# Appendix: Print Excel to Adobe PDF

##### Excel Sheets for Plan Production

Excel plans sheets were developed using Microsoft Excel for plan production to make tabular format plan data easier. The Excel-based data sheets are intended to speed up data entry, calculations, and plan drafting. It is also intended to eliminate the need to retype or re-enter data sent in by consultants or other departmental offices.

The sheets can be printed directly to an Adobe PDF and included in the final plan set without the need to transfer the sheets into MicroStation. The sheets reduce the manual calculations and repetitive data entry through Excel’s tabular references and automatically calculated formulas.

Additional benefits to utilizing the Excel sheets include flexibility to make minor revisions and updates, centralization of data that was previously spread across many files and the ability to apply digital seals to the final plans.

There also exists the ability to import the data directly from the Excel sheet into the P2S system.

The Excel Templates are located here:

Internal location: [Preconstruction :: Support :: Cadd Support (state.sc.us)](http://iwww.dot.state.sc.us/PreConstruction/support-cadd-support.aspx)

External location: [CADD Design standards and procedures for consultants (scdot.org)](https://www.scdot.org/business/CADD-Design.aspx)

The following sheets can be prepared using the Excel templates:

• Summary of Estimated Quantities

• Construction Plans Review Quantity Sheet

• Moving Items, Removal & Disposal, and New Fence Sheets

• Right of Way Data Sheet

• Erosion Control Data Sheet

• Survey Control Data Sheet

• General Construction Note Sheet

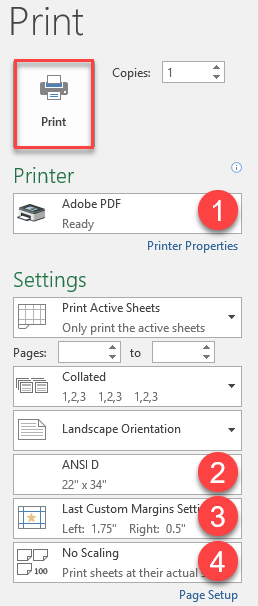
To begin each sheet for a new project, download the Excel file and add the 5-digit project number into its name.

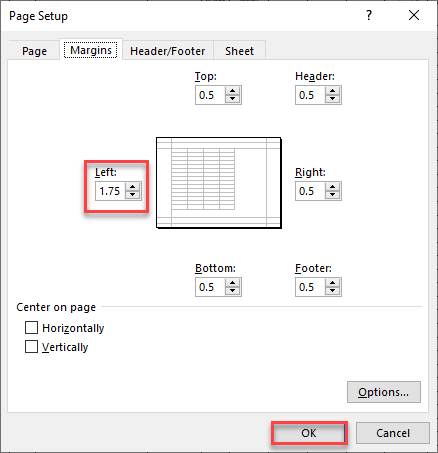
Unless otherwise noted all text is to be entered on these sheets in ALL-CAPS to improve readability.

##### Converting Excel Sheets to Adobe PDF

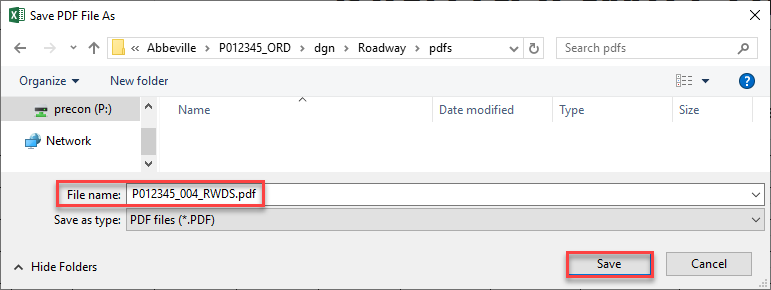
Select **File > Print** in Excel

1. On the Print dialog, select the **Adobe PDF** as the Printer.
2. For the Page Size, select ANSI D – 22” x 34”.
3. For the margins, select **Custom Margins**, and enter as show below on the right and press **OK**.
4. Ensure that “No Scaling” is selected and press the Print button.



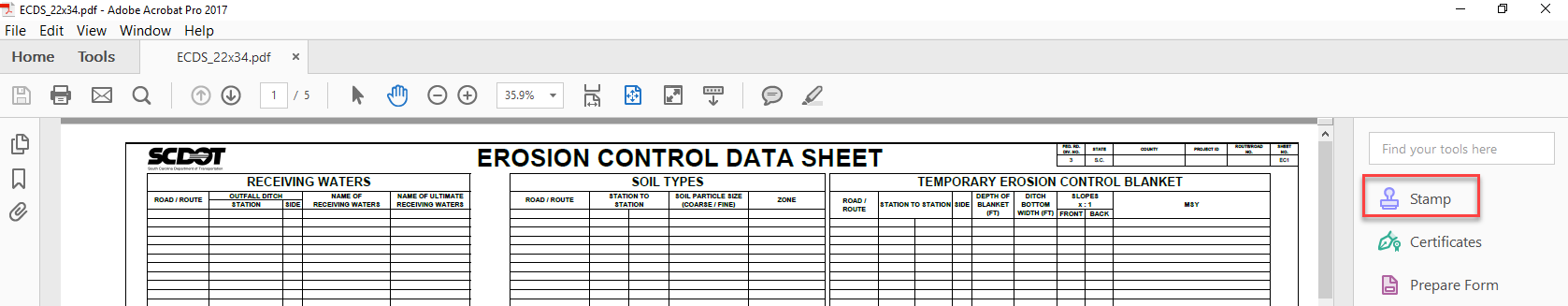


When prompted, browse to the appropriate project directory, enter a **File name** and press **Save**.

**Repeat** this process to create individual pdf plan sheets for each of the tabs as necessary.

##### Apply PE Seal to Adobe PDF

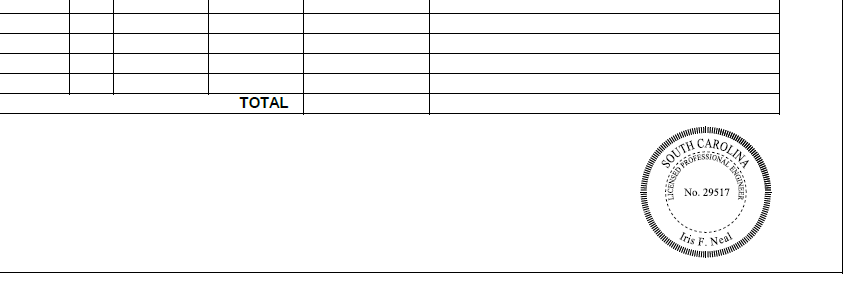
Each plan sheet should be an individual single page pdf and named according to the File Naming Conventions for Roadway Plans.

Open the pdf plan sheet in Adobe Acrobat. Select the **Stamp** button on the right hand tool panel.

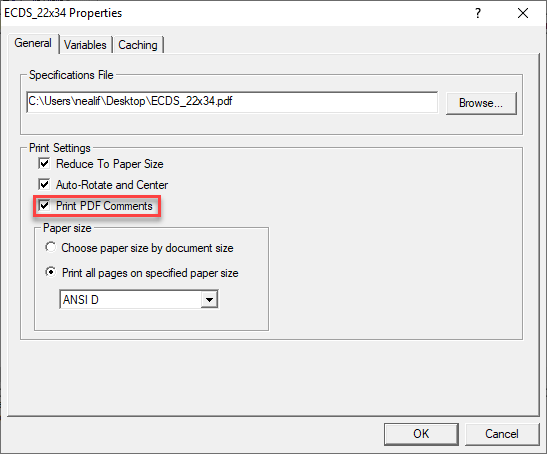
On the center Stamp menu, select the **Stamp** drop down and choose the appropriate PE Seal



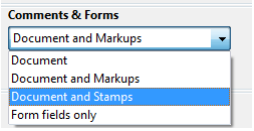
Zoom into the area of the plan sheet and click on the PDF document to **place the seal**.



The sheet can now be digitally signed utilizing Adobe or Bluebeam Revu.

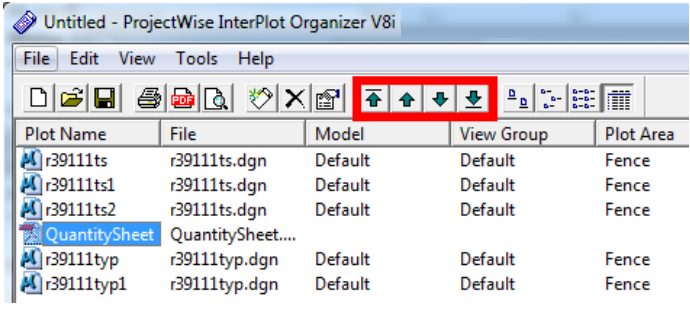


Note: Because the stamp is a “Comment”, this option must be turned on when plotting. The setting in Adobe is shown on the left and the setting for Iplot is shown on the right.

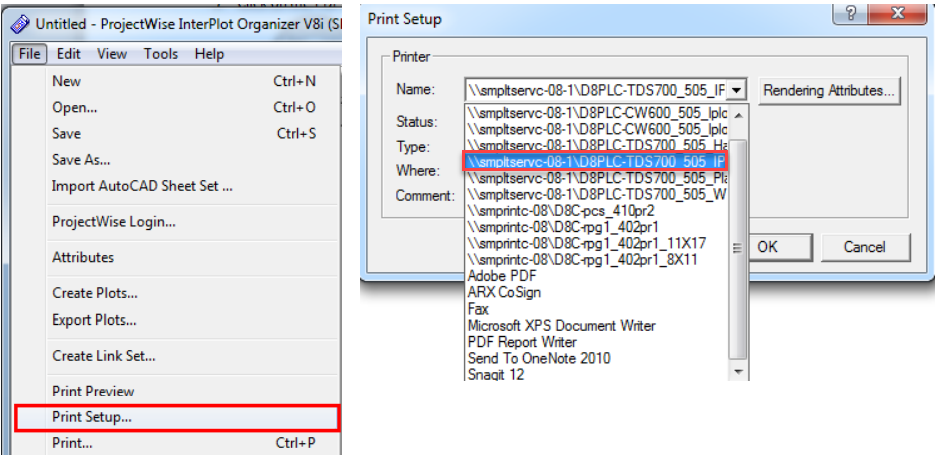


##### Adding PDF to Iplot IPS File

PDFs can be added to the Iplot IPS files in the same manner as DGN files. Open the IPS file and drag the PDF from the folder into the plotting list. Use the arrow keys to move the file to the correct location in the plan set for plotting.

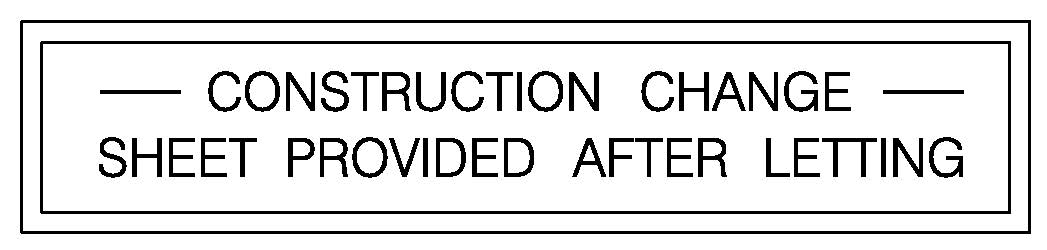


Before plotting, check the plotter driver to ensure the correct driver is being used. In the File menu, select Print Setup. Check that the Iplot driver is being used, NOT the WPD Windows driver.



##### Construction Changes after Letting

If changes are made after letting, the appropriate Excel files must be revised and re-exported as fresh Adobe PDF files. Before making changes, **create a copy** of the current excel file and rename the PDF file to include the **date it was printed** (e.g. “P037212\_004\_RWDS\_2021-01-29.xlsm”) so that an archive copy is kept. The printing date can be found in the bottom left corner of the sheet.



Make the necessary revisions to the Excel file. On the Images tab, locate the **Construction Change** image. Select **Copy** and activate the Excel plan sheet to **Paste** the image. Resize and move the image to the upper right corner.

Follow the **Converting Excel Sheets to Adobe PDF** instructions above to recreate a new plan sheet and re-apply the PE Seal. **Remove** the outdated plan sheet from the IPS file and **add** the revised sheet.