SD

DEPARTMENT OF TRANSPORTATION

BLUEBEAM
REVIEW
GUIDE

If you need assistance with Bluebeam, please contact one of the following people:

Bluebeam Contacts

Rebecca Urban	(605)-773-7190	Rebecca.Urban@state.sd.us
Keith Winter	(605)-983-1219	Keith.Winter@state.sd.us

For technical support you can email support@bluebeam.com, that will create a service ticket for your incident.

For additional training materials check out our training videos at the following link: https://dot.sd.gov/doing-business/engineering/design-services/forms-manuals#listItemLink_1552

For submitting questions or revisions to this guide, please contact Rebecca Urban with the contact information above.

Contents

Account & Profile

Creating a Bluebeam Account

1) Open Bluebeam > In the Studio Tab > Click "Sign In"
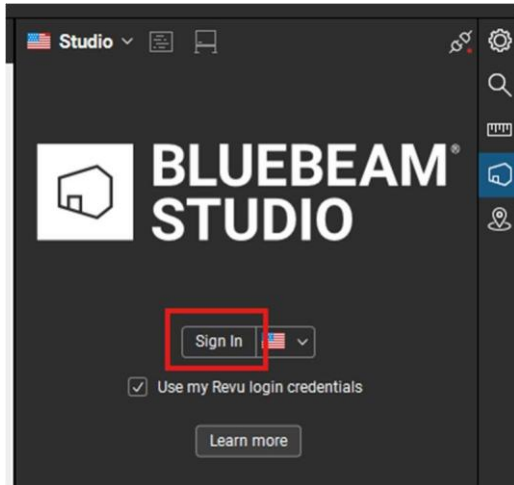
2) Click "Sign up"
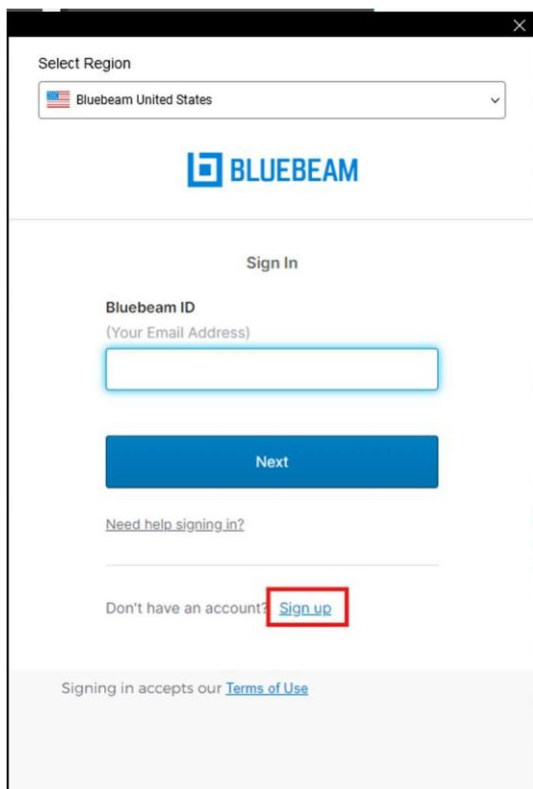
3) Fill out your first name, last name, Bluebeam Display Name (First and Last name as this will be displayed when you comment in a Session), Email (your state email address), and a Password (write this down as it will vary from your state single sign on password) > Click "Create Account"

* All new users will also need to be added to our license portal. Reach out to Rebecca Urban to get added to the license portal and/or if you need a license assigned to you.

Password Reset

1) If you forget your password on the login screen select "Need Help Singing in?" > then select "Forgot your password?" > Enter your state email and select "Send Reset Instructions"

Joining a Review Session

1) Click the link provided in the Session invite

2) Your internet browser will open > Select Join in Bluebeam Revu

How do you want to join this Studio Session?

Join in Bluebeam Revu®

Requires Revu 20.0.20+ for Windows

Join in the Web

WWW

No downloads, nothing to install

Don't have Revu? Download here.
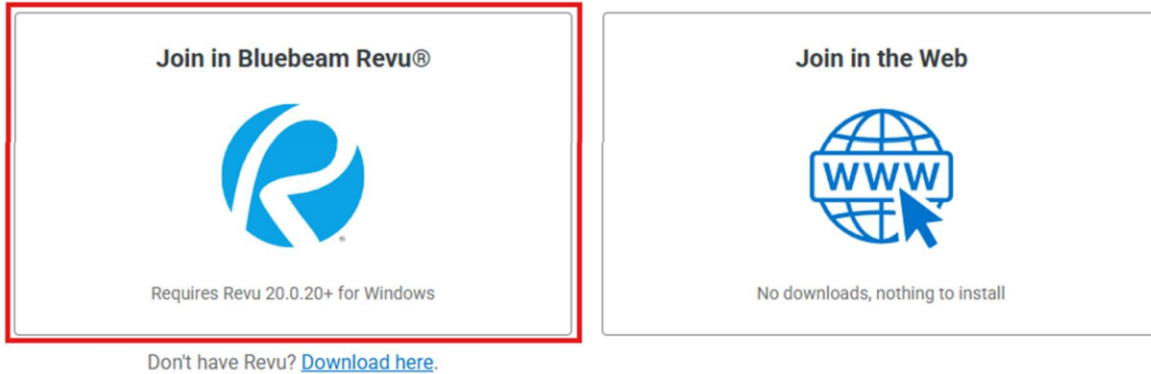
3) Bluebeam will then launch and open the session

Bluebeam Profiles

Bluebeam comes with 4 preloaded profiles. Each profile has a different set of tools, tool bars, and display settings. These can be found under the Revu Tab > Profiles
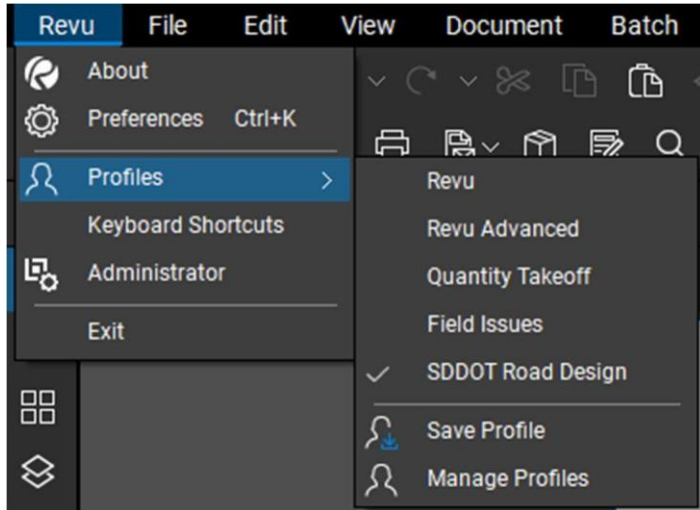
An SDDOT Road Design profile has been created which will preload tools, tool bars, display settings, stamps, scripts, and headers/footers. This can be loaded by navigating to this file folder location and double clicking the .bat file named Bluebeam_Version21.bat.

U:\rd\Bluebeam\BluebeamConfiguationUtility
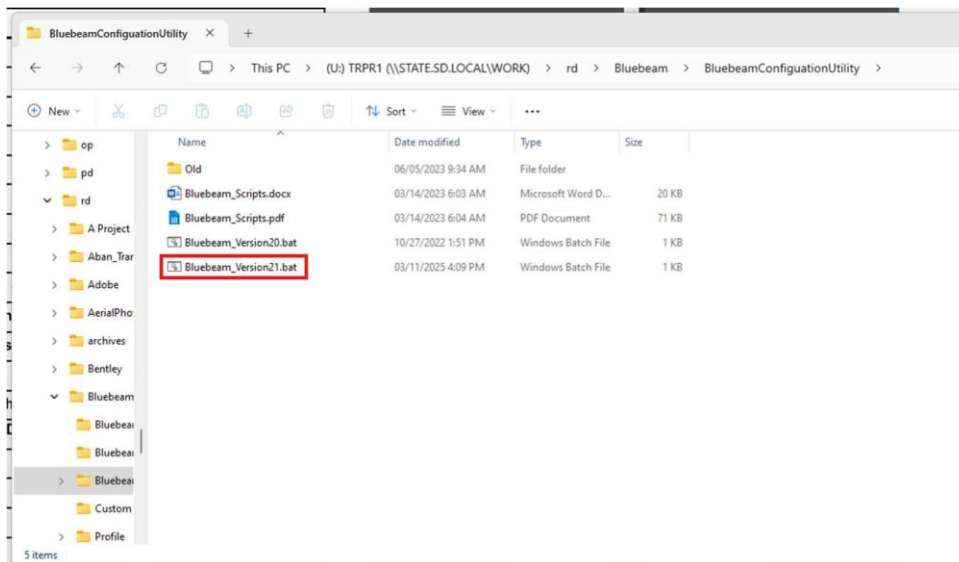
* If you have added any tools or docked any tool bars running this file will remove those settings and return to the basic profile settings

At any point in time if you add toolbars to your workspace, you can save your own profile.

1) This can be done by going to the Revu Tab > Profiles > Manage Profiles
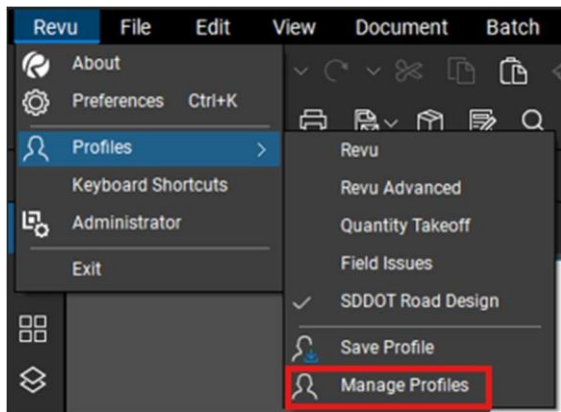
1) Click Add > Name your New Profile > Click OK > Click OK again
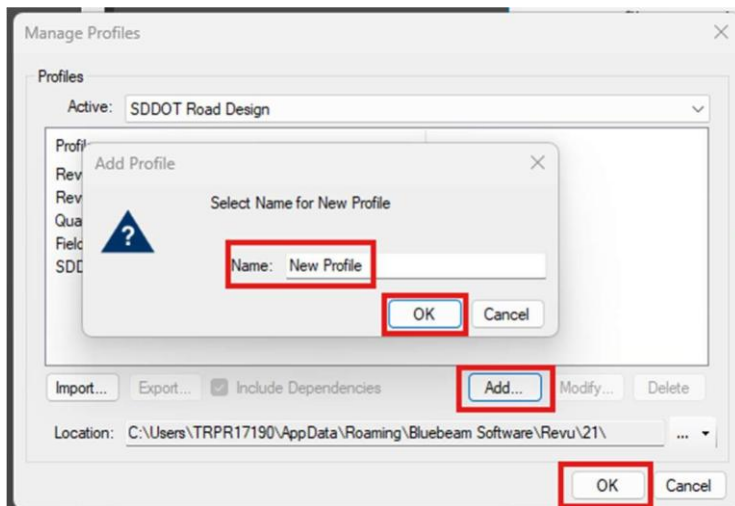
2) Then customize the workspace as desired. Go back to the Revu Tab > Profiles > Select "Save Profile"
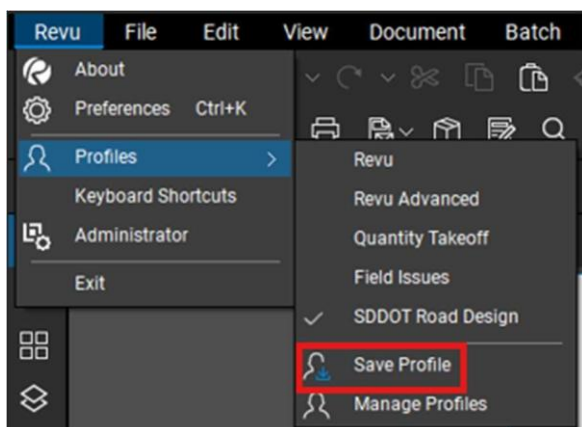
Bluebeam Account Name

To change the name that appears when you make comments in a Bluebeam Session to your First and Last name go to the Revu Tab > Preferences

Under the General Tab > in the User box type your First and Last name > Click OK

Bluebeam Markup Tools and Keyboard Short Cuts

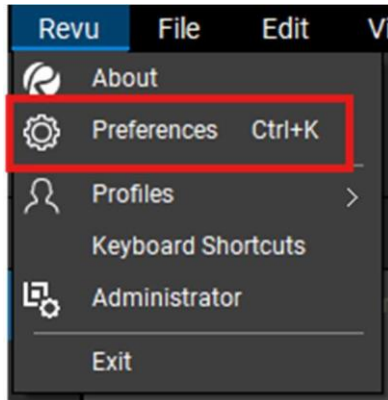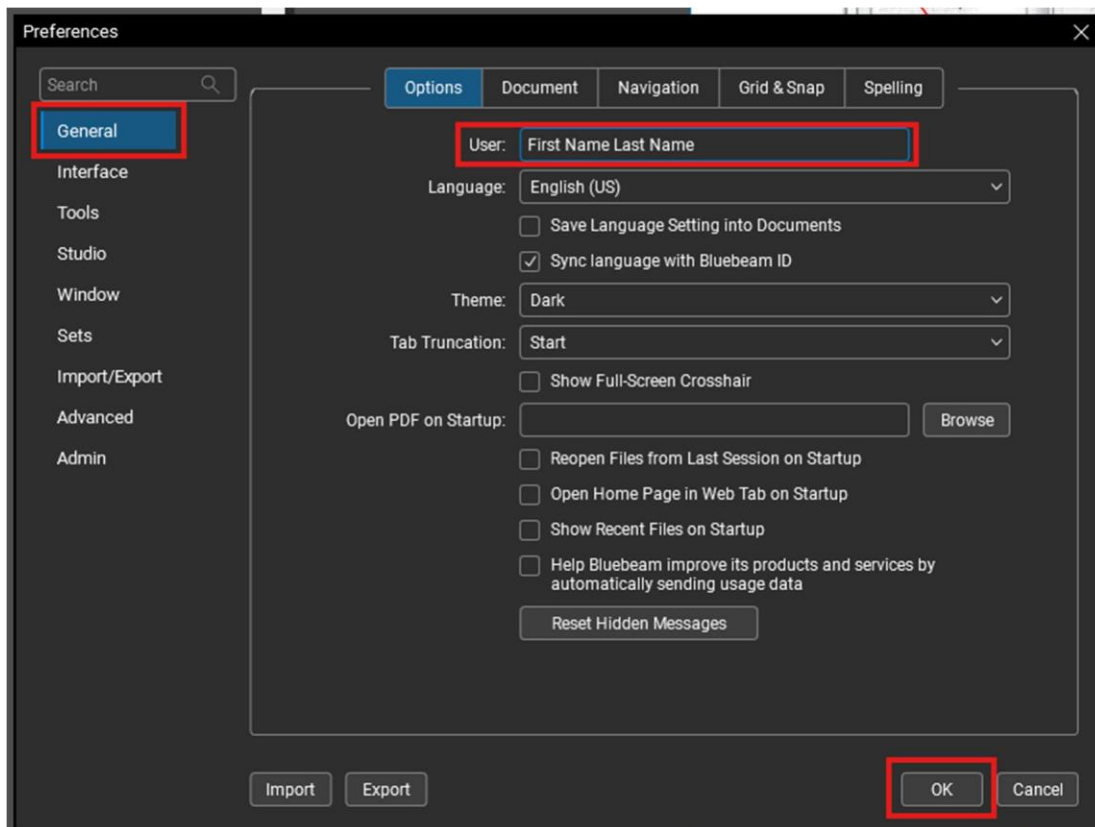|	Markup				
	Align Bottom	Ctrl + Alt + B		Flip Vertical	Ctrl + Alt + V
	Align Center	Ctrl + Alt + E		Group	Ctrl + G
	Align Left	Ctrl + Alt + L		Highlight	H
	Align Middle	Ctrl + Alt + M		Hyperlink	Shift + H
	Align Right	Ctrl + Alt + R		Image	I
	Align Top	Ctrl + Alt + T		Image from Scanner	Shift + I
	Arc	Shift + C		Import	Ctrl + F3
	Arrow	A		Line	L
	Autosize Text Box	Alt + Z		Lock	Ctrl + Shift + L
	Bring Forward	Ctrl + J		Note	N
	Bring to Front	Ctrl + Shift + J		Pen	P
	Callout	Q		Polygon	Shift + P
	Camera	Ctrl + Alt + I		Polyline	Shift + N
	Cloud	C		Rectangle	R
	Cloud+	K		Remove Selected from Group	Ctrl + Shift + Alt + G
	Dimension	Shift + L		Review Text	Shift + Alt + R
	Edit Action	Ctrl + Shift + E		Send Backward	Ctrl + [
	Ellipse	E		Send to Back	Ctrl + Shift + [
	Eraser	Shift + E		Spell Check	F7
	Export Markups	Ctrl + F2		Stamp	S
	File Attachment	F		Text Box	T
	Flag	Shift + F		Typewriter	W
	Flip Horizontal	Ctrl + Alt + H		Ungroup	Ctrl + Shift + G

Measure

	Angle	Shift + Alt + G			Measure Tool	M
	Area	Shift + Alt + A			Perimeter	Shift + Alt + P
	Count	Shift + Alt + C			Polylength	Shift + Alt + Q
	Diameter	Shift + Alt + D			Radius	Shift + Alt + U
	Dynamic Fill	J			Volume	Shift + Alt + V
	Length	Shift + Alt + L				

Forms

	Add Signature Field	X		Editor	Ctrl + Shift + F

Search

	Next Result	F3		Search	Ctrl + F
	Previous Result	Shift + F3			

File

✕	Close	Ctrl + F4			Publish as Compressed 1.5	Ctrl + Shift + P
⊕	Create PDF	Ctrl + N		💾	Save	Ctrl + S
📁	Open	Ctrl + O		💾	Save All	Ctrl + F2
🖨	Print	Ctrl + P		💾	Save As	Ctrl + Shift + S

Edit

📋	Copy	Ctrl + C		📋	Paste in Place	Ctrl + Shift + V
	Copy Page to Snapshot	Ctrl + Alt + C		↻	Redo	Ctrl + Y
✂	Cut	Ctrl + X			Select All	Ctrl + A
✕	Delete	Del		A	Select All Text	Ctrl + Shift + A
🖌	Format Painter	Ctrl + Shift + C			Snapshot	G
📋	Paste	Ctrl + V		↺	Undo	Ctrl + Z

Selection

🔍	Lasso	Shift + O		🔍	Toggle Zoom Tool	Shift + Z
✋	Pan	Shift + V		🔍	Zoom In	Plus
➤	Select	V		🔍	Zoom Out	Minus
A	Select Text	Shift + T		🔍	Zoom Tool	Z

Document

	Add & Edit 3D Content	Ctrl + Alt + 3		Mark Text for Redaction	Shift + K
	Add Bookmark	Ctrl + B		OCR	Ctrl + Shift + O
	Apply Redactions	Shift + A		Refresh Document	Shift + F5
	Crop Pages	Shift + Alt + O		Replace Pages	Ctrl + Shift + Y
	Delete Pages	Ctrl + Shift + D		Rotate Clockwise	Shift + Alt + Plus
	Deskew	Ctrl + Alt + D		Rotate Counterclockwise	Shift + Alt + Minus
	Document Properties	Ctrl + D		Rotate Pages	Ctrl + Shift + R
	Email	Ctrl + E		Security	Ctrl + L
	Extract Pages	Ctrl + Shift + X		Snapshot Content	Shift + G
	Flatten	Ctrl + Shift + M		Squiggly	Shift + U
	Flattened	Ctrl + Alt + F		Strikethrough	D
	Insert Blank Page	Ctrl + Shift + N		Underline	U
	Insert Pages	Ctrl + Shift + I		Unflatten	Ctrl + Shift + U
	Mark for Redaction	Shift + R			

Custom Keyboard Shortcuts

Remap existing Revu shortcuts to match similar functions in other programs you use or add new shortcuts to create your own personal list of frequently used commands.

1) In Revu, go to **Revu** > **Keyboard Shortcuts**.

2) In the Keyboard Shortcuts dialog, select the tool or command you want to shortcut, replace the keystroke in the **Shortcut** field, and select **Add**.
   To use a shortcut already assigned to another tool, select **Reassign**.

All shortcuts listed in the Revu menu system are automatically updated once a new shortcut has been assigned.

Mouse Navigation

Middle Button (wheel)	Pan	Click + drag
	Re-center view	Double-click
Left Button	Tool operation	Click
	Pan	Click + spacebar
	Multi-select	Shift + Click + drag
Right Button	Context Menu	Click
	Multi-select	Click + drag

Mouse for 3D navigation

Middle button (wheel)	Zoom in/out	Scroll
	Pan model	Click + drag
	Return to view	Double-click
Left button	Rotate model	Click + drag
Right Button	Context Menu	Click
	Multi-select	Click + drag

Modifier keys

The Alt, Shift, Ctrl, and spacebar keys aren't limited to keyboard shortcuts. They can also modify the way your mouse interacts with Revu. Some examples include:

- Hold **Ctrl** to toggle the mouse wheel between zoom and pan.

- Hold the **spacebar** to pan in the document without deselecting the markup you're creating or editing. Release the **spacebar** to return to your markup.

- Markups snap to 15-degree increments when rotated using the top control point. Hold **Shift** while rotating a markup to release that snap and allow rotations in 1- degree increments.

- Hold **Shift** and click on the caption of a ▥ **Measurement** markup to move the caption separately from the markup.

- **Ctrl** + **Shift** + **click** a markup to copy it and move the copy in a straight line.

- Hold Shift while using the ╱ **Line**, ➚ **Arrow**, ⌐ᷣ **Polyline**, ◁ **Polygon**, or ▥ **Measurement** tools to draw a straight horizontal, vertical, or 45-degree line.

- Hold **Shift** while using the ✒ **Pen** or ⟋ **Highlight** tools to draw straight lines horizontally or vertically.

Document Tools

Document Manipulation

Insert Pages

Pages can be inserted into a document in several ways. Primarily used will be Insert "Pages from Document…"

1) Open all the documents you want to combine
2) Navigate to the Document Tab > Select Insert and choose "Pages from Document…"
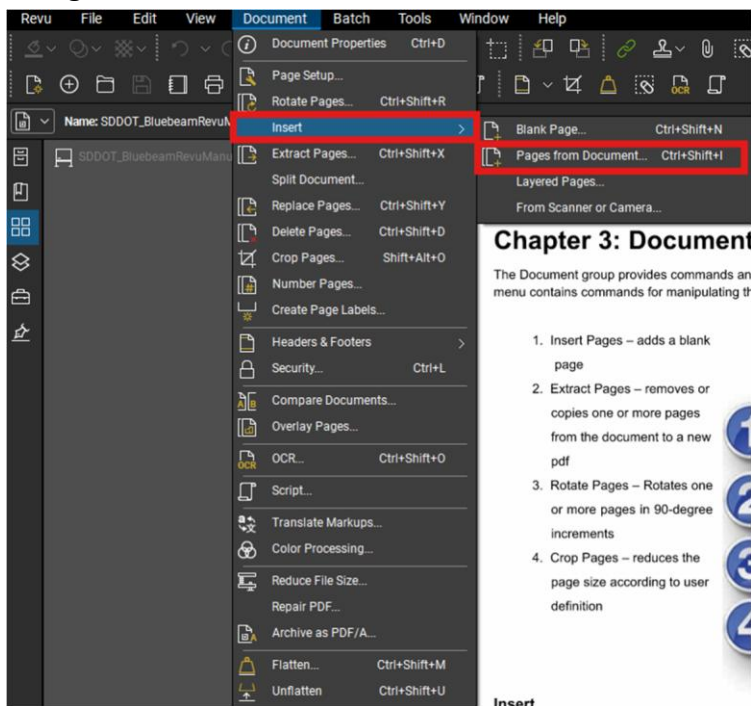
3) In the Insert Pages pop-up Select "Add Open Files" (these files can be deleted or moved using the navigation arrows on the side boxed in blue to the right)

4) Then select where you want them located within the parent document, this is done in the green box to the right

5) Select "OK"
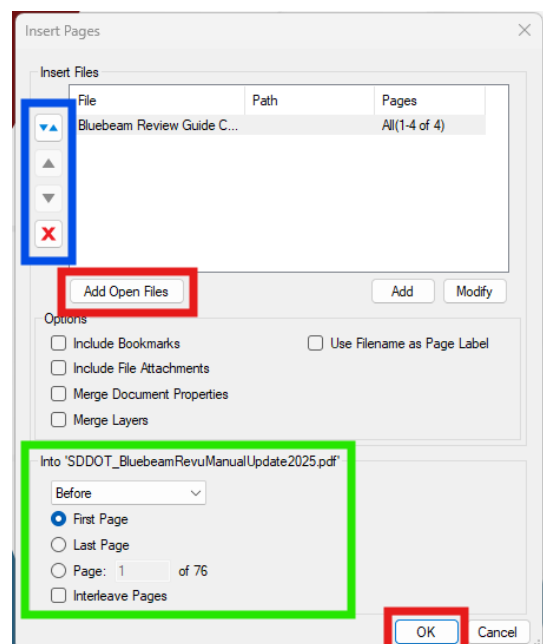
Moving Pages

Moving pages within a document can be done within the thumbnails tab.

1) In the document you would like to move pages in, open the thumbnails tab
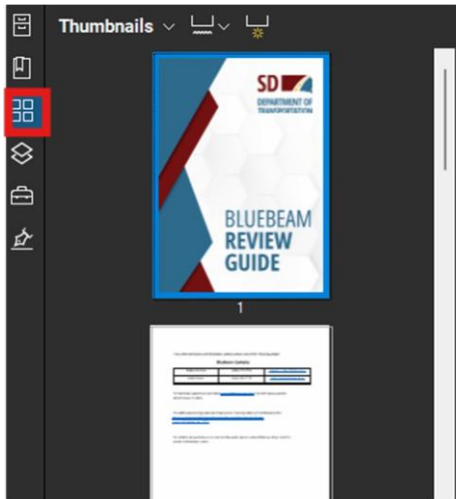
2) Select the page you would like to move and drag it to the place you would like it inserted which is indicated by a blue line under the page number
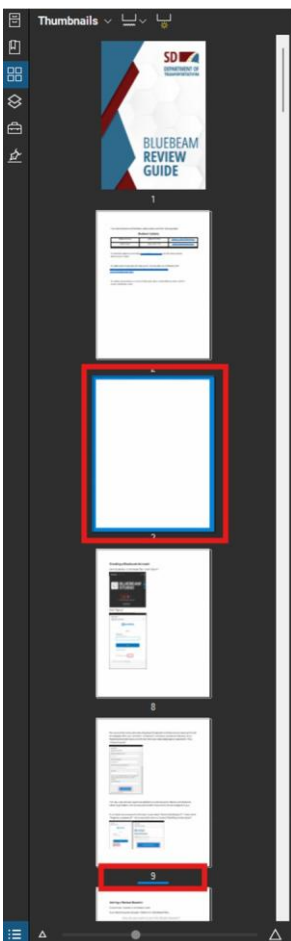
Extract Pages

This can be used to remove or copy one or more pages from the document to a new pdf.

1) In the document you would like to extract pages from go to the Document Tab > "Extract Pages"
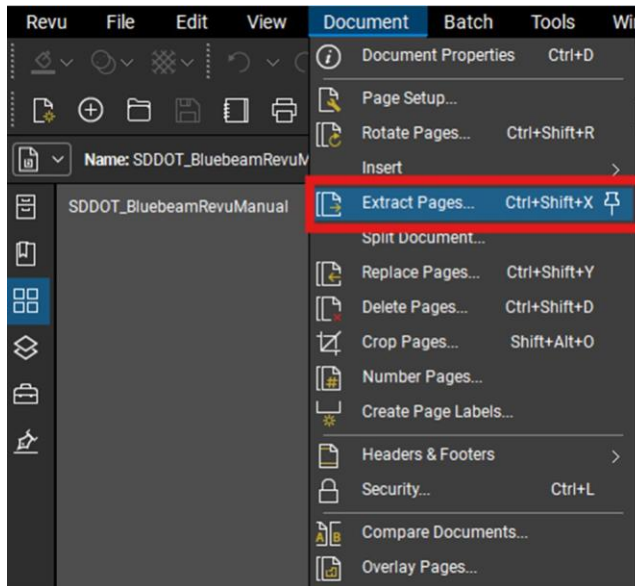
2) In the Extract Pages pop-up you will select your page range and the option which suits your extraction needs

3) Select "OK"
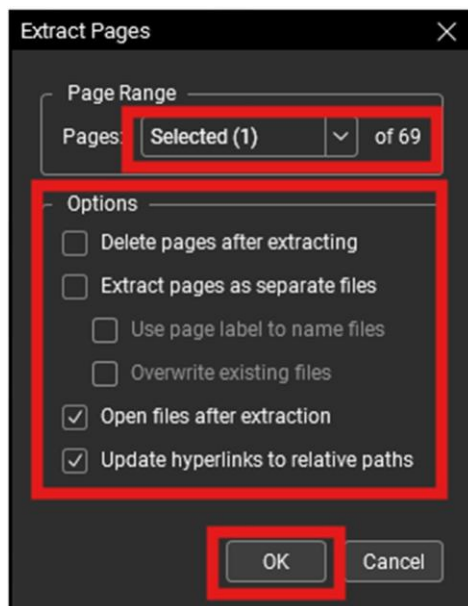
Rotate Pages

1) In the document with the rotated pages go to the Document tab > Select "Rotate Pages…"
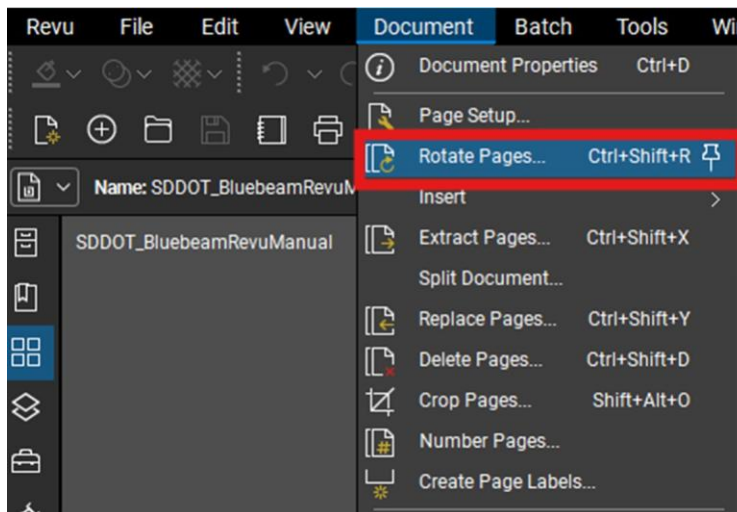
2) In the Rotate Pages pop-up select the page range of the pages to be rotated, change the direction of the rotation, and Select "OK"
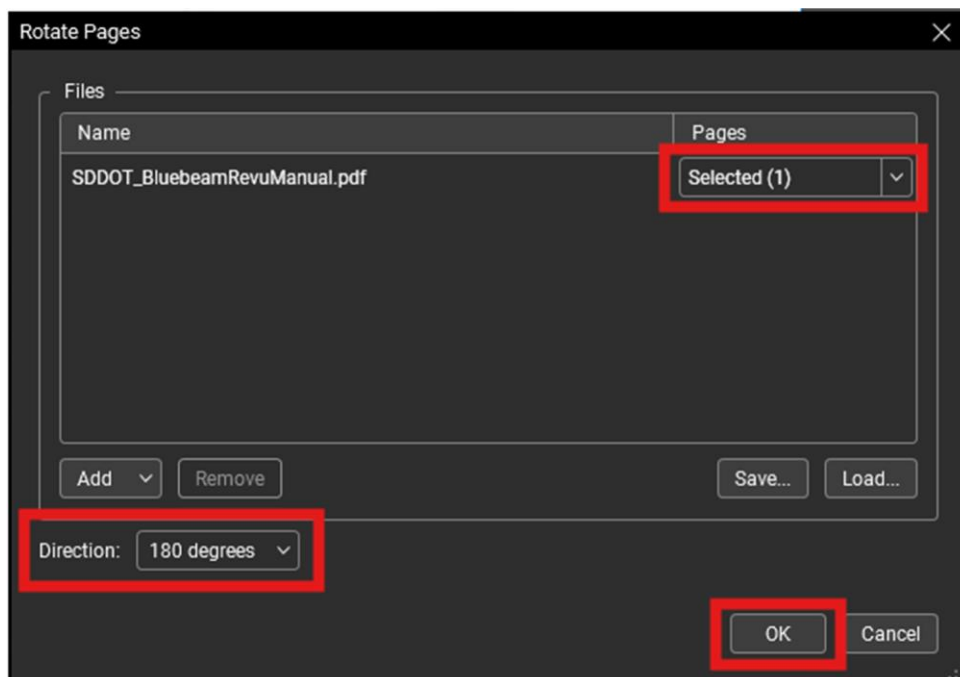
Crop Pages

The cropping tool allows you to remove unwanted parts of a PDF page. Using this tool will modify the PDF file; so, a best practice is to make a copy of the PDF file before utilizing this tool.

1) In the document to be cropped go to the Document tab > Select "Crop Pages…"
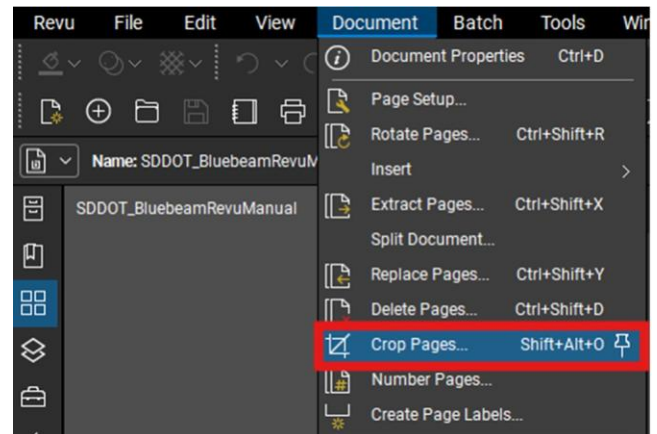
2) In the Batch: Crop and Page Setup box Select your page range and then Select "Next"
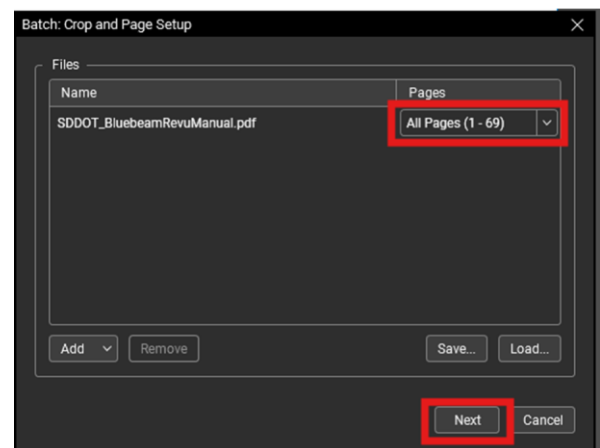
3) Under the crop pages tab modify the settings as desired and Select "OK"
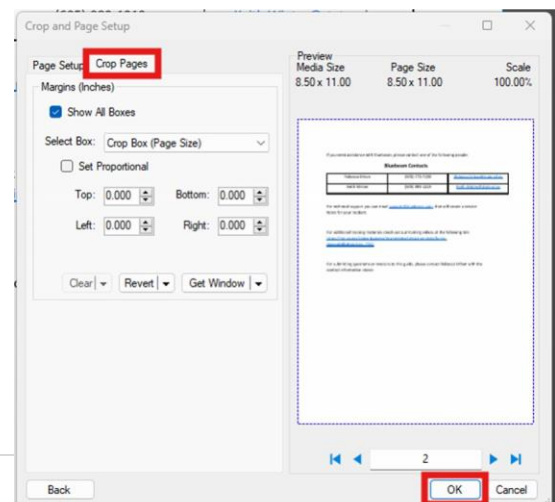
Delete Pages

1) Open the document you would like to remove pages from
2) Navigate to the page to be deleted
3) In the Document tab > Select "Delete Pages…"
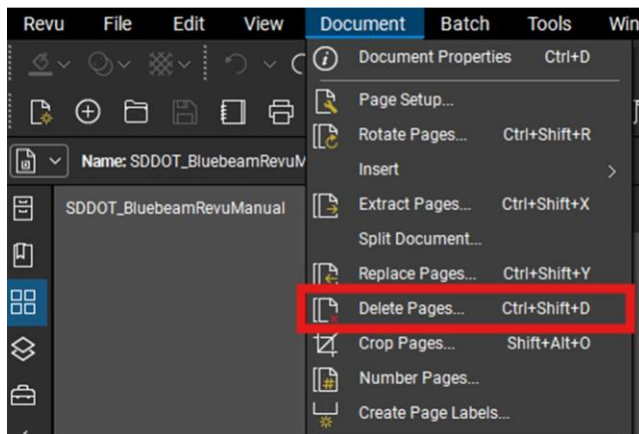
4) In the Delete Pages pop-up adjust the Page Range as necessary > Select "OK"
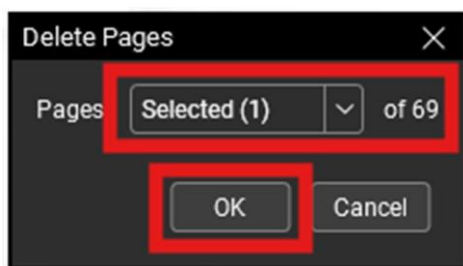
Screen Views

You can utilize the following buttons to change your screen view.

To utilize split screens to compare or review documents click this button .

To Auto-Fit a document to your screen select this button .

To change your document to be scrollable instead of having to hit next page select this button .

The Tool Chest

The Tool Chest allows you to recall your most used tools, recent tools, and allows you to save tools you regularly use/modify.

The Tool Chest can be found in the left side panel under this icon

Any Tool Set can be expanded or collapsed by selecting the arrow to the left of the Tool Set Name.
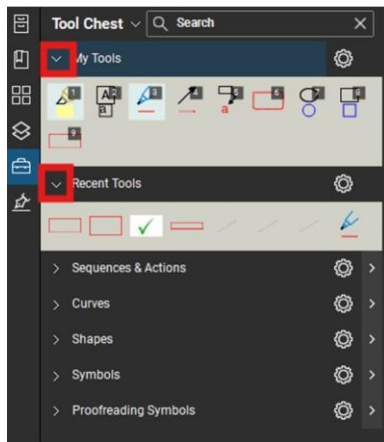
Using Tool Sets

Click any tool in the Tool Chest to select it, then click on the document to place the markup.

To copy a tool from one tool set to another:

1) Click and drag the icon to the desired tool set

To reorder the tools within a tool set:

1) Click and drag the icon to the desired location.

To delete a saved tool:

1) Click a tool to select it, right-click, and select delete

-or-

2) Click a tool to select it and then press the delete key

To change the colors of a tool:

1) Right-click a tool icon, then click Change Colors

Reusing Recent Tools

Recent Tools utilized within a pdf will be shown in the Recent Tools tool set.

To reuse a tool, simply click the icon and then click on the PDF to place the markup.

The recent tools history is temporary and will be deleted when Bluebeam is closed.

Permanently Saving a Tool to be Reused

To save a recently used tool so it will remain after the program has been closed, click and drag the tools icon from Recent Tools into My tools -or- Right-click ton the icon and then click "Add Item to My Tools".
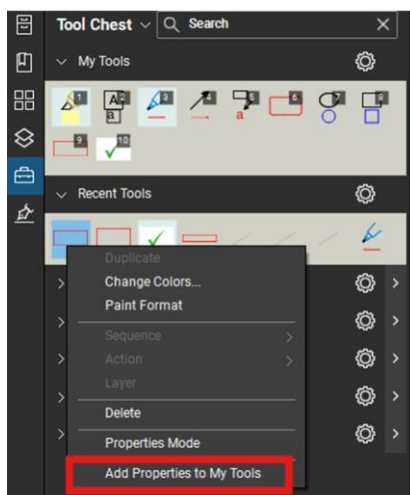
Exporting and Importing Custom Tool Sets

At any point in time a tool set can be exported or imported.

If you customize a tool set, you can export this to be imported when you get a new computer or Bluebeam is updated to a new version.

1) In the Tool Chest tab > Select "Tool Chest" > Select "Manage Tool Sets"
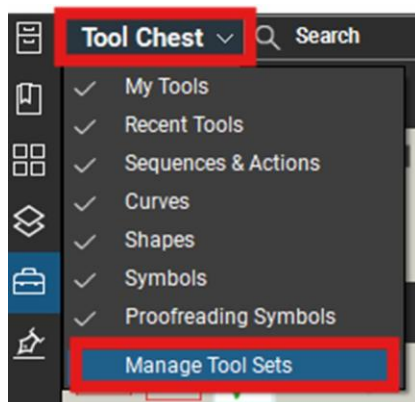
2) In the Manage Tool Sets pop-up Select the tool set to save and Select "Export" then save this to your desired file location > Select "OK" when finished
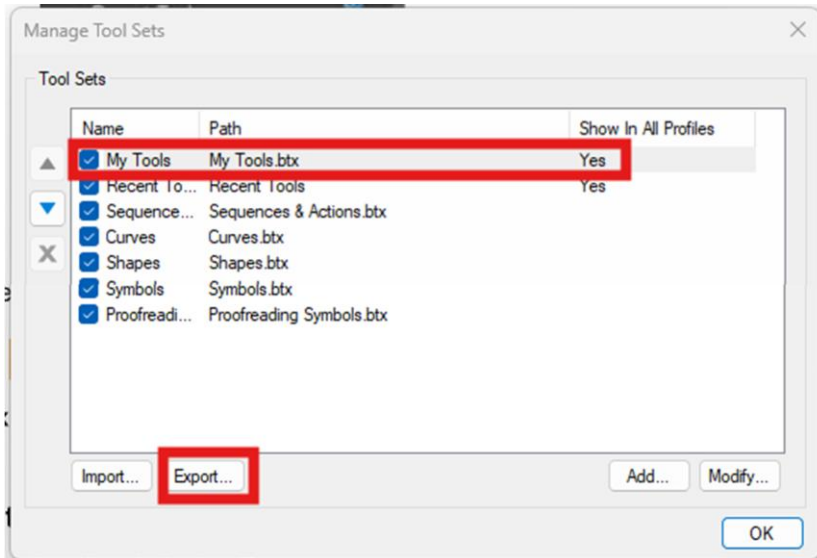
3) In the Manage Tool Sets pop-up Select "Import…" navigate to where your tool set is saved > Select "OK" when finished
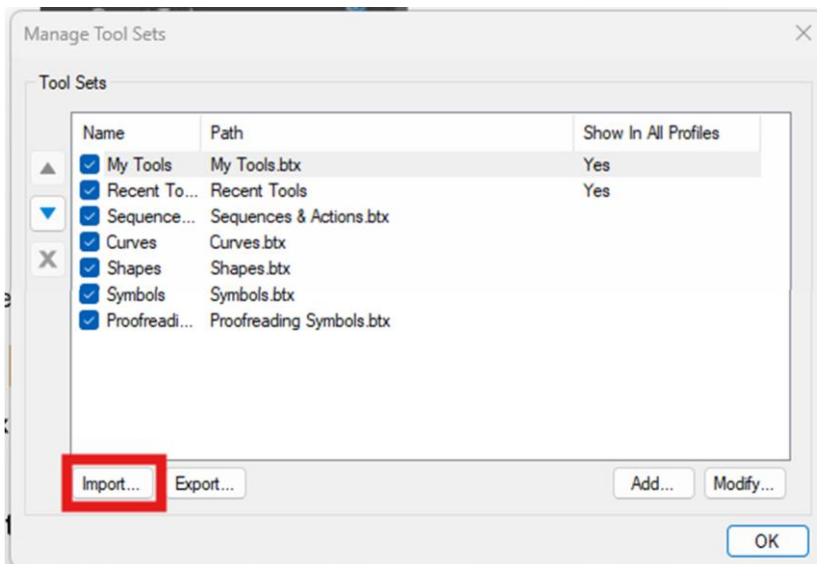
Defining the Appearance of Markups

1) Add a Markup to your document

2) Go to the Properties Tab

3) Here you can modify the line color, style, fill, and width; as well as any text settings if you are utilizing a tool with text
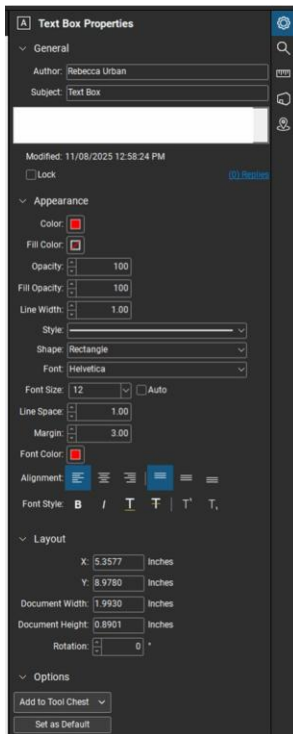
4) If you are constantly modifying a markups properties or size you can save this style by Selecting "Set as Default" (if this is utilized the tool properties will always appear as you defined them)

5) You can also add any tools you use regularly to a Tool Chest by modifying the settings and Selecting "Add to Tool Chest", this will allow the tool with revised properties to be used regularly while the default tool properties remain the same.

Measuring Tools

The measurement tools can be utilized on plan sheets that were created on a scale to measure distances.

 * However, this tool should be used with extreme caution as it can be dangerous and inaccurate due to some sheets not being created on a true scale and/or scales varying horizontally and vertically. THIS TOOL SHOULD ABSOLUTELY NOT BE UTILIZED IN THE FIELD TO MEASURE OFFSETS OR QUANTITIES – THE PROJECTS DESIGNER SHOULD BE CONTACTED IF THIS INFORMATION IS NEEDED.

Calibrating a PDF

1) Go the Measurements Tab
2) On the Command Bar Click the Measurement Tool you want to utilize > Then Click "Calibrate" next to Scale
3) Click "OK" in the Calibrate pop up
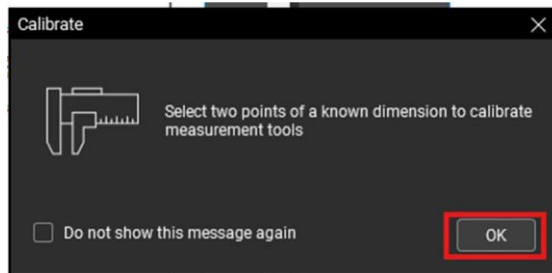
4) Click the first point of the know length, then click a second point to finish the line > Then enter the distance that these two points represent in the Scale box of the Calibrate pop-up (you can select a separate y scale if necessary by checking the "Separate Y Scale" box and following the steps again) > Then Select "Apply Scale"
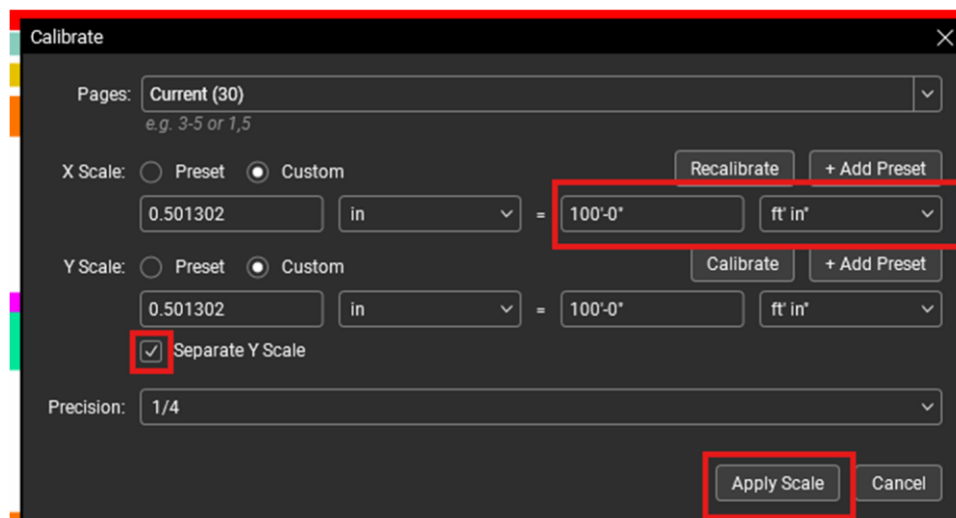
5) You can now measure within the file as needed

An alternative to calibrating manually, you can select a preset or set your own custom scale by typing in the values if you know what scale the sheets were created at.

* Best practice would be to always calibrate by measuring known points in the document to verify the scale is correct

Hyperlinks

1) To Add Hyperlinks to plans click the hyperlink icon in the toolbar [icon] > Highlight the link or text to add a hyperlink to > Select "Hyperlink" > Past web url in hyperlink box > Select OK
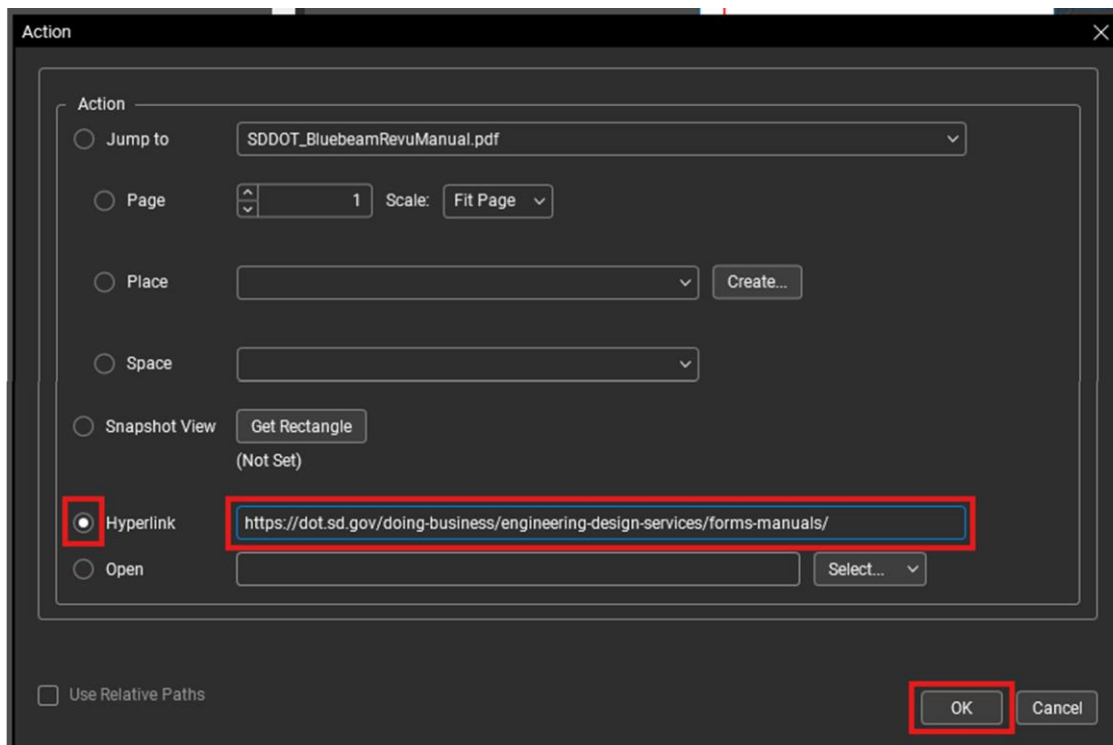
Press ESC to exit tool when done

OCR

This tool should be utilized when creating plans to make them searchable. It also will make hyperlinks clickable if they are on one line (for links on multiple lines the Hyperlink tool should be utilized).

  * This should only be run on sheets with notes, estimate of quantities, and quantity tables

  * DO NOT RUN ON TITLE SHEETS OR PLAN SHEETS

1) Open the Document you would like to run OCR on
2) Under the Document Tab > Select "OCR…"
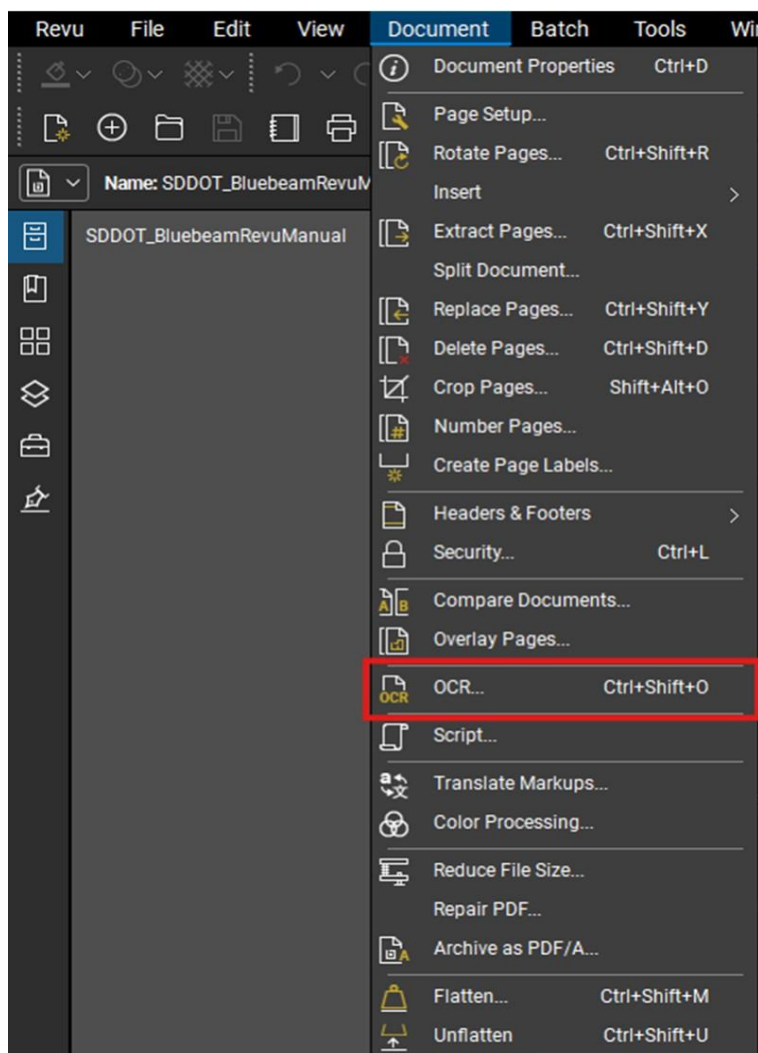
3) Set the OCR configuration in the pop-up box (normally this can be ran as is, you just need to select your page range) > Click OK to run OCR

OCR on Multiple Documents

1) If you would like to run OCR on multiple documents, Go to the Documents Tab > Select "OCR…"
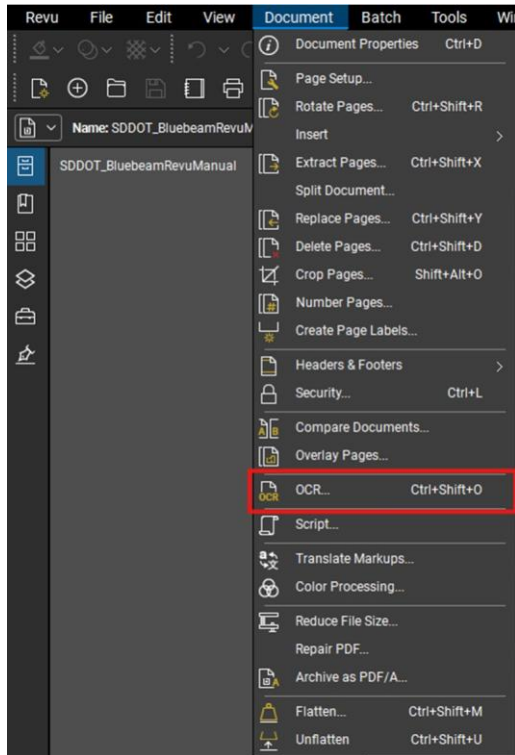
2) Select Add > choose from files, open files, folders or subfolders to find the additional documents you would like to run OCR on > Select your page range for all documents > Select OK
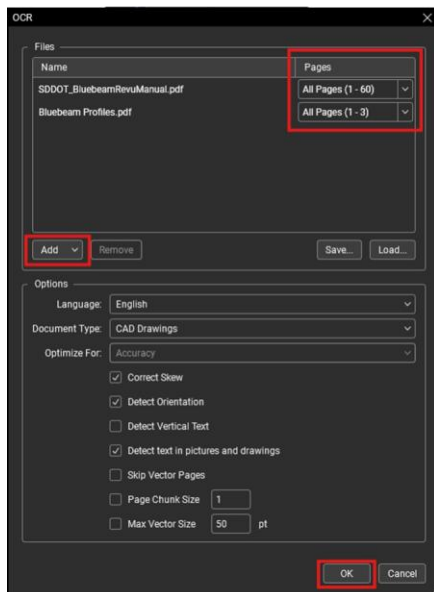
Scripts

Scripts can be used as an alternative to stamps to streamline the stamp process.

    * Currently Only Scripts for "Not For Construction" and "Preliminary" exist in the Road Design Profile

    * If Scripts are utilized you do not need to Flatten the document afterwards

1) Open the Document you would like to run a Script on

2) Go to the Documents Tab > Select "Script…"
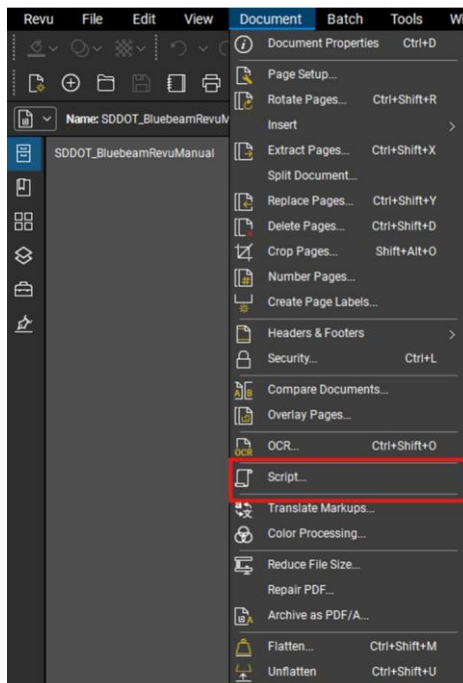
3) In the Script Manager pop-up Set your page range if necessary > Select the appropriate Script to Apply under the "Scripts" box > Select "Run"
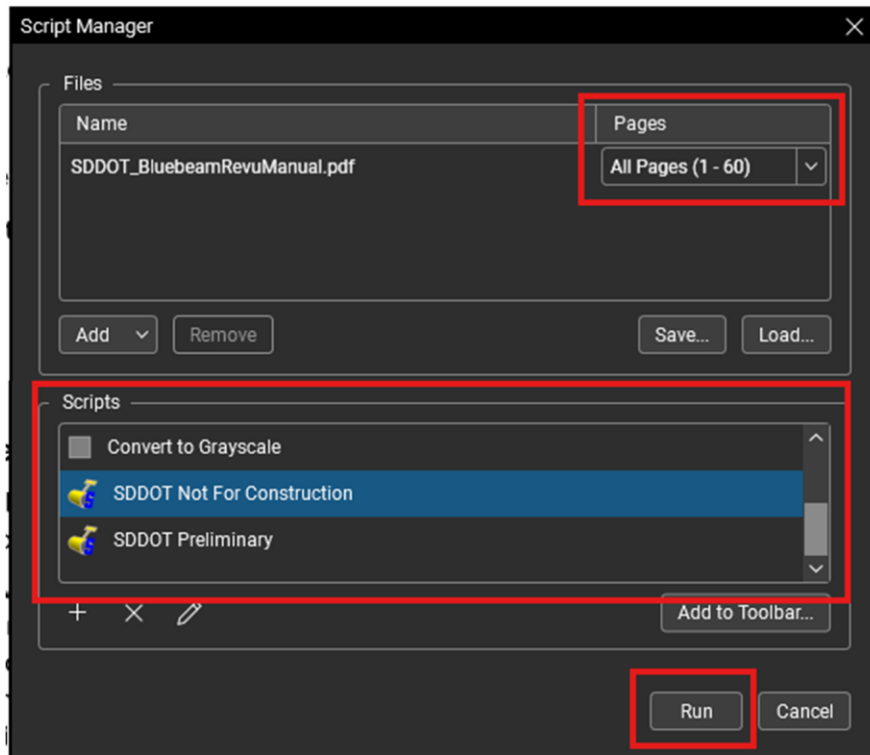
Scripts on Multiple Documents

1) If you would like to run Scripts on multiple documents, Go to the Documents Tab > Select "Script…"
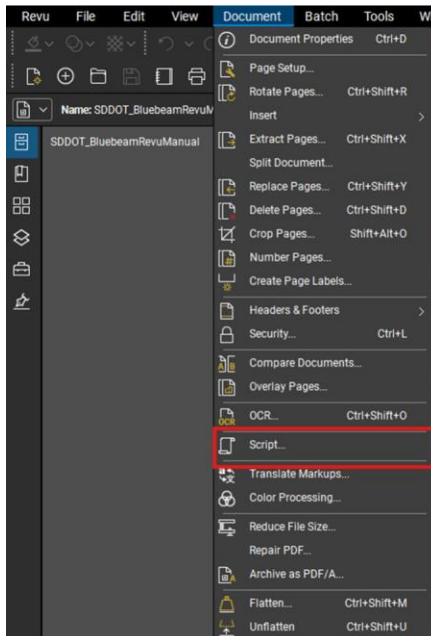
2) Select Add > choose from files, open files, folders or subfolders to find the additional documents you would like to run Script on > Select your page range for all documents if necessary > Select the appropriate Script to Apply under the "Scripts" box > Select "Run"
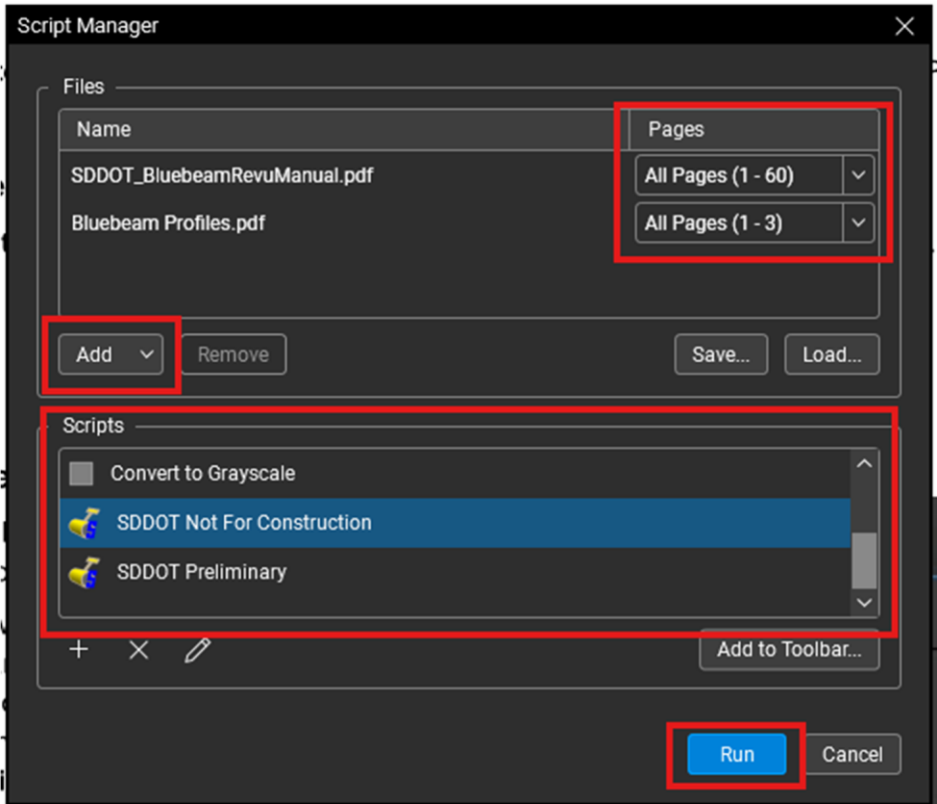
To Delete Scripts

1) To delete Scripts to prepare plans for Bid Letting Go to the Layers Panel > Select the Script Layer (Not For Construction in this example) > Click DEL
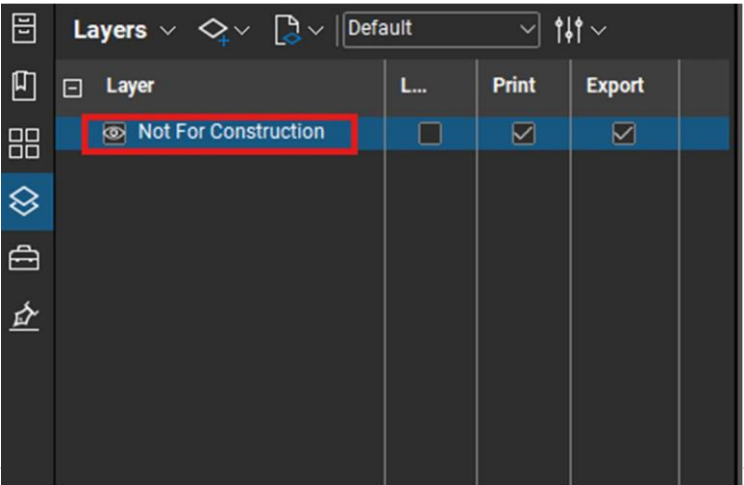
2) In the Delete Layer pop-up box Click Delete
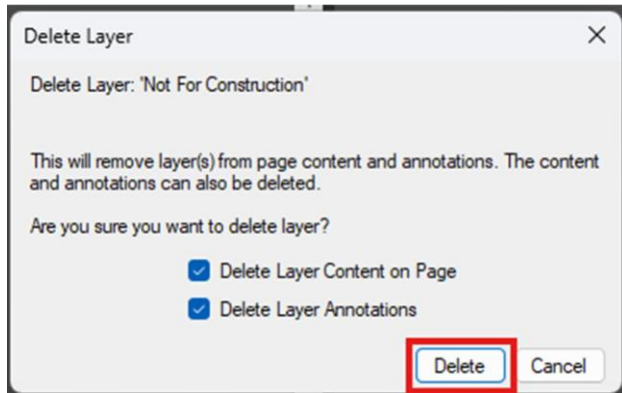
Stamps

Stamps can be utilized to place background images (ie. Not for construction, Preliminary, Draft, etc.) and allow for placement modifications on each page individually.

   * After a stamp is applied, the document must be flattened to prevent any deletion or modification of the stamp itself.

   * When possible, it is a best practice to utilize Scripts instead of Stamps

Loading Stamps

The general stamps will be loaded into the SDDOT Road Design profile which can be loaded by utilizing the Bluebeam_Version21.bat file. See page 8 for details.

To load stamps into the stamp tool itself:

1) Go to the Tools tab > Select Stamp > Select "Change Stamp Folder..."
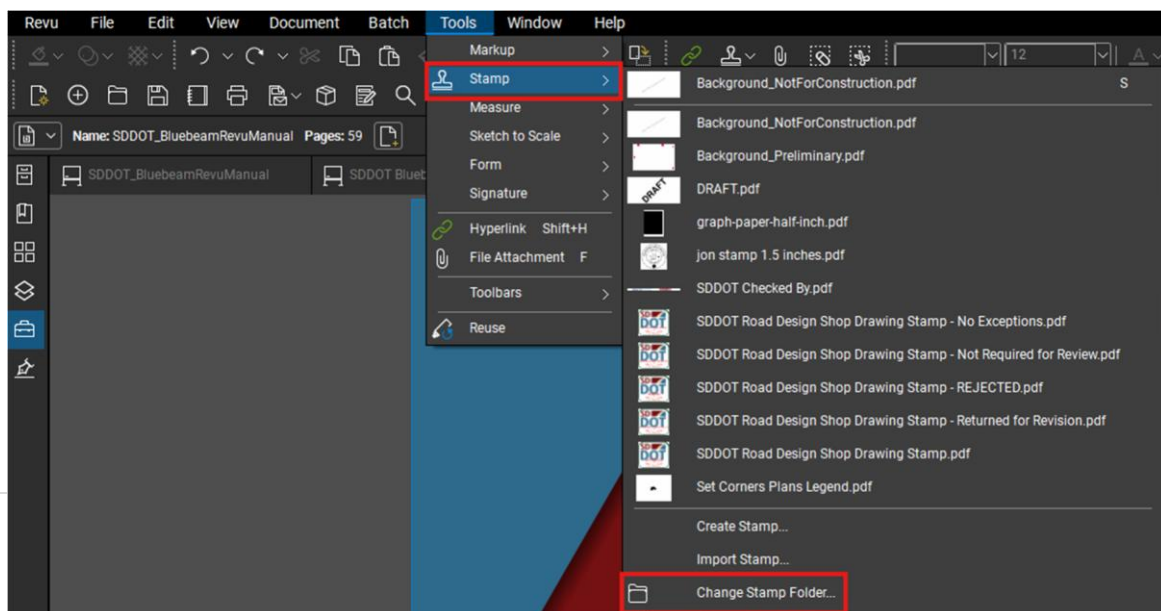
2) Navigate to U:\rd\Bluebeam , click on the "Stamps" Folder, and Select "Select Folder"
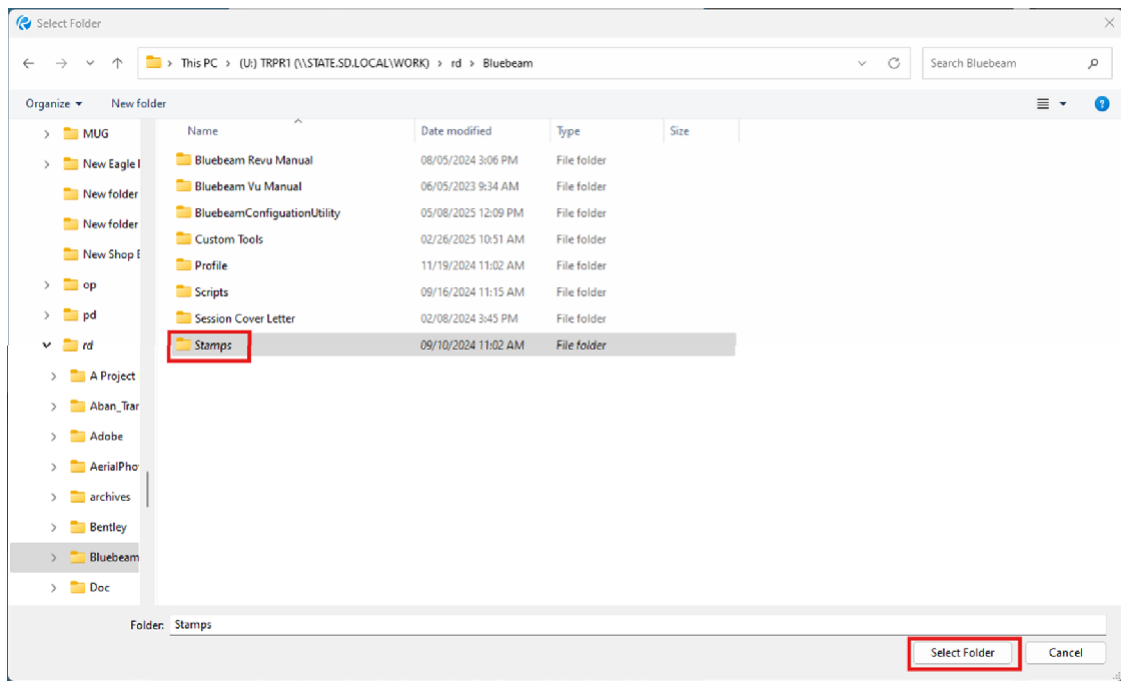
Applying a Stamp to an Individual Page

1) Open the document and navigate to the page you would like to add a Stamp too In the Tools Tab > Select Stamp > Select the Stamp you would like to apply
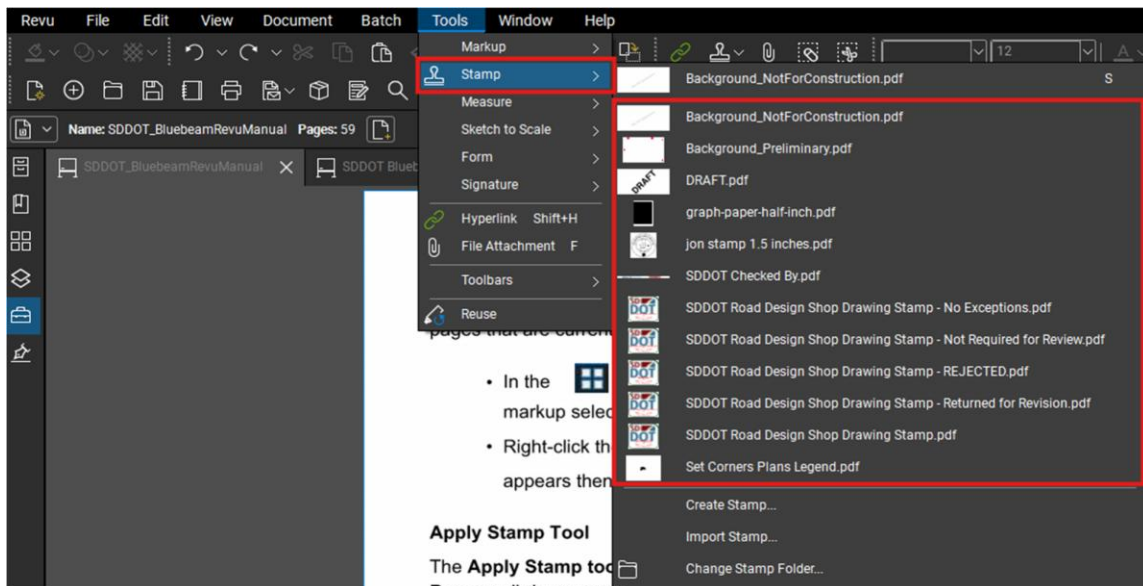
Applying a Stamp to Every Page in a Document

1) Open the document you would like to add stamps to
2) Go to the Batch Tab > Select "Apply Stamp…"
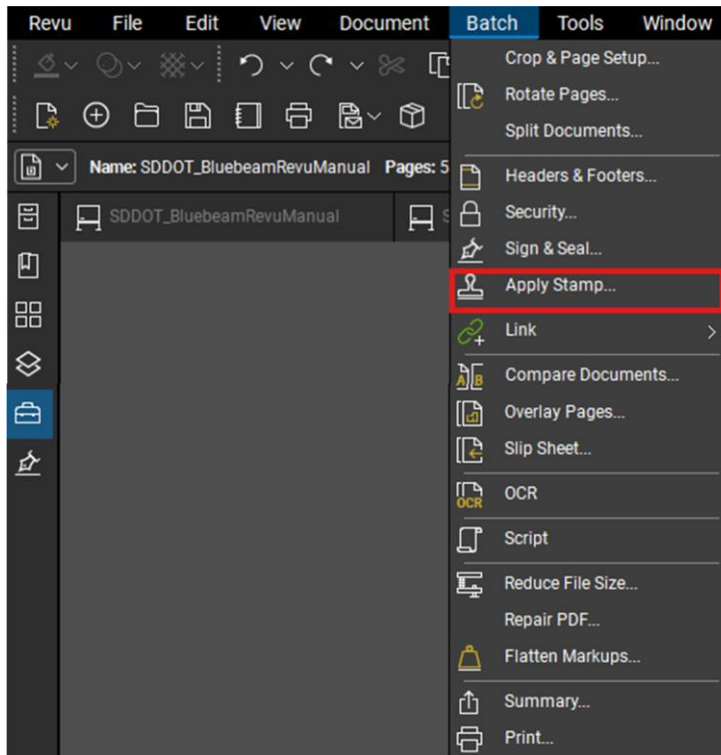
3) In the Apply Stamp pop-up you can select a page range if necessary, under the Files box > Under the Stamp Box Select the drop down in the first box to select the stamp to apply (change your location folder if necessary to find the standard stamps) > Select "OK"
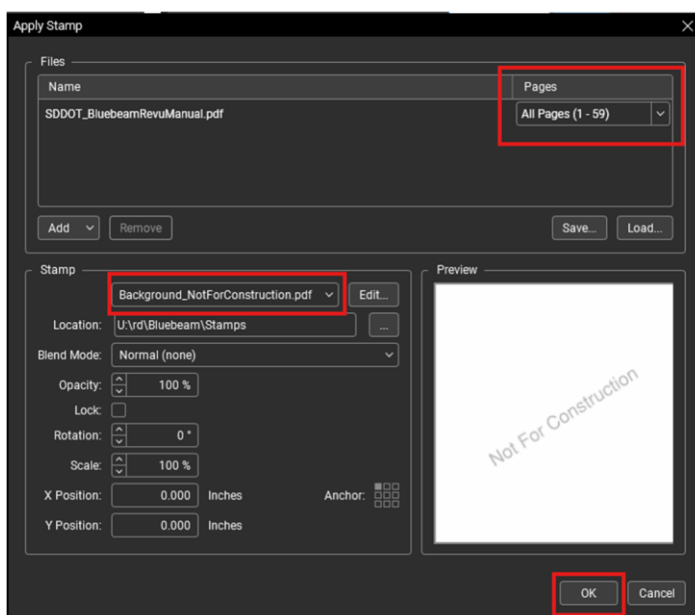
Flattening Stamps

*After applying stamps to any document this step MUST BE USED

1) In the document you just applied a stamp to go to the Document Tab > Select Flatten
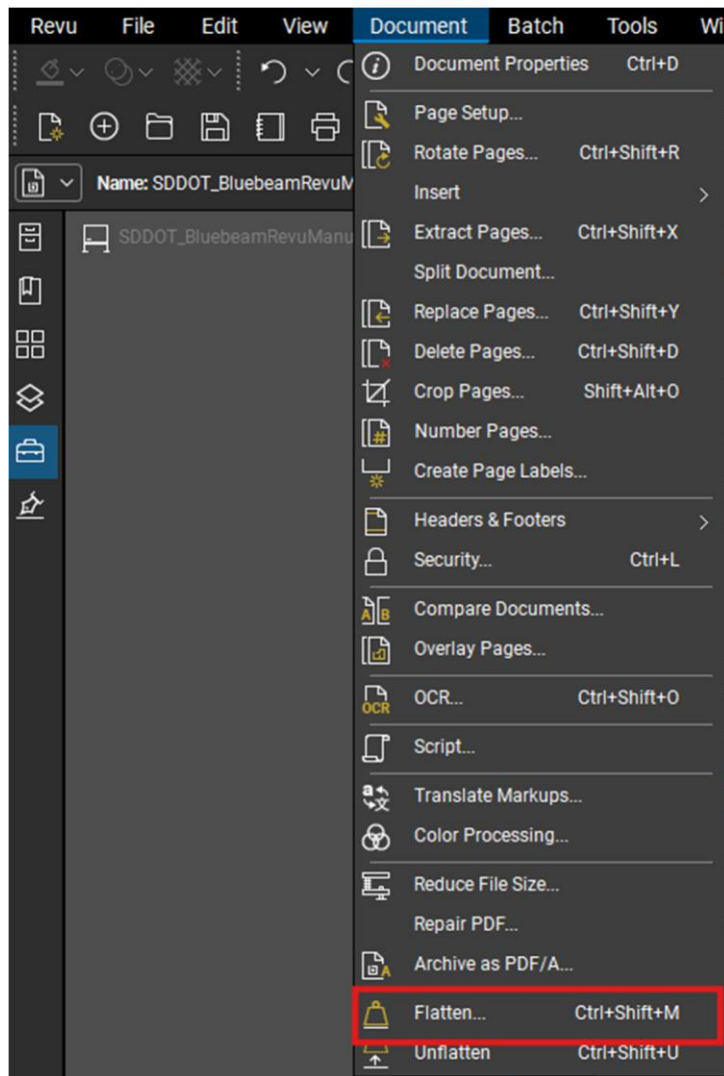
2) In the Flatten Markups pop-up verify that your page range includes all the sheets you added stamps too > Mark Flatten to Layer and name this after whatever stamp you utilized (in the example Not For Construction) > Select "Flatten"
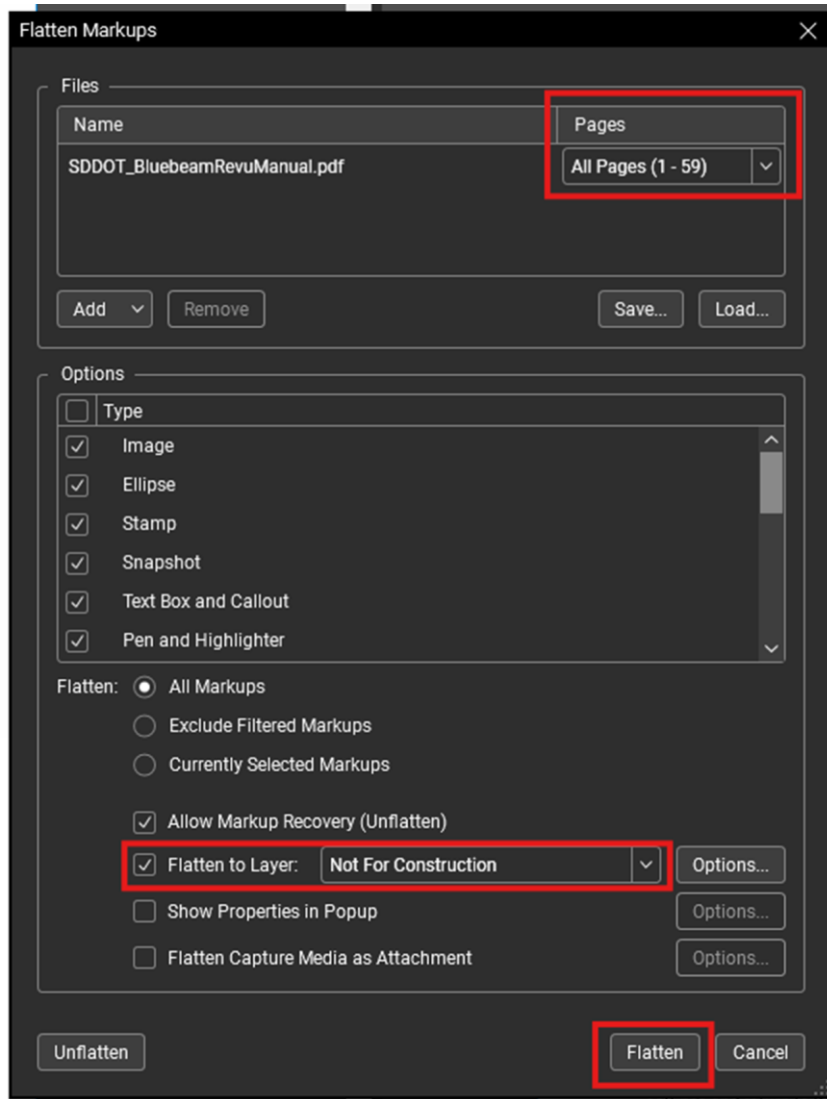
* By Flattening to Layer you can delete the Stamp the same way you would delete a script when the stamp needs to be removed for Bid Letting purposes. If this is not followed exactly the document will need to be unflattened and each stamp deleted individually.

Headers and Footers

Importing the SDDOT Plan Header and Footer Settings

To Import the Standard Plan Header and Footer Settings you will need to run the Bluebeam Configuration Utility file titled "Bluebeam_Version21.bat" found in the following folder: U:\rd\Bluebeam\BluebeamConfiguationUtility

Further instructions and warnings for this process can be found on page 8.

Numbering PDF pages Using Headers and Footers for SDDOT Plans

1) Open the file to add page number to
2) Go to the Documents Tab > Select "Headers C Footers" > Select "Add"
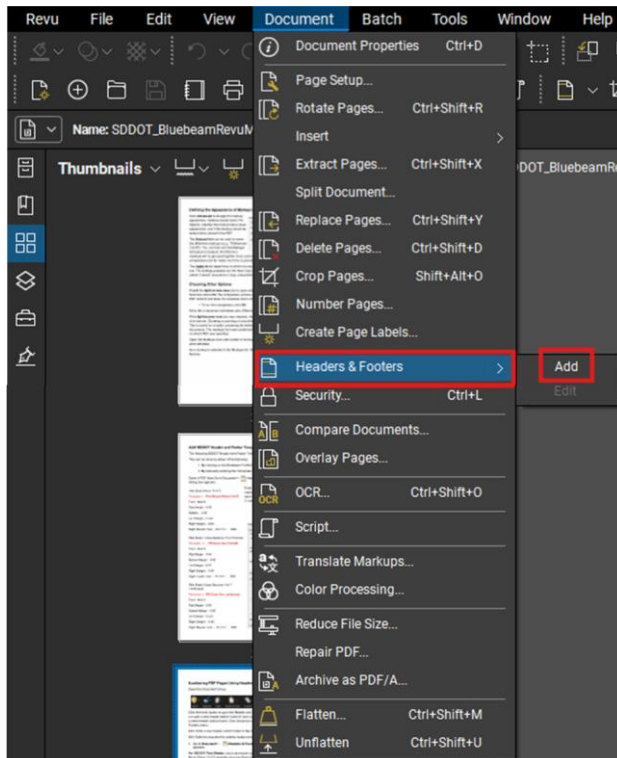
3) In the Header and Footer Dialogue Box Select your page range as necessary and then Select "Next"
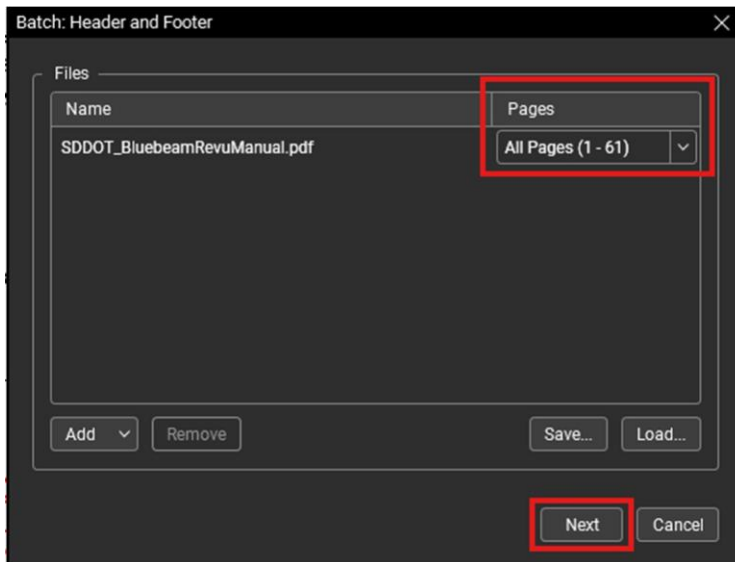
4) Under the Save Settings Drop Down Select the appropriate setting for the Plans Sheet Page Orientation > Insert Page numbers format in correct box (outlined on next sheet) > Select OK

Inroads Header & Footer Settings

These settings can be modified for each project individually as needed, but this provides a good starting point.

* These settings should not be saved if loaded from the Configuration Utility File

* The less then symbols around the page number (<<1>>) are indicators to have the page numbers count up and are not necessary if just labeling one page

* If you are not starting on the first page for number you can add a pound sign to indicating where you need to start numbering. Ie. If you want to start number on the third page of a document you would put in B<<1#3>>.

* These Template Settings can be saved individually by inputting the settings listed below into the Header and Footer dialogue box and selecting okay to apply (as described in the previous step). This can be beneficial if you want to save your own profile settings.

1) Then going back to the Document Tab > Select "Headers C Footer" > "Edit"

2) Input the page numbers the header/footer was previously applied to and Select "Next"

3) Then next to Save Settings Click "Save" and input the name of the template which you input below > Click "OK" > Click "OK"

The new template will show up in any document you open now.

- Title Block (Plans 11x17)
  - Font: Arial 8
  - Top Margin: 0.68
  - Bottom: 0.50
  - Left Margin: 14.20
  - Right Margin: 0.65
  - Text Inserted into Right Header Box
    - B<<1>>   B##

- TB Cross Sec Portrait
  Title Block (Cross Sections 11x17 Portrait)
  - Font: Arial 8
  - Top Margin: 0.50
  - Bottom Margin: 0.42
  - Left Margin: 8.70
  - Right Margin: 0.40
  - Text Inserted into Right Footer Box
    - X<<1>>   X##

- TB Cross Sec Landscape
  Title Block (Cross Sections 11x17 Landscape)
  - Font: Arial 8
  - Top Margin: 0.60
  - Bottom Margin: 0.50
  - Left Margin: 14.20
  - Right Margin: 0.40
  - Text Inserted into Right Header Box
    - X<<1>>   X##

OpenRoads Header & Footer Settings

These settings can be modified for each project individually as needed, but this provides a good starting point.

   * These settings should not be saved if loaded from the Configuration Utility File

   * The less then symbols around the page number (<<1>>) are indicators to have the page numbers count up and are not necessary if just labeling one page

   * If you are not starting on the first page for number you can add a pound sign to indicating where you need to start numbering. Ie. If you want to start number on the third page of a document you would put in B<<1#3>>.

   * These Template Settings can be saved individually by inputting the settings listed below into the Header and Footer dialogue box and selecting okay to apply (as described in the previous step). This can be beneficial if you want to save your own profile settings.

1) Then going back to the Document Tab > Select "Headers C Footer" > "Edit"

2) Input the page numbers the header/footer was previously applied to and Select "Next"

3) Then next to Save Settings Click "Save" and input the name of the template which you input below > Click "OK" > Click "OK"

   The new template will show up in any document you open now.

- Title Block (Plans 11x17)
  - Font: Arial 8
  - Top Margin: 0.68
  - Bottom: 0.50
  - Left Margin: 14.20
  - Right Margin: 0.65
  - Text Inserted into Right Header Box
    - B   <<1>>/B##

- TB Cross Sec Portrait
  Title Block (Cross Sections 11x17 Portrait)
  - Font: Arial 8
  - Top Margin: 0.68
  - Bottom Margin: 0.42
  - Left Margin: 8.70
  - Right Margin: 0.65
  - Text Inserted into Right Footer Box
    - X   <<1>>/X##

- TB Cross Sec Landscape
  Title Block (Cross Sections 11x17 Landscape)
  - Font: Arial 8
  - Top Margin: 0.68
  - Bottom Margin: 0.50
  - Left Margin: 14.20
  - Right Margin: 0.65
  - Text Inserted into Right Header Box
    - X   <<1>>/X##

Deleting Headers and Footers

To delete headers and footers previously added to a document

1) Open the Document
2) Go to the Documents Tab > Select "Headers and Footers..." > Select "Edit"
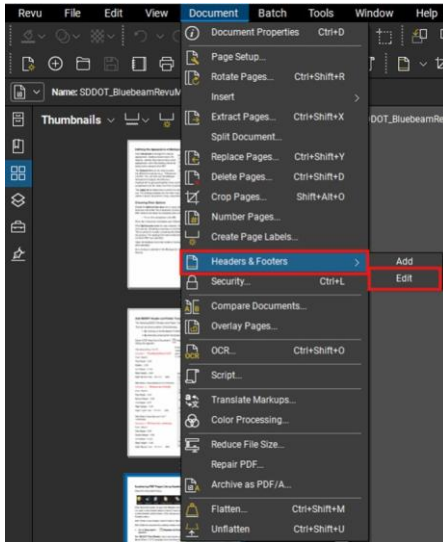
3) In the Header and Footer dialogue box Select "Next" (Page Range isn't relevant for this step)
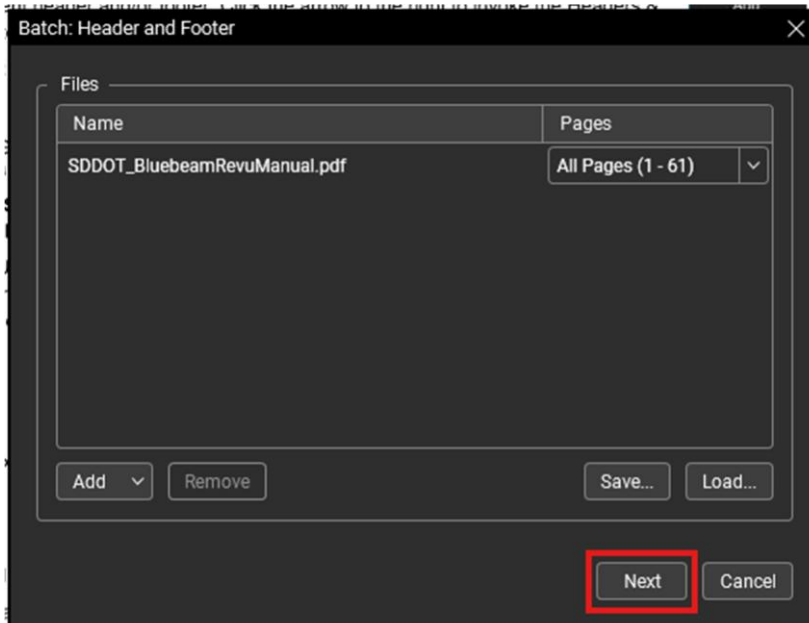
4) At the Left Bottom of the Header and Footer Dialogue Box Select "Delete All" >
Select "OK" in the pop-up warning box > Select "OK" in the Header and Footer
Dialogue Box
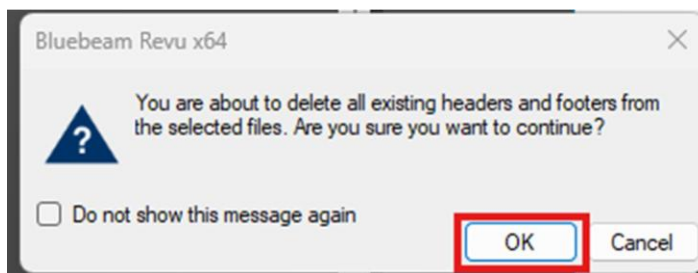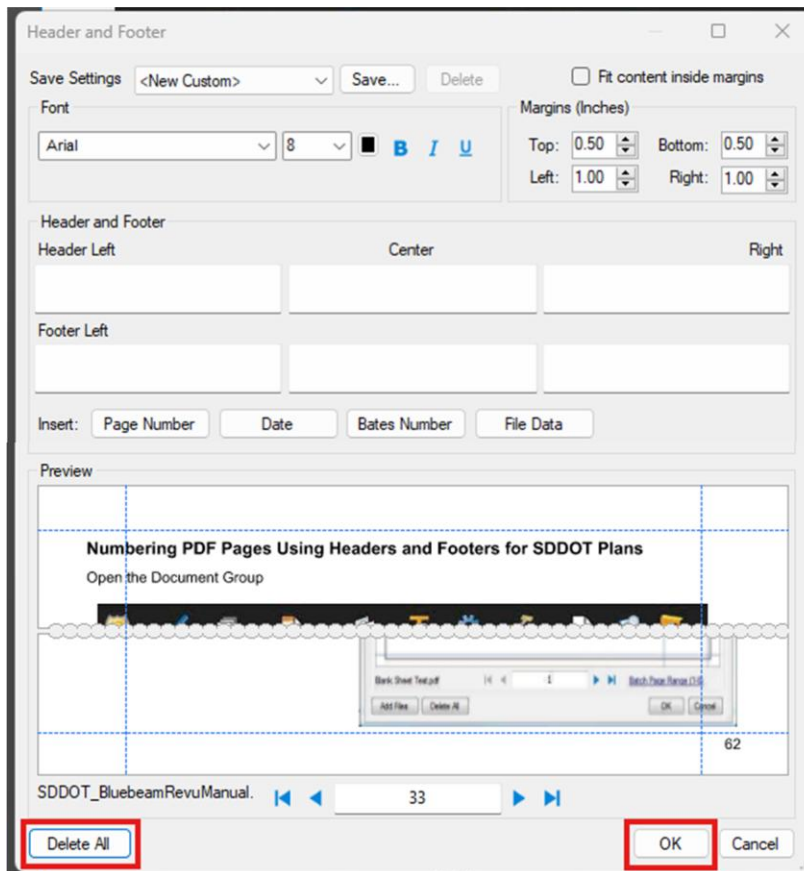
Thumbnail Page Labels and Numbering

<u>To change the name of a page label directly</u>

1) Select the Thumbnails tab
2) Select the Thumbnail of the page you would like to edit and double click the page label
3) The page label will become editable, and the page number can be changed. Tab can be used to move to the next page label. To stop editing click anywhere in the thumbnails tab
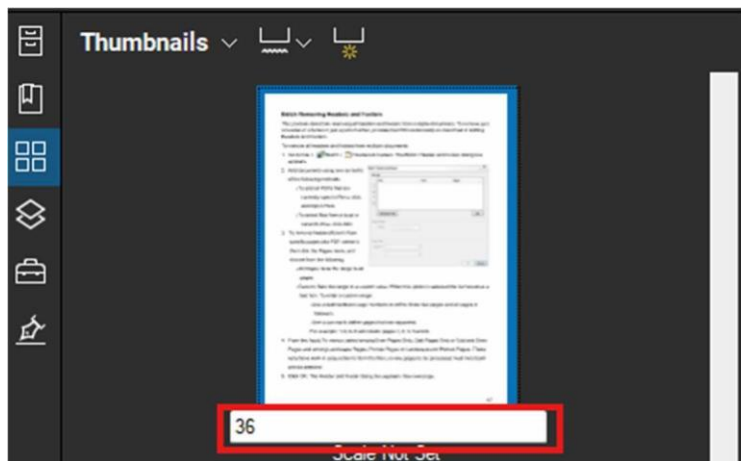
To edit a page label's numbering style

1) Select the Thumbnails tab

2) Under the Thumbnail Tab Menu > Select "Number Pages…"
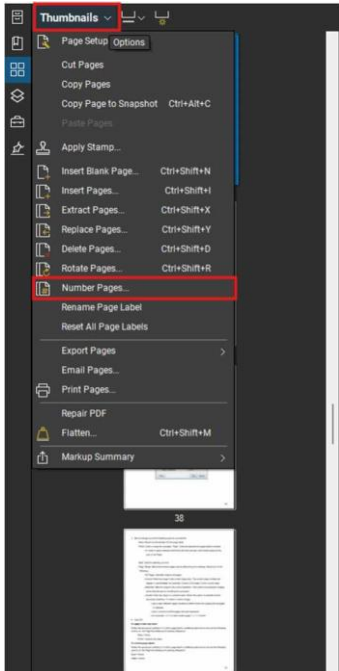
3) Change the Style for what you are trying to accomplish (1,2,3 for numbering, none for text only or to remove page labels)

4) Change the Prefix for what you are trying to accomplish (Desired text may be the section letter or blank to remove lettering)

5) Select appropriate Starting Page and Document Page Range

6) Select OK
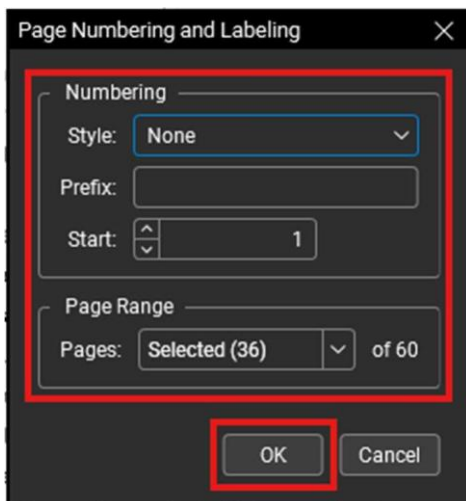
To remove page labels and reset to default numbering

1) Select the Thumbnails tab

2) Under the Thumbnail Tab Menu > Select "Reset All Page Labels"
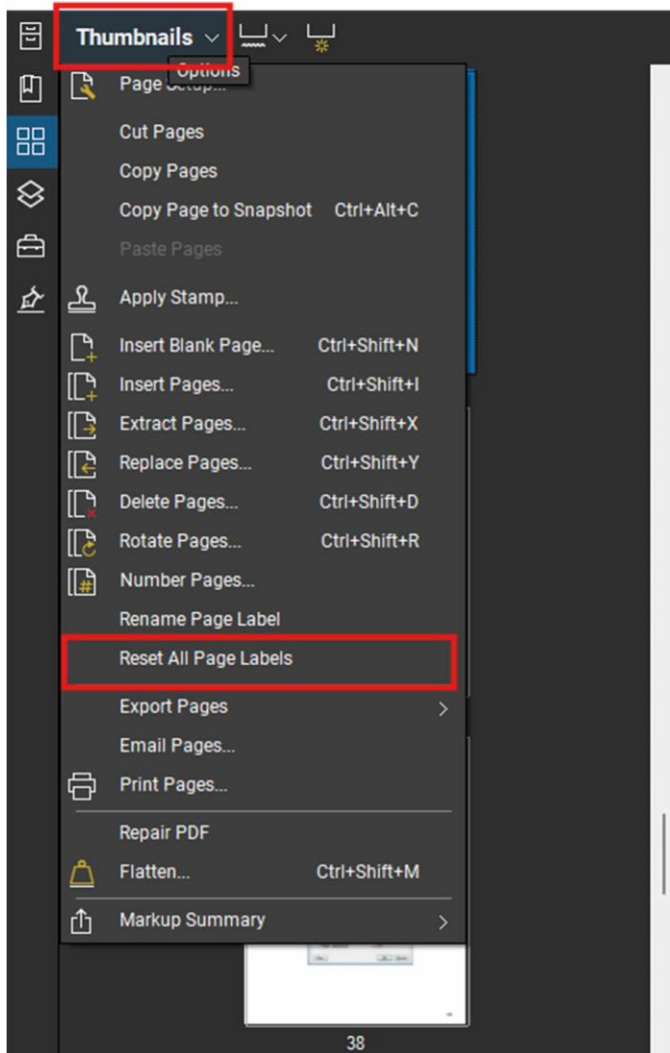
3) Select Yes on the Warning Pop-up
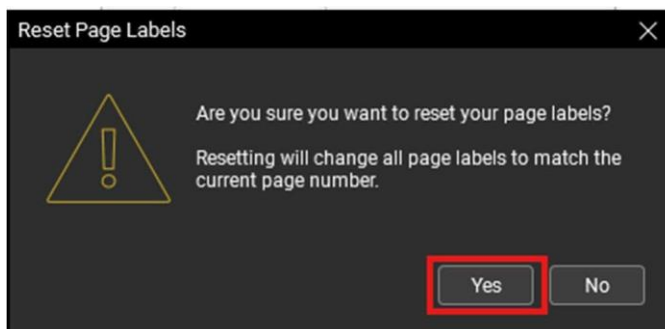
Review Sessions

The following will guide an individual on how to set up and host a Bluebeam Studio Session for SDDOT/FHWA reviews using SDDOT best practices. Hosting a Bluebeam session is not limited to only SDDOT/FHWA reviews, the following can also be easily adapted anytime where collaboration on a project might be desired. It can be developing a work order or give any individual the ability to view and or comment on an issue. A studio Session is simple to start, and a report can be generated for documentation.

SDDOT Best Practices:

- Adding individual documents such as Special Provision Checklist, PCN#_SectionA, PCN#_SectionB etc. to the review session. The individual pdf's allow reviewers a more systematic and simplistic approach when reviewing large review sessions that are common with Section Method reviews. It also gives the host some freedom to start a review session when not all documents to be reviewed are available; this is not ideal but does give flexibility to the host. The larger the review the larger the benefit is to our reviewers to have the pdf's separated out by Session Cover Letter, Checklists, Special Provisions and Plan Sections. When hosting a NonSection Method review keep the PCN#_NonSection separated from the Session Cover Letter, Checklists and Special Provisions

- Send Review Sessions out through Outlook and not through Bluebeam Revu. When Bluebeam Revu sends invitations out it is difficult for the host and especially to invitees to see who was all invited, this is important for offices that forward invites on to all their office reviewers. Also, when Bluebeam Revu sends invitations out, they are received in SDDOT Outlook Inbox as an "EXT" email and has resulted in invitees missing reviews.

Start SDDOT electronic plan review session

The Host will need to start a Studio Session.

1) In the Studio tab select "New Session" in the drop-down menu under "+".
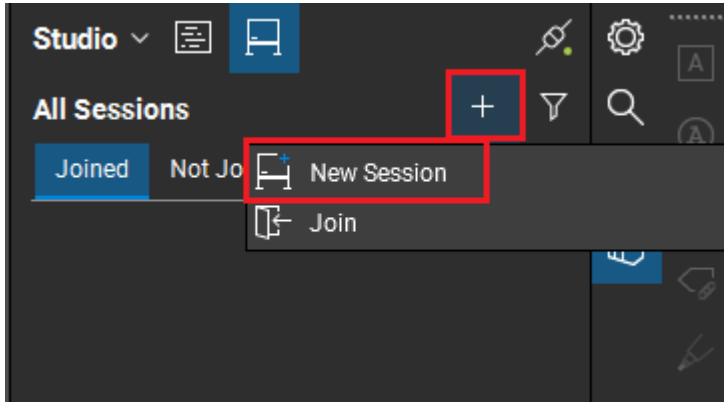
2) In the "Start Studio Session" dialogue box
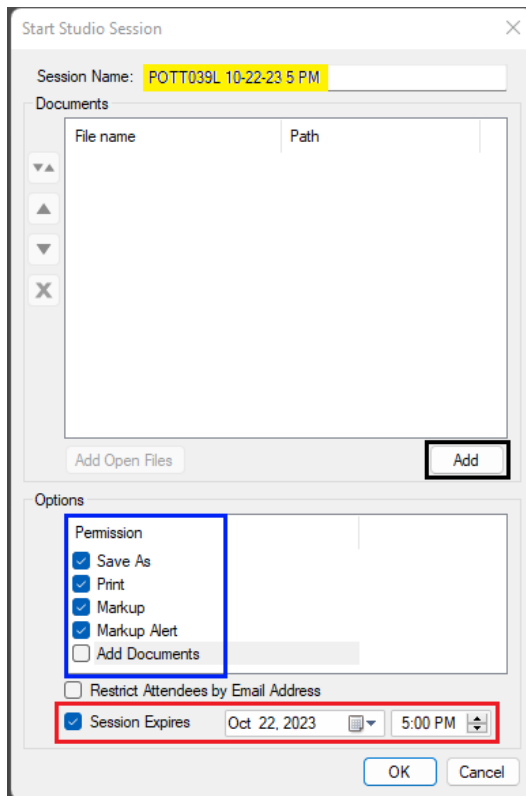
   a. Session Name: (Highlighted in Yellow) County PCN# Review Due Date Time,
      Example - Penn00WZ 08-15-18 5 PM

b. Pdf's can be added multiple ways (Black Box)

    i. Add Open Files – This adds files that are currently opened in Revu

    ii. Add – This adds files through file explorer

    iii. Add files later after the Session has been started (See Below "adding Documents in a Session")

3) Options – Can be adjusted after the Session has been started (Circled in Blue)

    a. Permission

      i. Check "Save As"

      ii. Check "Print"

      iii. Check "Markup"

      iv. Check "Markup Alert"

      v. Do Not Check "Add Documents"

4) **Do Not** Check "Restrict Attendees by E-mail Address"

    a. This allows SDDOT best practice of forwarding e-mail to others that need to review the plans

5) Check "Session Expires" (Circled in Red)

    a. Use Drop down Menus to set Date and Time

    b. Session Expiration can be adjusted during the review (see "Managing a Review Session")

6) Select "OK"

    a. "Session Invitation" will open.

7) In the "Session Invitation" dialog box

a. A (SDDOT Best Practice) is to send out reviews through Outlook and by selecting "OK" Bluebeam Revu populates an email with information entered and sends out the invitations. These invitations from Bluebeam cannot be tracked or documented. When exiting out of the "Session Invitation" dialog box always select "Cancel".
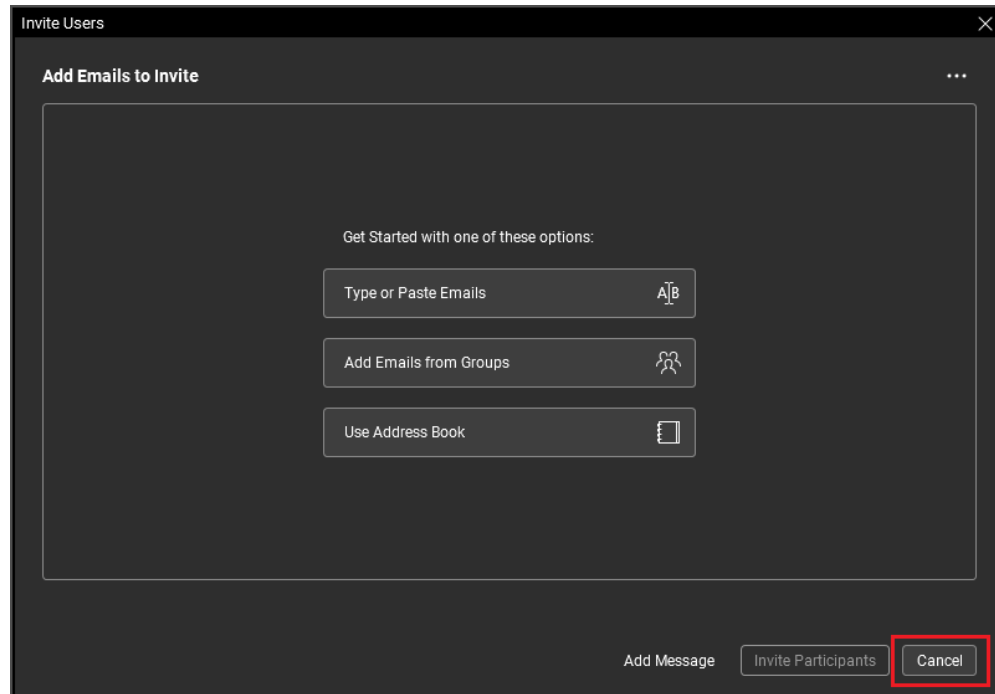
Managing SDDOT electronic plan review session

The Host will need to manage a Studio Session Review. This includes sending the review out to possible reviewers and allowing others to view who all the review was sent to.
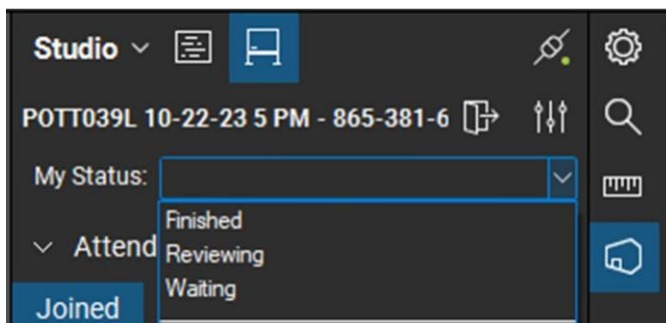
In the Session the name of the review is shown, set your status to "Reviewing, Finished etc.", send invitations out via a copied link, add documents to the review and manage the review through the settings.

Session Invitations Through Outlook

1) Create an Outlook e-mail:
   a. Subject: You're Invited to Review County PCN# Review Due Date Time Email Body: Reference the project
   b. RE: Project Number, County, PCN
      Location Description Improvement
      Description
2) Copy Invitation and paste into email
   a. To open Session Invitation dialog box click the Invite (envelope icon) at the top
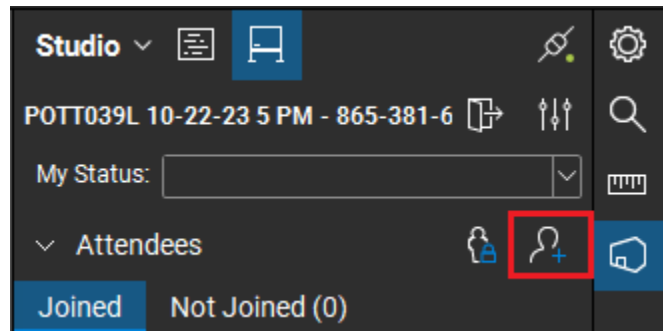
of the Attendees section in the studio session.

b. Select the "Copy Invitation", then paste into the Email Body.
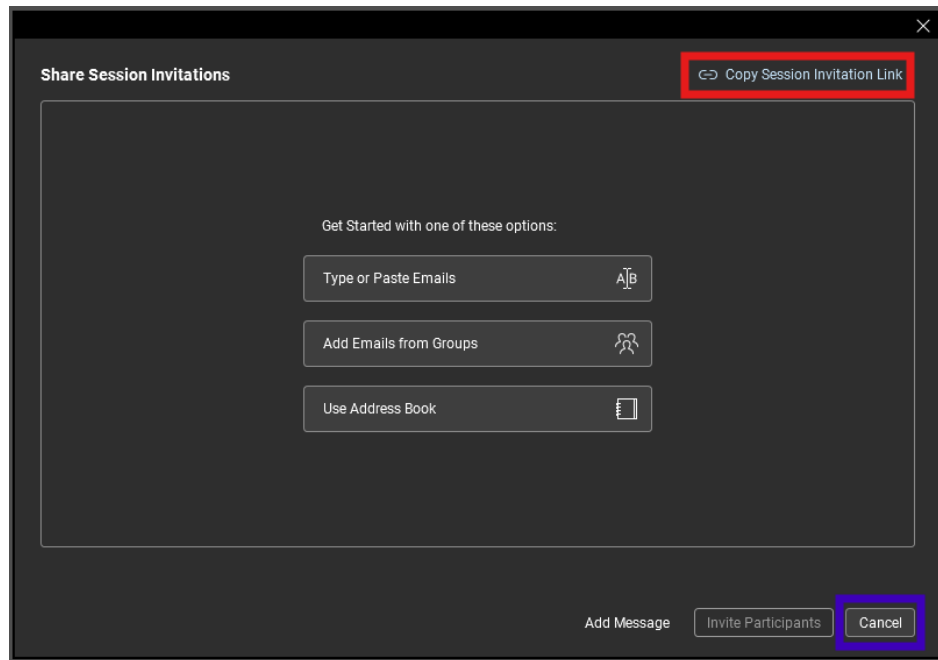
c. Finally, close out of the Session Invitation dialog box by selecting "cancel".

- Email Example
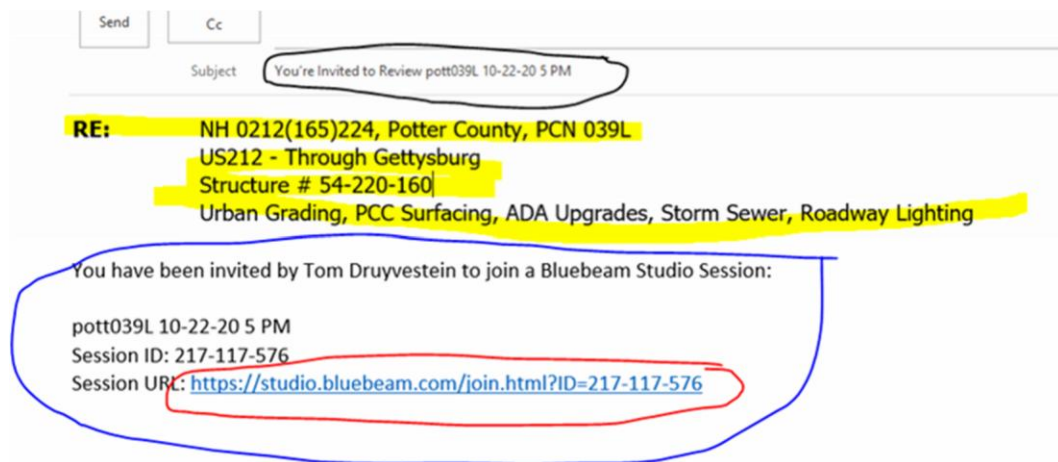
Giving Another User Full Control

When creating a review session, a best practice can be to give someone else full control of the session, in case you are unable to manage the session for any reason at any point in time (Road Design should do this step for every session).

1) To give full control of a session to another person go to the session settings and go to the permissions tab:
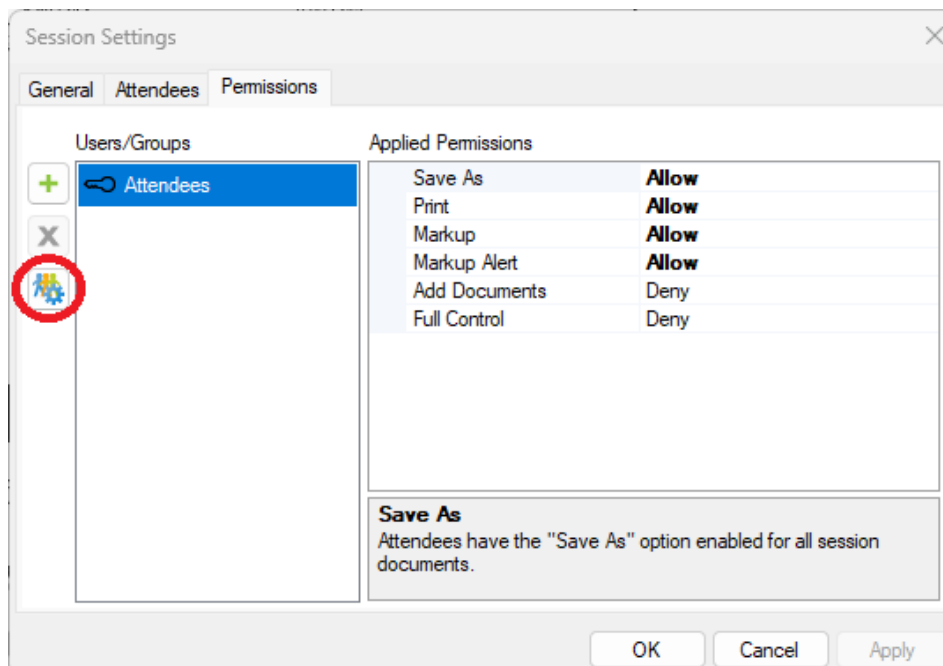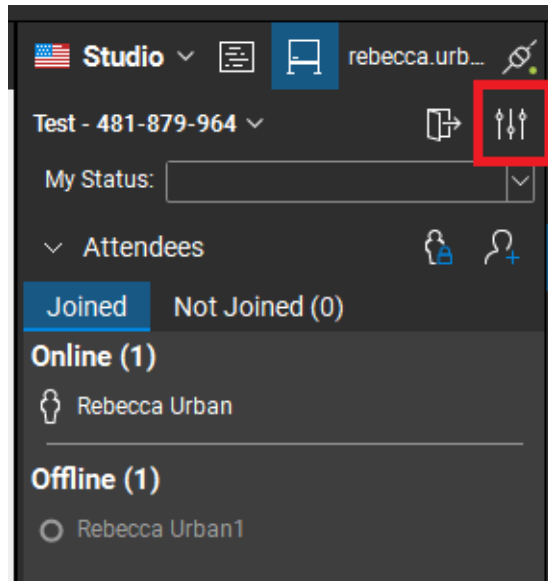
2) From there you will go to groups (circled above) and create a group with the person you want to give Full Control to. Click the Plus Symbol > Create a name for the group > Click Okay
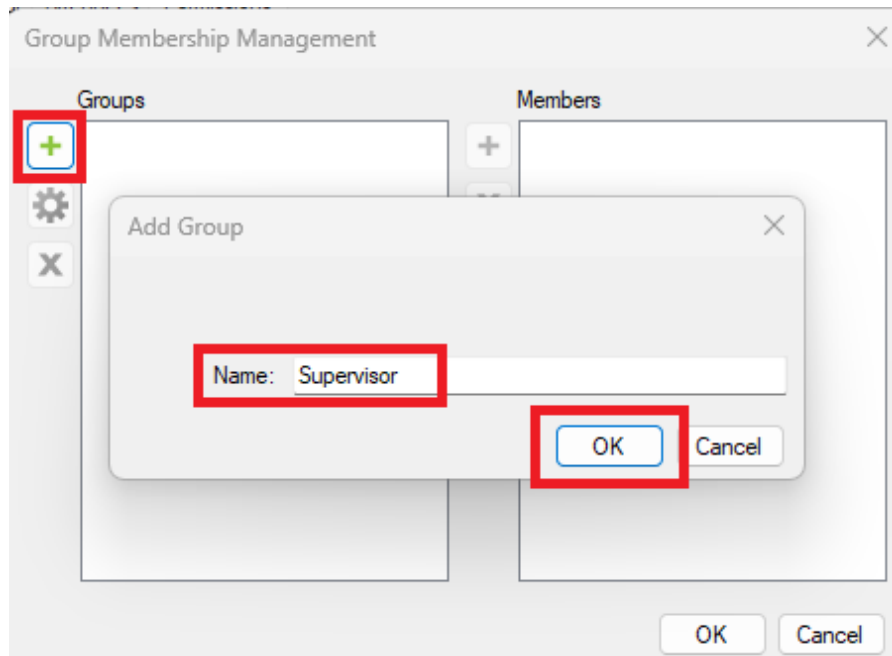
3) Then you will add the person to the group by selecting the group > Click the Plus Symbol in the Members Column > Type in the persons email address > Click Okay
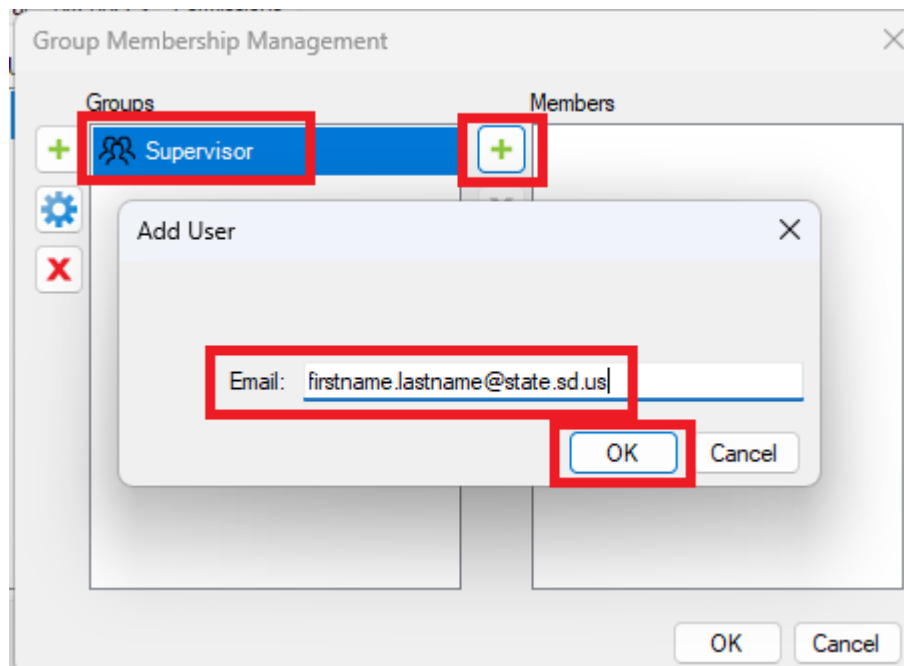
4) You can then click okay in the Group Membership Management pop up.

5) Back in the Session Management Popup under the permission tab you will click the Plus Symbol next to the Users/Groups columns > Select the group we just created > Click Okay
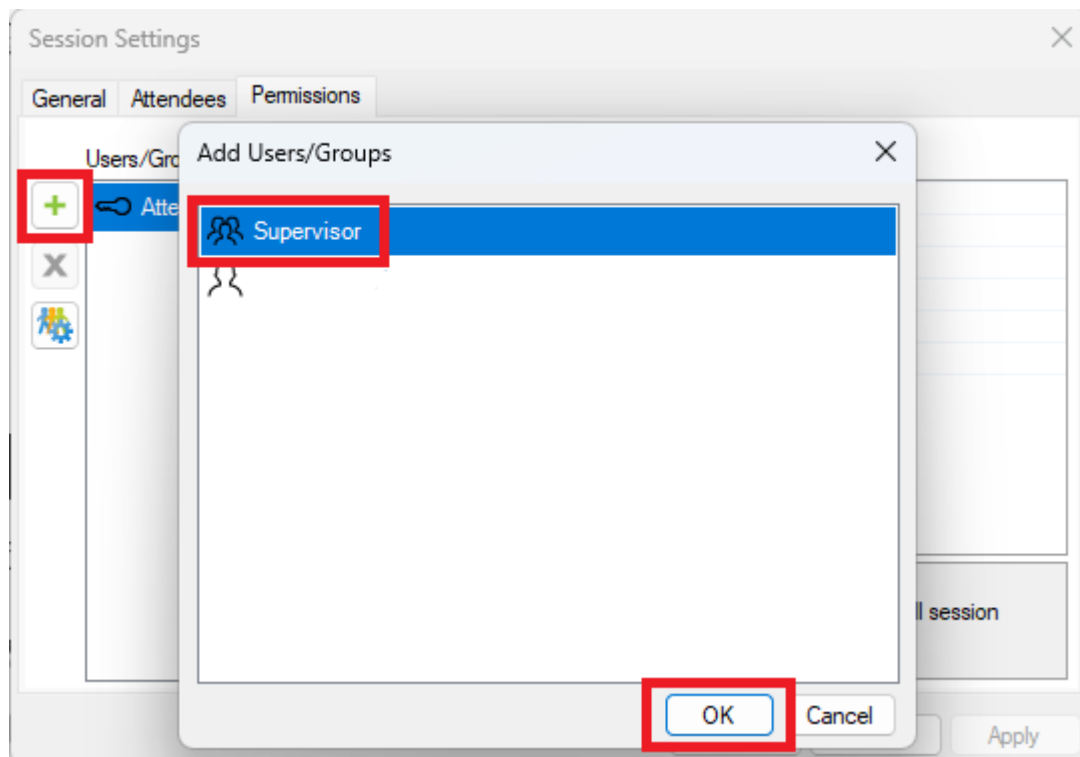
6) Back in the Session Management Popup we can now select the group we added and change the Applied Permissions to what are shown below and then Click Apply.
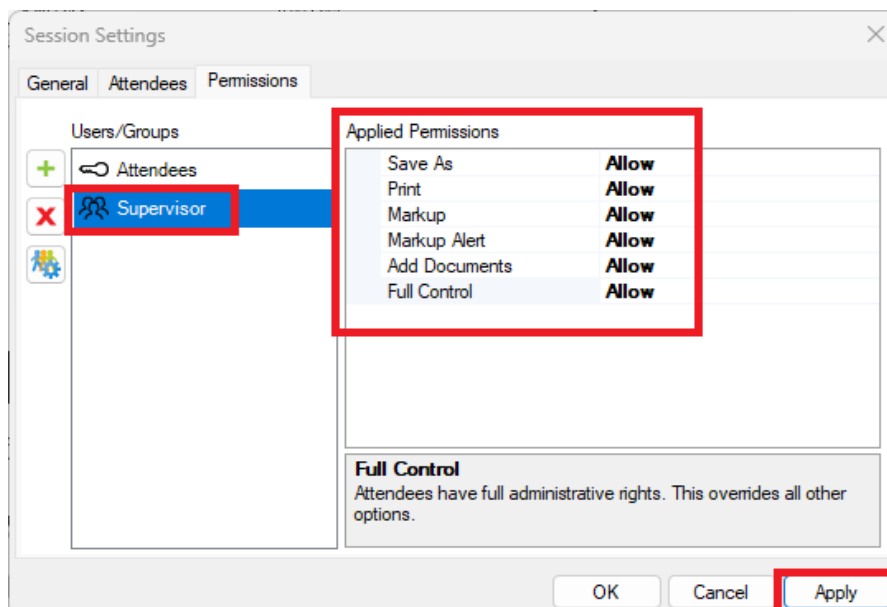
Studio Session Management

The review session can be managed through "Session Settings" in the studio session

(must select apply for any adjustments made)

General Tab: Enable the session to close (expiration) and select the closing date and time, can also manage session notifications in this tab.

Attendees Tab: Can add attendee by email and restrict attendees

Permissions Tab: Set permissions to attendees

- During the Markup portion of the review session set permissions for all to:
  - Save As   **Allow**
  - Print   **Allow**
  - Markup   **Allow**
  - Markup Alert   **Allow**
  - Add Documents   **Deny**
  - Full Control   **Deny**
- During the Revision portion of the review session set permissions for everyone except project designers to: (simply change "Attendees" permissions)
  - Save As   **Allow**
  - Print   **Allow**
  - Markup   **Deny**
  - Markup Alert   **Allow**
  - Add Documents   **Deny**
  - Full Control   **Deny**

- During the Revision portion of the review session set permissions for project designers to:
  - Save As   **Allow**
  - Print   **Allow**
  - Markup   **Allow**
  - Markup Alert   **Allow**
  - Add Documents   **Deny**
  - Full Control   **Deny**
    - This is accomplished through using permissions tab, use the green
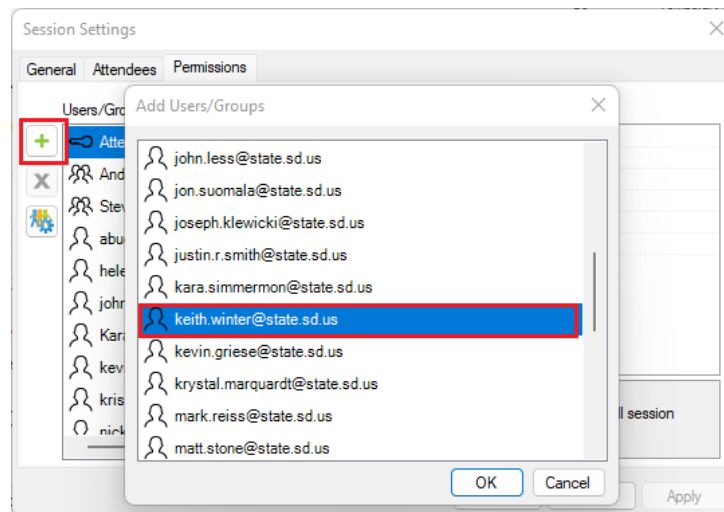
plus icon then select individual you want to change preferences for.
    - **NOTE:** Sometimes designers do not enter the session during the markup portion of the review. This results in them not being populated in the "Add Users/Groups" automatically.
    - To "Add Users/Groups" manually, use the "Group Membership Management" icon to create a group and populate it with members, select OK then select apply. Now you can give permissions to the group you just created.
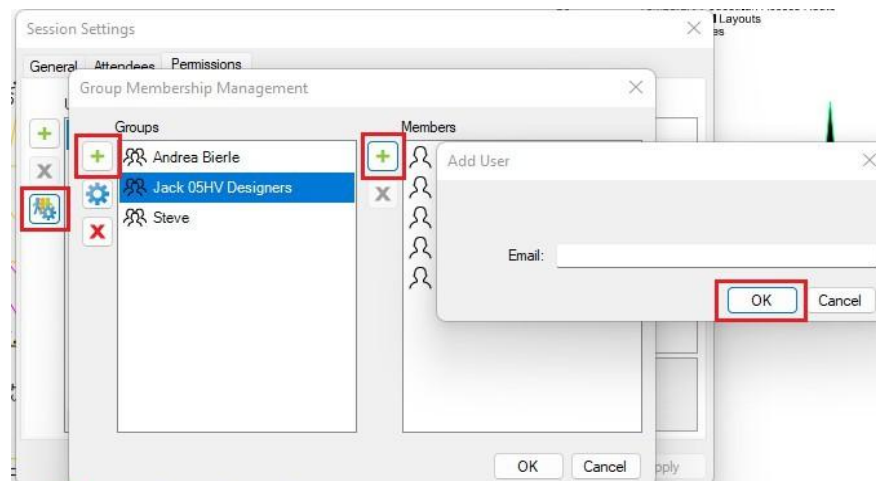
Adding Documents to a Session

1) Adding documents can be accomplished through the "Add File" Icon (+). This will route you through your file explorer capabilities on your computer.
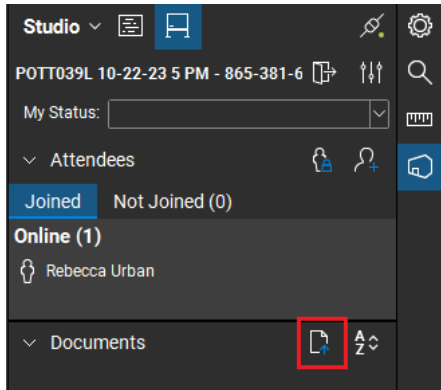
How to Respond to Review Comments

Each consultant/designer is responsible for responding to the comments left in the section(s) of plan(s) that they are responsible for during DOT Review. Each comment should be marked with a status and responded to as necessary.

If a comment is marked "**Accepted/Completed**" the comment is totally complied with. For a comment to be totally complied with the plans should be updated to include all the items specified in the comment. A short description of how the comment was handled can be added but is not required.

If a comment is marked **"Rejected"** this means the comment was not partially or totally complied with. In this case the consultant/designer must reply to the comment with the reasoning for not complying with the comment (ie. Standard Plate/Note, RD Manual, Spec Book, etc.). When a reply is complete the consultant/designer should Alert the Attendee (Reviewer) that made the comment and the Project Manager, so they are aware of the comment being rejected.

No comments should be marked **"Cancelled"** or **"None".**

If a Project Manager notices that comments that were marked Completed during the DOT Review were not addressed/complied with in the plans, the Project Manager should follow up with the Consultant/Designer to verify that the plans are updated to comply with the comment.

How to Set a Status:
1) In the Session Markup List > right click on the comment > hover over "Select Status" > Select the Status of the comment (ie. Accepted, completed, or rejected)
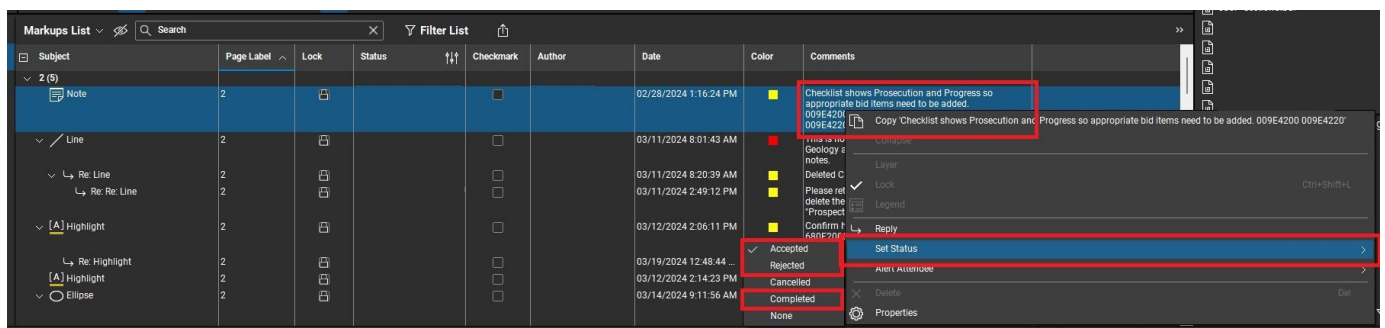
How to Reply to a comment:

1) In the Session Markup List > Right Click on the comment > Click "Reply"

2) Once you have completed your reply you should lock it, so it can not be edited or deleted.
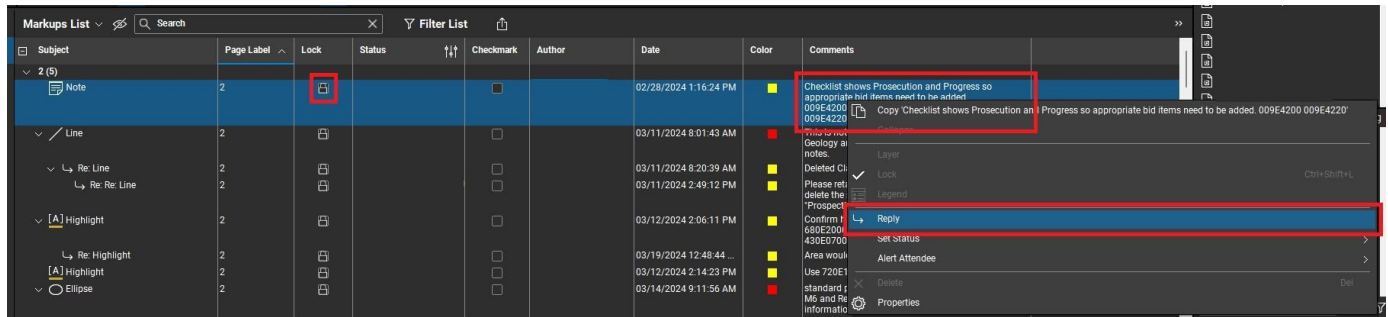
How to Alert an Attendee to a rejected comment and reply:

1) Highlight the comment and reply > right click in the comment box > hover over "Alert Attendee" > Select "Choose" > Scroll down the list and select the person who made the rejected comment and the Project Manager > Select "OK"
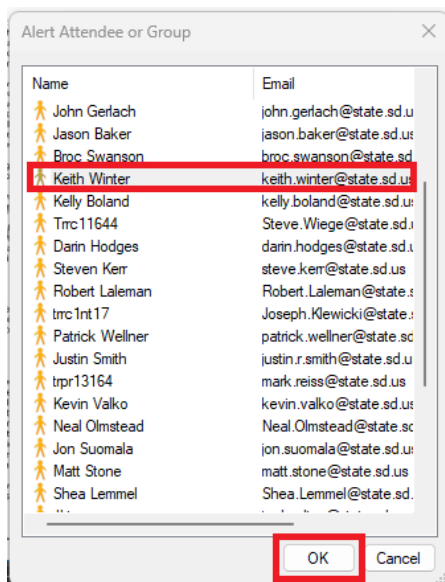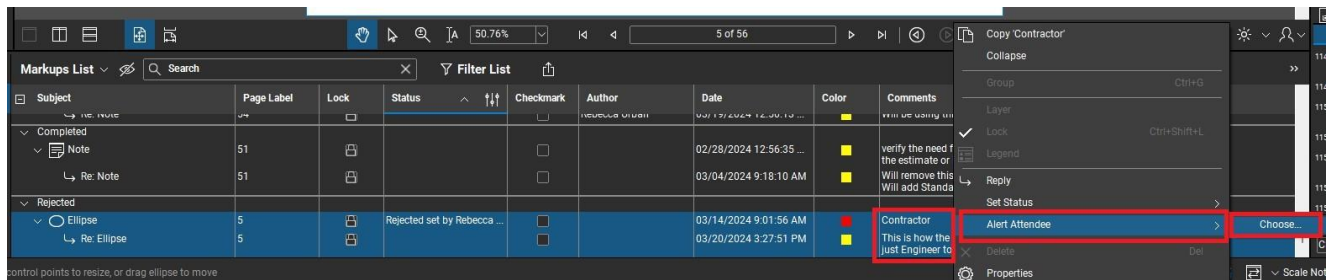
Commenting in Review Sessions Best Practices

Various markup tools can be used to leave comments in a review session. Some of the most used are:

The Highlighter tool which can be used to highlight text or plan sections

The Callout tool which can be used to point at a certain location with an arrow and add a text box

The Text Box tool which adds a text box at any location on a set of plans

The Note tool which can be used to mark a location within the plans but adds the note text to the markups list and not the plan sheet

The Rectangle or Ellipse tool which can be used to encompass/highlight a full section and provide a comment in the markups list.

Adding Comments to a Markup on the plan sheet

The Highlighter, Note, Rectangle, and Ellipse tool can be edited to add a comment on the plan sheet after they are placed.

1) Place your markup of choice
2) Double Click on the Markup and a comment dialogue box will pop up and place your comment in the dialogue box
3) Once completed with your comment be sure to close the comment box by clicking the X in the top right corner
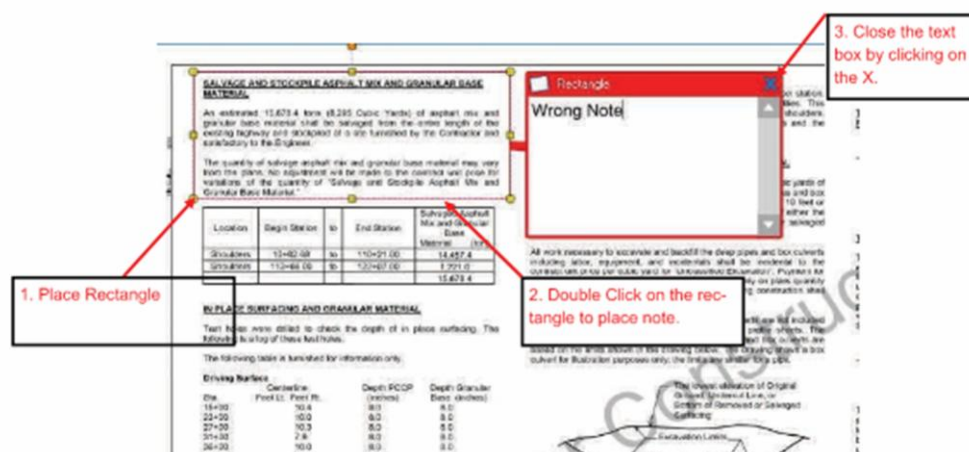
Adding Comments to a Markup in the Markups List

You can also add a comment to a markup in the markups list for all tools including ones that show up on the plan sheets.

1) Place your Markup (in this example a rectangle)
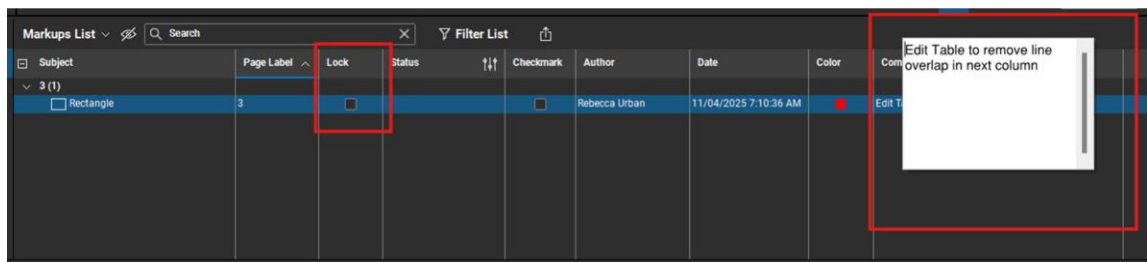
2) Expand the Markups List at the bottom of the screen either by dragging the blue line below the page #'s up or double clicking on the blue line
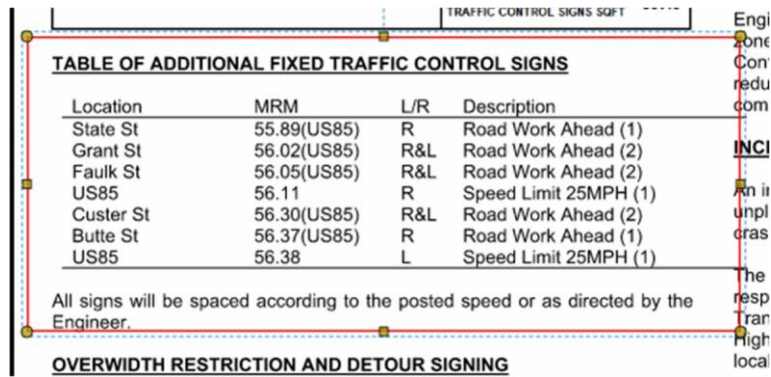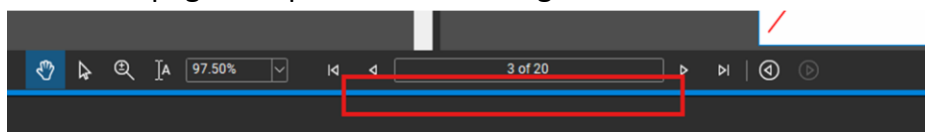

3) Double Click in the Comments Column and add comment when complete, click out of the box, then click the box in the Lock Column (If the comment needs to be edited you will need to uncheck the Lock Box)

* You can only delete or edit comments that you have added

* See Responding to Review Comments for DOT best practices on that process

Markups List

How to access the Markups List

The Markups List is at the bottom of the screen below the page navigation buttons. It can be expanded by double clicking anywhere on the blue heighted line that shows up when hovering below the navigation buttons or by dragging up on the blue line.
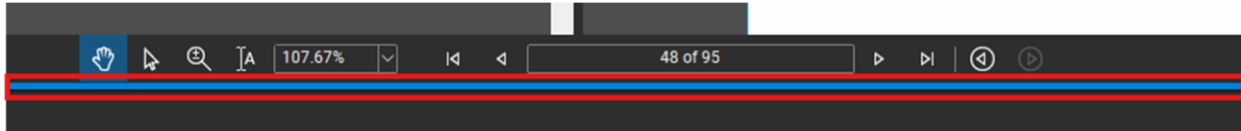
You could also click on the Markups toolbox to expand this.
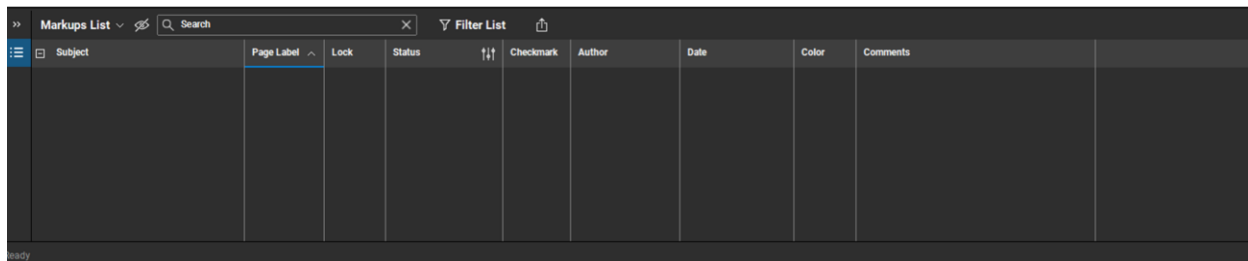
Sorting and Navigating Comments

Any column within the Markups list can be sorted by Ascending or Descending by clicking on the column header label
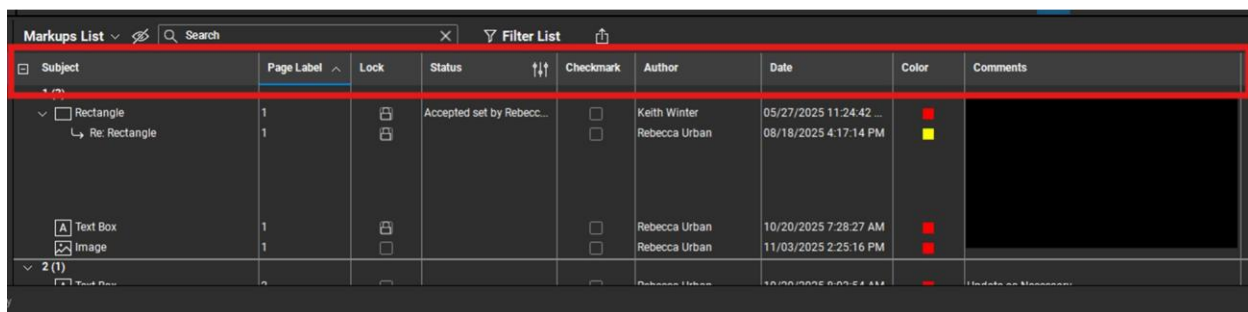
When a markup item is selected the view of the pdf will jump to the location of the markup. To step through additional markups once one is selected you can use the up or down arrows to navigate through the list.

How to filter comments:

1) In the Session Markups List > Select "Filter List" > Now you can click in the white box above each column to sort the column (ie. Above Status you can select all the comments that are still blank, above author you can select all comments made by any designer, etc.)

Managing Markups List Columns

Columns of information can be added or deleted from the markups list. To do this:

1) Select the Markups List drop down > Select Columns
2) From Here you can edit from the list displayed by checking the column description to add
3) From the "Manage Columns" pop-up you can drag columns to display in a different order or Select Additional Columns > When you all changes are complete Select "OK"
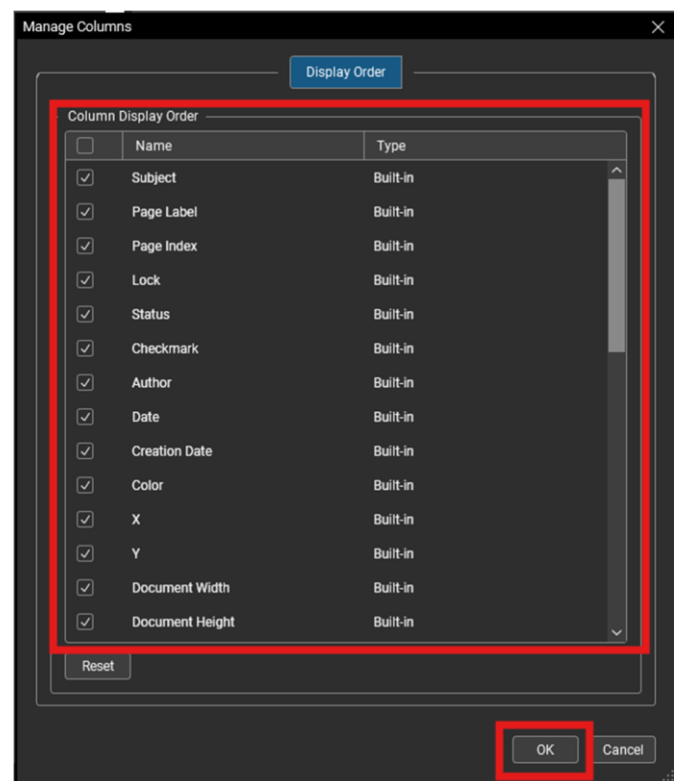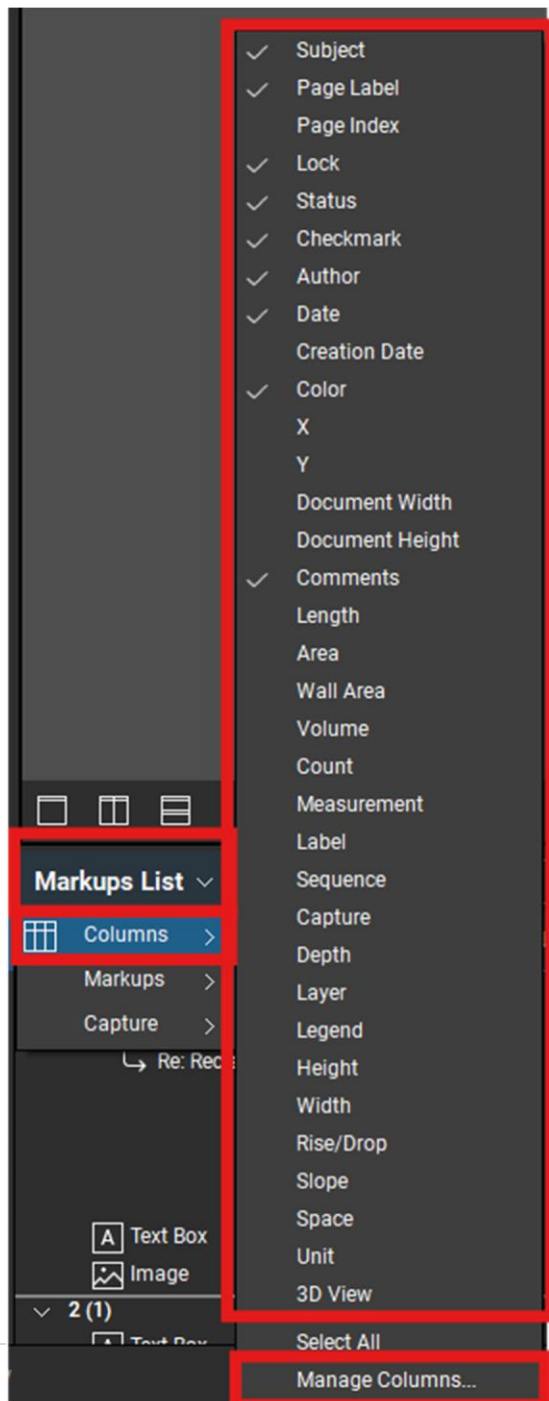
Creating Review Session Report

1) After the plan review and all the responses are complete the Host will need to generate a Session Report. Click the Report icon in the Record tab for the Review Session.
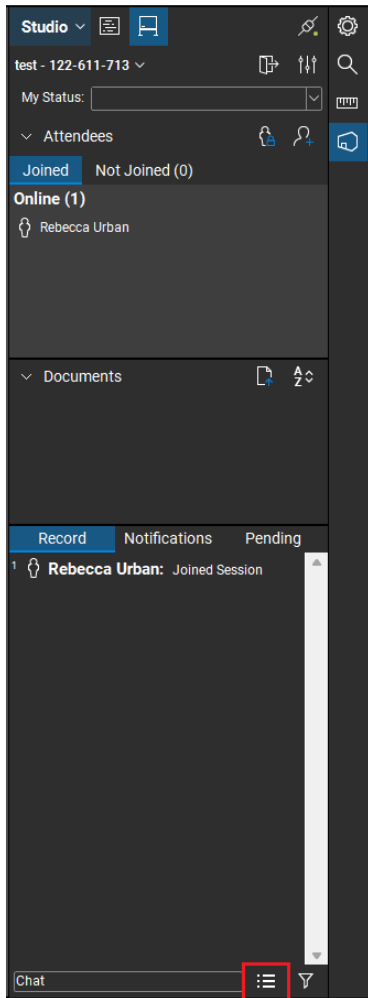
2) In the Session Report dialog box select
   a. PDF Package Report
   b. Letter
   c. Include Attendees List
   d. Include Documents List
   e. Include Record Items
        i. Do Not Include Filtered Items Only
   f. Columns Box check all
   g. When you select "OK" you will need the save the report in the "Review" folder under the project folder titled COUNPCN#_archive. Example CLAY023V_archive

Finish SDDOT electronic plan review Session

The Host will need to finish a Studio Session.

1) Select the Finish icon in the Review Session.
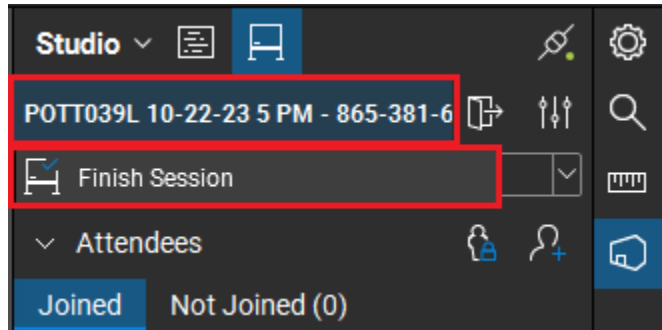
2) In the "Finish Session" dialogue box, select "Do not save files" and uncheck the "Generate Report"

Send Final Plans to Bid Letting

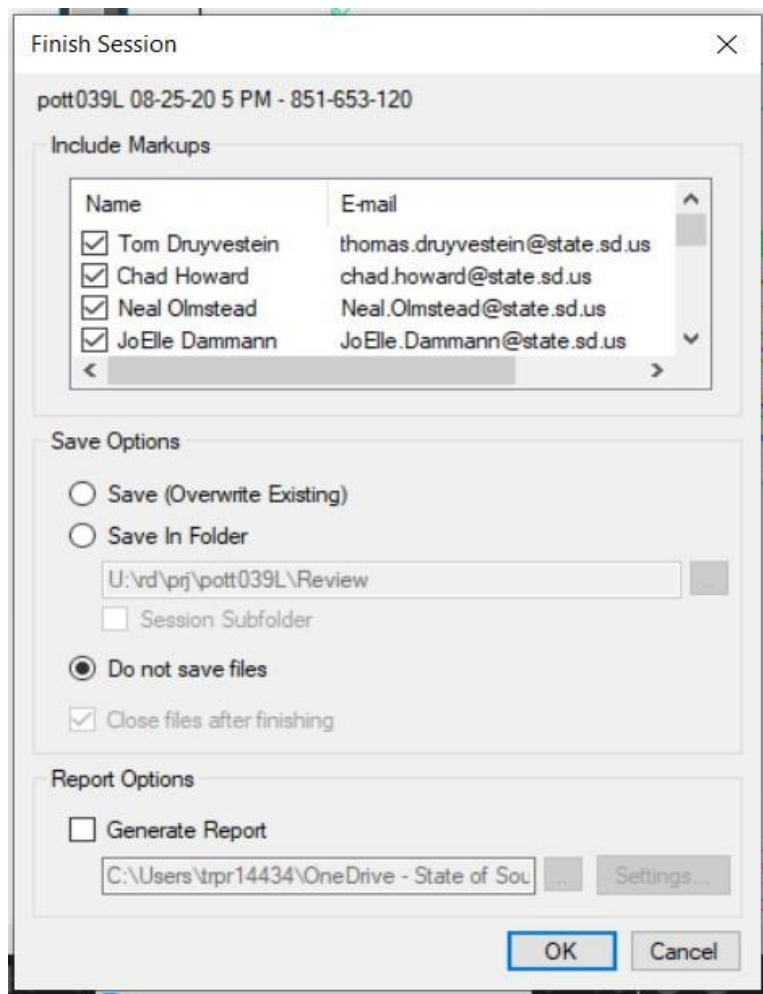Once a PDF Package Report has been created and the Session Finished Final Plans can be sent to Bid Letting.

The following form letter can be used to Send Final Plans to Bid Letting: U:\rd\A Project D-base\Form Letters\F4- Plans to Bid Letting.docx

The Designer sending final plans should include the field offices (Region Engineer, Region Operations Engineer, Region Traffic Control Engineer, Region Designers, Area Engineer, and Area Engineering Supervisor), all reviewers as listed in the Session Report, FHWA (on Federal Oversight Projects), and Local Government Offices.

Once this form letter is sent, a Bid Letting QA Review will take place. Any changes to the plans as a result of the QA review or to address issues after Plans are sent to Bid Letting will require a revision letter. The Project Managers office should be notified of these revisions so other plan sections impacted by changes can be revised and a revision letter can be sent with the following form letter utilized: U:\rd\A Project D-base\Form Letters\F6-Revision of Construction Plans (Bid Let).docx.

Appendix

Electronic PDF Plans

Naming Convention:

		Addendum	CCO
Section Method	PCN#_Section?.pdf	PCN#_Section?Add#.pdf	PCN#Section?CCO#.pdf
Non-Section Method	PCN#_Nonsection.pdf	PCN#_NonsenctionAdd#.pdf	PCN#_NonsectionCCO#.pdf

File Location:

All Final Plans should be saved in the prj folder for their respective office for ease of locating:

	File Location
Section A	U:\rd\prj\CounPCN#
Section B	U:\rd\prj\CounPCN#
Section C	U:\RegionX\prj\CounPCN#
Section D	U:\rd\prj\CounPCN#
Section E	U:\br\prj\CounPCN#
Section F	U:\ms\prj\CounPCN#
Section G-K	U:\rd\prj\CounPCN#
Section L	U:\rd\prj\CounPCN#
Section M	U:\RegionX\prj\CounPCN#
Section S	U:\RegionX\prj\CounPCN#
Section X	U:\rd\prj\CounPCN#
Section Z	U:\rd\prj\CounPCN#

Document Untitled Viewports Message

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