Deliverables 2 Data Transfer, Review, and Acceptance

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D2.01 General

This chapter defines the requirements for the transfer, review, and acceptance of WSDOT electronic data deliverables. The requirements include what information is transferred, who is expected to provide the information (the supplier), who will receive the information (the customer), and who will approve the information.

Department suppliers refer to persons directly employed by WSDOT. Consultant suppliers refer to consultant firms hired to provide engineering services for WSDOT.

Following are several examples of electronic data transfers:

- A WSDOT survey group or consulting firm (the supplier) provides an OpenRoads survey dataset to a design group or consulting firm (the customer) for use in the design of a project.
- A design office or consulting firm (the supplier) provides an OpenRoads design dataset to a construction office (the customer) for use during construction of a project.
- A consulting firm (the supplier) provides an OpenRoads dataset for Stages 1 & 2 of a project to the WSDOT Design Office for use during Stage 3 of a project.

While this list is not all-encompassing, it provides examples of some of the electronic data transfers throughout the project development process.

D2.02 Preparation and Transmittal of Electronic Data

All submissions of electronic data (preliminary, milestone, or final) shall adhere to the following requirements:

- The supplier shall provide the customer with the information in electronic format as described in the appropriate section of this manual.
- Electronic scanned sheets submitted will be scanned at 600dpi minimum and resulting image or PDF will be checked for clarity and readability before transmittal.
- All submittals shall ultimately reside in the appropriate WSDOT ProjectWise structure.
- Acceptance of submitted information shall be per D2.03.

D2.02(1) Data Reference from within ProjectWise

Documents and drawings developed specifically for a project effort shall be managed and stored within that project work area. This includes project specific survey deliverables.

Documents and drawings managed in ProjectWise by another group (such as Bridge or Right of Way Plans) shall not be copied to a ProjectWise project work area. Reference the documents and drawings from their source location. Do not make local copies of other group documents and drawings.

Reference to documents and drawings managed in ProjectWise shall include a hyperlink to the files/folder in an email or other medium to notify the customer of the submittal per the following:

- 1. In ProjectWise, browse to the file or folder to be submitted:
- 2. Right-click on the Address and select Copy URL.

FIG D2-1 ProjectWise Address bar with content selected



- 3. Paste this in the communication medium (email message, Word Document, Excel file, etc.) to send to the customer. The pasted address will display the folder or file name such as: PW101. The actual location is in the hyperlink.
- 4. Contact WSDOT CAE Support if the customer cannot access the submitted information.

D2.02(2) Data Submittal From Outside ProjectWise

External suppliers shall submit files through the WSDOT office administering their contract.

WSDOT suppliers shall submit documents, drawings, and other files electronically to department customers. All external electronic files shall be checked for computer viruses by the supplier immediately prior to submission. The supplier shall include a dated log file and a written verification of the virus check. The verification will include the name and version of the virus check software used and the date the virus check was performed. Submissions found to contain viruses will not be accepted. Due to the WSDOT Wide Area Network's virus scanning tools, the requirement is automatically met for data produced within the WSDOT WAN.

Once electronic data has been received, place the file in the appropriate location within the applicable ProjectWise work area.

For every deliverable, the following information shall be included in the transfer communication:

- Project information including name, project numbers, and description.
- A submission number and date (e.g., Submission #1, 12/22/2020). Revisions shall be submitted under the original submission number and include a revision number and revision date (e.g., Submission #1, Revision #1, 1/7/2020).
- A content listing and location of the electronic data being transferred.

All electronic data submissions shall be compatible with the current versions of CAE software in use by WSDOT. See Computer Aided Engineering website for acceptable deliverable file format and versions:

In general, all submissions shall be in accordance with the standards detailed in the current version of this manual. However, with approval from WSDOT, consultant suppliers may submit electronic files that conform to previous versions of this manual. Written approval must be obtained from WSDOT regarding the WSDOT electronic data standards that the consultant supplier is using for the submission. Requests for approval to use previous versions of WSDOT standards shall be directed to and approved by the Project Manager/Consultant Liaison as applicable.

The supplier shall ensure that the contents of all electronic files are the same as any "hard copy" information submitted (e.g., survey notes, paper plots, scanned images, or PDF files).

The supplier shall name the files as stated in the appropriate section of this manual.

D2.02(3) WSDOT provided CADD files to interested parties

The following describes the requirements for providing CADD drawings to interested parties such as Design Build proposers or local agencies, that are not actively working on WSDOT project in ProjectWise.

For Design-Build (DB) and Progressive Design-Build (PDB) efforts, all CADD Files are subject to RFP Chapter 1 requirements under "Disclaimer Regarding Documentation"

Preparing for delivery

Preliminary design CADD plan sheets and supporting files are conceptual in nature and are for information only. These CADD files may be made available to interested parties provided all the following steps are taken:

- 1. All information in the title block is removed from the plan sheet including company logos.
- 2. A disclaimer reading "FOR INFORMATION ONLY" is printed diagonally across each plan sheet.

Preliminary design plan sheets for current projects under design or under contract may be provided in PDF format including the disclaimer noted in Step 2 above. Historical or as-built plan sheets may only be shared in PDF format, as described in this section.

D2.03 Acceptance of Electronic Data Submittals

The supplier is responsible for adherence to all standards and should use the same methods and guidelines as the customer to evaluate conformance prior to submittal.

In the evaluation of all electronic files, the customer may review and comment on the information submitted by the supplier to ensure conformance with WSDOT CAE standards.

D2.03(1) General File Evaluation

The following general guidelines may be used in the evaluation of all CADD files:

- The vendor provided standards checker may be run on incoming DGN files for foundational CADD attributes such as Element Template (level, color, weight, and line style), Dimension and Text Styles assignment to ensure adherence to WSDOT standards as described in this manual and the *Plans Preparation Manual* M 22-31. User created resources shall be submitted to WSDOT CAE Support for approval.
- The customer may check submitted files for inconsistencies by reviewing tie points, stationing, and dimensioning to ensure accuracy and consistency with the design data generated by other applications used on the project.
- The customer may verify that the data is coordinately correct in the appropriate Geographic Coordinate System (GCS) including Northing, Easting, and Elevation values.

D2.03(2) Geometry Files

In addition to the general evaluation guidelines, the customer may review alignment/geometry files:

- To verify that geometry chains/lines and points appear in the correct location in relation to the topography.
- To verify that the appropriate Feature Definition has been assigned to all elements.
- By generating report files based on the alignments and coordinate geometry points and compare them against the survey notes or plans submitted by the supplier for accuracy.

D2.03(3) Survey Files

In addition to the general evaluation guidelines, the customer may review survey data files:

- For compliance with current WSDOT standard survey field code usage (see Symbology 2)
- That the appropriate datum is applied correctly and documented (see D5.03(2))

D2.03(4) Terrain Models

In addition to the general evaluation guidelines, the customer may include review terrain models criteria such as:

- For inconsistencies between features in the models and elements shown in corresponding design models.
- By generating contours to evaluate for inconsistencies, anomalies, and elements at incorrect elevations
- By generating profiles along the approximate centerline of all major roads and streams, reviewing for unusual slopes and/or breaks.
- By generating cross sections from the approximate centerline of all major roads and streams.
 These sections will be reviewed for unusual slopes and/or breaks.
- By displaying the triangles to ensure that erroneous triangles have not been included.
- Elevations using methods consistent with the accuracy attainable by the original method of collection.

D2.03(5) ASCII Files

The customer may review ASCII files to ensure they are in a format consistent with the file content.

D2.04 Rejection of Electronic Data Submittals

Any data or files submitted that do not meet the requirements outlined in this manual shall be returned to the supplier for correction. With the return of any data or files, the customer will provide a written explanation of all areas that do not conform to this document. The supplier shall be responsible for finding the source of the errors, correcting the errors, and resubmitting the files.

Any communications between a consultant supplier and WSDOT will be done through the Project Manager or Consultant Liaison as applicable.

