

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
MATERIALS CONTROL, SOILS AND TESTING DIVISION

MATERIALS PROCEDURE

PREPARING MATERIALS PROCEDURES

1. PURPOSE

- 1.1 To set forth instructions for drafting Materials Procedures (MP) concerning sampling, testing, reporting, and inspection.
 - 1.1.1 To establish a numbering system for MPs.
 - 1.1.2 To establish a styles guideline for MPs.
 - 1.2 To establish a workflow for the creation, acceptance, and approval for MPs.
 - 1.2.1 To set up a reconfirmation schedule for existing MPs.
 - 1.3 To provide further guidance and clarification from that set forth in DD-105.
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2. REFERENCED DOCUMENTS

- 2.1 [AASHTO Publications Style Manual and Process Guide](#)¹, current edition.
 - 2.2 [Using SI Units in ASTM Standards: A Guide to Form and Style for ASTM Standards, Part H](#)²
 - 2.3 [WVDOH Design Directives DD-105](#)³
 - 2.4 ASTM E29 - Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications.
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3. NUMBERING GUIDELINES

- 3.1 A MP consists of a sequence of numbers such as 120.20.01.
 - 3.1.1 The first set (three digits) of an MP are taken from the WVDOH Specifications Roads and Bridges to denote the general area to which the procedure applies.
 - 3.1.2 The second set (two digits) of an MP are taken from the WVDOH Specifications Roads and Bridges denotes the particular area to which the procedure applies.
 - 3.1.3 The third set (two digits) is defined by this Division thus:
 - 1. .00 - .09 Field Sampling
 - 2. .10 - .19 Pre-sampling (Source or Intermediate Points)
 - 3. .20 - .29 Testing
 - 4. .30 - .39 (For future designation)
 - 5. .40 - .49 Inspection
 - 6. .50 - .59 Quality Assurance System

¹ <https://materials.transportation.org/>

² <https://sn.astm.org/rules-and-regs/using-si-units-astm-standards-nd12.html>

³ <https://transportation.wv.gov/highways/engineering/Pages/Design-Directives.aspx>

- 7. .60 - .69 Reporting (laboratory)
 - 8. .70 - .79 Reporting (issuance under master control)
 - 9. .80 - .89 (For future designation)
 - 10. .90 - .99 Miscellaneous
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4. COMMON DEFINITIONS

- 4.1 To stay consistent, this section will define some commonly used terms and specify the term that is to be used in Materials Procedures.
- 4.2 Authors may choose to spell out these terms in titles, sections, or headers.
- 4.3 Specific Terms:
 - 4.3.1 DWR: When referring to a Daily Work Report that is performed on a WVDOT project, the term to be used is “DWR”.
 - 4.3.2 Coverage: When referring to coverage for a material, traditionally referred to as “Direct Coverage” or “Master Coverage”, the term to be used is “coverage”.
 - 4.3.3 Specifications: When referring to the WVDOT Standard Specifications, Roads and Bridges, current edition including Supplementals and Special Provisions, the term to be used is “Specification(s)” with a capital “S”. There is no need to list the Specifications in the referenced document, this link is assumed. Specific references to aid in navigation are encouraged.
 - 4.3.4 Should: When referring to a rule or provision, it indicates that said rule or provision is not mandatory, but is recommended as part of good practice.
 - 4.3.5 Shall: When referring to a rule or provision, indicates that said rule or provision is mandatory.
 - 4.3.6 WVDOT project: When referring to any construction project in the state that is governed by the Specifications, the term to be used is “WVDOT project(s).”
 - 4.3.7 MS&P: When referring to Manufacture and/or a Supplier and/or a Producer, the term to be used is: “MS&P”. This author may choose to define this in the first instance of use in the document as this is not a common, industry wide term.
 - 4.3.8 Chief Engineer: When referring to the final approving entity, the term “Chief Engineer” shall be used based on the WVDOT org chart.
 - 4.3.9 Division: When referring to the Department of Transportation, Division of Highways as an entire entity, the term: “Division” shall be used with a capital “D”. There is no need to spell out the name in any materials procedure.
 - 4.3.10 MCS&T Division: When referring to the Materials Control, Soils and Testing Division, the term: “MCS&T Division” shall be used. There is no need to spell out the name in any materials procedure, though the author may choose to do so.
 - 4.3.11 TED Division: When referring to the Traffic Engineering Division, the term: “TED Division” shall be used. There is no need to spell out the name in any materials procedure.
 - 4.3.12 All other Divisions shall be spelled out once and then given an appropriate abbreviation. For example, Engineering Division “Engr Division”
 - 4.3.13 APL: When referring to MCS&T Approved Product List, the term to be used is “APL”, with all letters capitalized.

- 4.3.13.1 When referring to an APL submission, the following text shall be used: “Prospective Producers/Suppliers shall complete form HL-468, as per MP 106.00.02 indicating their intention to be included on the WVDOH APL”.

5. UNITS

- 5.1 For units each champion has the option of using solely SI, or both SI and Imperial (combined units) as the standard.
- 5.2 When writing a procedure, the following two statements govern:
- 5.2.1 For solely SI, the values stated in SI are to be regarded as standard. No other units of measurement are included.
- 5.2.2 For combined units, the values stated in either SI or Imperial are to be regarded separately. The value stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance.
- 5.2.3 When providing a sample calculation or an example of a filled form, the champion may choose to use any single unit system.
- 5.2.4 When converting units, rounding shall be performed as specified in ASTM E29-Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications.
- 5.2.4.1 In the instance of length measurement, inches and feet shall be rounded to the nearest 5 mm. For example, 1 foot or 12 inches is 305 mm.
- 5.3 An example of the unit syntax is as follows:
- 5.3.1 The distance between the earth and moon is 238,900 mi (384,400 km).
- 5.3.2 The cylinder shall be 6 in (150 mm) x 12 in (305 mm).

6. FORMAT GUIDELINES

- 6.1 The style guides for MPs shall follow the general guidelines established in “Section 6.4.3” of [AASHTO Publications Style Manual and Process Guide Typography in Design](https://downloads.transportation.org/Publications/aashto_style_manual.pdf)⁴. These guidelines are further refined in this document.
- 6.1.1 The font shall be Times New Roman, size 12, fully justified for all text except for the section title. The section title shall be all capital letters, fully justified, Times New Roman, size 12 and bold. There shall also be a horizontal line above this text.
- 6.1.2 The line numbering shall be as follows: “x.” For a section title and “x.x” for a section paragraph. From here, follow the format of “x.x.x...” for additional layers of sub paragraphs. This document provides an example of the formatting.
- 6.1.3 Links shall be [blue and clickable](#)⁵. The link path shall also be included as a footnote. An example of this is demonstrated by the “blue and clickable” text and link above and the footer at the bottom of this page.

⁴ https://downloads.transportation.org/Publications/aashto_style_manual.pdf

⁵ <https://transportation.wv.gov/highways/mcst/Pages/default.aspx>

- 6.1.3.1 Any instances of an email address shall also be clickable and adhere the guidelines for a link.
- 6.1.4 Figure labels shall follow the guidelines of “Section 2.1.4” of AASHTO Publications Style Manual and Process Guide Typography in Design. This section states: “The title should be succinct noun or noun phrase that describes the figure, but does not provide unnecessary background information, nor repeat information found in the text.” Do not abbreviate “Figure” and capitalize key words such; an example of this is as follows: “Conditions Determined to Be Pre-Existing.”
- 6.1.4.1 Formatting for labels shall be the same as normal body text, except that “Figure X.” shall be bold. All figure text shall be centered and located below the figure.

7. HEADER GUIDELINES

- 7.1 A standard numbering and indexing system shall appear in the upper right-hand corner shall of pages of all MPs. All header text shall be in “All Caps” format.
- 7.1.1 The letters MP shall appear first, denoting Materials Procedure. The number of the MP shall follow that text and be in the header of every page. The numbering of the MP shall follow the format as described in this document.
- 7.1.2 All MPs shall contain headers in the manner described in this section. There are two instances of a header. If an MP has been reconfirmed, the header will follow the example in Figure 1. This includes the date the latest date the MP was approved, and the date of confirmation.

MP 700.00.00
JULY 6, 2020
RECONFIRMED: JULY 6, 2022
PAGE 1 OF 2

Figure 1 – MP Header with Approval Date and Reconfirmation Date

- 7.1.3 In the instance of either a new MP or an approved update to a MP, only the Director signature date (located at the end of the body section of the document) is in the header. A sample is provided in Figure 2.

MP 700.00.00
JULY 6, 2022
PAGE 1 OF 2

Figure 2 – MP Header With Approval Date

- 7.1.4 In the instance of an attachment, the first line of the MP header shall be in the format: MP XXX.XX.XX – ATTACHMENT. All other lines shall follow the guidelines previously described. This is demonstrated in Figure 3.

MP 100.00.00 - ATTACHMENT
JULY 6, 2020
PAGE 4 OF 5

Figure 3 – MP Attachment Header

- 7.1.4.1 In all instances, on all pages (do not use different first page), the text “PAGE X1 to X2” shall be last, with X1 being the current page and X2 being the total pages in the section. The main body and each attachment shall be considered a separate section; numbering shall be restarted on any new attachment instance.

8. MP APPROVAL PROCESS

- 8.1 In the instance of any MP Committee work, the champion is a person defined as the person who is the primary author, editor and/or liaison for the document. The champion is responsible for introducing and presenting the document. The champion is also responsible for addressing comments on the document.
- 8.2 Attachment 1 provides an overview of the approval process of an MP. First the document is brought to the MP committee chair (chair) by the champion. The document is distributed by the chair and discussed at the next MP committee meeting. After the document has been at a minimum of two consecutive MP meetings, the committee may vote to recommend or reject the proposed document. The document is then reviewed, and if approved, signed by the Director of Materials Control, Soils and Testing Division (Director, MCS&T). The signed document is sent through DOH management for review and approval. Once the review is complete, the document is reviewed and affirmed by Federal Highways Administration (FHWA). Once the document is affirmed by FHWA, the document is posted and distributed. If any comment is received during the approval process, the document is cycled back to the MP Committee meeting for review and another approval vote.
- 8.2.1 In the instance where a document has no content changes (editorial changes only), the MP committee may choose to vote to approve the document after one meeting. In this case, any voting member of the MP committee or the FHWA representative may veto this decision.
- 8.2.2 The details of the MP committee, including the submission process, distribution practices, and current voting members is available for review in Design Directive 105 and available at the [WVDOH Technical Support Webpage](https://transportation.wv.gov/highways/TechnicalSupport/Pages/Design-Directives.aspx)⁶

9. RECONFIRMATION PROCESS

- 9.1 Each MP shall be periodically reviewed for both relevancy and accuracy. At a minimum frequency, each MP shall be reviewed every 4 years by the applicable MCS&T Section Supervisor (Reconfirmation Champion). In the instances where

⁶ <https://transportation.wv.gov/highways/TechnicalSupport/Pages/Design-Directives.aspx>

there is no obvious Section Supervisor, the delegation of the review shall be the responsibility of the chair in liaison with the Director of MCS&T.

- 9.2 After reviewing the document, if the Reconfirmation Champion determines that no changes are required, they will submit the document to chair for reconfirmation. The reconfirmation shall be done by the voting members.
- 9.3 If approved by the Committee, the MCS&T Director shall review the document and if accepted, sign the document. Because no changes were made to this document, once the document is signed, it shall be posted and distributed.

10. POSTING AND DISTRIBUTION OF MPS

- 10.1 Active MPs are available on the [WVDOH MCST MP Webpage](#)⁷. The webpage shows the MP number, the title of the MP and the latest approval or reconfirmation date.
- 10.1.1 For each document (if applicable), an archived link is available to provide a documented history of updates. Figure 4 provides an example.

106.00.02	Procedure for Evaluation of New Products for Use In Highway Construction	November 2016
Archive		

Figure 4 – MP Committee Webpage Example

- 10.2 When a document is affirmed by FHWA, the documents will be distributed to applicable Division Directors, District Engineer/Managers and District Material Supervisors.

**Michael
Mance**

Digitally signed by Michael
Mance
Date: 2025.03.04 14:37:30
-05'00'

Michael A Mance, PE
Director
Materials Control, Soils & Testing Division

MP 100.00.00 Steward – Materials Control Section
MM:Bb
ATTACHMENT

⁷ <https://transportation.wv.gov/highways/mcst/Pages/WVDOH-Materials-Procedures.aspx>

ATTACHMENT 1 – MP Committee Meeting Flowchart

