

WisDOT Standard Specification Updates

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February 2012



WisDOT Standard Specification Updates

- Standard Specifications for Highway and Structure Construction - 2012 Edition
- Effective starting with projects in the December 2011 letting
- Extensive changes this year related to concrete construction

WisDOT Standard Specification Updates

- Major Change #1
 - Complete rewrite of majority of Chapter 415 on Concrete Pavements
- Why?
 - Update to the current state of the practice

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- Major Change #2
 - Roll Concrete QMP STSP's into Standard Specifications
 - QMP Concrete Pavement
 - QMP Concrete Structures
 - QMP Concrete Ancillary
- Why?
 - Natural progression due to decrease in number of changes as QMP specs have matured

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- Sequence of Presentation
 - Concrete Pavement – Chapter 415 and 416 changes
 - QMP Specs – New Part 7 of Std Spec book
 - The “Tentacles” in other locations
- THIS IS CONDENSED VERSION
 - Additional training recommended

WisDOT Standard Specification Updates

- Section 415 – Concrete Pavement
 - General
 - Much outdated or prescriptive language deleted
 - New language has greater end-result emphasis

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- Section 415 – Concrete Pavement
 - Eliminated all references to continuously reinforced concrete pavement
 - Eliminated continuous diamond grinding – now covered by STSP
 - Replaced tabulated crack repair costs with pay equation and reduced amount reimbursed

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- Section 415 – Concrete Pavement
 - Added new bid items for 12-1/2, 13 & 13-1/2 inch concrete pavement
 - Moved bid items to Section 415 from 416 that must conform to class I concrete QMP provisions - including:
 - Concrete Pavement Gaps
 - Concrete Alleys
 - Concrete Approach Slabs

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- Part 7 – Quality Management Program
 - Section 701 – General QMP requirements
 - Section 710 – General Concrete QMP requirements
 - Section 715 – QMP Concrete Pavement and Structures
 - Section 716 – QMP Concrete Ancillary

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- Section 701 – General QMP Requirements
 - Quality control program and plan
 - Testing personnel certification
 - Laboratory qualification
 - Test equipment – calibration records
 - QC testing and data submission
 - Recordkeeping
 - Department QV and IA testing

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- Section 710 – General Concrete QMP Requirements
 - Small quantities provisions
 - Testing technician certification requirements
 - Concrete mixes
 - Sampling and testing
 - Control charts no longer required

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- Section 715 and 716
- Establish new designation for concrete classes
 - Class I concrete – Used in Concrete Pavements and Structures
 - Class II concrete – Ancillary concrete items with primary means of acceptance by field QC testing
 - Class III concrete – Ancillary concrete items with primary means of acceptance by certification

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- Section 715 – Concrete Pavement and Structures
 - Contractor mix design and testing requirements for class I concrete used in pavements and structures
 - Incentive and disincentive pay adjustments based upon PWL calculated for compressive strength for concrete lots

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- Section 716 – QMP Concrete Ancillary
 - Requirements for class II and class III concrete
 - Class II – ancillary concrete the Department accepts based on field testing during placement
 - Class III – ancillary concrete the Department accepts by certification
 - To find which class applies to a particular item, look up reference in each Standard Spec Section under Materials
 - (e.g. 603.2(2) states that Concrete Barrier must meet class II requirements. 604.2(2) states that Slope Paving must meet class III requirements.)

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- Section 106.3.4.3 Department's Quality Management Program - defines
 - Process Control
 - Performed by contractor
 - Inspections, testing, corrective actions and control charts
 - Used to help settle disputes
 - Department Verification
 - Independent Assurance
 - QMP Dispute Resolution

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- Section 211 – Preparing the Foundation
 - 211.3.4 – Foundation for Concrete Pavement and Concrete Base
 - Revise to emphasize that aggregate base course is the foundation
 - States that slip-form paving requires a trimmer

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- Section 320 – Concrete Base
 - QMP testing required as class II ancillary concrete
 - Eliminated concrete base widening
 - Curing compound per 501.2.9 – traditional white wax-based material

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- Section 390 – Base Patching
 - QMP testing required as class II ancillary concrete
 - Curing also under 501.2.9
 - Opening under 320.3

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- Section 405 – Coloring Concrete – NEW SECTION
 - Covers coloring of any concrete item
 - Brings widely used special provision into Standard Specs
 - Defines requirements for red – (truck aprons)
 - Mix design requirements
 - Test slabs and trial batches
 - New bid item – payment by cubic yard

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- Section 416 – Concrete Pavement – Appurtenant Construction
 - Completely rewritten
 - Eliminates pavement widening (moved to 415)
 - Eliminates pavement headers (moved to 415)
 - Eliminates pavement terminal unit
 - Eliminates continuous diamond grinding (now STSP)

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Specification Updates

- Section 416 – Concrete Pavement – Appurtenant Construction
 - Incorporated roundabout truck aprons
 - Incorporated rumble strip items
 - Bulk of chapter is pavement repair and replacement items with no changes
 - Incorporated calcium chloride and epoxy materials items previously in Section 415