

New Amendments to the 2010 Standard Specifications Effective January 3, 2011

Please note: New Amendments to the Standard Specifications are described below. Previous Amendments that are not revised in this package are still in effect. Amendments to the Standard Specifications take precedence over the Standard Specifications in accordance with Section 1-04.2.

The following is a brief description of the latest revisions, with an explanation of why each change was made. The actual provisions should be reviewed in depth to become completely knowledgeable of the full extent of the revisions. These amendments are available at the following location:

<http://www.wsdot.wa.gov/Design/ProjectDev/Specifications>

This amendment package is different than previous packages to the 2010 Standard Specification Book in that the File Names of the amendments have changed. As an example an amendment to Section 6-07 would have had a File Name of 07.AP6 in previous packages, however in this package the File Name would be 6-07.AP6. Therefore, if a hardbound booklet is being kept of amendments then all previous amendments print outs should be replaced with this package.

All Amendment file names have changed in this package to reflect the section of the 2010 Standard Specification Book the file is amending. The file extension will remain the same. For example, 07.AP6 is now named 6-07.AP6 because it is amending Section 6-07 in the 2010 Standard Specification Book. Consequently, this package contains changes to all amendment file names including those amendments where content has not changed since the last update.

DIVISION 1 – GENERAL REQUIREMENTS

Section 1-06.1(4), Fabrication Inspection Expense

This amendment adds three new fabrication inspection items to the list.

Section 1-07.2, State Taxes

This amendment changes the August 2, 2010 amendment on whom the contact is for sales tax questions from that of the Vendor Payments section, to the Contract Payments section.

Section 1-07.14, Responsibility for Damage

This amendment reflects changes that WSDOT Risk Management wanted made to the existing specification as part of their review of insurance and indemnity issue in our current specifications a major theme of the changes is the inclusion of the reference to RCW 4.24.115 incorporated into the specification language.

Section 1-07.18, Public Liability and Property Damage Insurance

This amendment is a comprehensive rewrite of this section. The amendment is a complete replacement of the existing specification. The changes concern indemnity issues, insurer naming on policies, filing of insurance policies, references to State Law,

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recording of insurance policies, and policies that must be carried by the Contractor for WSDOT project along with other changes. This amendment was proposed by the State Attorney General's Office and WSDOT Risk Management.

Section 1-08.5, Time For Completion

This amendment updates the reporting requirements for MBE/WBE Participants. An earlier amendment to 1-08.1 had change reporting requirements from annual to quarterly reporting for MBE/WBE Participants; however we didn't change the wording in Section 1-08.5 to also show the change in reporting. This amendment corrects the reporting requirements in Section 1-08.5 for MBE/WBE Participants.

Sections: 1-09.2(1), 1-09.2(2), 1-09.2(3), 1-09.2(5), and 1-09.2(6)

These amendments address the needed cleanup within Section 1-09 by updating antiquated scales and getting rid of information that is no longer relevant to newer scales. This amendment also changes the operation of weighing in the following areas: daily tare weight, scaleman (scale operator), daily salesman's report and verification testing. These amendment changes are significant and it is requested that readers familiarize themselves with the above sections.

Section 1-10.3(2), Lane Closure Setup/Takedown

This amendment changes the first sentence of item no. 1, to clarify that a PCMS would be the first order of sequence if the Contract Plans had required a PCMS for lane closure.

DIVISION 2 – EARTHWORK

Section 2-09.3(1)E, Backfilling

This amendment deletes the definition of cementitious material in this section and moves the definition to a central location in the specifications of Section 5-05.2. This change is part of the several amendments that change the location of cementitious materials in the specification book.

Section 2-09.3(2), Classification of Structure Excavation

This amendment replaces the August 2, 2010 amendment to Item No. 1. The change clarifies the limits of excavation on Structural Earth Walls and Geosynthetic Walls.

Section 2-09.3(3)D, Shoring and Cofferdams

This amendment allows the use of gravel as backfill in temporary shoring soldier piles. This is prohibited in our current specifications. The ADSC team requested a change to this specification allowing the use of gravel backfill in temporary soldier piles. Our geotechnical branch engineers have agreed to allow gravel backfill. This change will allow for extraction of soldier piles and salvaging the steel beams resulting in greener construction and lower costs.

Section 2-09.4, Measurement

This amendment defines the horizontal limits of Structural Earth Wall and Geosynthetic Walls excavation.

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DIVISION 5 - SURFACE TREATMENTS AND PAVEMENTS

Section 5-05.2, Materials

This amendment provides a central point of definition on cementitious materials and eliminates having to keep multiple definitions of cementitious materials updated in various sections of the specifications. This change is part of the several amendments that change the location of cementitious materials in the specification book.

Section 5-05.3(1), Concrete Mix Design for Paving

This amendment deletes the definition of cementitious material in this section and moves the definition to a central location in the specifications of Section 5-05.2. This change is part of the several amendments that change the location of cementitious materials in the specification book.

DIVISION 6 –STRUCTURES

Section 6-02.2, Materials

This amendment adds Metakaolin to the materials list of this section. This change is part of the several amendments that change the location of cementitious materials in the specification book.

Section 6-02.3(2), Proportioning Materials

This amendment adds a revised table for allowable cementitious materials that takes the minimum and maximum amount of cementitious and the amount of pozzolans from sentences and places in a table. This change is part of the several amendments that change the location of cementitious materials in the specification book.

Section 6-02.3(2)A, Contractor Mix Design

This amendment adds additional language that references the new cementitious table in Section 6-02.3(2) to find minimum cementitious materials in concrete mix designs. This change is part of the several amendments that change the location of cementitious materials in the specification book.

Section 6-02.3(10)F, Bridge Approach Slab Orientation and Anchors

This amendment will change specification language to coincide with future wording changes being made to Standard Plan A-40.50-01. Presently the Standard Plan and the Standard Specification language don't match up.

Section 6-02.3(25), Prestressed Concrete Girders

This amendment allows metal ducts for prestressed concrete spliced I girders as plastic ducts were too large to fit prestressed concrete I girder webs and there were concerns about the performance of plastic ducts with high concrete curing temperatures.

Section 6-02.3(25)I, Fabrication Tolerances

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This amendment increase the maximum fabrication tolerance for prestressed concrete girder length from one inch to one and one half inches

Section 6-02.3(25)L, Handling and Storage

This amendment clarifies the design assumptions and lifting/handling procedures of prestressed concrete girder with post-tensioned temporary top strands.

Section 6-02.3(26)H, Grouting

This amendment should have been made in April 2009 when the test procedure ASM C-939 was no longer a requirement of this specification.

Section 6-02.3(27), Concrete for Precast Units

This is one of several amendments incorporating the SCC concrete mix design, testing, acceptance and specific element usage requirements. These changes have been in the process for sometime between Bridge, Roadway and the Material Laboratory. The revision to Section 6-02.3(27) contains the bulk of the revisions. The existing third paragraph dating back to January 2004 is deleted and replaced with new subsections A, B and C, pertaining to naming structure elements allowed to use SCC, submittal requirements for SCC, and acceptance testing requirements for SCC.

Section 6-02.3(28)B, Casting

This is one of several amendments incorporating the SCC concrete mix design, testing, acceptance and specific element usage requirements. These changes have been in the process for sometime between Bridge, Roadway and the Material Laboratory.

Section 6-07.5, Payment

The amendment ensures prompt payment for lump sum bid item of "Cleaning and Painting". The change will prevent significant delay of payment for work performed between initial cleaning (blasting) and final top coat of paint. This is needed when the containment is around a large section of structure. The change will have little impact to smaller bridges or components. The existing language is not appropriate.

Section 6-10.3(1), Precast Concrete Barrier

This is one of several amendments incorporating the SCC concrete mix design, testing, acceptance and specific element usage requirements. These changes have been in the process for sometime between Bridge, Roadway and the Material Laboratory. The Amendment to Section 6-10.3(1) deletes the current third paragraph, dating back to August 2003, and inserts a sentence into the seventh paragraph referencing back to Section 6-02.3(27) for SCC use for precast concrete barriers.

Section 6-11.3(3), Precast Concrete Wall Stem Panels

This is one of several amendments incorporating the SCC concrete mix design, testing, acceptance and specific element usage requirements. These changes have been in the process for sometime between Bridge, Roadway and the Material Laboratory. The first paragraph is revised to include a new sentence referencing back to Section 6-02.3(27) for SCC use for the applicable precast concrete item.

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Section 6-12.3(6), Precast Concrete Panel Fabrication and Erection

This is one of several amendments incorporating the SCC concrete mix design, testing, acceptance and specific element usage requirements. These changes have been in the process for sometime between Bridge, Roadway and the Material Laboratory. The first paragraph is revised to include a new sentence referencing back to Section 6-02.3(27) for SCC use for the applicable precast concrete item.

Section 6-13.3(2), Submittals

The amendment is due to an FHWA mandate that all retaining wall designs initiated after October 1, 2010 be designed under the AASHTO LRFD Bridge Design Specifications. Under this mandate, WSDOT has decided that all structural earth wall PS&E advertised on or after January 3, 2011 shall be designed under the LRFD code. The changes include:

- The section is separated into a general section, followed by two subsections for design calculation and working drawing content requirements.
- If the design calculations and working drawings are not prepared by the SE wall manufacturer, documentation accompanying the design calculation and working drawing submittal is required confirming that the SE wall manufacturer has reviewed and concurs with the submittal. This responsibility cannot be delegated to a sales representative office.
- The design calculations shall be based on the current AASHTO LRFD Bridge Design Specifications, and the current WSDOT Bridge Design Manual LRFD and Geotechnical Design Manual. Where differences in design requirements exist between these three references, the BDM and GDM shall govern.
- The wall design calculations shall address all aspects of wall internal stability for Service, Strength, and Extreme Event Limit States.
- SEW traffic barrier and SEW pedestrian barriers shall be designed for a minimum TL-4 impact load, unless otherwise specified, and the wall shall be designed for the impact load transferred from the barrier to the wall.
- The soil reinforcement length required by design is added as one of the criteria for establishing minimum soil reinforcement length.
- The working drawing details shall be selected from the design details and products specified for the specific wall manufacturer in the Preapproved Wall Appendix in the GDM, and the geosynthetic reinforcement shall be selected from the products listed in the QPL. Substitution of details and products not listed in these WSDOT resources will not be allowed.
- References to LFD load groups are deleted.

Section 6-13.3(4), Precast Concrete Facing Panel and Concrete Block Fabrication

This is one of several amendments incorporating the SCC concrete mix design, testing, acceptance and specific element usage requirements. These changes have been in the process for sometime between Bridge, Roadway and the Material Laboratory. The first paragraph is revised to include a new sentence referencing back to Section 6-02.3(27) for SCC use for the applicable precast concrete item.

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Section 6-17.3(3), Submittals

This amendment revises the references to “design load” to read “factored design load”. FHWA has mandated that all retaining wall designs initiated after October 1, 2010, or a date specified by the State DOT with FHWA concurrence, be designed under the AASHTO LRFD Bridge Design Specifications. Under this mandate, WSDOT has decided that all soldier pile walls with permanent ground anchors advertised on or after January 3, 2011 shall be designed under the LRFD code.

Section 6-17.3(5), Tendon Fabrication

This amendment revises the references to “design load” to read “factored design load” and factored design load shall not exceed 80 percent of the guaranteed ultimate tensile strength of permanent ground anchor. FHWA has mandated that all retaining wall designs initiated after October 1, 2010, or a date specified by the State DOT with FHWA concurrence, be designed under the AASHTO LRFD Bridge Design Specifications. Under this mandate, WSDOT has decided that all soldier pile walls with permanent ground anchors advertised on or after January 3, 2011 shall be designed under the LRFD code.

Section 6-17.3(8)B, Performance Testing

This amendment removes all references to “Load Factor Design Method” and “design load” are deleted. FHWA has mandated that all retaining wall designs initiated after October 1, 2010, or a date specified by the State DOT with FHWA concurrence, be designed under the AASHTO LRFD Bridge Design Specifications. Under this mandate, WSDOT has decided that all soldier pile walls with permanent ground anchors advertised on or after January 3, 2011 shall be designed under the LRFD code.

Section 6-17.3(8)C, Proof Testing

This amendment removes all references to “Load Factor Design Method” and “design load” are deleted. FHWA has mandated that all retaining wall designs initiated after October 1, 2010, or a date specified by the State DOT with FHWA concurrence, be designed under the AASHTO LRFD Bridge Design Specifications. Under this mandate, WSDOT has decided that all soldier pile walls with permanent ground anchors advertised on or after January 3, 2011 shall be designed under the LRFD code.

Section 6-18.2, Materials

This amendment adds three new items to the material section. Those items are: Ground Granulated Blast Furnace Slag, Microsilica Fume, and Metakaolin.

Sections: 6-18.3(3), 6-18.3(3)A, 6-18.3(3)B and 6-18.3(4)

These amendments are because we have recently been experiencing low compressive test results for shotcrete wall facing. Part of the problem can be attributed to the small size (2” minimum) of the core samples allowed in our Specifications. AASHTO T24 recommends a minimum core samples of 3.75” to minimize compressive test variability. Further, our current Specifications do not require a minimum core edge distance from panel edges or a minimum clear distance between the cores. The proposed changes

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attached should make our Specification consistent with the AASHTO T24 test method and hopefully solve the low compressive test results encountered in the field.

DIVISION 7 – DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWERS, WATER MAINS AND CONDUITS

Sections: 7-02.2, Materials and 7-02.5 Payments

These amendments add the new polypropylene culvert pipe to the sections.

Sections: 7-04.2, Materials and 7-04.5 Payments

These amendments add the new polypropylene storm sewer pipe to the sections.

Sections: 7-17.2, Materials and 7-17.5 Payments

These amendments add the new polypropylene sanitary sewer pipe to the sections.

DIVISION 8 - MISCELLANEOUS CONSTRUCTION

Section 8-02.2, Materials

This amendment adds *Mulch and Amendments* to the material list.

Section 8-09, Raised Pavement Markers

This amendment created two new subsections and changed the numbering and verbiage in other existing subsections to allow RPMs to be glued down with either Hot Melt Flexible Bituminous Adhesive or Epoxy Adhesive. Due to the significance of the changes, this amendment replaces existing Section 8-09 in its entirety.

Section 8-14.3(3), Placing and Finishing Concrete

The amendment to Section 9-34.2(1), in this package, is a complete removal of the material specification on High VOC Solvent Based Paint, and because of that a reference to Section 9-34.2(1) in Section 8-14.3(3) also is deleted with this amendment.

Comment [MJG1]: New amendment from what was sent out in State Wide Review Package per Patrica Crane.

Section 8-20.3(6), Junction Boxes ,Cable Vaults, and Pull boxes

This amendment adds verbiage that where Standard Duty pull boxes, concrete junction boxes or cable vaults are installed in sidewalks, walkways and shared use paths they will have a slip resistant surface.

Section 8-21.3(9)G, Permanent Signing

This amendment expands what may constitute and identification plate on removed sign structures; such as a riveted plate, a sticker or other means. The importance is to get the plate information to the Engineer.

DIVISION 9 – MATERIALS

Section 9-02.1(8) Flexible Bituminous Pavement Marker Adhesive

This amendment adds a requirement for the material samples to be prepared in accordance with SP 318 Standard Operating Procedure for Melting of Flexible

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Bituminous Pavement Marker Adhesive for evaluation and the amendment reorganizes the existing table.

Section 9-05, Drainage Structures, Culverts and Conduits

The amendment to this section add a new subsection titled; *Section 9-05.24 Polypropylene Culvert Pipe, Polypropylene Storm Sewer Pipe, and Polypropylene Sanitary Sewer Pipe* for materials and acceptance requirements for polypropylene culvert, storm and sanitary sewer pipe.

Sections: 9-02.2(8), 9-05.19, and 9-05.20

Amendments to these sections were done to include “couplings and fittings” in the headings of the sections and in the content of the sections to assure that the specifications covered the “couplings and fittings” material requirements for polyethylene culvert, underdrain and storm sewer pipe.

Section 9-06.5(3), High-Strength Bolts

This amendment revises the amendment to the second paragraph made in the August 2, 2010 Amendment Package. The August 2nd amendments deleted the second paragraph. This amendment package now inserts new verbiage for the second paragraph. The reason for the additional verbiage is Section 9-06.5(3) was revised August 2, 2010 to add ASTM F 1852 tension control bolt assemblies as an acceptable high-strength bolt alternative to AASHTO M 164. However for galvanized applications, while AASHTO M 164 bolts can be hot dip galvanized in accordance with AASHTO M 232, ASTM F 1852 TCB assemblies must be mechanically galvanized as hot dip galvanizing is specifically prohibited.

Discussion between the HQ Construction Office, the HQ Materials Laboratory Construction Materials Division, and the Bridge and Structures Office has concluded that TCB assemblies galvanized in accordance with ASTM B 695 Class 55 Type I are acceptable for galvanized high-strength bolt applications.

The attached revisions to Section 9-06.5(3) complete the equivalency between AASHTO M 164 and ASTM F 1852 for galvanized high-strength bolt applications. A reference to ASTM B 695 Class 55 Type I is added for galvanizing of ASTM F 1852 TCB assemblies when galvanizing is specified. The prohibition against galvanizing of ASTM F 1852 TCB assemblies is deleted.

Section 9-17.4, Pre-approval

This amendment updates the pre-approval requirements of flexible guide posts. It clarifies that WSDOT will accept National Transportation Produce Evaluation Program (NTPEP) test results as part of approval process.

Section 9-23 Concrete Curing Materials and Admixtures

This amendment adds two new subsections to Section 9-23: Section 9-23.12 Metakaolin that defines the material requirements metakaolin and add Section 9-23.13 Blended Supplementary Cementitious Material that allows binary and tertiary blends of fly ash,

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ground granulated blast furnace slag, microsilica fume, and metakaoli. This change is part of the several amendments that change the location of cementitious materials in the specification book

Sections: 9-29.1(2)A, 9-29.1(4)B and 9-29.1(4)C

These amendments correct an April 5, 2010 amendment to Section 9-29.1(2)A. The April amendment put a paragraph on PVC expansion fittings in the wrong location. These amendments remove the April amendment from Section 9-29.1(2)A, and put that information in Section 9-29.1(4)B. The information that had been in Section 9-29.1(4)B is then relocated into a New Section 9-29.1(4)C.

Section: 9-29.2(1)A

This amendments adds verbiage that Standard Duty Concrete J Boxes placed in sidewalks and walkways will have slip resistant surfaces and that non-slip lids and frames are hot-dip galvanized. This amendment also remove the verbiage that frames shall be anchored to vault boxes by welding wire fabric to the frame. Other minor updating is also done.

Comment [MJG2]: New amendments from what was sent out in State Wide Review. Per Terry Thayer

Section 9-29.2(2)A

This amendment adds verbiage that Standard Duty Concrete J Boxes placed in sidewalks and walkways will have slip resistant surfaces and that non-slip lids and frames are hot-dip galvanized. The amendment also removes the verbiage that frames shall be anchored to vault boxes by welding wire fabric to the frame.

Comment [MJG3]: New amendment from what was sent out in State Wide Review. Per Terry Thayer

Sections: 9-29.3(2)B, 9-29.3(2)E, 9-29.3(2)F and 9-29.3(2)G

These amendments ensure that stranded wire conductor is allowed and we get the correct detector loop wire.

Section 9-29.16(2)A, Optical Units

This amendment corrects a minor grammatical error to item number 2 in Section 9-29.16(2)A, which was part of the extensive August 2, 2010 amendment to Section 9-29.

Section 9-31.1, Requirements

This amendment updates this section due to recent revisions to AASHTO LRFD Bridge Design Specifications supported by NCHRP Report 596 which significantly changed the design procedures for elastomeric bearing pads. Concurrent with AASHTO's adoption of these design specification changes, the WSDOT Bridge and Structures Office stipulated that all elastomeric bearings be designed for the revised Method B procedure, and that the elastomer material be defined by shear modulus instead of durometer hardness. Section 9-31.1 is revised to define the elastomer material by shear modulus only. Because the new design specifications increase allowable bearing loads and rotations, Section 9-31.1 is revised to increase the minimum elastomer cover over steel shims, and to require edges of steel shims to be ground or otherwise removed, and Section 9-31.1 is also simplified by removing the duplicate fabrication tolerance specifications that are now included in AASHTO M 251.

Sections: 9-34.1, 9-34.2 and 9-34.2(1)

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These amendments remove information on High VOC Solvent Based Paint. The amendment to Section 9-34.2(1) completely removes this sections verbiage and changes the title to Vacant. The reason for the amendment is that neither our WSDOT Maintenance staff nor Contractors are using paint stripe made with Volatile Organic Compounds (VOC). The Traffic Office is working on development of a future cold weather waterborne paint stripe that will possibly, in the future, replace this section once development is completed.

Comment [MJG4]: These are added amendments from what was sent out in State Wide Review Package per Ed Lagergren.