations listed in subsection 407.09 shall still apply.



COLD WEATHER PAVING AND COMPACTION PLAN

Date:	
Contract ID:	
Proposed Construction Date(s):	
Estimated Air Temp:	°F
Estimated Surface Temp:	°F
Estimated Wind Speed:	mph
Mix Type(s):	
AC Grade(s):	
Lift Thickness(es):	in
Minimum Production Temperature:	°F
Maximum Production Temperature:	°F
Warm Mix Asphalt?	Yes / No
Maximum Paver Speed:	ft/sec
Maximum production rate:	tph

ADDITIONAL COLD WEATHER TACTICS

Tactic	Yes/No?	Comments
Insulated truck beds		
Additional rollers		
Automated measurement of existing surface temperature		
Automated measurement of mix temperature immediately behind screed		
Automated temperature measurement on rollers		

Surface heaters		
Compaction aids or warm mix asphalt		
Additional third-party testing documenting all mixtures placed meet density requirements		
Reduced production and paving rates		

CIRCULAR LETTER

SECTION: 407.14 SPREADING AND FINISHING
NUMBER: 407.14-01
SUBJECT: HOT MIX ASPHALT ROADWAY INSPECTOR CHECKLIST
DATE: ~~NOVEMBER 1, 2006~~ FEBRUARY 29, 2016

The attached checklist shall be completed during the start of paving for each project and rechecked as needed as the project progresses. The checklist shall be completed during the test strip construction while verifying mixture properties by the Project Supervisor, or their designated representative.

If the contractor does not comply with the specifications, as outlined in the checklist, then paving shall be stopped and not allowed to proceed until in compliance.

When paving at nighttime, the contractor shall not be allowed to begin paving unless the lighting is in accordance with the approved lighting plan.

Asphalt Laydown Checklist

Date:
 Contract No:
 Project No:
 County:
 Prime Contractor:
 Paving Contractor:
 Inspection made by:
 Project Description:

The inspection checklist shall be completed by the Project Supervisor, or their designated representative, during the test strip construction.

Asphalt Laydown			
Lighting (Section 712.02)	YES	NO	COMMENTS
Temp Traffic Control (Sect 712)			
If applicable, has a Lighting plan been submitted and approved?			
Is lighting on all paving equipment (Paver, Transfer Device, Rollers, trail vehicle) per the approved plan <u>and in compliance with Section 712.04 and table 712.04-1?</u>			
Is the lighting adequate?			
<u>Are workers and other personnel wearing personal protective equipment?</u>			
<u>Does the Contractor's traffic control comply with Section 712 of the Standard Specifications and applicable Plan Notes?</u>			
Milling/Cold Planing (Sect. 415)	YES	NO	COMMENTS
What is the width of the milling machine(s)?			
<u>Do the Plan Notes require a fine tooth milling machine?</u>			
Are the milling teeth in good condition and all in place? <u>Fine Teeth Spacing \leq 1/2", Max Tooth Spacing = 5/8"</u>			Teeth spacing =
Is the milled surface free of scabbing, scallops, gouges, ridges, etc...			

<u>What is the forward speed (ft./min.)Is the Contractor maintaining the maximum forward speed of 60 ft/min for ½”-5/8” teeth spacing or 80 ft/min for teeth spacing of less than ½”?</u>			Speed=
Is the proper depth and cross-slope being obtained by milling? <u>Is the contractor utilizing automatic slope & Grade Controls?</u>			
Tack Coat (Sect. 403)	YES	NO	COMMENTS
<u>Has the distributor been approved for use?</u>			
<u>What is the date of the most recent calibration?</u>			
<u>Are the proper nozzle sizes being used?</u>			
<u>Are the nozzles set at 30° from the spray bar?</u>			
<u>Are the nozzles clean and unclogged?</u>			
<u>Is the bar height sufficient to allow at least a double lap spray?</u>			
<u>Is the distributor equipped with a tank stick?</u>			
<u>Is the volume measuring meter of the tank accurate as compared with the stick reading?</u>			
Has the tack coat test strip been completed and is <u>it</u> acceptable? What is the application rate to obtain the proper residual rate? <u>uniform full coverage without ponding, pooling, or corn-rowing?</u>			Application rate=
Has the existing surface been cleaned and all foreign materials been removed?			
<u>Is the tack breaking properly (Brown to Black)?</u>			
<u>Is debris/milling fines building up on construction equipment/hauling truck tires after the tack application? If yes, the roadway must be cleaned in a more efficient manner.</u>			
<u>Are cores for tack coat bond being obtained? (SS407.15 and 403.05)</u>			

Material Transfer Device (MTD) (SP407G)Section 407.06B	YES	NO	COMMENTS
<u>Who is the manufacturer and what is the model of the equipment?</u>			
Does the MTD have a minimum of 15 tons storage capacity and capable of remixing the material?			
Does the paver have a surge hopper with a minimum of 15 tons storage capacity and sloping sides?			
Rollers (407.07)	YES	NO	COMMENTS
Are three rollers of the required size being used as required <u>in Section 407.15?</u> (except CS, OGFC, TL, and TLD mixes where two are required) (407.15)?			
If the inside shoulder and inside traffic lane are being paved concurrently, is there a 4 th roller (min. 4 ft wide) for the <u>inside</u> shoulder?			
Is a pneumatic roller (rubber tire) used for intermediate rolling? *If a latex or polymer additive is used a steel wheel roller may be used instead of a pneumatic roller for the intermediate roller provided the surface course meets density requirements.			
Are rollers equipped with a device for moisten and cleaning the wheels as required? (407.07)			
<u>Is rolling being completed from the low side up?</u>			
<u>Is rolling being completed as identified in the test strip? Correct number of passes? Within the established temperature range?</u>			<u>Number of passes=</u> <u>Temperature range=</u>
<u>Are all spray nozzles working properly (no dry spots or asphalt being picked up on the wheels)?</u>			
Is a release agent being used on the tires of the pneumatic roller? If yes, what type and is it approved?			
Paver (407.06)	YES	NO	COMMENTS
Is a minimum 40-foot ski or non			

contact grade control system used for grade control? (407.14)			
<u>Is a 12 foot straightedge and level on the paver?</u>			
Is the mix maintained at half the auger height?			
Are auger extensions within 18 inches of the end plate?			
Is the paver screed heated? <u>Is it in vibratory mode?</u>			
Is the screed producing effectively a finished surface of required evenness and texture without tearing, shoving or gouging the mixture?			
Are temperature limitations being adhered to? Is there an approved "cold weather paving plan" if out of season?(407.09)			
Is the surface upon which the mix is to be placed free from excessive moisture?			
<u>Does the mix have an even texture, free from segregation, tearing or shoving?</u>			
Is the pavement and shoulder cross slope being checked. Are they correct (within 0.5% of the plans)?			
Are depth checks being made? Is the thickness correct?			
<u>Are spread rate checks being computed at least twice daily?</u>			
Delivery	YES	NO	COMMENTS
Are truck beds covered with tarps extending 6 inches over the sides and secured at 5-foot intervals? (407.05)			
Are truck beds tight, clean, and smooth, with a thin coat of approved release agent?			
Is the TDOT inspector accepting the weight tickets and signing them <u>in accordance with Section 107? What is the mix type? What is the AC type?</u>			<u>Mix Type=</u> <u>Grade AC=</u>
<u>Are the allowable weights displayed? Tare weight? Allowable gross weight? Interstate? Non-interstate?</u>			
Does each truck bed have a <u>1/4"-3/8"</u>			

hole for checking temperature?			
Is the TDOT inspector recording temperatures every <u>5th-3rd</u> -load. (Sampling and Test Guide)			
Is the mix temperature in the paver hopper within the allowable specification limits? (407.11)			
Longitudinal Joint	YES	NO	COMMENTS
Is the joint area along the edge clean prior to placement of the adjacent mat? Tack coat applied?			
Is the material slightly high at the joint to allow for compaction (about 0.2 <u>5</u> " per 1" laid)?			
Is the longitudinal joint being overlapped 1 to 1.5 inches over the adjacent mat to create a tight joint?			
Is the luter casting mix across the mat?			
On a multiple course pavement, is the longitudinal joint offset by <u>at least</u> one foot of the preceding layer?			
For surface course, is the longitudinal joint at the lane <u>edge/ or</u> center -line of roadway?			
Transverse Joint	YES	NO	COMMENTS
When tying into existing pavement is a full head of material maintained in front of the screed to the end?			
<u>Is the contractor cutting back on previous runs to expose the full depth of the previous course to form transverse joints?</u>			
<u>Is the contractor utilizing nulling blocks for takeoff?</u>			
Is the material slightly high at the joint to allow for compaction (about 0.2 <u>5</u> " per 1" laid)?			
When continuing paving, is the joint thoroughly cleaned and tack applied to ensure a good bond?			
Is the joint straightedged to ensure smoothness?			
Test Strip (407.15)	YES	NO	COMMENTS
Is the test strip a minimum of 400 SY			

as required?			
Is the mix being compacted to achieve <u>the required maximum</u> density?			
Are cores taken where directed to calibrate the nuclear gauges?			
Do the average and individual nuclear densities meet minimum requirements for the ADT and type of mix (expressed in percent of maximum theoretical density)? What density is required?			Required density:
<u>Have temperature ranges of each roller been established during development of the roller pattern?</u>			

COMMENTS:

CIRCULAR LETTER

SECTION: 501.09 HANDLING, MEASURING AND BATCHING MATERIAL
NUMBER: 501.09-01
SUBJECT: CONCRETE BATCH TICKETS
DATE: JULY 1, 1992

The following is a suggested method for arriving at water calculations and proper recording of mixing revolutions:

Max. Water (Design) – This quantity represents the total amount of water that may be added at any time to the mix and still not exceed the water-cement ratio. For instance, if your concrete design indicates a mix based on 33 gal. per C.Y. with an additional 2.5 gal. per C.Y. noted under remarks, the Max. Water (Design) would be $(33+2.5)$ 35.5 gal. per C.Y. times the number of C.Y. batched.

Total Water (Plant) – This quantity represents the amount of water metered into the mix plus whatever quantity was present in the aggregates indicated by your moisture tests. For instance, if the free moisture in the fine and coarse aggregate is 16 gals. and the amount of water metered is 246 gals., the Total Water (Plant) would equal 262 gals.

The difference in the above two quantities indicates to the roadway inspector the amount of water that may be added at the job site. The actual quantity added must be shown under Water Added (Project) even if the quantity is zero.

Mixing revolutions at the plant and job site are to be recorded. The mixing revolutions are to be witnessed by the inspector and noted on the tickets for all concrete. Trucks with revolution counters inoperable are not to be used.

CIRCULAR LETTER

SECTION: 501.24 TOLERANCE IN PAVEMENT THICKNESS
NUMBER: 501.24-01
SUBJECT: CORING FOR THICKNESS ACCEPTANCE
DATE: APRIL 24, 1998

Project Supervisors are hereby advised to notify Materials and Tests personnel at least one week in advance of opening any concrete roadway or ramp to allow the concrete to be cored for acceptance testing prior to removal of the Contractor's traffic control.

CIRCULAR LETTER

SECTION: 602.42 ERECTION OF STEEL STRUCTURES
NUMBER: 602.42-01
SUBJECT: PRE-ERECTION CONFERENCE
DATE: JULY 1, 2009 (01/01/2010)

A pre-erection conference on the project site should be held prior to erecting steel members for bridge construction. The conference should include: –discussion on methods of erection; equipment utilized; traffic control; safety precautions; and any questions or concerns of those persons involved in the erection.

In addition to the Project Supervisor, the conference should include representation from the following:

1. The Contractor
2. The Erector
3. The Division of Structures
4. The Project Field Personnel

CIRCULAR LETTER

SECTION: 603.13 REPAINTING OF EXISTING STEEL STRUCTURES
NUMBER: 603.13-01
SUBJECT: ABRASIVE BLASTING/WATERWASHING ACTIVITIES GUIDANCE
DATE: OCTOBER 2, 2015

Requirements outlined in this guidance apply to all abrasive blasting/waterwashing activities that are organized or coordinated by TDOT District Operations Engineer, including: painting; blasting with sand, slag, steel shot or grit; and waterwashing of bridges. For each abrasive blasting/waterwashing project, the onsite TDOT District Operations Engineer shall ensure completion of the following:

- (1) A minimum of two weeks prior to commencement of any project involving blasting/waterwashing of bridges or steel structures, the TDOT Environmental Facilities Compliance Office is notified of the project and schedule. The Division address and contacts are:

TDOT Environmental Facilities Compliance Office
Mr. Barry Brown, Manager
Suite 900 James K. Polk Bldg.
505 Deaderick Street
Nashville, TN 37243

Regional Environmental Coordinator

- (2) On the first day that abrasive blasting/waterwashing begins, a “split” sample is collected and submitted for TCLP metals analysis (a “split” sample is defined as a sample that is collected directly from the sample that the contractor collects for testing). The TDOT Environmental Facilities Compliance Office shall arrange for the split sample to be collected/analyzed, and the onsite TDOT District Operations Engineer shall ensure collection of the sample.
- (3) The TDOT Environmental Facilities Compliance Office receives a copy of the contractor’s test results to compare with the results of Toxicity Characteristic Leaching Procedure (TCLP) metals analysis of the “split” sample. A copy of the test results from the contractor’s sample shall be submitted to the TDOT Environmental Facilities Compliance Division within two weeks of receipt from the testing laboratory.
- (4) Abrasive blasting/waterwashing wastes are not disposed onsite. These wastes are disposed as hazardous wastes per TN Rule 1200-1-11 or as special wastes per TN Rule 1200-1-7.
- (5) The TDOT Environmental Facilities Compliance Office receives a copy of any Hazardous Waste Notification Form (“HN Form”) submitted by the contractor to TDEC, if applicable. A copy of the HN Form shall be submitted to the TDOT Environmental Facilities Compliance Division at the same time the form is submitted to TDEC.

- (6) The TDOT Environmental Facilities Compliance Office receives a copy of any Hazardous Waste Stream Report (“Attachment WS”) that is submitted to TDEC by the TDOT contractor/subcontractor (typically submitted in conjunction with the HN Form). A copy of Attachment WS shall be submitted to the TDOT Environmental Facilities Compliance Office at the same time the form is submitted to TDEC.
- (7) The TDOT Environmental Facilities Compliance Office is listed as the responsible facility on all waste manifests, using the address and contact information listed in item # 1, above.
- (8) The TDOT Environmental Facilities Compliance Office receives copies of all hazardous waste manifests, non-hazardous waste manifests, or other shipping papers as appropriate. For hazardous waste manifests, the generator copy shall be submitted to the TDOT Environmental Facilities Compliance Office within two weeks of the date of waste shipment. The returned copy of the manifest from the treatment, storage, disposal facility (TSDF) shall be submitted to the TDOT Environmental Facilities Compliance Office within two weeks of receipt from the TSDF.
- (9) The contractor/subcontractor provides disposal facility contact information (including facility name, installation ID number, location, mailing address, contact person and phone number) to the TDOT District Operations Engineer, or their designee, in a timely manner. Within two weeks of receipt of this information from the contractor/subcontractor, disposal facility contact information shall be sent to the TDOT Environmental Facilities Compliance Office for proper record keeping.

CIRCULAR LETTER

SECTION: 604.01 CONCRETE STRUCTURES - DESCRIPTION (GENERAL)
NUMBER: 604.01-01
SUBJECT: REQUEST FOR MARKING REPAIR AREAS BY BRIDGE REPAIR DIVISION
DATE: OCTOBER 2, 2015

When requesting inspection by the Structures Division for the purpose of locating and marking repair areas, the following procedures should be followed:

1. Notify the Region & Repair office a minimum of three (3) days in advance of the scheduled work.
2. The deck to be marked should be scarified (if required), cleaned and traffic control set up before the marking team arrives.
3. The Project Supervisor is to furnish one man to assist in marking the decks.

CIRCULAR LETTER

SECTION: 604.01 DEFINITIONS AND TERMS
NUMBER: 604.01-03
SUBJECT: AMERICAN WELDING SOCIETY (AWS) – CERTIFICATION
DATE: OCTOBER 2, 2015

All field welding must be in conformance with the American Welding Society (AWS) D1.5 Bridge Welding Code and accomplished by an AWS Certified Welder. Said certification must have been administered by a Certified Welding Inspector (CWI).

The following is a partial listing of companies currently staffed to administer AWS Certification Tests:

PSI (Pittsburgh Testing Laboratory), Nashville, TN
World Testing, Mt. Juliet, TN
American Industrial Testing & Analytical Laboratories, Memphis, TN
Quality Control & Inspections, Knoxville & Memphis, TN

For reference, a sample qualification record from the AWS D1.5 Bridge Welding Code is attached detailing the pertinent information needed on all certifications. The contractor/welder may have a different form than the one attached, however the information detailed on the form must include the information shown on the reference document. In addition, the Project Supervisor may be able to verify the Welder's Certification by entering the Certification Number on the AWS website (www.aws.org).

WELDER AND WELDING OPERATOR QUALIFICATION RECORD

Welder or welding operator's name _____ Identification no. _____
 Welding process _____ Manual _____ Semiautomatic _____ Mechanized _____
 Position _____
 (Flat, horizontal, overhead or vertical—if vertical, state whether upward or downward)
 In conformance with WPS no. _____
 Material specification _____
 Thickness range this qualifies _____

FILLER METAL

Specification no. _____ Classification _____ F no. _____
 Describe filler metal (if not covered by AWS specification) _____

 Is backing used? _____
 Filler metal diameter and trade name _____ Flux for SAW or gas for GMAW or FCAW-G _____

VISUAL INSPECTION (6.26.1)

Appearance _____ Undercut _____ Piping porosity _____

Guided Bend Test Results

Type	Result	Type	Result

Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

Fillet Test Results

Appearance _____ Fillet size _____
 Fracture test root penetration _____ Macroetch _____
 (Describe the location, nature, and size or any crack or tearing of the specimen.)
 Test conducted by _____ Laboratory test no. _____
 per _____ Test date _____

RADIOGRAPHIC TEST RESULTS

Film Identification	Results	Remarks	Film Identification	Results	Remarks

Test witnessed by _____ Test no. _____
 per _____

We, the undersigned, certify that the statements in this record are correct and that the welds were prepared and tested in conformance with the requirements of AASHTO/AWS D1.5M/D1.5, (_____) *Bridge Welding Code*.
 (year)

Manufacturer or Contractor _____

Authorized By _____

Form N-5

Date _____

Form N-5—Welder and Welding Operator Qualification Record

WELDING PROCEDURE SPECIFICATION (WPS)
PREQUALIFIED QUALIFIED BY TESTING
or PROCEDURE QUALIFICATION RECORDS (PQR) Yes
AASHTO/AWS D1.5 Qualification Type 5.12.1 – 5.12.2 – 5.12.4

Contractor/
 Organization _____
 Welding Process(es) _____
 Type: Manual Semiautomatic
 Mechanized Automatic
 Tandem Parallel

Identification _____
 Revision _____ Date _____ By _____
 Authorized by _____ Date _____
 Supporting PQR No.(s) _____

JOINT DESIGN USED

Single Double Weld
 Backing: Yes No Material _____
 Root Opening _____ Root Face Dimension _____
 Groove Angle _____ Radius (J-U) _____
 Backgouging: Yes No Method _____
 Root Treatment _____

POSITION

Position of Groove _____ Fillet _____
 Vertical Progression: Up Down

ELECTRICAL CHARACTERISTICS

Transfer Mode (GMAW): Globular Spray
 Current: AC DCEP DCEN Pulsed
 Electrical Stick Out _____
 Other _____

BASE METALS

Material Spec. _____
 Type or Grade _____
 Thickness: Groove _____ Fillet _____
 Diameter (Pipe) _____

TECHNIQUE

Stringer or Weave Bead _____
 Multi-pass or Single Pass (per side) _____
 Number of Electrodes _____
 Electrode Spacing: Longitudinal _____
 Lateral _____ Angle _____
 Interpass Cleaning _____

FILLER METALS

AWS Specification _____
 AWS Classification _____
 Manufacturer Trade Name _____

PREHEAT

Preheat Temp., Min. _____
 Interpass Temp., Min. _____
 Interpass Temp., Max. _____

SHIELDING

Flux _____ Mfg. Trade Name _____
 Electrode-Flux (Class) _____
 Gas Composition _____
 Flow Rate _____ Gas Cup Size _____

POSTWELD HEAT TREATMENT

Temp. _____ Hold Time _____
 Heating/Cooling Rate _____

HEAT INPUT

Calculated Heat Input Value: kJ/in kJ/mm
 Max. Heat Input _____ Min. Heat Input _____

WELDING PROCEDURE

Pass or Weld Layer(s)	Process	Filler Metals	Current		Volts	Travel Speed	Joint Details
		Diam.	Type & Polarity	Amps or Wire Feed Speed			

Form N-2

Form N-2—Sample Welding Procedure Specification

CIRCULAR LETTER

SECTION: 601.01 DESCRIPTION (GENERAL)
NUMBER: 604.01-04
SUBJECT: STAKE OUT OF STRUCTURES
DATE: JULY 1, 1992

Prior to commencing construction on a bridge, project personnel shall check the stake out of the structure by using either an alternate method or checked by an independent party. All stake out data shall be made a part of the project records.

CIRCULAR LETTER

**SECTION: 604.03 CLASSIFICATION, PROPORTIONING AND QUALITY ASSURANCE OF
CONCRETE**
NUMBER: 604.03-01
SUBJECT: CONCRETE DELIVERY TICKETS
DATE: APRIL 1, 2009

When concrete is delivered to a project, it is the TDOT Inspector's responsibility to verify that the concrete delivery ticket includes the information specified in Section 604 of the Standard Specifications and/or Section 600 of the Supplemental Specifications.

The inspector should also verify the Batch Time and note the Discharge Time on the ticket. He/she should sign the ticket and keep a copy for the project records.

CIRCULAR LETTER

SECTION: 604.05 PRECAST PRESTRESSED BRIDGE DECK PANELS
NUMBER: 604.05-01
SUBJECT: POST ERECTION BRIDGE DECK PANEL DEFICIENCY CHECK
DATE: OCTOBER 2, 2015

After pouring a bridge deck which has precast deck panels, the Project Supervisor should request the Structures Division to review and report any deficiencies found in the deck panels prior to final acceptance.

When a report indicates deficiencies, the Project Supervisor should notify the Regional Operations Engineer and the Contractor, in writing, of the type of deficiencies. A decision will be made advising of necessary corrective action to take. The project will not be accepted as complete until all necessary repair work has been completed.

CIRCULAR LETTER

SECTION: 604.16 CONCRETE STRUCTURES
NUMBER: 604.16-01
SUBJECT: BRIDGE DECK CONSTRUCTION CHECKLIST
DATE: OCTOBER 2, 2015

The following pages contain a checklist procedure to be followed before, during and after bridge deck pours and a list of factors that adversely affect deck construction.

PAGE 1
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CONTRACT _____ CONTRACTOR _____
PROJECT _____ BRIDGE NUMBER _____
REFERENCE _____ STATION NUMBER _____
COUNTY _____ LANE (IF APPL) _____

BRIDGE DECK CONSTRUCTION CHECK LIST
TO BE COMPLETED BEFORE, DURING AND AFTER BRIDGE DECK POURS

THIS REPORT IS TO COMPLETED BY THE
APPROPRIATE PROJECT PERSONNEL
AND COPIES SENT TO
THE CONTRACTOR
AND
MAINTAINED IN
THE PROJECT FILES FOR REVIEW

BRIDGE DECK CONSTRUCTION
PRE-POUR CHECKLIST

CONTRACT _____	CONTRACTOR _____
PROJECT _____	STRUCTURE _____
REFERENCE _____	STATION _____
COUNTY _____	LANE/SPAN _____

1. Check forms:
 - a. Clean, free of major defects. _____
 - b. Mortar tight. _____
 - c. Line and grade. _____
 - d. Structurally adequate to insure minimum settlement in deck or overhang. _____

2. Check rebar:
 - a. Clean. _____
 - b. Dimensionally correct. _____
 - c. Supported per specs and Standard Drawing STD-9-1. _____
 Note: Overhang may require different supports.
 - d. Document rebar quantities in field book. _____

3. Check screed rails and headers for line and grade. _____

4. Check screed for camber, insure is correct for template. _____

5. Make dry run with screed, check for correct slab thickness and rebar clearance.
 Document thickness and clearances in field book.
 Note: Check mechanical condition of screed. _____

6. Check access to site for concrete trucks, have equipment on hand for towing,
 grading, etc., if required. _____

7. Check concrete plant:
 - a. Up-to-date scales check. _____
 - b. Check concrete trucks to be sure on approved list, all revolution counters
 and water gauges working, and load does not exceed mixing capacity. _____
 - c. Insure enough approved trucks available to maintain required pouring rate. _____
 - d. Insure adequate supply of aggregates, cement, and additives are on hand for
 deck pour. _____

8. Check to be sure Contractor has scheduled enough personnel to handle pour,
 including equipment mechanics. _____

BRIDGE DECK CONSTRUCTION (Cont'd)
PRE-POUR CHECKLIST

- 9. Have Contractor verify the availability and operability of all necessary equipment, including finishing machines, continuous water source or portable tanks, water distribution equipment, two work bridges, vibrators, sprayers, 12 ft. straightedge and appropriate backup items. _____
- 10. Obtain material certifications for the curing compound and burlap, and for the polyethylene where applicable. Check to be sure an adequate supply of these curing materials is available. _____
- 11. Where placement by pumping requires more than one setup, obtain proposed plan from the Contractor showing the locations of the pumping equipment, the location(s) of the leading edge of the concrete pour while repositioning the pumping equipment and a realistic time for each work delay anticipated while repositioning pumping equipment. _____
- 12. Require the Contractor to designate which of the pumping configurations listed in Subsection 604.17(a) will be used at the end of the discharge line. No exceptions are to be made, other than alternative equipment proposed under Subsection 105.17 and approved in writing by the Division of Structures under the conditions of that Subsection. _____
- 13. Have the Contractor designate his/her authorized representative who will be present and have the authority to represent the Contractor during the bridge deck pour. _____
- 14. Hold Pre-Pour Conference to coordinate and confirm above items.
Note: Place copy of Pre-pour conference minutes in project files. _____

INSPECTOR _____

TITLE _____

DATE _____

REV. 9/28/99

PAGE 4

BRIDGE DECK CONSTRUCTION
CHECKLIST DURING POUR

Answer "Yes" or "No" except as noted and elaborate on "No" answers.

1. Are all concrete trucks on the approved list? _____
2. Is plastic concrete checked several times behind screed for slab depth and rebar cover and documented? _____
3. Do pour, finishing operations and deck finish comply with specifications? _____
4. Do checks of the pour rate indicate it is satisfactory? (at least 20'/hr. along roadway) _____
5. Has the deck been straight-edged and any deficiencies corrected? _____
6. Are required tests on concrete made and the data recorded in book and on tickets? _____
7. Is the amount of curing compound checked both before use and after deck pour to determine quantity used? Compute rate and show here in ft.²/gal. _____
8. Is the curing compound applied as soon as the water sheen disappears from the surface of the concrete? _____
9. From a work bridge, is damp burlap placed as soon as surface will support the burlap without undue marring of the concrete? _____
10. After placement, is the burlap immediately wet with a misty spray and kept wet thereafter with a continuously fed soaker hose? _____
11. Is the burlap properly anchored to provide full protection to the concrete? _____

INSPECTOR _____

TITLE _____

DATE _____

BRIDGE DECK CONSTRUCTION
POST POUR CHECKLIST

- 1. Check curing process every day to be sure deck is kept wet.
Note: Suggest checking early A.M., midday, and late P.M., at a minimum. _____
- 2. Check bridge deck for deficiencies using 12' straightedge and/or profilograph as required by specifications and have contractor make necessary corrections. _____
- 3. Review "Pre-Pour" and "During Pour" checklists and observations, give written instructions to Contractor concerning any unsatisfactory conditions of deficiencies to insure these are not repeated on next pour. _____
- 4. Place copy of all checklists, Pre-Pour Conference minutes, and instructions to Contractor in project file. _____

INSPECTOR _____

TITLE _____

DATE _____

FACTORS THAT ADVERSELY AFFECT DECK CONSTRUCTION

- I. Failure to Conduct Proper Pre-pour Inspections
 - a. Inadequate use of pre-pour conferences.
 - b. Insufficient checking of screed ordinates, header profiles, screed rail profiles, condition of equipment, forming, slab thickness and bar reinforcement cover.
 - c. Non-compliance with Section 511 of the Special Provisions and insufficient knowledge of current contract documents.
 - d. Inadequate dry run with screed to check slab thickness and bar reinforcement cover.
 - e. Failure to take strong positive corrective action.
 - f. Failure to observe and adhere to plan notes requiring that all elevations and dimensions on structures to be widened be verified in the field prior to ordering materials.

- II. Condition of Equipment
 - a. Poor Maintenance.
 - b. Inadequate backup system.
 - c. Inability to vary speed of screed strike-off mechanism and travel speed of screed independently.
 - d. Lack of adequate review of equipment condition.

- III. Improper Use of Screeds
 - a. Failure to keep concrete raked down in front of screed.
 - b. Failure to make more than one pass with a longitudinal screed.
 - c. A & B above adversely affects deck profile and deck finish.

- IV. Failure to Meet the Minimum Required Concrete Placement Rates
 - a. Concrete Supply Problems
 - i. Inadequate delivery
 - ii. Failure to receive a uniform or consistent concrete mix.
 - b. Concrete Placement Problems
 - i. Inability to strike-off concrete in a timely fashion in order to straightedge and achieve corrective work that may be necessary.
 - ii. Failure to achieve adequate final finish and curing.
 - iii. Failure to achieve a reasonable concrete placement rate contributes to shy deck thickness and bar reinforcement cover.

- V. Failure to Read and Have Current Knowledge of Contract Documents

- VI. Lack of Sufficiently Trained and Experienced Personnel on the Part of the Department of Transportation and the Contractor.

CIRCULAR LETTER

SECTION: 604.21 DEFECTIVE CONCRETE
NUMBER: 604.21-01
SUBJECT: EVALUATION OF LOW STRENGTH CONCRETE
DATE: OCTOBER 2, 2015

Subsection 604.21 of the Standard Specifications grants the Engineer the discretionary authority of allow concrete which fails to meet the design strength to remain in place, subject to the price adjustment set out in Subsection 604.31 and provided its durability is good and it is considered structurally adequate. To aid in administering this provision, the Division of Structures has prepared the Low Cylinder Evaluation Guide (LCEG) shown on page two of this circular letter.

In concordance with the LCEG, test results for low strength concrete are to be processed as follows:

1. Cast in place concrete within the tolerances permitted by the LCEG may be accepted by the Regional Construction Office provided the concrete is considered durable and structurally sound.

A completed Concrete Cylinder Strength Evaluation Form is to be sent for information to the Division of Materials and Tests in Nashville, and to the FHWA on non-exempt Federal-aid projects. The Contractor is to be advised in writing of the action taken.

On the Concrete Cylinder Strength Evaluation Form under “REGION” it should be noted that the concrete represented by the low cylinders is considered structurally adequate and may remain in place subject to the adjustment in contract price provided in Subsections 604.21 and 604.32. The statement “As noted above”, or similar wording, should be written under “Proposed Disposition”; and “Not Applicable (N/A)” should be written on the approval lines at the bottom of the form.

2. Test results for cast-in-place concrete with strength less than permitted by the tolerances in the LCEG are to be submitted for approval to the Headquarters Construction Division in accordance with our past practices.
3. Test results for precast or prestressed products below the specified design values shown on the Approved Shop Drawings are to be submitted to the Division of Materials and Tests in Nashville for evaluation and coordination with the Division of Structures, and with the FHWA on non-exempt Federal-aid projects.

The Concrete Cylinder Strength Evaluation Form, modified as applicable, may be used to process low test results for precast or prestressed concrete products.

LOW CYLINDER EVALUATION GUIDE

BRIDGE/STRUCTURE MEMBER	STRUCTURAL REVIEW REQUIRED
CIP Concrete Except as Noted	Notes 1 and 2 (CIP)
	Notes 2 and 3 (PC), (PS)
Bridge Railing and Median Barriers	1.40 MPa (200 psi)
Bridge Deck & Diaphragms	3.45 MPa (500 psi)
Concrete Girders	0.70 MPa (100 psi)
Concrete Girders, Panels & Piles (PC or PS)	Note 3
Bent Caps and Columns	1.40 MPa (200 psi)
Bent Footings	3.45 MPa (500 psi)
Abutment Walls & Wings	1.40 MPa (200 psi)
Retaining Walls & Footings	1.40 MPa (200 psi)
Box Bridge Slabs & Walls	1.40 MPa (200 psi)
Box Bridge Slabs & Walls (PC)	Note 3
Expansion Joint Concrete Repair	3.45 MPa (500 psi)
Culvert Headwalls (Precast) and other Miscellaneous Precast Items	Note 3

NOTES

1. If concrete test cylinder breaks for cast-in-place (CIP) members fall below the specified values shown in the plans by more than these values, an evaluation will be required in the Division of Structures.
2. Design values are based on 20.7 MPa (3,000 psi) concrete, except bridge decks are 27.6 MPa (4,000 psi). See shop drawings for precast (PC) and prestressed (PS) members.
3. Any test cylinder breaks below the values shown on approved shop drawings for precast (PC) or prestressed (PS) members will be evaluated by the Nashville Office of Materials and Tests.

CIRCULAR LETTER

SECTION: 705.01 GUARDRAIL AND END TERMINALS

NUMBER: 705.05-01

DATE: February 29, 2016

INSTALLATION OF GUARDRAIL AND GUARDRAIL END TERMINALS

All new guardrail, new guardrail end terminals, repair of existing guardrail, repair of existing guardrail end terminals, adjustment of guardrail, etc... shall be constructed in accordance with the appropriate section(s) of the TDOT Standard Specifications and/or Special Provisions and/or the appropriate TDOT Standard Drawing and/or the approved MASH shop drawing.

The TDOT inspector/representative shall complete the attached daily inspection form. The form must be signed by both the inspector and the Contractor's authorized representative. All certifications and FHWA acceptance letters for end terminals shall be attached to the inspection form. (It will only be necessary to supply one certification letter and FHWA acceptance letter for each type used.)

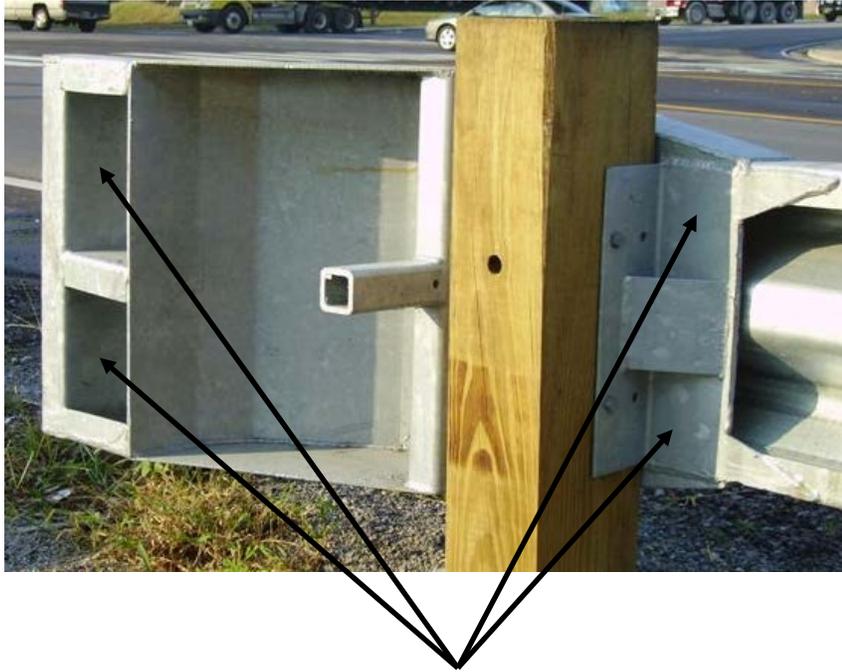
Installation decals shall be applied to all end terminal sections, either new installation or repair, as shown in Attachment #1. The tag should be placed on the guardrail end terminal in an area that is least likely to be damaged on impact.

Any post holes that are drilled in rock shall be documented on the inspection form and payment shall be in accordance with the specifications.

As noted in the Standard Specifications (SS700), each guardrail contractor/installer shall have a minimum of 5 line posts and 5 terminal posts per Region per year tested to verify length. The posts will be pulled by the Contractor who currently has each respective Region's "On Call Guardrail Repair Project".

ATTACHMENT #1

RECOMMENDATION FOR TAGGING GUARDRAIL END TERMINALS



EXAMPLE OF LOCATION FOR END TERMINAL TAG LOCATION

TENNESSEE DEPARTMENT OF TRANSPORTATION										
TO REPORT DAMAGE CALL 615-350-4300										
INSTALLATION DATE						CONTRACT NUMBER				
MONTH						B	C	D	E	F
1	2	3	4	5	6	0	1	2	3	4
7	8	9	10	11	12	0	1	2	3	4
YEAR						0	1	2	3	4
06	07	08	09	10		5	6	7	8	9

The above tag is an all weather decal that will adhere to any material including metal and wood. A hole punch is used to specify the installation date and contract number. The design is similar to the tag used for highway signs fabricated by the Department of Transportation. The tag should be placed on the guardrail end terminal in an area that is not likely to be damaged on impact, similar to the example above. **The Division**

of Materials and Tests will procure the tags and distribute them to the regions, as needed. These tags will be installed on new guardrail end terminals on both new construction and on-call maintenance projects.

ON-CALL GUARDRAIL REPAIR

The purpose of this Circular Letter is to address difficulties in the repair of guardrail due to existing field conditions on On-Call Guardrail Repair Contracts. This Circular Letter is not intended to address new guardrail installation or upgrade contract complications. These issues must be submitted to design for further investigation.

All guardrail anchor terminals **must** be installed as specified by Standard Drawings, Specifications, or Shop Drawings meeting NCHRP-350 criteria with **no** allowable exceptions.

It is the intent of the Department to install all guardrail as specified by Standard Drawings, Specifications, or Shop Drawings meeting NCHRP-350 criteria. If field conditions prevent the installation of line guardrail as intended, the following alternatives may be used. All revisions shall be clearly documented in the Daily Inspection Report.

1. Structures or utilities preventing the installation of guardrail posts to specified depth:
 - a) Allow shortened posts with a minimum length of 64 inches. Posts must maintain a 36 inch embedment. No alteration of posts will be allowed in the field. Altered posts must be shop cut and coated with an approved coating.
 - b) Allow a maximum of one additional block-out on three consecutive posts.
 - c) Allow the nesting of an additional section of rail to eliminate a maximum of two consecutive posts. The nested guardrail must extend a minimum of two posts beyond each side of the omitted posts (See figure 1. on attachment). When no contract unit price has been established for Nested Guardrail, payment will be made at a rate equal to 1.5 times the contract unit price for Single Guardrail (Type 2). Payment shall be full compensation for all posts, blocks, rail elements, hardware, labor and equipment necessary to complete the work.

2. Obstacles or utilities preventing the proper deflection behind the guardrail:
 - a) Remove or relocate the obstacle, if possible.
 - b) Remove trees in accordance with TDOT Policy # 501-02 with the approval of the Regional Director.
 - c) If utility structures prevent proper deflection, notify utility in writing of obstacle on State Right-of-Way and liability. Elevate situation through Regional Construction Manager and Utilities.

3. Damaged anchors attaching guardrail to Bridge ends:
 - a) If existing anchors cannot be reused, holes shall be drilled through the existing parapet wall. Care shall be taken to ensure that excessive damage does not occur to the back of the parapet wall when drilling. Excessive damage shall be repaired at the contractor's expense using approved concrete patching materials. Bolts shall be

placed completely through the wall with galvanized bearing plates on the back as referenced in Standard Drawing SBR-2-134.

4. Inadequate slope backing for proper embedment of line post.
 - a) If possible, add additional embankment to obtain 44 inch embedment of posts. A minimum of 36 inch embedment of posts must be maintained.
 - b) Require the use of long post as required to obtain 44 inch embedment of post if possible. A minimum of 36 inch embedment must be maintained. (Item Numbers 705-02.20 and 705-02.25)

The proposed solutions described above shall be implemented only when approved by the Project Supervisor. The Project Supervisor must notify the Regional Construction Supervisor of the deviation from the Standard Drawing or Shop Drawing. Other conflicts that prevent the specified installation of guardrail shall be elevated to the Regional Construction Supervisor and forwarded to the appropriate Headquarters Construction Assistant Director for evaluation.

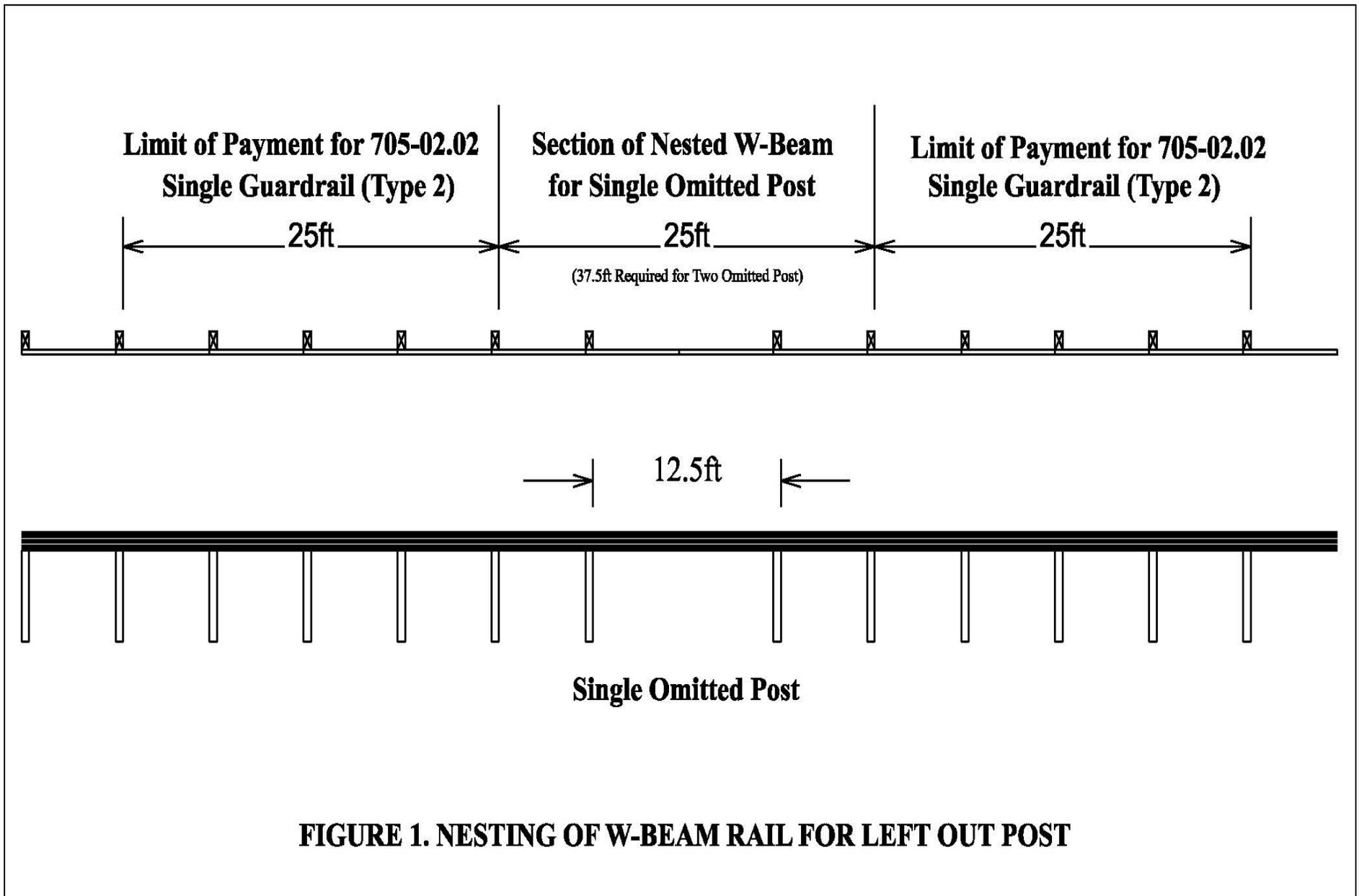


FIGURE 1. NESTING OF W-BEAM RAIL FOR LEFT OUT POST

CIRCULAR LETTER

SECTION: 712.04
NUMBER: 712.04-01
SUBJECT: REDUCTION OF SPEED LIMIT IN ACTIVE CONSTRUCTION ZONES
DATE: JUNE 15, 2013

In order to enhance safety for both the motoring public and construction personnel, the Department will permit, upon written request and written approval by the State Traffic Engineer, the Contractor to erect signs for reduced speed limits as warranted by the Guidelines for Establishing Work Zone Speed Limits. The Project Supervisor shall first review the Guidelines to determine if the reduction in speed is warranted before forwarding the request to the State Traffic Engineer.

The intent is to allow a reduction of the legal speed limit for the shortest period warranted in the area of active construction work as outlined in the Guidelines. The reduced speed limit signs are to be furnished, erected, maintained and removed at the contractor's expense. They are to be used only for the immediate area of active construction work.

Enclosed, herewith along with the Guidelines, is a suggested form that may be used for the approval procedure.

Date:

Contract No.:

Project No.:

Project Reference No.:

County:

Civil Engineering Supervisor
Tennessee Department of Transportation

Dear Sir:

We _____, Prime Contractor, on the above captioned project, request permission to reduce the speed limit from ____MPH to ____MPH to utilize Speed Limit Reduction Signs as shown on Tennessee Department of Transportation Drawing No. T-S-18. We agree to utilize subject signs only in the immediate area of active construction. We further agree to furnish, erect, maintain and remove them at our expense. The flashing lights will only be operational when active work is begin performed.

Thanks for your consideration of this matter.

Prime Contractor

Approved: _____
Civil Engineering Supervisor

Date: _____

Copy to Regional Construction Engineer

CIRCULAR LETTER

SECTION: 712.04 TEMPORARY TRAFFIC CONTROL - GENERAL
NUMBER: 712.04-02
SUBJECT: REVIEW AND APPROVAL OF PROPOSED TRAFFIC CONTROL PRIOR TO MAJOR DISRUPTIONS OF EXISTING TRAFFIC PATTERNS
DATE: FEBRUARY 1, 1994

Anytime proposed construction requires major disruption to existing traffic patterns, the Regional Traffic Engineer is to be consulted. The Regional Traffic Engineer should be provided details on the proposed disruption, including but not limited to advance warning, possible alternate routes, type of disruption, time and length of disruption, Contract Plans, etc. The Regional Traffic Engineer should review, modify if needed, and approved the proposed plan prior to implementation. The Regional Traffic Engineer's guidance is crucial to minimize negative impacts and to maximize safety for the public.

Such major disruptions could include closures of interstate, primary, major arterials and/or secondary highways; lane closures on urban interstates or major arterials; and any other disruptions deemed appropriate.

CIRCULAR LETTER

SECTION: 712.04 TEMPORARY TRAFFIC CONTROL
NUMBER: 712.04-04
SUBJECT: GUIDELINES FOR LAW ENFORCEMENT USE ON TDOT PROJECTS
DATE: ~~FEBRUARY 29, 2016~~~~OCTOBER 2, 2015~~~~JULY 1, 2013~~

Effective all lettings after July 1, 2013, the use of Uniformed Law Enforcement Officers will be subject to the following guidelines.

Definition of Terms

Uniformed Law Enforcement Officer: (Uniformed State Commissioned Police Officer or Tennessee Highway Patrol Trooper) A law enforcement officer, with a marked law enforcement vehicle equipped with blue lights, having the authority to write traffic tickets and make arrests at the project site.

Introduction

These guidelines were developed to provide guidance addressing the use of uniformed law enforcement on Federal-aid highway projects in accordance with the Federal Highway Administration's (FHWA) ruling on Temporary Traffic Control Devices (23 CFR 630 Subpart K). Specifically, these guidelines address:

- 1) General nature of law enforcement services to be provided
- 2) Conditions where law enforcement in work zones may be needed or beneficial
- 3) Determining need and priority for law enforcement services based on project-specific factors and characteristics
- 4) Provision of Uniformed Law Enforcement officers and project-level communications
- 5) Compensation of law enforcement services
- 6) Required documentation
- 7) Officer training requirements

General Nature of Law Enforcement Services

The primary function of the Uniformed Law Enforcement officer is to enforce regulatory speeds and coordinate the removal of vehicles with the Tennessee Department of Safety and/or other law enforcement agencies having jurisdiction through the work zone. Authorization to move a vehicle involved in a traffic accident is retained exclusively by law enforcement officers.

Uniformed Law Enforcement officers may also be used:

- 1) When a new phase of traffic control must be implemented to provide brief stoppage of traffic to allow Contractors to re-align traffic control devices, erect new signs, apply new pavement markings and/or prepare the highway for traffic;
- 2) In areas where excessive speeding or crashes are common;
- 3) On high-speed roadways to position law enforcement in advance of traffic queues to alert approaching motorists of stopped traffic;

- 4) To mitigate safety and congestion impacts by improving the driver behavior and alertness of the work zone.

Note: In no case shall Uniformed Law Enforcement officers be used to replace flaggers.

Determining Need and Priority for Project-Specific Services

In general, the need for law enforcement is greatest on projects with high traffic speeds and volumes, and where the work zone is expected to result in substantial disruption to or changes in normal traffic flow patterns. Conditions should be examined on a per-project basis to determine the need for or potential benefit of law enforcement. Project factors and characteristics used to determine need may include, but are not limited to:

- 1) Project scope and duration;
- 2) Anticipated traffic speeds through the work zone;
- 3) Anticipated traffic volume;
- 4) Vehicle mix;
- 5) Type of work (as related to worker exposure and crash risks);
- 6) Distance between traffic and workers, and extent of worker exposure;
- 7) Escape paths available for workers to avoid a vehicle intrusion into the work space;
- 8) Time of day (e.g., night work);
- 9) Work area restrictions (including impact on worker exposure);
- 10) Consequences from/to road users resulting from roadway departure;
- 11) Potential hazard to workers and road users presented by device itself and during device placement and removal;
- 12) Geometrics that may increase crash risks (e.g., poor sight distance, sharp curves);
- 13) Access to/from work space;
- 14) Roadway classification; and
- 15) Impacts on project cost and duration.

Provision of Uniformed Law Enforcement Officers

Upon the approval of the Regional Safety Coordinator or Regional ~~Construction Supervisor~~ Operations Engineer, Uniformed Law Enforcement Officers may be provided as follows:

- 1) THP Troopers may be used as established by a Memorandum of Agreement (MOA) between TDOT and TDOS. When a Project Supervisor determines the need for a THP Trooper in a work zone, they will submit the State Trooper Request form* to the Regional Safety Coordinator or Regional ~~Construction Supervisor~~ Operations Engineer, who will make the request to the THP Sergeant who schedules each THP Trooper. The date, time, location, and type of work on the TDOT project must be conveyed to the Sergeant. All requests to provide the THP should be received at least forty-eight (48) hours in advance of the requested time of service. It is the responsibility of the on-site TDOT Inspector to meet with the officer upon arrival to obtain information for documenting the officer's work hours and for providing information to the officer regarding the work to be performed.

** The State Trooper Request form is located in File Management at :\\HQ Construction\Standard Forms\Correspondence\Outgoing*

When the THP is scheduled to work and the work is canceled, or the schedule is changed, the contractor is responsible for notifying the THP and the Project Engineer at least two (2) hours prior to the scheduled time of work. The Project Engineer should immediately notify the Regional Safety Coordinator or Regional ~~Operations Engineer~~ ~~Construction Supervisor~~.

- 2) When THP Troopers are not available, or the Regional Safety Coordinator or Regional ~~Operations Engineer~~ ~~Construction Supervisor~~ determines that the project would benefit from the use of County or Municipal Police, a Uniformed Police Officer is available through the use of the Non-Bid Item 712-08.01. This item is added to the contract by contacting the Headquarters Finance Division. The Uniformed Police Officer shall be provided in accordance with the Standard Specifications.

Compensation

THP Troopers: In accordance with the MOA, THP Troopers shall only be paid for the actual hours of service provided to TDOT; therefore Troopers shall not be paid for time driving to and from the project site. Time charges are calculated from the time of arrival at the work site to the time of departure from the work site. If work is discontinued for weather or other unforeseen reasons, Troopers may elect to stop work and receive payment for the hours worked or continue to monitor/patrol the project until ~~a total of (2) hours~~ total of (2) hours for the shift have been accumulated. It is imperative that the project inspector accurately document the Trooper's hours. This documentation will be used by the Regional ~~Construction Supervisor~~ Operations Engineer or Regional Safety Coordinator to verify invoices received from the Department of Safety.

THP Troopers arriving at the work site without being notified of cancellation or schedule changes shall be allowed to monitor/patrol the project for a maximum of (2) hours. Additionally, the contractor shall be charged liquidated damages equaling the THP pay rate for the hours of service, up to a maximum of two (2) hours of work.

Uniformed Police Officer: Uniformed Police Officers shall be provided by the contractor and compensation made by the Department for the invoice price of the work plus 5% not to exceed \$50 per hour for the hours present on the project. No compensation will be made for drive time.

Required Documentation

The attached form shall be used to document the THP Trooper's hours and shall be submitted weekly to the Regional Safety Coordinator or Regional ~~Construction Supervisor~~ Operations Engineer with a copy placed in the project files.

When Uniformed Police officers are used, the hours worked shall be documented in SiteManager. The construction inspector shall note the beginning and ending time of work; total hours worked and type of work done by the Uniformed Police Officer.

Officer Training Requirements

All Uniformed Law Enforcement Officers shall have POST certified training and shall have an additional 4 hours of FHWA approved work zone training. Copies of each officer's record of training shall be provided to the Project Supervisor and placed in the project file.

See Circular Letter 712 04.03 for more information regarding training requirements. All Uniformed Law Enforcement Officers working on TDOT projects shall have training from a Peace Officer Standards and Training (POST) certified police training academy in the State of Tennessee. These academies are as follows:

- a. Tennessee Law Enforcement Training Academy (3025 Lebanon Rd., Nashville, TN 37214-2217)
- b. Tennessee Department of Safety THP Training Academy (275 Stewarts Ferry Pike, Nashville, TN 38124)
- c. Blount Co. Sheriff's Office Law Enforcement Training Academy (940 E. Lamar Alexander Pkwy., Maryville, TN 37804)
- d. Chattanooga Police Department Training Academy (3200 Amnicola Hwy., Chattanooga, TN 37406)
- e. Cleveland State Community College Police Training Academy (P.O. Box 3570, Cleveland, TN 37329-3570)
- f. Knox Co. Sheriff's Office Regional Training Academy (4900 Maloneyville Rd., Knoxville, TN 37921)
- g. Knoxville Police Department Training Academy (220 Carrick St., Suite 202, Knoxville, TN 37921)
- h. Memphis Police Academy (4371 O.K. Roberson Rd., Memphis, TN 38128)
- i. Metro Nashville Police Department Training Department (2715 Tucker Rd., Nashville, TN 37218)
- j. Shelby Co. Sheriff's Office Training Academy (993 Dovecrest, Memphis, TN 38134)
- k. Walter State Community College Regional Law Enforcement Academy (215 North College St., Greenville, TN 37743)

In addition, after April 30, 2011, all Uniformed Law Enforcement Officers working within TDOT work zones shall have an additional 4 hours of FHWA approved work zone training by December 31, 2010. The course currently approved is "Safe and Effective Use of Law Enforcement personnel in Work Zones" from the FHWA. This course is subject to change periodically to reflect changes in the industry and State practices. Record of this training shall be submitted to the TDOT Project Supervisor for inclusion in the project files.



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

Your Office Street Address
Your Office City, State and Zip Code

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

TO: Regional Safety Coordinator

FROM: Supervisors "Typed" Name
OPERATIONS SPECIALIST SUPERVISOR I

DATE: _____

RE: STATE TROOPER REQUEST

Contract: _____

Project No: _____

Contact Person: _____

of Troopers: _____

Work Zone: _____

Dates: _____

Times: _____

Meeting Location: _____

Remarks (if needed): _____

Tennessee Highway Patrol Hours

Use of Tennessee Highway Patrol must be approved in advance by the Regional Safety Coordinator or Regional Construction Supervisor.

Contract No:		Project No:	
For week beginning:			

Date	Name of THP Trooper	Time Begin – End	Hours Worked	Type of Work (use codes listed below)

Note: THP Troopers arriving at the work site without being notified of cancellation or schedule changes shall be allowed to monitor/patrol the project for a maximum of (2) hours.

Work Codes:

- A. Area of frequent worker presence adjacent to high-speed traffic without positive protection devices
- B. Traffic control setup or removal that presents significant risks to workers and motorists
- C. Complex or short term changes in traffic patterns with significant potential for motorist confusion or worker risk
- D. Safety and congestion impacts related to the work zone activity that may be mitigated by improved driver behavior and awareness of the work zone
- E. Work zone operations that require brief stoppages of all traffic in one or both directions (e.g. Bridge beam erection)
- F. High-speed roadways where unexpected or sudden traffic queuing is anticipated
- G. Other work site conditions where traffic presents high risk for workers and motorists

Project Inspector: _____

Copies to: Project file; Regional Construction Supervisor or Regional Safety Coordinator

CIRCULAR LETTER

SECTION: 712.07 MAINTENANCE
NUMBER: 712.07-01
SUBJECT: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND CHECKLIST FOR TRAFFIC CONTROL DEVICES
DATE: OCTOBER 2, 2015

All construction warning signs are to be placed in accordance with the Manual on Uniform Traffic Control Devices for Highway Construction and Maintenance Operations.

Construction signs should be erected no closer than 50 feet from an existing sign. Construction signs may be moved plus or minus 100 feet from the Plans location in order to avoid conflicts with existing signs, driveways and side streets. The Regional Traffic Engineer should be contacted if these criteria cannot be met.

At the beginning of work on a project, the construction signs and other traffic control devices are to be placed in accordance with the MUTCD and, thereafter, properly maintained and changed as conditions on the project change.

To direct traffic through construction projects safely and expeditiously, it is imperative that adequate and proper signing be maintained for the full duration of the project. Such maintenance includes the cleaning, repositioning, temporary covering, removing of foliage or other needs as warranted. It should be noted that the MUTCD illustrates minimum desirable standards for normal situations. Additional protection must be provided when special complexities and hazards exist.

To be effective, signing must be credulous. To maintain credibility the signing must convey to the motorist exactly what can be expected on the road ahead. This cannot be accomplished with contradictory or improper signing. Signs should be removed or covered when they are not applicable. If a driver observes a sign several times such as "Right Lane Closed" or "Flagmen Ahead", but as he proceeds he finds the situation conveyed by the message to be nonexistent, he will be much more apt to disregard it in the future. In addition, when a series of signs encroach into the area of another series of signs, only the signs conveying the appropriate message should be displayed. For example, if a series of lane closure signs encroach into the advance warning signs, the advance warning signs should be covered or removed until their need is warranted again.

It is important that the responsibility for inspecting the signing be clearly defined. This responsibility may be assigned to one individual on a region wide basis or on a project basis by the designation of a staff member by the Project Engineer.

Signing should be inspected at least once a week or more often if conditions warrant. Inspections should be made periodically during hours of darkness.



WORK ZONE TRAFFIC CONTROL INSPECTION FORM

Contract No.		Project No.	
Date / Time	/ / _ : _ a.m. <input type="checkbox"/> p.m. <input type="checkbox"/>		
Location			County
No. of Lanes			Posted Speed Limit MPH
Weather / Lighting Conditions			Project Type

ADVANCE WARNING SIGNS

SIGN QUANTITY		
Appropriate No. of Signs	Yes <input type="checkbox"/>	No <input type="checkbox"/> <i>(If No, Explain)</i>
Missing Sign(s)	Yes <input type="checkbox"/> <i>(If Yes, Explain)</i>	No <input type="checkbox"/>

SIGN CONDITION	Good	Poor
Cleanliness	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Legibility	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Reflectivity	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>

LEGENDS	Yes	No
Appropriate Legends	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Unneeded Signs Visible	<input type="checkbox"/> <i>(Explain)</i>	<input type="checkbox"/>
Signs Posted, No Work	<input type="checkbox"/> <i>(Explain)</i>	<input type="checkbox"/>

SIGN PLACEMENT	Good	Poor
Height	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Visibility	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Spacing	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>

ARROW PANEL A, B, C, or D	Good	Poor
Placement	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Delineated / Shielded	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Removed When Not In Use	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>

SIGN SUPPORTS		
Stationary Sign Supports	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Installed per TDOT Specs.	Yes <input type="checkbox"/>	No <input type="checkbox"/> <i>(If No, Explain)</i>
Portable Sign Stands	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Removed from Clear Zone When Not In Use	Yes <input type="checkbox"/>	No <input type="checkbox"/> <i>(If No, Explain)</i>

CHANNELIZING DEVICES

TYPE OF UPSTREAM TAPER <i>(Check One)</i>	
Merging <input type="checkbox"/>	Shifting <input type="checkbox"/>
Shoulder <input type="checkbox"/>	One-Lane, Two-Way <input type="checkbox"/>

DOWNSTREAM TAPER <i>(Optional)</i>		
Used	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Taper Length	<i>Feet</i>	

CHANNELIZING DEVICE CONDITION

DEVICE	Good	Poor
Barricades Type I, II, or III	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Drums	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Cones	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Tubular Markers	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Vertical Panels	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Warning Lights	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>

DEVICE	Yes	No
Adequate Spacing	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Adequate Taper Length	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Appropriate No. of Devices	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>
Non-Standard Device	<input type="checkbox"/> <i>(Explain)</i>	<input type="checkbox"/>

PAVEMENT MARKINGS

USE OF PAVEMENT MARKINGS		
Markings Used	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Easily Understandable	Yes <input type="checkbox"/>	No <input type="checkbox"/> <i>(If No, Explain)</i>
Conflicting Markings Removed	Yes <input type="checkbox"/>	No <input type="checkbox"/> <i>(If No, Explain)</i>

CONDITION	Good	Faded	Damaged / Dislodged
Paint / Tape	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>	<input type="checkbox"/> <i>(Explain)</i>
Raised Markers	<input type="checkbox"/>	<input type="checkbox"/> <i>(Explain)</i>	<input type="checkbox"/> <i>(Explain)</i>

FLAGGING

FLAGGER USE			
Flagger(s) Used	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No. of Flaggers
Flagger Station Preceded By Advance Warning Signs	Yes <input type="checkbox"/>	No <input type="checkbox"/> <i>(Explain)</i>	
Flaggers Are Clearly Visible To Approaching Traffic	Yes <input type="checkbox"/>	No <input type="checkbox"/> <i>(Explain)</i>	
Approaching Traffic Has Sufficient Distance To Stop	Yes <input type="checkbox"/>	No <input type="checkbox"/> <i>(Explain)</i>	
Flagger Stations Illuminated (Night Time)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Signaling Device	Slow / Stop Paddles <input type="checkbox"/>	Flags <input type="checkbox"/>	

FLAGGER ATTIRE	
High-Visibility Apparel	
Yes <input type="checkbox"/>	No <input type="checkbox"/> <i>(Explain)</i>

Communication Used Between Flaggers	
Visual Contact <input type="checkbox"/>	
Two-Way Radio Contact <input type="checkbox"/>	
Flagging Technique	
Good <input type="checkbox"/>	Poor <input type="checkbox"/> <i>(Explain)</i>

ROADSIDE SAFETY

Portable Barrier Used	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Barrier Condition	Good <input type="checkbox"/>	Poor <input type="checkbox"/> <i>(Explain)</i>
Barriers Properly Connected	Yes <input type="checkbox"/>	No <input type="checkbox"/> <i>(Explain)</i>
Impact Attenuator Used	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Impact Attenuator Condition	Good <input type="checkbox"/>	Poor <input type="checkbox"/> <i>(Explain)</i>

BARRIER DELINEATION		
Lights	Good <input type="checkbox"/>	Not Working <input type="checkbox"/> <i>(Explain)</i>
Reflectors	Good <input type="checkbox"/>	Poor <input type="checkbox"/> <i>(Explain)</i>
Vertical Panels	Good <input type="checkbox"/>	Poor <input type="checkbox"/> <i>(Explain)</i>

CIRCULAR LETTER

SECTION: 712.09 METHOD OF PAYMENT
NUMBER: 712.09-01
SUBJECT: PAYMENT FOR PORTABLE BARRIER RAIL
DATE: JUNE 15, 2010

There has been confusion and inconsistency, from one region to another, regarding payment for the movement of portable barrier rail.

This letter is being issued in order to promote more uniformity throughout the state. The Standard Specifications seem quite clear on the matter, but it's not that simple in the field. The Specs declare that there will be only one payment per site. Each side of a median divided road and each bridge on a project is a separate site. Generally, the thinking is that moving the barrier across the roadway is not another site, thus one payment. But, when the contractor has to pick up the rail, put it on a low boy and move it to another location, then this constitutes another site.

The Contractor has the option of creating a traffic control plan and a plan for construction phasing. If these plans are approved by the Project Supervisor, the contractor is obliged to follow this plan unless he is instructed to do differently at some juncture by the Project Supervisor. If the Project Supervisor directs the contractor to load up and move to another site as mentioned before, that is, not per his approved construction phasing plan or traffic control plan, then the contractor is entitled to payment. The Project Supervisor is cautioned to avoid moving median barrier rail unless there is a real need because there is a cost involved.

Payment amount for relocations due to safety of work zone or traffic, as established in the traffic control plans or as directed by the Project Supervisor, laterally up to 10 ft., shall be paid at ten percent (10%) of the interconnected portable barrier bid amount unless a separate item is in the proposal.

Judgments will still have to be made in the field, but this may help clarify some of these decisions.

CIRCULAR LETTER

SECTION: 713.04 CONSTRUCTION METHODS AND REQUIREMENTS
NUMBER: 713.04-01
SUBJECT: ERECTION OF PERMANENT SIGNS
DATE: JANUARY 1, 2010

Desirable lateral and vertical clearances are indicated in **Section 2A.16** Standardization of Location of the MUTCD (2009 Edition).

Circumstances at some locations prohibit strict compliance with MUTCD. In those situations the signs should be located to maximize both visibility and safety.

CIRCULAR LETTER

SECTION: 1230 EQUAL EMPLOYMENT OPPORTUNITY
NUMBER: 1230-01
SUBJECT: ON-THE-JOB TRAINING PROGRAM REQUIREMENTS
DATE: MAY 1, 2009

All Prime Contractors holding contracts on projects with Federal-Aid in excess of \$10,000, shall as part of their Equal Employment Opportunity requirements, be required to have an On-the-Job Training Program. The contractor's individual programs shall be submitted to the Tennessee Department of Transportation's OJT Program Coordinator for approval. The Prime Contractor may adopt the program as defined in the OJT Desk Reference, prepared by the TDOT Civil Rights Office, or they may submit an individualized program that at a minimum must include the requirements of the OJT Desk Reference. The contractor's approved program will be in effect until he/she submits revisions for approval or until there are changes in the Federal Regulations.

The Prime Contractor shall submit, for each individual project, an "On-the-Job Training – Initial Training Schedule" form (Attachment 1) to the OJT Program Coordinator prior to the Pre-Construction Conference. This form lists the Classification and Number of Trainees that the contractor intends to employ on the project. The contractor shall make an effort to employ trainees on each project; however, in the event that the number of trainees will be zero, the contractor shall provide adequate documentation on Attachment 1 to justify the absence of trainees on the project.

The Prime Contractor will not be allowed to commence construction until an "On-the-Job Training – Initial Training Schedule" form (Attachment 1) has been approved by the OJT Program Coordinator. Failure of the contractor to provide an approved training program shall not be considered "As a condition not under the control of the contractor" in regards to Contract Time.

The OJT Program Coordinator will maintain a database of approved OJT programs. He/she will forward a copy of each approved "On-the-Job Training – Initial Training Schedule" form to the Contractor and Project Supervisor for inclusion in the project files. By approving this form, the OJT Program Coordinator is affirming that the Prime Contractor has an approved OJT Program on file with the OJT Program Office.

On-the-Job Training – Initial Training Schedule

TDOT Contract No.: _____

TDOT Project No.: _____

Reference No.: _____

County: _____

Prime Contractor: _____

Address: _____

Phone No.: _____

Contact Name: _____

Classification	Number of Trainees	Required Hours	Projected Start Date of Trainees

Remarks/Justification:

Submitted by:

Name: _____ Title: _____

Signature: _____ Date: _____

Approved: _____ Date: _____

CIRCULAR LETTER

SECTION: 1240 TRAINING PROGRAM
NUMBER: 1240-01
SUBJECT: TRAINING PROGRAM REQUIREMENTS
DATE: MAY 1, 2009

The following outlines the procedures and documentation necessary to implement the training program as noted in Special Provision 1240.

PROCEDURES TO BE FOLLOWED RELATIVE TO TRAINING PROGRAM REQUIREMENTS

1. TRAINING PROGRAM

The Contractor shall use the Tennessee Department of Transportation On-The-Job Training Program Desk Reference. The TDOT On-The-Job Training Program Desk Reference is the approved training plan by the Tennessee Department of Transportation and Federal Highway Administration.

The contractor shall not be permitted to commence construction without an approved training program. Failure of the contractor to provide an approved training program shall not be considered "As a condition not under the control of the contractor" in regards to Contract Time.

2. PRE-CONSTRUCTION CONFERENCE

It is essential that the Affirmative Action Program Office (AAPO) be advised of the date, time and location of the pre-construction conference in order that he/she may have a representative present.

The contractor should be thoroughly familiarized with the administrative procedures of this program and the importance of prompt reporting should be stressed.

3. CLASSIFICATION APPROVAL

Prior to the pre-construction conference, the contractor shall submit to the AAPO, the "On-The-Job Training – Initial Training Schedule" form (Attachment 1) for at least the minimum number of training hours required by the contract. The trainees may consist of new hires or trainees presently enrolled in the training program and transferring to the project or a combination of the two. However, if a trainee is in the training program and is transferring to the project, approval from AAPO is required before the trainee can begin.

Upon approval of the "On-The-Job Training – Initial Training Schedule" form by the OJT Program Coordinator a copy of this approved form will be forwarded to the Contractor and the Project Supervisor. By approving this form, the OJT Program Coordinator is affirming that the Contractor has an approved OJT Program on file with the OJT Program Office.

The Project Supervisor shall not permit the contractor to start work on the project prior to receipt of an approved training plan.

If urgency exists for the construction to commence, the AAPO or his/her representative may give verbal approval and follow with the necessary written formal approval.

4. ENROLLMENT AND TRANSFER

Before a trainee is employed on the project the contractor shall submit an "On-The-Job Training Enrollment Form" (Attachment 2 - herein after referred to as the enrollment form) to the AAPO. The AAPO will forward approved copies of the enrollment form to the Contractor and the Project Supervisor.

Trainees, for which payment will be made, may not be shown on the contractor's payroll unless the AAPO's files contain an approved "On-The-Job Training Initial Training Schedule" in the proper classification and an enrollment form for the trainee approved prior to the trainees employment on the project. A contractor employing an individual as a trainee without proper approval is in violation of labor laws.

Any number of trainees, for which payment will not be made, may be employed on the project in any classification provided the AAPO's files contain an enrollment form approving the trainees prior to their employment on the project. In this case the enrollment form will be noted to the effect that the trainee is not filling a training slot and no payment is requested.

The contractor may, at any time during the progress of the project, request changes in training classifications or additional trainees for payment. The same procedures will be followed in processing these requests as outlined above. In the case of requests for additional trainees for payment an approved Construction Change setting up additional training slots will be required as well as the AAPO's approval before the additional trainees are employed on the project.

5. EMPLOYMENT

Normally a trainee should be employed on the project within two weeks after the type work in which he/ she is to be trained has started. If the contractor has not employed a trainee in the classification he/ she has requested by the time approximately 15 percent of that type work has been performed, the Contractor shall advise the AAPO, in writing, why the trainee has not been furnished. Failure to receive an acceptable explanation from the contractor may be cause to withhold progress payments.

6. TERMINATION OF TRAINING

When the trainee terminates training on the project for any reason-----completes training, quits, is fired, transfers, etc.--- the OJT Program Coordinator should receive a letter of termination within one week of separation. This letter must contain Trainee's Name, Address, Phone Number, TDOT Contract Number, Project County, Hours Completed, Classification and reason for termination.

7. DOCUMENTATION OF TRAINING TIME

a. Contractor's Payrolls

When a trainee appears on the payroll for the first time the AAPO should check his/ her files to assure that the training classification is approved and that he/ she has an enrollment form for the

trainee approved on or before his/ her first date of employment, otherwise, the payroll should be returned for correction. A log should be kept of the training hours for payment as taken from the payroll. The rate of pay the trainee receives should be at least the minimum required by the Special Provision Regarding Training Program Requirements.

b. OJT Weekly Progress Report (Attachment 3)

This report must be signed by the Contractor's Supervisor and trainee with attached payroll and submitted to the AAPO. This report will be used as the primary documentation for payment of Trainees. However, the hours shown on this report must be in agreement with the total hours shown on the accumulated payrolls.

8. PAYMENT

No payment for training hours will be made until the trainee has terminated training on the project and the AAPO has received and approved a letter of completion and "OJT Request for Payment" (Attachment 4). Upon approval by the OJT Program Coordinator of the Request for Payment a "Memo to Pay" or "Memo of No Pay" and supporting documentation will be sent to the Project Supervisor. Payment shall not be made without approval from the TDOT OJT Program Coordinator. In addition, the Final Estimate will not be paid without a "Memo to Pay" or "Memo of No Pay" from the TDOT OJT Program Coordinator. All payments shall be made under Item 109-10.01, Trainee, at the unit price of \$0.80 per hour for each hour of approved training whether or not the trainee completes the approved training program.

However, no payment shall be made to the contractor if either the failure to provide the required training or the failure to hire the trainee as a journeyman is caused by the contractor and a lack of good faith on the part of the contractor in meeting the requirements of the training Special Provision.

The contractor may elect to graduate the trainee before completion of the required training hours and receive payment for the total number of hours required by the applicable training classification provided that the total of the hours trained and the hours the trainee has been employed as a journeyman equals or exceeds the required training hours.

On-The-Job Training – Initial Training Schedule

TDOT Contract No.: _____

TDOT Project No.: _____

Reference No.: _____

County: _____

Prime Contractor: _____

Address: _____

Phone No.: _____

Contact Name: _____

Classification	Number of Trainees	Required Hours	Projected Start Date of Trainees

Remarks/Justification:

Submitted by:

Name: _____ Title: _____

Signature: _____ Date: _____

Approved: _____ Date: _____

On-The-Job Training Enrollment Form

Prime Contractor _____

TDOT Contract No _____ TDOT Project No _____

Reference No _____ County _____

Trainee Name _____

Address _____

Phone No _____

Gender M F (circle one)

Race ___ Asian/Pacific Islander ___ Black ___ Hispanic ___ Native American ___ White ___ Other

Trainee Classification _____ Number of Required Hours _____

Enrollment Date _____

Prime Contractor's Project Manager _____

Wages Starting _____

1st Quarter Training Complete _____

2nd Quarter Training Complete _____

3rd Quarter Training Complete _____

Completed Training _____

Trainee Signature _____ Date _____

Employer Signature _____ Date _____

OJT Program Coordinator Signature _____ Date _____

FOR CONSTRUCTION FIELD OFFICE USE ONLY

The trainee has reported to work on this project

OJT Weekly Progress Report

(attach payroll records to report)

Trainee Name: _____	Contractor: _____
Classification: _____	TDOT Contract No: _____
Enrollment Date: _____	County: _____
Wage: _____	Contact: _____
Week Ending: _____	Phone No: _____

Training Phase*	Total Hours This Week	Total Accumulated Hours

*Familiarization, Safety, Maintenance, Clean-Up, Traffic Control, Equipment Operations, etc...

Trainee's Supervisor Signature: _____ Date: _____

Trainee Signature: _____ Date: _____

Send or Fax to: OJT Program Coordinator
 Civil Rights Office
 505 Deaderick St. Ste. 1800
 James K. Polk Building
 Nashville, TN 37243
 Fax – 615.741.3169



OJT REQUEST FOR PAYMENT

Prime Contractor: _____

Address: _____

Contact Person: _____

TDOT Contract No.: _____ TDOT Project No.: _____

Reference No.: _____ County: _____

Trainee Name: _____

Address: _____

Phone No.: _____

Trainee Classification: _____ Number of Required Hours: _____

Enrollment Date: _____ Number of Hours Completed: _____

Starting Wage: _____ Ending Wage: _____

Contractor Signature: _____ Date: _____

Approved for payment: _____ Amount to pay: _____

Special comments: _____

OJT Program Coordinator Signature: _____

Date: _____



CIRCULAR LETTER

SECTION: 1247 DBE SUBCONTRACTING
NUMBER: 1247-01
SUBJECT: MONITORING OF PROJECTS WITH DBE SUBCONTRACTS
DATE: NOVEMBER 1, 2011

***Note*- This Circular Letter applies to ALL projects with Federal funds that utilize DBE's**

I. Contract Award

At the time of contract award with projects containing SP1247, the contractor has made commitments to subcontract certain portions of the contract to DBE contractors. This information, since not always contained in the contract proposal, is being submitted by the Civil Rights Office (CRO) Small Business Development Program (SBDP) to the Regional Construction Offices for dispersion to the Project Supervisors. These commitments are contract requirements and are to be adhered to unless revised with approval of the CRO SBDP Director. The Project Supervisor should review this contract information to verify the actual work to be performed by the DBE contractors and review any lease agreements allowed as part of the DBE commitment.

II. Pre-Construction Conference

At the Pre-Construction Conference, the contractor should identify all DBE subcontractors indicating approximate dates for their appearance on the project.

III. Construction

After the project has been awarded, the contractor, "as soon as practical", shall submit copies of all binding subcontracts and purchase orders with DBEs to the Project Supervisor and Small Business Development Program Director. It is important that this information be provided so TDOT can accurately report DBE race conscious and race neutral participation to the FHWA. No progress estimates shall be processed until this information is received when the Contract Proposal includes SP 1247 and a DBE Goal is specified. The subcontracts are to be submitted in such detail as necessary to explicitly show the project personnel what is to be performed by the DBEs. (These agreements are not to be confused with the approved subcontract forms distributed by the Headquarters Construction Division which is an entirely different form.) These agreements should be checked against the commitments submitted by the contractor at the time of award. Any discrepancies should be resolved with the Contractor and the CRO SBDP prior to processing any estimates.

The following required forms shall be submitted:

1. The attached Commercially Useful Function (CUF) Checklist shall be completed as described below.
2. When the project has been completed, the contractor and the DBE must submit Form CC-3 certifying to the amount paid the DBE on all projects where a DBE participated in the work. The final estimate is not to be processed until this form has been received.

Originals of all forms submitted to the Project Supervisor shall be retained in the project files with copies being transmitted to the CRO SBDP and Regional Construction Office.

In addition to review of the forms submitted by the Contractor, the project personnel shall monitor DBE work during the life of the project to ensure the work committed to DBEs is performed as committed. The monitoring shall include the following:

- Any work committed to DBEs not performed in accordance with submitted subcontract agreements will not be allowed unless the deviation is as provided for in the contract and has been approved by the CRO SBDP.
- If work committed to DBEs is found being performed by others, it is to be halted and reported to the CRO SBDP immediately. It is not to be resumed until instructed by the CRO SBDP.
- If a DBE performing on the contract is found to be using the Contractor's forces and/or equipment that was not outlined in the subcontract agreement, this shall be reported to the CRO SBDP. This is allowable in certain instances but a determination by the CRO SBDP is necessary. If found unacceptable, the work is to be halted until such time as the matter is resolved.

At the discretion of the Engineer, an exception to all of the above will be allowed should an emergency situation develop requiring actions to the contrary for the Public's safety or for environmental compliance. If such an emergency occurs, the Public's safety and environmental compliance is to be ensured first by whatever means appropriate. Thereafter, the occurrence should be reported to the Region and CRO SBDP for review and disposition.

The Contractor must provide documentation of good cause to terminate a DBE subcontractor on a project with SP 1247 included in the Contract Proposal. Acceptable reasons for good cause are stated in 49 CFR 26.53(f) and the proper process for terminating a DBE subcontract are also included in this section. After adequate notice by the Contractor, if any DBE is unable to perform work committed toward the goal, the DBE shall provide to the CRO SBDP a signed statement saying why they are unable to complete the work. The Contractor shall document their efforts to have another DBE perform the item or to have a DBE perform other items to replace the original DBE commitment amounts. In the event the Contractor is not able to find replacement DBE work, the Contractor must provide the CRO SBDP documentation clearly evidencing good faith efforts. Any request for substitution of a DBE subcontractor shall be made to the Department and approved by the CRO SBDP

Transportation or Hauling of Materials-

Leases- A DBE must own and operate a minimum of one (1) truck. A DBE may "lease to own" a truck from licensed truck dealership/leasing agency for consideration as "ownership" if there is a finance (capital) lease which meets at least one of the following criteria: 1) ownership of the asset is transferred to the lessee at the end of the lease term; 2) the lease contains a bargain purchase option to buy the equipment at less than fair market value; 3) the lease term equals or exceeds 75% of the asset's estimated useful life; 4) the present value of the lease payments equals or exceeds 90% of the total original cost of the equipment. (For additional lease to own information refer to Statement of Financial Accounting Standards No. 13 (FAS 13).

SP 1247 states the following “The DBE who leases trucks from a non-DBE is entitled to the total value of transportation services provided by non-DBE lessees not to exceed the value of transportation services provided by DBE-owned trucks on the contract.” The following example is used to clarify this provision:

DBE Firm X uses two of its own trucks on a contract. It leases two trucks from DBE Firm Y and six trucks from non-DBE Firm Z. DBE credit would be awarded for the total value of transportation services provided by Firm X and Firm Y, and may also be awarded for the total value of transportation services provided by four of the six trucks provided by Firm Z. In all, full credit would be allowed for the participation of eight trucks. With respect to the other two trucks provided by Firm Z, DBE credit could be awarded only for the fees or commissions, and driver if provided by the DBE, pertaining to those trucks Firm X receives as a result of the lease with Firm Z.

The Contractor/DBE Hauler is required to complete the “TDOT DBE Truck List” to identify which trucks will be used towards DBE goal participation. If the DBE hauler leases trucks or subcontracts hauling from a non-DBE, they must also complete the “TDOT DBE Trucking Credit Worksheet” to accurately document eligible DBE participation.

Commercially Useful Function (CUF) Checklist

The CUF Checklist applies to ALL DBEs on ALL projects. *A DBE performs a commercially useful function when it is actually performing, managing, and supervising the work of the contract. To perform a commercially useful function, the DBE must also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, installing (where applicable), and paying for the material itself.* If a DBE is using a prime contractor’s equipment, manpower or supervision, it is merely an extra participant. This checklist is designed to be a snapshot of the day to ensure a DBE is an independent firm that is in control of day-to-day operations.

Instructions for completing the CUF Checklist are as follows:

1. On DBE goal projects, the HQ Civil Rights Office Small Business Development Program (CRO SBDP) will supply Project Supervisors with the DBE Company Profile and all other necessary forms and DBE certification data.
2. *If a Prime Contractor or Subcontractor (if 2nd Tier agreement) will be using a DBE Material Supplier/Trucker, then a DBE Material Supplier/Trucker Contract Certification form must be completed and submitted to the HQ Civil Rights Office with the actual Subcontract Agreement and/or purchase order prior to the pre-construction conference.*
3. The Project Inspector will complete the CUF Checklist once a DBE begins work and will submit the completed form to the CRO SBDP. This shall be done for ALL DBEs on ALL projects. If at any time a DBE is observed not performing a CUF or if there are any items that are suspicious, red flags or warrant further attention, this must be reported to the Regional Construction Supervisor and CRO SBDP Director immediately.

The Construction Field Office and CRO SBDP shall review the checklist to ensure completeness and file it with the project records.

CIRCULAR LETTER

SECTION: 1273 CONTRACT PROVISIONS – FEDERAL-AID CONTRACTS (AND/OR 1280 – STATE FUNDED CONTRACTS)
NUMBER: 1273-01
SUBJECT: PROJECT SITE POSTERBOARD
DATE: JULY 1, 2013

The following posters and notices are to be posted on all construction projects by the contractor. This includes resurfacing projects and projects of short duration. For moving operations, or projects where there is not a suitable location for a stationary posterboard, contractors may use magnetic poster boards/notices on the side of trucks wherever equipment is stored or where individuals congregate, to meet the posting requirements.

Certificate of Non-Segregated Facilities

Complaint Procedures

Federal Posters/Notices:

1. Equal Opportunity is the Law Poster. (Form EEOC-P/E-1, required by FHWA 1273.
2. Your Rights Under USERRA (The Uniformed Services Employment and Reemployment Rights Act). (Use poster or text from www.dol.gov/vets website, required by 20 CFR Part 1002). Poster and/or text posted should be material published after January 2006 when this rule became effective.
3. NOTICE Federal Aid Projects – False Statements . (Form FHWA 1022, required by 18 CFR 1020 and 23 CFR 635.119).

Note: State Highway Department Representative should be inserted as:

Commissioner
Tennessee Department of Transportation
Suite 700, James K. Polk Building
Nashville, TN 37243-0326

FHWA Representative should be inserted as:

Division Administrator
Federal Highway Administration
404 BNA Drive
Building 200, Suite 508
Nashville, TN 37217

4. Fair Labor Standards Act (FLSA) Minimum Wage Poster. (Form WH 1088 and WH 1313, required by 29 CFR 5.5(a)(1). Note actual wage rates must be entered on WH 1313

5. Employee Rights for Workers with Disabilities Paid at Special Minimum Wages (Form WH-1284, required by CFR 525.14)
6. Contractor's EEO Policy Statement and Letter Appointing the Company's EEO Officer for the Project. (Statement must be developed by contractor per requirements of 41 CFR 60-741.44)
7. Job Safety and Health IT'S THE LAW Poster. (OSHA Form 3165, required by 29 CFR 1903.2(a)(1) through FHWA-1273.
8. NOTICE Employee Polygraph Protection Act. (Form WH 1462, required by 29 CFR 801.6).
9. Employee Rights and Responsibilities Under the Family and Medical Leave Act. (Form WHD 1420, required by 29 CFR 825.300 and 825.400 for employers of more than 50 people.
10. Employee Rights Under the Davis-Bacon Act. (Form WH 1321, required by 29 CFR 5.5 (a)(3) and FHWA-1273).
11. Prevailing Wage Rates. (Required by WH 1321).
12. 24 Hour Emergency Numbers. (Contractor must post numbers to call in the event of an emergency, required by 29 CFR 1926.50(f) through FHWA-1273

State Posters/Notices:

1. Wage Regulation/Child Labor Poster. Tennessee Code paragraph 50-5-111. (Applies to employers of minors subject to the child labor regulations).
2. Tennessee Law Prohibits Discrimination in Employment. Tennessee Code paragraph 4-21-904.
3. Tennessee Worker's Compensation Insurance Poster. Tennessee Code paragraph 50-6-407.
4. Tennessee Unemployment Insurance Poster for Employees. Tennessee Code paragraph 50-7-304.
5. Payday Notice. Wage Regulation Act Tennessee Code 50-2-103(d).
6. TOSHA Safety and Health Poster. Tennessee Code paragraph 50-3-2005. Posting of the Federal Poster meets requirement.
7. Prompt Payment. Tennessee Department of Transportation. Standard Specifications, Section 109.02.

The posters/notices listed above may be obtained at:

www.dol.gov/esa/whd/resources/posters.htm

www.tn.gov/labor-wfd/poster.htm

Environmental Permits:

The following items must be posted if the project is covered under the applicable environmental permit(s):

1. Notice of Coverage (NOC) for TDEC Construction General Permit.
2. Any other applicable environmental permits for the project site where permit conditions require posting a permit copy at the project site.
3. Location of SWPPP along with an individual contact name, company name, phone number and email address (if applicable).

CIRCULAR LETTER

SECTION: 1273 CONTRACT PROVISIONS – FEDERAL-AID CONTRACTS
NUMBER: 1273-02.01
SUBJECT: CONTRACTOR’S PAYROLLS - CORRECTIONS
DATE: MAY 15, 1994

If the Engineer discovers either through review of contractor payrolls, monthly labor interviews and/or labor complaints that incorrect wages are being paid, it is his responsibility to initiate immediate action to correct the same. An outline of actions to correct are offered for your use.

- (1) Notify the contractor of the infraction giving him sufficient time to investigate and correct with documentation of his actions (two weeks).
- (2) Progress estimates should be withheld if the contractor fails to initiate corrective action with written notification to the contractor.
- (3) Failure on the part of the contractor to make corrections after #2 above requires notification to this office and the Tennessee Department of Labor for further handling.

Please note that the above is for those instances in which proof positive exists that an infraction has occurred. In those instances, where an infraction is alleged but can not be verified by TDOT personnel one way or the other the following is offered.

- (1) Notification to the contractor of the infraction giving him sufficient time to investigate and correct or explain his action otherwise.
- (2) Field people should closely monitor circumstances around the alleged infraction from the point of the complaint to determine if a violation is continuing to occur.
- (3) If #2 indicates an infraction, the contractor must correct immediately with documentation or have progress estimates withheld.
- (4) If the contractor fails to comply with #3 notification to this office and Tennessee Department of Labor is required.
- (5) If #2 fails to disclose an infraction and/or the complaint is not resolved, the complaint should be passed on to this office and the Tennessee Department of Labor for further handling.

In all instances it is the intent that any infraction be dealt with immediately and at the lowest level possible.

NOTE: Procedures also apply to State Funded projects.

CIRCULAR LETTER

SECTION: 1273 CONTRACT PROVISIONS – FEDERAL-AID CONTRACTS (1280-STATE FUNDED PROJECTS)
NUMBER: 1273-02
SUBJECT: CONTRACTOR’S PAYROLLS
DATE: OCTOBER 1, 2016~~JANUARY 15, 2014~~

In accordance with Special Provisions 1273, 1270 and Section §107.20, the Contractor and all sub-contractors must submit each week in which any contract work is performed, one (1) copy of the weekly payroll with a signed “Statement of Compliance” to the District Operations Project Supervisor. THE PRIME CONTRACTOR IS RESPONSIBLE FOR THE SUBMISSION OF COPIES OF PAYROLLS FOR ALL SUBCONTRACTORS.

Effective with contracts in the February 14, 2014 letting, Prime Contractors must submit payrolls electronically. The electronic copy shall be a scanned copy of the original weekly payroll with a Statement of Compliance. Originals shall be maintained by the contractor and subcontractors during the work and for at least three (3) years after issuance of the Completion Notice and shall make them available for review upon request. For projects let prior to February 14, 2014, the contractor may elect to submit electronic payrolls in accordance with this circular.

The required weekly payroll information may be on any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <https://www.dol.gov/whd/programs/dbra/wh347.htm> ~~http://www.dol.gov/esa/whd/forms/wh347instr.htm~~ or its successor site. If Form WH-347 is not used, the payroll shall contain:

1. Payroll number, including begin/end dates.
2. Each employee's full name and individually identifying number (such as the last 4 digits of SSN).
3. Each employee's classification.
4. Each employee's hourly wage rate (including fringe benefits) and hourly overtime pay rate.
5. Daily and Weekly number of regular hours worked in each of the employee's classification including number of overtime hours worked.
6. Itemized deductions for each employee.
7. Net wages paid to each employee.

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. Signing the “Statement of Compliance,” certifies 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, 29CFR 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.

The first payroll submitted by the prime contractor and each sub-contractor shall be thoroughly checked to ensure the payroll is certified (contains Statement of Compliance), contains the information required (as detailed above), all laborers and mechanics, are paid, at a minimum, the rate specified in the contract for the associated classification and overtime rates are correct. It is not necessary to compare daily DWR workforce entries to the payrolls. On a monthly basis, a randomly selected contractor's or sub-contractor's payroll should be checked to assure the payroll is correct and complete. On Federally funded projects, the monthly payroll checked should be that of the contractor/sub-contractor of the employee interviewed (CL 1273-03) to assure continued conformance.

Thorough payroll reviews shall be made when the project supervisor has any reason to believe that any contractor or sub-contractor employee is not being paid the minimum prevailing wage. Any necessary corrections shall be made as stated in Circular Letter 1273-02.01 and shall be requested through the Prime Contractor.

All payrolls (paper or electronic) must be submitted to the Project Supervisor weekly for the previous week in which any contract work is performed to the Project Supervisor within 7 days after the regular payment date of the respective contractor's weekly payroll period or progress payments shall be withheld. The payroll (paper or electronic) is to be retained with the project records at the Project Supervisor's Office.

For electronic payrolls, once reviewed for formatting as stated below, the Project Supervisor (or designee) will create a sub folder labeled with the payroll ending date (Ex: 01/01/01) under the File Management folder labeled "Payrolls" and save all the payrolls and email sent by the Prime Contractor for each ending date. It will not be necessary to maintain a printed copy in the project records

For electronic submittals, the PRIME contractor shall follow the formatting below:

1. Send one email per week.
2. Include in the email the individual payrolls for the Prime and all Subcontractors (DO NOT send one pdf containing all payrolls)
3. The subject line of the email may shall read: CNxxx, Payrolls, Week ending: xx/xx/xx
4. Individual files shall be designated as: CNxxx_PrimeContractorName_Endingdate.pdf, CNxxx_SubContractorName_Endingdate.pdf (Ex.:CNA123_JohnDoeContracting_01/01/01.pdf)
5. In the email text, the Prime shall list all approved subcontractors for the project. This list may grow during construction, as additional subcontractors are added.

6. If during the week being reported, the Prime or any individual subcontractor has not performed work, then in the email text next to the listed contractor, the Prime shall note "No work performed by (Contractor Name) for the week ending _____. (See Section §107.20 of the Standard Specifications.)

The Tennessee Department of Labor and Workforce Development (TDLWD) does not need to receive a copy of the certified payroll, but may be allowed access to review any payroll upon request. Payrolls shall not be made available to public inspection (except as indicated above) by the Project Supervisor.

TENNESSEE DEPARTMENT OF LABOR
LABOR STANDARDS STAFF

NASHVILLE OFFICE - (615) 741-2858
220 French Landing Dr., Suite 1B
Nashville, TN 37243
Director

CHATTANOOGA OFFICE - (615) 634-6421
540 McCallie Avenue, 504 West
Chattanooga, Tennessee 37402
Paula J. Horne

KINGSPORT OFFICE - (615) 246-8142
220 Commerce Street
Kingsport, Tennessee 37660
Betty Lewis

KNOXVILLE OFFICE - (615) 594-7129
1610 University Avenue
Knoxville, Tennessee 37921
Kimberly A. Stoner

MEMPHIS OFFICE - (901) 543-7275
170 North Main, Room 704
Memphis, Tennessee 38103
Patricia Haley
Delois Tolbert

JACKSON OFFICE - (901) 423-5645
225 Dr. Martin Luther King Street
Jackson, Tennessee 38301
Charles Humphrey

CIRCULAR LETTER

SECTION: 1273 CONTRACT PROVISIONS – FEDERAL-AID CONTRACTS
NUMBER: 1273-03
SUBJECT: LABOR INTERVIEW (DAVIS-BACON ACT)
DATE: APRIL 15, 2007

TDOT Departmental Policy 301-02 shall be adhered to when conducting contractor employee interviews.

Labor interviews shall be conducted on all Federal Aid contracts. A minimum of one (1) interview shall be performed on each Federal Aid contract every month. An employee of either the prime contractor or a sub-contractor may be interviewed. If an employee declines a request for an interview, the employee's name and "Declined to Interview" shall be recorded on the form. This will be considered as a completed interview. All interviews shall be recorded on the attached form "Contractor's Employee Interviews".

After the interviews are made and recorded, they are to be compared to the contractor's certified payrolls submitted for the corresponding time frame. The project supervisor or his/her representative shall verify that the employee is properly classified and is being paid the proper hourly wage rates. Any discrepancies between the two must be resolved as stated in Circular letter 1273-02.01.

Approval by the Project Supervisor of the progress payment certifies that the labor interviews have been conducted unless an exception (i.e. no work, final estimate, etc.) exists.

Interviews may be conducted more often if conditions warrant.

CONTRACTOR'S EMPLOYEE INTERVIEWS

(Form C-27)

Contract Number	County	Contractor or Sub-Contractor
Employee Name	Payroll Classification	Hourly rate for classification
Type of work being performed by employee as observed by interviewer:		
Hourly Rate for work employee is performing: \$		
I affirm that the information shown above is correct and that I am / am not receiving the number of hours for normal time and overtime.		
Complaints/comments/remarks:		
Contractor Employee's Signature		Interviewer's Signature
Date:		Date:

The Contractor's/Sub-Contractor's (as identified above) payroll for this project have been checked for the period covering this interview and it is apparent that the subject employee is / is not properly classified and is / is not receiving the correct wage scale for the work he is performing in accordance with the wage established, for this project as specified in the Contract Proposal.	
Comments/Remarks:	
Project Supervisor's/Representative's Signature	
Date:	

CIRCULAR LETTER

SECTION: 1273 CONTRACT PROVISIONS – FEDERAL-AID CONTRACTS
NUMBER: 1273-04
SUBJECT: DAVIS-BACON ACT RELATING TO TRUCKERS
DATE: JULY 1, 1992

Enclosed herewith is a copy of the Federal Highway Administration's, December 4, 1991, letter together with Mr. Thomas O. Willett's memorandum of October 3, 1991, pertaining to the application of the Davis-Bacon Act to truck drivers.

It appears this is different from the interpretations, therefore, please be governed accordingly.



U.S. Department
of Transportation
Federal Highway
Administration

Tennessee Division Office

112 - 2544

249 Cumberland Bend Drive
Nashville, Tennessee 37228

December 4, 1991

Mr. Carl Wood, Executive Director
Bureau of Operations
Tennessee Department of Transportation
Nashville, Tennessee

Dear Mr. Wood:

Subject: Application of Davis-Bacon Act

We are transmitting a copy of a memorandum from our Washington Office concerning application of the Davis-Bacon Act as it relates to truck drivers on Federal-aid highway projects. The memorandum discusses a current court ruling on this subject.

In short, the court has ruled that Davis-Bacon requirements do not apply to truck drivers delivering materials to a project site even if the drivers are employed by the contractor or a subcontractor. An exception would be if the driver's jobsite is the project itself. Decisions are to be made on a case by case basis. This is contrary to 29 CFR 5.2 (j) and will require a change from current practices.

This interpretation is to be implemented immediately. If there are any questions, please contact Gary Hamby of this office.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Dennis C. Cook".

(For) Dennis C. Cook
Division Administrator

Enclosure



U.S. Department
of Transportation
Federal Highway
Administration

Memorandum

RECEIVED
FHWA REG 4

112-2564

OCT 08 '91

Subject: Application of Davis-Bacon Act
to Truckdrivers - Midway Decision

Date: OCT 3 1991

From: Director, Office of Engineering

Reply to
Attn. of: HCC-32/HNG-2:

To: Regional Administrators
Federal Lands Highway Program Administrator

BACKGROUND

The purpose of this memorandum is to provide policy guidance to the Divisions and States as a result of the decision reached in Building and Construction Trades Dept. v. Midway, decided on May 17, 1991. The Court of Appeals for the District of Columbia Circuit held in Midway that Department of Labor (DOL) regulation 29 C.F.R. § 5.2(j) is inconsistent with the Davis-Bacon Act, 40 U.S.C. § 276(a). The Court of Appeals ruled that the regulation, which defines work covered under the Act to include "transporting materials and supplies to or from the building or work by the employees of the construction contractor or construction subcontractor," is invalid because it conflicts with the statutory objective of the Davis-Bacon Act, which is to pay prevailing wages to "mechanics and laborers employed directly upon the site of the work." In the view of the Court of Appeals, the Act covers only mechanics and laborers who work on the site of the federally-funded public building or public work, not mechanics and laborers employed off-site, such as suppliers, materialmen and material delivery truckdrivers, regardless of their employer. According to the Court, material delivery truckdrivers who come on to the site merely to drop off construction materials, are not covered by the Act even if they are employed by the government contractor.

The Court of Appeals in its analysis focused on the statutory text of the Act, and the phrase "site of the work." The Court relied on and quoted from DOL regulation 29 C.F.R. § 5.2(1)(1) in defining that the site of the work is "limited to the physical place where the construction, will remain," along with off-site facilities that are "dedicated exclusively" to the performance of the contract and are "so located in proximity to the actual construction location that it would seem reasonable to include them." 29 C.F.R. § 5.2(1)(2).

The Court, in its review of the legislative history of the Act, concluded that Congress clearly intended the Act to apply only to on-site workers and affirmatively intended it not to apply

to off-site workers. In the Court's view, there is no legislative history to suggest, as the DOL has ruled, that Congress intended the employment status of the worker rather than the location of his job to be determinative of the Act's coverage.

APPLICATION OF MIDWAY TO THE FEDERAL-AID HIGHWAY PROGRAM

The Court of Appeals' decision is final, as neither the Solicitor General, U.S. Department of Justice, nor the union will seek appeal to the U.S. Supreme Court.

Since we have yet to receive any guidance from DOL on its reaction to Midway, the following is our interim policy and guidance based on the Midway ruling. To the extent that the interim policy conflicts with any subsequently issued statement from DOL, the policy will then be accordingly modified.

The Court of Appeals ruled that material delivery truckdrivers, who come onto the site of the work merely to drop off construction materials, are not covered by the Davis-Bacon Act even if they are employed by the government contractor, because they are not employed directly upon the site of the work. Application of the Midway ruling relative to what constitutes the "site of the work" shall continue to depend upon DOL's definition of that term as set forth in 29 C.F.R. Part 5.2(1). The regulation states that "the site of the work" is limited to the physical place or places where the construction called for in the contract will remain when work on it has been completed and other adjacent or nearby property used by the contractor or subcontractor in such construction which can reasonably be said to be included in the "site." Further, it defines "site of the work" by stating that fabrication plants, mobile factories, batch plants, borrow pits, job headquarters, tool yards, etc., are part of the "site of the work" provided that they are dedicated exclusively, or nearly so, to performance of the contract or project, and are so located in proximity to the actual construction location that it would be reasonable to include them.

DOL defines what is not included in the term "site of the work" in 29 C.F.R. Part 5.2(1)(3). Not included in the term "site of the work" are such facilities as permanent home offices, branch plant establishments, fabrication plants, and tool yards of a contractor or subcontractor whose locations and continuance in operation are determined wholly without regard to a particular Federal or federally assisted contract or project. In addition, fabrication plants, batch plants, borrow pits, tool yards, etc., of a commercial supplier or materialmen which are established by a supplier of materials for the project before opening of bids and not on the project site, are not included in the "site of the work." Such permanent, previously established facilities are not a part of the "site of the work," even where the operations for a period of time may be dedicated exclusively, or nearly so, to the performance of a contract.

It is important to remember that the above DOL regulation defining "site of the work" was not changed by the Midway decision. As the Midway court stated in a footnote, the validity of the "site of the work" regulation was not before the Court. What has changed is the application of this regulation to determine if a particular group of truckdrivers or haulers are covered by the Davis-Bacon Act.

When determining whether the hauling work done by truckdrivers falls under Davis-Bacon coverage, one must look at three scenarios.

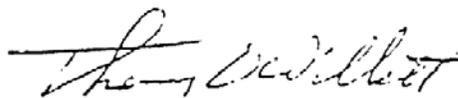
(1) If the work involves hauling being done on the actual "site of the work," that is the physical place or places where the construction called for in the contract will remain when work on it has been completed, then the truckdrivers are covered by the Davis-Bacon Act and are subject to prevailing wage rates.

(2) Similarly, if the work involves hauling from an adjacent or nearby property dedicated exclusively, or nearly so, to performance of the contract or project, and so located in proximity to the actual construction location that it would be reasonable to include them, then the truckdrivers are again covered by the Davis-Bacon Act and are subject to prevailing wage rates.

(3) However, if the work involves hauling being done from an off-site location, for example at permanent home offices, branch plant establishments, fabrication plants, and/or tool yards of a contractor or subcontractor whose locations and continuance in operation are determined wholly without regard to a particular Federal or federally assisted contract or project, then the truckdrivers are not covered by the Davis-Bacon Act and are not subject to prevailing wage rates. Similarly, fabrication plants, batch plants, borrow pits, job headquarters, etc., of a commercial supplier or materialman which are established by a supplier of materials before opening of bids and are not on the project site are not part of the "site of the work," even where the operations for a period of time may be dedicated exclusively, or nearly so, to the performance of a contract.

Because of the Midway decision, these determinations of Davis-Bacon coverage must now be based solely on the location of the truckdrivers' jobsite, rather than the employment status of the driver. These determinations of coverage must occur on a case by case basis, so it is important that the contractor indicate as early as possible how trucking and handling operations will occur on the project.

If there are any questions concerning this policy guidance, please contact Mr. Robert S. Wright (HNG-22) at FTS 366-1558 or Mr. Terence Carlson (HCC-32) at FTS 366-1395.

A handwritten signature in cursive script, appearing to read "Thomas O. Willett". The signature is written in black ink and is positioned above the printed name.

Thomas O. Willett

CIRCULAR LETTER

SECTION: 1273 CONTRACT PROVISIONS – FEDERAL-AID CONTRACTS
NUMBER: 1273-04.01
SUBJECT: DAVIS-BACON ACT RELATING TO TRUCKERS (SUPPLEMENTAL)
DATE: JULY 1, 1992

Attached is a copy of Supplemental Information Relative to Implementation of the Midway Decision which amplifies the information furnished you with Circular Letter 1273-04.

This additional information is intended to further clarify the application of Davis-Bacon requirements to truck drivers pursuant to the Midway Decision and FHWA's interim policy for implementation.

Supplemental Information Relative to
Implementation of the Midway Decision

The following information is offered as supplemental guidance in response to questions and scenarios that have been brought to our attention from the various field offices since the Midway Decision was issued.

Questions:

1. What is the effective date for implementation of policy changes arising from the Midway Decision?

May 17, 1991, the date of the court's decision, is the effective date, since all motions for rehearing were denied and the parties in question never petitioned to the Supreme Court.

2. What projects may the Midway Decision affect?

The decision may affect Federal-aid construction projects that were authorized on or after May 17, 1991, as well as work that occurred on or after May 17 on projects authorized prior to that date.

The impact of Midway to existing and completed projects will depend upon the number of contractors who desire to make adjustments in payments made to truck drivers pursuant to the ruling and States' reactions to such requests. States with their own minimum wage legislation may find that such statutes preclude any adjustment.

3. Does the Midway Decision have applicability to owner/operators?

No, there is no impact on owner/operator trucking agreements. Davis-Bacon wage rates do not apply to owner/operator trucking transactions.

4. Has the Midway Decision ruling affected the Department of Labor's (DOL's) policy involving hauling operations from the project site to a "non-dedicated" off-site facility?

Yes, the Court's decision held that DOL's regulation, 29 CFR Section 5.2(j), defining "construction" to include the hauling of materials to and from a construction site, is invalid because it conflicts with the language of the Davis-Bacon Act in that such hauling is not performed "directly on the site of the work." As a result, the Court concluded that truck drivers engaged in hauling materials and supplies to and from a construction site are not employed "on the site of the work" and, therefore, the DOL is without statutory authority to extend the prevailing rate requirement to such drivers. It is noted that this application is in reference to only those hauling operations to and from an "off-site" facility that has been determined to be "non-dedicated."

5. In view of the Midway Decision, a number of inquiries have been made regarding applicability of Davis-Bacon wage rates under several scenarios of truck/hauler operations involving various "off-site facilities." To properly address each scenario, the "off-site facility" must be evaluated to assure it meets the criteria for "site of the work" as defined in DOL's regulations (29 CFR 5.2). The criteria is as follows:

An "off-site" facility that comes under the definition of "site of the work" must be considered "dedicated exclusively" to the performance of the contract, and be so located in proximity to the actual construction location that it would be reasonable to include it.

An evaluation of the "off-site" facility should address the following issues:

- (a) Does the "off-site" facility exist because of the Federal-aid project? If the answer is yes, then it probably meets the "dedicated exclusively" criteria, which means all truckers hauling from this facility to the project site and from the project site to the facility, regardless of whom they are employed by, are covered by Davis-Bacon wage rates.

However, when it comes to certain "off-site" facilities, such as borrow or waste pits, one must also examine whether or not it has a "commercial nature". This can be done by answering the following questions:

- Was the "off-site" facility established by a commercial supplier or materialman prior to award of the project?
- Will the "off-site" facility be used for multiple purposes (by other projects, i.e., State or the private sector)?

If the answer is yes to either of these questions, then the "off-site" facility most likely cannot be considered "dedicated exclusively" and be included as part of the "site of the work", even when the operations for a period of time may appear dedicated exclusively, or nearly so, to the performance of the contract.

- (b) If the "off site" facility being evaluated is determined to meet the "dedicated exclusively" portion of the criteria, it next must be tested to assure it also meets the "in proximity to" portion. To accomplish this, several factors should be examined. These include:

- the type/nature of the project, and
- the geographical elements involved (i.e., geological and whether the project is in an urban or rural location).

The key word in this test is "reasonable." The determination of reasonableness is very subjective and best left to be determined at the local or State level based on the factors involved. For this reason, no specified distance limitations have been developed as they may vary from State-to-State and region-to-region.

- (c) Scenarios that involve major route/corridor type work that consists of multiple adjacent contracts/projects and/or different contractors represent a unique set of circumstances. As a general rule, if such a group of projects have "off-site" facilities that meet the test criteria noted above for being "dedicated exclusively" and "in proximity to" for the "group of projects" only, then such facilities can be considered to be included in the definition of "site of the work." This would include "shared" facilities from different contracts/projects by the same contractor, as well as, the possibility of "shared" facilities from different contracts/projects by different contractors.

6. In light of the Midway Decision, how will determinations be made with regard to "split-trip" operations?

Due to the Midway Decision, contractors will need to establish payroll records that indicate the times that truck drivers are hauling under conditions that meet the criteria for Davis-Bacon coverage and the times when conditions do not meet the criteria. Since wage determinations are usually based on hourly increments, the wage rate that dominates for any given hour of the day will depend on the type of operation that dominates for that given hour of the day.

In cases where the legs of the trip are split (i.e., hauling from a commercial site to the project site in one leg of the trip, then hauling from the project site to a "dedicated exclusively" off-site facility in the other leg), DOL has in the past ruled the trip-leg that meets the criteria for Davis-Bacon wage rate coverage will dominate the wage coverage determination for that entire operation. It is noted that the impact of the Midway Decision on this "split-trip" issue is currently being examined in the Ames Construction Case. Until a decision is conclusively reached on this matter, DOL's current policy will stand with respect to the Midway Decision.

Application Scenarios:

Using the guidance provided above, the following scenarios furnished by the field offices are now examined to demonstrate the application of Davis-Bacon to truck drivers under Midway:

(Remember, whether or not the truck drivers are directly employed by the government contractor is no longer a relevant factor.)

Scenario 1: A trucking firm is contracted to haul materials from a commercial production source. The contract may be with the supplier or the prime contractor.

(The work is not covered under the Davis-Bacon Act.)

Scenario 2: The prime contractor hires drivers to operate trucks from a commercial production source.

(The work is not covered under the Davis-Bacon Act.)

Scenario 3: A project involves milling a bituminous overlay from concrete pavement, rubblizing and hauling off old concrete pavement, re-compacting the subgrade, placing a lime treatment on the subgrade, placing a Portland cement treated base, followed by Portland Cement Concrete Pavement. A trucking firm is subcontracted to do the following:

- (a) to haul millings, dirt, debris, etc.; from the project site to a State designated location adjacent to or near the project;

(The designated location is an "off-site" facility which meets the criteria for "site of the work." Therefore, the hauling of millings, dirt and broken concrete to this location is covered and subject to the prevailing Davis-Bacon wage rates.)

- (b) to haul Portland cement treated base from a plant located in a commercial quarry which is set up specifically for the project;

(The plant used to produce Portland cement treated base was set up "off-site" specifically for the project, therefore it meets the criteria for "site of the work." Thus, work done at the plant and hauling from and to the plant from the actual site of work is covered and subject to the prevailing Davis-Bacon wage rates.)

- (c) to haul concrete aggregate from a commercial quarry to the concrete plant location.

(The source of concrete aggregate is a bona fide commercial quarry, (i.e., a commercial supply source not dedicated exclusively to the project). It, therefore, is not considered a part of the "site of work." Work performed by drivers hauling from this source and to this source from the actual site work is not subject to the prevailing Davis-Bacon wage rates.)

Scenario 4: The project involves hauling excavated earth from various locations on the project to other locations on the same project and from a borrow site established by the contractor at the same location as the commercial hot mix plant. The hot mix plant is located within a reasonable hauling distance to the project site. The prime contractor owns several trucks capable of hauling both dirt and bituminous material and does the following work:

- (a) Drivers employed by the contractor haul excavated material within the project limits for construction of the roadway embankment;

(Since the hauling of excavated materials involves working within the actual site of the work, the hauling is covered and subject to the prevailing Davis-Bacon wage rates.)

- (b) After hauling all available embankment material within the project limits, the contractor's drivers haul excavated overburden from a commercial borrow site, owned by the contractor, to complete the roadway embankment;

(The contract plans required the contractor to furnish embankment material for the project. The location that the contractor furnished embankment borrow from is a commercial supply source. The source, even though owned by the contractor, does not meet the "dedicated exclusively" criteria. Thus, the hauling work is not covered by the provisions of the Davis-Bacon Act.)

- (c) After completion of the roadway embankment and trimming of the subgrade to the proper grade, the contractor placed a surface of bituminous material which was hauled from his commercial hot mix plant and dumped into a laydown machine.

(The material delivery truck drivers who came onto the site of the work merely to drop off construction materials are not covered by the Davis-Bacon Act regardless if employed by the prime contractor or subcontractor. The source of the materials is of a commercial nature not "dedicated exclusively" to the project.)

Scenario 5: The project involves grading and bituminous surfacing of an existing roadway for a distance of 16 km (10 miles) with limited right-of-way. The plans call for the roadway to be widened and the shoulders to be stabilized. Included in the plans is a requirement for the contractor to furnish embankment from a location approved by the State. The contractor locates an area approximately 3.2 km (2 miles) from the nearest point of the project. The haul road from the borrow area intersects the project midway through the project. The contractor is

required to strip vegetation from the area and, by an agreement with the land owner, stockpile the top soil which will be replaced after use of the borrow pit is no longer needed. The contractor subcontracts a trucking firm to:

- (a) haul embankment from the borrow location to the project site;

(The borrow pit was required by the construction plans and was not open to commercial sales. Therefore, it is considered to be included in the "site of the work" and the drivers hauling from the site are covered by the Davis-Bacon Act.)

- (b) to haul aggregate from a commercial quarry to the hot mix plant that was set up adjacent to the project site at the intersection with the borrow pit haul road;

(The hauling of the aggregate from a commercial quarry to the hot mix plant site is considered a supply activity. Therefore, the drivers of these trucks are not covered by the provisions of the Davis-Bacon Act.)

- (c) to haul a portion of the bituminous surfacing material from the hot mix plant to the job site;

(The hot mix plant was set up specifically (i.e., dedicated exclusively) for this project. Therefore, all drivers hauling from the plant are covered by the provisions of the Davis-Bacon Act.)

- (d) The contractor used his own forces to haul AS-1 shoulder material from a plant set up in a commercial quarry specifically for this project.

(Even though the AS-1 was hauled from a commercial supply source, truck drivers are covered by the provisions of the Davis-Bacon Act because the plant used to produce the material was set up specifically for the project.)

Scenario 6: A contract is awarded to a company who has just completed a similar project during the later part of the preceding construction season. This project abuts one end of the project completed the preceding season and is of the same design. The contractor cannot locate an acceptable borrow pit site within reasonable hauling distance, however, there is a commercial quarry located within an acceptable distance from the project. An agreement is made with the quarry owner to allow the prime contractor to remove overburden from part of his quarry to be purchased and used for roadway embankment material. The owner of the quarry will take both original and final cross sections for measurement of the site of which borrow is purchased. The contractor moves in his own fleet of trucks to:

(a) haul embankment from the borrow site to the project site;

(The contract plans require the contractor to furnish embankment material for the project. The location of the contractor furnished material is a commercial supply source. The source is not considered to be included in the "site of the work" and the drivers are merely dropping off material to the project location. Therefore, they are not covered by the provisions of the Davis-Bacon Act.)

(b) haul bituminous material from the plant at the same location as it was for the previous project;

(Even though the plant was set up specifically for a project that was completed the previous construction season, it did not produce any bituminous material for commercial sale. Therefore, the drivers hauling from the plant are covered by the provisions of the Davis-Bacon Act.)

(c) A subcontract is approved for a trucking firm to haul the AS-1 for shoulders from a plant set up specifically for the project completed the previous construction season to the project site, dump the material into a shouldering machine;

(Even though the plant was set up specifically for a project that was completed the previous construction season, there was no material produced for commercial sales by the plant during that time. Therefore, the drivers are covered by the provisions of the Davis-Bacon Act.)

(d) to haul aggregate from a commercial quarry to the hot mix plant.

(Drivers of trucks hauling aggregate from commercial quarries to the hot mix plant are not covered by the provisions of the Davis-Bacon Act.)

CIRCULAR LETTER

SECTION: 1273 CONTRACT PROVISIONS – FEDERAL-AID CONTRACTS
NUMBER: 1273-05
SUBJECT: SUBCONTRACTING LABOR
DATE: JUNE 15, 2010 (02/01/2011)

It has been determined that contractors may subcontract labor on highway construction projects under the following conditions:

- A. The contractor shall request and obtain permission to subcontract labor from the Director of Construction as with any other item of construction.
- B. Typically, the subcontract request will be for a partial pay item, since there is no pay item specifically for labor charges.
- C. The total amount of labor being subcontracted shall be treated as any other item of construction; therefore, the aggregate of labor and other items being subcontracted may not exceed the permissible limits set out in the contract. In addition, the dollar amount of labor subcontracted will be treated as any other subcontracted item of Subsection 108.01 of the Standard Specifications.
- D. The contractor must comply with all terms of the construction contract regarding labor, Equal Employment Opportunity, the Davis-Bacon Act and all related statutes, the Tennessee Prevailing Wage Act and all regulations of the Tennessee Department of Labor.

Contractors who utilize labor through Employee Lease Agreements (see CL 1273-05.01) cannot request subcontract approval for that labor.

Note: Procedures also apply to State Funded projects.

CIRCULAR LETTER

SECTION: 1273 CONTRACT PROVISIONS – FEDERAL-AID CONTRACTS
NUMBER: 1273-05.01
SUBJECT: EMPLOYEE LEASE AGREEMENTS
DATE: DECEMBER 1, 2011

Prime contractors may enter into employee lease agreements with an employee leasing firm meeting all relevant Federal and State regulatory requirements if the leased employees are under the direct supervision and control of the contractor's superintendent and/or supervisor. Leased employees may be considered part of the prime's "own organization" if the following conditions apply:

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;
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.

If the leased personnel are treated as employees of the prime contractor, and would be considered as such but for their actual employment by a leasing agency, then they should be considered employees of the prime contractor's organization and not as a subcontractor (23 CFR 635.116(a)). Circular Letter 1273-05 contains information regarding requirements for subcontracting labor.

Additionally, for the purpose of Davis-Bacon compliance, the prime's agreement with the employee leasing firm must ensure compliance with minimum wage requirements. The prime is also responsible for providing the appropriate payroll information for all leased employees. To meet this requirement, the Employee Leasing Agency shall be responsible for submitting a certified payroll to the Prime showing the actual wages paid to the leased employee. The Prime is then responsible for verifying that the wages shown meet or exceed minimum wage requirements for the work classification performed. The Prime shall then submit the payroll to the Project Supervisor.

Prime contractors shall forward copies of any executed employee lease agreements to the Project Supervisor for inclusion in the project records.

NOTE: Procedures also apply to State Funded projects.

CIRCULAR LETTER

SECTION: 1273 CONTRACT PROVISIONS – FEDERAL-AID CONTRACTS
NUMBER: 1273-06
SUBJECT: DAVIS-BACON ACT RELATING TO SURVEY CREWS
DATE: DECEMBER 15, 2007

The Wage and Hour Division of the Employment Standards Administration, U.S. Department of Labor (DOL), in its Field Operations Handbook (6/1/87) - Section 15e19(a) - "Survey Crews" states that where surveying is performed immediately prior to and during actual construction, in direct support of construction crews, such activity is covered by the Davis-Bacon and Related Acts (DBRA). Coverage to Survey Crews is also provided under the Contract Work Hours and Safety Standards Act (CWHSSA). DBRA requires payment of the prevailing wages specified in the contract and CWHSSA requires payment of time and a half for all hours exceeding 40 hours in a workweek.

If the contract contains the Item No. 105-01 or 105M01 Construction Stakes, Lines and Grades and the survey personnel are performing work that will be paid for under this item, then they must be paid the contract prevailing wage for their classification and included on weekly certified payrolls. However, if the contract does not contain Item No. 105-01 or 105M01, and no subcontract form has been submitted for a company employing the survey personnel, then these workers may be providing services to the contractor and do not have to be included on certified payrolls.

All survey personnel performing work to meet the contract's DBE goal shall be paid the contract prevailing wage and shall be included on the weekly certified payrolls.

The Tennessee Department of Labor & Workforce Development currently has the following classifications in the Highway Construction Crafts for survey party work persons:

Survey Instrument Operator (Craft 18) - Obtains data pertaining to angles, elevations, points, and contours used for construction, map making, mining, or other purposes, using alidade, level, and transurveying instruments. Compiles notes, sketches, and records of data obtained and work performed. Directs work of subordinate members of survey team. Performs other duties relating to surveying work as directed by Chief of Party.

Survey Helper/Rodman (Unskilled Laborer – Craft 23) - Performs any of the following duties to assist in surveying land: Holds level or stadia rod at designated points to assist in determining elevations and laying out stakes for mapmaking, construction, mining, land, and other surveys; calls out reading or writes station number and reading in notebook; marks points of measurement with elevation, station number, or other identifying mark; measures distance between survey points, using steel or cloth tape or surveyor's chain; marks measuring points with keel (marking crayon), paint sticks, scratches, tacks, or stakes; places stakes at designated points and drives them into ground at specified elevation, using hammer or hatchet; cuts and clears brush and trees from line of survey, using brush hook, knife, ax, or other cutting tools.

A survey crew member who primarily does manual work such as clearing brush is classified as an unskilled laborer and is covered for the time so spent. Attached are Sections 15e19(a) and (b) of the Field Operations Handbook which address this situation.

Rev. 550

FIELD OPERATIONS HANDBOOK - 6/1/87 15e19 - 15e21

15e19 Survey crews

- (a) Where surveying is performed immediately prior to and during actual construction, in direct support of construction crews, such activity is covered by DBRA. Under the United States Housing Act of 1937 and the Housing Act of 1949, the "development of the project" coverage test is broader and may also cover preliminary survey work.
- (b) The determination as to whether certain members of survey crews are laborers or mechanics is a question of fact. Such a determination must take into account the actual duties performed. As a general matter, instrumentman or transitman, rodman, chairman, party chief, etc. are not considered laborers or mechanics. However, a crew member who primarily does manual work, for example, clearing brush, is a laborer and is covered for the time so spent.

15e20 Timekeepers.

Timekeepers who perform no manual labor on construction projects are not considered to be "laborers" or "mechanics" for purposes of DBRA. However, if such workers perform other duties as laborers or mechanics, they must be paid the WD rate for the particular classification involved for the time so spent.

15e21 ~~Survey crews~~

- (a) Truck drivers employed by a construction prime contractor or ~~subcontractor~~ to transport materials or equipment to a DBRA project, or from a DBRA project to return materials to the contractor's or subcontractor's plant or yard, are covered. Drivers employed by a prime contractor or subcontractor transporting materials or equipment from one DBRA project to another DBRA project are also covered, and the time so spent is compensable at the DBRA rate required to be paid on the latter project. Drivers employed by a prime or subcontractor transporting materials or equipment away from a DBRA project to another project of the same contractor or subcontractor are also covered, even where the latter project is not subject to DBRA.
- (b) Truck drivers engaged in hauling excavated material, debris, dirt, asphalt for recycling, etc. away from a DBRA-covered construction site are covered for the time spent loading at the site, transporting the material and unloading. All truck drivers engaged in such activities are covered regardless of their employer's status as a materialman or a construction contractor. It makes no difference whether or not an employer who is engaged in