

WVDOH Publications Update!

2024 Materials Construction Conference
March 7, 2024

The Hard Copy of the 2023
Standard Specifications &
2022 Construction Manual!



Timeline of Book Printing



October-December 22'

October:

Books are out to bid

November:

Book Bid #1-No takers,

Had to rebid the book Book Bid #2-
Very High \$

December:

Book was rebid for a third time.



January 23'

Book #3 was lower than prior bid, however, it was still outside the budget.

Meeting to request more \$\$\$ was held.



April-June 23'

April: Book was rebid for a 4th time

May: Book bid #4 was accepted.

June: Working on book proofing.



July-August 23'

Working on Cover Proofing- had some issues with the cover art.



September 23'

Final Proof Approval and Book Arrival!

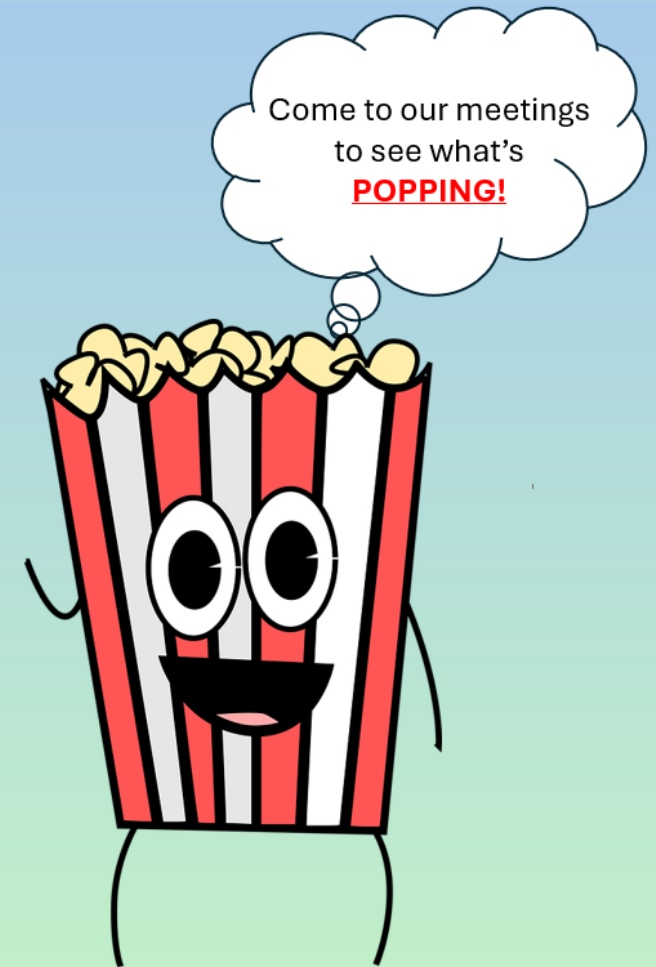
WVDOH personnel ... contact us if you need hard copies of Standard Specifications or Construction Manual.

Specification Book Order Forms are online for industry:

https://transportation.wv.gov/highways/TechnicalSupport/specifications/Documents/SpecBookOrderForm_20230925.pdf

Specification Committee Meetings

- Next Meeting: April 3, 2024
- Available online or in-person from 9:00-12:00pm
- Held in person at Technical Support Division:
1334 Smith Street, Charleston WV
 - Virtual Option
- Part of the Open Government Meeting Act
- Informative
- Distribution List



2023 Specification Committee

2023 Specification Committee Approved Items

	Feb.	Apr.	Jun.	Aug.	Oct.	Dec.	TOTAL
Specification Changes	1	11	4	8	7	17	48
Project Specific Special Provision (SP)	1	0	2	4	3	1	11

Approved Items

- *Specification changes:* 2020 - 59 2021 - 57 2022 - 45 2023 - 48
- *Special Provisions:* 2020 - 18 2021 - 43 2022 - 8 2023 - 11

2023 Meeting Participation

- February-37 April-44 June-43 August-36 October-47 December-39

2023 Approved Special Provisions (SP)

1. SP401 - Material Transfer Vehicle
2. SP601 - Galvanic Anode Protection *
3. SP601 - Distributed Anode System
4. SP601 - Surface Resistivity and Super Air Meter Testing *
5. SP601 - Structural Concrete *
6. SP603 - Post Tensioning
7. SP628 - Ground Anchors *
8. SP636 - Automated Flagger Assistance Device
9. SP697 - Bridge Safety Inspections
10. SP900 - Railroad
11. SP900 - Railroad Protective Services

* = Update to previously approved SP

SPs are stored in the ProjectWise Folder:

- Approved Project Specific Provisions (PDF)

SP 401- Material Transfer Device (MTV)



Appendix 401A. This sheet is not required with PS&E submission.:

Designer Note: This specification requires use of MTV on paving projects. It is intended for only specified projects which meet criteria listed below. In addition to the requirements listed below, the designer needs to consider site conditions of the project, noting the height and weight of an MTV, and how that may impact project selection. If an MTV is used for a project, it shall meet all of the following requirements:

When to use:

- The design speed is equal to or greater than 35 mph.
- The project length is a minimum of one (1) mile of continuous pavement.
- The total tonnage of all asphalt concrete is greater than 2000 tons.

Where to use:

- Mainline of the traveled way.
- Ramps, full width acceleration lanes, full width deceleration lanes and full width turn lanes that are greater than 1000 feet in length.

Do not use the MTV for the following conditions:

- A project with lane width that is equal to or less than 11 ft.
- A passing lane only project.
- PWL Projects (Section 410- Asphalt Base and Wearing Courses, Percent with Limits (PWL)).
- Scratch Courses and Patching and Leveling Courses

SP 636- Automated Flagger Assistance Device (AFAD)

When to use an AFAD?

- In situations where there is only one lane of approaching traffic in the direction to be controlled.
- Max Distance between AFAD units shall be 1,000 ft without any side road intersections.
- Placement such that traffic can clearly see units without sun interference.



SP 900- Railroad Protective Services

SECTION 900 RAILROAD PROTECTIVE SERVICES – NORFOLK SOUTHERN RAILWAY COMPANY

900.1–RAILROAD PROTECTIVE SERVICES – NORFOLK SOUTHERN RAILWAY COMPANY:

The Contractor shall adhere to the latest edition of *Norfolk Southern's Special Provisions for Protection of Railway Interest*, which is located in Appendix E of *Norfolk Southern's Public Improvement Projects Manual*, which is available at this link: <http://www.nscorp.com/content/nscorp/en/transportation-terms/other-requirements/public-project-guidelines.html>.

The following companies have been pre-approved by Norfolk Southern Railway Company to provide railroad protective services (Railroad Flagger):

Railpros Direct Hire
Adam Brown
877-315-0513 (option 1)
NS.INFO@RAILPROS.COM

Railroad Consultants
Jonathan Parker
615-663-6594
JParker@railroad-consultants.com

R&R Consulting Team
David Craft
717-497-4373
DCRAFT@RRCONSULTINGTEAM.COM

2024 Supplemental Information

2024 Supplemental Specifications is out!

- Please visit our webpage to view, download, or print:

<https://transportation.wv.gov/highways/TechnicalSupport/specifications/Pages/default.aspx>

- Applicable to all projects let after 1/1/24.
- 54 pages.
- Encourage electronic use... No hard copies

WEST VIRGINIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS



2024 SUPPLEMENTAL SPECIFICATIONS

To accompany the 2023 Edition of the
Standard Specifications of Roads and Bridges

Electronic copies of this book can be obtained via the Internet at
<https://transportation.wv.gov/highways/TechnicalSupport/>

2024 Supplemental Specifications

Seven specification changes to update terminology of AASHTO Product Evaluation and Audit Solutions (formerly National Transportation Product Evaluation Program - NTPEP):

1. 101.1-Abbreviations
2. 401.9.7-Trucks for Transporting Mixture
3. 707.1.1-Acceptance Requirements for Air Entraining Admixtures
4. 708.3-Joint and Crack Sealant, Hot-Poured for Concrete and Asphalt Pavements & 708.4.1.2-Test Requirements
5. 709.1-Steel Bars for Concrete Reinforcement
6. 711.5.3-Approval & 711.23-Material/System Approval
7. 715.4-Concrete Repair Materials, 715.9-Warning Devices, 715.11-Engineering Fabric, 715.14-Elastomeric Bearing Pads, & 715.40-Pavement Marking Material

DIVISION 100
GENERAL PROVISIONS

2024 Supplemental Specifications

Division 100-General Provisions

Section 101-Definition of Terms

101.2-Definitions:

- “Engineer” updated to correlate with Division’s personnel.
- “Holidays” revised to align with State Code.

Holidays-Official holidays are New Year's Day, Martin Luther King's ~~Birth~~day, ~~Jr. Day,~~ President's Day, Memorial Day, West Virginia Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, The day after Thanksgiving Day (Lincoln's Day), Christmas Day, and any day in which an election (Primary, ~~or~~ General, or Special) is held throughout the State and such other days as the President, Governor, or other duly constituted authority shall proclaim to be holidays. If a holiday falls ~~on~~ on a Sunday, the following Monday shall be observed in lieu thereof. If a holiday falls on a Saturday, the previous Friday shall be observed in lieu thereof.

SECTION 101 DEFINITION OF TERMS

101.2-DEFINITIONS:

DELETE AND REPLACE THE DEFINITION OF ENGINEER IN THE SUBSECTION WITH THE FOLLOWING:

~~Engineer-The State Highway Engineer of the Division, or an authorized representative, limited by the scope of duties assigned.~~

Engineer, assigned by the Commissioner, or a designated representative, limited by the scope of particular duties or authority given to them by West Virginia, these Specifications, or the Contract Documents.

2024 Supplemental Specifications

Division 100-General Provisions

Section 106-Control of Materials

- **106.1-Source of Supply and Quality Requirements (Buy America):** Updates correlate with new Federal requirements.
- **106.3-Samples:** Adds testing and material acceptance requirements.
- **106.3.1-Acceptance Plans:** Removes subsection from Acceptance Plans.

SECTION 106 CONTROL OF MATERIALS

106.3-SAMPLES:

ADD THE FOLLOWING CONTENTS TO THE SECTION:

All materials will be inspected, tested and approved prior to incorporation into the work. Any work which incorporates materials prior to the above evaluation shall be performed at the Contractor's risk, and may subsequently be considered as unacceptable. Unless otherwise specified, the materials shall meet the applicable Standard or Interim Specifications of the American Association of State Highway and Transportation Officials ([AASHTO](#)), the Standard or Tentative Specifications of the American Society for Testing and Materials ([ASTM](#)), or Standards

106.3-SAMPLES:

106.3.1-Acceptance Plans:

DELETE THE CONTENTS OF THE SUBSECTION AND REPLACE WITH THE FOLLOWING:

~~106.3.1.1-Percent Within Tolerance: The percentage of each lot or subplot of material, product, item of construction, or completed construction within the specified tolerances will be determined by the procedures as referenced by the specification requirements. 43 When West Virginia AP-A is referenced, it will consist of Tables 106-1 to 106-5 inclusive, published in MP 106.00.20.~~

106.3.1.2¹-Sampling of Reworked Lots or Sublots: It is the intent of these Specifications that lots or sublots of materials, products, items of construction or completed construction meet specification requirements at the time of submission. Lots or sublots generally will not be resampled unless reworked before submission. Sampling after reworking will be at the expense of the Contractor.

~~01/1/11 100.00.02, 01/1/11 100.00.02,~~

2024 Supplemental Specifications

Division 100-General Provisions

Section 107-Legal Relations and Responsibility to Public

- **107.21.3-Basis of Payment:** Clarifies payment of erosion and sediment pay items.

Section 109-Measurement and Payment

- **109.20-Weigh Tickets:** Updates weigh ticket requirements.

107.21-PROTECTION OF RIVERS, STREAMS, AND IMPOUNDMENTS:

107.21.3-Basis of Payment:

DELETE THE ENTIRE CONTENTS OF SUBSECTION 107.21.3 AND REPLACE WITH THE FOLLOWING:

~~Except when pay items are specifically described and furnished as pay items in 642, Temporary Pollution Control, the water pollution and erosion and siltation control requirements set forth shall be at the expense of the Contractor.~~

The Department will specify pay items in the contract to protect rivers, streams and impoundments. These include but are not limited to sections 641, 642, 651, 652, 653, 654, 655, and 656. Cost and quantities for items deemed necessary or beneficial by the Engineer or Environmental Monitor that are not specifically described and furnished as pay items in the contract shall be negotiated by the Engineer and Contractor to be included in the Contract.

SECTION 109 MEASUREMENT AND PAYMENT

109.20-WEIGH TICKETS:

DELETE THE CONTENTS OF THE SUBSECTION AND REPLACE WITH THE FOLLOWING:

The Allowable Gross Weight for any vehicle being used to haul materials on publicly maintained highways under the terms of this contract shall be as follows.

Title 23 Code of Federal Regulations, Section 658.17, establishes maximum allowable gross weight on the Interstate System. The maximum allowable gross weight on WV and US Routes will be as established in Chapter 17C, Articles 17 and 17A of the Official Code of West Virginia, as amended. The Public Service Commission, Weight Enforcement Section is responsible for the enforcement of these provisions.

A weigh ticket shall be required with each load of material from a commercial source which would normally have truck scales. This includes, but is not limited to, all asphalt paving materials and all aggregates regardless of the contract pay unit. The weigh ticket shall include gross, tare, and net weights, time and date of loading, Item Number or Description of Materials, Project Number, ~~number of axles on haul unit~~, license number of haul unit, and signature of the weigher certifying that all information on the ticket is correct. All weigh tickets shall contain as a minimum the information required in MP 307.00.50, MP 401.03.50, and MP 601.03.50, for aggregate, asphalt, and concrete respectively. If the weigher's name is printed by the computer on the ticket, then it only needs to be initialed by the weigher.

For material from a commercial source or a batch plant, which would not normally have truck scales, a weigh ticket documenting the tare weight, ~~number of axles on the haul unit~~, license number of haul unit, date weighed, location of scales, and signature of the weigher certifying that all information on the ticket is correct, may be supplied for each haul unit as an alternate to the ticket required in the previous paragraph. The tare weight ticket shall be supplied for each contract on a yearly basis and when modifications are made to the vehicle or combination of vehicles. The weight of the material delivered shall be calculated and furnished by the vendor/supplier shipping the material to the project site or DOH facility. This includes, but is not limited to, ~~concrete~~, structural steel, piling, reinforcing steel and all prepackaged material of known weight, such as cement, grout, fertilizer, lime, abrasives, etc.

**DIVISION 200
EARTHWORK**

2024 Supplemental Specifications

Division 200-Earthwork

Section 201-Clearing and Grubbing

- 201.7-Disposal: Updates terminology to 'construction limits'.

Section 202-Building Demolition, Well and Septic Tank Abandonment

- 202.4-Buildings: Updates terminology to 'construction limits'.

Section 219-Controlled Low-Strength Material

- 219.4.2-Testing: Clarifies the daily set of cylinders requirement.

201.7-DISPOSAL:

DELETE THE CONTENTS OF THE EIGHTH PARAGRAPH IN SUBSECTION 201.7 AND REPLACE WITH THE FOLLOWING:

The in ground trench is to be placed outside the ~~roadway prism construction limits~~, unless otherwise approved by the Engineer. If the trenches are not to be eliminated in the subsequent excavation operation, they shall be backfilled. All backfill within ~~the roadway prism construction limits~~ shall be accomplished in accordance with the requirements of Section 207. Compaction of backfill outside ~~the roadway prism construction limits~~ shall be performed so as to obtain a minimum density equal to that of the surrounding ground.

202.4-BUILDINGS:

DELETE THE CONTENTS OF THE FIRST PARAGRAPH IN SUBSECTION 202.4 AND REPLACE WITH THE FOLLOWING:

219.4-CONSTRUCTION METHODS:

219.4.2-Testing:

DELETE THE CONTENTS OF THE SECOND PARAGRAPH IN SUBSECTION 219.4.2 AND REPLACE WITH THE FOLLOWING:

The Contractor shall determine the flow, and shall mold one set (3 cylinders) of standard six (6) inch by twelve (12) inch compressive strength specimens for every 100 cubic yards, or fraction thereof, of material that is placed per day. These cylinders shall be cured and tested in accordance with ASTM D4832 except that they shall be stored at the construction site in the storage container until the fourteenth day after preparation. After the fourteenth day, they shall be transported to the site of the curing environment, specified in ASTM D4832, where they will be cured for the remainder of the 28 day period. The average compressive strength at 28 days shall meet the strength requirements listed in section 219.3. Material not meeting the minimum compressive strength at 28 days shall be removed at the Contractor's expense. The Division shall evaluate Type A material that exceeds the maximum compressive strength.

DIVISION 300
BASES

**DIVISION 400
ASPHALT PAVEMENTS**

2024 Supplemental Specifications

Division 400-Asphalt pavements

Section 401-Asphalt Base, Wearing, And Patching And Leveling Courses

- **401.2-Materials:** Removes a note from the table that conflicts with gradation requirements in Section 703 for friable particles.
- **401.9.10-Materials Transfer Vehicle:** Adds Material Transfer Vehicle (MTV) requirements to equipment section.

Section 402-Asphalt Skid Resistant Pavement

- **402.2-Materials:** Updates to align with subsection 401.2.

SECTION 401 ASPHALT BASE, WEARING, AND PATCHING AND LEVELING COURSES

401.9-EQUIPMENT:

DELETE SUBSECTION 401.9.10 AND REPLACE WITH THE FOLLOWING:

401.9.10-Material Transfer Vehicle: A Material Transfer Vehicle (MTV) shall be designed to independently transfer and continuously mix asphalt concrete to mitigate thermal and particle size segregation when transferring from the haul equipment to the paving equipment.

An MTV shall have a high-capacity truck unloading system be capable of receiving and transferring material at a rate that exceeds the capacity of the delivery and paving equipment, and have a minimum combined capacity of 15 tons of asphalt concrete, including the MTV storage bin and hopper. An MTV shall include a system contained within an integrated storage bin which continuously mixes the asphalt concrete prior to discharge to the paving equipment. Additionally, the MTV should have a discharge conveyor with the ability to swivel to allow for the delivery of material to the paver while the MTV operates from an adjacent lane.

The MTV shall be maintained and in proper working condition.

2024 Supplemental Specifications

Division 400-Asphalt pavements

Section 406-High Friction Surface Treatment

- **406-High Friction Surface Treatment:** New Addition (used to be Special Provision) - Adds High Friction Surface Treatment (HFST) as a Section.

Section 410-Asphalt Base and Wearing Courses, Percent With Limits (PWL)

- **410.13.6-Bond Strength Adjustment:** Clarifies values used in calculation.

Section 420-Single / Multiple Course Micro Surfacing

- **420.3.1-Mix Design:** Adds reference to AASHTO R103.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

SUPPLEMENTAL SPECIFICATION

FOR

ADD THE FOLLOWING SECTION:

**SECTION 406
HIGH FRICTION SURFACE TREATMENT**

406.1-DESCRIPTION:

This work shall consist of the construction of a high friction surface treatment (HFST) material, composed of binder material and aggregate, upon an existing surface, in accordance with these Specifications and in reasonably close conformity with the lines, grades, thicknesses, and cross sections shown on the Plans or established by the Engineer.

The Contractor shall notify the Engineer a minimum of two weeks prior to starting any high friction surface treatment operation.

~~406.1.1-Interim Completion Date / Overall Completion Date: When specified, the Contractor shall complete HFST work by interim completion date of: _____. The Contractor shall be assessed liquidated damages per Section 108.7.1 for each calendar day that the HFST work is not complete.~~

~~The overall completion date will be 1 year after interim completion date and allow for final skid testing.~~

406.2-MATERIALS:

~~The binder and aggregate shall meet the requirements of AASHTO MP-41, shall be a multi-component modified exothermic polymer resin binder treatment. The binder shall cure exothermically and hold the aggregate firmly in position and meet the following requirements:~~

**DIVISION 500
RIGID PAVEMENTS**

2024 Supplemental Specifications

Division 500-Rigid Pavements

Section 501-Portland Cement Concrete Pavement

- Subsections 501.2, 501.3, 501.8, 501.9, 501.12.5, and 501.12.7: Adds fibers in Portland Cement Concrete.
- **501.3-Proportioning:** Allows use of reduced cement factor provided the aggregate used in those mix designs meet requirements for optimized gradation of Section 601.2.4.1.

501.2-MATERIALS:

ADD THE FOLLOWING TO THE TABLE:

MATERIAL	SUBSECTION
Fibers	715.3

501.3-PROPORTIONING:

ADD THE FOLLOWING BEFORE PARAGRAPH FIVE:

The Contractor may develop mix designs with a reduced target cement factor as indicated in Table 501.3.1.1 in lieu of Table 501.3.1, provided the aggregates used in those mix designs meet the requirements for optimized aggregate gradation in Section 601.3.2.4.1. The A requirements will not apply for mix designs that use optimized aggregate gradation.

TABLE 501.3.1.1

Minimum 28-Day Design Strength	Minimum Cement Factor	Maximum Water Content	Nominal Maximum Aggregate Size	Target Entrained Air
Pounds per square inch	lbs./c.y.	lb. of water / lb. of cement	Inches	Percent
3,000 Compressive or 500 Flexural ^{Note 1}	524 ^{Note 2}	0.44	1 or ¾	7.0

Note 1 Flexural strength when tested by the third point method.

Note 2 An equal mass of a SCM may be substituted for Portland cement up to the following maximum amount. Only one SCM is permitted in a mix design.

- Open bag and distribute fibers on aggregate belt at ready-mix concrete plant.
- Open bag, break apart any fiber clumps, and introduce fibers into ready-mix concrete truck in a well-distributed manner (i.e., "chicken feed").

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**DIVISION 600
INCIDENTAL CONSTRUCTION**

2024 Supplemental Specifications

Division 600-incident construction

Section 625-Rock Socketed Drilled Shaft

- **625-Rock Socketed Drilled Shaft:** Updates to entire Section, moves testing requirement responsibility to the Contractor.

Section 636-Maintaining Traffic

- **636.11.1-Flagger:** Clarifies flagger requirements on Interstate and/or Expressways.
- **636.24-Basis of Payment:** Updates payment of items after contract completion date.

636.11-FLAGGER OR TRAFFIC DIRECTOR:

636.11.1-Flagger:

DELETE THE CONTENTS OF SUBSECTION 636.11.1 AND REPLACE WITH THE FOLLOWING:

All flaggers shall be furnished by the Contractor, and it shall be the Contractor's responsibility to provide flaggers at ~~any~~ locations necessary to assure the safety of the travelling public. No flaggers are allowed on Interstate mainline; however, they may be allowed on ramps and/or Expressways mainline, when approved by the Traffic Engineering Division. Hand signaling devices and high visibility apparel meeting the requirements of the WVDOH Traffic Control Manual shall be used by the Contractor's personnel assigned to traffic control responsibilities. Approved headgear, if worn, and vests worn by the Contractor's personnel shall not bear the Division symbol. Wireless two-way communication shall be provided to the flaggers when they are out of sight of each other.

Flaggers must be certified by passing an American Traffic Safety Service Association

636.24-BASIS OF PAYMENT:

DELETE THE FIRST PARAGRAPH AND REPLACE WITH THE FOLLOWING:

The quantities, determined as provided above, will be paid for at the contract unit price bid for the items listed below, which prices and payment shall be full compensation for furnishing all the materials and doing all the work prescribed in a workmanlike and acceptable manner, including all labor, tools, equipment, supplies and incidentals necessary to complete the work. When aggregate for maintaining traffic, dust palliatives, flagger, traffic director, pilot truck, cleaning of traffic control devices, or the electric arrow are contained in the contract as pay items, payment for such pay items ~~will not be made subsequent to the date of required completion of the project.~~ shall not exceed the plan quantity for use after the contract completion date.

2024 Supplemental Specifications

Division 600-incidental construction

Section 697-Safety Inspection of In-Service Bridges During Construction

- **697-Bridge Safety Inspections:** New Section added for bridge inspection on any temporary bridge or stage construction of a new bridge.

697.5-BASIS OF PAYMENT:

Payment for the above described work, including all materials, equipment, labor, and any other incidental work necessary to complete this item, will be considered completely covered by the contract unit price for the item below.

697.6-PAY ITEM:

ITEM	DESCRIPTION	UNIT
697001-*	NBIS Bridge Safety Inspection, "designation", "type"	Each

* Sequence number
"designation" Bridge, temporary bridge, or stage name designation
"type" Inspection type, typically Inventory Inspection or In-Depth Routine Inspection

Note 1: Each individual bridge inspection should be added as separate line item in project proposal.

Example:

697001-001, NBIS Bridge Safety Inspection, Temporary Bridge, Inventory Inspection, Each

697001-001, NBIS Bridge Safety Inspection, Stage One, In-Depth Routine Inspection, Each

DIVISION 700
MATERIALS DETAILS

2024 Supplemental Specifications

Division 700-Materials Details

Section 703-Coarse Aggregate

- **703.1.5.2-Dolomite Limestone:** Clarifies that either ASTM test for elemental magnesium can be performed.

**SECTION 703
COARSE AGGREGATE**

703.1-CRUSHED STONE:

703.1.5-Limestone Anti-Skid Aggregates:

703.1.5.2-Dolomite Limestone:

DELETE AND REPLACE THE CONTENTS OF THE FOLLOWING SUBSECTION:

When produced for anti-skid, shall be sampled from the stockpile by the Division. The stockpile shall meet the requirements for Section 703.1, with the addition of ASTM C1271 or ASTM C1301. Dolomite shall contain a minimum of 10% elemental magnesium.

STANDARDS AND MANUALS

Standards and Manuals Committee

Standards Committee Meetings

- Next Meeting: **March 13, 2024**
- Available online or in-person from **9:00-12:00pm**
- Held at Technical Support Division: **1334 Smith Street, Charleston WV**
- Encourage attendance and participation
- Distribution List

Manuals Committee Meetings - Immediately afterwards

If you are aware of errors or have suggestions to improve current specifications, standards, or manuals....

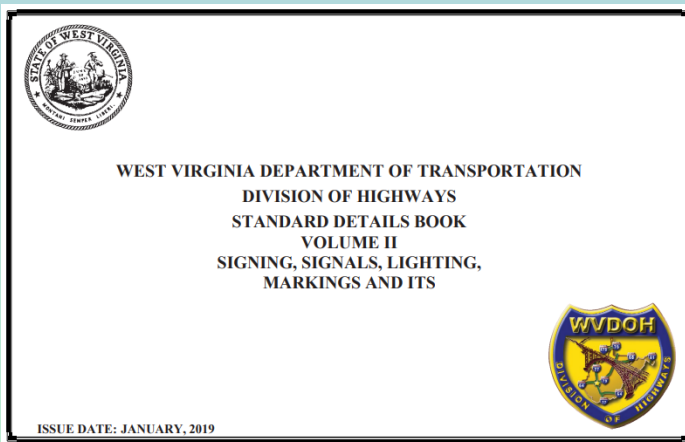
- Please let us know, so we can revise

2023 Standard Details Updates

Twenty four (24) proposed drawings and revisions to WVDOH Standard details Book – Volume

1. 2TE1-3A Roadside Sign Supports Steel Beam Type
2. TE1-3B Roadside Sign Supports Steel Beam Type
3. TE1-3C Roadside Sign Supports Steel Beam Type
4. TE2-1A Bridge or Retaining Wall Sign Mounting, Type K 1 & 2 Supports
5. TE2-1B Bridge or Retaining Wall Sign Mounting, Type K 1 & 2 Supports
6. TE2-2 Bridge or Retaining Wall Sign Mounting, Type L Pipe Post Mount
7. TE2-3 Barrier Wall Sign Support Bracket Type D
8. TE3-1 Overhead Sign Support – Steel Two Tube Span (TTS)
9. TE3-2 Overhead Sign Support – Steel One Tube Span (OTS)
10. TE4-3A Overhead Sign Support – Steel Double Arm Cantilever
11. TE4-3B Overhead Sign Support – Butterfly Cantilever
12. TE4-4A Overhead Sign Support – Single Arm Cantilever (Heavy)
13. TE4-4B Overhead Sign Support – Single Arm Cantilever (Light)
14. TE4-5 Overhead Sign Support – Steel Common Details
15. TE5-1A Overhead Sign Support Box Truss Span
16. TE5-1B Overhead Sign Support Box Truss Span
17. TE9-1 Sign Clamps for Tubular Supports
18. TEL41 Junction Box Details Type A
19. TES-31 Pedestrian Push Buttons (PPB)
20. TEM-2 Typical Pavement Markings (Sheet 2 of 2)
21. TE1-5B Pole Pot Sign Support, Type 6-9
22. TES-10 Mast Arm Types A1 and A1L
23. TES-20 Stain Pole Types C1 and C1L
24. TES-23 Wood Pole Type D

Note – These have been Approved by committee, but they are not in effect yet.



2023 Structure Directives Updates

STRUCTURE DIRECTIVES



WEST VIRGINIA DEPARTMENT OF
TRANSPORTATION
DIVISION OF HIGHWAYS

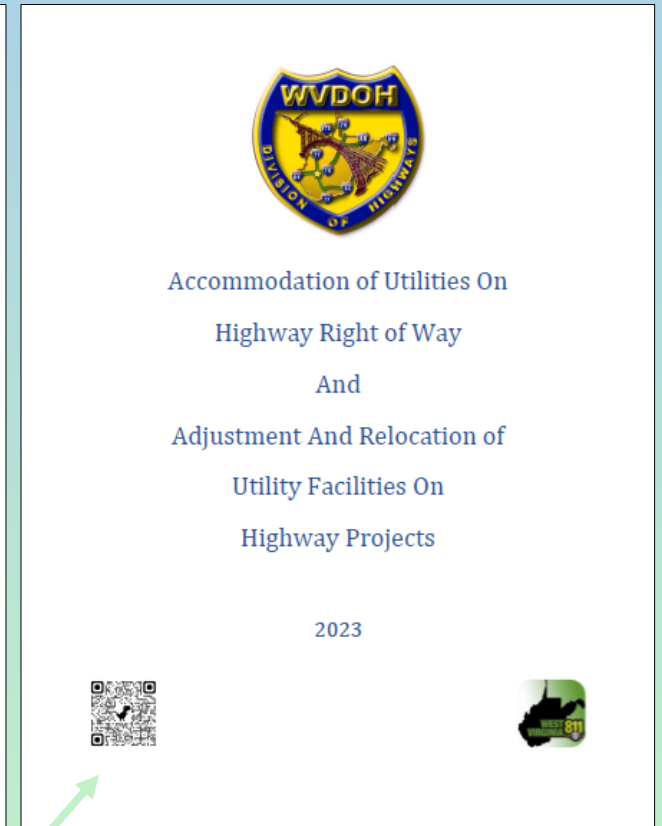
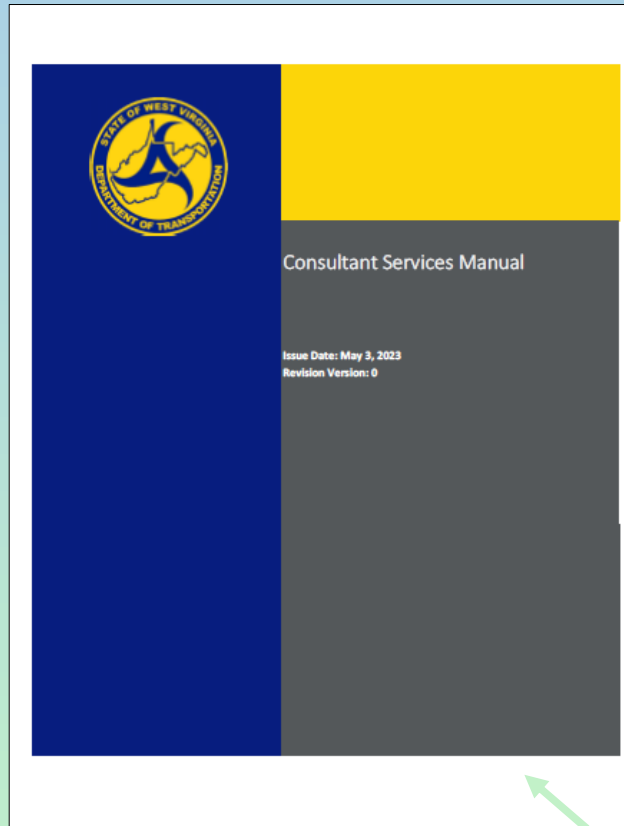
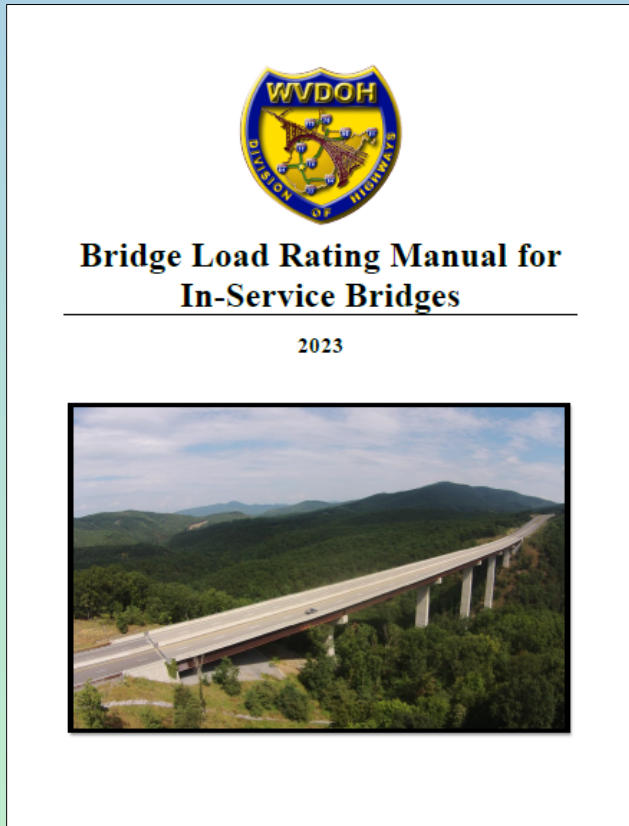
May 2022

STRUCTURE DIRECTIVES (SD)

- 1.SD110-Project Design Criteria
- 2.SD1040-Structrural System Selection
- 3.SD1041-Steel Superstructure Type
- 4.SD1042-Concrete Superstructure Type
- 5.SD1043-Abutment Types
- 6.SD1044-Pier Type.
- 7.SD1073-Rehabilitation Techniques.
- 8.SD2034-Fatigue Critical
- 9.SD2045-Croncrete Superstructures
- 10.SD2048-Adjacent Box Beams
- 11.SD2150-Load Rating of New Bridge Design



2023 Manuals Updates



Note – These have been Approved by committee, but they are not in effect yet.

What's up in committee?

- Recently approved, but not in affect yet...
 1. Nine proposed drawings to WVDOH Standard Details Book - Volume 3. These details are for prestressed girders and would be new 3200 Section.
 2. Deputy State Highway Engineers have been reassigned as Chief Engineers and State Highway Engineer position has been removed. These personnel announcements require revision to 25 Design Directives and 1 Structure Directive.
 3. DD-702: *Signing and Sealing of Professional Work, Title Sheet Signature Block*

March Standards Committee Meeting (3/13/24)

- *Design Directive (DD)-202 Field and Office Reviews for Initial Engineering, Preliminary Engineering and Final Design.* Two new additions for Right of Way (R/W) to the submission checklist ... R/W 1&2 Plans & Questionnaire Checklist and R/W 3 Plans Checklist
- *DD-301 Right of Way Plan Development.* Entire section updated.

March Manuals Committee Meeting (3/13/24)

- Contract Award Manual

Quiz Time... with prizes

Instructions: After the question is called, the person who stands up first with correct answer, wins a prize...

1. How do we make changes to our specifications?
2. We removed 'State Highway Engineer' from definition in spec book... what did we replace that with?
3. Name one Project Specific Special Provision (SP) that was approved in 2023?
4. What item has traditionally been covered by SP... but was added to the 2024 Supplemental?
5. Who is responsible for Rock Socketed Drilled Shaft testing?
6. Name a manual that was approved (or in the works) this year

Thank You!

Contact Information:

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Phone: (304) 414-6988

