## FDM 19-10-1 Transmittal of Let Project PS&Es

November 15, 2021

This procedure describes the requirements for transmitting a let project PS&E to central office. Guidance for LFA agreement PS&Es is in <u>FDM 19-25-5</u>. <u>FDM 19-1-1.4</u> contains additional information relating to PS&E submittal timing for WisDOT and non-WisDOT projects. Direct questions to the Plans & Estimates Specialist at (608) 266-1020.

A let project PS&E transmittal consists of an electronic submittal consisting of all required exhibits and must be sent to the BPD using eSubmit.

## 1.1 Accessing eSubmit

To access the WisDOT eSubmit Application you must have both of the following: 1) A valid Wisconsin User ID in the Web Access Management System (WAMS); and 2) Authorization from WisDOT.

### 1.1.1 Creating a Wisconsin User ID

To create a WAMS ID, go to:

https://on.wisconsin.gov/WAMS/SelfRegController

and follow the instructions. Individuals, not companies, are associated with the WAMS IDs.

### 1.1.2 Requesting Authorization from WisDOT

After creating your WAMS ID, send an email requesting eSubmit access to <a href="mailto:david.domabyl@dot.wi.gov">david.domabyl@dot.wi.gov</a> and <a href="mailto:eric.arneson@dot.wi.gov">eric.arneson@dot.wi.gov</a>. Include your full name and phone number in your request. Consultants requesting eSubmit access must also include a 2-sheet ePlan PDF with their request. Sheet 1 must be a title sheet created from scanned hardcopy. Sheet 2 must be a plan & profile sheet created from your CAD system. Both sheets must comply with <a href="mailto:FDM\_15-5-10">FDM\_15-5-10</a>. If you have a valid ID, and (consultants only) the 2-sheet ePlan complies with the FDM, you will be granted eSubmit access, and a confirmation will be emailed to you.

IMPORTANT: All electronic exhibits must be free of viruses. If an infected exhibit is submitted, the submitter will receive a confirmation that it was sent. However, it will be immediately and automatically deleted and will not be accessible by WisDOT staff.

#### FDM 19-10-5 Final Review

November 15, 2023

This procedure reviews steps that should be completed prior to PS&E submittal.

#### 5.1 Approval of Plans

The title sheet of the plans should have all the required signatures and stamps, indicating that the plans have gone through all necessary approvals. See <u>FDM 15-1</u> Table 10.2 for plan preparation, acceptance, and approval requirements.

### 5.2 Cost Effectiveness Finding

When a local unit of government is to construct a highway project with its own forces and equipment under a LFA agreement, a CEF shall be approved prior to submittal of the PS&E. The CEF is covered under <u>FDM 3-5-10.9</u>.

### 5.3 Hazardous Materials

The remediation of hazardous materials should be completed, and project location certified as either within acceptable limits or free of contamination prior to letting the contract to bids where practicable. If remediation during construction would be advantageous, every effort should be made to plan for efficient coordination with construction operations. See FDM 21-35-20.

# 5.4 Right of Way and Encroachments

The acquisition of all right of way, including PLE, TLE construction permits and right of entry, should be completed prior to submittal of the PS&E.

The disposition of all encroachments should also be determined prior to submittal.

See FDM Chapter 12 or the Real Estate Program Manual for detailed information.

#### 5.5 Permits and Environmental Documents

All permits and environmental documents necessary to construct the contract should be completed prior to submittal of the PS&E. See FDM Chapter 20 for detailed information.

#### 5.6 Utilities and Railroads

Utility and railroad agreements, utility and railroad land interests and arrangements for moving utilities should be complete prior to submittal of the PS&E. See FDM Chapter 17 and FDM Chapter 18 for detailed information.

#### 5.7 Justifications

Justifications for cattle passes or other exceptional items should be cleared prior to submittal of the PS&E. Non-standard items or requirements that do not require formal approval are to be addressed in the Plan Letter.

## **5.8 Proprietary Products**

The use of proprietary products in a contract should be approved prior to the submittal of the PS&E and is documented in project files at the Region. See <u>FDM 19-1-5</u>.

## 5.9 Constructability Review

Questions or comments about Constructability Reviews should be directed to Bureau of Project Development Construction Standards Oversight and Program Section Chief.

Constructability reviews are intended to improve the effectiveness of a set of plans and specifications by having those with construction expertise participate in the review. It is generally good practice to conduct these reviews as part of the preliminary plan review. However, a review at the time of PSE can identify issues that can be addressed prior to advertisement of the proposal. Those involved in constructability reviews should be reviewing issues that affect the ability for contractors to understand the plans and specifications well enough to provide well informed bids and meet the Department requirements during construction. Reviewers should also be considering whether the plans and specifications are allowing the contractor to perform the work in the most efficient manner possible, while delivering a high-quality product. Those conducting the reviews should have knowledge of construction practices and the ability to make independent cost estimates of the work elements. If a project has an issue that can benefit from industry input, but does not justify extensive overall review, the local construction industry expertise should also be used.

The AASHTO Subcommittee on Construction has defined the "Constructability Review" as "a process that uses construction personnel with extensive construction knowledge *early in the design stages* of projects to ensure that the projects are buildable while also being cost-effective, biddable, and maintainable."

An effective constructability review process should assure that:

- 1. The project, as detailed in the plans and specifications, can be constructed using standard construction methods, materials and techniques;
- 2. The plans and specifications provide the contractor with clear, concise information that can be utilized to prepare a competitive, cost-effective bid; and
- 3. The work when constructed in accordance with the plans and specifications will result in a project that can be maintained in a cost-effective manner by the agency over the life of the project.

It is recommended that constructability reviews be used on most reconstruction and expansion improvement types and considered for other improvement types, especially if new or rarely used construction technique or material are being implemented.

For further information, see the AASHTO Constructability Review Best Practices Guide at:

http://sp.construction.transportation.org/Documents/AASHTOConstructabilityFinal.pdf

### 5.10 Bureau Project Review

During the final design phase, staff from various central office bureaus will review specific aspects of the project. These reviews can occur at different times during final design as the different parts of a project are completed.

The checklists shown in <u>Attachments 5.1</u> to <u>5.6</u> identify what items are to be reviewed and who should do the reviewing. As each review is completed the central office reviewer will email the region to certify their review has been performed. Regions will retain these emails in their project file and transcribe the review date into the appropriate box in the Summary of Review Documentation (see <u>FDM 19-10-15.1.26</u>).

#### 5.11 PS&E Pre-Submittal Review

A final PS&E review should be performed by the designer using the PS&E Pre-Submittal Review Guide provided in FDM 19-40 Exhibit 1.1.

### LIST OF ATTACHMENTS

Attachment 5.1	BPD - Quality Review Checklist
Attachment 5.2	BOS – Quality Review Checklist
Attachment 5.3	BHM - Quality Review Checklist
Attachment 5.4	BTS Environmental Section - Quality Review Checklist
Attachment 5.5	BTLRRH - Quality Review Checklist
Attachment 5.6	BTS Acquisitions & Services Section - Quality Review Checklist

# FDM 19-10-10 Transmittal of Let Project PS&E Exhibits

November 15, 2023

### 10.1 Submitting PSE Exhibits with eSubmit

After you have been granted eSubmit access, you may browse to the eSubmit application at:

### https://trust.dot.state.wi.us/ESubmit/

From the main "Electronic Submittal System" page, select "Roadway Plans and Exhibits". In the top section of the "Submit Roadway Plans and Exhibits" page, provide required information about the submittal.

<u>Comments</u>: Enter up to 80 characters of special information including any appropriate message for the recipients, i.e., Original, Revision, Insert, Advanceable Plan, Resubmittal per comments, etc. Otherwise enter "NA."

<u>Let Date:</u> Select the year and month in which the project is scheduled for letting. Check ExLET if submitting an advanceable PSE.

<u>Submittal Status</u>: Select the Submittal Status. The choices are: 30%, 60%, 90% (which are for Pre-PS&E) and Final PS&E (which is for a Final Submittal). A list of exhibits generally submitted are provided in Table.1.1. on the following page. Final PS&E and ExLET submittals include all exhibits.

<u>WisDOT Office</u>: Select the WisDOT Region Office. The choices are: Eau Claire, Green Bay, La Crosse, Madison, Rhinelander, Superior, Waukesha, Wisconsin Rapids and Operations. (For Work Share projects, select the "giving" Region).

<u>Construction Project ID</u>: Enter the 8-digit Construction ID using the format: 00000000. Do not enter dashes. Do not enter a Design ID. If there are multiple ID numbers shown on the title sheet of the plan, enter the lowest ID number.

Additional Project IDs: If there are multiple Construction IDs shown on the title sheet and or with the plan, enter the lowest ID on the previous line. Enter the rest of the Construction IDs here. Enter the IDs using the format: 00000000. Do not enter dashes. Do not enter Design IDs. Separate multiple IDs using commas. If there are no additional IDs, enter "NA."

<u>Structures</u>: If there are structures on the project, enter the structure numbers using the format B-00-000 for Bridges, C-00-000 for Culverts, R-00-000 for Retaining walls, S-00-000 for Sign bridges, N-00-000 for Noise Barriers, M-00-000 for Miscellaneous Structures, and P-00-000 for Bridges with no record plans on file. Separate multiple numbers with commas. If there are no structures, enter "NA."

Route Name: Enter the route name (e.g. USH 45).

Project Name: Enter the project name (e.g. CTH Y – 10TH Avenue).

<u>WisDOT Design Contact/Phone</u>: Enter the WisDOT Region Office Design Contact's full name and phone number (e.g., Jane Doe / 608-334-4556).

<u>Consultant Design Contact/Phone</u>: If applicable, enter the Consultant Contact's firm name, full name and phone number (e.g., ABC Consulting Engineers Inc., John Buck / 608-334-4556). Otherwise, enter "NA."

In the middle section of the "Submit Roadway Plans and Exhibits" page, specify the exhibits to submit. At least one exhibit is required. See also FDM 19-10-10.

### 10.2 Naming Exhibits

Each electronic exhibit must be named using the Construction ID number, with no dashes, plus a 3 letter abbreviation indicating the type of exhibit. An underbar "\_" must be used between the Construction ID and the exhibit type. See Table.1.1.

When multiple Construction IDs are shown on a single title sheet, submit all the exhibits under the lowest ID. When multiple plans with multiple title sheets are tied together, submit each plan, Contractor Data Packet and SDD spreadsheet individually using the appropriate ID for each.

The eSubmit system appends the Submittal Status, Date and Time to each exhibit as it is copied to the WisDOT network. This suffix serves as the exhibit revision number. The format is SSS\_YYMMDD\_TIME. SSS is Submittal Status (030, 060, 090 or PSE). YY is Year, MM is Month and DD is Date. Time is in 24-hour format.

For example: a PSE ePlan for project 11302072 submitted at 4:03 PM on September 16, 2005 would be named: 11302072\_pln\_pse\_050916\_1603.pdf.

Table 1.1 Exhibits and Requirements

	Table 1.1 Exhibits and Requirer			
Exhibit	Exhibit File Type and File Name (where 00000000 is the associated Construction ID)	Template File	More Information	
Electronic Plan	Adobe PDF 00000000_pln.pdf		FDM 15-5-10	
Standard Detail Drawing Spreadsheet	Excel spreadsheet 00000000_sdd.xls	sdd.xls	FDM 15-5-15	
Plan Letter	Word document 00000000_ltr.docx	planltr.docx	FDM 19-10-15	
Environmental Commitments (including signed cover of environmental document, including any signed re-evaluations)	Adobe PDF 00000000_env.pdf		FDM 20-20 FDM 20-30	
Special Provisions or Special Provision Insert	Word document named 00000000_xyz.docx, where xyz is the region office. See Table 1.2. or Word document 00000000_ins.docx	See Special Provision web page for templates	FDM 19-15-1	
Contract Time for Completion (including LFA contracts)	Excel spreadsheet or Adobe PDF 00000000_tim.xlsx or .pdf	DT1923	FDM 19-10-30	
Governor's Approval Form (not required for let projects)	Word document 00000000_gov.doc or .docx	<u>DT25</u>	FDM 19-10-20	
Proposal Cover (not required for let projects)	Word document 00000000_pro.doc or .docx	DT1502	FDM 19-10-25	
Right-of-Way Certification (remove instructions before submitting)	Adobe PDF 00000000_row.pdf Submit a separate pdf for each Project ID	RE1899	FDM 19-10-35	
Utility Status Report (remove instructions before submitting)	Adobe PDF 00000000_usr.pdf Submit a separate pdf for each Project ID	<u>DT1080</u>	FDM 19-10-40	
Estimate	Loaded in AASHTOWare Project (AWP) Preconstruction System		(AWP Main)	
Proposal Level Preliminary Detail Estimate Report	Adobe PDF 00000000_est.pdf		(AWP Chap 8)	
Estimate Documentation Report	Adobe PDF 00000000_esd.pdf	esd-template.docx	FDM 19-5-6	
Certificate of Coordination of Railroad Work with Highway Construction	Adobe PDF 00000000_rrx.pdf Submit a separate pdf for each Project ID	<u>DT1804</u>	FDM 19-10-42	
Contractor Data Packet	Zip file 00000000_cdp.zip		FDM 19-10-43	
Other Project Data	Submitted directly to the region		FDM 19-10-43	

Click the Browse button in eSubmit to the right of each exhibit you wish to submit. When the "Choose file" dialog appears, browse to the exhibit on your computer or network. Repeat until you have specified all the exhibits you wish to submit.

## **10.2.1 Naming Special Provisions**

Note that the Special Provisions are named with a 3-letter code corresponding to the applicable WisDOT Region

Office as shown below.

Table 1.2 Region Office Cities and 3-Letter Codes

Region Office City	Green Bay	Eau Claire	La Crosse	Madison	Rhinelander	Superior	Waukesha	Wisconsin Rapids
Three-Letter Code	gre	eau	lax	mad	rhi	sup	wke	wis

## 10.2.2 Modifying Exhibits

When submitting modified exhibits, the entire document must be re-submitted (except for special provisions). When modifying exhibits, include the words "revised exhibits" on the comments line. A new Date and Time suffix will automatically be added to the eSubmitted filename to prevent overriding previous submittals.

If there are changes to the plan after the initial PS&E submittal, please coordinate with a Plan Examiner in the Proposal Management Section prior to resubmitting the plan.

### 10.2.3 Modifying Special Provisions

There are two ways to modify special provisions, inserts and revisions.

Inserts are used when there are a relatively small number of changes to the special provisions. Only the portion that is being changed needs to be re-submitted. Modifications should be made to special provisions using inserts whenever possible. Inserts must be named 00000000\_ins.doc or docx, where 00000000 is the associated Construction ID. When submitting special provision inserts, include the words "special provision insert" on the comments line, and send an email to the Special Provisions Engineer stating that an insert has been submitted.

When submitting an insert, use the document *Special Provisions Insert* and follow the directions in *Insert Guidelines* located at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/stsp.aspx

Preface the changes with detailed directions on where the revised language should be inserted, and, if necessary, which language in the special provisions should be deleted. For example, the directions may state "Delete paragraph three, which begins with the words "beginning words of paragraph three," of the existing Utilities article and replace with the following paragraph "text of new paragraph." Follow these guidelines for preparing inserts for special provisions:

- 1. If changes are needed to existing articles, provide detailed directions on where the revised language should be inserted, and which language in the special provisions should be deleted. An example is: "In bid item SPV.0060.01, Cleaning and Painting Pole, delete paragraph three in section C Construction. The third paragraph begins with the words "Blast-clean the pole with..."
- 2. If adding an STSP, simply provide the number of the STSP. (Do not send the entire STSP.)
- 3. If deleting articles, provide the title of the article, NOT the article number, because articles are frequently rearranged during the review process. For example, delete the article for bid item SPV.0105.01, Remove Traffic Signals at Intersection (STH 33 and USH 12).

It is preferred that, if possible, changes to special provisions are submitted as an insert. However, it may be necessary when there are so many changes that the entire special provisions document must be re-submitted as a revision. Never submit a revision without first checking with the Special Provisions Engineer.

If an insert is being submitted late in the plan-review process or after the special provisions have been reviewed by the Special Provisions Engineer, notify the Special Provisions Engineer, <a href="mailto:rielly.odonnell@dot.wi.gov">rielly.odonnell@dot.wi.gov</a> by email, in addition to eSubmitting the insert. If the revision involves a change to a structures special provision, coordinate with both Bureau of Structures (BOS) and the Special Provisions Engineer.

### 10.3 Submittal

In the bottom section of the "Roadway Plans and Exhibits" page, specify who will receive notification that the submittal was sent. An email notification is sent automatically to WisDOT staff when roadway exhibits are submitted. Recipients are determined based on the Submittal Status selected by the submitter. The email contains the same information that is included on the confirmation page. The submitter also receives a copy of the email notification. It is sent to the email address specified by the submitter at the time he/she created their Wisconsin eSubmit User ID (their extranet ID).

Under "Notify additional affected parties," check the boxes that are applicable for the project. Email notifications will also be sent to appropriate WisDOT staff in those areas.

For workshare projects only, select the "receiving" Region.

Additional email addresses may be entered manually on the "Additional Emails" line. Separate multiple email addresses with commas.

The submitter is *required* to include their phone number as it may be different than the Contact Phone number.

Before clicking the Submit button, review the information you have entered. You will not be prompted to confirm when you press Submit. The submittal will begin immediately.

Click the Submit button once and wait. Exhibits may take several minutes to upload depending on your Internet connection speed.

When processing is complete, you will see a confirmation page like Figure 1.1. If you do not see the confirmation page, the submittal was not successful. Please attempt submittal a second time before contacting 608-266-1020 or the DOT help desk at 608-266-9434.

```
comments:
             PRE-PS&E FOR BUREAU SUBMITTAL
             stars:
header:
            GRE Office 90% 12210971 ROADWAY PLAN SUBMITTAL
stars:
             01 2021 January
letting_parm:
project_name: MILWAUKEE - GREEN BAY ROAD route_name: IH 43 structures: NA
            NA
structures:
additional ids: 45402771
wdot_contact: PATTI NELSON/920-492-7700
cons_contact:
             ****************
affects:
            AFFECTS
affects1:
affects2:
affects3:
           Signing
affects4:
affects5:
            Traffic Control
affects6:
            Pavement Marking
affects7:
affects8:
affects9:
stars:
             ******************
stars:
date:
            Friday, June 5, 2020
             9:27:16 AM, CDT
time:
            Nelson Patti
            patti.nelson@dot.state.wi.us
email:
phone:
             920-492-7700
```

Figure 1.1. Sample eSubmit Confirmation Page

### 10.4 Submitting Structure Plans

Do not include structure plans when submitting the roadway plans. Information for submitting structure plans

can be found at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/strct/plan-submittal.aspx

### 10.5 Error Messages

Review the confirmation page. Verify that it contains no error messages. Two common errors are shown below.

The error "resource not found" or "destination folder does not exist" indicates that the required destination folder at WisDOT does not exist. See <u>Figure 1.2</u>. Contact the individual responsible for receiving the exhibits. Verify that they are expecting your submittal and have created the appropriate folder on the WisDOT network.

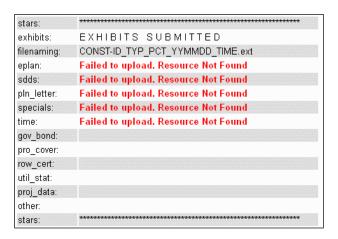


Figure 1.2. Sample eSubmit Error Report

The error "File not found" indicates that the file specified cannot be found on your computer or network. See <u>Figure 1.3</u>. Verify that the path and filename are correct and try again. This error will also occur when an empty file (zero bytes) is specified.

	Failed to upload. N:\Bhc\EPlans\save\consult\test_data\roadway\98730160_3\98730160_pln.pdf File not found. Please verify path and resubmit.
fileSDD_Spreadsheet	Failed to upload.  N:\Bhc\EPlans\save\consult\test_data\roadway\98730160_3\98730160_sdd.xls  File not found. Please verify path and resubmit.
filePlan_Letter	Failed to upload. N:\Bhc\EPlans\save\consult\test_data\roadway\98730160_3\98730160_ltr.doc File not found. Please verify path and resubmit.
fileSpecial_Provisions	Failed to upload.  N:\Bhc\EPlans\save\consult\test_data\roadway\98730160_3\98730160_spe.doc  File not found. Please verify path and resubmit.
fileTime_for_Complete	Failed to upload.  N:\Bhc\EPlans\save\consult\extranet\roadway\98730160_3\98730160_tim.xls  File not found. Please verify path and resubmit.
comments:	na
etare:	***************************************

Figure 1.3. Sample eSubmit Error Report

### FDM 19-10-15 Plan Letter

November 15, 2023

A plan letter is to accompany all PS&E transmittals - including both bid contracts and force account agreements. Its objective is to provide BPD the information required to authorize the plan and process the PS&E without delays. It also informs others within the department of the transmittal and its general concepts.

The plan letter template is available at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/stsp.aspx

The most current version of the plan letter must be submitted at PS&E stage, or the designer will be required to resubmit the letter. The plan letter contains fields for entering required information. The tab key or the up and down arrows on your keyboard allow the user to move from one field to the next field. Text can be copied from other sources and pasted into the form fields. Images and tables should not be copied into a field.

If there are unresolved issues that have been cleared, or changes to the project scope after the final PS&E is

submitted, contact the Special Provisions Engineer to determine if a new Plan Letter should be eSubmitted.

#### 15.1 Plan Letter Contents

#### 15.1.1 Header

The plan letter is addressed to the Chief Proposal Management Engineer, BPD. The plan letter includes in its headings, the name and title of the PDS Supervisor who approved the PS&E submittal. Also include the subject project information as presented in FIIPS. The first project title listed must be the controlling project ID, followed by all other project titles. Also include the corresponding design project ID(s), legislative subprogram code, and bid letting date.

### 15.1.2 Introduction

Include the following information in the introduction:

- 1.Project description i.e. general location and type of work. If the project involves structure work then specify what obstacle the structure is spanning (e.g., Rock River, STH 21, or C&NW Railroad). Major items of work listing should match what is entered under Scope of Work in the Special Provisions.
- 2. Project Requested By or Purpose: Briefly describe the purpose of the project.
- 3. Consequences if not Approved: Briefly provide consequences.
- 4. Contract type (LET or LFA agreement).
- 5. Alternative Contracting Methods Used. Indicate if alternative contracting methods ("enhanced" liquidated damages, interim liquidated damages, incentives/disincentives, cost plus bidding or lane rentals) will be used. Refer to FDM 19-15-2.
- 6. PS&E due date. One of the quarterly dates each year (February 1, May 1, August 1 and November 1) which the PS&E is intended to meet.
- 7. Contract Completion Type: Select the contract type.
- 8. Anticipated construction start date. Obtain this from Form <u>DT1923</u>, Contract Time for Completion. See <u>FDM 19-10 Attachment 30.1.</u>
- 9. Anticipated All Work Complete Date:

Note: The "Anticipated All Work Complete Date" refers to the FIIPS financial field. (This is not the same as the "All Contract Work Complete" that is defined in the Finals Process guidance.)

Local program construction projects:

- Use SMA sunset date

State program construction projects:

- For Completion Date contracts: Use the overall contract completion date plus 12 months. For projects with plant establishment or other warranty periods, add 12 months after end of these periods. (Example: If a project has a completion date of September 1, 2020 and has a one-year plant establishment period that ends October 15, 2021, the date to be entered is 10/15/2022.)
- For Working Day or Calendar Day contracts: Use November 15<sup>th</sup> of the calendar year in which all work must be complete plus 12 months. For projects with plant establishment or other warranty periods, add 12 months after end of these periods. (Example: If a project has work completed in 2021 and has a two-year plant establishment period that ends October 15, 2023, the date to be entered is 10/15/2024.)
- 10. Performance Miles. Provide the miles of paved surface. Divided highways should not be doubled.
- 11. Name and e-mail address of the regional design contacts for the project supervisor, PDS chief, project manager, project leader, and the contact person for project information after advertising, and (if necessary) the design consultant contact (also include phone number). Contacts must be available to answer questions after the PS&E submittal through the letting process. If contact person changes prior to advertisement, e-submit an updated plan letter with new contact information (note this revision in comment section of e-submit form).
- 12. National highway system. See FDM 4-1-20.2 for definition and map.
- 13. Federal oversight. Reference FIIPS to determine if the project is subject to federal oversight.
- 14. Prequalification should only be waived for unique projects that may have nontraditional contractors bidding on the project. Waiving bidder prequalification requires approval by the Proposal Management

Chief.

# 15.1.3 Pre-Bid Meeting

During project development it may become apparent that extraordinary circumstances connected to the project may be difficult to communicate to the bidders in the usual project documents. When such is the case, a pre-bid meeting may be appropriate. Indicate if the pre-bid meeting is mandatory or optional. Pre-bid meetings are identified in the advertisement for bids and should be reviewed with the Bureau of Project Development – Proposal Management Section prior to inclusion.

A pre-bid meeting is usually of value only on projects of a unique or innovative nature and would probably be non-productive on the more routine projects. The date, time, and location of the pre-bid meeting and the topics to be discussed should be indicated. This information will then be included in the advertisement for bids.

The pre-bid meeting shall be held at least three weeks prior to the letting.

The types of information which could be effectively furnished in this manner are: alternative contracting methods being used, new construction methods required; complex traffic handling requirements; special coordination between contractors or with others; stage construction requirements; site access restrictions during construction; etc. as project aspects may require.

### 15.1.4 Synopsis of Significant Approvals, Acceptances or Completed Action

Fill in date of approval, acceptance or completed action or N/A if not applicable to the project. If there is more than one date due to multiple project lds, fill in the field with project ld and date for each ld, separated by a comma. (Example:1111-11-11 MM/DD/YYYY, 2222-22-22 MM/DD/YYYY)

For the environmental document, fill in the date of the final environmental document and select one of the following types from the drop-down menu.

- FEIS/ROD
- FONSI
- ER
- PCE
- CEC

### 15.1.5 Environmental Issues / Commitments

Note any specific commitments made to outside agencies for the purpose of mitigating environmental impacts, and state how the plans and specifications make provisions for them. Also, include the status of required permits.

If there are any commitments for which provisions have not been made, an explanation should be given.

E-submit the Environmental Commitments Sheet of the Basic Environmental Screening worksheets (include the signed cover of the environmental document) with your P.S. & E. submittal. Submit in the following format: 12345678\_env.pdf. Re-evaluations of environmental documents should be noted, with updated cover sheets being included as part of the \_env submittal. This information is forwarded to FHWA for oversight projects.

### **15.1.6 Permits**

On projects of a type where a 401 and/or 404 permit could be required, a statement should be included to the effect that either a 404 permit is not required or that a 401 and/or 404 permit is required. If required, state what it is for, the type of permit (including Nationwide No.) and its effective and expiration dates.

If it is anticipated that project completion will extend beyond the 401 and/or 404 permit expiration date, it should be noted. A copy of the special conditions from the 401 and/or 404 permits (including those specified in the U.S. Army Corps of Engineers transmittal letter) should be included in the Environmental Commitments.

## 15.1.7 Right-of-Way and Utilities

Provide brief status of right-of-way acquisition and relocations (i.e., is acquisition complete? If not, when will it be completed?) or indicate their absence. Indicate if the ROW is clear of encroachments and utilities or, if not, the expected date of clearance. Identify any utility or other outside force work which will be in progress during the construction operations and may affect the contract time. Do not copy the entire utility special provision article into the plan letter.

## 15.1.8 Sanitary Sewer and Water Main

Provide the status of DNR approval of the sanitary sewer and water main, the status of any grants or loans for these facilities, the status of rights of entry for service connections and the status of any hazardous materials

issues.

#### 15.1.9 Railroads

Identify all railroad grade separations, railroad at grade crossings and encroachments on railroad right of way that are located within the contract limits. Indicate if railroad work will be in progress during construction operations. Give the status of all railroad coordination necessary to let the proposal.

#### 15.1.10 Hazardous Materials

Indicate if there are hazardous materials located within the ROW and what steps have been taken to remediate or clean up the contaminated site(s).

## 15.1.11 Design Data

Deviations from design criteria not previously approved are to be explained here. (Materials, specifications, or special items should be covered in the special provisions portion of the plan letter.)

#### 15.1.12 Structures

List the structure numbers of all structures to be constructed under the contract (e.g., B-40-139) that have been submitted to Bureau of Structures (BOS), which include bridges, culverts, sign bridges, retaining walls, noise barriers, and high mast lighting foundations. Also indicate if there are any structures within the roadway plans that were not submitted to BOS.

### 15.1.13 Landscape Architecture

Remember to route PS&Es with landscaping to the Roadside Management section in the BHO prior to submittal of the PS&E to the BPD. Include the date of review completion in the SoRD at the end of the plan letter.

Note all the requirements for landscape architecture. This includes:

- Aesthetic design elements for structures that have been identified under "Structures."
- Roadside vegetation management elements:
  - Note landscape plantings to be installed under this contract or a subsequent contract.
  - Note efforts to save existing vegetation.
  - Note roadside clearing to be performed outside of the grading limits.
- Identify who will maintain the plantings after the contract has expired.

### 15.1.14 Traffic Signals

List all intersections where traffic signals will be constructed under the contract.

#### 15.1.15 Traffic

State how traffic will be accommodated during construction (construction under traffic, detour, etc.). If a detour will be used explain the location and how the signing will be accomplished.

Indicate the approval date for the TMP.

Indicate the date when the Finished Traffic Control Plan & Review Meeting was held, if applicable.

### **15.1.16** Lighting

State whether lighting is WisDOT or locally maintained. Briefly describe the lighting system (continuous, roundabout, signalized intersections, etc.). Refer to <u>FDM 11-50-60</u> and the electrical/electronic systems (chapter 11) of the Traffic Engineering, Operations and Safety Manual. The Traffic Engineering, Operations and Safety Manual is available at:

 $\underline{\text{https://wisconsindot.gov/Pages/doing-bus/local-gov/traffic-ops/manuals-and-standards/teops/default.aspx}$ 

### 15.1.17 Special Provisions

List any SPV.XXXX.XX bid items in the contract.

### 15.1.18 Standardized Special Provisions (STSPs)

List any changes that were made to bid items with associated STSPs so that central office staff can be made aware of the modifications. There is no need to list the STSP if the only modifications made were to complete the blank fields within the STSP.

#### 15.1.19 Plans and Proposals

Indicate the region office, and the number of 11" x 17" plans and the number of sample proposals that are

needed for contract administration (maximum of 30). Verify that the plans and proposals are going to the administrating region for work share projects.

- A. North Central Region has directed a maximum of 20 for those offices (RHI and WIS).
- B. Northwest Region has directed a maximum of 15 for those offices (EAU and SUP).
- C. Northeast Region has directed a maximum of 5 for those offices (GRE).

## 15.1.20 Sign Details

- A. Special Sign Plates. If not done prior to the 90% PS&E Review Process, request a pdf file of all special sign plates from Central Office's Bureau of Traffic Operations by emailing <a href="mailto:DOTBTOSigndetails@dot.wi.gov">DOTBTOSigndetails@dot.wi.gov</a> a minimum of three weeks prior to PS&E Submittal.
- B. Standard Sign Plates. Central Office's Bureau of Traffic Operations will review the Signing and Marking portion of the 90% Plans. Be sure to include Signing and Pavement Marking as Additional Affected Parties when submitting the 90% and PS&E Plans. In the plan letter, select "required" or "not required". BTO will review and generate a list of required standard sign plates for the Plan Examiners to insert into the Final Plans.

### 15.1.21 Native American Hiring Provision

Indicate if the Native American hiring provision (see STSP 107-200) should be applied. The current tribe contact information can be found on the WisDOT page for business and labor development.

### 15.1.22 Additional Special Provisions

Include a list of the ASPs (refer to <u>FDM 19-15-90</u>) that are to be inserted by the BPD when assembling the proposal. ASP 4, 6, 7 and 9 are included with every proposal. If ASP 1 is requested, include the number of graduates and apprentices and the total number of hours requested for each category.

### 15.1.23 Force Account Agreements

Letters for force account agreement projects must state that the submitted agreement is within the policy limits (see <u>FDM 3-5-10</u>). If the agreement exceeds policy limits the letter must include the date of approval of exceptions to the stated policy.

## 15.1.24 Posting of Preliminary Plans

The criteria below are a guide to help determine if preliminary project information should be shared with industry. Answer the questions listed in this section of the plan letter to determine if preliminary plans will be posted for the project.

BPD will post preliminary plans on the HCCI projects page after PS&E submittal if the project meets one or more of the following criteria:

- Projects with 50,000 CY or more of earthwork.
- Projects with unique structural components.
  - Steel Girders
  - Specialty Steel
  - Large Quantities
  - Accelerated Bridge Construction (ABC)
  - Specialized Construction "Roll Ins" etc.
- Projects over \$20 million in estimated dollars
- Any others deemed appropriate by the region. (Example: Complex Staging)

BPD will add the watermark "PRELIMINARY AND NOT FOR BIDDING PURPOSES" to all posted documents. One week prior to the advertisement, the information will be removed from the website to eliminate confusion with the official bid documents. Items to be posted as preliminary plans may include the following:

- Plans
- Special Provisions
- Soils Reports\*
- Digital Models\*
- Construction Staging roll plots (for complexly staged projects) \*
- Project overview roll plots (for large projects) \*

\* Documents that are not part of PS&E submittal must be coordinated with the BPD Proposal Management Section at DOT DTSD Highway Construction HCCI (hcci.dtid@dot.wi.gov).

### 15.1.25 Labor Compliance Prevailing Wage Rate Decisions

Answer the questions listed in this section of the plan letter to assist BPD in determining which Davis Bacon prevailing wage rates need to be inserted into each proposal that contains federal funding.

- BPD will include Highway Construction wage rates (WI10) in all proposals with federal funding.
- BPD will include Heavy wage rates (WI15) in proposals with federal funding that include any type of bridge construction over a US Army Corps of Engineers (COE) navigable waterway. For this section of the plan letter, navigable waterway is determined only by the COE navigable waterway definition (not the WisDNR navigable waterway definition). For information regarding COE navigable waterway see the COE navigable waters list:

http://www.mvp.usace.army.mil/Portals/57/docs/Regulatory/RegulatoryDocs/navigable%20waters% 20wi.pdf

- BPD will include Heavy (Sewer and Water Line and Tunnel) wage rates (WI08) in proposals with federal funding when the engineer estimate for sanitary sewer and water line construction is greater than 20% of the engineer estimate for the overall contract, or when the engineer estimate for this type of work is \$1,000,000 or greater.
- BPD will include Building wage rates (WI various #) in proposals with federal funding that require building trades.

#### 15.1.26 Conclusion

Use this section to explain any unique features of this PS&E that are not addressed in any other section of the plan letter.

When a PS&E is submitted for re-letting after bids are rejected from an earlier letting, use this section explain to the kind of work in the contract (e.g., grading, base, structure, etc.) and what has been changed, such as plan details, special provisions and/or specification requirements, prosecution and progress, and makeup of the contract(s).

## 15.1.27 PS&E Review Summary

This document is a summary certification of all the reviews the PS&E has undergone from central office staff. This must be filled in for each project to be let.

# FDM 19-10-20 Governors Approval Form (DT25)

May 17, 2021

The official name for this document is the Recommendation to Governor for Contract and Bond Approval. The purpose of this form is to obtain the Governor's approval of a contract while the BPD is processing the contract itself. This is not a required submittal for let projects, as it is developed by the Proposal Management Section based on information provided elsewhere.

If needed for other types of non-let projects (i.e. Work Force Account), the responsible bureau or region should create and process this form.

Here is a working copy of form <u>DT25</u>.

Complete the form to the extent indicated in Attachment 20.1 using the following guidelines:

- 1. Include any applicable federal project numbers, if known, along with state project I.D. numbers in the upper left box.
- 2. Do not show any values for "Contract Amount" or "WisDOT Confidential Estimate."
- 3. Do not fill in the "Date Let" line if there is a significant chance a project will be moved from one letting to another.
- 4. Bonds are required for all contracts with private contractors. Bonds are not required for contracts with other governmental agencies.
- 5. Fill in only the "State I.D." column of the area entitled "Project Funding Percentages." The other columns should be left blank. The BPD will complete them.
- 6. For the following parts of the form:

Project(s) requested by or purpose: Please focus on the purpose of the project. Explain briefly, but with adequate detail, why this project is being constructed.

Work consists of: A brief description of the work required for the project. Please refrain from using technical terms. Write in such a way that the common person could understand what is being stated. Use enough detail so that the reader can readily understand the relative size and scope of the project.

Consequences if not approved: Explain briefly what would occur if the project is not constructed. For LFA agreements, the cost savings identified by the CEF must be shown. When a programmatic finding applies (see FDM 3-5-10) this must be noted also.

The following are examples of "Consequences if not approved" for LFA agreements:

1. For Agreements > \$25,000

Deficiency will continue, and the roadbed will further deteriorate. A cost effectiveness study conducted with the (County of; City of; Town of; Village of) revealed a cost savings of \$22,649.46 (12.3%) by having this work performed by the local unit of government versus private contractor.

2. For Agreements < \$25,000

WisDOT with FHWA concurrence has determined through a programmatic cost effectiveness finding dated 8/13/98 that it is in the public interest to have the work be performed by the local governing municipality versus private contractors for projects under \$25,000.

#### LIST OF ATTACHMENTS

Attachment 20.1

Sample of Form DT25, Governor's Approval Form

## FDM 19-10-25 Sample Proposal

August 17, 2020

The sample proposal for a bid contract includes the following:

- Highway Work Proposal (Form DT1502). See the example at Attachment 25.1,
- Special Provisions (FDM 19-15-15),
- Additional Special Provisions (FDM 19-15-90) that are pertinent to the contract,
- Contract language; including language that is appropriate to the funding source for the proposal,
- Appropriate wage rates,
- The Schedule of Items included in the contract.

After PS&E submittal, if funding changes are necessary, contact the Plans and Estimates Specialist at (608) 266-1020. After the proposal is assembled (day of the Ad Meeting, see <u>FDM 19-1 Attachment 1.2</u>), no funding changes will be allowed as contract language added to the proposal directly correlates to the proposals funding source(s).

Form DT1502 is available in MS Word format at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/stsp.aspx

#### 25.1 Completing Form DT1502

- This form is autogenerated by the Proposal Management Section based on information entered in AASHTOWare Project for let projects and is not required as an eSubmittal document. If needed for other types of projects (i.e. Work Force Account), to complete the Highway Work Proposal Form, <u>DT1502</u>, fill in the following fields:
- County, State Project ID, Project Description, and Highway. Enter the project's description exactly as it appears in FIIPS and on the plan's title sheet. If there is more than one project in the proposal, use horizontal spaces to clearly delineate the different projects.
- Proposal Guaranty Required. Obtain the amount from the table below:

Proposal Guarantee			
Construction Cost Estimate*	Proposal Guarantee		
0 - 75,000	\$ 2,000		
75,000 - 150,000	\$ 6,000		
150,000 - 500,000	\$ 20,000		
500,000 - 1,000,000	\$ 40,000		
1,000,000 - 5,000,000	\$ 75,000		
5,000,000 - 10,000,000	\$100,000		
> 10,000,000	To be determined		

<sup>\*</sup> This amount does not include engineering and contingencies.

- Bid Submittal Due, the letting date. Do not abbreviate the month; spell out the month's complete name.
- Contract Completion Time, the number of calendar days, working days, or the completion date of the contract (see <u>FDM 19-10-30</u>); for example, Thirty (30) Working Days, Ninety (90) Calendar Days, or November 10, 2010.
- Type of Work. Indicate the major work classification(s) of the contract, e.g., grading, base aggregate dense, Structure (Number), concrete pavement, HMA pavement, pavement marking, permanent signing, traffic signals, lighting, ITS, and storm sewer.

The BPD will complete the federal project ID field and will mark whether there is federal oversight on the project.

The sample proposals (contract) for LFA agreements are covered in <u>FDM 19-25</u>.

### LIST OF ATTACHMENTS

Attachment 25.1

Sample of Completed <u>DT1502</u> Form Highway Work Proposal

### FDM 19-10-30 Contract Time for Completion (DT1923)

November 15, 2023

### 30.1 General

A completed Contract Time for Completion (Form <u>DT1923</u>) is required for all bid contracts and negotiated agreements. An example is included as <u>Attachment 30.1</u>. ESubmit a single DT1923 file encompassing all contract work. Multiple worksheets can be used within the file.

After the Contract Time for Completion is eSubmitted to Central Office as part of the final PSE, updated forms can be eSubmitted up to 7 weeks ahead of the scheduled letting date. If eSubmitting an updated form, always contact the Proposal Management Section to provide the reason for the update.

### 30.2 Contract Work Type

The contract should be analyzed in sufficient detail to determine a reasonable contract time. Contract time can be set up based on working days, calendar days, or by specifying a completion date. In any case, four to six weeks should be estimated between the letting date and the start of work.

In Form DT1923, select the Contract Work Type by checking the appropriate box.

**Calendar Day.** Every day on the calendar, which includes Saturdays, Sundays, and holidays. This is one of the preferred methods of establishing contract time when an Interim Liquidated Damages provision is included in the contract.

Contract time shall be rounded to the nearest five days. Contract time suspensions ordered by the engineer and/or the days required for certain excluded work operations are not included within this total.

**Working Day.** This is a calendar day, except for Saturdays, Sundays and specified legal holidays, on which weather and conditions not under the control of the contractor will permit construction operations to proceed for at least eight hours with the normal working force engaged in performing the controlling item of work which would be in progress at this time. The controlling item is that item which must be partially or wholly completed to permit progress essential to complete the contract within the number of working days allowed. See <a href="Standard">Standard</a> Spec 108.9 for construction details related to working day contracts.

The working days method is preferred for establishing contract time for a normal construction project. Working day contracts equitably provide for those projects where relatively minor weather changes greatly influence work progress, or where there are frequent delays occasioned by other contracts, material delivery, or operations beyond the contractor's effective control.

Contract time shall be rounded to the nearest five days.

**Completion Date.** The calendar date shown in the proposal on or before which the work contemplated in the contract shall be completed. No time extension allowances are made for normal delays or lack of progress.

A completion date is preferred when an Incentive/Disincentive provision is used in the contract.

A completion date contract should be considered in any of the following situations:

- 1. When stage construction contracts must closely follow one another to meet a desired open-to-traffic date.
- 2. When the timing of a special event is the critical factor in determining the desired completion date.
- 3. When the contract work is expected to extend over multiple construction seasons.
- 4. When the Interim Liquidated Damages provision is included in the contract.

Designers should avoid requiring unjustifiably high rates of operation progress through improper selection of an early completion date. The normal procedure is to select the completion date from a working day type time analysis, taking into consideration the desired reasons for specifying the use of a completion date.

#### 30.3 Contract Time

Form DT1923 is based on anticipated work days. Possible Work Days are determined by removing the weekends and holidays from the month. If work is expected to be done on weekends or holidays for Calendar Day or Completion Date contracts, days can be added back into a month under Additional Work Days Modifier, which will adjust the possible work days. Then enter the weather-based Probable Work Days for a month (See <a href="Attachment 30.2"><u>Attachment 30.2</u></a> to determine weather-based probable work days.)

Holidays shall be New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Eve Day, Christmas Day and New Year's Eve Day. Independence Day may be more than 1 day in duration, depending on the day of the week. See FDM 19-15-23.1.

## **30.4 Factors Influencing Contract Time**

**Probable work days in a month** are the possible weekdays available for work multiplied by a weather-based percentage factor established on past experience for the major construction operation being performed. A percentage factor chart is included as <a href="https://example.com/Attachment 30.2">Attachment 30.2</a>. It may be used directly or with minor modification to reflect regional weather conditions.

**Production Rates.** There are two methods production rates can be estimated. The preferred way is the production estimation tool. The other method is the production rate table, which is used for a quick, unrefined estimate of production rates.

The production estimation tool will provide the most realistic production rates. The tool considers variety of design project attributes and data entered by WisDOT construction staff to predict the estimated production rates. The tool has production rates broken into the following categories: bridge construction, earthwork, asphalt paving, concrete paving, earthwork, miscellaneous activities, and other considerations.

To access the production estimation tool, use the following link:

 $\frac{https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/tools/estimating/productivity-estimation-\\ \underline{tool-v.1.xlsm}$ 

The production estimation tool contains information and instructions on how to use the tool.

The production rate table uses a range of rates from the production rate tool without taking project attributes into consideration, therefore making less accurate. The ranges have the outliers removed and the typical (median) production rate is shown. The table is at the following location:

 $\frac{https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/tools/estimating/production-rate-table.pdf$ 

Engineering judgement is required for choosing a production rate. The production rates should be tailored to meet the conditions of each individual contract. Consideration should be given to the size of work areas, time of year constructed, congestion due to traffic, etc. For instance, a low production rate should be chosen for items

being completed with short runs.

**Utility and railroad adjustments** are usually planned to occur prior to construction operations to avoid interfering with the contractor's construction schedule. Occasionally, utility or railroad facility adjustments must be performed during construction operations. If these adjustments delay the start of construction, or impact the contract progress during construction, time should be accounted for in the contract time for completion. The regional utility or railroad coordinator should be consulted as necessary.

Form DT1923 has a worksheet tab to use on projects where work by a utility or railroad impacts the timeline of the project. Use this worksheet to show how the work will affect the progress of the project.

**Temporary structures.** When a temporary structure is required to keep the highway open to traffic, a sufficient amount of time should be included in the contract time for the construction of the temporary structure. This time should be shown on the contract time chart.

**Curing and protection of concrete.** Include the contract time required to ensure concrete is sufficiently cured and has developed adequate strength to support subsequent construction operations without damage to inplace work. Also include time required before bridge decks can be sealed.

### **Exclusion from Contract Time Charge**

Operations excluded from the contract time charges are those occurring prior to and following the major operations of the contract, a brief list of these is as follows:

- 1. Construction Staking, initial layout before grading work begins.
- 2. Move-in of equipment by the contractor.
- 3. Clearing, grubbing, stripping and subsequent final clean-up of aggregate pits or quarries, borrow or subbase pits.
- 4. Delivery, installation and removal of temporary traffic control devices.
- 5. Exploratory digging of test holes.
- 6. Construction, maintenance and subsequent obliteration of access roads to pits or quarries.
- 7. Setting up and dismantling of crushing, asphaltic or concrete batching or mixing plants.
- 8. Preliminary blasting or crushing for test samples.
- 9. Watering sod, when performed after completion of all sod replacement and all other construction work is completed. The 10-day watering requirement remains in effect, however.
- 10. The production of aggregate stockpiles when no other work is in progress nor has been ordered to start.
- 11. Repairs to equipment performed at the work site prior to the start of work during official suspension or after contract work is completed.

### LIST OF ATTACHMENTS

Attachment 30.1 Sample DT1923, Contract Time for Completion

Attachment 30.2 Percentage Factors for Probable Working Days

### FDM 19-10-35 Certificate of Right of Way (DT1899)

August 17, 2020

The FHWA has established rules and regulations that must be followed by state and local agencies when acquiring highway right of way where federal aid funds are used. A Certificate of Right of Way (DT1899) shall always accompany the PS&E transmittal. Note: At the time of this writing, an additional step is being implemented on a trial basis where an exception report is being required at the time of the PS&E to try and address any issues that may prevent a project from meeting all requirements for advertisement and letting. See FDM 19-1-3 for more about the project letting process.

\*\* When finished filling in the RE1899. Please convert to a PDF per instructions on the bottom of the form.

## 35.1 Right-of-Way Clearance

The status of ROW is reported using the Certificate of Right of Way (<u>RE1899</u>). <u>Attachment 35.1</u> shows a copy of this form with detailed instructions for completing. A separate document must be submitted for each Project ID. An electronic copy of this form is available from the Real Estate Program Manual (REPM) at

### https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/re/repm.aspx

The top half of this form (see items marked #1 – 16 on <u>Attachment 35.1</u>) is always completed by the organization that is designing the project (either the region or the consultant); however, only WisDOT is authorized to verify and approve the information given. Further processing of this form depends upon the project circumstances.

## 35.1.1 No New ROW Required

If there is no new land interest being acquired (either permanent or temporary), then the regional project development unit representative should check the appropriate box and type their name in section 17. Only WisDOT is authorized to verify and approve the information given on the certification. The form should then be added to the PS&E package.

### 35.1.2 New ROW Is Required

If the project does require the acquisition of new land interests (either permanent or temporary) then the regional project development unit representative should check the appropriate box and type their name in Section 17. Only WisDOT is authorized to verify and approve the information given on the certification. The form should then be sent to the regional technical services' real estate unit for completion of sections 18 - 21. The responsible regional real estate representative will fill in their name in Section 21. Only WisDOT is authorized to verify and approve the information given on the certification. When all sections have been completed the form should be added to the PS&E on-line transmittals in accordance with FDM 19-10-1.

### LIST OF ATTACHMENTS

Attachment 35.1 Certificate of Right of Way

#### FDM 19-10-40 Utilities Status Report (DT1080)

August 17, 2020

The information contained in the utility status report (USR) (Form <u>DT1080</u>) provides data relative to utility facilities within the project and the status of utility parcels and agreements. A separate document must be submitted for each Project ID. See <u>FDM 18-10-40</u> for guidance on creating a USR and a sample of one.

When finished filling in the DT1080. Please convert to a PDF per instructions on the bottom of the form.

## **40.1 Utility Clearance**

The utilities status is reported by the region. The status of non-parcel utility facilities should also be included. Where utility adjustments or relocations have been performed prior to the PS&E. transmittal date, the special provisions should contain current information.

### FDM 19-10-42 Certification of Railroad Coordination with Highway Construction

August 17, 2020

A Certificate of Coordination of Railroad Work with Highway Construction (<u>DT1804</u>) is required for all project PS&E submittals regardless of if there are railroad impacts. A separate document must be submitted for each project ID.

The Regional Railroad Coordinator and/or the WisDOT Project Manager are responsible for completing the <a href="DT1804">DT1804</a> form at PS&E. The Regional Railroad Coordinator shall sign the <a href="DT1804">DT1804</a>. The Railroads and Harbor Section (RHS) within the Bureau of Transit, Local Roads, Railroads, and Harbors (BTLRRH) will review the <a href="DT1804">DT1804</a> prior to clearing the project within psetrak.

Convert the completed DT1804 form to a PDF prior to eSubmitting.

### FDM 19-10-43 Digital Data Exchange

November 15, 2023

#### 43.1 General

Digital Data Exchange provides a way to use highway project data with standard formats in survey and engineering software during construction and for future design projects.

This procedure describes the requirements for submitting the Contractor Data Packet, submitting Civil 3D project data, reviewing the submitted project data and archiving the project data. No physical documentation is sent to central office as part of the submittal. All questions about the content of this procedure should be directed to Methods Development at <a href="mailto:support.cae@dot.wi.gov">support.cae@dot.wi.gov</a>.

### 43.1.1 Application

The requirements of this procedure apply only to projects on the state trunk highway system. For consultant-designed projects, these requirements apply to two-party contracts only.

- Projects that have solicitation dates and FIIPS Life Cycle set to 11 (for internal projects, FIIPS Life Cycle set to 11) before July 1, 2014 can submit project data either in MicroStation/CAiCE or AutoCAD Civil 3D formats.
- Projects that have solicitation dates and FIIPS Life Cycle set to 11 (for internal projects, FIIPS Life Cycle set to 11) after July 1, 2014 shall submit digital data in Civil 3D formats and be developed in AutoCAD Civil 3D software.

### 43.1.2 AutoCAD Civil 3D Mandate Notification

The use of AutoCAD Civil 3D software and file formats native to it will be required on most highway projects. Further information is included in Attachment 43.1.

### 43.2 Contractor Data Packet Submittal

The designer shall create a Contractor Data Packet for each let project with a geospatially accurate reference alignment. Submitted data required for a project is dependent on project scope. See Table 43.3 for accepted file formats. Unused layers and referenced data should not be included in the Contractor Data Packet.

The Contractor Data Packet shall contain a metadata document that lists all files submitted. An electronic copy of the metadata template (WisDOT-C3D-ContrDataPack-Meta.docx) can be found at WisDOT Civil 3D forms.

The Contractor Data Packet files shall be zipped into a single file and named <ConstructionID>-cdp.zip. The Civil 3D project subfolder *const* should be the top folder within the zip file. Submit the .zip file using the lowest construction ID when multiple construction IDs are shown on a single title sheet.

Example: A project with a construction ID of 00000000 shall be submitted as 00000000-cdp.zip.

The designer shall submit the Contractor Data Packet through the eSubmit system (See FDM 19-10-1).

### 43.3 Consultant Civil 3D Design Data Submittal

After the PS&E has been reviewed and corrected, the consultant designer shall submit the Civil 3D files used to develop the final design for the let project. Submitted data required for a project is dependent on project scope. See Table 43.3 for accepted file formats.

The design data submittal shall contain a metadata document that lists all files submitted. An electronic copy of the design metadata template (WisDOT-C3D-DesignData-Meta.docx) can be found at WisDOT Civil 3D forms.

All digital data required by this procedure shall be delivered as specified by the Region and uploaded to the Box project folder. The Civil 3D project shall be zipped into a single file and named <DesignID>-c3d-proj.zip. The Civil 3D project folder should be the top folder within the zip file.

Example: Civil 3D project named 00000000 should be archived to 00000000-c3d-proj.zip.

### 43.3.1 Digital Project Data Confirmation

After receiving electronic project data from a consultant, the data must be confirmed by personnel at the Region. This confirmation involves verification that the formats of the files sent follow the standard formats outlined in this procedure. The confirmation does not imply that the electronic data received matches the information shown on the plan submitted as part of the PS&E, nor does it verify that the design is valid and follows design standards set by the Department. The confirmation does not release the consultant from responsibilities related to the constructability and validity of the design.

The confirmation of electronic project data must take place within a month of receipt of the data from the consultant. An electronic copy of the confirmation checklist (WisDOT-C3D-Checklist.docx) can be found at WisDOT Civil 3D forms. After the data has been received and verified, correspondence confirming the receipt and acceptance of this data will be sent to the consultant by the Region.

### 43.3.2 Project Archive

After the submitted project data confirmation has occurred, it is then the responsibility of the Region to store the data in the designated DTSD archived projects folder on Box.

### 43.4 File Formats

## 43.4.1 AutoCAD Civil 3D DWG Specifications and Parameters

All files submitted as Civil 3D DWG shall be fully compatible with AutoCAD Civil 3D 2022 or earlier. Files shall

be created from file templates provided by WisDOT. These can be found at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/cad/civil-3d.aspx

The following table describes further information for requirements and options within an AutoCAD Civil 3D DWG.

Table 43.1 WisDOT AutoCAD Civil 3D DWG Feature Requirements and Options

Feature/Object	Requirements/Options		
Layers	Custom layers that are based on standard layers to allow for finer control of data are allowed. Example: The custom layer P_ALI_STH25 could be created based on the layer P_ALI.		
Linetypes and fonts	Only WisDOT-provided linetypes and fonts shall be used.		
Text, dimension, multi- leader, AutoCAD table, Civil 3D label, and Civil 3D table styles	Custom text-based styles that use WisDOT layers, linetypes, and fonts are allowed.		
Blocks	Custom blocks that use WisDOT layers, linetypes, and fonts are allowed.		
Layouts	Layouts used in plan sheets shall be created from WisDOT layout templates.		
Non-survey Civil 3D object styles	Custom styles for non-survey Civil 3D objects that use standard layers, linetypes, and fonts are allowed.		
Civil 3D survey points, survey figures, point description key sets, and figure prefix database	Only WisDOT-provided settings for survey databases, description keys, and styles for survey points and figures shall be used.		
Plot styles	Only WisDOT-provided plot style tables shall be used for plan sheet plotting.		
Pipe network catalogs and part lists	Only Autodesk-provided or WisDOT-provided pipe network catalog and parts shall be used. Pipe network part catalog shall be submitted.		
	Subassemblies provided by Autodesk and WisDOT are acceptable. Custom subassemblies are acceptable with the following requirements:		
	The custom subassembly is developed in Autodesk Subassembly Composer.		
	The pkt file for all custom subassemblies is included along with each project delivery that uses the custom subassemblies.		
Subassemblies	The subassembly follows established naming conventions for point, link, and shape codes. See WisDOT and Autodesk subassembly help file code diagrams for more information on established corridor code naming conventions.		
	Custom subassemblies used on WisDOT projects are part of the project data submittal. Intellectual property rights associated with the custom subassembly are forfeited. The Department assumes full ownership rights of the subassembly. WisDOT may use the subassembly on any future project. WisDOT may openly share the custom subassembly with the public, including it in the Civil 3D standards files packages for distribution.		
	Help documentation structured in a fashion similar to WisDOT subassembly help files shall be submitted. Help files must be delivered in Word docx format.		
Coordinate Systems	Assigning a coordinate system to DWG files is not required.		
DWG Unit Settings	Drawing Units shall be set to "Feet." Imperial to Metric conversion shall be set to "US Survey Foot (39.37 Inches per Meter)."		

## 43.4.2 DWG References

Data connections within a Civil 3D project shall be intact upon delivery to the Department. To ensure this, all xreferences between files in a Civil 3D project shall be relative and not full path or no path. Also, unless there is

a specific reason to do otherwise, xreferences should be of an overlay type and not an attachment type to avoid circular references.

# 43.5 Categories of Digital Data Exchange

Table 43.2 Digital Data Exchange Categories

Field Control Data	Data in this category are used to establish survey control in the field. Field control points are physical points collected in the field, not points created by a designer. Data must be provided in the coordinate system specified for the project. Points to include are those with feature codes classified as field control in <u>FDM 9-25-10</u> .		
Existing Surface Data	This category includes existing surface data. It is created from data collected in the field and used by design.		
Existing Topography - General	This category includes point and figure information pertaining to topographic information, other than utilities. This includes but is not limited to, fences, tree lines, and waterways.		
Existing Topography - Utilities	This category includes point and figure information pertaining to utilities such as gas, telephone, and storm sewer. WisDOT standard feature codes shall be used for the data in this category.		
Reference Line Data	This category includes all mainline and side road reference line data, and the project control necessary to establish such reference lines.		
Reference Profile Data	This category includes profiles of any reference lines as specified for the project.		
Superelevation Data	This category includes information on locations of the superelevation transition points along an alignment. The minimum number of transition points, which must be included, are the beginning and ending of normal crown, reverse crown, and the beginning and ending of full superelevation.		
Proposed Point Data	This category includes points provided in plan detail sheet tables. Examples include intersection and curb ramp details. Other design points shown in the plan that are not in a table may be provided as well but is not required. Projects completed in Civil 3D 2019 and earlier are excluded from this requirement.		
Proposed Roadway Features	This category includes proposed physical features of the roadway. This includes but is not limited to edge of pavement, shoulder edges, curb and gutter, and slope intercepts.		
Proposed Structure Horizontal Features	This category includes proposed physical features of the structure(s). This includes but is not limited to structure geometrics, pavement, shoulder, sidewalk, structure roadway widths, parapets, abutments, wingwalls, piers, and footings. This does not need to include reinforcement details, piling locations, and girders.		
Proposed Surface Models	This category includes all data associated with proposed design surfaces. It includes the following:  - Complete surfaces for each feature model in design  - Outer boundaries of the surfaces  - Longitudinal breaklines and surface points that create the surfaces		
Proposed Cross Section Data	This category includes cross section data of the proposed datum surface. Surface feature names in the cross-section files must follow department standards. All cross-section data submitted must have corresponding reference line information submitted as well.		
Earthwork Data	This category includes the tabular data in the plan's computer earthwork data sheets, immediately preceding the cross sections in the plan. Data includes incremental end areas, incremental volumes, cumulative volumes, expanded volumes and expansion factors for; cut, fill, marsh excavation, rock excavation, and EBS; cumulative mass ordinate.		
Right-of-Way Monumentation Data	This category includes all existing and proposed right-of-way alignments and points to be staked including those considered to be FEE, PLE or TLE locations.		
Other Survey Data	This category of data is for those survey items not included in any of the other categories.		
Graphical Information	Information in this category is contained in AutoCAD Civil 3D DWG files not defined in another category. It contains DWG files used to create plan sheets, and DWG files which contain the plan sheets themselves.		

## 43.5.1 Digital Data Formats

For each of the data categories, standard digital formats have been established. The acceptable formats for

each category are described below. Note that any standard format in the various categories must be accepted. Unless a mutual agreement has been made between the consulting firm performing the project work and the appropriate region office, a preferred format cannot be mandated. Refer to <u>FDM 15-5-3</u> for file naming standards.

Table 43.3 Digital Data Exchange Accepted Formats by Category

	Designer Data (AutoCAD Civil 3D format)	(Contractor Data) (Neutral format)
Field Control Data	Civil 3D survey points in a format to be imported into or in a survey database (*.xml, *.pac, *.sdb)	LandXML v. 1.2 exported from Civil 3D object files
	*.wsi file	
	Raw data files from data collectors	
	Appropriate field collection notes	
	See <u>FDM Chapter 9</u> for more information.	
Existing Surface Data	SRV file from Central Office Technical Services	LandXML v. 1.2 exported from Civil 3D object files
	Civil 3D surface object	AutoCAD v. 2010 file including 2D or 3D polyline of surface boundary
	Civil 3D survey points and survey figures in a format to be imported into or in a survey database (*.xml, *.pac, *.sdb)	
	Raw data files from data collectors	
	Appropriate field collection notes	
Existing Topographic	AutoCAD Civil 3D DWG file from Central Office Technical Services	Basic AutoCAD v. 2010 files of topography files.
Data - General and Utilities	Civil 3D survey points and survey figures in a format to be imported into or in a survey database (*.xml, *.pac, *.sdb)	
	Raw data files from data collectors	
	Appropriate field collection notes	
Reference Line Data	Civil 3D alignment objects in a DWG.	LandXML v. 1.2 files exported from Civil 3D alignments. This file should also contain the profiles and superelevations. A single LandXML alignment/profile file per LET project is preferred.
Reference Profile Data	Civil 3D profile objects in a DWG.	LandXML v. 1.2 files exported from Civil 3D profiles. This file should also contain the alignments. A single LandXML alignment/profile file per LET project is preferred.
Superelevation Data	AutoCAD Civil 3D DWG file using alignments with superelevation.	.csv or .xlsx file exported from Civil 3D
Proposed Point Data	AutoCAD Civil 3D DWG file	LandXML v. 1.2 file(s) exported from Civil 3D.
Proposed Roadway Features	2D Civil 3D and/or AutoCAD objects (alignments and 2D polylines preferred)	Basic AutoCAD v. 2010 files of 2D polylines.

	Designer Data (AutoCAD Civil 3D format)	(Contractor Data) (Neutral format)
Proposed Structure Horizontal Features	Basic AutoCAD files of 2D polylines.	Basic AutoCAD v. 2010 files of 2D polylines.
Proposed Surface Models	Civil 3D surfaces built from corridors refined with feature lines and gradings.	LandXML v. 1.2 files exported from Civil 3D  AutoCAD features exported from Civil 3D surfaces into individual Basic AutoCAD v. 2010 files:  - 2D or 3D polylines of surface boundary - 3D polylines (breaklines) and COGO points of features that created the surface
Proposed Cross Section Data	Civil 3D section view groups and associated layouts in a DWG.	Datum surface slope stake reports for all cross-section groups in the plan. See Contractor Data - Slope Stake Report for creation method and format.
Earthwork Data	Microsoft Excel .xls or .xlsx file	Microsoft Excel .xls or .xlsx file
Right-of-Way Monumentation Data	Civil 3D point, alignment, and parcel objects in a DWG. Parcel objects shall have Owner information and Interest required filled out. Volume/Page/Document information should be filled out when known.	Basic AutoCAD v. 2010 files exported from Civil 3D of existing and proposed right of way and easement alignments.  LandXML v. 1.2 files exported from Civil 3D existing and proposed right of way and easement points. A single LandXML RW points file per LET project is preferred.
Other Survey Data	Civil 3D survey points and survey figures in a format to be imported into or in a survey database (*.xml, *.pac, *.sdb)  Raw data files from data collectors  Appropriate field collection notes	Only if applicable, basic AutoCAD v. 2010 files exported from Civil 3D survey points and survey figures.
Graphical Information	AutoCAD Civil 3D DWG file  Usage of WisDOT line types, fonts, layers and other display characteristics.  Data must be located in applicable coordinates and be coordinate correct.	Not applicable

### 43.6 Guidelines on Data Requirements

Each project has its own unique digital data needs. Digital data requirements should be determined on a project-by-project basis during project scoping. Data that is listed in Table 43.2 and is used to develop project plans shall be provided in the Contractor Data Packet. The category of Other Survey Data is used only when required survey information does not fall into any of the other categories,

On projects where earthwork is paid lump sum, or if a job has less than 10 cross sections, no proposed surface model data is required. However, Pavement Replacement and Reconditioning projects should include proposed surface data in the Contractor Data Packet.

#### LIST OF ATTACHMENTS

Attachment 43.1 Civil 3D Specific Design Deliverable Requirements

#### FDM 19-10-45 Review of Consultant Plans

November 15, 2023

### 45.1 Purpose

To establish procedural guidelines to be followed when changes are required to plans developed by consultants. The guidelines are intended to assure that all inputs are recognized and considered and that all parties are appropriately involved and have necessary documentation available to them.

#### 45.2 Statement of Problem

Consultants who have designed plans for WisDOT administered projects are concerned that, on occasion, the plans have been changed without their knowledge or input. The consultant's concern is primarily directed to significant design concepts or detail changes. When plans are changed without the consultant's knowledge the design may be compromised or local input may be circumvented.

Other less significant, but important changes have on occasion, been necessary and made without communication with the consultant. The consultants also want to be informed of these types of changes because they are liable for the complete design.

The consultant community has also expressed a need to be informed of all secondary or "housekeeping changes." In these cases, important knowledge and opportunity for education will be missed unless the consultant is informed.

The consultant community is concerned about liability, reputation and the opportunity to gain experience and knowledge. In the spirit of the consultant community being a supplement to the WisDOT staff, these guidelines are being established to enhance two-way communications between the consultant designer and WisDOT design and construction staff relative to plans and contract documents.

### **45.3** Project Development

Regular meetings between the consultant and WisDOT staff during project development appear to reduce the need for changes to the final plan. Improved communications should be the goal.

### 45.3.1 Pre-Final Plan

To permit time for an orderly review process without creating a crisis situation, the consultant should submit a pre-final roadway plan to the respective region a minimum of two months before the PS&E is due at the region office. The plan should include quantities, traffic control and most of the construction details.

There should be frequent communications between the designer in the consultant's office and the project reviewer/coordinator in the region office during the final plan work by the consultant.

### 45.4 Region Activities

The complete PS&E is due at the region office a minimum of 4 weeks prior to the scheduled CO PS&E due date. If the PS&E documents, including final plans, arrive at the region office by the scheduled date they will be given priority attention. If the PS&E documents arrive late the region reviewer/coordinator will be involved with other scheduled work and the PS&E review will wait until time can be scheduled, perhaps resulting in a missed letting date.

During the final plan/PS&E review, communications should be directly between the region reviewer/coordinator and the project designer. The consultant's staff should make all corrections and/or changes that are required. If possible, the corrections/changes should be made and submitted by the consultant electronically to avoid delaying the project. If the region staff feel they must correct or change a consultant plan, they review the proposed changes with the consultant's staff. The region shall then send copies of the revised plan sheets to the consultant, along with a summary of the changes/corrections.

If possible, the consultant should make the corrections/changes in the region office, to avoid rescheduling the project. If changes or corrections are suggested by CO, the region should contact the consultant to discuss the concept of the requested changes. The region will then respond to the CO. The consultant should make any corrections or changes at this time as described above.

Appropriate consultant staff should be invited to the region office to review the marked print and draft sample proposal after it is received from the CO.

The region should review the preliminary electronic data file list, provided by the consultant, to determine if the consultant has identified all necessary files. If any additional files are needed the region should document them

and provide and updated list to the constant. The consultant then submits electronic copies of all data files on the updated list to the region after final review of the plan by CO.

Copies of bridge plans from central office bridge should be forwarded to the consultant after review by region staff. A copy of the final plan and a copy of the final sample proposal should be forwarded to the consultant by the region when they are received from the central office. A copy of any addendum issued during the advertising period should be forwarded to the consultant by the region when they are received from the CO.

#### 45.5 Bureau of Structures Activities

Completed structure plans should be submitted to the Structures Design Section a minimum of two months before the PS&E date. The reviewer may contact the consultant during review process to get additional information to justify non-standard or unusual details.

After checking the final structure plans, the consultant plan reviewer in central office will contact the consultant as necessary to resolve discrepancies.

All plans receive an additional cursory review by the Chief Structural Design Engineer before being submitted to the Proposal Management Section. This review is primarily to determine the need and adequacy of special provisions and the consistency of bid items. Changes in bid items are normally editorial in nature and the consultant is not contacted.

Substantive changes, involving structural elements and details, are discussed with the consultant.

### **45.6** Bureau of Project Development

PS&Es should not be submitted to BPD unless they are complete and checked by the consultant and region. Region/consultants should not anticipate making additions or corrections after submittal nor expect that BPD staff will catch errors/oversights during the review.

Substantive changes should be discussed between CO project development engineers and region design personnel. Editorial changes for clarity and correction of errors can be discussed between the CO plan examiners and region reviewer/ coordinator. Two factors need to be considered:

- 1. Time is critical at this stage of review.
- 2. Judgment must be used in determining if detailed type changes of small significance need to be discussed.

Drafting work to repair plans will, in general, be done by the consultant/region. The designer will be in charge of the work not the CO plan examiner. Arrangements for consultants to do the work will be coordinated through the respective region.

### **45.7 Post Letting Activities**

Minor changes to better fit field conditions will be made by construction staff without contacting the consultant. The consultant should be contacted along with department staff when considering contractor-initiated Cost Reduction Incentive proposals. If a proposed change is significant, or if the solution to a problem is not obvious, the consultant should be contacted as well as various department personnel.

Construction staff should forward a copy of the post construction critique of the plan and proposal to the design consultant after the region design staff has added their comments.

When available, the consultant may review the as-built plans and contract change order file in the region office.

## FDM 19-10-50 Revisions of PS&E and Resubmittal of Rejected Proposals

November 15, 2023

#### 50.1 Revisions of PS&E

## 50.1.1 Plan Review

Plans will be reviewed in BPD using the checklist found in <u>FDM 19-40-1</u>. BPD plan examiners will coordinate changes with region staff and consultant designers who will submit necessary revisions.

## 50.1.2 Addenda

The region will make any plan changes on CADDS and send the revised plans to BPD as PDF files formatted to be  $8 \frac{1}{2} \times 11$  inches (see FDM 15-5-10 and FDM 19-22-1).

#### **50.2** Resubmittal of Rejected Proposals

The Proposal Management Section will send an email to indicate the required actions to resubmit a rejected proposal, including new PS&E and letting dates that are established after discussion with regional staff.

Resubmittals may be necessary to update documents with the new dates and construction timeline. For the updated Plan Letter, under the "Conclusion" section, explain any changes from the rejected proposal that have been done. See <u>FDM 19-10-15.1.26</u>.