Ohio Department of Transportation

PDF Submission Procedure – January 15, 2016

Table of Contents

Procedure

The process outlined in this document provides step-by-step instruction for creating the PDF Documents, submitting the files, completing any file revisions (if necessary), and processing addenda (if applicable) on traditional Design-Bid-Build Projects. For Design-Build projects refer to Office of Estimating, "Design-Build Project Submittal Requirements". To better illustrate the traditional Design Bid Build process, the procedure is categorized into the following sections:

- ➢ Initial Plan Package Plan Set Submission
    - o Review PDF requirements and File Naming Convention
    - o Create the multi-page PDF file
    - o Copy the file to the Central Office Server
    - o Review additional plan set submission details
- ➢ Plan Package Document Submission
    - o Prepare and assemble Plan Package document
    - o Create the PDF file
    - o Name Plan Package according to naming convention
    - o Copy the file to the Central Office Server
    - o Notify Office of Contracts of submission
- ➢ Pre-Addenda Phase – Revising Plan Set
    - o Verify the project is in Pre-Addendum Phase
    - o Create revised multi-page PDF file (all plan sheets)
    - o Create Clean and Clouded versions of revised multi-page PDF file (revised sheets only)
    - o Copy the file(s) to the Central Office Server
    - o Notify the Office of Contracts regarding the change
- ➢ Addenda Phase – Revising Plan Set
    - o Verify the project is in Addendum Phase
    - o Create revised multi-page PDF file (all plan sheets)
    - o Create Clean and Markup versions of revised multi-page PDF file (revised sheets only)
    - o Copy the file(s) to the Central Office Server
    - o Notify the Office of Contracts regarding the change
- ➢ Post Final Conformed Set of Plans to Digital Paper
    - o Contracts posts As-Awarded Final Conformed Set (incorporating all plan changes up to project sale date) to Digital Paper Website
    - o Contracts designates Plans as Conformed Set in Digital Paper

<u>Initial Plan Package Plan Set Submission</u>

1. PDF Details
    a. The plan set PDF files should be generated directly from the CADD Design Files. Refer to the CADD Engineering Standards Manual **Section 500** for additional details.
    b. All plan images for a project (i.e. construction, right-of-way, geotechnical, etc.) are required to be the same "physical" size and the same dpi resolution size.
    c. Image Properties. All "Standard" project plan sheets are to be submitted as 17" wide x 11" high. SPEDuP plan sets are to be submitted as 8.5" x 11" sheets.
        1. For Standard Plan sheets:
            a. 17" wide x 11" high
            b. 300 DPI
        2. For SPEDuP Plan sheets:
            a. 8.5" x 11"
            b. 300 DPI
        3. If a document cannot be legibly reproduced, the plan set will be required to be recreated and resubmitted.
2. File Naming
    i. File names shall conform to the following naming convention
        1. XXXXXXXX_PID_AsFiled.pdf
        2. Where "XXXXXXXX" represents the eight digit date in the following format: Four Digit Year, Two Digit Month, Two Digit Day. An example for plan filed on May 9, 2015 would be: 20150509_123456_AsFiled.pdf
        3. Where "PID" is the six digit PID# associated with the project (if the PID# is five digits long add a lead zero. For example PID# 97231 should be 097231).
    ii. Geotechnical Exploration Sheets:
        1. Geotechnical Exploration Sheets are considered a separate component of the plans. If a project contains these sheets they are to be added to the end of project plan set. Project Index of Sheets should refer to the Geotechnical Exploration Sheets by the specific project type i.e., Soil Profile Sheets, Structure Foundation Exploration Sheets, Landslide Exploration Sheets, etc. See the Office of Geotechnical Engineering - Specifications for Geotechnical Explorations for more project types. The Geotechnical Exploration Sheets are not included with the overall sheet count in the plans.
        2. The Geotechnical Exploration Sheets shall be combined with the final plan PDF and as such shall be named using the same naming convention as overall plan set.
3. Create the PDF files
    a. The designer is responsible for generating the required PDF documents per the minimum standards provided in this document and the **ODOT CADD Engineering Standards Manual** regardless of their software or methodology.
    b. Refer to the **CADD Engineering Standards Manual** and the **PDF Printing with Print Organizer** section in the ODOT Project Management with the ODOTcadd Standards Training Guide for more information on ODOT's process for generating multi-page PDF's utilizing Bentley MicroStation software.
4. Copy the PDF file(s) to the Central Office server
    a. \\CTRFS100\D01$ (Each District has their own share. For example, D01$, D02$)
    b. Place the PDF File(s) in the following folder:
        i. \\CTRFS100\D01$
            1. Plans
                a. CTY-PID (District to create this folder under the "Plans" folder at the time of filing)

    c. A separate folder is provided for each District as referenced above. Only the District has write access to their corresponding project folder with the exception of the common folder, \\CTRFS100\TEMP$. All Districts can write and access the common folder.

5. Additional initial plan set submission details
    a. Projects **less than 400** sheets
        i. If a project has less than 400 plan sheets, it is preferred that the PDF files are submitted at least one day early.
    b. Projects **greater than 400** sheets
        i. If a project has greater than 400 plan sheets, it is required that the PDF Files are submitted at least **one full working day** early. The one working day requirement provides the Office of Contracts adequate lead time to print the required paper copies.
    c. Title sheet
        i. The District signed title sheet is to be converted into a PDF and incorporated into the multi-page PDF plan set. At this time, it is acceptable for this to be a scanned document.

Plan Package Document Submission

Along with creation of the initial PDF plan set, Designers must create and submit the plan package submittal documentation in electronic format as a single PDF file. The following process outlines the steps required to create, name, and submit the plan package documents electronically:

1. The final plan package document can be accessed at the following location:
    a. http://portal.dot.state.oh.us/Divisions/Planning/estimating/default.aspx
2. Verify the plan package documents
    a. Review the plan package submittal documentation for accuracy and completeness prior to creating the electronic file.
    b. All original documentation will remain at the District (i.e. Right of Way Certification Form and Environmental Consultation Form).
    c. Create the GENSUM spreadsheet per the requirements given at following website: http://www.dot.state.oh.us/Divisions/ConstructionMgt/Estimating/Pages/General-Summaries.aspx
3. Create an Adobe PDF file
    a. Assemble the submission documents into one (1) PDF file
4. Name the file
    a. File names shall conform to the following naming convention
        i. PID - PlanPackage.pdf
        ii. Where PID references the Project ID
5. Copy the PDF file to the Central Office server
    a. \\CTRFS100\D01$ (Each District has their own share. For example, D01$, D02$)
    b. Place the PDF file in the following folder:
        i. \\CTRFS100\D01$
            1. Plans
                a. CTY-PID
6. Notify the Office of Contracts
    a. After the Plan Package PDF file AND Initial plan set PDF are placed on the Central Office Server, email the following contact to notify them of Plan Submittal:
        i. DOT CEN Contracts PlanSubmittal

7. Plan Logging (Ellis)
   a. The Office of Contracts will review the submission, notify the District of any issues, and mark the Plan Package Received in C.O. Ellis milestone as complete.
8. Plan Package Revisions
   a. Plan Package revisions after plan file will be coordinated between office of contracts and Districts. Resubmittal requirements will be communicated to District Project Contacts.

Pre-Addenda Phase – Revising Plan Set

During the Pre-Addenda phase if plans require revision, proceed as directed below:

1. Verify the Pre-Addenda Phase
   a. The Pre-Addenda Phase is defined as the time frame up to the **"Estimate Complete"** date per the Project Letting Schedules provided by the Office of Estimating. The letting schedule is available on-line at the following link:
      i. http://www.dot.state.oh.us/Divisions/ConstructionMgt/Estimating/ProjCorPSE/Letting%20Schedules.pdf
      ii. Access the report to confirm your Estimate Complete date.
   b. Any changes beginning on the Estimated Completed date and beyond will require an addendum. Follow the Addenda Phase instruction below.
2. Correct the plan set as required
   a. If a plan set requires revision, the Office of Estimating will notify the District via phone or email explaining the correction.
   b. The Office of Estimating **will not** make the plan revisions.
   c. The District will be responsible for making the necessary correction(s) and resubmitting the files as indicated below.
3. Place the Complete Revised plan set (entire plan set including "clean" revised sheets) on server
   a. RevisedpPlan sets submitted during the Pre-Addendum Phase shall be named as follows: XXXXXXXX_PID_PreAddendum_R#.pdf as described below:
      i. "XXXXXXXX" represents the eight digit date in the following format: Four Digit Year, Two Digit Month, Two Digit Day.
      ii. "PID" is the six digit PID# associated with the project (if the PID# is five digits long add a lead zero. For example PID# 97231 should be 097231).
      iii. R"#" is the sequential revision number starting at 1.
      iv. An example filename for a project revised on October 29, 2015 with PID# 85699 and being pre-addendum revision #2 would be: 20151029_085699_PreAddendum_R2.pdf
   b. Place the revised plan set on the Central Office server as listed under the "Initial Submission". The original "As Filed" plan set should also remain on server so that a history of all plan submissions can be easily tracked.
   c. The Central Office file location will keep all pre-addendum plan sets until the Office of Estimating assigns a project number. Once the project number is assigned, the project will enter a "lock-down" phase where file updates will not be permitted. If a change is required once the project number is assigned and the project is advertised, then the Project Manager will have to issue a formal addendum to the project.
4. Prepare the Clean and Clouded (i.e. markup) sheets and place on server
   a. The Clean and Clouded sheets should contain just the revised sheets and each should be compiled as a single multi-page PDF file containing all revisions.
   b. The Clouded (i.e. Markup) sheets shall be the revised sheets with all changes clouded or marked up clearly showing what changes were made to the plans. These sheets can be created utilizing the Clouding command in MicroStation (or other CAD software), the Clouding command in PDF editing software, or by hand markup of the revisions and scanning the hand marked sheets.

      c. The Clean Sheets shall be named as follows;
         XXXXXXXX_PID_PreAddendum_R#_Clean.pdf as described below:

            i. "XXXXXXXX" represents the eight digit date in the following format: Four Digit Year, Two Digit Month, Two Digit Day.
           ii. "PID" is the six digit PID# associated with the project (if the PID# is five digits long add a lead zero. For example PID# 97231 should be 097231).
          iii. R"#" is the sequential revision number starting at 1.
          iv. An example filename for a project revised on October 29, 2015 with PID# 85699 and being pre-addendum revision #2 would be: 20151029_085699_PreAddendum_R2_Clean.pdf

      d. The Clouded Sheets shall be named as follows;
         XXXXXXXX_PID_PreAddendum_R#_Clouded.pdf as described below:

            i. "XXXXXXXX" represents the eight digit date in the following format: Four Digit Year, Two Digit Month, Two Digit Day.
           ii. "PID" is the six digit PID# associated with the project (if the PID# is five digits long add a lead zero. For example PID# 97231 should be 097231).
          iii. R"#" is the sequential revision number starting at 1.
          iv. An example filename for a project revised on October 29, 2015 with PID# 85699 and being pre-addendum revision #2 would be: 20151029_085699_PreAddendum_R2_Clouded.pdf

      e. Place the Clean and Clouded PDFs in the SAME folder as the original plan submittal.

5. Notify the Office of Contracts regarding the changes
      a. After the Revised PDF Files have been placed on server, send a notification email to the following contact:
            i. DOT CEN Contracts PlanSubmittal
           ii. Be sure to clearly indicate in email the page numbers of the revised sheets

Addenda Phase – Revising Plan Set

Note: The existing Addenda Procedure established by the Office of Contracts **remains unchanged** and is not altered as a result of the PDF submissions. The following items pertain only to the plan set revisions and not the formal Addenda Procedure. A link to Addendum Documentation accessible to internal employees is as follows:

http://portal.dot.state.oh.us/Divisions/ContractAdmin/contracts/Documentation/Forms/Docs.aspx

During the Addenda phase, if a plan sheet requires replacement, proceed as follows:
1. Verify the Addenda Phase
      a. The Addenda Phase is defined as the time frame after the **"Estimate Complete"** date per the Project Letting Schedules provided by the Office of Estimating. The letting schedule is available on-line at the following link:
            i. http://www.dot.state.oh.us/Divisions/ConstructionMgt/Estimating/ProjCorPSE/Letting%20Schedules.pdf
           ii. Access the report to confirm your Estimate Complete date.
      b. Any changes prior to the Estimate Complete date will follow the pre-addendum process. Follow the Pre-Addenda Phase instruction above.

2. Place the Complete Revised plan set (entire plan set including "clean" revised sheets) on server
      a. Once the project is advertised the existing plan files will be deleted from the "Plans" folder. The only location where the files can be updated will be in the "Addenda" folder.
      b. Revised plan sets submitted during the Addendum Phase shall be named as follows;
         XXXXXXXX_PID_Addendum_R#.pdf as described below:
            i. "XXXXXXXX" represents the eight digit date in the following format: Four Digit Year, Two Digit Month, Two Digit Day.

      ii. "PID" is the six digit PID# associated with the project (if the PID# is five digits long add a lead zero. For example PID# 97231 should be 097231).

      iii. R"#" is the sequential revision number starting at 1. The revision number for addendum phase is independent of pre-addendum phase and shall always start at 1.

      iv. An example filename for a project revised on October 29, 2015 with PID# 85699 and being addendum revision #2 would be: 20151029_085699_Addendum_R2.pdf

  c. The revised plans should be placed on Addenda District location as indicated below:

      i. \\CTRFS100\D01$

        1. Addenda

          a. CTY-PID

3. Prepare the Clean and Clouded (i.e. markup) sheets and place on server

  a. The Clean and Clouded sheets should contain <u>just</u> the revised sheets and each should be compiled as a single multi-page PDF file containing all revisions.

  b. The Clouded (i.e. Markup) sheets shall be the revised sheets with all changes clouded or marked up clearly showing what changes were made to the plans. These sheets can be created utilizing the Clouding command in MicroStation (or other CAD software), the Clouding command in PDF editing software, or by hand markup the revisions and scanning the hand marked sheets.

  c. The Clean Sheets shall be named as follows; XXXXXXXX_PID_Addendum_R#_Clean.pdf as described below:

      i. "XXXXXXXX" represents the eight digit date in the following format: Four Digit Year, Two Digit Month, Two Digit Day.

      ii. "PID" is the six digit PID# associated with the project (if the PID# is five digits long add a lead zero. For example PID# 97231 should be 097231).

      iii. R"#" is the sequential revision number starting at 1. The revision number for addendum phase is independent of pre-addendum phase and shall always start at 1.

      iv. An example filename for a project revised on October 29, 2015 with PID# 85699 and being addendum revision #2 would be: 20151029_085699_Addendum_R2_Clean.pdf

  d. The Clouded Sheets shall be named as follows; XXXXXXXX_PID_Addendum_R#_Clouded.pdf as described below:

      i. "XXXXXXXX" represents the eight digit date in the following format: Four Digit Year, Two Digit Month, Two Digit Day.

      ii. "PID" is the six digit PID# associated with the project (if the PID# is five digits long add a lead zero. For example PID# 97231 should be 097231).

      iii. R"#" is the sequential revision number starting at 1. The revision number for addendum phase is independent of pre-addendum phase and shall always start at 1.

  e. An example filename for a project revised on October 29, 2015 with PID# 85699 and being addendum revision #2 would be: 20151029_085699_Addendum_R2_Clouded.pdf

  f. Place the Clean and Clouded PDF's in the SAME Addenda folder as the Complete Revised plan submittal as described above in Step 2C.

4. Notify the Office of Contracts regarding the changes

  a. After the Revised PDF Files have been placed on the server, send a notification email to the following contact:

      i. <u>DOT Prebid</u>

      ii. Be sure to clearly indicate page numbers of the revised sheets in the email.

Post Final Conformed Set of Plans to Digital Paper (C.O. Contracts)

1. C.O. Contracts to post As-Awarded Conformed plan set (Entire plan set) to Digital Paper
    a. The As-awarded Conformed Set will come from one of the following three sources:
        i. If no plan changes after initial plan file, then As-Awarded Conformed Set is originally filed plan set.
        ii. If plan changes during Pre-Addendum Phase, use latest revision (Entire plan set) of Pre-Addendum plan set.
        iii. If plan changes during Addendum Phase, use latest revision (Entire plan set) of Addendum plan set.
2. Make sure that when posting As-Awarded Conformed set of plans to Digital Paper that it is clearly identified as "Conformed" set.