

# 2020 Spec Training

## 2020 Construction Standards Update

Presented by WisDOT:  
Bureau of Project Development

### Agenda

- 2020 Standard Specs
- 2020 CMM Updates
- Curb Ramps Update
- Break
- Roadway Standards Website
- What's New – 2021 Design
- What's New – 2020 Construction
- Contract Administration
- 2020 Field Software Updates and Changes
- AASHTOWare Project Implementation

### 2020 Standard Specs Updates

**Michael Hall, P.E.**  
Standard Specification Editor  
[michael1.hall@dot.wi.gov](mailto:michael1.hall@dot.wi.gov)  
(608) 266-8461

### 2020 Standard Specs Updates

<http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/stnds-spec.aspx>

#### Standard Specifications - 2020 Edition Changes

##### Part 1 General Requirements and Covenants

##### Section 102 Bidding Requirements and Conditions

**Do The Right Thing:** Revise 102.5(1) to require prospective bidders to notify the department if discovering an error or omission.

##### Section 301 Base, Subbase, and Subgrade Aggregate

Revise 301.2.4.5(1) to add a freeze-thaw testing requirement for recycled concrete from outside of project limits.

##### Section 606 Riprap

Revise 606.2.1(2) to define extra-light riprap for use in drainage and erosion control applications.

Revise 606.3.1 to add construction requirements for extra-light riprap.

### 102.5 Examining Contract Documents and Work Site

#### Do the right thing

- FHWA contract administration workshop & WTBA ethics training
- Bidders cannot take advantage of an error or omission
  - Inflated prices
  - Penny bids
- Notify the department immediately
  - Issue addenda
- 105.4(5) covers contractor and department
  - Issue change order

### 104.6.1.2 Construction Operations and Facilities

#### General

- Safely and adequately accommodate public traffic

#### Flagging

- Department's flagging handbook (ASP 6)  
<https://wisconsindot.gov/dtsdManuals/traffic-ops/manuals-and-standards/flagger.pdf>
- Training and certification
- Temporary portable rumble strips
- Pilot vehicles (ASP 6)

#### Drop-Off and Hazard Protection

- Lanes open to traffic
- Prescriptive (eliminate, delineate, protect)
  - Distance from traffic, drop-off height, duration
- Drop-off protection
  - Paid where the contract shows
  - Not paid solely to accommodate contractor means & methods

# 2020 Spec Training

## 105.11.2.1.3 Substantially Complete

### Relieve contractor of maintenance

- Usable by public without delay, disruption, or impediment
  1. Lanes open to traffic on a finished surface
  2. Signs & traffic control devices in place and operating
  3. Drainage, erosion, excavation, & embankments complete
  4. Safety appurtenances complete
- Contract bid items
- Change order work
- Except punch list

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## 109.1.4.2 Load Tickets

### Daily weigh tickets for each load as work is completed

- Weighed aggregate is the "standard" for tickets
  - Ticket, project, material, date/time, gross/tare/net, and truck
  - Reference ticket submittal
    - Granular backfill
    - Structure backfill
    - Base, subbase, and subgrade aggregate
    - Seal coat
    - Pipe culvert backfill
    - Storm sewer backfill
- Asphaltic mixtures in 450.3.1.1.4
- Ready-mixed concrete in 501.3.5.4

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## 205.5.2.3.2 Quantity Overruns

### EBS quantity overruns (April 19 letting)

- Unplanned EBS is significant contractor risk
  - Uncertain quantity
  - Blended price
  - Disposal costs especially in urban areas
- Department pays 2X Excavation Common price
  - Exceeds EBS earthwork summary by more than 25 percent
  - Requires disposal outside of project right-of-way
- Pays for portion exceeding 25 percent threshold up to \$25,000
- Paid under EBS Quantity Overrun administrative item

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## 415.3.16.3 Locating Test Plates

### Clearance from steel embedments for thickness test plates

- Steel with 3 feet interferes with measurement
- New spec says
  - "Do not place plates within 3 feet of steel or an object containing steel"
- Previous spec said
  - "within 4 feet of a transverse or longitudinal joint containing steel"
- What's the Problem ??????
  - How long are tie bars?
  - How much slab is left?

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## Section 450 General Requirements for Asphaltic Pavements Section 455 Asphaltic Materials Section 460 Hot Mix Asphalt Pavement



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## 505.2.4 Coated High-Strength Bar Steel Reinforcement

### No more WisDOT-specific, just follow ASTM A775

- Keep this:

505.2.4.2 Coating Material  
505.2.4.2 Coating ~~Material~~

(1) Coat reinforcement according to [ASTM A775](#) with a fusion-bonded powder from the department's [APL](#). Provide written certification from the resin manufacturer that the coating material is the same formulation and quality as submitted to the department for prequalification testing.

(2) Furnish a two-part epoxy resin that meets [ASTM A775](#) for field repairs and patching.

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# 2020 Spec Training

## 505.2.4 Coated High-Strength Bar Steel Reinforcement

No more WisDOT-specific, just follow ASTM A775

- Deep six this:

**606.2.4.3—Surface Preparation**

- ❖ Ensure the bar surface is clean and free from rust, scale, oil, grease, and similar surface contamination, and slivers, scabs and other surface defects detrimental to proper coating.
- ❖ Blast the surface to a near white No. 10 finish according to SSPC SP 10. Provide an anchor pattern with blast profile maximum roughness depth readings within the range of 1.6 mils to 4.0 mils. Determine the readings according to NACE RP 287, using replica tape.
- ❖ Remove all traces of grit and dust from the blasting before coating.
- ❖ Apply the coating to the cleaned surface as soon as possible after cleaning and before visible oxidation of the surface occurs. The contractor shall not wait to apply the coating more than 8 hours after cleaning, unless the engineer directs otherwise.

**606.2.4.4—Coating Process**

- ❖ Apply the coating as an electrostatically charged dry powder sprayed onto the grounded steel bars using an electrostatic spray gun. The contractor may apply the powder to either a hot or a cold bar. Give the coated bar the thermal treatment the epoxy resin manufacturer recommends to provide a fully cured finished coating.
- ❖ Cure, post cure, or cure and post cure the coating film to a fully cured condition. The coating applicator shall check a representative proportion of each production lot, using the method it finds most effective for measuring cure, to ensure the entire production lot of coating is fully cured.

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## 505.2.4 Coated High-Strength Bar Steel Reinforcement

No more WisDOT-specific, just follow ASTM A775

- fuhgeddaboutis:

**606.2.4.6—Test Bar Conditioning**

- ❖ Condition bars being tested for coating thickness, holidays (pinholes not visually discernible), coating adhesion, and abrasion resistance at a temperature range of 68 F. to 96 F. If disputed, conduct tests at 73 F., 4 F. and 50 F. ± 5 percent relative humidity according to ASTM D3451 section 3-1.

**606.2.4.6—Coating Thickness**

- ❖ Ensure the coating is smooth and uniform in thickness. After curing is complete, ensure at least 90 percent of recorded thickness measurements of the coating are 7 mils ± 2 mils. Thickness measurements below 5 mils are cause for rejection. The upper thickness limit does not apply to repaired areas of damaged coating. Measure the film thickness on a representative number of bars from each production lot according to ASTM D7081 for measuring film thickness of pipeline coatings on steel.
- ❖ Take an average of 3 individual readings on the body of a straight length of bar between 3 consecutive deformations to obtain a single recorded thickness measurement. Obtain a minimum of 5 recorded measurements, evenly spaced along 2 sides of the test bar for a minimum of 10 recorded measurements per bar.
- ❖ The contractor may use pull-off and fixed probe gauges. Do not use pencil type pull-off gauges that require the operator to observe the reading at the instant the magnet is pulled from the surface. Follow the thickness gauge manufacturer's recommendations for its calibration and use.

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## 505.2.4 Coated High-Strength Bar Steel Reinforcement

No more WisDOT-specific, just follow ASTM A775

- Be gone with it:

**606.2.4.7—Coating Continuity**

- ❖ Check the coating on a representative number of bars selected from each production lot after cure for continuity of coating and ensure it is free from holes, voids, contamination, cracks, and damaged areas. Additionally, ensure that no more than an average of 2 holidays exist in any linear foot of coated bar. Base the average on the bar's full production length.
- ❖ Use a 67-112-volt holiday detector at the manufacturer's plant to check the coating.

**606.2.4.8—Coating Flexibility**

- ❖ Evaluate the coating flexibility based on a representative number of bars selected from each production lot. Evaluate coating adhesion according to ASTM A775.

**606.2.4.9—Abrasion Resistance**

- ❖ Determine the coating's resistance to abrasion on a representative number of bars selected from each production lot, according to ASTM D4060 using CS-10 wheels and a 1000-gram load per wheel, and ensure that the weight loss does not exceed 100 megagrams per 1000 cycles.

**606.2.4.10—Inspection**

- ❖ Furnish a certificate of compliance for the surface preparation, coating material, and process. The coating applicator shall retain test results and make them available for not less than 7 years.

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## 505.2.4 Coated High-Strength Bar Steel Reinforcement

No more WisDOT-specific, just follow ASTM A775

- Keep this:

**505.2.4.14—3 Damage Repair and Rejection**

- ❖ The contractor shall not repair epoxy-coated high-strength bar steel reinforcement that does not conform to the requirements for coating thickness, continuity of coating, coating cure, or flexibility of coating. Replace the reinforcement or strip, reclean, and recoat epoxy-coated high-strength bar steel reinforcement with one or more of these defects.
- ❖ If using coated high-strength bar steel reinforcement in bridges, the department requires patching on circumferential areas with damaged coating, on sheared or cut ends, on end areas left bare during the coating process, and on any areas that the entire coating is removed.
- ❖ If using coated high-strength bar steel reinforcement in concrete pavement and miscellaneous concrete construction bid items in 415 or 418, the department requires patching on circumferential areas with damaged coating or removed coating. The department will not require patching on sawed ends, cut ends, coated damaged ends, or end areas left bare during the coating process.
- ❖ Patch with the material specified in 505.2.4.2(2) according to ASTM D3963 and manufacturer instructions.
- ❖ Complete required repairs before visible oxidation of the steel surface occurs.
- ❖ The engineer will reject bars having total damage greater than 2 percent of the total circumferential area of the bar length. Consider the entire loss of the coating at the specific area on the bar as total damage.

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## 506.3.19.1 General

### Welding plans

- Submit an annual field welding plan
  - Conform to CMM 5-20.6.5.4
  - Department form DT2337
- Do not begin field welding without an approved welding plan

### AWS certified inspectors

- Required for welding on primary members (see 506.3.1.1)

### Field Welding Inspection Checklist

- Complete & submit DT2320 to the engineer for each day of field welding

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## 603.3.1.1 General

### Hot weather for permanent concrete barrier. (April 19 letting)

- Conform to structure hot weather concreting in 501.3.8.2

### 715.1.1.2 Small Quantities

- Define small quantities of barrier concrete per contract
  - Less than 150 cubic per contract

### 715.2.3.1 Pavements and Cast-in-Place Barrier

- Pavement mix with structure strength limit
  - For barrier: the 90 PWL specified in 715.5.3

### 715.3.1.2.3 Lots by Cubic Yard

- Sublot and lot sizes for cast-in-place concrete barrier
  - Max 1000 CY lot divided into 100 CY or smaller sublots

### 715.5.1 General

- Administrative Items
  - 715.0603 Incentive Strength Concrete Barrier
  - 804.6057 Disincentive Strength Concrete Barrier

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# 2020 Spec Training

## Section 606 Riprap

### Extra-light riprap for drainage and erosion control

- 606.2.1 Riprap Stone
  - Gradation: 10-inch nominal top size
- 606.3.2 Placing Extra-Light Riprap
  - Place by hand or mechanical means
- 606.5 Payment
  - Add the Riprap Extra-Light bid item
  - Paid by CY

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## 628.5.11 Mobilizations Erosion Control

## 628.5.12 Mobilizations Emergency Erosion Control

### Increase deduct & add Failing to Mobilize admin items

- Mobilizations Erosion Control
  - Mobilize within 72 hours or deduct \$500 per calendar day
  - Failing to Mobilize for Erosion Control admin item
- Mobilizations Emergency Erosion Control
  - Mobilize within 8 hours or deduct \$500 per calendar day
  - Failing to Mobilize for Emergency Erosion Control admin item

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## Section 630 Seeding

### Add Seed Water bid item for watering seed

- 630.2.2 Water
  - Clean, free of impurities that might injure seed
- 630.3.6 Watering
  - Keep thoroughly moist before germination
  - Do not let top inch dry out until grass is well established
  - Maintain soil moisture for 30 days
- 630.4 Measurement
  - By the 1000 gallons (MGAL)
  - Engineer-approved meters or tanks of known capacity
- 630.5 Payment
  - 630.0500 Seed Water MGAL
- 628.5.1(2) to include Seed Water for borrow & disposal sites

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## Section 644 Temporary Pedestrian Facilities

### Incorporate STSP 644-010, 644-020, and 644-030

#### Temporary Pedestrian Surface

- Asphalt
- Plywood
- Plate
- Prefabricated Skid Resistant Mat from APL

#### Temporary Pedestrian Curb Ramp

- Cast-in-place
- Prefabricated from APL

#### Temporary Pedestrian Barricade

- From APL

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## 646.3.1.6 Proving Period for Grooved-In Marking

### Limit 180-day proving periods to grooved-in marking

- Periodic post acceptance inspections during proving period
- Evaluate performance of grooved-in marking
- Begins on last day of week for marking placed that week

### Retroreflectivity

- Add wet reflective epoxy
- Lower values for permanent tape

### Remove marking in groove before replacement

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## 657.3.3.2.3 Bolt Installation

### Tension with 48 hours after arm installation

- Repetitive wind loading
  - Over stress bolts
  - Damage DTI's
- After 48 hours
  - New bolt/nut/washer assemblies & new DTIs
  - Fully tension immediately

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# 2020 Spec Training

## Section 715 QMP Concrete Pavement and Structures

### 715.2.1(5) SAM tests for all new lab-qualified class 1 mixes

- AASHTO provisional standard TP 118
- Include the SAM number as a part of the mix design submittal

### 715.3.1.1(2) to extend field SAM tests for class 1 concrete

- Includes structures and permanent concrete barrier
  - Existing exceptions still apply
  - Additional bid item exceptions
- |                                  |  |
|----------------------------------|--|
| Concrete Masonry Culverts        | Crash Cushions Permanent                 |
| Concrete Masonry Retaining Walls | Crash Cushions Permanent Low Maintenance |
| Steel Grid Floor Concrete Filled | Crash Cushions Temporary                 |
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## Fall 2019 Construction & Materials Manual (CMM) Updates for 2020 Construction

Michael Hall, P.E.

BPD Interim CMM Editor

[michael1.hall@dot.wi.gov](mailto:michael1.hall@dot.wi.gov)  
(608) 266-8461

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## Fall 2019 Construction & Materials Manual (CMM) Updates for 2020 Construction

<http://wisconsin.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/cmm.aspx>

### CMM - Changes for 2020 Construction

#### Chapter 1: General Provisions

##### Section 1-30 Hazardous Materials

Revise 1-30.1.2 to update and provide more detail regarding information contained on chemical Safety Data Sheets.

Revise 1-30.2 to Figure 3 to update and provide more detail regarding contamination found during construction.

Revise 1-30.3.1.2 to update and provide more detail and documentation regarding contract-required notification timeframes.

##### Section 1-35 Safety

Revise 1-35.3.2.3 to reference flagging operations moved to CMM 1-45.

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## CMM Purpose

- "How", "Why", and "When", but not "What" of the spec
- Help field staff administer the contract uniformly
- Provide exceptions or additions to ASTMs or AASHTOs
- Spec - "Shall" or "May" CMM - "Must" or "Should"
- Documentation - Where to file information and how to submit it
- Communicate expectations to our staff, consultants, & contractors

#### 815 Density Testing

CMM provisions mobilized by the contract: 815.10.2.1, 815.10.2.2

##### 815.1 General

Field densities are taken by nuclear methods in accordance with established procedures as required by the contract. If the contract contains quality management program (QMP) density testing provisions, the contractor performs quality control density testing and the department performs quality verification density testing. If the contract doesn't include QMP density testing provisions, the department will perform all density testing conforming to standard spec 460.3.3.2. Once a method has been selected for determining mat density, that method should be used throughout the project.

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## 1-30 Hazardous Materials

### 1-30.1.2 Content on chemical safety data sheets (SDS)

- Lists the 16 sections of the SDS
- Four sections are non-mandatory

### 1-30.2 Update contamination procedures flow chart

- More detail regarding contamination found during construction

### 1-30.3.1.2 Contract-required notification

- Disposal Request form (DT1231)
  - FDM 21-35-35
  - Ten day notification for container drop-off and pickup
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## 1-45.14 Flagging (moved from 1-35 Safety)

### Wisconsin Flagging Handbook available online at:

<https://wisconsin.gov/Pages/doing-bus/local-gov/traffic-ops/manuals-and-standards/manuals.aspx>

#### Flagger certification

- All flaggers must be certified
- Do not allow flagging to begin until certified flaggers are available

#### Temporary portable rumble strips (TPRS)

- Required for flagging operations with speed limit > 35 mph
- Do not use TPRS on loose gravel or milled surfaces

#### Pilot cars

- Flagging operation exceeds 2 miles
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# 2020 Spec Training

## 1-65.7 Pantry Software

<https://awpkb.dot.wi.gov/Content/constr/Pantry/StatewideForms.htm>

### Provides links to forms used by construction staff

- WS forms
  - Relocated
  - Renamed
  - Deleted
- DT Forms
- Check for changes at:  
<https://awpkb.dot.wi.gov/Content/constr/Pantry/StatewideFormChanges.htm>

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## 2-31.3 Material Found Outside Excavation Limits

### Adjust price under standard spec (ASP 6)

- 104.8 Rights in the Use of Materials Found on the Project

### Material in ROW but outside grading limits

- Not identified in the contract
  - Engineer written authorization
  - Environmental documentation and permits
  - Department reduces pay by \$1.50/CY
  - Admin item: 801.0400 Material from Right-of-Way
- Identified in the contract
  - Do not excavate without engineer's written permission
  - No additional environmental documentation and permits
  - No pay reduction
- Suspend if affects essential functions or characteristics

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## 2-42.5 Creating the Contract Change Order

### Notify local agency of change orders

- Revised contract mod justification (CMJ) form
  - Now DT2355
    - Updated link and screen shot online
    - Linked from pantry
- Guidance coming with spring 2020 CMM update

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## Section 2-53 Dispute Resolution Procedures

### Department's dispute resolution procedures

- Moved from the Contract Administration web site
- No substantive changes in content

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## 5-20.6.5.4 Field Welding

### Annually approved DT2337 form on file with BOS before welding

- Viewed through the field welding library at:

<https://wisconsin.dot.gov/Pages/doing-bus/eng-consultants/cnsilt-rsroes/strct/fab-sharepoint.aspxun>

### Exceptions to CWI requirements for primary members:

- Shear stud welding with a stud gun
- Bearing sole plates welded to the steel girder flange
- Threaded rods welded on girder to install new expansion joints

### Contractor inspector submits form DT2320 daily to engineer

- Engineer reviews, signs, & puts into permanent project record
- Engineer uploads copy of DT2320 forms to BOS welding library

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## 8-10.5.4.1 Items Requiring Special Guidance

### Rebar not meeting AASHTO M31 bend tests

- Consult with the Bureau of Structures (BOS)
- May remain in place with a 20% price reduction
  - If conforming in all other respects
  - Not critical to performance

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# 2020 Spec Training

## Curb Ramp Construction Inspection and Documentation

**Wayne Chase, P.E.**  
BPD Construction Oversight Chief

[wayne.chase@dot.wi.gov](mailto:wayne.chase@dot.wi.gov)  
(608) 267-7774

**Gary Corcoran, P.E.**  
Roadway Design Standards Engineer

[gary.corcoran@dot.wi.gov](mailto:gary.corcoran@dot.wi.gov)  
(608) 264-9426

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## Why inspect and document curb ramp construction?

- Want to ensure compliance consistency
  - Lowers risk of non-compliance
  - High compliance = lower risk for lawsuits
- Our responsibility
  - Required by Americans with Disabilities Act (ADA)
  - Better pedestrian accessibility = fewer pedestrian issues/reduces crashes
- Compliance = Lower risk of DOJ lawsuits




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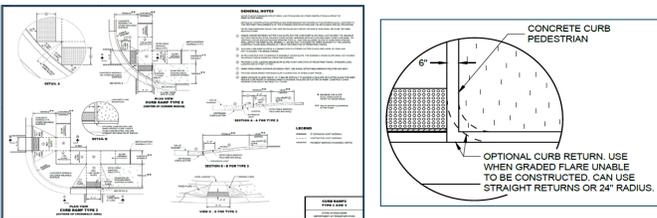
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## Curb Ramp SDD Changes

- Option to use curb returns and straight curb returns for Type 2 & 3 curbs ramps when a non-walkable terrace surface exists




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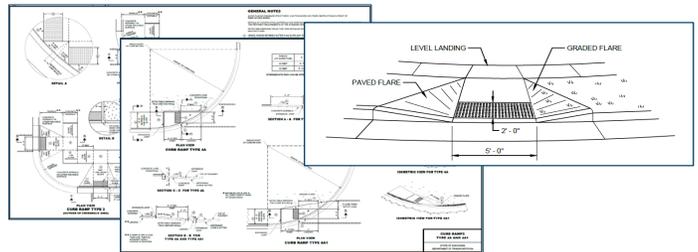
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## Curb Ramp SDD Changes

- Option to use 3-foot graded flares for Types 2, 3 & 4 curbs ramps when a non-walkable terrace surface exists




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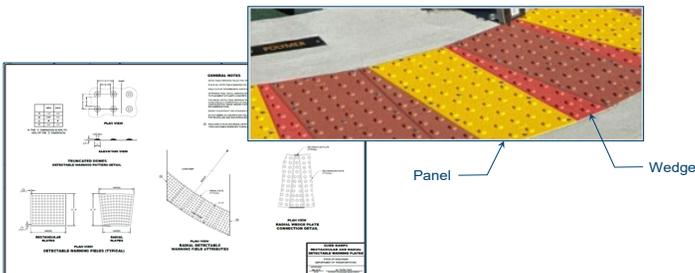
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## Curb Ramp SDD Changes

- Addition of panel/wedge detail for radial DWF's SDD




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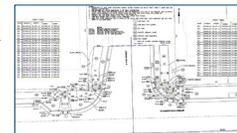
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## What is necessary to ensure compliance?

- Designers to provide accurate curb ramp construction details in plans
  - Curb ramp type
  - Curb ramp location
  - Spot elevations and grades
  - Dimensions
- Document "Technically Infeasible" curb ramps
  - Must show "max extent feasible" for design




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# 2020 Spec Training

## What is necessary to ensure compliance?

- Discuss curb ramps at Preconstruction Conference 
- Review all curb ramps 
  - Verify all curb ramps meet design standards as shown in plans
- Discuss any curb ramp issues with designer
  - Layouts that don't meet design standards
  - Differing field conditions that might affect curb ramp compliance
  - Potential missing curb ramps
- Curb ramp discussion requirement added to Preconstruction Conference form

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## What is necessary to ensure compliance?

- Verify all curb ramp layouts in field
- Check concrete forms prior to placing concrete
  - Chance to correct errors
  - Chance to adjust for differing field conditions
- Measure curb ramp attributes
  - Dimensions
  - Cross slopes
  - Grades




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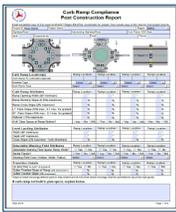
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## Compliance documentation process

- Document compliance for all curb ramps after construction
- Use curb ramp compliance report
  - Used for 2019 construction season
  - Had issues with entering latitude and longitude
  - May be replaced with electronic data entry system
  - Need to submit after curb ramp is constructed
  - Form documents curb ramp attribute values
  - Document any constructed curb ramps that do not match designs in plan set
  - Make sure to read instructions for using form




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## Compliance documentation process

- Reports sent to WisDOT Region Bike/Ped coordinators  → 
- Copy of forms sent to Central Office by WisDOT Region Bike/Ped coordinators  → 
- Data from reports entered in curb ramp database for use in tracking ADA compliance  → 

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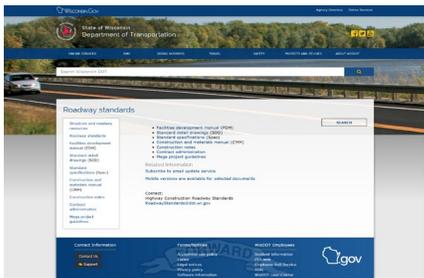
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## Roadway Standards Website

<http://wisconsindot.gov/Pages/doing-bus-eng-consultants/cnslt-rsrces/rdwy/default.aspx>




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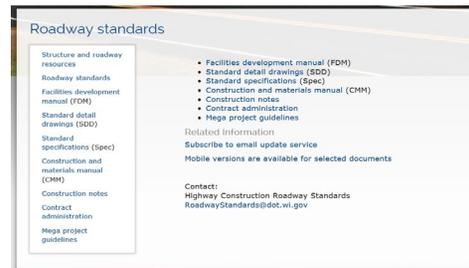
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## Roadway Standards Website




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# 2020 Spec Training

## Roadway Standards Website - Emails

Wisconsin Department of Transportation

**Subscribe to Roadway Standards email lists**

Sign up to receive email notification when we update the documents listed below. We will send brief email messages to let you know where you can view, download or get printed copies of our documents. We will also provide information of interest to subscribers to our various documents.

**Check the list(s) you wish to sign up for:**

- Facilities Development Manual (FDM)
- Standard Specifications (Spec)
- Construction and Materials Manual (CMM)

Do want you have selected one or more lists. Enter your email address and click "Subscribe."

You will automatically be sent a confirmation message to validate your email address. Follow the instructions in the confirmation message to complete the subscription process.

If you do not receive a confirmation message, something did not work correctly and you will need to try again. The most common reason for a problem is an incorrect email address.

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## Roadway Standards Website - Search

Roadway Standards Search

Structure and roadway resources

- Roadway standards
- Facilities development manual (FDM)
- Standard detail drawings (SDD)
- Standard specifications (Spec)
- Construction and materials manual (CMM)
- Construction notes
- Contract administration
- Mega project guidelines

The Roadway Standards custom search feature allows you to focus your search on content specific to the Roadway Standards. This custom search feature searches all Roadway Standards files (FDM, SDD, CMM, Standard Specifications, and Region Special Provisions) and excludes results from elsewhere on the WisDOT website to achieve higher search relevancy.

Search examples:

- **Any word:** productivity or tools
- **Exact phrase:** "productivity tools" or "productivity tools"
- **All words:** productivity and tools

Search Roadway Standards - all manuals

To search individual manuals, select from the following list:

- FDM
- SDD
- CMM
- Standard Spec
- Regions

For more information, contact: [RoadwayStandards@dot.wi.gov](mailto:RoadwayStandards@dot.wi.gov)

## Roadway Standards Website - Search

aggregate

About 300 results (0.18 seconds)

Sort by: Relevance

- 20 Spec - Section 730 GMP Base Aggregate
- 20 Spec - Section 305 Dense-Graded Base
- CMM 8-60 Materials Testing and Acceptance - Aggregates
- CMM 8-34 GMP - Aggregate
- 20 Spec - Section 301 Base, Subbase, and Subgrade Assemblies

The search reads the entire document looking for matches.

## Roadway Standards Website - Search

Construction and Materials Manual

Chapter 8 Materials Testing, Sampling, Acceptance

Section 34 GMP - Aggregate

8-34.1 Sampling and Testing

**Aggregate** sampling techniques and minimum sample sizes must be in accordance with the appropriate sample method. Use of larger samples should be considered by the QC staff to increase the probability of obtaining a representative sample. When split samples are required by the provision, the field sample size shown in [CMM](#) to be doubled.

**You must do a secondary search on the document**

Sampling During Production or Before Placement

8-34.1.1 To include before-placement testing and update details for stockpile testing.

For production or before-placement sampling required by the provision, the contractor can obtain samples from the finished product conveyor belt or stockpile. Obtaining samples from the belt discharge is acceptable if the full production stream can be obtained with sufficient rapidity and safety.

Production samples are taken during aggregate crushing and stockpile operations and can only be conducted or witnessed by QC personnel. Individual GMP provisions may allow for optional production testing as an alternative to in-place, stockpile or loadout samples before the beginning of a project. If production test results are submitted, documentation of random sampling must be provided.

Stockpile samples are taken after the contract is awarded, before placement and test results can be used for multiple projects within the GMP provision's specified timeframe. After aggregate placement begins, no additional stockpile samples are required for that project. Taking additional stockpile tests may be advisable depending on project circumstances. If a project is suspended for over six months, taking an additional stockpile sample on other non WisDOT projects or new material is added to the stockpile, taking a stockpile sample is advisable before resuming placement. If a project is suspended for over six months, taking an additional stockpile sample is advisable before resuming placement. Multiple stockpile tests for the same project and source are not required.

Selection of random sample locations must be in accordance with the GMP provision.

## What's New this Season?

Michael Hall, P.E.  
Standard Specification Editor  
[michael1.hall@dot.wi.gov](mailto:michael1.hall@dot.wi.gov)  
(608) 266-8461

## What's New - Design

### 2021 Specifications **NEW: for DESIGNERS – November 2020**

- New Bid Items
  - 460.xxxx HMA Pavement items
  - 531.xxxx Formerly 636.xxxx Concrete Sign Supports
  - 532.xxxx Formerly 641.xxxx Sign Structures
  - 603.8500 Anchoring Concrete Barrier Temporary Precast
  - 633.5350 Markers Permanent Flexible
  - 655.0142 Cable In Duct 4-2 AWG
- Retired Bid Items
  - 633.53xx Markers (Crossover and Median)
  - 634.041x Posts Wood 4x4-Inch x (10-FT to 18-FT)
- Renamed Bid Items
  - 502.3101 Expansion Device (structure)
  - 502.3111.S Expansion Device Modular (structure)
  - 603.8505 Anchoring Concrete Barrier Temporary Precast on Bridge Decks

# 2020 Spec Training

## What's New - Construction Specifications in ASP 6

### December 2019 Letting:

- Revise 104.3: to streamline the claims process and prescribe the format for the contractor 5-day written statement.
  - Revise 104.6.1.2.1(1): to specify flagging as required in Wisconsin Flagging Handbook.
  - Revise 104.6.1.2.2: to specify pilot vehicles as required in the Flagging Handbook.
  - Revise 104.8(2): to specify pay for material from outside excavation limits but in ROW.
  - Revise 104.10.1(1): to include WisDOT generated ideas needing contractor effort as potential CRIs.
  - Revise 104.10.1(5): to allow changes to temporary pavement type or subgrade improvement CRIs.
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## What's New – December ASP 6

- Revise 104.10.2: to prohibit adopting a contractor's CRI concept without sharing the savings.
  - Revise 104.10.4.2(1): to eliminate WisDOT price adjustment for the fair value of deleted work.
  - Revise 105.13: to streamline the claims process.
  - Revise 106.3.4.2.2.2 (1): to update F/T testing procedures as modified in CMM 8-60.2.
  - Revise 208.5(3): to specify pay for borrow from outside excavation limits but in ROW.
  - Revise 301.2.3(1): to update F/T testing procedures as modified in CMM 8-60.2.
  - Revise 301.2.4.5: to update F/T testing procedures as modified in CMM 8-60.2.
  - Revise 450.2.2(1): to update F/T testing procedures as modified in CMM 8-60.2.
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## What's New – December ASP 6

- Add 450.3.2.6.3: to establish compaction roller pattern determined by growth curve.
  - Revise 450.3.2.8(3)&(5): to define layer thickness requiring wedge joints and allow vibratory plate compactors for wedge joints.
  - Revise 455.2.5(1): to require tack coats with "h" suffix indicating a stiffer emulsion.
  - Revise 460.2.2.3(1): to add No.6 and revise SMA No. 5 gradations. (bid items)
  - Revise 460.2.7(1): to modify F/T tests in CMM 8-60.2; and add No. 6 mix & SMA min effective AC.
  - Revise 460.2.8.2.1.3.1(4): to specify the exact rather than minimum tonnage for testing.
  - Revise 460.2.8.2.1.4.2(1): to add more sieve sizes.
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## What's New – December ASP 6

- Revise 460.2.8.2.1.5(1): to add sieve sizes and specify VMA limits for No.6 mixes.
  - Revise 460.3.2(1): to add leveling and wedging layers and thickness for No. 6 mixes.
  - Revise 460.3.3.1(1): to specify compaction rather than density for No. 6 mixes.
  - Revise 460.3.3.2(3): to eliminate specifying tests per lot by tonnage.
  - Revise 460.5.2.1(6): to specify min or max VMA criteria.
  - Revise 501.2.5.5(1): to update freeze-thaw testing procedures as modified in CMM 8-60.2.
  - Revise 505.2.2, 505.2.3, and 505.2.4.1: to specify AASHTO M31, type S or type W steel.
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## What's New – December ASP 6

- Revise 505.2.6.1: to move "coat in a CRSI certified plant" to 505.2.6.2.2; applies only to solid bars.
  - Revise 505.2.6.2.2: to move "coat in a CRSI certified plant"; applies only to solid bars.
  - Delete 625.3.2(4): to remove requirements for Topsoil substitution and disposal of excess topsoil.
  - Revise 701.3.1(1) table 701-1: to specify consolidation by rodding for SAM air void testing.
  - Revise 715.2.1(5): to specify consolidation by rodding for SAM air void testing.
  - Revise 715.3.1.1(2): to specify consolidation by rodding for SAM air void testing.
  - Revise 730.3.1(3): to increase time allowed for stockpile tests.
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## What's New – December ASP 6

- Revise 730.3.2(4): to increase time allowed for reporting recycled asphalt test results.
- Revise 730.4.1: to revise test requirements for small quantity contracts <= 500 tons.
- Revise 740.3.2(3): to decouple ride segments from concrete sublots.

### What's New - ASP 6 Errata

- 104.6.1.2.3(1) Drop-Off and Hazard Protection
    - Change 2 inches or greater to greater than 2 inches
  - 305.3.3.3(2) Shoulders Adjacent to Asphaltic
    - Change 2 inches or greater to greater than 2 inches
  - 614.3.6(2) Thrie Beam Structure Approach Retro Fits
    - Delete redundant galvanization reference
  - 628.3.7 Mobilizations for Erosion Control
    - Mobilize means promptly proceed with construction
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# 2020 Spec Training

## 2020 Contract Administration

**Wayne Chase, P.E.**  
BPD Construction Oversight Chief

[wayne.chase@dot.wi.gov](mailto:wayne.chase@dot.wi.gov)  
(608) 267-7774

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## Timely Decision Making

<https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/admin.aspx>

- Meeting agendas
- Lines of communication
- Designated materials person
- Look-ahead schedules
- RFIs

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## Critical Inspection Guide

<https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/default.aspx>

- Not one-size-fits-all
- Continue to strive for the right-sized staff with the appropriate experience
- Inspection = If you see something, say something!  
Be pro-active.

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## WisDOT & Industry Workgroups

### 2019

- Claims Process
- CRI Process
- Trans 220

### 2020

- Construction Quality
- Cost Savings
- DBE Good Faith Effort

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## Miscellaneous

- Contractor Notification (104.3) & Claims Process (105.13)
  - Specs completely re-written, shortened process, contractor written statement format
- Change Orders
  - Deal with contract time when the change order is written – not at the end of the project

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## Miscellaneous

- CRI's
  - CRI Validation team
- Retainage
  - Shouldn't hold more retainage than necessary

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# 2020 Spec Training

## Aggregate Source Management



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## Aggregate Source Management

- When it isn't done well?



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## Follow the Spec Requirements See 305.2.2.2



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## Protect the Work!



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## FHWA

- HMA Tack Coat -- Project Review
  - 9 projects reviewed
  - Specifications for prep and application of tack coat were met
  - Off-site tracking of tack coat was observed on 2 projects
  - Appropriate inspection was provided
- FHWA Form 1273 – Needs to be physically included in all subcontracts, not referenced



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# 2020 Spec Training

FHWA-1212 - Revised May 1, 2012

**REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS**

I. General

II. Non-discrimination

III. Nondiscriminatory Facilities

IV. Construction and Related Air Provisions

V. Contract Work Hours and Safety Standards Act Provisions

VI. Subletting or Assigning the Contract

VII. Safety: Accident Prevention - Regulatory Provisions

VIII. Public Statements Concerning Regulatory Provisions

IX. Implementation of Clean Air Act and Federal Water Pollution Control Act

X. Compliance with Governmentwide Suspension and Debarment Requirements

XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Program, System or Appalachian Local Access Road Contracts (Included in Appalachian contracts only)

**GENERAL**

1. Form FHWA-1212 must be physically incorporated in each construction contract funded under Title 23 (existing and emergency contracts) and incorporated by reference in each subsequent contract scope intended to be awarded later. The contractor or subcontractor must insert this form in each subsequent contract scope, insert agreements for other agreements for supplies or services.

2. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of program payments, or revocation of final payment. Revocation of the contract, suspension, termination or any other action deemed to be appropriate by the contracting agency and FHWA.

3. Selection of Labor: During the performance of this contract, the contractor shall not use bonded labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by persons who are employed, supervised, released, or probation. The term Federal-aid highway does not include roadways traditionally classified as local roads or rural minor collectors.

4. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 232 are applicable to all Federal-aid construction contracts, and shall remain in effect for all contracts awarded on or after the effective date of 23 CFR Part 232 and not applicable to material locally engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following general contract order 1246, 41 CFR 63.29 CFR 102-102-1027, Title 23 USC Section 140, the Federal Acquisition Regulation (48 CFR 101-11.6), the US of the Civil Rights Act of 1964, as amended, and related regulations including 23 CFR Parts 21, 23 and 27, and 23 CFR Parts 200, 205, and 633.

The contractor and all subcontractors must comply with the

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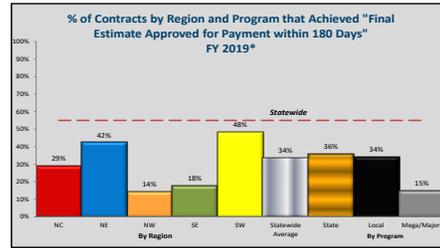
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## Construction Finals




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## 2020 Erosion Control Standard Specification Updates

- 628.5.11/12 – Failure to mobilize**
- Updated from \$300 to \$500 daily deduct
- 630.0500 – Seed Water**
- Water required if rainfall not sufficient after seed germination

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## Erosion Control – Form Updates

- All forms updated
  - WS 1072 (inspection)
  - WS 1073 (ECIP)
  - WS 1074 (order)
- Now "DT" forms
- All updated to enable electronic completion
- Minor updates to 1072 and 1074
- Bigger updates to 1073

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## Erosion Control – Form Updates

- DT 1072 (inspection)
  - Added a location for general comments
  - Added common erosion control practices (rock bags, culvert pipe checks, tracking pads, dewatering, bypass pumping)
  - Provided greater detail for communicating inspection
- DT 1074 (order)
  - \$300 daily deduct changed to \$500 to match Standard Spec 628.5.11/628.5.12

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## ECIP Update – DT 1073

- Electronic format
- Sections A and B minor changes
- New section C – Pollution Prevention

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# 2020 Spec Training

## Section C – Pollution Prevention

- New section
- Designed to meet TCGP
- Straightforward Best Management Practice (BMP) checkboxes
- Required on all projects with an ECIP
- Can be amended similar to other ECIP sections
- Most notable requirement – contractor required to manage concrete truck washout

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## Erosion Control Training

- WisDOT developed web based training
- WisDOT Learn Center
- New modules to be posted soon:
  - Water Diversion/Dewatering
  - Construction Recordkeeping
  - ECIP 101
  - Erosion control inspections

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## 2020 Field Software Updates and Changes

**David Castleberg, P.E.**  
 Design & Construction Technologies Supervisor  
[david.castleberg@dot.wi.gov](mailto:david.castleberg@dot.wi.gov)  
 (608) 264-7606

AASHTOWare Project Administrators:  
 Annette Czerneski, [annette.czerneski@dot.wi.gov](mailto:annette.czerneski@dot.wi.gov), 715-421-7319  
 Adam Bleskacek, [adam.bleskacek@dot.wi.gov](mailto:adam.bleskacek@dot.wi.gov), 715-833-5574

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## 2020 PC Special Provisions – Construction

- Located on the WisDOT Internet site at: <https://wisconsindot.gov/Pages/doing-business-with-us/contracts/con-docs.aspx>
- No hardware changes
- Software changes
  - Windows 10 professional 64-bit only
  - Microsoft .NET Framework, ver 4.6 min
  - Adobe Acrobat DC, Bluebeam, or similar
- Computers must meet the minimum specifications for new installations

**SPECIAL PROVISION REVISIONS FOR 2020 CONSTRUCTION ENGINEERING CONTRACTS**  
 Field Office Computer Requirements - Revised 1/19/2019

**Field office minimum hardware and software requirements:**  
 The CONSULTANT shall be responsible to provide the field office with a computer or laptop and printer which meet the following minimum specifications:

**Hardware requirements for FieldManager and FieldBook workstations**

- 2" or greater monitor
- 8 GB RAM minimum
- 20 GB free disk space on the C: drive for the installation of DEPARTMENT software
- Backup storage device (e.g. USB drive) to backup field software databases for disaster recovery purposes
- Ethernet or wireless network adapter to communicate with DEPARTMENT and AASHTOWare servers

**Software requirements:**

- Microsoft Windows 10 Professional 64-bit
- Microsoft .NET Framework version 4.6 minimum
- Microsoft Office 2016 or Office 365 (only Word and Excel are required)
- Adobe Acrobat DC (bluebeam or adobe product)
- Antivirus software with up-to-date definition files to protect the computer
- Internet and e-mail access are required. CONSULTANT shall provide the project leader's e-mail address.

The DEPARTMENT region office will provide and support the following software for the duration of the CONTRACT. After the completion of the CONTRACT, the CONSULTANT is required to contact the DEPARTMENT region office to remove the software:

- AASHTOWare Project FieldManager™, FieldBook™ and/or Mobile Inspector™ for smartphones and tablets
- Field Information Tracking System (if AASHTOWare Project FieldManager is installed)
- Microsoft Information Tracking System (if required by the DEPARTMENT region office)
- Links to the AASHTOWare Project Knowledge Base (able to access Field software and FORMS) DEPARTMENT spreadsheets and documents for administration and record keeping

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## AASHTOWare Project Knowledge Base (AWPKB)

- Was developed for users of one or more of the AASHTOWare Project™ web based applications including Preconstruction, Construction & Materials, and Civil Rights & Labor.
- Modeled after the Civil 3D Knowledge Base (C3DKB) so users have a familiar web experience.
- Supported on multiple platforms – Computers, tablets, and smartphones
- Provides detailed documentation, training videos, program downloads, external resources, and a FAQ section.
- Has an internal search engine.

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## AASHTOWare Project Knowledge Base (AWPKB)

- The site provides guidance for designers creating an engineer's estimate and a proposal for PSE submittal.
- All the future Construction module documentation will be located on this website.
- See the Preconstruction Summary of Changes or Construction Summary of Changes for a list of recent site updates related to these support areas.
- AWPKB URL - <https://awpkb.dot.wi.gov/Content/Default.htm>

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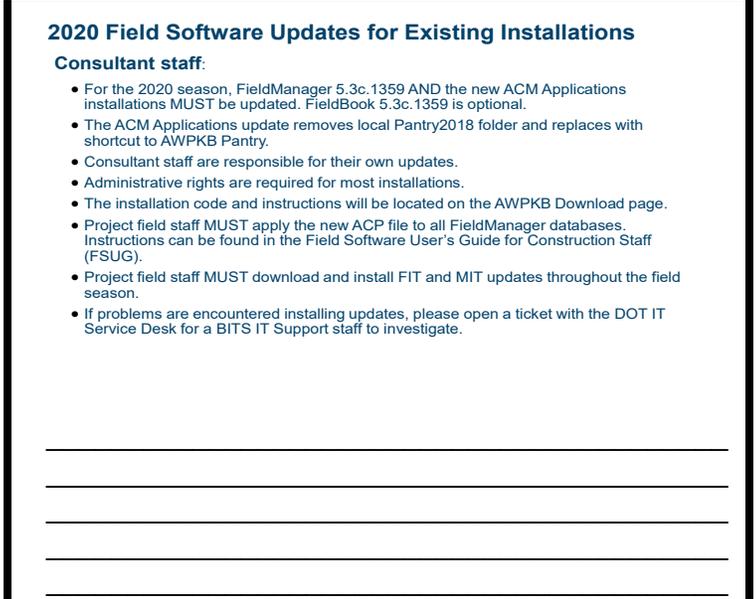
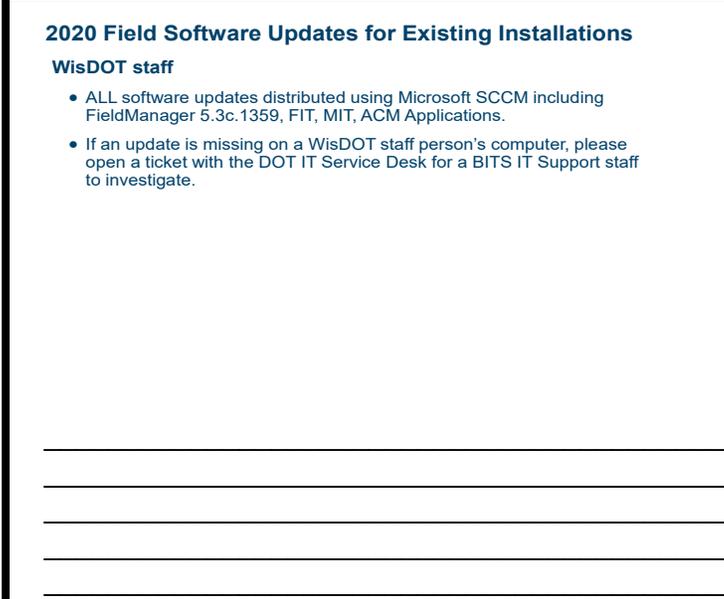
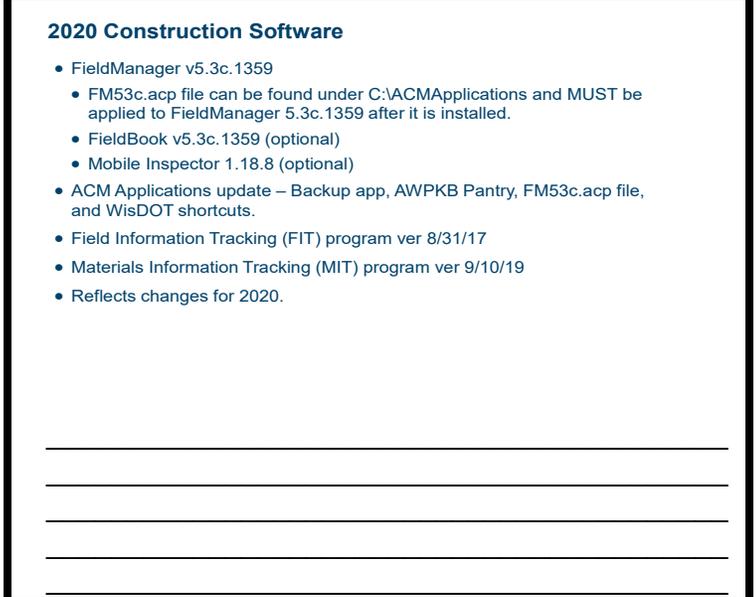
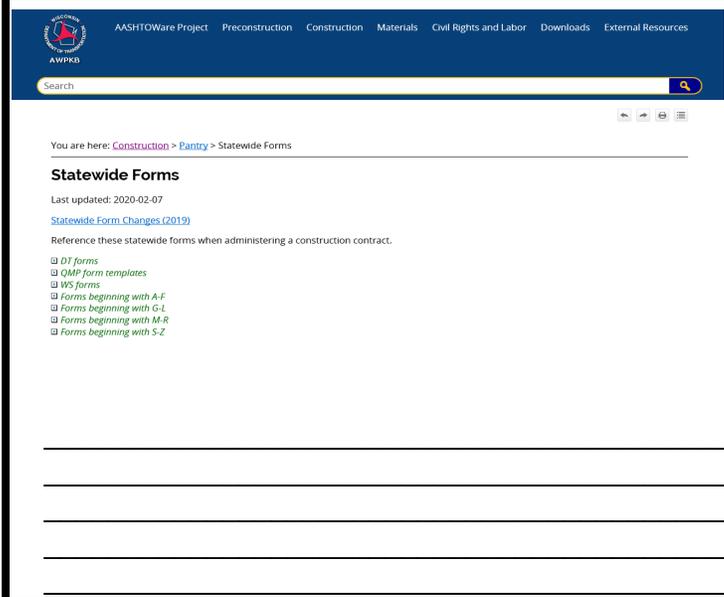
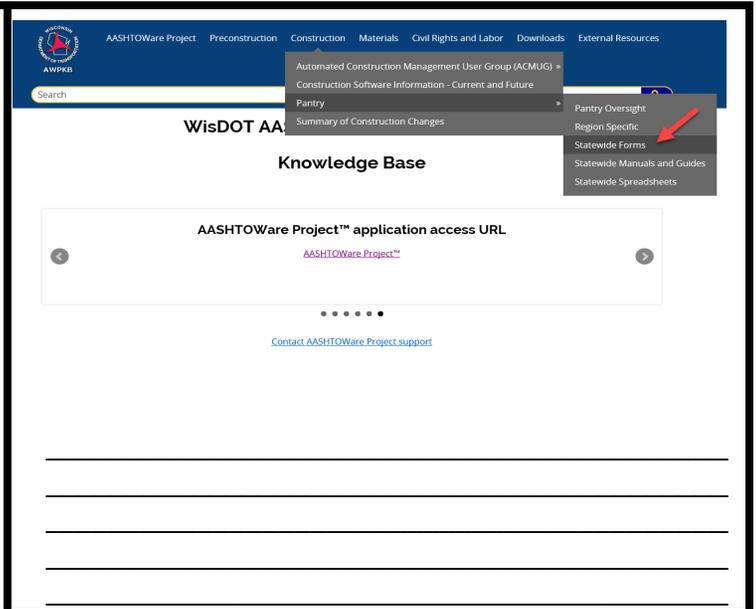
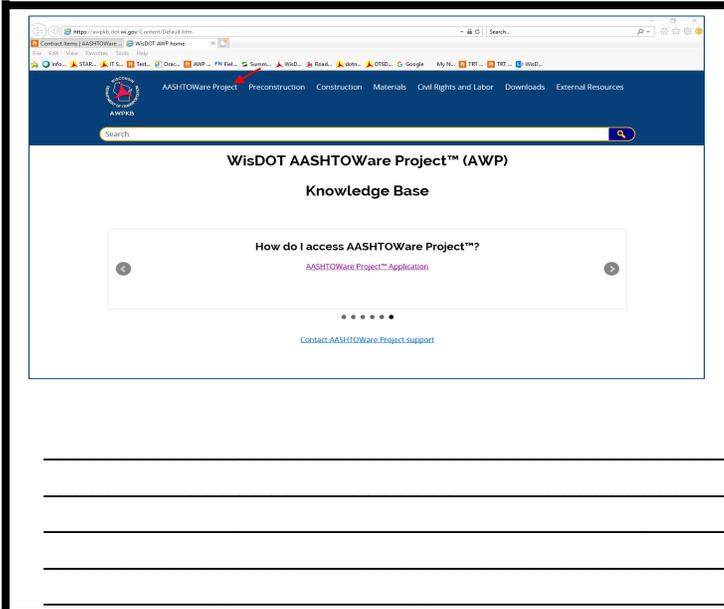


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# 2020 Spec Training



# 2020 Spec Training

## 2020 Field Software for New Installations for All Staff

- Contact the DOT IT Service Desk to schedule an appointment with a BITS IT Support.
  - Call (800) 362-3050 or (608) 266-9434
  - Email [dotitservicedesk@dot.wi.gov](mailto:dotitservicedesk@dot.wi.gov)
  - Available Monday – Friday from 6 a.m. – 5:30 p.m.
- BITS IT Support staff will install the following software for both WisDOT staff and consultants:
  - ACM Applications – WisDOT Shortcuts, ACP file, AWPKB Pantry shortcut and backup software.
  - FieldManager 5.3c.1359 and/or FieldBook 5.3c.1359
  - Current version of Field Information Tracking (FIT) program ver 8/31/17
  - Current version of Materials Information Tracking (MIT) program ver 9/10/19
  - Project field staff MUST apply the new ACP file to all FieldManager databases.

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## Field Software User's Guide for Construction Staff (FSUG)

- Statewide guide for construction project engineers and support staff.
  - Provides user guidance for FieldManager, FieldBook, FIT, and MIT.
  - Mobile Inspector installation and configuration plus user guidance.
  - Backup options and procedures.
  - Support contacts listing.
- References region specific construction administration guide for further guidance from the region office.
- Updated throughout the year and available online on the AWPKB site <https://awpkb.dot.wi.gov/Content/constr/PantryFiles/StatewideManualsAndGuides/FieldSoftwareUsersGuideForConstructionStaff.pdf>

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## Contract Administration Support

Region Project Managers and Contract Specialists are your 1<sup>st</sup> line of contact for contract questions and issues:

- Contract modifications.
- Estimates.
- Site time and events.
- Liquidated damages.
- Retainage issues.
- Adding projects, categories, or sites to a contract.

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## AASHTOWare Project System Administration Support

The AASHTOWare Project Administrators, Annette Czerneski and Adam Bleskacek, are your 1<sup>st</sup> line of contact for the following issues:

- Bad contract transfers.
- Missing vendors, items or other reference data.
- Data sync issues between FieldManager and AWP Project CAS.
- Mobile Inspector support.

The region Project Manager and Contract Specialists may elevate issues to the AASHTOWare Project Administrators.

AASHTOWare Project Administrators:  
Annette Czerneski, [annette.czerneski@dot.wi.gov](mailto:annette.czerneski@dot.wi.gov), 715-421-7319  
Adam Bleskacek, [adam.bleskacek@dot.wi.gov](mailto:adam.bleskacek@dot.wi.gov), 715-833-5574

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## FieldManager Site Events

- WisDOT uses site events to suspend Time and Work on WORKING DAY CONTRACTS ONLY!
  - Time Suspended / Time Resumed - Used to temporarily suspend time on carry over contracts and avoid charging liquidated damages.
  - Work Suspended / Work Resumed - Used to document suspension of work on carry over contracts only. Has no effect on liquidated damages.
- The entry of a Suspend event REQUIRES the entry of a Resume event. Failure to do this will cause issues when the next estimate is sent.
- FieldManager site events do not work correctly with Calendar Day or Completion Date contracts in CAS and FieldManager. For these types of contracts, the PL should either:
  - Extend time using a contract modification.
  - Have your contract specialist enter a maximum liquidated damages rate based on the (number of days to charge) x (liquidated damage rate per day).

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## FieldManager Site Times

- Before sending an estimate, review all contract sites to ensure that the number of days or completion dates are not exceeded on the site.
- If time is exceeded, a time extension contract modification may be required to reduce or eliminate liquidated damages.
- If the time charges stop date is entered incorrectly or the number of days charged to date is incorrect, contact your Project Manager and Contract Specialist for assistance.
- If you have a contract with mixed sites (a completion date contract with interim working day or calendar day sites), work with your Project Manager and Contract Specialist throughout the life of the contract to ensure liquidated damages are calculated correctly.

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# 2020 Spec Training

## FieldManager Contract Modifications

- Contract modifications are used to add new items to a project, move items from one project or category to another, increase/decrease items quantities, or add time to a contract.
  - Contact your region Contract Specialist if you need to add a new project with categories, contract site, change a contract site time, or change the retainer. Categories cannot be added to existing projects.
  - Merge and send FIT data each time you change the status of a contract modification to keep CAS and Project Tracking up-to-date.
  - Approval process is based on region specific guidelines.
  - When generated, item quantity changes can be included on IDRs but will not be included on an estimate until the contract modification is approved.
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## FieldManager Contract Modification Approval Process

- **Draft** - Cont Mod is in this status during the initial creation and editing mode
    - <Save> or <Save/Close>
    - No files in the FieldManager Outbox
    - FIT Merge and Send will create cont mod record in Project Tracking
  - **Pending Approval** - Ready to print and obtain signatures
    - <Generate>
    - Respond NO to "Does this require supervisor approval?"  
**Note:** If YES is selected, contact the AASHTOWare Project Administrators for assistance.
    - Confirm there are 2 messages in outbox before sending
  - **Approved** - Change to approval status after all signatures are obtained (and region procedures completed)
    - <Approve>
    - Confirm there is 1 message in FieldManager outbox before sending.
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## FieldManager Negative Estimates

- If the quantities are incorrect, do not generate the estimate! Close the estimate and make the corrections in the IDRs. Regenerate the IDRs and recreate the estimate.
  - If the total dollar amount of the estimate is a negative amount, contact your Project Manager or Supervisor **prior** to generating and sending the estimate. Discuss how to handle this estimate with a negative payment.
    - **Intermediate Estimates** - In most cases, these should not be negative. If possible, do not generate the estimate until there are enough work items to create a positive payment.
    - **Semi Final Estimates** - In most cases, these should not be negative, unless there will be enough retainage to later cover the negative amount with the final estimate.
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## FieldManager Estimate Considerations

1. **Notice to Proceed** date MUST appear PRIOR to generating the first estimate. Check Contract Documentation (Docu button / General tab). See page 6 of FSUG for details.
  2. **Estimate Comments** are REQUIRED.
    - **REQUIRED for the Bureau of Financial Management and must be entered first** - Date range of work completed or FY.  
Examples: MM/DD/YYYY to MM/DD/YYYY  
FY20 (July 1, 2019 – June 30, 2020)  
FY21 (July 1, 2020 – June 30, 2021)
    - Estimate comments are required for **ALL** estimate types including intermediate, semi-final and final.
    - The region may require other comments but there is a 60 character limit on the estimate/voucher report. Comments that exceed 60 characters will be truncated.
  3. **Review Sites**
    - Check each **Site's Time Charges Start and Stop Dates** to avoid liquidated damages.
    - Is a **contract modification** necessary to extend contract time and avoid liquidated damages?
    - Is a **Site Event** required to suspend or resume time on a working day contracts only prior to estimate creation?
  4. **IDRs and Daily Diaries** MUST be generated prior to creating an estimate.
  5. **Retainer reduced?** Contact the CS prior to creating an estimate.  

**ALWAYS Communicate** with your PM and CS when creating an estimate to avoid estimate errors.
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## FieldManager Common Issues

Additional guidance has been added to the Field Software User's Guide for Construction Staff (FSUG) for these common issues:

- **Net Change Amount Issues on Contract Modifications:**  
Sometimes when contract revisions are made, the net change dollar amount of the contract modification may not match the total for the item changes for all projects.
  - **Removing Lump Sum Items from a Contract**
  - **Guidance for Delayed Contracts:** Contracts that cannot be completed until the following spring.
  - **Processing Contract Modifications with Site Time Extensions**
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## FieldManager Backup

- Prompt appears after logging out of FieldManager database 10 times.
  - This process backs up the FieldManager database only.
  - First copy stored on local C: drive.
  - Can save an additional copy on external backup device.
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# 2020 Spec Training

## FieldManager, FIT and MIT Database Backup Process

- WisDOT RECOMMENDS weekly backups!
- This process backs up ALL field application databases.
- Steps to setup on an external device appear in the Field Software User's Guide for Construction Staff.
- Store the backup device offsite.

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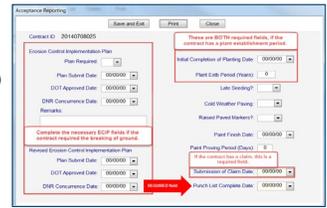
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## Field Information Tracking (FIT) - Required Fields

- DQI information for each project.
- Explanation of Variation report - Item variation entered in FieldManager under the Project Items | Documentation tab.
  - Notes field - Explanation for the variation between the quantities.
- Acceptance Reporting.
  - Punch List Completed Date
  - ECIP Information (if required)
  - Plant Establishment Periods (if required)
  - If a claim is submitted, Submission of Claim Date is required.
  - Other fields as required.
- Staff / Field Office information.
- Warranty information, if applicable.




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## Field Information Tracking (FIT) – Merge and Send FIT Data

Requirements to merge and send data:

- When the ECIP is approved.
- When contract time starts.
- When a contract modification is **created**.
- When a contract modification is **approved**.
- When work is completed on the contract.
- When a DQI report is completed.
- When an estimate is submitted.
- When claim is submitted.
- When the punch list is completed.
- When entries are made on the Staff / Field Office tab.
- Weekly, at a minimum, for labor compliance reviews.

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## Project Tracking - WPDES General Permit Dates Wisconsin Pollutant Discharge Elimination System

- General Permit issued by DNR
- Only required for projects with an acre or greater of ground disturbance.
- Permit request submitted by designer at DNR final concurrence (online e-permitting system).
- NOT is submitted by construction team at 70% permanent vegetation establishment (PDF form and instructions are located in AWPBK Pantry).
- Project Manager to notify Contract Specialist
  - Permit Coverage Start Date
  - Notice of Termination Date
- If the permit is required, the dates are entered in Project Tracking.




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## Transferring FieldManager and FIT Contracts

In some regions, Project Engineers may be asked to transfer their FieldManager contract to a Project Manager or a region Finals PC before the semi-final or final estimate has been submitted.

THESE STEPS MUST BE FOLLOWED TO ENSURE FIT CONTRACT DATA IS NOT LOST:

1. Send and receive FieldManager mail.
2. Backup FieldManager and FIT databases.
3. Transfer FIT contract.
4. Transfer FieldManager contract.
5. Import FieldManager contract.
6. Import FIT contract.

See pages 35-37 of the Field Software User's Guide for Construction staff for detailed instructions.

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## Archiving FieldManager Contracts

Each region handles the FieldManager contract archival process differently. Work with your Project Manager and Contract Specialist to ensure you are completing the correct steps.

Regions where the Project Engineer or Project Manager archive contracts:

1. Contact your contract specialist to ensure you are ready to archive your FieldManager contract.
2. Send and receive FieldManager mail.
3. Merge and send FIT contract data.
4. Archive FieldManager contract.

Detailed instructions for archiving a contract can be found on page 40 of the Field Software User's Guide for Construction Staff.

Regions that DO NOT have the Project Engineer archive contracts should follow the Transferring a Contract to Another FieldManager Computer steps on pages 34-36 of the Field Software User's Guide for Construction Staff.

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# 2020 Spec Training

## Mobile Inspector™

- Developed by InfoTech Inc.
- Purpose.
- Field staff use the app to create IDRs.
- Locked IDRs auto sync with the FieldManager contract PC.
- Staff can take photos and attach them to the IDRs.




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## Mobile Inspector™

- Other efficiencies using a mobile device.
  - Standalone versions of the CMM and Standard Spec are available.
  - Access to email.
- Supported devices
  - Apple iOS 8 or higher smartphones and tablets.
  - Android 5.x or higher smartphones and tablets.
  - Windows 10 tablets.

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## Mobile Inspector™ - Licensing

- Download free app
- WisDOT pays an annual license fee for the AASHTOWare Project SYNC Service™ license.
- The installation and configuration steps for Mobile Inspector plus the user guide are located in Field Software User's Guide for Construction Staff on pages 44-46.
- Contact Adam Bleskacek or Annette Czerneski for assistance.




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## Mobile Inspector™ - Initial Setup

### Mobile Device

- Download and install Mobile Inspector on the device. Note the Mobile Inspector Device ID.



### FieldManager

- Install Bridge Communication software within FieldManager.
- Register CMS ID with InfoTech.
- Add users and enter Mobile Device ID for each user.
- Associate users to contract.




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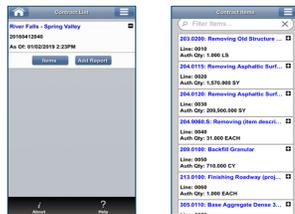
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## Mobile Inspector™ - Contract Items

- Open Mobile Inspector application to access available contracts.
- Click <Items> to see a list of Contract Items.




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## Mobile Inspector™ - Add IDR

- Click <Add Report>
- Required data entry: IDR date, weather and remarks.
- Optional: Attachments.
- Saved automatically.




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# 2020 Spec Training



## Mobile Inspector™ - Add Postings

- Click the <Postings> button
- Required data entry: Item, quantity, location or station, and remarks.
- Click checkmark to save.




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## Mobile Inspector™ - Add Equipment

- Click the <Equipment> button
- Select contractor, type of equipment, number of pieces of equipment, and hours used.
- Click checkmark to save.




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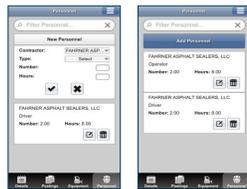


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## Mobile Inspector™ - Add Personnel

- Click the <Personnel> button
- Select contractor, type of personnel, number of personnel, and hours worked.
- Click checkmark to save.




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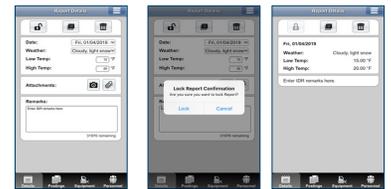


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## Mobile Inspector™ - Lock Report

- Highlight the IDR.
- Click the <Lock> button at the top of the Report Details window.
- Click <Lock> on the Lock Report Confirmation window.
- A report cannot be unlocked or edited in Mobile Inspector.




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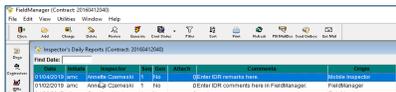


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## Mobile Inspector™ - FieldManager

- The Mobile Device must be connected to a cellular or wireless network to upload locked IDR(s) to the cloud.
- Open FieldManager to autostart the Bridge Sync Service. This will download the locked IDR(s) from Mobile Inspector.
- Open the IDR list. The IDR origin field will denote where the IDR was created. Mobile Inspector IDRs can be updated in FieldManager.




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## AASHTOWare Project Implementation

**David Castleberg, P.E.**  
 Design & Construction Technologies Supervisor  
[david.castleberg@dot.wi.gov](mailto:david.castleberg@dot.wi.gov)  
 (608) 264-7606

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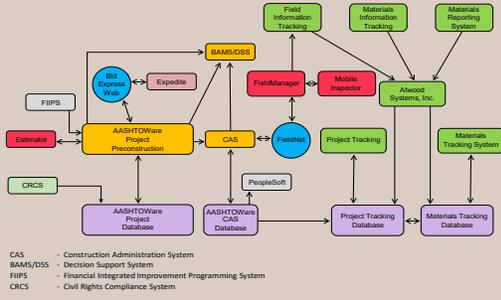
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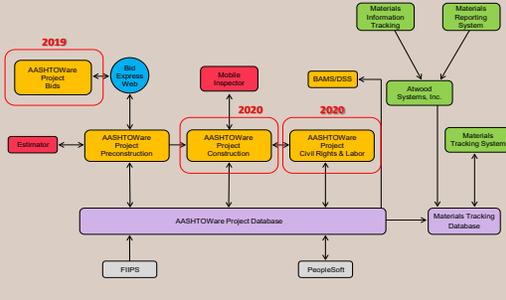
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# 2020 Spec Training

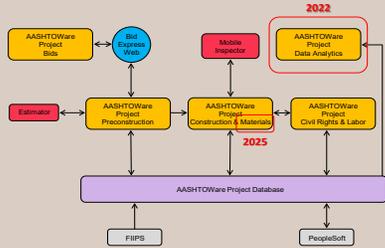
## WisDOT Contract Management System - Current



## WisDOT Contract Management System – Future Phase 1



## WisDOT Contract Management System – Future Phase 2



## Overarching Benefits of AASHTOWare Project

- Continuity of a unified database, starting with Preconstruction, including, Construction & Materials, and Civil Rights & Labor modules.
- Reduction of the number of interfaces, forms, and reports.
- Streamlined data access to AASHTOWare Project Construction™.
- External access for contractors to manage tasks.



## Overarching Benefits

- Compliance in WisDOT's continued eConstruction goals and objectives.
- Highly configurable for expansion and growth into the future as new requirements evolve.
- Increased IT efficiency in administration and maintenance of fewer systems, interfaces, and peripheral applications.
- Integration of Mobile Inspector™ for Daily Work Reports.



## AASHTOWare Project (AWP)

### Current implementation status

- AWP Preconstruction in production for 3+ years.
- AWP Bids in Production since June 2019.
- AWP Civil Rights & Labor in configuration stage.
- AWP Construction in configuration stage.
- AWP Materials beginning implementation.



# 2020 Spec Training

## AASHTOWare Project Civil Rights & Labor

### Implementation of AWP Civil Rights & Labor (CRL)

- Web Based with external access for contractors
- Replaces Civil Rights Compliance System (CRCS)
- DBE, Trucking, OJT, Labor Compliance
- Will conduct a pilot with contractors.




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## AASHTOWare Project Materials

### Implementation of AWP Materials

- Web Based with external access for consultants, and contractors
- Replaces Materials Information Tracking, Materials Reporting System and Materials Tracking System
- Tentative production 2025




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## AASHTOWare Project Construction

### Implementation of AWP Construction

- Web Based with external access for consultants, contractors and FHWA
- Replaces CAS, FieldManager, FieldBook, FieldNet, Field Information Tracking and Project Tracking
- Connects to Mobile Inspector app for Daily Work Reports (IDRs)




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## AASHTOWare Project Construction

### Implementation of AWP Construction - Continued

- Configuration changes – Completing now
- Test of User Roles – February
- Pilot Test Spring/Summer 2020
- User set-up Summer/Fall 2020
- Training Fall/Winter 2020
- Production Date – Winter 2020/21




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## 2020 Construction Standards Update

For a full size copy of the presentation slides go to the Roadway Standards Contract Administration page at:

<http://wisconsin.dot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/admin.aspx>

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For assistance, contact the WisDOT AASHTOWare Project System Administrators at [AWPSupport@dot.wi.gov](mailto:AWPSupport@dot.wi.gov)  
Version 4.2 Revision 026

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