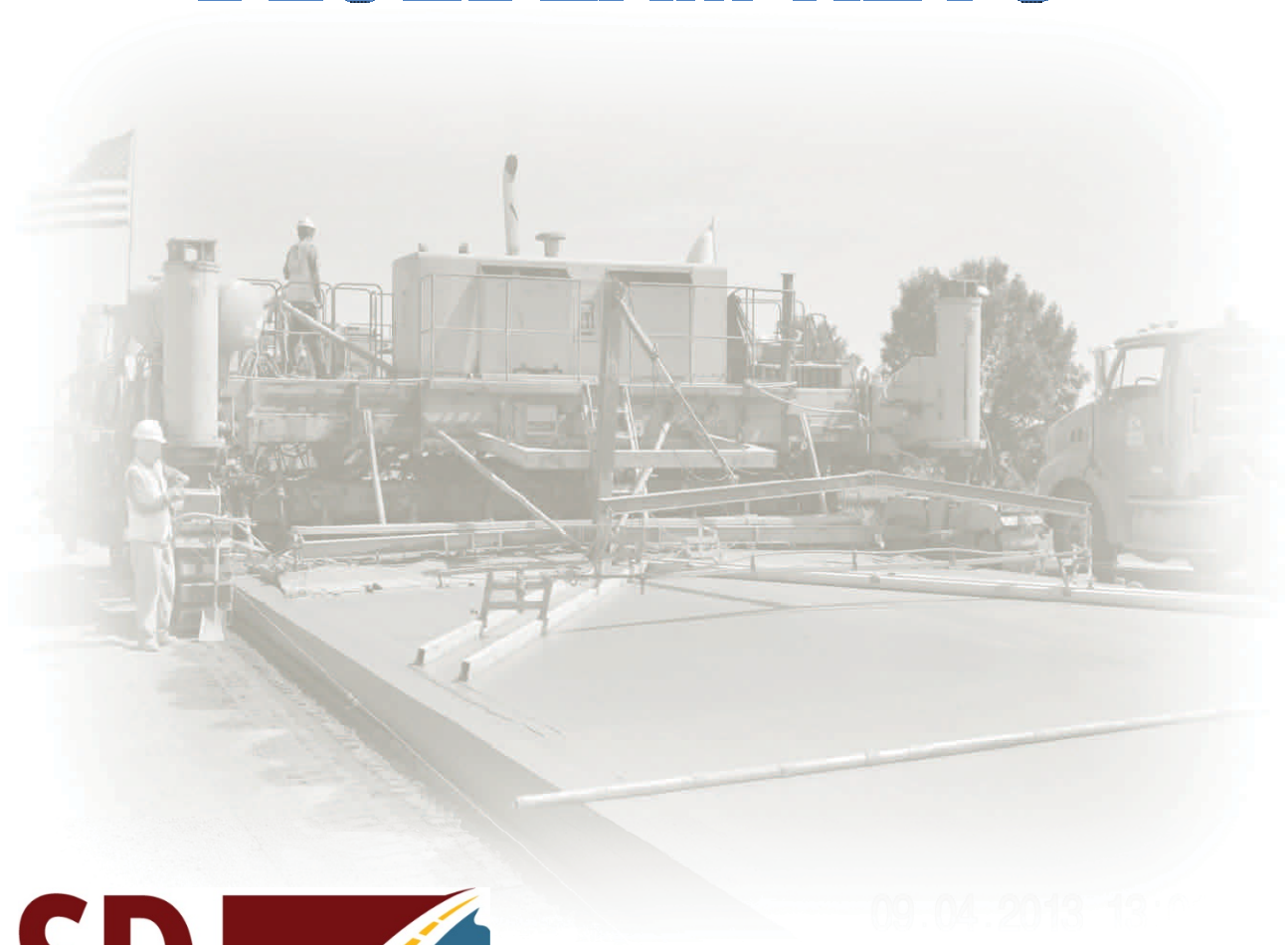


ELECTRONIC PLAN REVIEW

USER GUIDE FOR BLUEBEAM REVU



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Table of Contents	
Introduction to Bluebeam Revu	7
How to Use This Guide	7
Default PDF Associations	8
Joining a Review Session	9
Review Session Layout	10
Reviewing Plans	11
Commenting Best Practices	11
Chapter 1: Interface	12
Interface Overview	12
Navigation	13
Status Bar	14
Command Bar Groups	15
File	15
Edit	15
View	15
Document	15
Markup	16
Measure	16
Window	16
Help	16
Tabs	17
Properties Tab	17
Thumbnails Tab	21
Bookmarks Tab	22
Search Tab	24
Working with Profiles	25

Preferences	25
General	26
Grid & Snap	27
Markup	29
Navigation	30
Studio	31
Chapter 2: Commenting & Markups	32
Compatibility	32
Markup Overview	32
Markup Tools	32
Text Menu	33
Pen Menu	33
Lines Menu	34
Shapes Menu	34
Sketch Menu	35
Image and Image Menu	35
Hyperlink and Hyperlink Menu	36
Attachment	36
Stamp Menu	36
Measurement Setup	37
Calibrating a PDF	38
Working with Viewports	38
Measurement Tools	39
Measure Tool	39
Calibrate	39
Linear Menu	39
Area	39
Volume	39

Cutout	39
Count	39
Geometric Menu	39
The Tool Chest	40
Using Tool Sets	40
Reusing Recent Tools	40
Permanently Saving a Tool to be Reused	41
Properties Mode vs. Drawing Mode	42
Pinning a Tool Set	42
Working with Stamps in the Tool Chest	43
Placing Stamps from the Tool Chest	43
Applying a Stamp from the Tool Chest to Multiple Pages	43
Applying a Stamp from the Tool Chest to Selected Pages	44
Working with Stamps in the Document Group	44
Flattening Stamps	44
Adding Not For Construction or Preliminary Stamp on Plans	45
Flatten Markups Tool	46
Markups List	47
Markups List Button Bar	47
Markups List	48
Expanded List	49
Collapsed List	49
Partially Collapsed List	49
Columns Menu	50
Context Menu	51
Chapter 3: Document Manipulation	52
Insert	52
Extract	53
Rotate	53
Crop	53

Document Comparison	54
Comparing Two Versions of the Same Document or Drawing	54
Defining Documents A and B	54
Optionally Defining a Region	54
Aligning the Documents	54
Defining the Appearance of Markups	55
Choosing Other Options	55
Creating a Combined PDF from Multiple PDFs	56
What needs to be included in a Combined PDF for a Session Plan Review	56
Creating a PDF from an Existing File not a PDF	57
Creating PDF(s) from Multiple Existing Files Not PDFs	58
Stapler: Using Windows Explorer to Combine or Convert Files	60
Add Header and Footer Templates for SDDOT Plans	61
Numbering PDF Pages Using Headers and Footers for SDDOT Plans	62
Numbering PDF Pages Using Batch Processing - Headers and Footers	65
Batch Processing - Removing Headers and Footers	67
Editing Page Labels and Page Numbering	69
To change the name of a page label directly	69
To edit a page label's numbering style	69
To apply a text only label	70
To remove page labels	70
Creating Page Labels from Page Region	71
Introduction to OCR (Optical Character Recognition)	72
Running OCR on a Single Document	72
Running OCR on Multiple Documents using Batch	74

Chapter 4: Studio Session	75
Studio Session: Create, Share and Collaborate in the Cloud	75
Host a Studio Session	75
Start a Session	76
Manage a Session	78
Attendee Access	78
Manage Documents	79
Responses to Review Comments and Revisions	80
Rejecting Comments, Replying to the Rejected Comments and Alerting the Reviewers That Made the Comments	84
How to Respond to Review Comment	85
Completed Review Session Report	87
Finish a Session	88
Memorandum/Letter to Bid Letting	89
Appendix	90
Electronic PDF Plans	90
Document Untitled Viewports Message	90
PDF from Word or Excel with Bluebeam Revu	91
Adding “Not For Construction” as a Stamp	92
Removing the Stamp “Not For Construction”	92
Adding “Preliminary” as a Stamp (ROW Plans - Only)	92
Removing the Stamp “Preliminary” (ROW Plans - Only)	92
Numbering PDF Pages Using Header and Footers	92
Standard Plates in Bluebeam Revu 11x17 Sheets	93
Alternate Procedures for Comments Outside of the Studio Session	94
Bluebeam Revu Studio Session Procedures for SDDOT Projects	95

Introduction to Bluebeam Revu

This is a guide for how to use Bluebeam Revu for your PDF markup and collaboration needs.

Bluebeam Revu provides powerful and easy to use features for marking up Architecture, Engineering, and Construction (AEC) plan PDF documents. The Studio Session feature allows users from any location to participate in a collaborative review. Bluebeam makes use of Amazon Web Services (AWS), commonly referred to as the Amazon Cloud. This service will host the documents for the Studio Session.

There are two roles within a Bluebeam Studio Session. That of an initiator, and that of a participant. If you are going to initiate a Studio Session you need to have any tier of Bluebeam Revu installed on your pc. However, to be a participant all that is required is Bluebeam Vu (a free PDF reader), though Bluebeam Revu can be used as well.

Initiator	Install Bluebeam Revu
Participant	Install free Bluebeam Vu download (unless the participant already has Bluebeam Revu)

How to Use This Guide

Each section of this reference guide will begin with a description of the topic that will be covered, followed by step-by-step instructions on how to accomplish it.

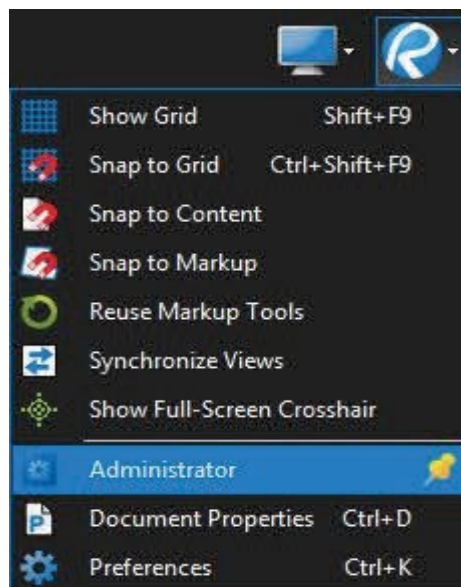
Default PDF Associations

In a mixed environment (using both Adobe Acrobat & Bluebeam Revu), a choice has to be made as to which PDF reader is set as the default PDF reader. In most cases this is generally just a user preference, but in a mixed environment leaving Adobe Acrobat as the default PDF reader is recommended. This is recommended because Acrobat Shared Review invitations use the default PDF reader to open links to the Shared Review, while Bluebeam Studio Session invitations know to use Bluebeam Revu regardless of whether or not it is the default PDF reader. In this scenario a user could navigate both invitations without running into any problems.

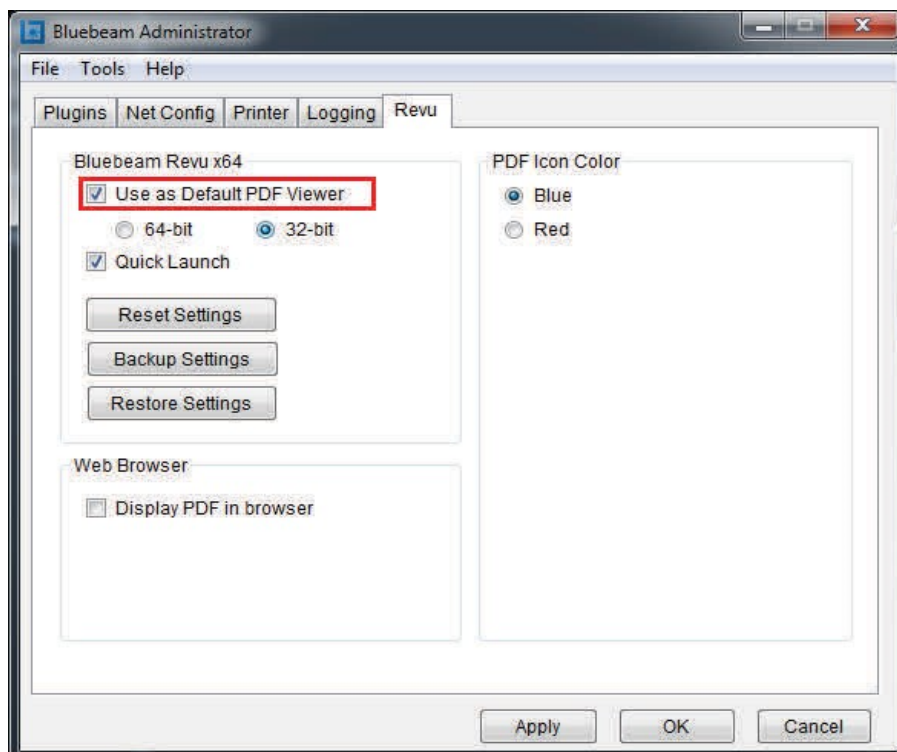
In the case that you are **NOT** in a mixed environment, shown below are instructions for setting Bluebeam Revu as your default PDF reader in Windows.

Setting the default PDF reader in Windows

From within **Bluebeam Revu**, click the drop-down menu next to the Bluebeam Revu symbol in the upper right corner of the screen, then click on **Administrator**.



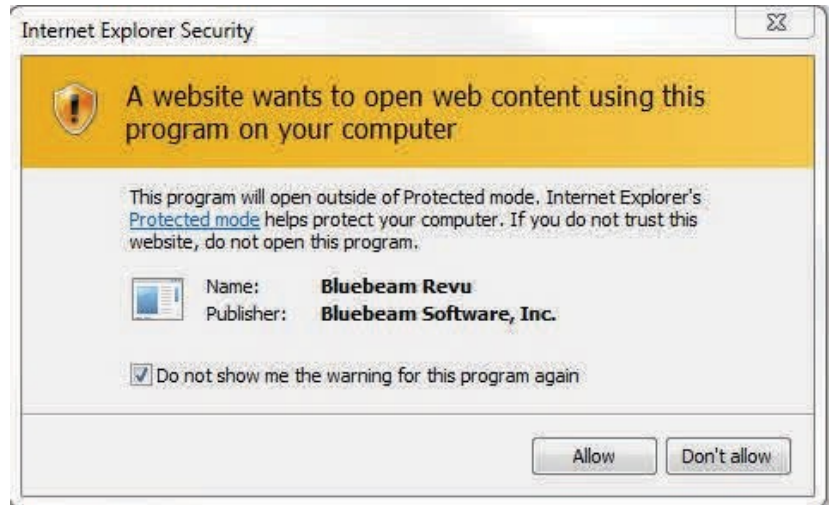
On the **Bluebeam Administrator** dialog, select the **Revu** tab. In the **Bluebeam Revu** section check the **Use as Default PDF Viewer** checkbox, then click **OK**.



Joining a Review Session

To join a review session, click on the link provided in the Session invite.

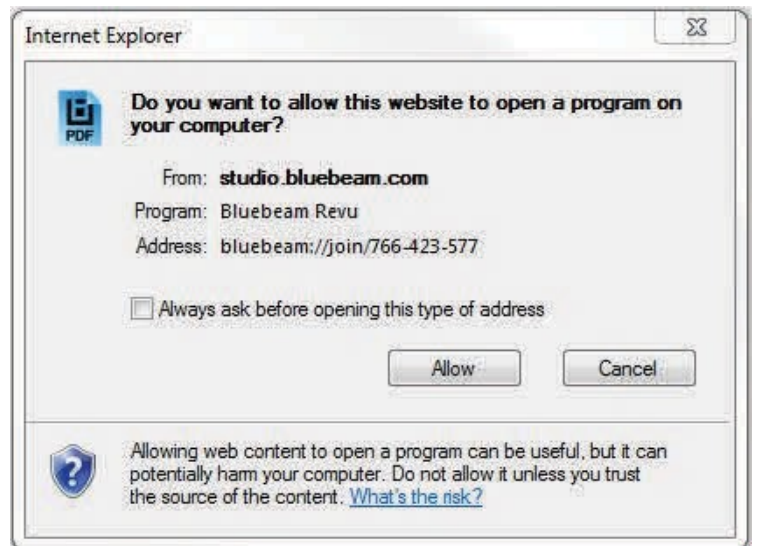
When the Internet Explorer window appears. Check “Do not show me the warning for this program again” and on the next screen uncheck “Always ask before opening this type of address” and click on **Allow**. These windows should not appear again.



Bluebeam will launch. If this is your first time into a review session, create a Studio account.

DOT Staff:

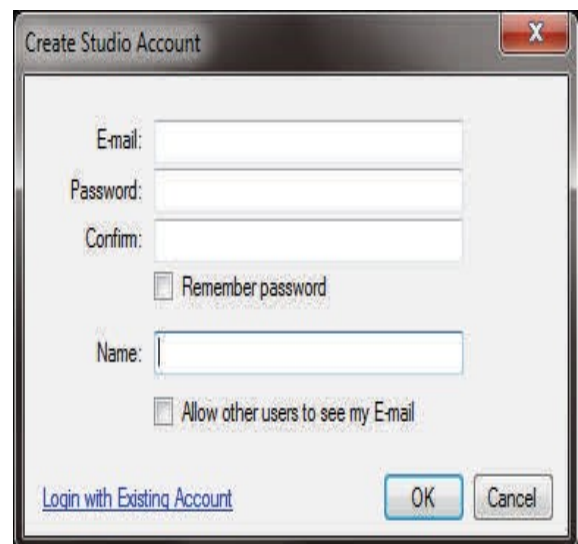
Enter your State email address and a password. Enter your name as you want it to show up in the review comments (Do not leave your computer number). Select “Remember password” and select “Allow other users to see my e-mail”. Click OK



Other Reviewers:

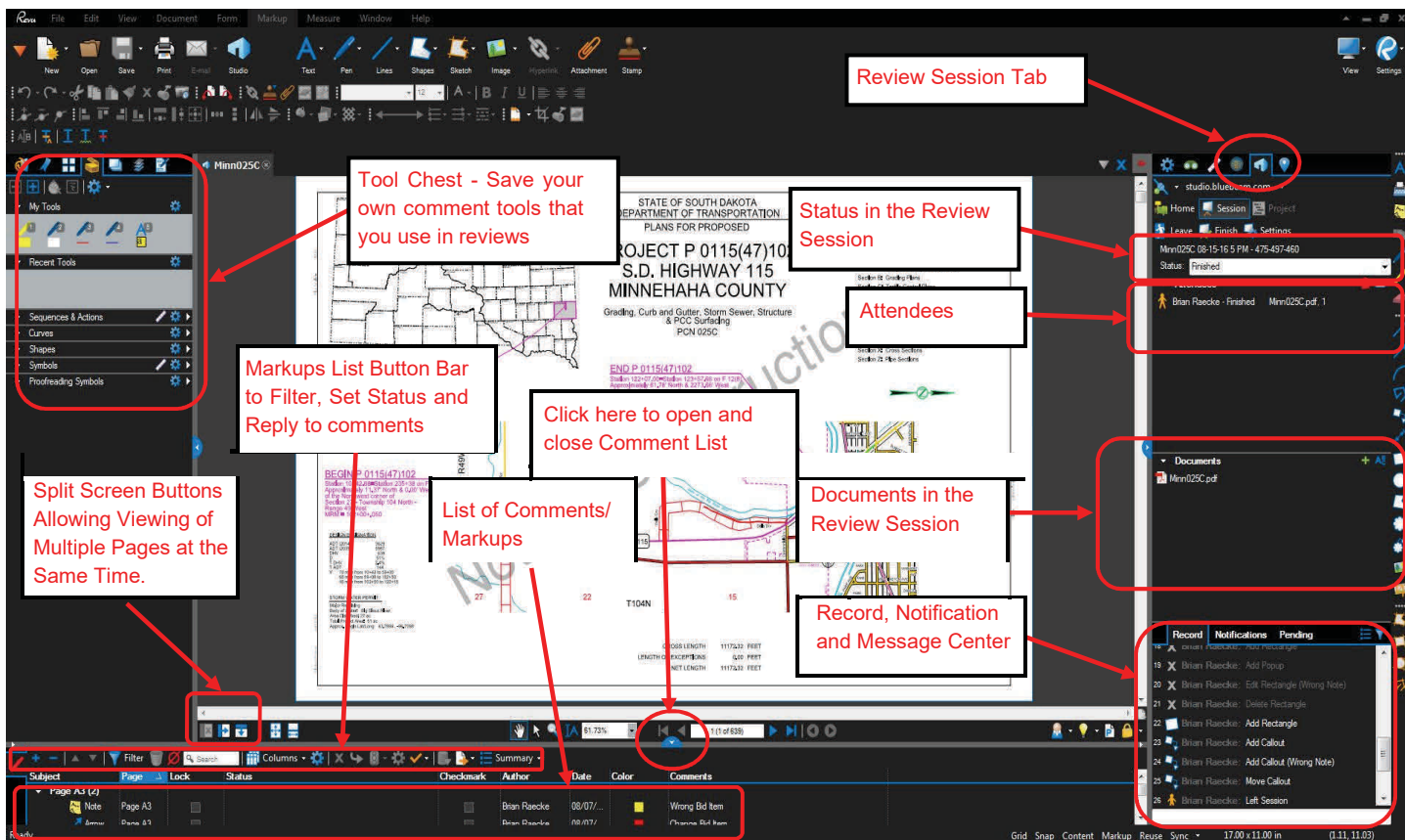
Enter your email address and a password. Enter your name as you want it to show up in the review comments. Select “Remember password” and select “Allow other users to see my e-mail”. Click OK

If this is not your first time in a review session, you may have to enter your studio log in information if you forgot to check “Remember Password”



Review Session Layout

When you enter a Bluebeam review session you will see the Studio Session Tab located on the right hand side of the screen. This tab displays the attendees of the session, a list of the documents in the session, and a record of all actions that take place on a review document. On the bottom of the screen you will see the list of all comments placed on a document. If this bottom tab is not open, click on the blue half circle with the white dot in the middle. On the left of the screen you can have the the Tool Chest open with your own comment tools or other options.

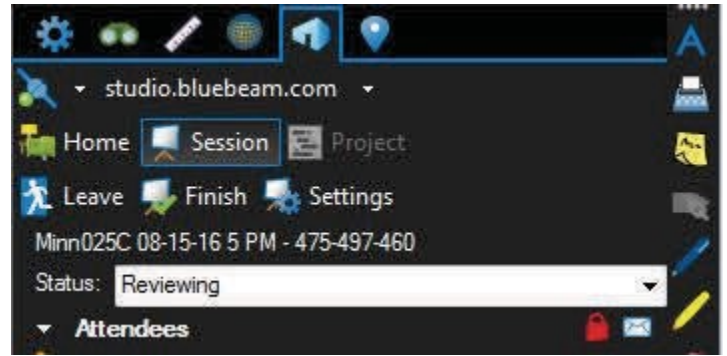


All comments that are made get saved instantly to the Bluebeam review session; you do not need to manually save any comments. You can only delete comments you have made. If someone else has made a comment that you would like to respond to just right click on their comment on the plans or in the Markup List and select reply.

You can leave and rejoin sessions as many times as you want as long as the review session has not been closed. The review session will be closed by the Project Manager (Host) in accordance with the procedures shown in this manual.

Reviewing Plans

Reviewers may print digital review documents to paper and mark them up; however, they must transfer these comments onto the digital review documents. Any written comments that are received can be scanned to a PDF and attached to the session documents using the attach file command. Please be careful when you place a comment or markup so that you do not cover up areas of notes or details that may need to be review by other individuals.



1. All reviewers must set your review status to “Reviewing” by clicking on the drop down arrow shown to the right. Note: If you leave the session and return your status will stay as Reviewing.
2. Next select a document to review from the studio session tab. Note: There may be more than one document in a session review. Example: DOT Plans and Utility Plans.
3. Proceed to make comments using the various markup tools. Make comments on other reviewer comments by right clicking on the comment and selecting reply.
4. After your review of the documents is completed set your status to “Finished”. This status lets the Project Manager (Host) know which Reviewers have completed their reviews. Note: You can still enter the session if your status is set to Finished.
5. If a review comment is rejected, the reviewer will receive an Alert email from the Consultant/ Designer that rejected your comment. See pages 83-84 of this manual.

Commenting Best Practices

A text note can be added to any of the other comment tools by double clicking on the markup after you place it. The text note box must be closed after the comment is made by clicking on the X in the top right corner of the note. The example below shows a note being attached to the rectangle tool.

1. Place Rectangle

2. Double Click on the rectangle to place note.

3. Close the text box by clicking on the X.

SALVAGE AND STOCKPILE ASPHALT MIX AND GRANULAR BASE MATERIAL

An estimated 15,678.4 tons (8,295 Cubic Yards) of asphalt mix and granular base material shall be salvaged from the entire length of the existing highway and stockpiled at a site furnished by the Contractor and satisfactory to the Engineer.

The quantity of salvage asphalt mix and granular base material may vary from the plans. No adjustment will be made to the contract unit price for variations of the quantity of "Salvage and Stockpile Asphalt Mix and Granular Base Material."

Location	Begin Station	to	End Station	Salvaged Asphalt Mix and Granular Base Material (tons)
Shoulders	10+62.68	to	110+21.00	14,457.4
Shoulders	113+66.00	to	122+07.00	1,221.0
				15,678.4

IN PLACE SURFACING AND GRANULAR MATERIAL

Test holes were drilled to check the depth of in place surfacing. The following is a log of these test holes.

The following table is furnished for information only.

Driving Surface	Centerline Feet Lt. Feet Rt.	Depth PCCP (inches)	Depth Granular Base (inches)
Sta			
15+00	10.4	8.0	8.0
23+00	10.0	8.0	8.0
27+00	10.3	8.0	8.0
31+00	7.9	8.0	8.0
36+00	10.0	8.0	8.0
43+00	10.0	8.0	8.0

The lowest elevation of Original Ground, Undercut Line, or Bottom of Removed or Salvaged Surfacing

Excavation Limits

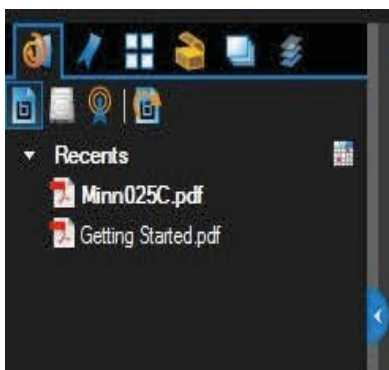
Chapter 1: Interface

Interface Overview

At the top of the Revu window you will see the **Command Bar**. The Command Bar provides access to tools and commands organized by group. Below the Command Bar and to the right edge are optional **Toolbars**. These toolbars provide customizable, one-click access to the tools you need most.



There are three **Panels** around the Main Workspace which contain a number of tabs. These tabs provide quick access to tools for viewing, navigating, annotating and gathering information from a PDF. Revu provides Left, Right, and Bottom Panels and places commonly used tabs in them by default, but you can freely move any tab to any panel, and it is even possible to detach a tab into a floating panel for more flexibility. To detach a tab, click and drag it off the panel area. Once you create a floating panel, any number of tabs may be added to the panel.



Left Side



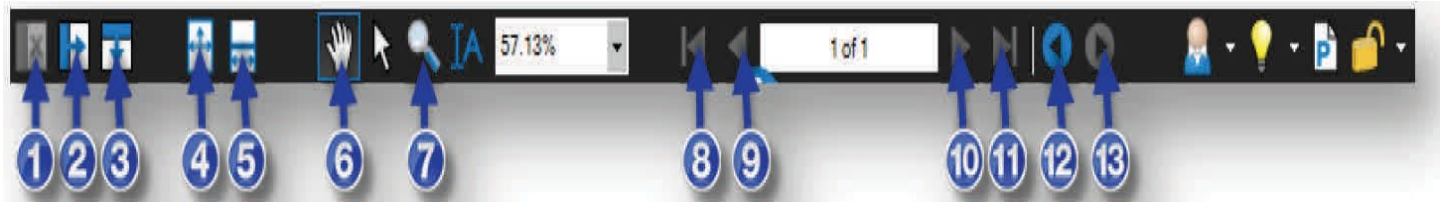
Right Side



Bottom

Below the Main Workspace but above the bottom panel, notice the **Navigation Bar**, which contains tools to help navigate documents. This bar is customizable like a Toolbar. At the very bottom of the application window, below the bottom panel, sits the **Status Bar**, which contains additional information and tools to help you interact with PDFs smoothly.

Navigation



The Navigation Bar is located between Revu's Main Workspace and the Bottom Panel. The Navigation Bar enables efficient movement between pages and views in the Main Workspace.

1. **Unsplit:** Eliminates the current split.
2. **Split Vertical:** Engages MultiView™ and divides the workspace into two vertically oriented splits.
3. **Split Horizontal:** Engages MultiView™ and divides the workspace into two horizontally oriented splits.
4. **One Full Page:** A single page of the PDF displays. *The mouse wheel will zoom in and out of the page.*
5. **Scrolling Pages:** Pages of the PDF files display in a column. *The mouse wheel will scroll up and down the pages.*
6. **Pan (Esc or Shift+V):** Click and drag to pan the image.
7. **Zoom (Z):** Click to zoom in; hold **Ctrl** and click to zoom out.
8. **First Page (Home):** Jump to the first page of the PDF.
9. **Previous Page (Ctrl+Left):** Go to the prior page of the document.
10. **Next Page (Ctrl+Right):** Go to the next page of the current document.
11. **Last Page (End):** Jump to the last page of the document.
12. **Previous View (Alt+Left):** Go back to the previous view in the main workspace.
13. **Next View (Alt+Right):** Go to the next view in the main workspace.

Status Bar



The status bar is located at the bottom of the Revu desktop. The left side includes prompts to help you use the current command or tool. The right side includes the size of the current PDF page and the current cursor position.

To display the Status Bar:

- Press **F8**
-or-
- On the **Command bar**, click **View > Interface > Status Bar**.

There are six toggle buttons in the middle that switch features on and off:

Grid (Shift+G): Displays the visible grid to aid in placement of markups. The grid spacing is configured through the Preferences. Click **Settings/Preferences/Grid & Snap**.

Snap (Ctrl+Shift+F9): Forces the cursor to move along the defined document grid. The grid spacing is configured through the Preferences. Click **Settings/Preferences/Grid & Snap**. The grid can be made visible by toggling on the Grid button on the Status Bar or in Settings.

Content: Toggles whether or not elements of markups will snap to underlying content. The snap will connect to the endpoints or the midpoints of the elements. Change the settings for this option in Preferences. Click **Settings/Preferences/Grid & Snap**.

Markup: Toggles whether markups will snap to other markups when they are created.

Reuse: Enables the same markup to be added to the PDF without having to reselect the button on the toolbar. This mode is helpful when adding the same markup onto the PDF sequentially.

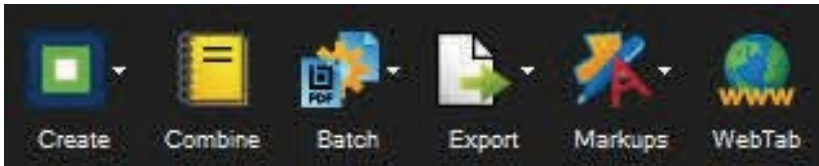
Sync: Synchronizes the two viewing windows when displaying the PDF in side-by-side Split View mode or in a detached window. This is useful when you need to compare two different versions of the same document. Moving the document in one window will automatically adjust the view in the second window

Command Bar Groups

As mentioned earlier, groups of menu buttons display in the center of the Command Bar and are interchangeable depending on the Menu you have selected. There are nine menu groups:

File

The File group contains menu buttons associated with creating, combining, importing and exporting, and batch processing documents.



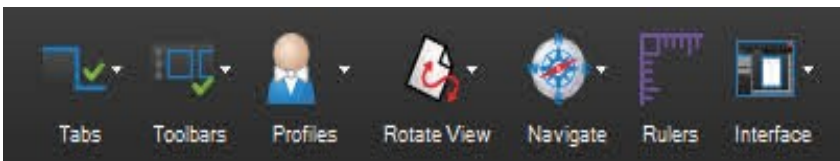
Edit

The Edit group provides menu buttons pertaining to object and text manipulation.



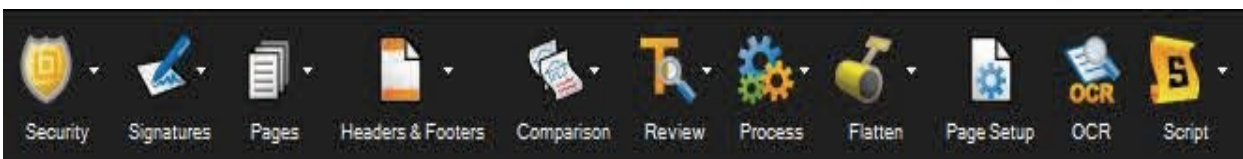
View

The View group contains menu buttons to change the look of the workspace and open documents.



Document

The Document group provides menu buttons for working with PDFs.



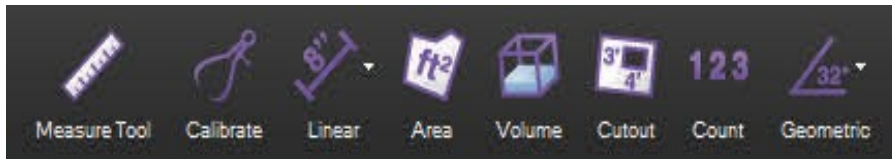
Markup

The Markup group contains menu buttons for adding markups to a PDF.



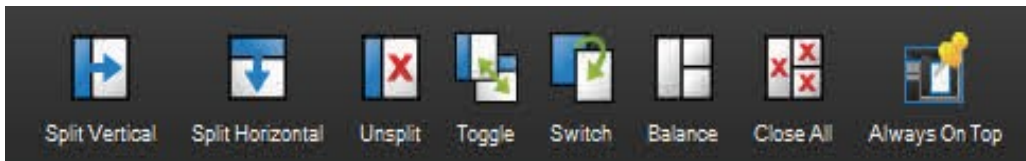
Measure

The Measure group contains the Measurement and Calibration tools plus quick access to the various measurement modes.



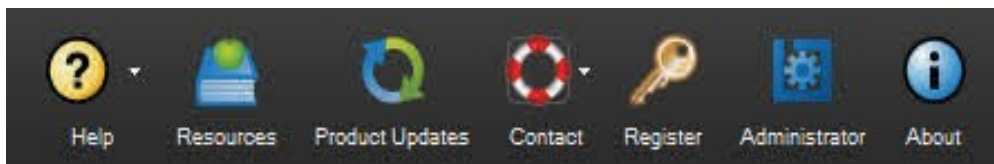
Window

The Window group includes menu buttons for controlling the main workspace window.



Help

The Help group contains menu buttons that link to help and other resources.





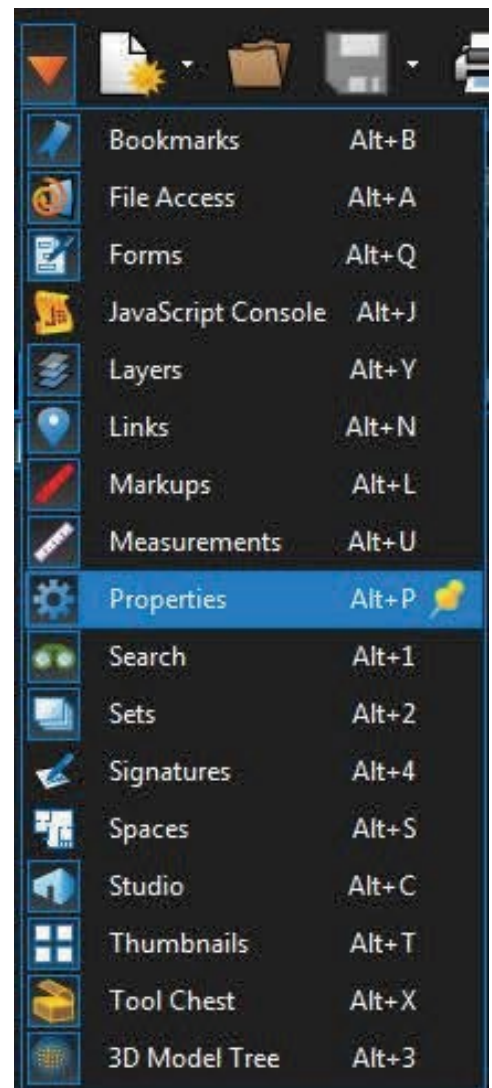
Tabs

The three attached panels and any floating panels you have created can hold a number of powerful, specialized tabs, which provide efficient access to a variety of Revu features. This section covers the most used tabs and the functionality each enables.

Properties Tab

The Properties tab displays any attached files and metadata about the currently active PDF. If a markup or group is selected, the Properties tab will display the specific appearance of the selected markup or group. By default, the Properties tab appears in the right panel.

To display the Properties tab, click  >  **properties** or press **Alt+P**.

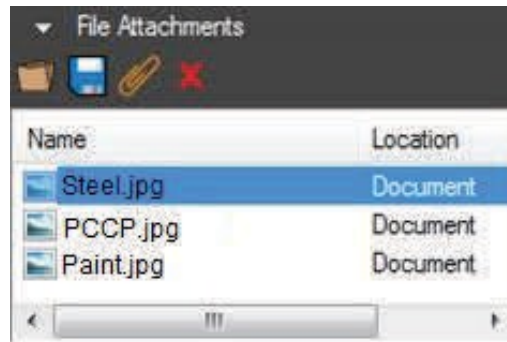


File Properties Sections

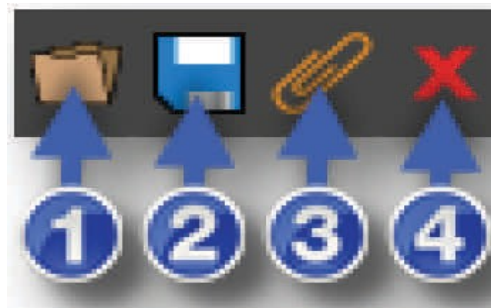
If no markup is selected, the currently active file's properties are displayed in the Properties tab.

File Attachments Section

The File Attachments section lists any attachments saved in the current document. Click a file to select it, then use the tools in the File Attachments button bar to open, save, or delete it. Double-click a file name to open it.



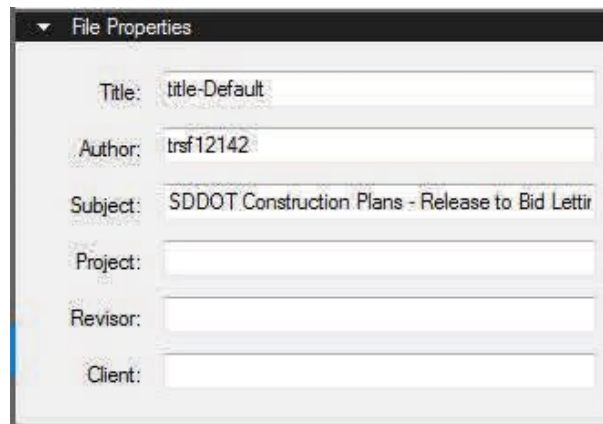
File Attachments Button Bar



1. **Open:** Opens the selected file.
2. **Save:** Saves a copy of the selected file locally, outside of the document it's attached to.
3. **Add New:** Uses an Open dialog to select a file from your computer to attach to the current document.
4. **Delete:** Removes the selected attached file from the document.

File Properties Section

The File Properties section displays, and allows editing of, the following metadata fields: Title, Author, Subject, Project, Revisor and Client.



The screenshot shows a dialog box titled "File Properties" with a dropdown arrow on the left. It contains six text input fields, each with a label to its left:

- Title: title-Default
- Author: trsf12142
- Subject: SDDOT Construction Plans - Release to Bid Lettir
- Project: (empty)
- Revisor: (empty)
- Client: (empty)

File Custom Properties Section

The Custom Properties section displays, and allows editing of, additional custom metadata.



The screenshot shows a dialog box titled "Custom Properties" with a dropdown arrow on the left. It contains a table with two columns: "Name" and "Value". The table has one empty row below the header.

Name	Value

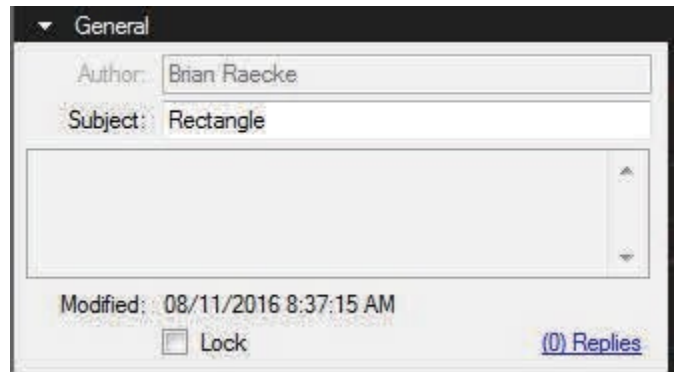
To add a new field, click an empty cell in the **Name** column, type a name for the property, then click in the corresponding **Value** column cell and add the value. To delete a custom row, click in either cell and click **Delete**.

Markup Properties Sections

When a markup is selected, the tab displays all of the parameters that are configurable for that particular markup.

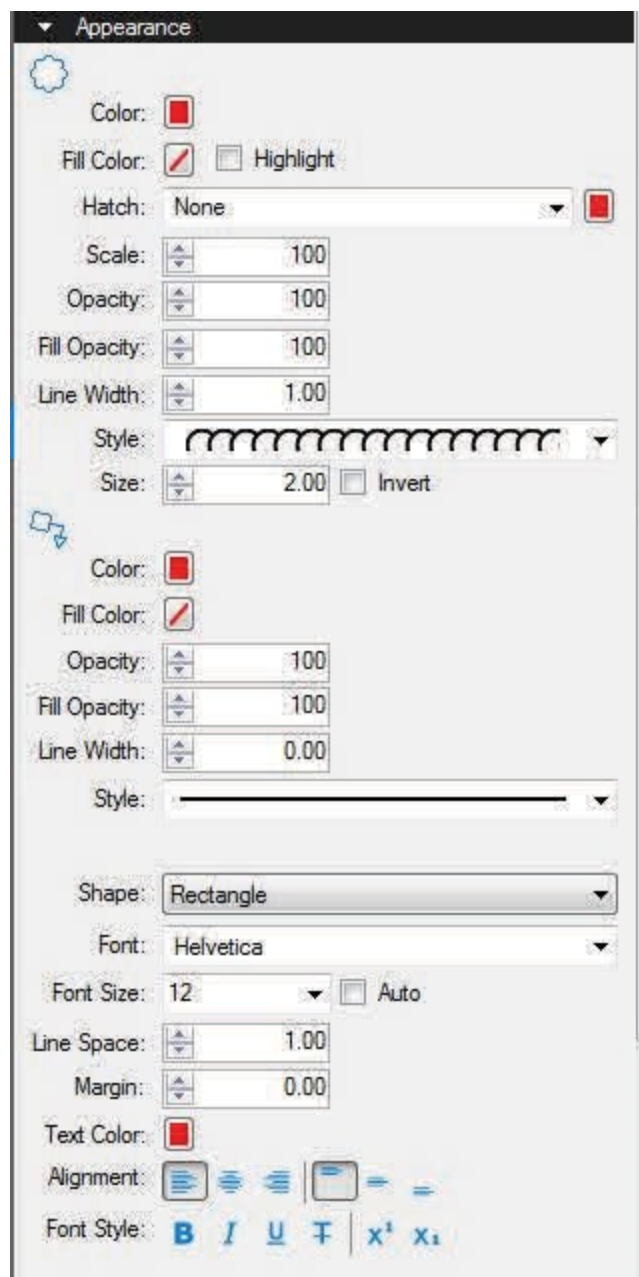
General Section

The General section is different for different markups, but will often contain a comment preview window, Author and Subject fields, and a Lock checkbox to avoid accidentally moving or changing the markup.



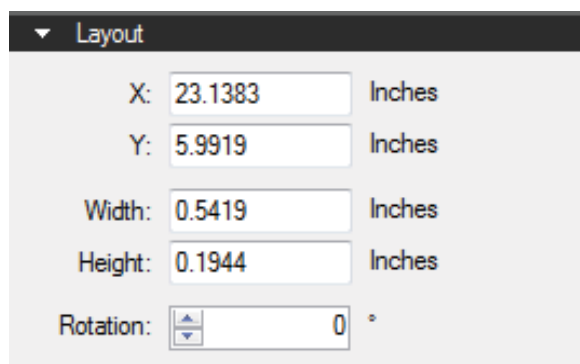
Appearance Section

This section contains settings pertaining to the display style of the markup. See the sections on individual markup tools for what specific appearance settings are available for that tool.



Layout Section

This section reports where the markup exists on the document page. Enter values to place markups precisely. If you move a markup by clicking and dragging, the change is reflected here.




The screenshot shows a 'Layout' panel with the following fields:

X:	23.1383	Inches
Y:	5.9919	Inches
Width:	0.5419	Inches
Height:	0.1944	Inches
Rotation:	<input type="text" value="0"/>	°

Options Section

This section will also vary from markup to markup, but generally holds a quick menu to allow adding the current tool to My Tools or any tool set in your tool chest and a button to make the current settings the default for that tool.



The screenshot shows an 'Options' panel with two buttons:

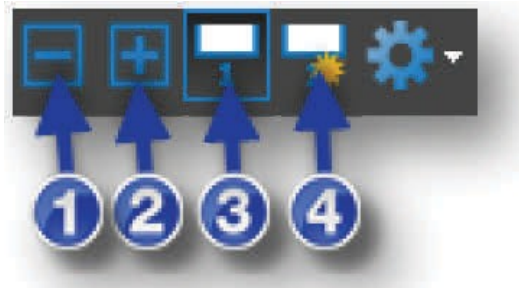
- Add to My Tools
- Set as Default

Thumbnails Tab

The Thumbnails tab displays small previews of PDF pages for quick navigation within a multi-page document. By default, it appears in the left panel.

To display the Thumbnails tab, click  >  **Thumbnails** or press **Alt+T**.

Thumbnails Button Bar






1. **Reduce Thumbnail Size:** Reduces the size of the thumbnail images.
2. **Increase Thumbnail Size:** Enlarges the thumbnail images.
3. **Show/Hide Page Label:** Toggles page labels on or off underneath the individual thumbnails.
4. **Create Page Label:** The **AutoMark™** technology allows automatic Page Label modification based on Bookmarks or a specified Page Region on the PDF that is consistent on each page.

Bookmarks Tab

Revu recognizes existing bookmarks in PDFs and enables users to create and edit bookmarks as well. Bookmarks contained in a PDF are displayed in the Bookmarks tab. For more information, see the section on Working with Bookmarks.

When generating PDFs from other file types using the Bluebeam PDF creation tools, certain content will be automatically transformed into bookmarks – for example, a Microsoft® Word table of contents, worksheet labels from Excel® and slide headers in PowerPoint®. When using AutoCAD®, Revit® or SolidWorks®, bookmarks can be created from layout sheets as well.

To display the Bookmarks tab, click    **Bookmarks** or press **Alt+B**.

Left-pointing triangle icons along the right side of the bookmark list indicate bookmarks associated with the current page. A bookmark will not have this symbol if it links to an element on a different page.



Bookmarks Button Bar



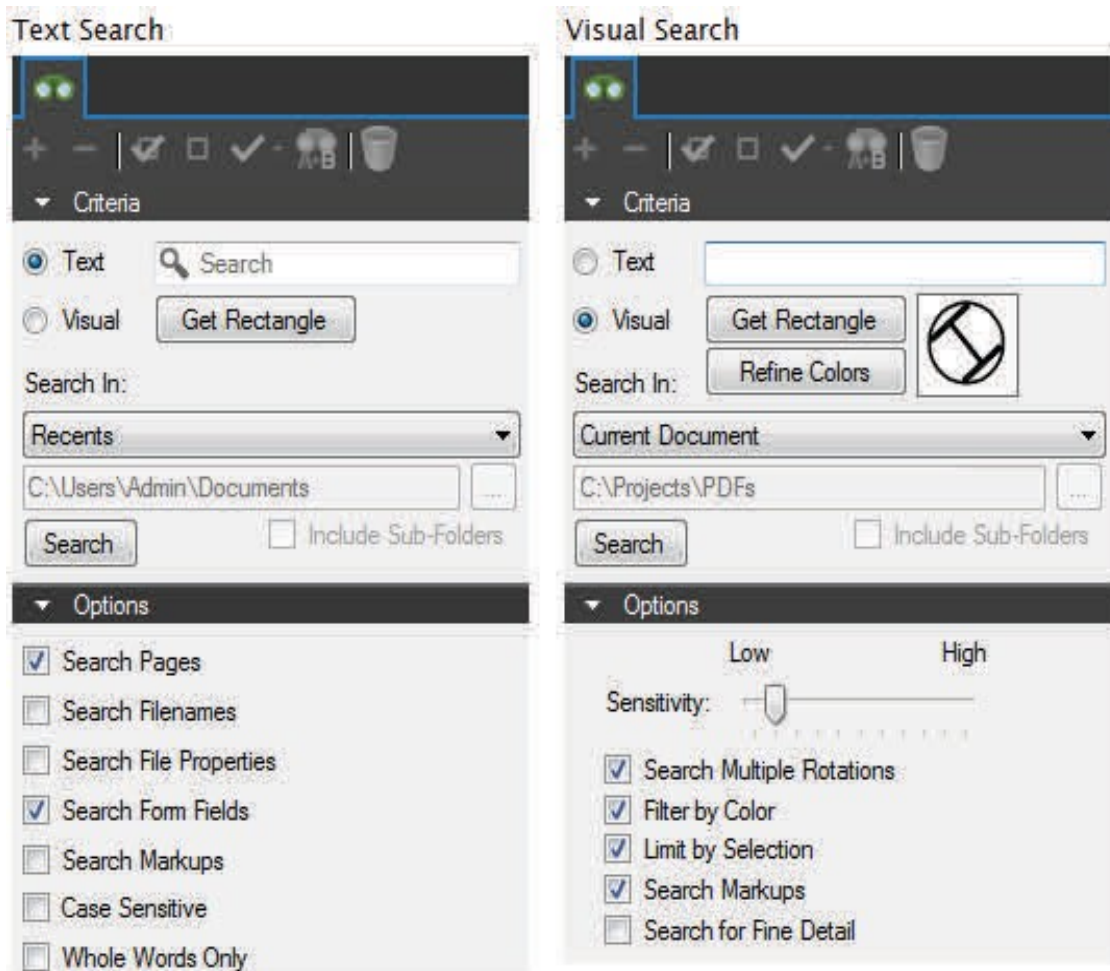
The Bookmarks button bar contains tools to organize and navigate bookmarks.

1. **Expand All:** Expands the entire bookmarks list.
2. **Collapse All:** Collapses the entire Bookmarks list.
3. **Save Collapse State:** Saves the current Collapse/Expand state as the default (requires that the file be saved as well to retain this default across sessions).
4. **Create Bookmarks:** Makes a new bookmark and allows you to specify the name, viewing scale and page range. With **AutoMark™**, bookmarks can automatically be created from existing page labels or text found in a specific region on each page of the document.
5. **Add:** Adds a bookmark to the current page, visible below the currently selected bookmark in the bookmarks list.
6. **Delete:** Deletes the selected bookmark(s).
7. **Action:** Opens the Action dialog, which allows the user to insert a hyperlink into a bookmark.
8. **Properties:** Opens the **Bookmark Properties** dialog.
9. **Audit Bookmarks:** Analyzes the bookmarks list to ensure the links still work.

Search Tab

The Search tab allows you to search for text in the current PDF, all open PDFs, PDFs in a folder, or in the files in the Recents list. You can perform a **Text search** or a **Visual search**. You can also Search and Replace.

- To display the Search tab, click  **Search** or press **Alt+1** or **Ctrl+F**.



Text Search

Text must be present in the PDF file for text search to find it. Scanned PDF files are images and do not contain any text, so they are not searchable. See Optical Character Recognition (**OCR**) for details on how to make scanned documents searchable.

VisualSearch

VisualSearch allows for the searching of graphical symbols in PDFs. To set the search criteria, define a rectangle around the symbol or graphic that you want to search for in the document.

Working with Profiles

Profiles provide an easy way to store the toolbar, menus, and other display settings within Revu. Profiles can also be used to shape the User Interface of Revu for particular job functions within your organization. For example, you may create a simplified interface, turning off most of the toolbars within Revu, for those users within your organization who would only be viewing PDFs and not have need to edit PDFs. Additionally, you could turn on only the most basic markup functions without any of the advanced editing functions and save a profile for basic markup users.



The toolbar settings are available from the **Profile** button menu. The check next to the profile name indicates the currently active profile setting. To switch to a different profile, select another profile from the menu. Once selected, the Revu interface will update based on the settings defined in the new profile.

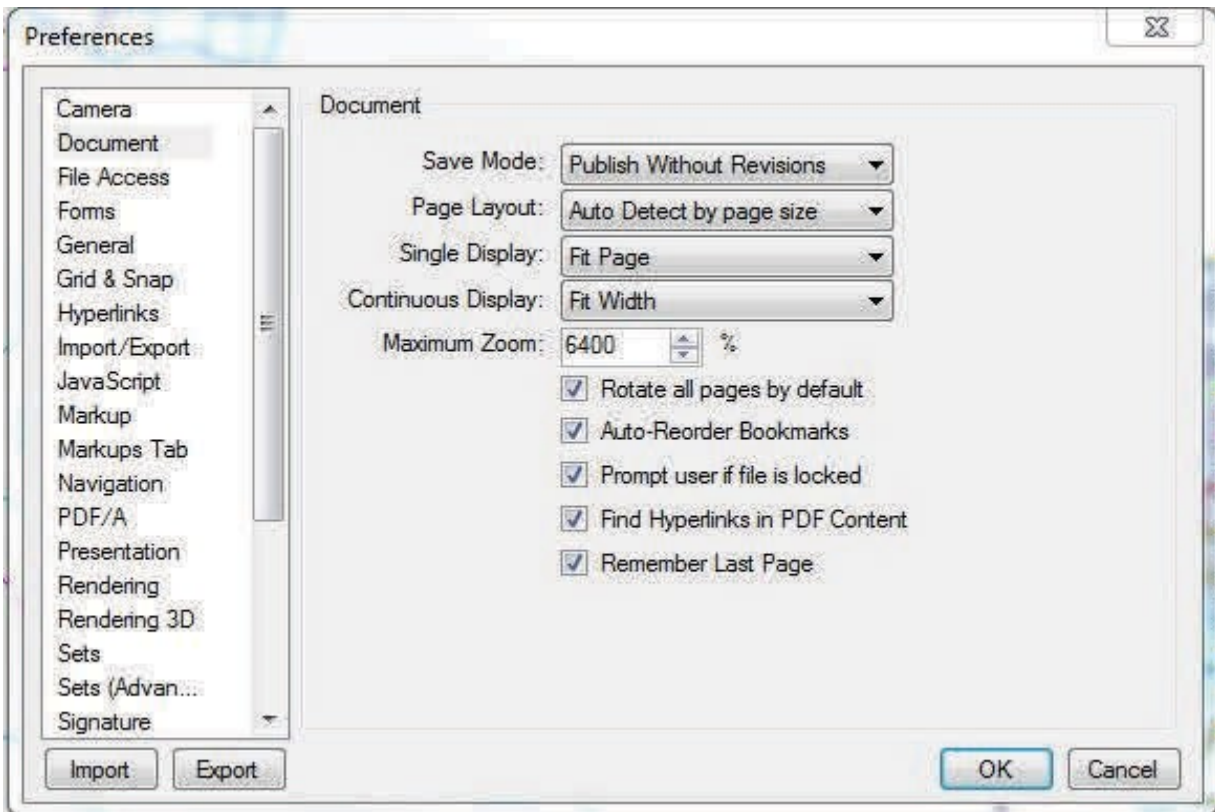
Preferences

The Preferences dialog enables customization of Bluebeam Revu settings. This section briefly describes some commonly used settings, organized by the section of the preferences dialog that contains it.

To invoke the Preferences dialog:

- On the Command Bar, click **Settings**, then click **Preferences**.
- **-or-**
- Press Ctrl+K.

Some commonly changed preferences will be discussed in this section.



General

User: Each time a markup is made, Revu records who made it. This field defines the name to use.

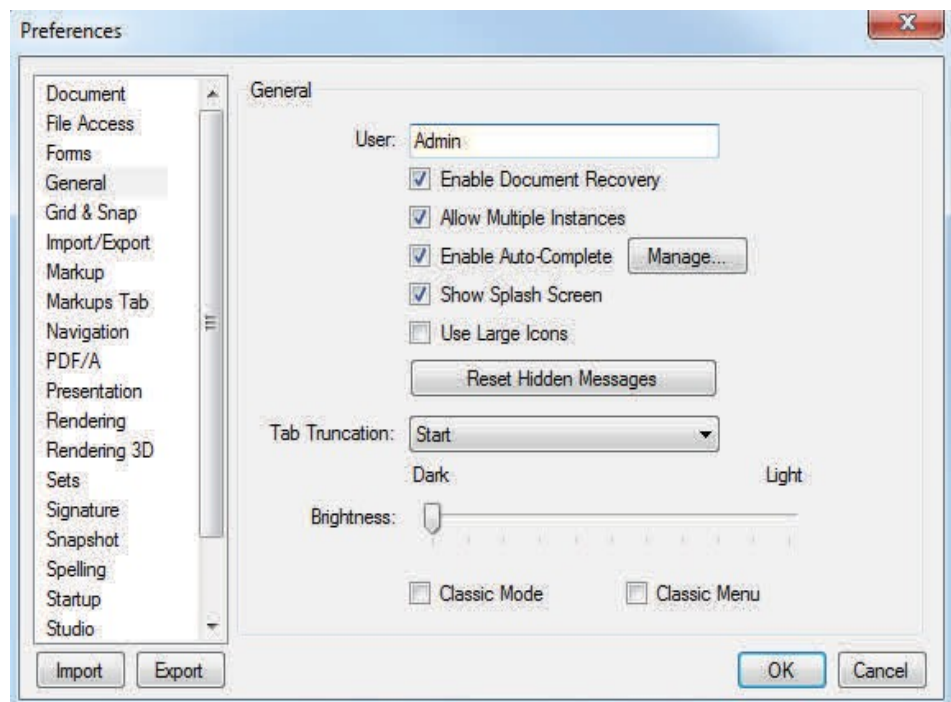
Enable Document

Recovery: If Revu quits unexpectedly with this option set, the next time Revu is started, it will attempt to recover unsaved changes to the document(s) open in the previous session.

Allow Multiple Instances:

This enables or disables the Multi-Revu feature.

Enable Auto-Complete: Remembers previously entered text. Click the **Manage** button to edit the auto-complete history.



Show Splash Screen: Enables or disables the Revu splash screen when Revu is first launched.

Use Large Icons: The User Interface Icons will be displayed larger and support High Resolution Displays.

Reset Hidden Messages: Resets the display of the dialog boxes where "Don't Show Again" was selected.

Tab Truncation: Determines if the file name in the opened tab, truncates the beginning or end of the name.

Brightness: Sets the overall brightness of the Revu interface.

Classic Mode: Switches to an emulation of the appearance of the default interface for Revu prior to version 6.

Classic Menu: Switches the menus to classic menus.

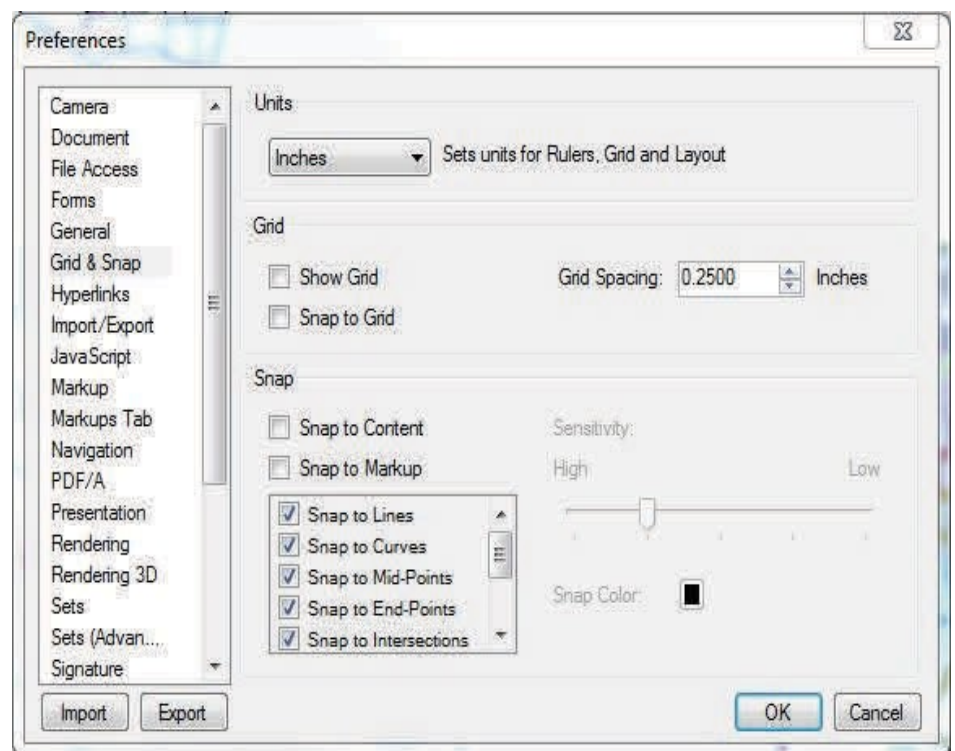
Grid & Snap

Units Section

Application Units: Defines the system of measurement to use for rulers and measurement dimensions.

Grid Section

Show Grid: Provides control over displaying the grid. Also

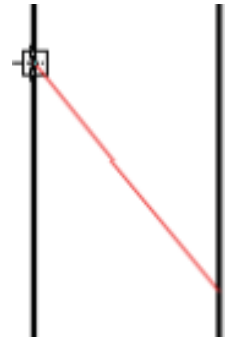


Snap to Grid: Makes any points used to define a markup line up with the defined grid. Also controlled by the **Snap** button on the Status Bar.

Grid Spacing: Controls increments between grid units, which affects the snap-to resolution as well as the spacing of the grid markers that are displayed on the PDF. A smaller increment makes a smaller grid, a larger increment makes a larger grid.

Snap

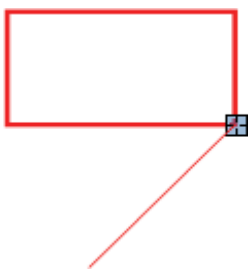
Snap to Content: Snaps markups to the underlying PDF vector content. A small box appears over the underlying PDF content when markups are being made. The following image demonstrates the behavior as a line markup is being drawn. Snap to Content does not snap to text or images in the PDF, only vector images such as lines and shapes. It is also controlled by the **Content** button on the Status Bar.



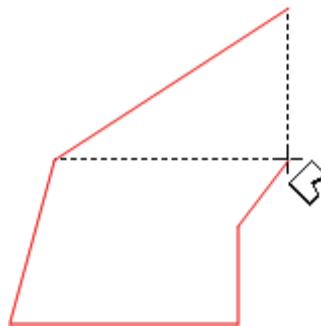
Snap to Markup: Snaps the cursor to other markups in the PDF. This can also be controlled by the **Markup** button on the Status Bar.

With Snap to Markup enabled, two related behaviors will occur. The cursor will snap to points on other markups, like Snap to Content snaps to points in the PDF content. Revu will also display – and the cursor will snap to – guidelines that are based on lines in nearby markups.

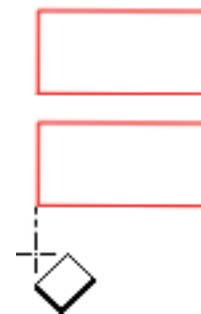
Snap to a point



Guidelines creating a Polygon



Guideline creating aligned Rectangles



Snap Color: Determines the color of the indicator box.

Sensitivity: Move the slider to High to make the snap area smaller. Move the slider to Low to make the snap area larger.

Markup

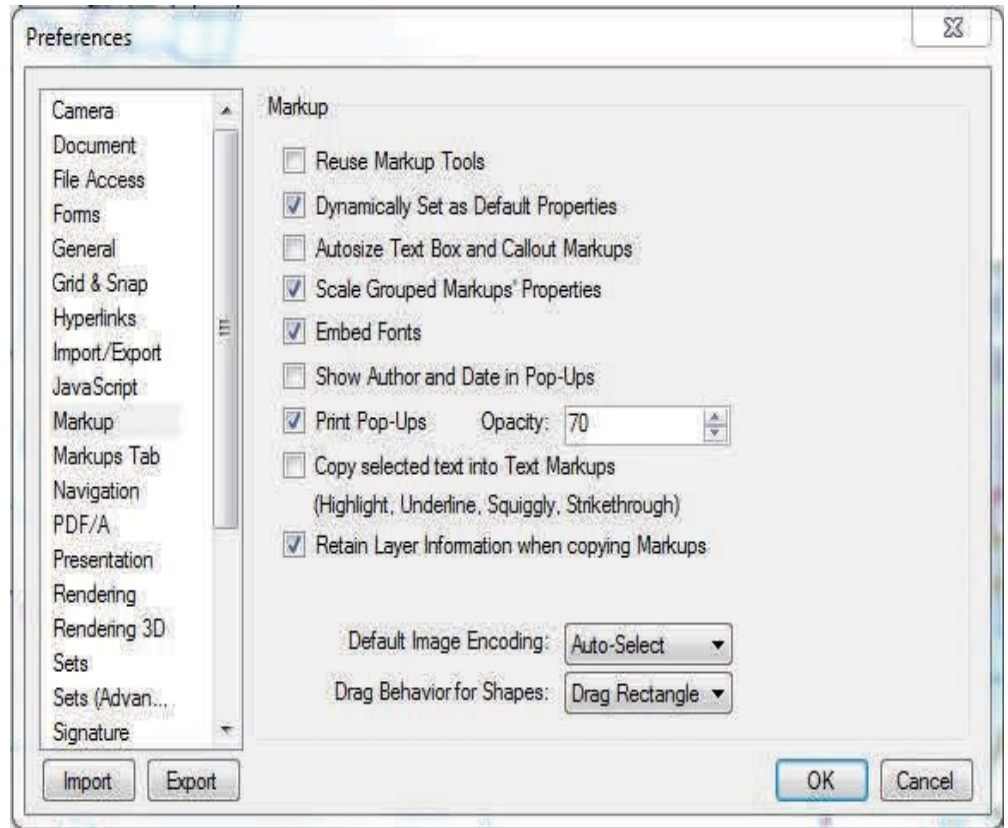
Reuse Markup Tools: If checked, the last markups used will remain selected so it can be used over and over again. If unchecked, after a markup is placed Revu will switch back to pan mode.

Dynamically Set as Default properties: Remembers the last property settings for a markup. For example, if the appearance properties for a rectangle markup were set to a Green color, 2 point wide line, the next time that the rectangle markup is selected, these properties will be used.

Autosize Text Box and Callout Markups: Fits the surrounding text box to the entered text for a callouts and text markups. After editing the text in a Free Text or Callout markup, the text box will resize automatically to fit the text.

Embed Fonts: Includes fonts used for markups in the PDF.

Show Author and Date in Pop-Ups: Displays Author and Date in popup notes when an markup is double-clicked. The title and author will also appear when a note markup is added to a PDF.



Print Pop-Ups: Check to print Notes and Comments popup boxes.

Opacity: Opacity level that Notes and Comments popup boxes will be printed if **Print Pop-Ups** is checked.

Copy Selected Text into Text Markups: Any time a text markup is used, the annotated text will be copied to the copy buffer so that it can be pasted into other applications. Text markups are Highlight, Underline, Squiggly line, and Strikethrough.

Retain Layer Info when copying Markup: Layer information will be copied when you copy a markup. If you copy a markup to another PDF, its layer will be created in the new PDF.

Use Relative Paths for Hyperlinks and Actions: Set the default status for paths to be "relative" when Hyperlinks and Actions are created.

Set 'Open in New Window' option for Hyperlinks and Actions: Set the option to open a Hyperlink or Action in a new window when the Hyperlink or Action is created. This option only applies when viewing PDFs in Acrobat or Reader. Revu already opens the links in a new tab.

Default Image Encoding: Chooses the format in which embedded images and inserted image markups are stored in the PDF.

Drag Behavior for Shapes: Determines whether, when drawing certain shapes (polygons, area measurement), a rectangle is used or whether the drag behavior sets control points for the Bézier curves used to define the shape. The effect will be either a rectangle is dragged, or a curve shape will be drawn.

Navigation

Mouse Wheel Section

Set how the mouse wheel behaves in this section.

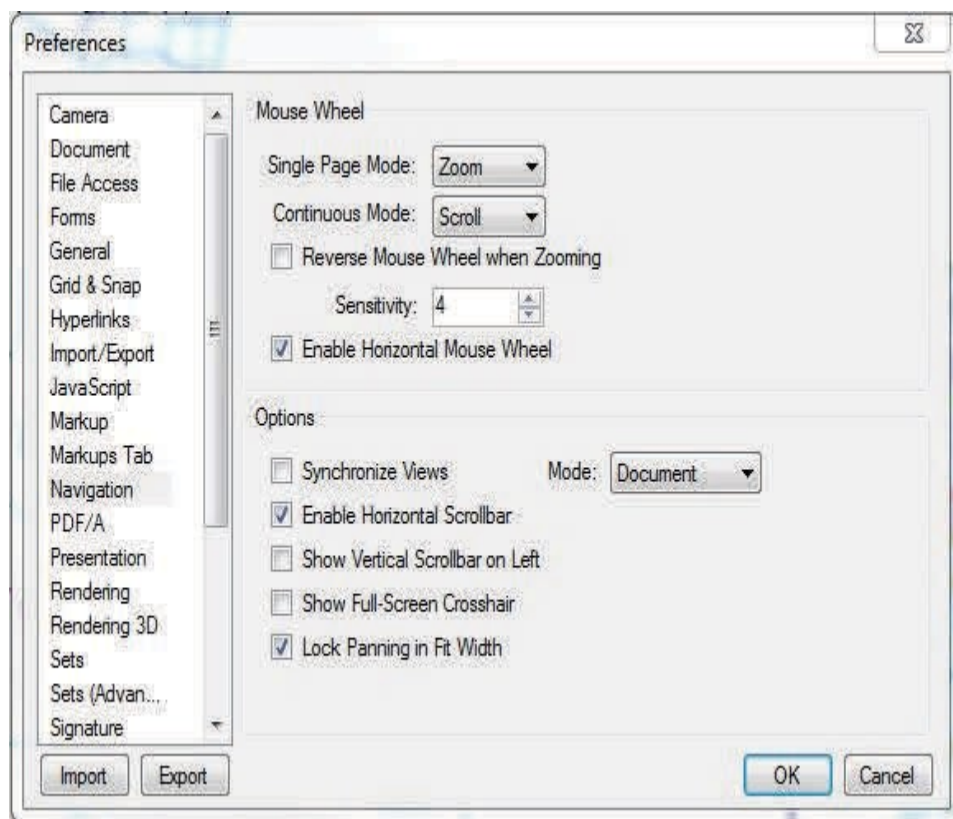
Single Page Mode: Sets the mouse wheel behavior in single page mode. Choose either Zoom or Scroll.

Continuous Mode: Sets the mouse wheel behavior in continuous mode. Choose Zoom or Scroll. This behavior is independent of the Single Mode setting.

Reverse Mouse Wheel when Zooming: Changes the direction for when the mouse wheel will zoom in versus zoom out.

Sensitivity: Controls how much the zoom level changes per mouse wheel click.

Enable Horizontal Mouse Wheel: Enables panning for mice that have tilt-able scroll wheels.



Options Section

Synchronize Views: Synchronizes the viewing windows when displaying the PDF in side-by-side Split View mode. The **Mode** can be changed to sync by **Document** or by **Page**. For example, this is useful when you need to compare two different versions of the same document. Moving the document in one window will automatically adjust the view in the other window(s). This can be quickly toggled on and off with the **Sync** button in the **Navigation** bar.

Enable Horizontal Scrollbar: Toggles on and off the horizontal scroll bar at the bottom of the document tab.

Show Vertical Scrollbar on Left: Displays the vertical scrollbar on the left side of the PDF page instead of the right.

Lock Panning in Fit Width: Constrains panning to vertical movement when in **Fit Width** mode. This prevents the page from sliding sideways if the mouse is moved slightly horizontally.

Maximum Zoom: Sets the maximum percentage the workspace will allow zooming of PDFs.

Enable 3D Mouse: Enable 3D navigation with a 3D mouse.

Studio

Account

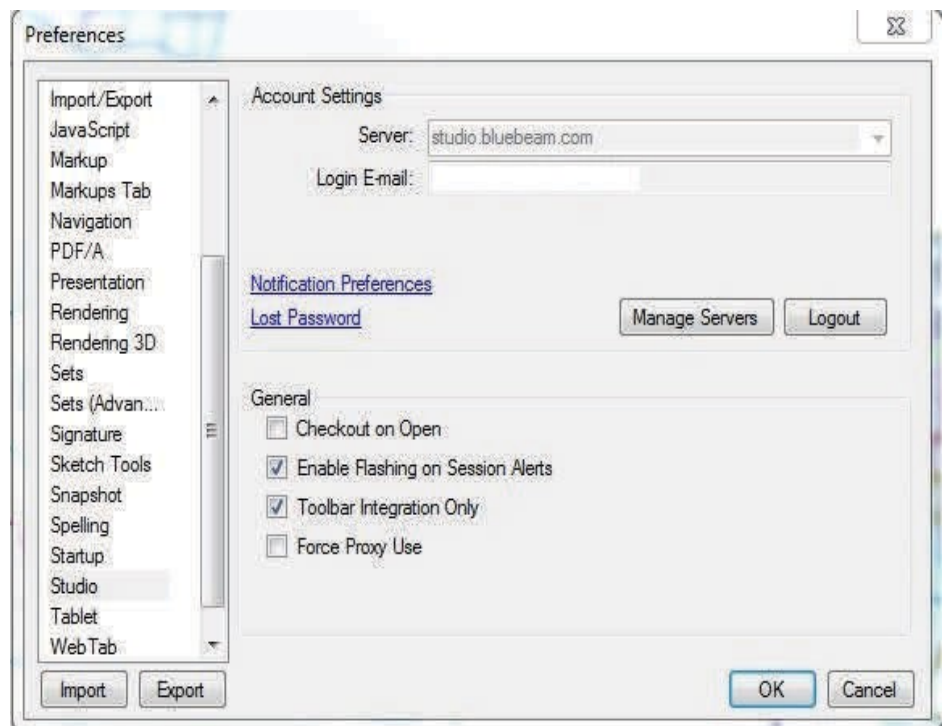
Change your account settings, create an account or login to Studio.

Checkout on Open: If this option is selected, when a Studio Project file is opened, it is automatically checked out.

General

Enable Sounds: Play sounds with studio events.

Enable Flashing Alerts: Turn off visible flashes with studio events.



Chapter 2: Commenting & Markups

Compatibility

Comments made in either Acrobat or Revu can be seen in both without any issue. If you add comments to a PDF from within Adobe, you can open the PDF and see those comments even in Revu.

Markup Overview

The tools to create and edit markups can be found in the Markup and Measure groups of the Command Bar, in the Text and Shapes toolbars, and in the Tool Chest tab. In addition, most markup tools have convenient keyboard shortcuts. Each time a markup tool is selected and used, the markup is stored in the Recent Tools section of the Tool Chest tab.

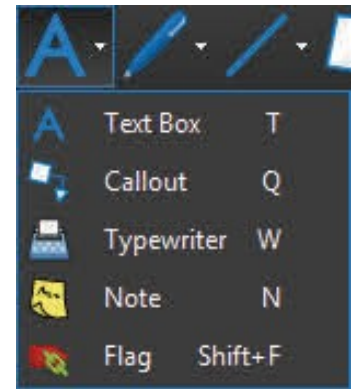
Markup Tools


The Markup group contains menus and commands to allow the markup of PDFs.





Text Menu

The Text menu contains tools to create text-bearing markups.




 **Text Box (T):** Adds a text markup.

 **Callout (Q):** Adds a text callout.

 **Typewriter (W):** Enables freely typing text on a PDF.


 **Note (N):** Adds a sticky note. **Caution:** If any popup text windows are closed, the popup text of those markups will not show up when printing.

 **Flag (F):** Adds a linked flag on the currently active page.


Pen Menu

The Pen menu contains markup tools that behave in a similar manner to a real-world pen.



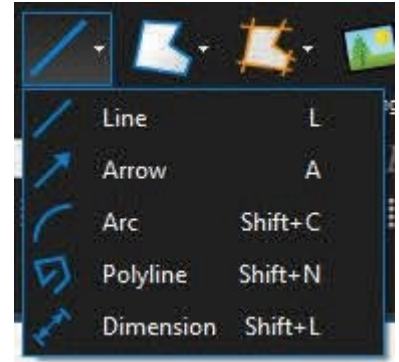
 **Pen (P):** Adds a free-drawn markup.


 **Highlight (H):** Adds a semi-transparent line simulating a highlighter.


 **Eraser (Shift+E):** Removes pen and highlighter markups.


Lines Menu


The Lines menu contains tools to create linear markups.



 **Line (L):** Adds a line. Hold Shift to snap line in 45° increments.

 **Arrow (A):** Adds an arrow markup.

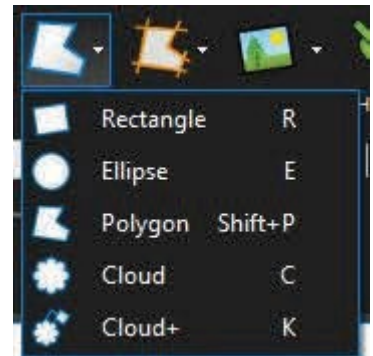
 **Arc (Shift+C):** Adds an arc markup.


 **Polyline (Shift+N):** Adds a segmented line.


 **Dimension (Shift+L):** Adds a dimension or leader line markup on the PDF.


Shapes Menu


The Shapes menu contains tools to create outlined shape markups.




 **Rectangle (R):** Adds a rectangular markup.

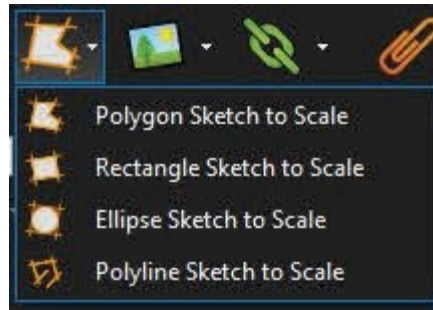
 **Ellipse (E):** Adds an elliptical markup. Hold Shift to make a circle.

 **Polygon (Shift+P):** Adds a polygon markup with no defined angle. Click to set each point, then press Enter or double-click to finish.

 **Cloud (C):** Adds a polygon with a cloud-like appearance preset.

 **Cloud +(K):** Adds a polygon with a cloud-like appearance preset and a text box.

Sketch Menu







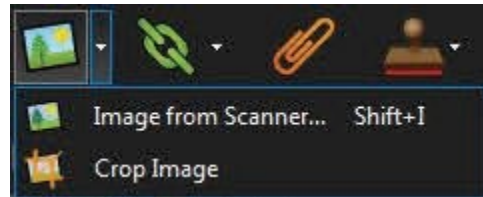


-  **Polygon Sketch to Scale:** Adds a polygon markup to an exact scale.
-  **Rectangle Sketch to Scale:** Adds a rectangle markup to an exact scale.
-  **Ellipse Sketch to Scale:** Adds an ellipse markup to an exact scale.
-  **Polyline Sketch to Scale:** Adds a polyline markup to an exact scale.

Image and Image Menu

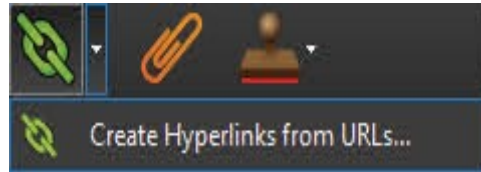
Image (I): Inserts an image from a graphic file accessible on your workstation. Click to the right to access the Image Menu.



-  **Image from Scanner (Shift+I):** Displays the Scanner dialog to acquire images from a scanner or camera. Images captured result in new image markups.
-  **Crop Image:** Crops an image markup. Click and drag to define a rectangle. Areas of the image markup outside the rectangle will be eliminated.

Hyperlink and Hyperlink Menu

Hyperlink: Allows the creation of hyperlinks in a PDF. Click to the right to access the **Hyperlink Menu**.



Create Hyperlinks from URLs: Creates hyperlinks from URLs that exist in the PDF content.

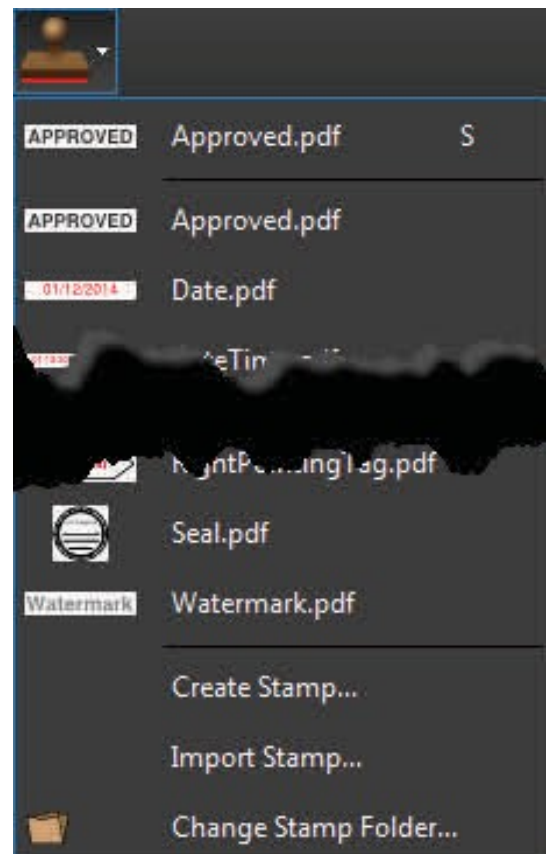
Attachment

Attachment: Opens the **Add Attachment** dialog to allow embedding a file in the PDF.

Stamp Menu

The Stamp Menu can be used to add "rubber stamp" comments on the drawing.

This tool is what you will use to work with the out-of-the-box stamps or any stamps that you create yourself. Any standardized stamps will be accessed via your section specific stamp Tool Sets. For more information see the **Working with Stamps** section.






Measurement Setup

The Measurements tab provides access to the measurement modes, allows setting the document scale, setting up Viewports for multiple scales in the same document, and other measurement options.

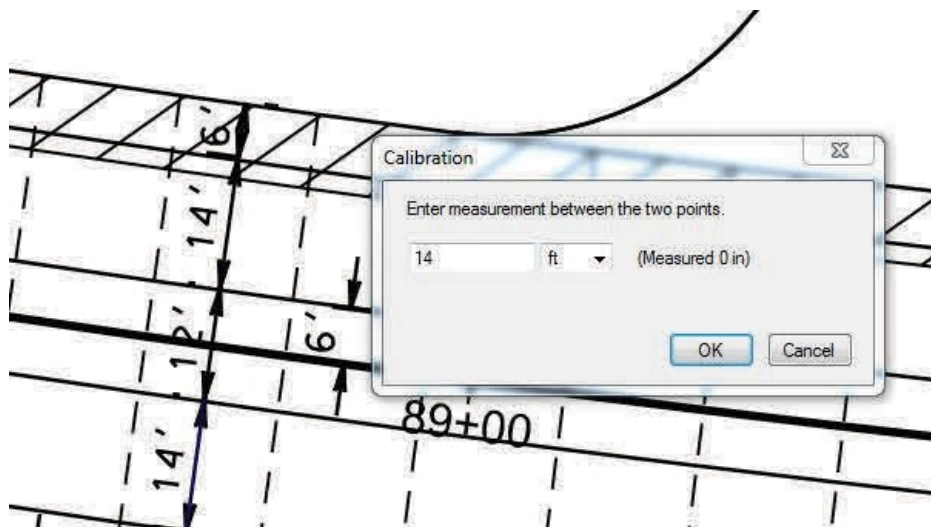
To display the Measurements tab, click  >  **Measurements** or press **Alt+U**.

Calibrating a PDF

The Calibrate button brings up the Calibrate dialog to allow accurate measurements to be taken from a PDF. First, locate a labeled, known length somewhere on the PDF.

- On the Command Bar, click **Measure**, then click  **Calibrate**.
- or-
- On the **Measure** toolbar, click  **Calibrate**.
- or-
- In the **Scale** section of the **Measurements** tab, click  **Calibrate**.
- Click **OK**.
- Click the first point of the known length, then click a second point to finish the line. You can hold down the **Shift** key to snap the two points horizontally.
- Enter the distance that these two points represent on the drawing and click **OK**.

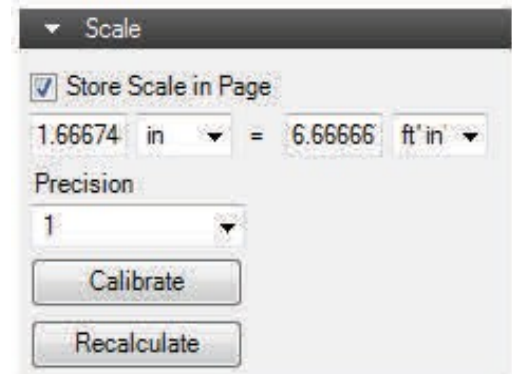
NOTE: If you are working with a vector-based drawing (as opposed to a scanned PDF), you can enable **Snap to Content** which makes the cursor snap to the underlying lines and drawing elements, making it much easier to accurately select the two points.



Alternatively, if you already know the scale, enter the values in the Scale section of the Measurements tab. It is recommended to always use Calibrate if possible, as sometimes scaling occurs during the PDF creation process.

The unit drop down list determines the units in which the measurements will be reported. In the preceding example, the result will be displayed in “feet-inches”.

Precision determines the decimal or fractional precision of the measure value displayed.

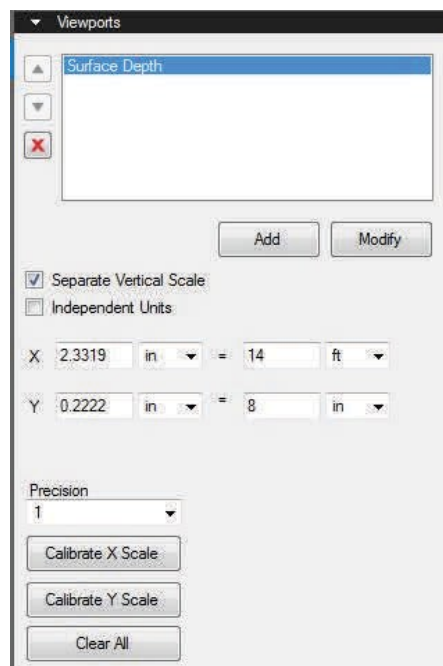
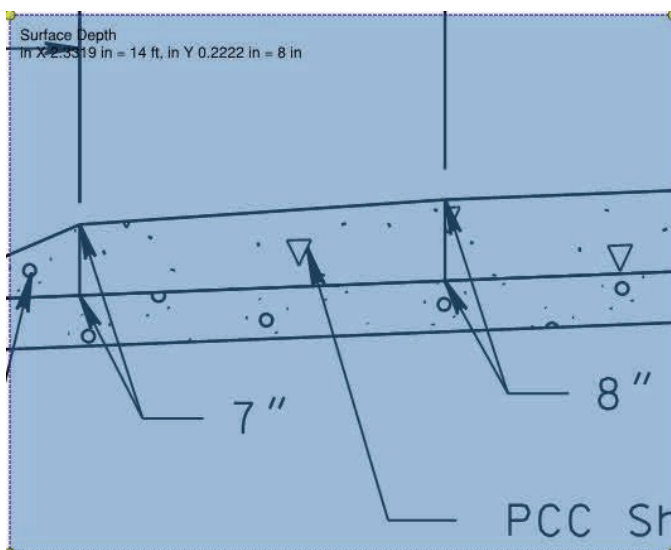
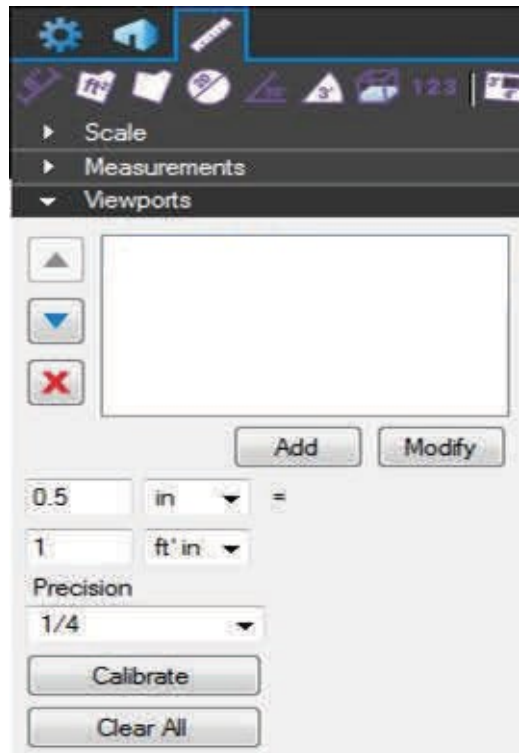


Working with Viewports

Different scale zones can be defined within a drawing or document by clicking the **Add** button in the **Viewports** section of the **Measure** tab. To define the region on the page, click and drag a rectangle around the area the scale should apply to, and then type the viewport **Name**. Once the area is defined on the PDF, click the **Calibrate** button and select two points within the viewport to define the scale.

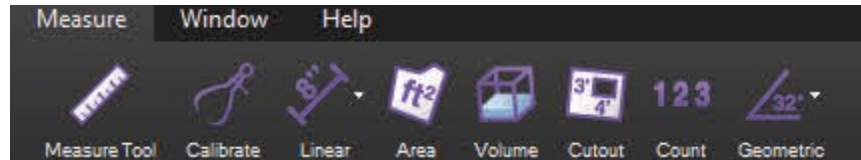
When the viewport name is selected in the list, the viewport area, name and scale will display in the drawing.

Note: When a measurement is placed on a PDF with Viewports defined, the Viewports are highlighted with their associated scales displayed. If you notice a viewport that is untitled, this could be affecting the accuracy of your measurements in that area. In this case, **the untitled viewport should be deleted.**



Measurement Tools

The Measure group contains the Measure and Calibrate tools plus quick access to the various measurement modes.



Measure Tool

Measure (M): Creates a temporary measurement or markup in any of eight measurement modes.

Calibrate

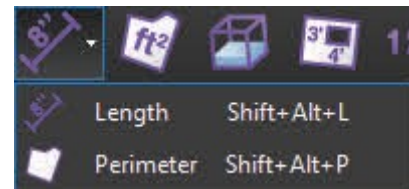
Calibrate: Calibrates the scale to allow accurate measurements to be taken.

Linear Menu

The Linear menu contains linear measurement modes.



Length: Calculates a linear measurement.



Perimeter: Calculates the length of all the sides of a given shape or multi-segment line.

Area

Area: Calculates the area of a simple rectangle or of an irregular, polygonal shape.

Volume

Volume: Calculates the volume of an area with a defined depth.

Cutout

Cutout: Allows you to cut out or subtract an area from an existing Area or Volume measurement.

Count

Count: Places a markup for each mouse click, associating a running total of counts with each markup as it is placed.

Geometric Menu

The geometric menu contains measurement modes that calculate angles and circular features.



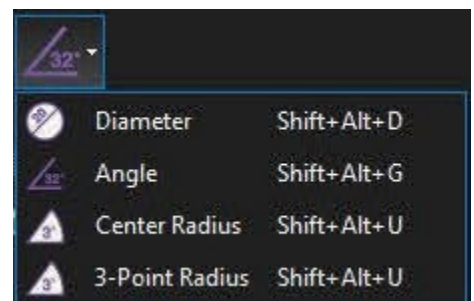
Diameter: Calculates the diameter of a circular shape.



Angle: Measures a given angle as defined by three points.





Radius: Measures the radius of an incomplete circle defined by three points along the arc.



The Tool Chest

The Tool Chest is a powerful feature that makes the marking up of documents much more efficient. Once a markup is created, it can be easily recalled using the Tool Chest. The Tool Chest will store your most used markups in a central, easily accessible location.

By default the Tool Chest is in the left panel. To access the Tool Chest, click  >  **Tool Chest** or by press **Alt+X**.

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 tool set:

- Click and drag the icon to the desired tool set.

To reorder the tools within a set:

- Click and drag the icon to the desired location.

To delete a saved tool:

- Click a tool to select it, then click the  **Delete Icon** on the Tool Chest button bar.

-or-

- Click a tool icon to select it, then press the **Delete** key.

-or-

- Right-click a tool icon, then click **Delete**.

To duplicate a tool:

- Right-click a tool icon, then click **Duplicate**.

To change the colors of a tool:

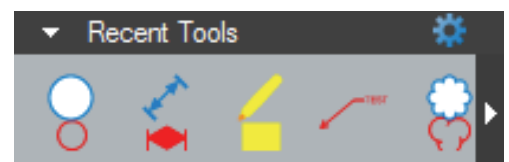
- Right-click a tool icon, then click **Change Colors**.

Reusing Recent Tools

The **Recent Tools** section records every markup as it is added to the PDF.

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

The Recent Tools history is temporary; it only lasts until Bluebeam Revu is closed.



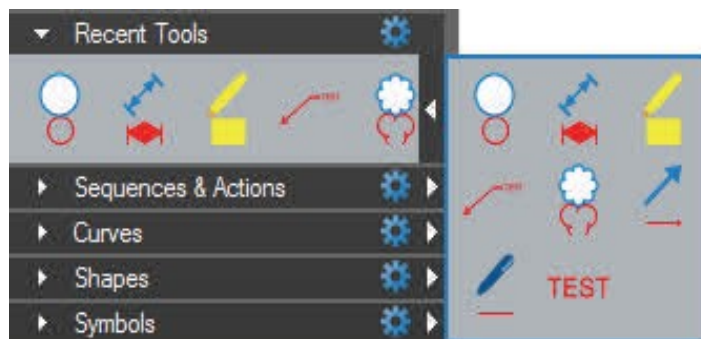
Permanently Saving a Tool to be Reused

To save a recently used tool so it will remain after the program has been closed, click and drag the tool's icon from Recent Tools into My Tools or another tool set, or right-click the icon and then click **Add Item to My Tools**.


To save a markup on the document as a reusable tool, right-click the markup, hover over **Add to Tool Chest**, then click the tool set to save it to (For example, My Tools).

Managing Recent Tools

If too many tools have been used recently to view them all in the Recent Tools section, an arrow appears to the right of the row. Click the arrow to access all recent tools.





To set how many recent tools to retain:


- Click the  gear at the top right of the section, then hover over **Maximum Recents**.
- In the **Maximum Recents** submenu, click a value to set the number of recents.


Clearing Recents and Hiding the Recent Tools Section

To clear all recent tools without closing Revu:

- Click the  gear at the top right of the section.
- Click  **Clear Recents**.

To Hide the Recent Tools Section:

- Click the  gear at the top right of the section, then click **Hide**.

Click the  **Manage Tool Sets** menu in the Tool Chest button bar, then click Recent Tools, to show it again.

Properties Mode vs. Drawing Mode

Items in My Tools, Recent Tools and custom tool sets can function in two different modes. The tool icon changes to show which mode is currently being used.



Drawing Mode

← Double-click →




Properties Mode

Properties mode adds a new markup with the same display properties of the saved markup. In this mode the Properties (as displayed in the Properties tab) are retained but the exact dimensions, text, and so on are not. In the preceding example, using the tool in Properties mode would create a new yellow text box with black border and text color, but no text would be inside the box yet, nor would the box have a fixed size.

Drawing mode adds a new markup that is an exact duplicate of the saved markup, as if you'd copied and pasted the original markup rather than made a new one of a similar type.

To change the mode, double-click on the icon. All information of the original markup is always retained when switching modes. Only the icon and the way that the markup is added to the file changes when the mode is switched. By default, most tools are saved in Properties mode. There are some markups that always remain in Drawing mode. A Stamp and a Grouped markup are two examples.



To set all markups to default to Drawing mode:

- Click the  gear at the top right of the section, then uncheck **Properties Mode**.

Sequences & Actions

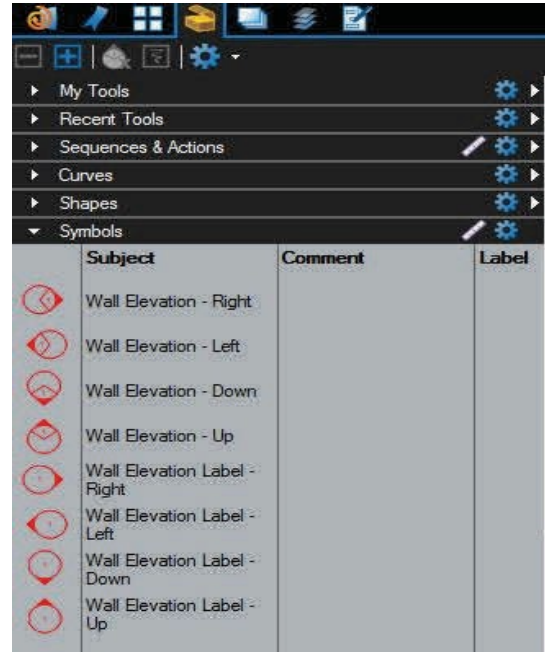
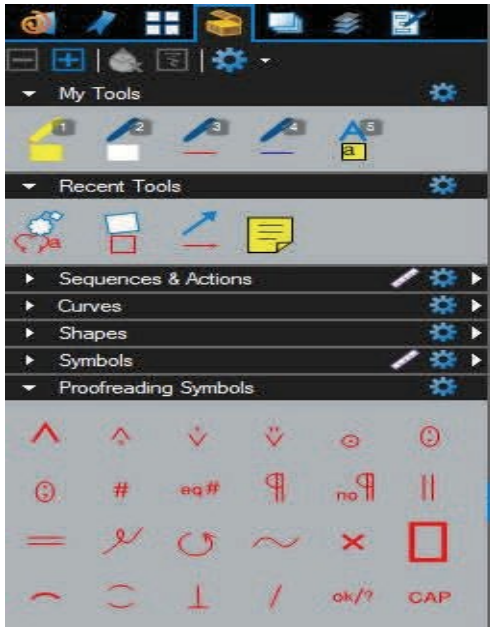
A **Sequence** allows a text based markup to increment in value each time that a markup is added to the PDF. The updating sequence value can be a number or text. An **Action** allows you to add hyperlinks to tools in the Tool Chest.

Pinning a Tool Set

- For quick and easy access, a Tool Set can be pinned to any Toolbar.
- Click the small  gear to the right of the Tool Set name.
- Click  **Pin to Toolbar**, then select the specific Toolbar.

Working with Stamps in the Tool Chest

Standardized stamps can be delivered via section specific Tool Sets in the **Tool Chest**. Here are some examples:



Placing Stamps from the Tool Chest

To place a stamp:

- Click the thumbnail of the stamp you would like to place from the desired Tool Set.
- Click the PDF in the location you would like the stamp to appear.

Unlike placing a stamp off of the Stamp Menu, placing a stamp from a Tool Set produces a dynamic preview of the stamp on your cursor. This feature results in much easier stamp placement.

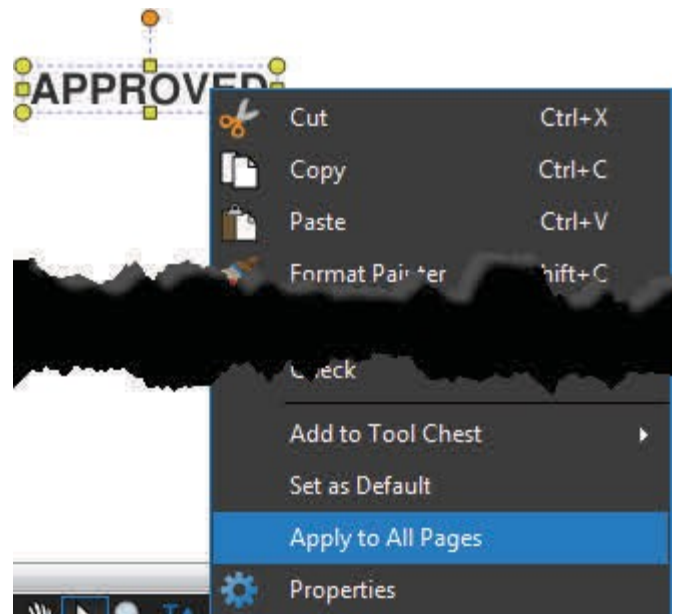
Applying a Stamp from the Tool Chest to Multiple Pages

There are a few options for applying a stamp to multiple pages, the **Apply to ... Pages** context menu options, and the **Apply Stamp** tool.

Apply a Stamp from the Tool Chest to All Pages


This will copy and paste in place any markup on all the pages of a PDF.

- Right-click a markup, then click **Apply to All Pages**.



Apply a Stamp from the Tool Chest to Selected Pages

Apply to Selected Pages works like Apply to All Pages, but instead applies the markup to the pages that are currently selected in the Thumbnails tab.

- In the  **Thumbnails** tab, hold **Ctrl** and click to select pages while leaving the markup selected.
- Right-click the selected pages and then click **Apply Stamp** the Apply Stamp dialog box appears then select the Stamp and click **OK**.

Apply Stamp Tool


The **Apply Stamp** tool can be found in the **Document** group of the **Command Bar** under the **Pages** pull-down menu.



The **Apply Stamp** dialog gives you more control on how you would like to apply a stamp. This dialog includes all the general stamp placement options as well as the ability to apply a stamp to page ranges in multiple files, or even specify an anchor point option that could prove useful on PDF's of differing page sizes.

To Import Stamps into the Stamp Tool



1. Go to Markup >  Stamp > Import Stamp
2. Select the PDF file that you want to import into the Stamps folder and click **Open**

The location for the SDDOT “Not For Construction” and Preliminary Stamps is as follows:


U:\rd\Bluebeam\Stamps

Flattening Stamps


At times it's important to be able to flatten your stamps to prevent any deletion or modification after the document has left your hands. This can be accomplished by using the Flatten context menu option, or the **Flatten Markups** tool.

Flatten Context Menu Option

This option will flatten the selected markups.

- Right-click on the markup and then click  **Flatten**.

Adding Not For Construction Or Preliminary Stamp On Plans

To place the Not For Construction Stamp on the plans click on **Document > Pages**  **Apply Stamp**. An Apply Stamp dialogue box opens.



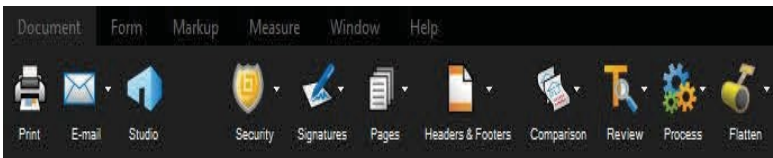
Click on the drop down box and select:
Background_NotForConstructon.pdf



Note: The same steps can be used to select and place the Preliminary Stamp.

Check the **Page Range** (Default is all pages). Click **OK**.


Flatten the PDF

To remove the stamp markups from the Markup List you must Flatten the PDF. Otherwise the stamp markups will show up as review comments.



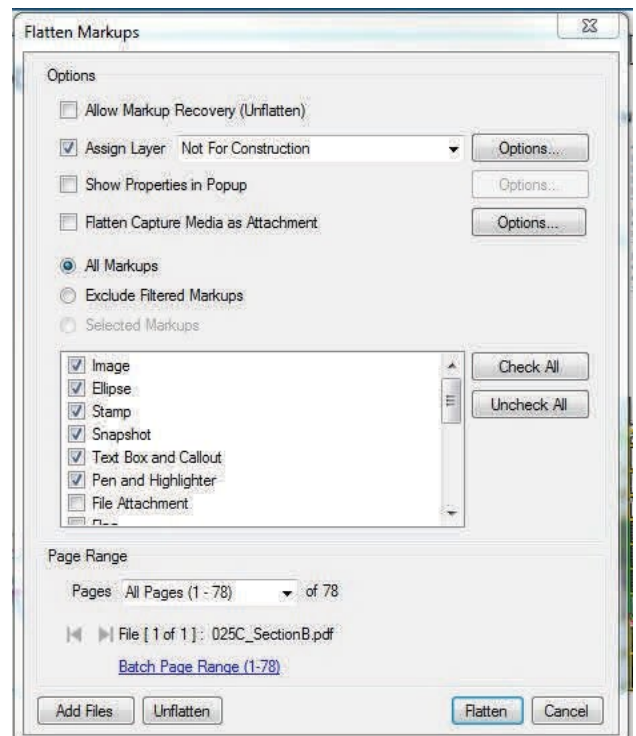
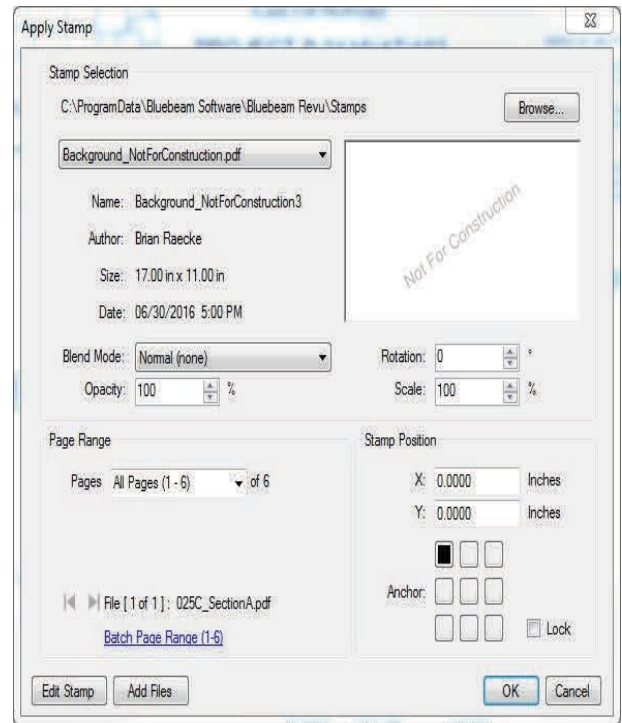
Click on **Document >**  **Flatten**. The Flatten Markups dialogue box opens. Then uncheck the **Allow Markup Recovery** (If Checked). Click **Assign Layer >**Type Not For Construction (Type Preliminary if Preliminary Stamp) in the area provided. Click **All Markups**. Check the **Page Range**(Default is all pages). Click on **Flatten**. Click on  **Save** in the Command Bar.

The Stamp will be placed on the Layer “Not For Construction” on every sheet.

The Not For Construction Stamp layer can be turned off and on by clicking the eye  **Not For Construction**

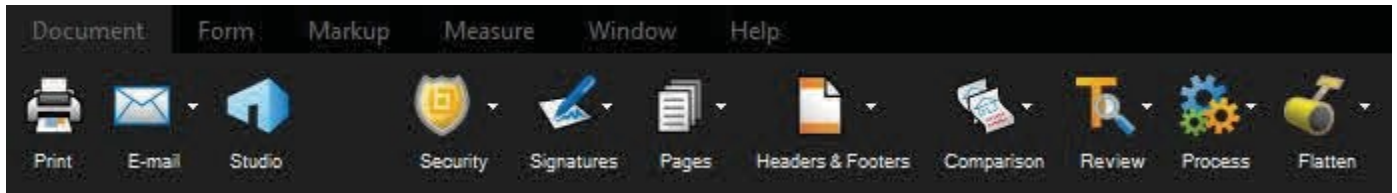
Under the **Layers Tab**

The Not For Construction Stamp layer can be deleted by right clicking on  **Not For Construction** and selecting Delete. Under the **Layers Tab**.



Flatten Markups Tool

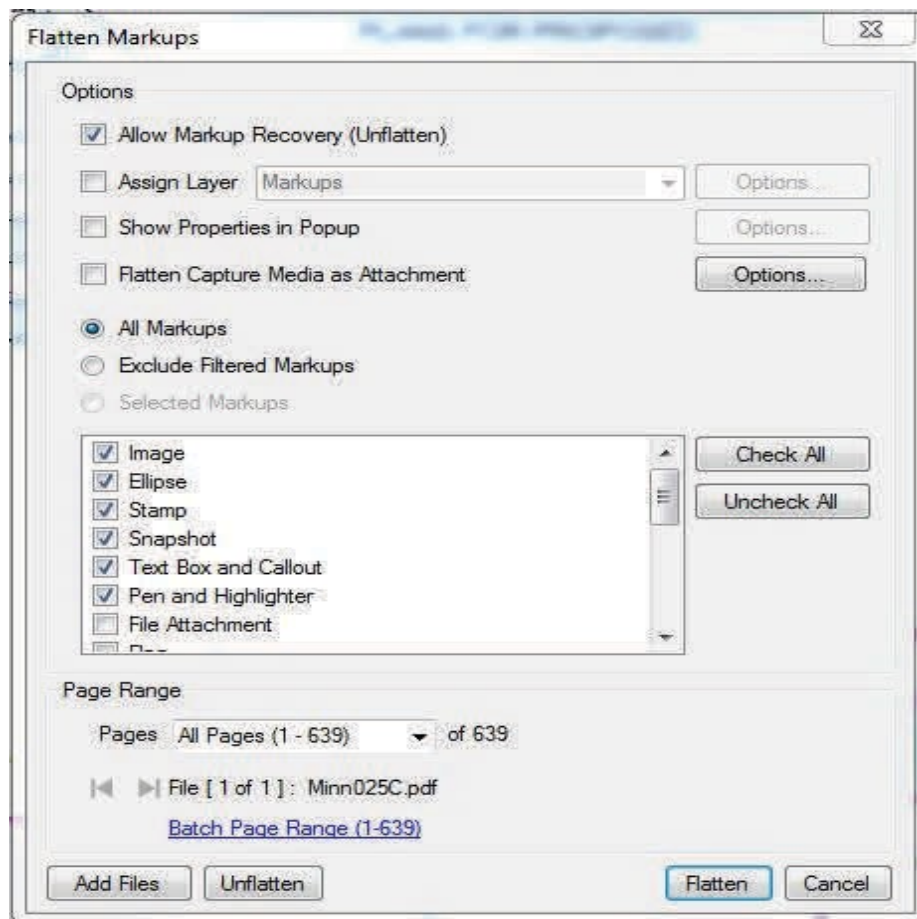
The **Flatten Markups** tool can be found in the **Document** group of the **Command Bar** under the **Flatten** pull-down menu.



The **Flatten Markups** dialog provides additional controls over how markups are flattened.

It's important to note that if the **Allow Markup Recovery (Unflatten)** option is checked, then flattened markups will be able to be converted back into markups using the **Unflatten** tool. If your intent is to prevent deletion or modification of your markups after handing off the PDF, then make sure that the **Allow Markup Recovery (Unflatten)** option is NOT checked.

There are checkboxes to include the various markup types in the flattening operation, and there are also options to exclude the currently filtered markups to further refine what gets flattened.



Markups List


The **Markups** list is a specialized tab with a horizontal layout that provides powerful features for processing, accessing, reviewing, and summarizing the markups on a PDF. By default it is found in the bottom panel.

To access the Markups list, click  > **Markups** or press **Alt+L**.


Markups List Button Bar


The Markups list button bar contains tools for organizing, processing, importing and exporting data.




 **Expand All:** Expands the entire Markups list.


 **Collapse All:** Collapses the entire Markups list.

 **Previous:** Moves to the previous Markups in the list.

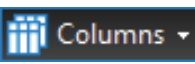
 **Next:** Moves to the next Markups in the list.


 **Filter:** Displays only markups that match the filter criteria.

 **Clear Filters:** Clears applied Filters.

 **Hide Markups:** Hides all markups in the current PDF file. Markups will not display or print when this mode is enabled. This mode is temporary and will be reset the next time that Revu is started.

 **Search box:** Filters based on the text entered in the box.

 **Columns menu:** Selects which columns to display in the Markups list.

 **Manage Columns:** Launches the Manage Columns dialog to change the display order and add, remove, and create custom columns. Columns can also be reordered by dragging and dropping column headers.



Delete: Deletes currently selected markup or reply.

NOTE: Delete removes the markup from the PDF, not just from the list.



Reply: Replies to the selected markup. Replies appear on a new indented row below the markup in question.



Status menu: Sets the status of the markups. The default states are the following: **Accepted, Reject, Completed, Canceled, None.**



Manage Status: Creates and manages custom states.



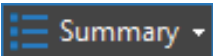
Checkmark menu: Checks or unchecks the checkbox associated with the selected markup. Also provides a command to clear all checkboxes.



Import: Takes the markups from a PDF or an XML file and includes them in the active PDF. This is useful for incorporating and reviewing markups or feedback from multiple sources. FDF files containing markups generated from other PDF applications may also be imported.



Export: Exports all markups to an XML file. The XML file can be imported into another PDF so that the markups will be displayed in the target PDF. The created XML file can also be imported into Microsoft Excel for viewing in a tabular form. Markups may also be exported to the FDF format for interoperability with other PDF applications.



Summary: Provides a formatted list of all of the markups in the document. It is also possible to define a subset of markups to summarize.

Markups List

The Markups list displays a table, with each row representing a markup that has been added to the active PDF. Each column displays information about the markups.

As a row is selected, the view of the PDF in the workspace will jump to the location of the associated markup. This makes it easy to use the markup list to step through the markups in PDF. To step through, click the **Previous** or **Next** buttons, or press the **Up/Down** arrow keys.

Horizontal section separators with disclosure triangles show and hide each section of the Markups list. Click a disclosure triangle to show or hide that section.

The following figures show an expanded, collapsed and partially collapsed list that is sorted by Page number:

Expanded List

Subject	Page	Lock	Status	Checkmark	Author	Date	Color	Comments
Page A1 (1) Note	Page A1	<input type="checkbox"/>		<input type="checkbox"/>	Brian Raecke	08/11/...	Yellow	MRM Wrong
Page A4 (1) Recta...	Page A4	<input type="checkbox"/>		<input type="checkbox"/>	Brian Raecke	08/11/...	Red	Change Quantities
Page A5 (1) Cloud	Page A5	<input type="checkbox"/>		<input type="checkbox"/>	Brian Raecke	08/11/...	Red	Modify note to reflect change in project length
Page A6 (1) Cloud+	Page A6	<input type="checkbox"/>		<input type="checkbox"/>	Brian Raecke	08/11/...	Red	Replace with new note

Collapsed List

Subject	Page	Lock	Status	Checkmark	Author	Date	Color	Comments
Page A1 (1)								
Page A4 (1)								
Page A5 (1)								
Page A6 (1)								

Partially Collapsed List

Subject	Page	Lock	Status	Checkmark	Author	Date	Color	Comments
Page A1 (1) Note	Page A1	<input type="checkbox"/>		<input type="checkbox"/>	Brian Raecke	08/11/...	Yellow	MRM Wrong
Page A4 (1)								
Page A5 (1) Cloud	Page A5	<input type="checkbox"/>		<input type="checkbox"/>	Brian Raecke	08/11/...	Red	Modify note to reflect change in project length
Page A6 (1)								


Columns Menu

The Columns menu allows you to toggle on and off various columns. A column that is turned on will appear in the top row of the Markups list and will display a check box next to the name in the menu. Click a column name to turn it on or off. To sort by any column, click the column's name on the header. Click again to reverse the sort order.

Subject: Displays an icon of the markup and text referring to the subject of the markup. By default, the text contains the name of the tool used to create the markup (Pen, Highlight, Callout, etc.). This text can be changed in the **Subject** field in the **Properties** tab, or by double-clicking on the Subject text in the **Markups** list.

Page: Displays the name of the page on the PDF on which the markup is located.

Page Index: Displays a numeric value indicating the page on which the markup or measurement resides. The Page Index is a useful column for sorting when exporting to spreadsheet programs.

Lock: Toggles whether the markup is locked for editing or not. If locked, a  appears in the box, and the markup cannot be moved or changed. If unlocked, the box is clear and the markup can be edited.

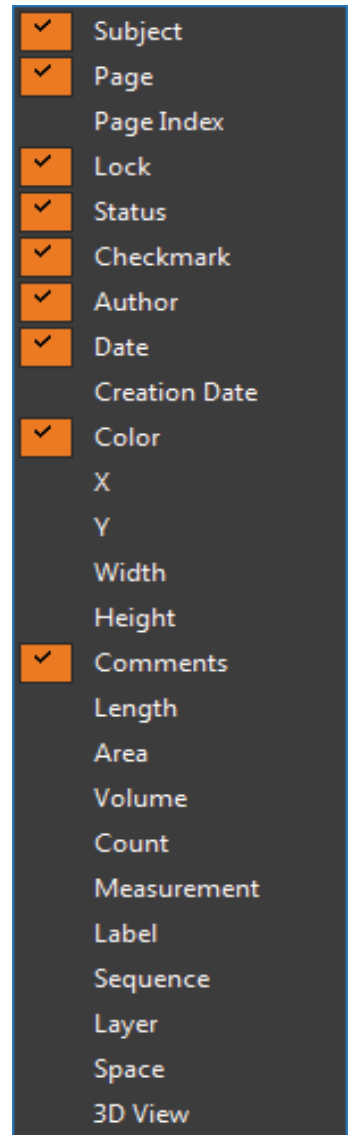
Status: Can be set to one of the default states or a custom status. The default values are **Accepted**, **Rejected**, **Canceled**, **Completed** and **None**. Once the status is set on a markup, you can sort by status.

Checkmark: Toggles the checkbox, enabling the Markups list to be used as a basic checklist. As changes are being reviewed, click to check the box; click again to uncheck it.

Author: Indicates the username of who made the markup. Double-click this field to edit your displayed name. To set the name globally, click **Settings > Preferences > General**, then enter a name in the **User** box.

Date: Displays the date and time the markup was modified based on the system time.

Creation Date: Displays the date and time the markup was created based on the system time.



Color: Displays the fill color that was used for the markup. You may sort by this column to group all "red" or "blue" markups.

X and Y: Display the coordinates on the PDF page where the markup is located, counted from the lower left.

Width and Height: Display the size of the markup itself.

Comments: Displays the comments from the **General** section of the **Properties** tab for this markup. Double click in this field to change the comment associated with the markup.

Length, Area, Volume, Count, and Measurement: All display values associated with Measurement markups.

Label: Displays the label associated with the markup. Label can be changed in the **General** section of the **Properties** tab. For measurement markups, it is common to use the Label field to specify the type of material that's being measured, such as "Asphalt Pavement 1" or "Conduit 3".

Sequence: Records the numerical value associated with a Sequence markup.

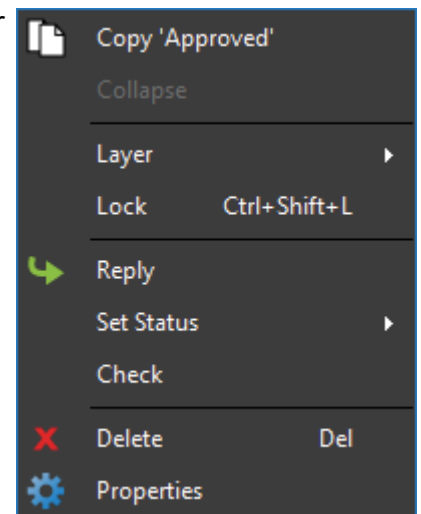
Layer: Displays the Layer the markup is associated with.

Space: Displays the Space that contains the markup.

3D View: Displays the 3D view that contains the markup. Click to jump to that view in the 3D window.

Context Menu

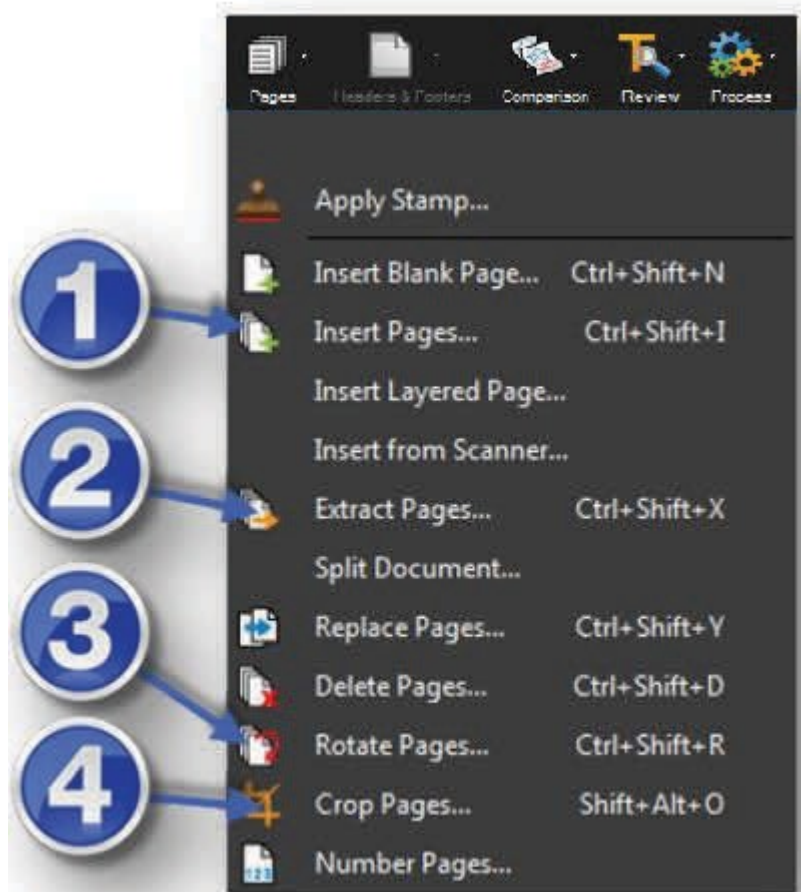
Right-click on any field in the markup list to display a context menu for performing functions on the currently selected cell. The first option, **Copy**, stores the contents of the cell on the clipboard, enabling the pasting of the information within Revu or other Windows applications.



Chapter 3: Document Manipulation

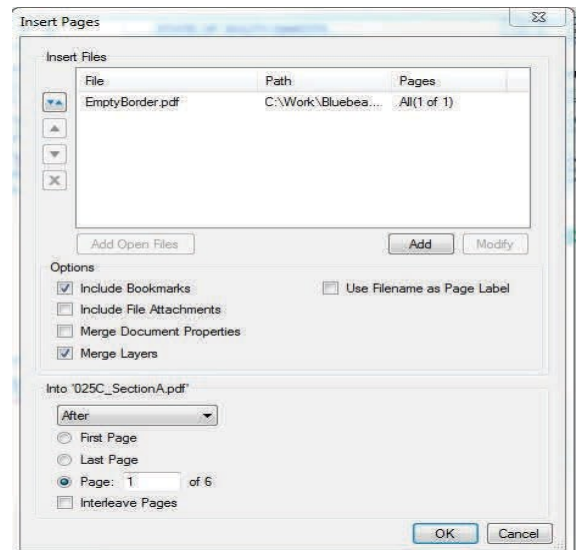
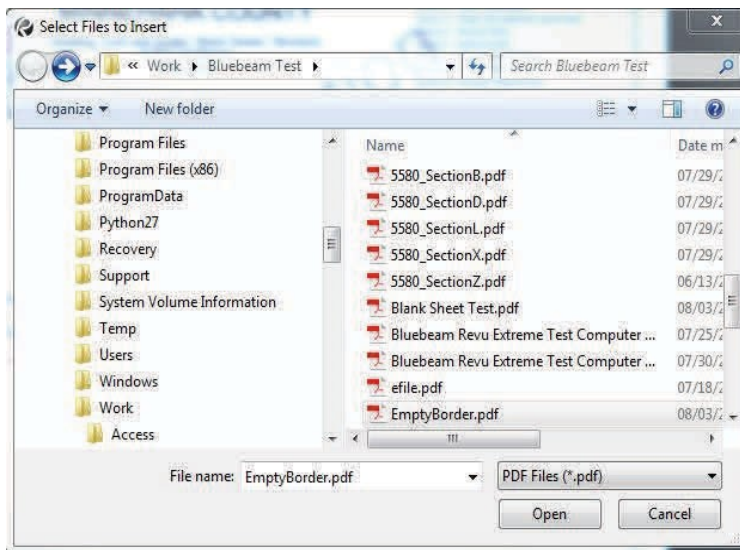
The Document group provides commands and menus for working with the PDFs. The **Pages** menu contains commands for manipulating the actual pages of the PDF.

1. Insert Pages – adds a blank page
2. Extract Pages – removes or copies one or more pages from the document to a new pdf
3. Rotate Pages – Rotates one or more pages in 90-degree increments
4. Crop Pages – reduces the page size according to user definition



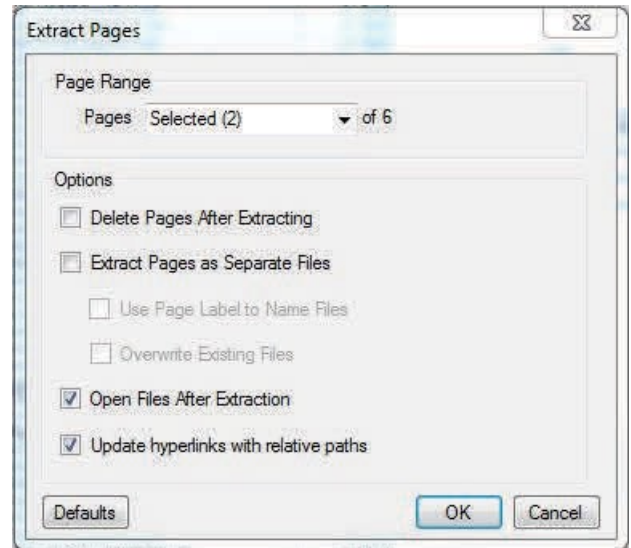
Insert

To insert a page or pages use the Insert Pages command. Select Files. Choose where to place pages > Click OK



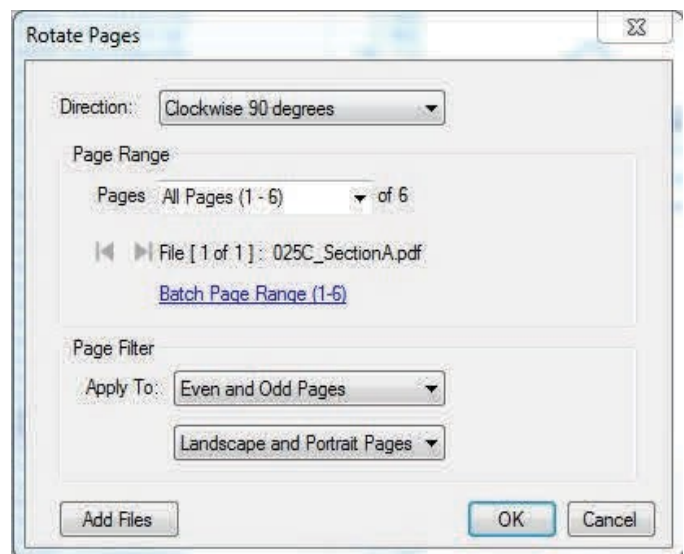
Extract

Individual pages or a range of pages can be pulled out of the current document into a separate file or group of files using the **Extract Pages** command.



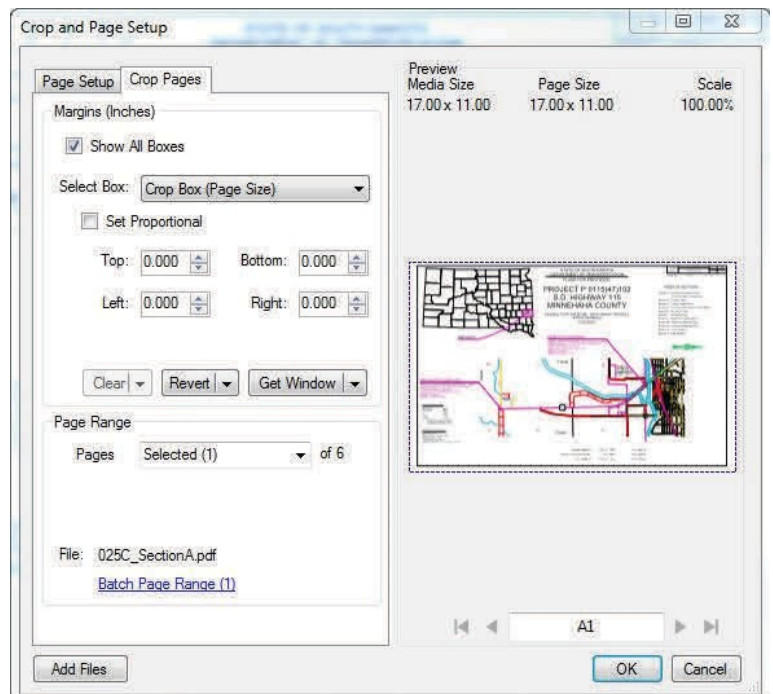
Rotate

To rotate the currently active page by 90°, use the Rotation toolbar. If you do not see the Rotation toolbar, click **View > Toolbars > Rotation**.



Crop

Bluebeam Revu includes a cropping tool that allows you to remove unwanted parts of a PDF page. Using the Crop Pages feature will modify the PDF file; therefore it is recommended that you make a copy of the PDF before proceeding.



Document Comparison


The Compare Documents feature is used to compare two PDF files and highlight the differences. The differences are indicated with markups. Once the markups have been created, the differences can be reviewed using the Markups list.

Comparing Two Versions of the Same Document or Drawing

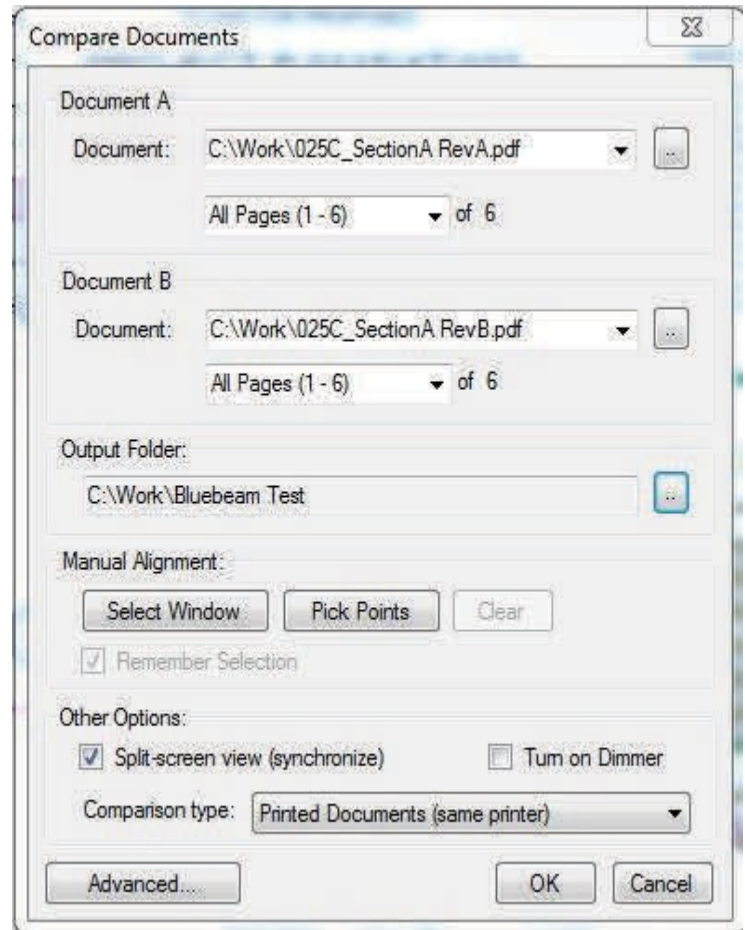
• On the Command Bar, click **Document** >

Comparison >  **Compare Documents...**

Defining Documents A and B

- If the document is already loaded within the current Revu session, click the **Document** list in the **Document A** section, then click the name of the file.
- If the document is not loaded, Click 
- In the **Open** dialog, locate the appropriate file, then click **Open**.
- Click the Page Range list to define a range of pages to use for comparison.

Follow the same steps in the Document B section to define Document B.



Optionally Defining a Region

If you want to compare only a specific region of each document, click **Select Window**, then define a rectangle. Otherwise the entire document will be compared.

Aligning the Documents

By default Revu will attempt to line up the document. If you wish to override the automatic alignment, click **Pick Points** to specify the alignment points. You will need to pick 4 points on each document. The points should be specified in a clockwise order and the alignment points should correspond to one another; for example, Selection Point 1 on Document A should correspond to Selection Point 1 on Document B.

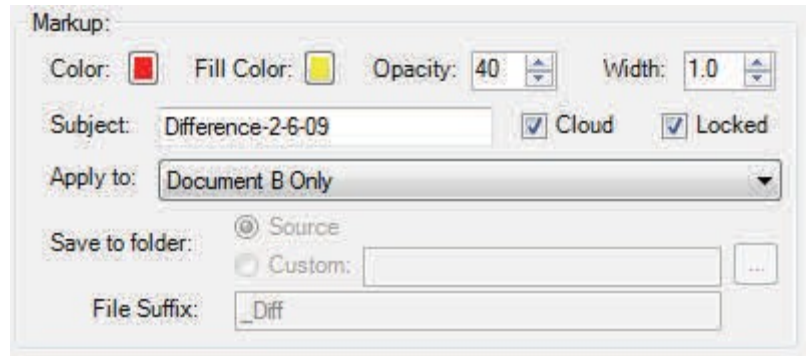
Defining the Appearance of Markups

Click **Advanced** to change the markup appearance. Options include Color, Fill, Opacity, whether the markup has a cloud appearance, and if the markup should be locked when placed in the PDF.

The **Subject** field can be used to name the difference markups (e.g., “Differences 2-6-09”). You can then sort the Markups list based on Subject. All difference

markups will be grouped together since each markup has the same subject. A series of difference comparisons can be made over time to provide a change history.

The **Apply to** list determines to which document the markups are added when the comparison is run. The settings available are the *New Copy of Document A*, *New Copy of Document B*, *Both Document A and B*, *Document A Only*, *Document B Only*.



The screenshot shows a 'Markup' configuration dialog box. It includes the following fields and controls:

- Color:** A red square icon.
- Fill Color:** A yellow square icon.
- Opacity:** A numeric input field set to 40 with up and down arrows.
- Width:** A numeric input field set to 1.0 with up and down arrows.
- Subject:** A text input field containing 'Difference-2-6-09'.
- Cloud:** A checked checkbox.
- Locked:** A checked checkbox.
- Apply to:** A dropdown menu currently showing 'Document B Only'.
- Save to folder:** A radio button selected for 'Source', and an unselected radio button for 'Custom:' followed by an empty text field and a browse button (...).
- File Suffix:** A text input field containing '_Diff'.

Choosing Other Options

Check the **Split-screen view** box to open side-by-side synchronized windows for reviewing the differences noted after the comparison process completes. Check **Turn on Dimmer** to dim underlying PDF content and make the locations where differences are found easier to see.

- To run the comparison, click **OK**.

Once the comparison completes, any differences will be annotated.

If the **Split-screen view** box was checked, the two compared documents will open in a side-by-side manner. Zooming or panning on one window will update the display in the opposite window. This is useful for visually comparing the before/after, changed, and unchanged parts of the two documents. The markups that were added will appear in either the left or right window depending on which PDF was specified.

Open the Markups list to see a table of markups that were automatically added when differences were detected.

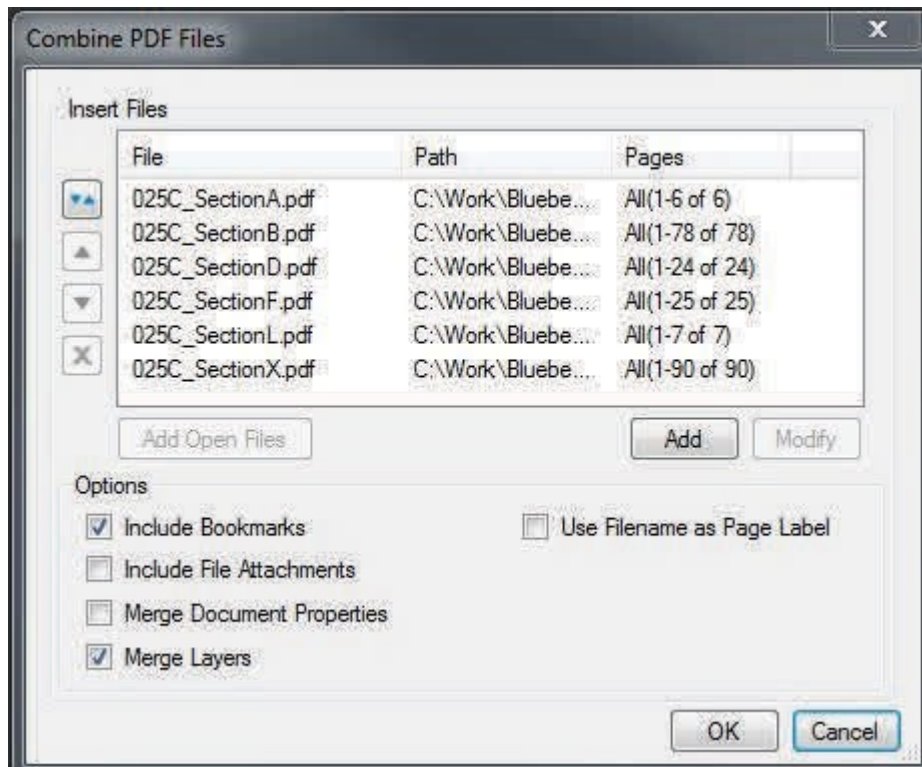
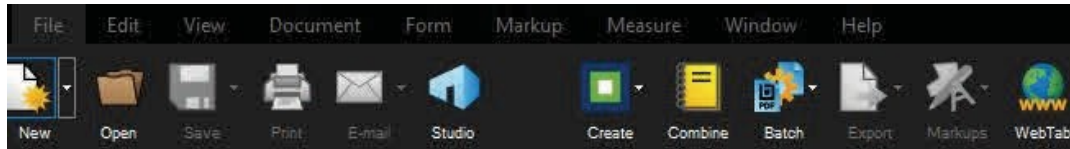
As a markup is selected in the Markups list, the Revu workspace will jump to the location of the difference.

Creating a PDF from Multiple PDFs

Multiple PDFs can be combined into a single PDF from within Revu or from the context (right-click) menu in Windows Explorer.

To combine multiple PDFs into a single PDF from within Revu:

1. Go to **File** >  **Combine**. The Combine PDF Files dialog box appears.



2. Add files to the list:





- o To add all PDFs that are currently open in Revu, click **Add Open Files**.
- o To select files from a local or network drive, click **Add**.

3. In a Session Plan Review the following shall be included in the combined PDF for review:

1. Session Cover Letter Example U:\rd\Misc\Design\topic\Bluebeam Session Cover Letter
2. Special Provision Checklist
3. Special Provisions (If Provided)
4. Plan Sections A-Z/Non-Section Plans
5. Utility/Building Specifications
6. Utility/Building Plans

Note: You may add the Utility Spec., Utility Plans, Building Spec. and Building Plans as a separate document(s) in the Session Review (See Adding Documents to a Session Review)

4. PDFs will be combined in the order in which they are sorted. To change the sort order:

- o Click  and select the desired sort option to sort the files automatically.
- o Select a file you wish to move and click either  to move it up in the list or  to move it down in the list to reorder the files in the list manually.
- o Select a file and click  to remove it from the list.

5. Click **OK**.

6. **Save the Combined File for Plan Reviews as CountyPCN#.pdf**

And place the file in the Project Folder under the File Folder "Review".



Options:

Include Bookmarks: Add any bookmarks from the selected PDF files (**Check this Item**).

Include File Attachments: Add any file attachments from the selected PDF files. (**Do not Check**)

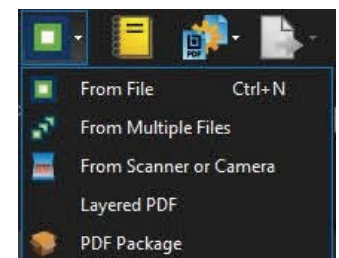
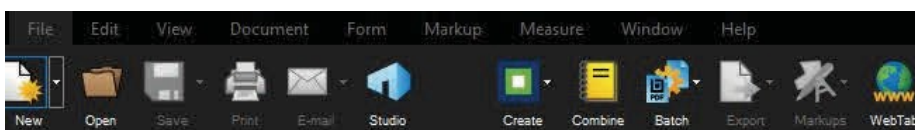
Merge Document Properties: Combine the document properties of the existing and selected PDF files. (**Do not Check**)

Merge Layers: All layer information in the PDFs will be kept when this option is checked. If unchecked, the layers will be removed, but the content and markups in the layers will remain in the combined PDF. (**Check this item**)

Use Filename as Page Label: By default, each page label of the combined PDF is named after the source PDF's page label. Select this to use the file names instead. (**Do not Check**)

Creating a PDF From an Existing File Not a PDF

Revu lets you create PDFs out of existing files, including those that are not PDFs themselves. When creating a single PDF out of a single not-PDF file, Revu will use its own plugin whenever available (for example, the Office or CAD plugins).



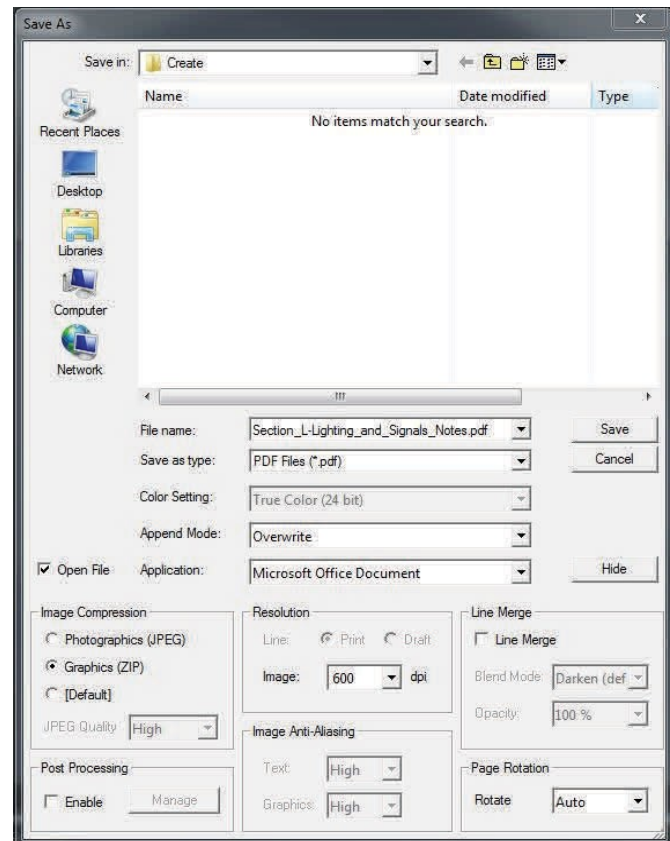
1. Go to **File** >  **Create** >  **From File**. The **Open File**

dialog box appears.

2. Navigate to and select a file. The source file can be a document, such as a Word, Excel or PowerPoint document. Once the file is selected, click **Open**. The **Save As** dialog box appears.

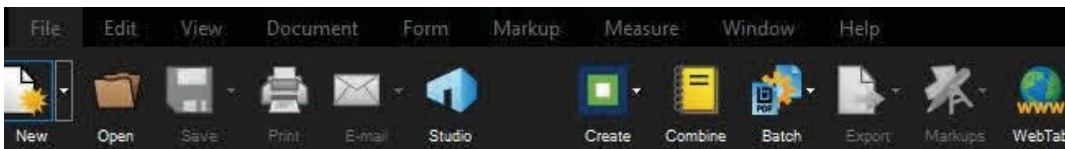
3. By default, the PDF created out of the selected file will have the same name. If desired, enter a new name in the **File name** field, then choose a folder location and click **Save**.

- Navigate to and select a file. The source file can be a document, such as a Word, Excel or PowerPoint document. Once the file is selected, click Open. The Save As dialog box appears.
- By default, the PDF created out of the selected file will have the same name. If desired, enter a new name in the File name field, then choose a folder location and click Save.

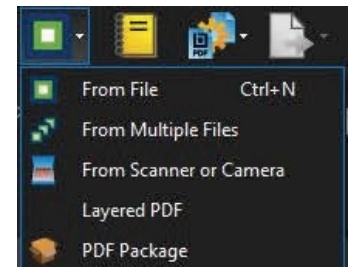




Creating a PDF(s) From Multiple Existing Files Not PDFs

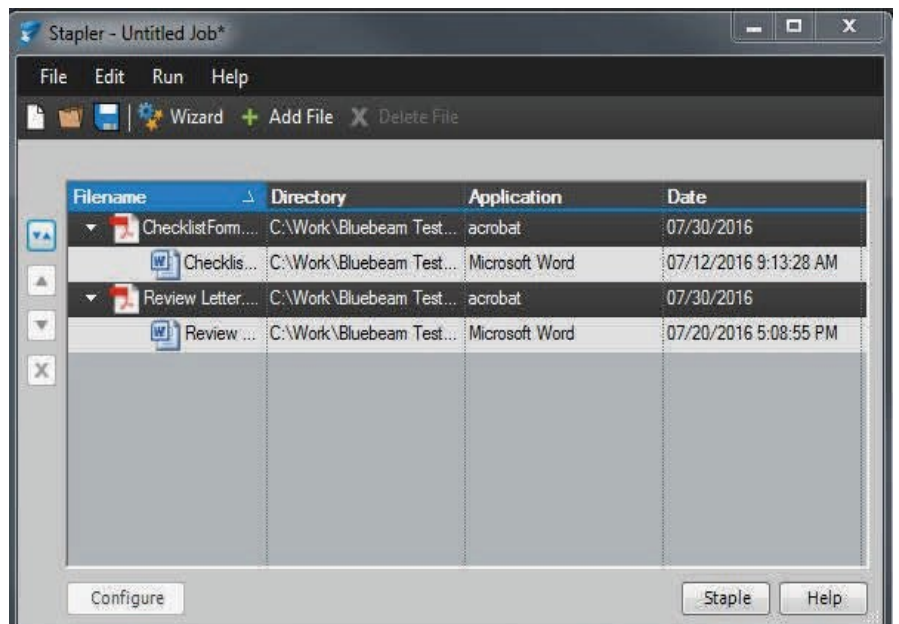
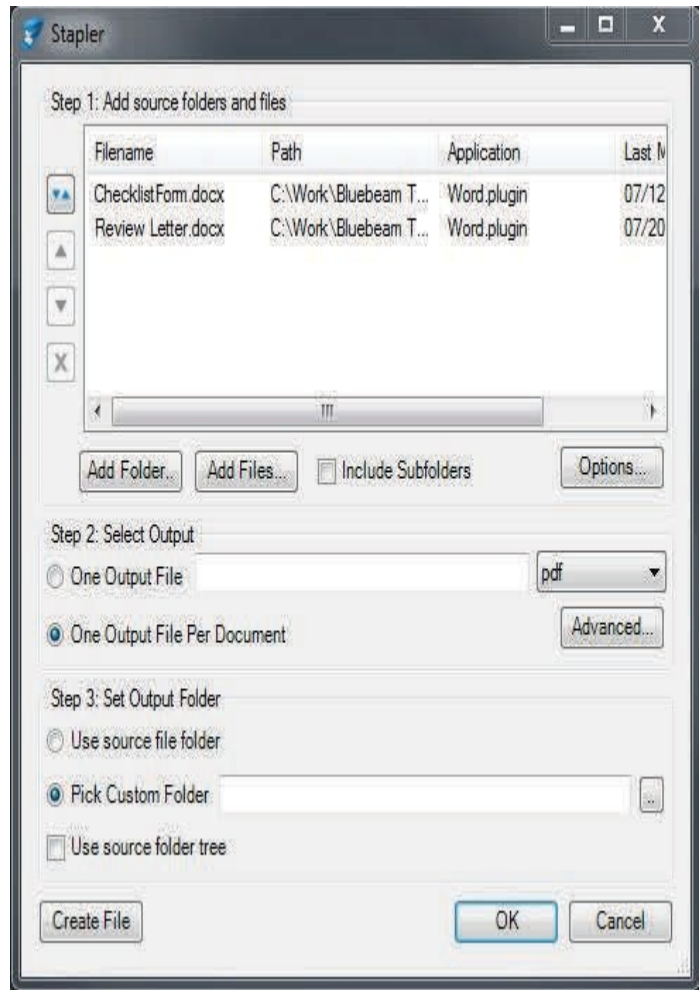
Revu lets you create PDF(s) out of multiple existing files, including those that are not PDFs themselves.



- Go to **File** > **Create** > **From Multiple Files**. The Open File dialog box appears.



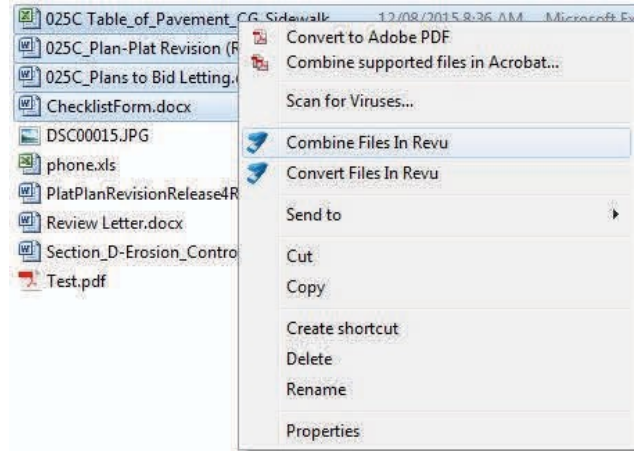
2. Navigate to and select the files. The source files can be a document, such as a Word, Excel or PowerPoint document. Once the files are selected, click Open. The Stapler  dialog box appears.
3. If you are going to combine the files use the  to change the order of the files.
4. Select if **One Output File** is desired or **One Output File Per Document**. If one output file is desired then provide a name for the file.
5. Pick the **Output Folder**
6. Click **OK**
7. The Stapler - Untitled Job dialog box appears.
8. Select the Staple button and the files will be converted to PDF and opened.



Stapler Using Windows Explorer to Combine or Convert Files

Windows Explorer Context (right-click) menu

In Windows Explorer, you are able to select files and right-click to Combine Files or Convert Files in Revu using Stapler.



Step 1: Browse in Windows Explorer to a folder containing the files you want to Convert or Combine.

Step 2: Select the files in the Explorer window.

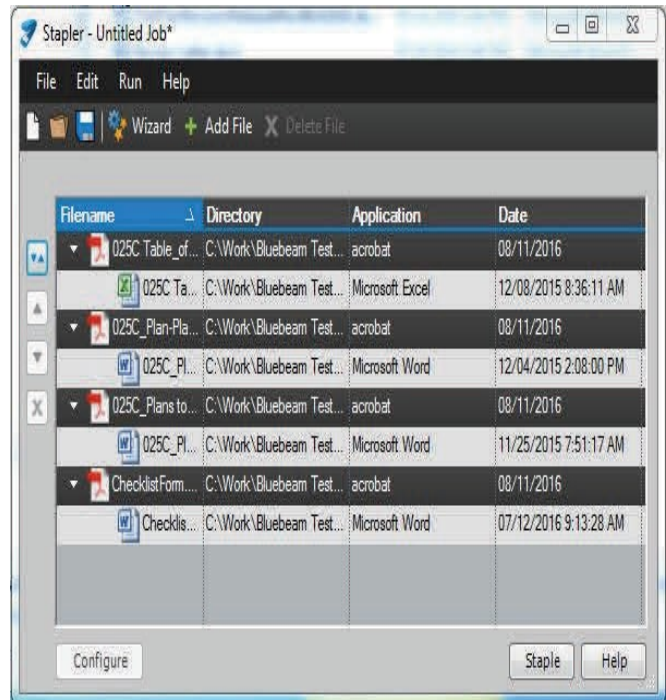
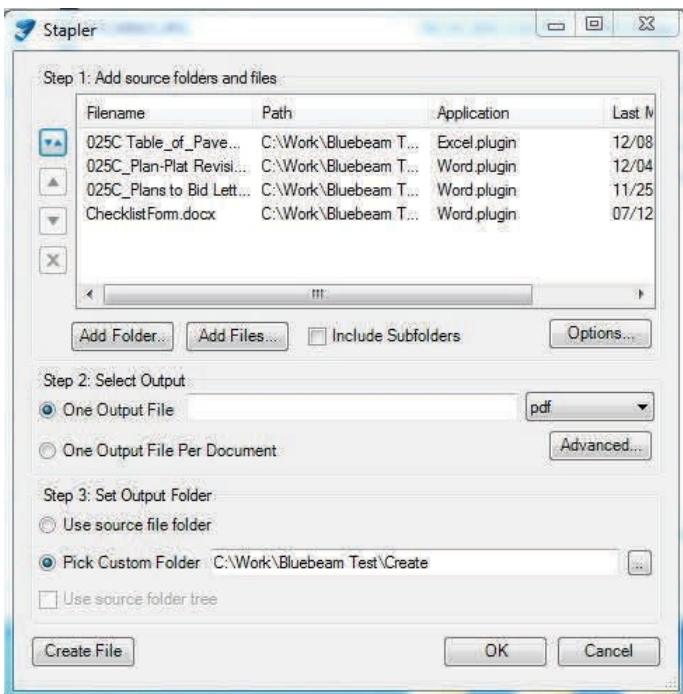
Step 3: Right-click on any of the selected files and choose Combine Files in Revu or Convert Files in Revu.

Combine Files in Revu will create a single multipage PDF from the selected files.

Convert Files in Revu will make individual PDF from each of the selected files.

1. When Combine Files in Revu is selected, (File>Stapler will be invoked with the files chosen already populated in the source file window.
2. Enter the name of the Output File.
3. Change the Custom Output Folder if needed.

1. When Convert Files in Revu is selected, Stapler will be invoked with the files chosen already populated in dialog.
2. Select the Staple button and the files will be converted to PDF and opened in Revu.




Add SDDOT Header and Footer Templates

The following SDDOT Header and Footer Templates need to be saved into the software:

This can be done by either of the following:

1. By clicking on the Bluebeam Profile file <U:\rd\Bluebeam\Profile>
2. By Manually entering the Templates as shown below.

Open a PDF then Go to Document >  Headers & Footers > Add. The Header and Footer dialog box appears.

Title Block (Plans 11x17)

Template 1 - Title Block (Plans 11x17)

Font - Arial 8

Top Margin - 0.68

Bottom - 0.50

Left Margin - 14.20

Right Margin - 0.65

Right Header Text - B<<1>> B99

Title Block (Cross Sections 11x17 Portrait)

Template 2 - TB Cross Sec Portrait

Font - Arial 8

Top Margin - 0.50

Bottom Margin - 0.42

Left Margin - 8.70

Right Margin - 0.40

Right Footer Text - X<<1>> X99

Title Block (Cross Sections 11x17 Landscape)

Template 3 - TB Cross Sec Landscape

Font - Arial 8

Top Margin - 0.60

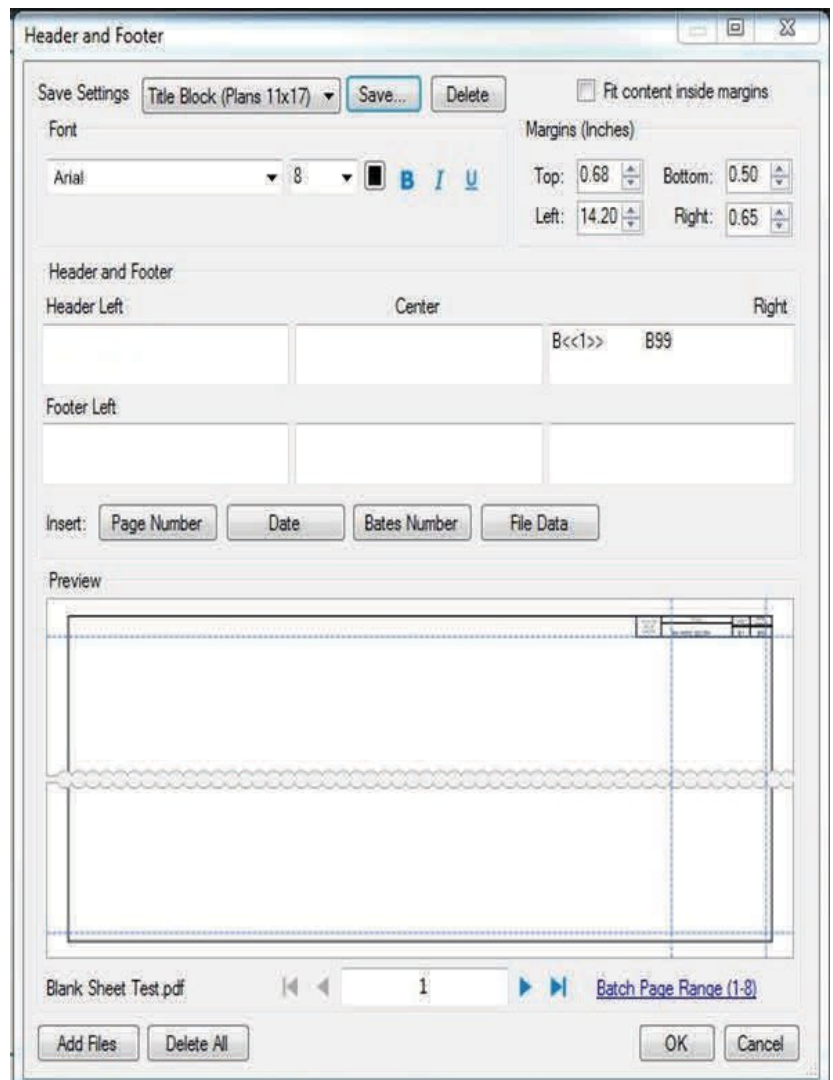
Bottom Margin - 0.50

Left Margin - 14.20

Right Margin - 0.40

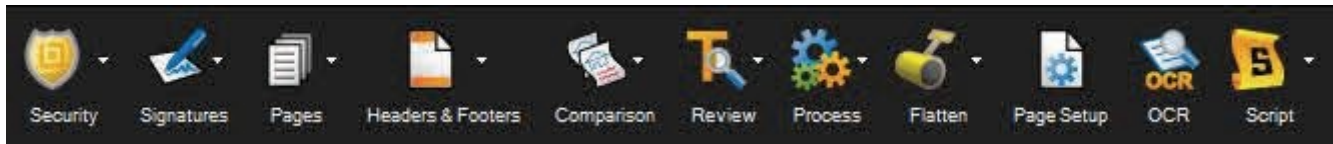
Right Header Text - X<<1>> X99

Enter each one of the Header & Footer Templates information and name the Template as shown. Make sure you save the Template. When you are done you should have 3 Templates when you click on the down arrow by **Save**

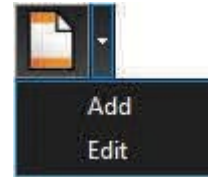


Numbering PDF Pages Using Headers and Footers for SDDOT Plans

Open the Document Group



Click the main button to open the Header and Footer dialog box, from which you can add a new header and/or footer (if none currently exist on the page) or edit the current header and/or footer. Click the arrow to the right to invoke the Headers & Footers menu.



Add: Adds a new header and/or footer to the document.

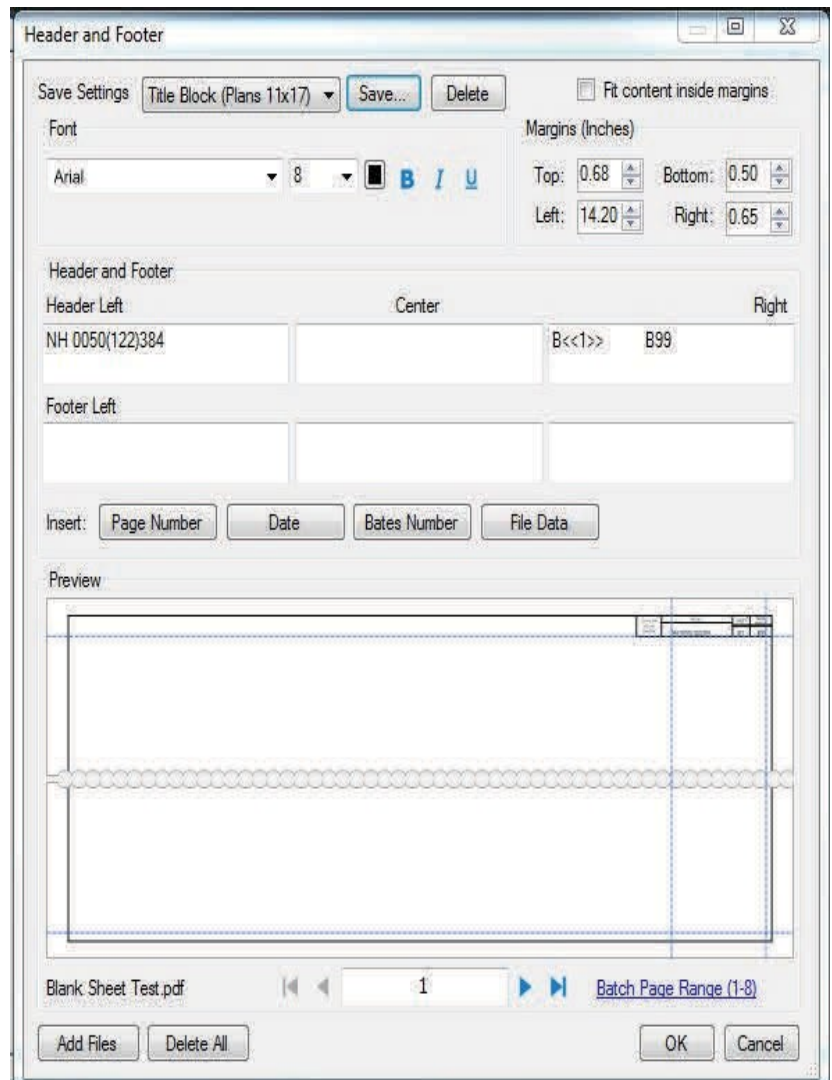
Edit: Edits the document's existing header and/or footer.

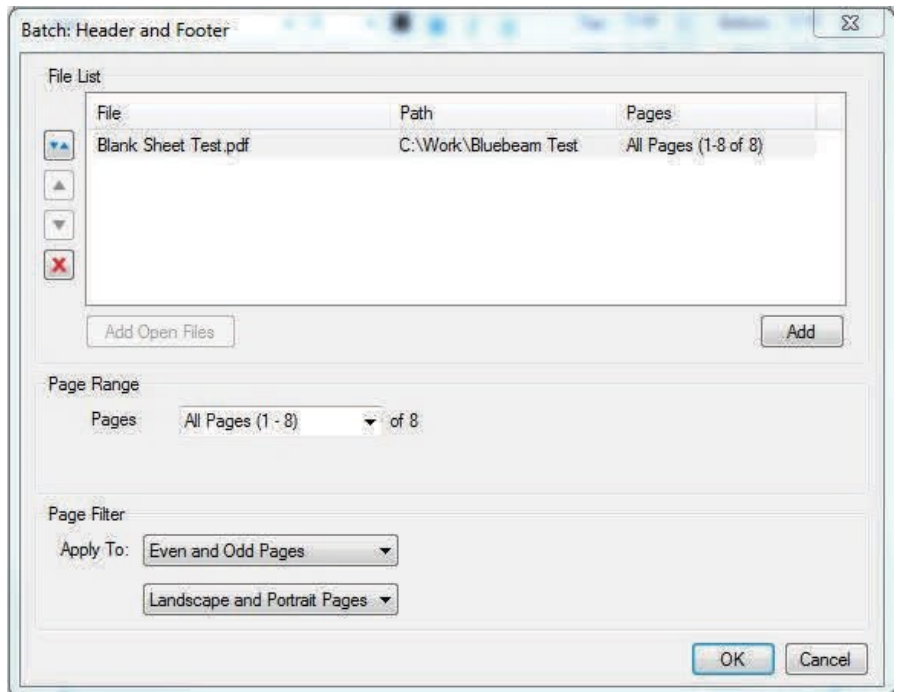
1. Go to **Document** >  **Headers & Footers** > **Add**. The **Header and Footer** dialog box appears.

For SDDOT Plan Sheets: Use a previously configured header/footer template, select the Title Block (Plans 11x17) template from the Save Settings list.

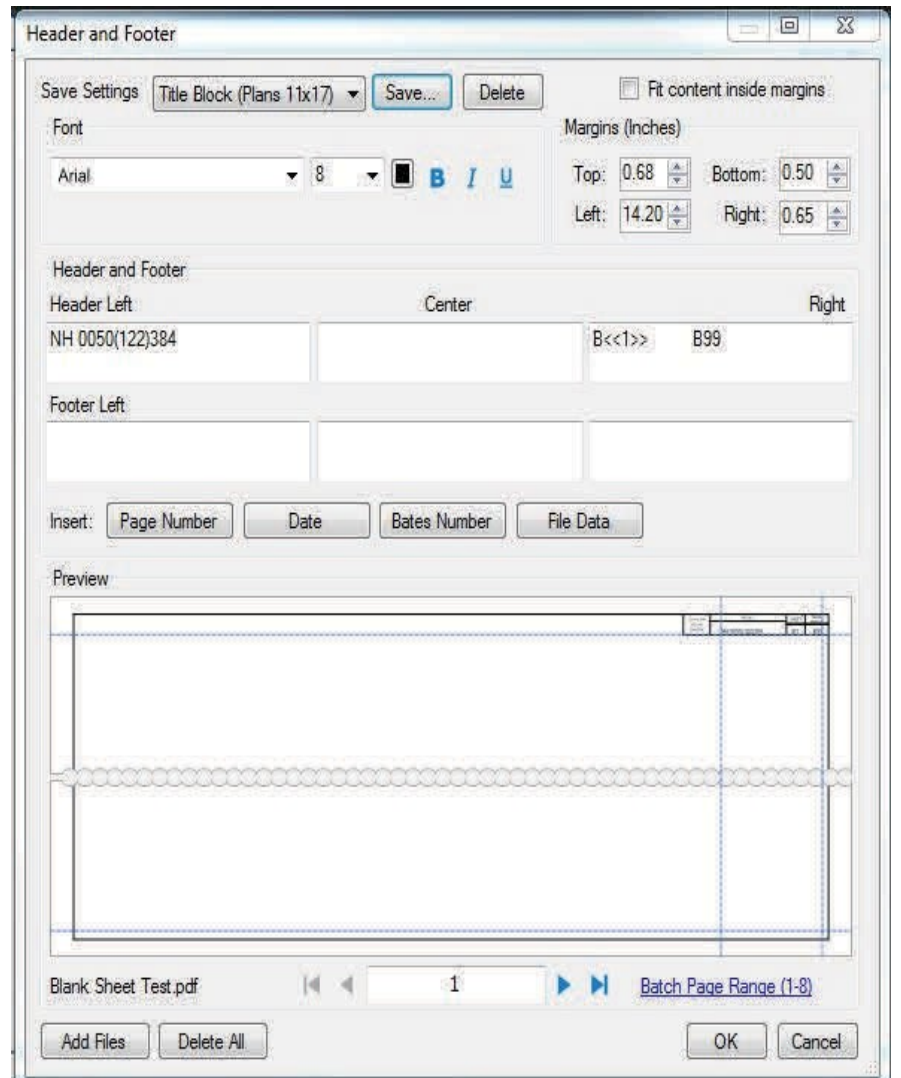
2. Under “Right Header Text” Change the first “B” to the appropriate section. (DO NOT change <<1>>).
Change the second “B” and “99” to the appropriate section and the total number of pages.
3. Project Number
Under “Left Header Text” fill in Project Number.
4. Click on Batch Page Range X-X. The Batch: Header & Footer dialogue box opens. See next page.

Note: For SDDOT Cross Section Portrait Sheets and Cross Section Landscape Sheets specific requirements refer to page 64.





Click **OK**



Click **OK**

For Cross Section Portrait sheets: Refer to Page 63 for general instructions

All pages will need to be rotated so the title block is right side up.

Select “TB Cross Sec Portrait”. Under “Right Footer Text” change the first “X” to the appropriate section. (DO NOT change <<1>>). Change the second “X” and “99” to the appropriate section and the total number of pages.

Optional - Project Number. Under “Left Footer Text” fill in Project Number. Select “ Page Range Options...” and set the range of pages to modify. Adjust “Start Page Number” under “Page Number and Date Format...” for the pages to update.

Select OK.

For Cross Section Landscape sheets: Refer to Page 63 for general instructions

Select “TB Cross Sec Landscape”. Under “Right Header Text” change the first “X” to the appropriate section. (DO NOT change <<1>>). Change the second “X” and “99” to the appropriate section and the total number of pages.

Optional - Project Number. Under “Left Header Text” fill in Project Number. Select “ Page Range Options...” and set the range of pages to modify. Select “Page Number and Date Format...” and modify “Start Page Number” to define the starting page number.

Select OK.

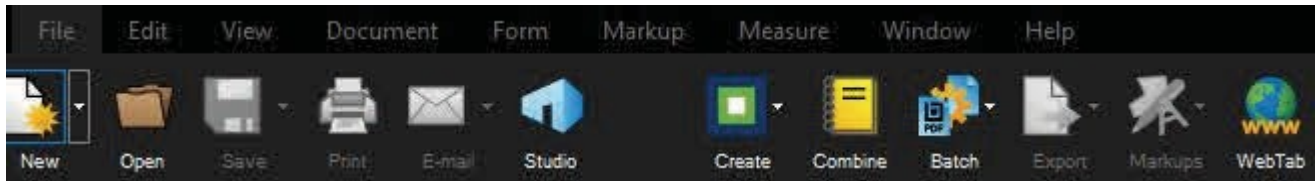
Note:

This applies page numbers and total pages to all the pages in the PDF (unless you specify something different). If all the pages don't have the title block in exactly the same location those pages will need to be adjusted. One solution is to fill in the numbers in the source software. Or you can update the Header & Footer and apply it only to the pages selected in the Page Range Options. You will also want to adjust the “Start Page Number”.

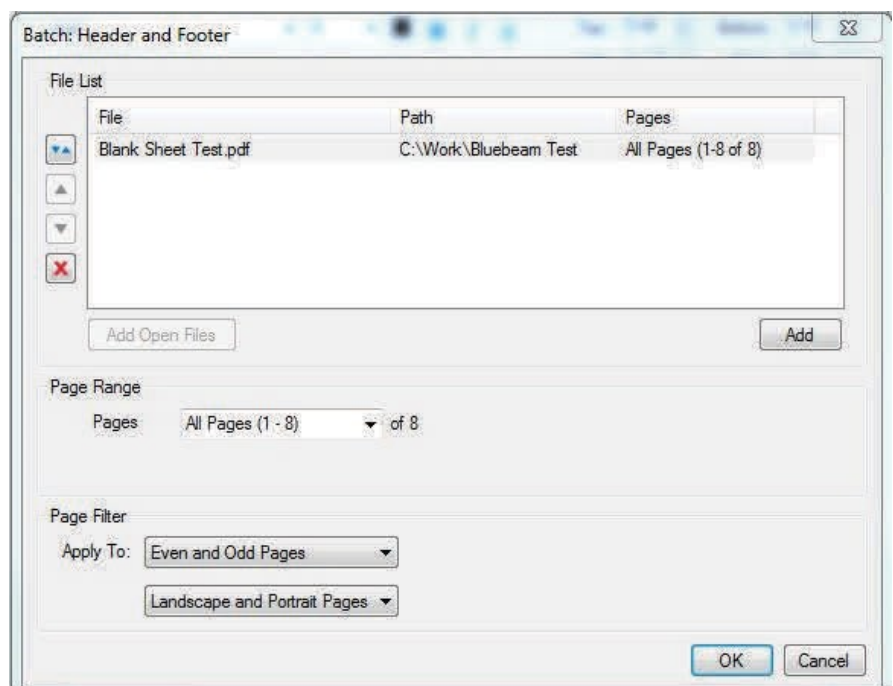
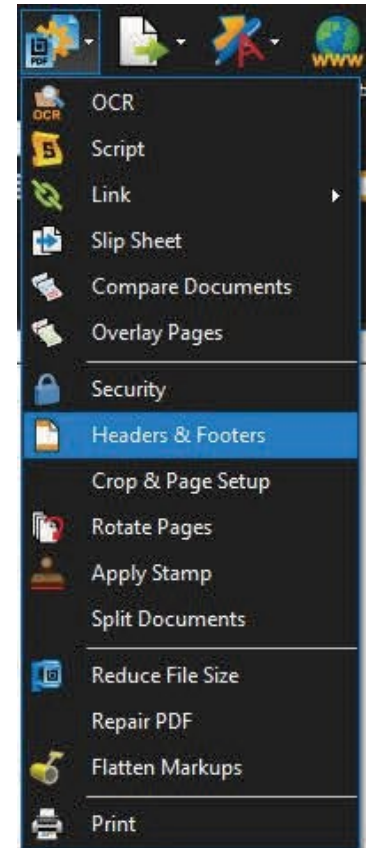
Note:

- The “Right Header Text” is right justified text and controlled by the “Right Margin” setting.
- The “Left Header Text” is left justified text and is controlled by the “Left Margin” setting.
- To move the Project Number left or right adjust the Left Margin.
- To move Total Page Number left or right adjust the Right Margin.
- To move Page Number left or right adjust the number of spaces after <<1>>.

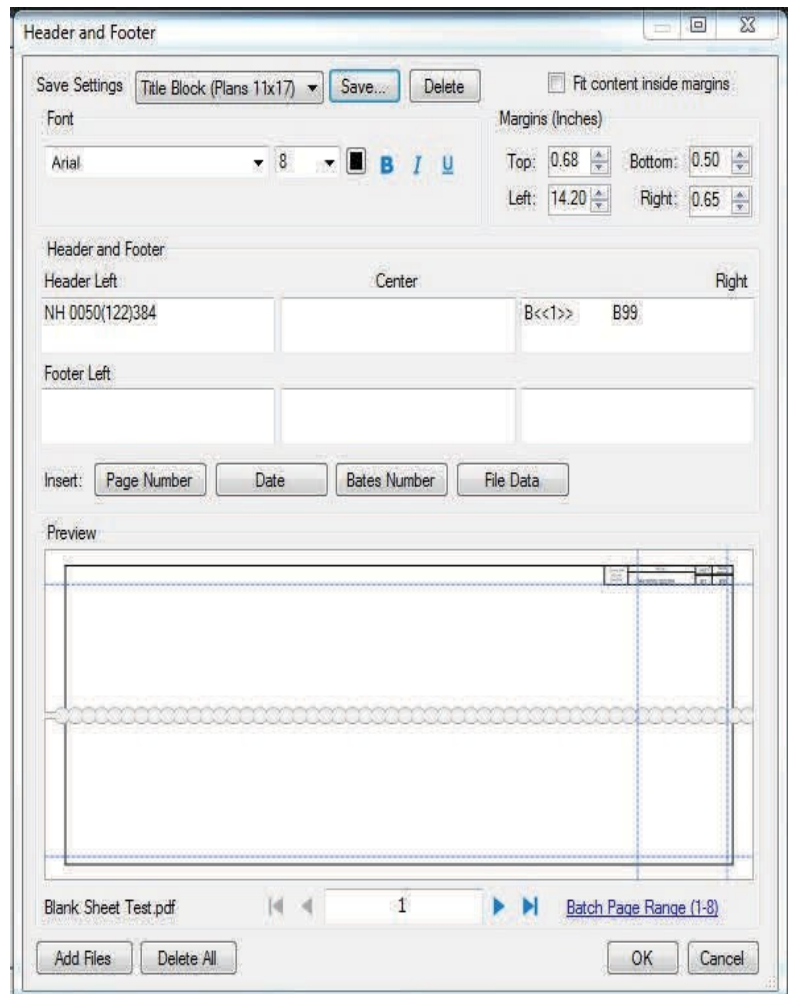
Numbering PDF Pages Using Batch Processing - Headers and Footers



1. Go to **File > Batch > Headers & Footers**. The **Batch: Header and Footer** dialog box appears
2. Add documents using one (or both) of the following methods:
 - o To add all PDFs that are currently open in Revu, click **Add Open Files**.
 - o To select files from a local or network drive, click **Add**.
3. Click **OK**. The **Header and Footer** dialog box appears. See next page.



4. Use a previously configured header/footer template, select the Title Block (Plans 11x17) template from the Save Settings list.
5. Under “Right Header Text”
 - Change the first “B” to the appropriate section. (DO NOT change <<1>>).
 - Change the second “B” and “99” to the appropriate section and the total number of pages.
6. Project Number
 - Under “Left Header Text” fill in Project Number.



Batch Removing Headers and Footers

This process describes removing all headers and footers from multiple documents. To remove just a header or a footer or just a part of either, process the PDFs individually as described in Editing Headers and Footers.

To remove all headers and footers from multiple documents:

1. Go to File >  Batch >  Headers & Footers. The Batch: Header and Footer dialog box appears.

2. Add documents using one (or both) of the following methods:

- o To add all PDFs that are currently open in Revu, click Add Open Files.

- o To select files from a local or network drive, click Add.

3. To remove headers/footers from specific pages of a PDF, select it, then click the Pages menu and choose from the following:

- o All Pages: Sets the range to all pages.

- o Custom: Sets the range to a custom value. When this option is selected the list becomes a text box. To enter a custom range:

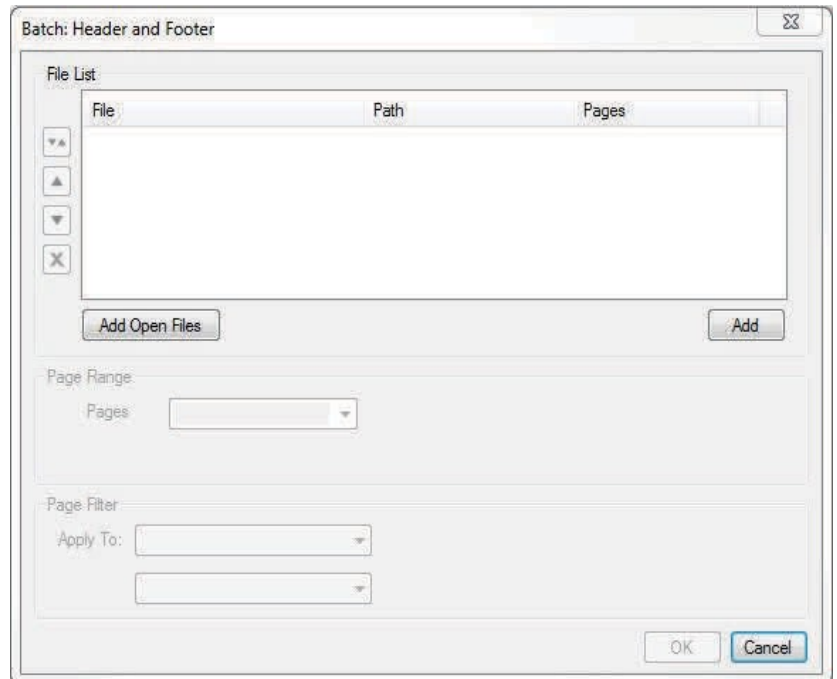
- o Use a dash between page numbers to define those two pages and all pages in between.

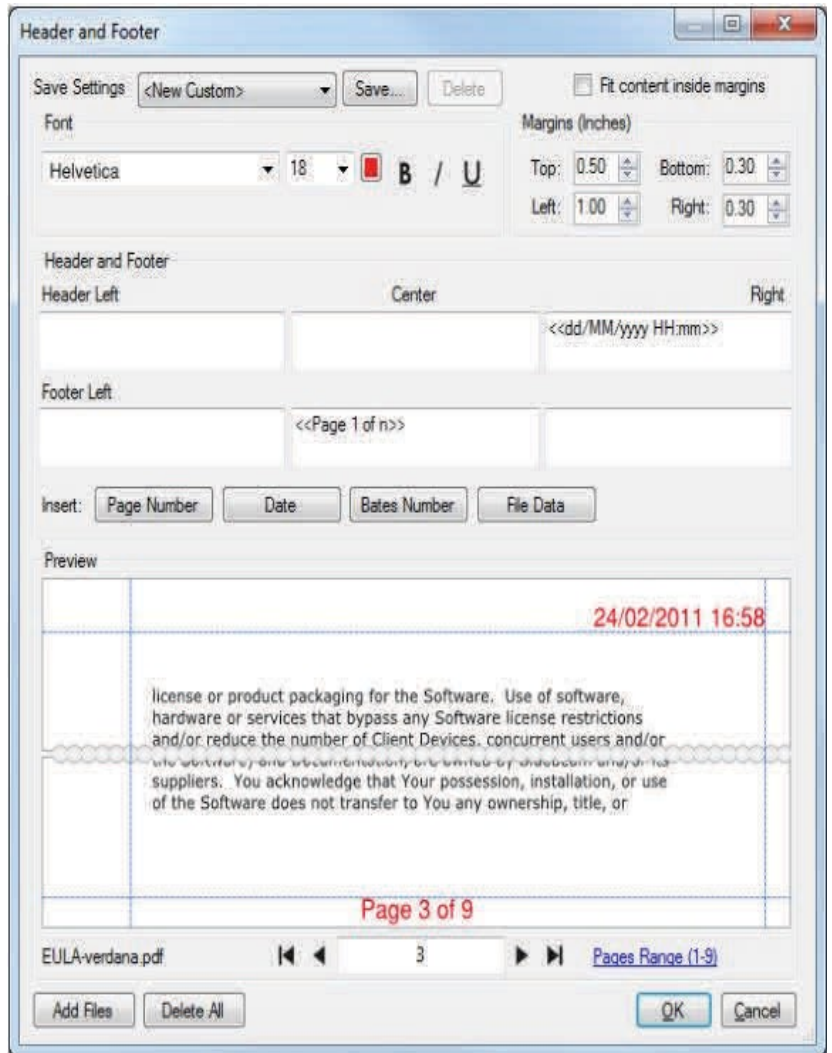
- o Use a comma to define pages that are separated.

For example: 1-3, 5, 9 will include pages 1, 2, 3, 5 and 9.

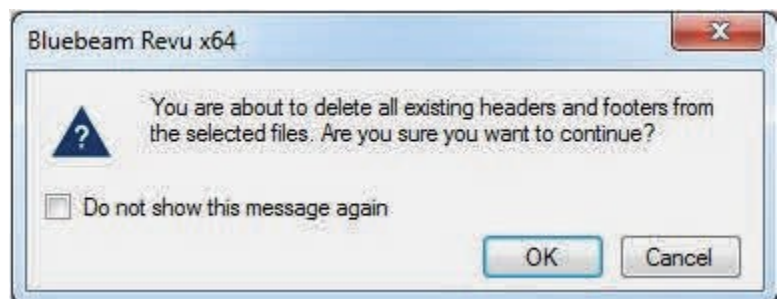
4. From the Apply To menus, select among Even Pages Only, Odd Pages Only or Odd and Even Pages and among Landscape Pages, Portrait Pages or Landscape and Portrait Pages. These selections work in conjunction to form the filter, so any pages to be processed must meet both criteria selected.

5. Click OK. The Header and Footer dialog box appears. See next page.







6. Click **Delete All**. A warning dialog box appears.



7. Click **OK**

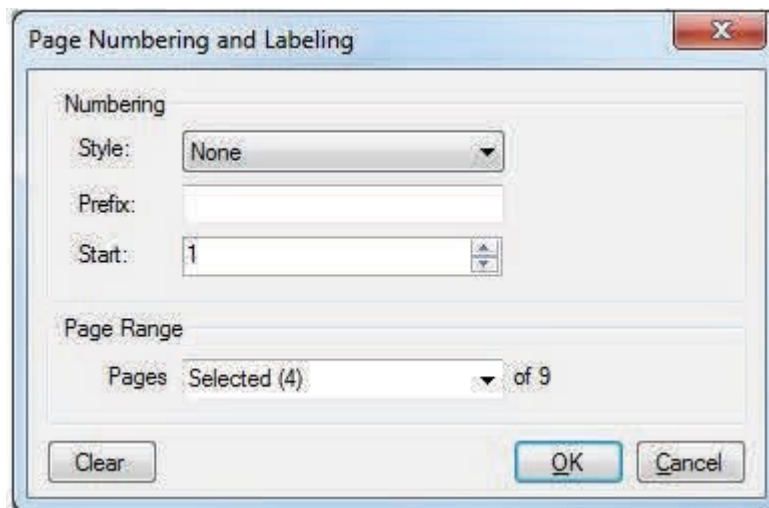
Editing Page Labels and Page Numbering

To change the name of a page label directly

1. Select the **Thumbnails** tab. If it is currently hidden, go to **View** >  **Tabs** >  **Thumbnails** or press ALT+T.
2. Select the thumbnail and press the F2 key. The thumbnail's label becomes editable.
Alternatively, double-click the thumbnail's page label. The thumbnail's label becomes editable.
When in this mode, pressing TAB will move to the next page label while remaining in Edit mode.
Pressing SHIFT+TAB will move to the previous page label.

To edit a page label's numbering style

1. Select the Thumbnails tab. If it is currently hidden, go to View > Tabs > Thumbnails or press ALT+T.
2. Use one of the following methods to open the Page Numbering and Labeling dialog box:
 - o Select the thumbnail and go to Document > Pages > Number Pages.
 - o Select the thumbnail and go to Options > Number Pages.
 - o Right-click a thumbnail and select Number Pages.



3. Set or change any of the following options, as desired:

- Style: Select a numeral style for the page label.
- Prefix: Enter a value (for example, "Page ") that will precede the page label's numeral.
 - To insert a space between the Prefix and the numeral, add a blank space at the end of the Prefix.
- Start: Sets the starting numeral.
- Page Range: Determines which pages will be affected by the settings. Select one of the following:
 - All Pages: Sets the range to all pages.
 - Current: Sets the range to the current page only. The current page number will appear in parentheses, for example, Current (2) if page 2 is the current page.
 - Selected: Sets the range to the current selection. This option only appears if pages were selected prior to invoking the command.
 - Custom: Sets the range to a custom value. When this option is selected the list becomes a text box. To enter a custom range:
 - Use a dash between page numbers to define those two pages and all pages in between.
 - Use a comma to define pages that are separated.
 - For example: 1-3, 5, 9 will include pages 1, 2, 3, 5 and 9.

4. Click OK.

To apply a text only label

Follow the procedure outlined in To edit a page label's numbering style above and set the following options on the Page Numbering and Labeling dialog box:

Style = None.

Prefix = desired text label.

To remove page labels

Follow the procedure outlined in To edit a page label's numbering style above and set the following options on the Page Numbering and Labeling dialog box:

Style = None.

Prefix = blank.

Creating Page Labels from Page Regions

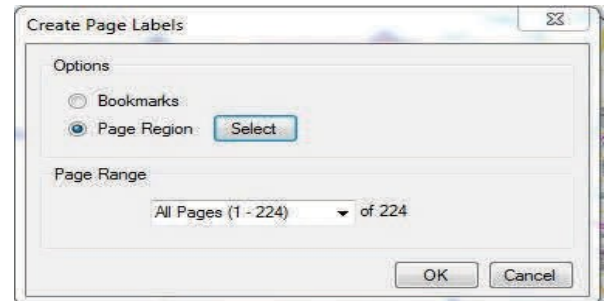
1. From the **Thumbnails** toolbar, click  **Create Page Label**. The **Create Page Labels** dialog box opens.

2. Select **Page Region**.



3. Click **Select**. The **Create Page Labels** dialog box disappears, replaced with a crosshair cursor.

4. Click and drag to define a region on the PDF. Generally speaking, the data in this region should be consistent across any PDFs being labeled. When the region has been defined, the **AutoMark** dialog box opens.



5. To add another region, click **Add**. The **AutoMark** dialog box disappears, replaced with a crosshair cursor again.

Click and drag to define another region. The **AutoMark** dialog box reappears with the new region added to the **Selection** field. There is no limit to the number of regions that can be added.

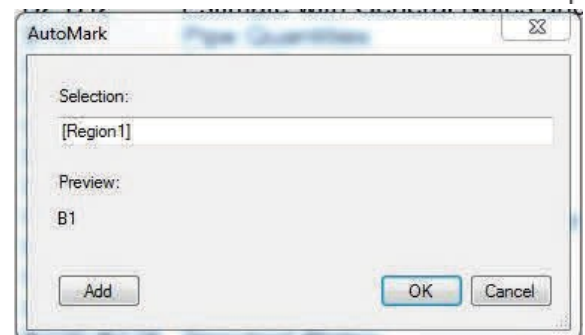
- o Review the sample page label as shown under **Preview**. If desired, click in the Selection field to add text before, after or between **[Regions]**.

6. When all regions have been defined, click **OK**. The **AutoMark** dialog box closes, replaced by the **Create Page Labels** dialog box.

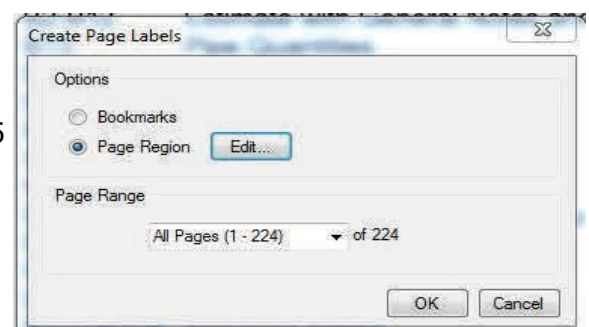
SHEET	TOTAL SHEETS
B1	B128

7. Select a **Page Range**:

- o **All Pages**: Sets the range to all pages.
- o **Current**: Sets the range to the current page only. The current page number will appear in parentheses, for example, Current (2) if page 2 is the current page.
- o **Selected**: Sets the range to the current selection. This option only appears if pages were selected prior to invoking the command.
- o **Custom**: Sets the range to a custom value. When this option is selected the list becomes a text box. To enter a custom range:
 - o Use a dash between page numbers to define those two pages and all pages in between.
 - o Use a comma to define pages that are separated.
 For example: 1-3, 5, 9 will include pages 1, 2, 3, 5 and 9.



Click **OK**.



Introduction to OCR in Revu

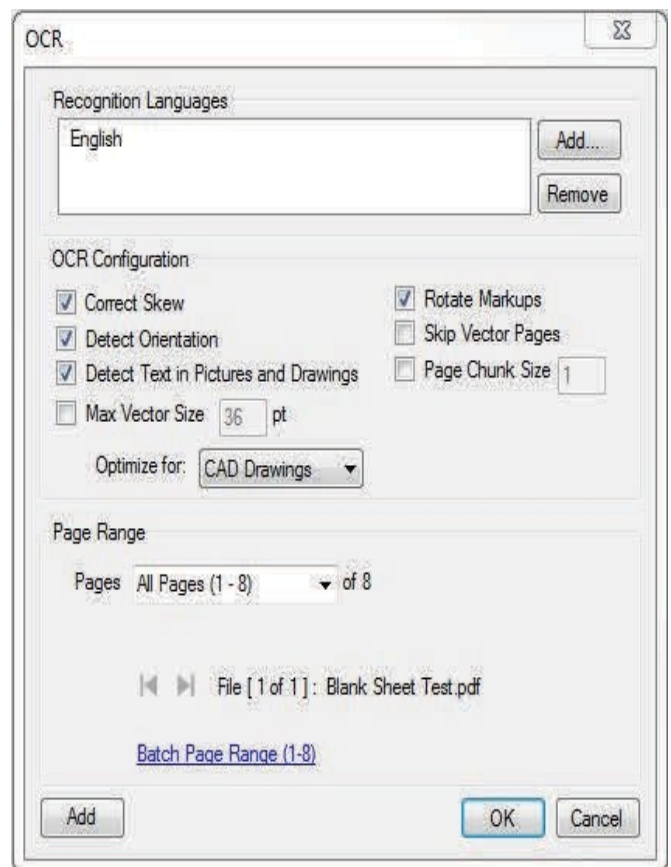
Optical Character Recognition (OCR), or text recognition, translates the text in scanned PDF documents into searchable text. Once OCR has been run on a scanned PDF, you can search the document for specific text, add bookmarks and hyperlinks on text, copy text to another document or use one of Revu's advanced text editing tools.

Note: Do Not run OCR on all SDDOT plan sheets. Run OCR only on pages with images. Some pages that may need OCR are Note Sheets, Quantity Sheets and Data Sheets. These requirements may change as we test the new OCR in the 2016 version of Bluebeam Revu

Running OCR on a Single Document



1. Open the document on which OCR is to be run.
2. From the **Command** bar, go to **Document** > **OCR** or use the keyboard shortcut **Ctrl+Shift+O**. The **OCR** dialog box opens.
3. Set the OCR Configuration options, as desired:
 - **Correct Skew**: Enable to correct angular deviations in scanned documents.
 - **Detect Orientation**: Enable to detect the page orientation (90, 180 and 270 degrees) of each page and correct it if needed.
 - **Detect Text in Pictures and Drawings**: Enable to detect text in graphics.
 - **Rotate Markups**: If **Correct Skew** is enabled, use this option to also adjust existing markups so they line up with skew-corrected text or images.
 - **Skip Vector Pages**: Enable to skip processing of pages with vector content.
 - **Page Chunk Size**: Use to determine the maximum number of pages sent to the OCR engine at one time. Increasing chunk size can increase speed, but will also consume more of the computer's resources.



- Max Vector Size: Use to set the maximum vector size that will be analyzed during the OCR process; any vectors larger than this setting will be discarded in pre-processing. Decreasing this value can increase speed, but might also cause larger text (for example, larger fonts) to be inadvertently ignored.
- Optimize for: Use to optimize the OCR process for the selected document type. The CAD Drawing setting tends to ignore text formatting, for example, while the Text Document setting does not.

4. To select a Page Range, click the Pages menu and select from the following:

- All Pages: Sets the range to all pages.
- Current: Sets the range to the current page only. The current page number will appear in parentheses, for example, Current (2) if page 2 is the current page.
- Selected: Sets the range to the current selection. This option only appears if pages were selected prior to invoking the command.
- Custom: Sets the range to a custom value. When this option is selected the list becomes a text box. To enter a custom range:
 - Use a dash between page numbers to define those two pages and all pages in between.
 - Use a comma to define pages that are separated.
 - For example: 1-3, 5, 9 will include pages 1, 2, 3, 5 and 9.

6. Click OK to run OCR.

7. Save the Document.

Running OCR on Multiple Documents (Batch)

1. From the Command bar, go to File >  Batch >  OCR. The Batch: OCR dialog box opens.

2. Add documents using one (or both) of the following methods:

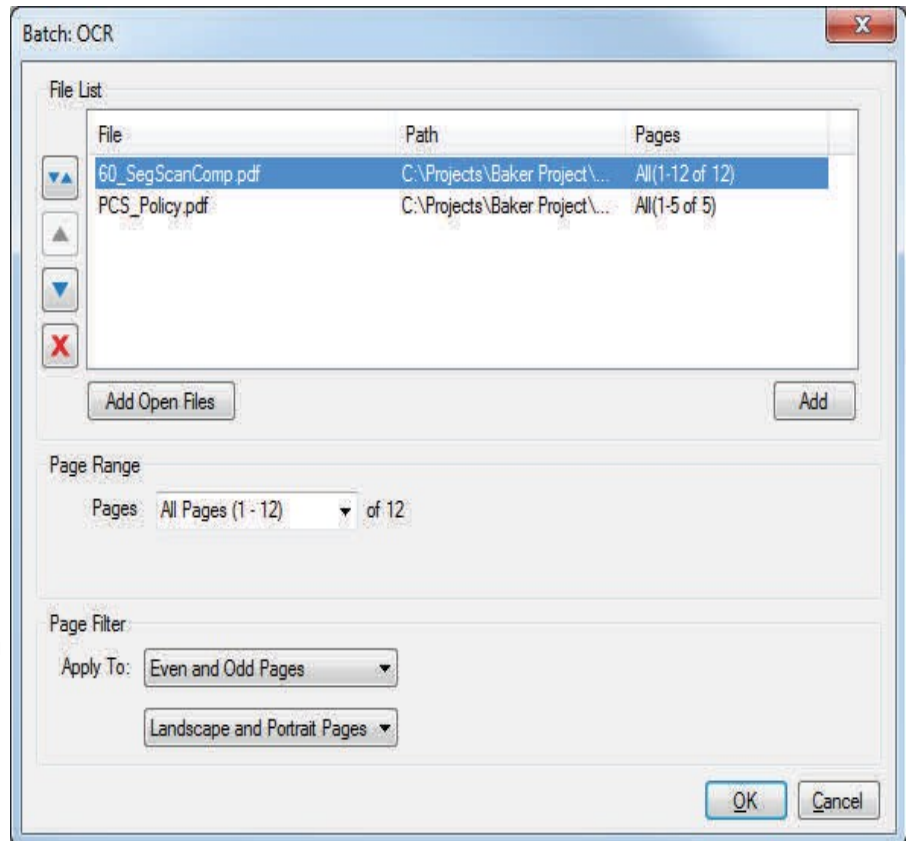
- o Click Add Open Files to add currently open files to the list.
- o Click Add to select files from a local or network drive to the list.

3. To select a Page Range, click the Pages menu and select from the following:

- o All Pages: Sets the range to all pages.
- o Custom: Sets the range to a custom value. When this option is selected the list becomes a text box. To enter a custom range:
 - o Use a dash between page numbers to define those two pages and all pages in between.
 - o Use a comma to define pages that are separated.

For example: 1-3, 5, 9 will include pages 1, 2, 3, 5 and 9.

4. Click the Apply To lists to select among Even Pages Only, Odd Pages Only or Odd and Even Pages and among Landscape Pages, Portrait Pages or Landscape and Portrait Pages.
5. Select the next PDF in the File List and repeat steps 3 and 4 until Page Range and Page Filter options have been set for each PDF.
6. Click OK. The OCR dialog box opens. See settings for single document OCR.
7. Click OK to run OCR



Chapter 4: Studio Session

Studio Session: Create, share and collaborate in the cloud

Studio combines the best of cloud storage and collaboration. Simply upload your PDFs to a Studio session, and invite attendees from around the world to view and add markups to the same PDFs in real-time or on their own time. All session activity is tracked in a record that conveniently links back to the PDFs. You can even create reports to archive or share with your team.

Host a Studio Session



The session **host** is the person who starts and controls the Studio Session. The host starts the session, adds the documents, invites the **attendees** and defines the security and permissions. The host also manages the Session. Documents can be added or removed and new attendees invited. When everyone has contributed, the host also creates the report, finishes the session and saves the files.

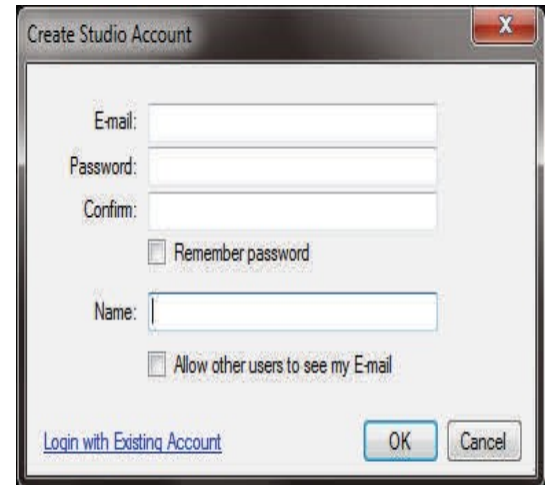
However, the host does not need to be in the session for other people to join the session and work. People work at different times and have different times available to them for different types of work. Once a session is started, anyone who has been invited can login to the session and work.

The features available to attendees when attending a session have already been described. This section addresses the features that are unique to the Host.

Start a Session

To start a new Session:

- In the Studio tab button bar, click  **Start** >  **New Session**.
- The **Create Studio Account** dialog displays if you have not already created an account. If you have an existing account you can log in with your existing account.
- The **Start Studio Session** dialog displays.



The 'Create Studio Account' dialog box contains the following fields and options:

- E-mail: [Text Field]
- Password: [Text Field]
- Confirm: [Text Field]
- Remember password
- Name: [Text Field]
- Allow other users to see my E-mail
- [Login with Existing Account](#)
- OK [Button]
- Cancel [Button]

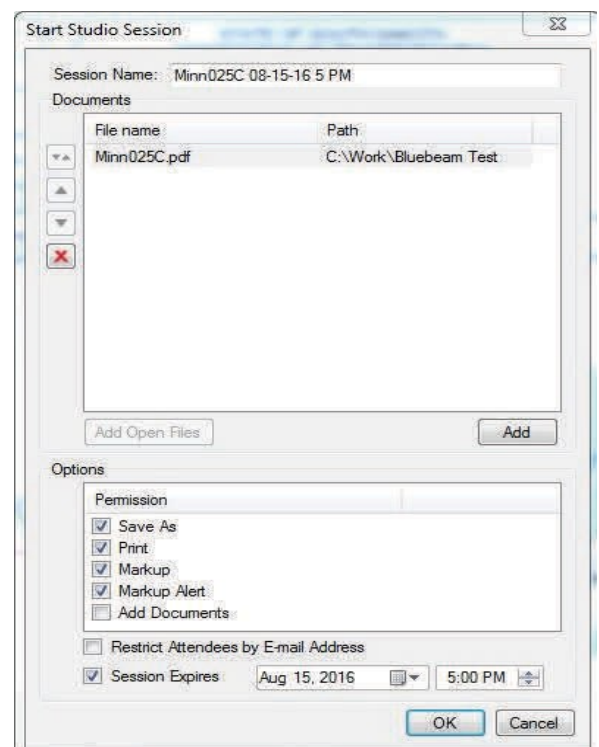
- **Session Name: Use CountyPCN# Review Due Date Time** Ex. Minn025C 08-15-16 5 PM
The date and time allows the reviewers to see the due date and time in the email without opening the plan review. The Date and Time in the name also allows the reviewers to know at a glance in the Studio Session List when the review comments are due especially for the reviewers that have multiple Session Reviews to keep track of.
- Click **Add** to select PDF documents that you want to be part of the session, or click **Add Open Files** to add the files that are already open. **For Plan Reviews use a combined PDF file of all Sections including the Cover Letter, Check List and any Special Provisions available. Separate documents can be added in the Session Review for the Utility Spec./Plans or Building Spec./Plans. Example of a Cover Letter can be found here:**
<U:\rd\Bluebeam\Session Cover Letter>

Options:

Select the Permissions. You can allow or disallow attendees to Save, Print or Markup the PDF documents that are in the session and include the ability to Add Documents to the session. **For Plan Reviews Check Save As, Print, Markup and Markup Alert.**

Check **Restrict Attendees by E-mail Address** if you want to restrict access to the session by e-mail address.

IMPORTANT - In Plan Reviews leave The Restrict Attendees unchecked to allow users that have been forwarded the e-mail invite to join the session.







The 'Start Studio Session' dialog box contains the following fields and options:

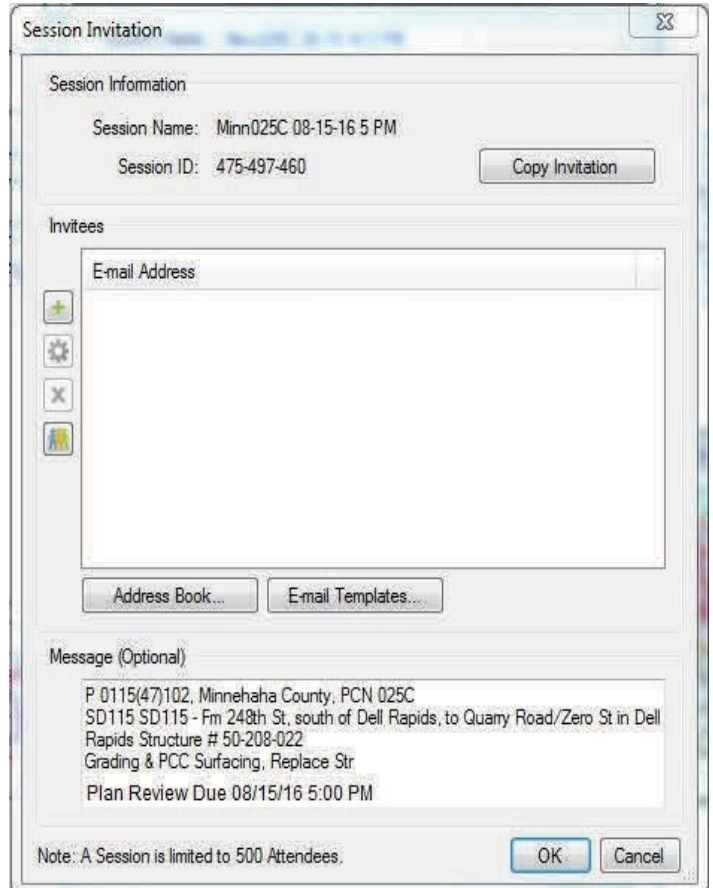
- Session Name: Minn025C 08-15-16 5 PM
- Documents:
 - File name: Minn025C.pdf
 - Path: C:\Work\Bluebeam Test
- Buttons: Add Open Files, Add
- Options:
 - Permission:
 - Save As
 - Print
 - Markup
 - Markup Alert
 - Add Documents
 - Restrict Attendees by E-mail Address
 - Session Expires: Aug 15, 2016 5:00 PM
- Buttons: OK, Cancel

- Check **Session Expires** if you want to have an end date for the Session. **For Plan Reviews always check this to have an end date for the review and modify the time (Recommend 5:00 PM).**
- Click **OK** to save the settings and upload the files. The **Session Invitation** dialog displays.
- The **Session Information** is listed at the top of the dialog. Click the **Copy Invitation** button to copy the session Invitation information to paste it into another program, such as an e-mail message, IM or document.
- The **Invitees** section allows you to add e-mail addresses so you can send the information needed to join the session. This list of e-mail addresses also defines who is allowed to access the session if **Restrict Attendees by E-mail Address** was selected.

Click on **Address Book** to bring up the Outlook email list. Add the people that are needed for the Plan Review including FHWA (If project is an oversight project), Local Governments, Consultants and SDDOT Designers.

- Click  to add a new email address. Type the **E-mail** address and click **OK**.
- Select an email and click  to change an email address.
- Click  to remove an email from the list.
- Click  to add all members of an existing Group.
- Type a **Message**. **For a Plan Review always include the Project Description in this Message Area (Copy and Paste from Letter). Also include that it is a Plan Review and the due date and time. This Message is included in the email invitation that is sent out.**
- Click **OK** when you are done and the email invitations will be sent from the Studio server.

Note: the email invite can be forwarded to any person that needs to take part in the review. They will need the free version of Bluebeam Vu to do the review.



- **Address Book** will open the address book of your e-mail program so you can select people directly from your existing e-mail contacts. **This will bring up the Outlook email list.**
- **E-mail Templates** allows you create or access templates defined in Revu.

Note: The e-mail messages are sent from the Studio server.

Manage a Session


Documents, Attendees and Permissions can be added or removed during a session.

Attendee Access

Changes to the Attendees can be made during a session. Invitations can be sent to new Attendees. New Attendees can be granted access or Attendees can be denied access.



Add Attendees to a Session

(Invite Attendee)

- Click  **Invite** at the top of the Attendees section.
- The **Session Invitation** dialog displays.

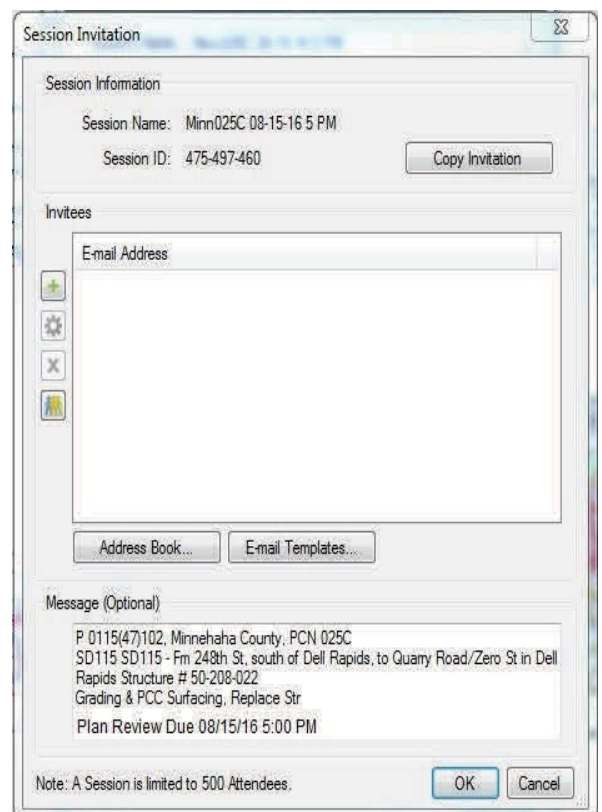
Allow or Deny an Attendee

There are three ways to deny an Attendee access to the session:


- Right-click on the name in the Attendees list and click **Deny**.
- or -
- Click  **Attendee Access** in the Attendees list. The Attendee Access dialog will display.
- Select the name in the list and click **Deny**.
- or -
- Click  **Session Settings**, then click the **Attendees** tab.
- Select the name in the list and click **Deny**.

An Attendee can be allowed back into the session after they have been denied access. Follow any of the steps above and click **Allow**.


Note: In SDDOT Plan Reviews the Allow or Deny option will not be used.

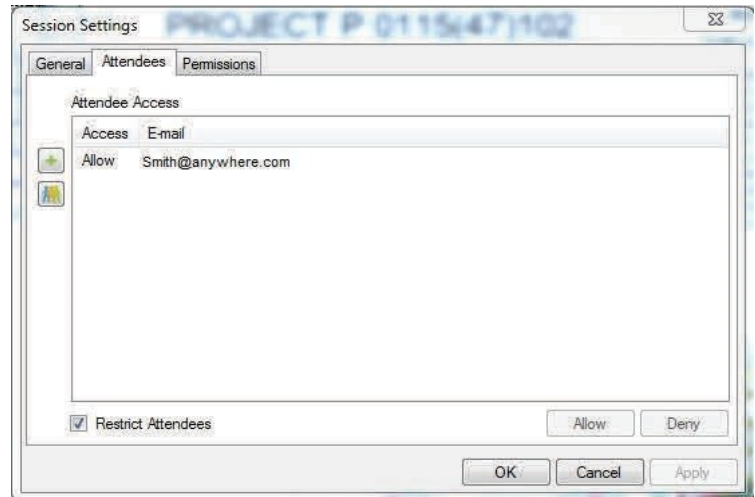


Restrict Attendees by E-mail Address allows access to only those who appear in the Attendees list in the Attendees tab or Attendee Access dialog.

- Click  Attendee Access in the Attendees list. The **Attendee Access** dialog will display.
- Check **Restrict Attendees by E-mail Address** and click **OK**.

- or -

- Click  **Session Settings**, then click the **Attendees** tab.
- Check **Restrict Attendees by E-mail Address** and click **OK**.




NOTE: Restricting Attendees will not allow forwarding of the plan review email invite.

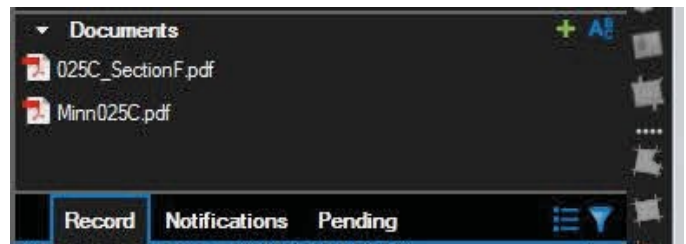
Manage Documents

Documents are added when a session is started, but the Host can also add, delete and replace documents during the session.

See the Start a Session topic to add the documents when you start the session.

Add a File:

- Click  **Add File** in the Documents list.
- Select the file or files and click **Open**.



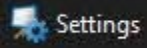
If a Section of the plans were not included in the Combined PDF it can be added to the Review Session. There will be a record of when the Section of plans was added to the review Session. **To notify the reviewers that the additional Section was added to the review an email shall be sent out to all reviewers using Outlook.**

Delete a File: Only the Host can delete a Session file. Do not delete a Session Review Document unless absolutely necessary - All Comments will be lost.

- Right-click on the name in the Document section and then click **Delete**.

Responses To Review Comments and Revisions

When the review period ends review comments can no longer be published to the review Session. The Project Manager will need to notify the Consultants/designers from each section that the review has ended and responses to the comments and revisions are to be completed by a certain date. All review comment responses shall be shown in the review Session. In order for the Consultants/designers to respond to the comments on the review Session the review deadline will need to be extended by the Project Manager (Host).

Click on  in the Studio Session. A Session Setting dialogue box will appear. Uncheck the Expiration date to allow responses to the review comments. The Project Manager will set the Review Responses/Revisions due date in an email as shown on page 82. Note: the reason that the Expiration date is not reset is because all of the attendees of the review will receive automatic emails that their comments are due by the new date.

Next the Project Manager is required to set the Permissions on the review so that late review comments are not received.

1. In the Session Settings click on Permissions.

In the Permissions window click on the Attendees applied permissions “Markup” a arrow will appear then select “Deny”.

The Attendees should have the following permissions during the Review Response/ Revisions period:

Save As - Allow

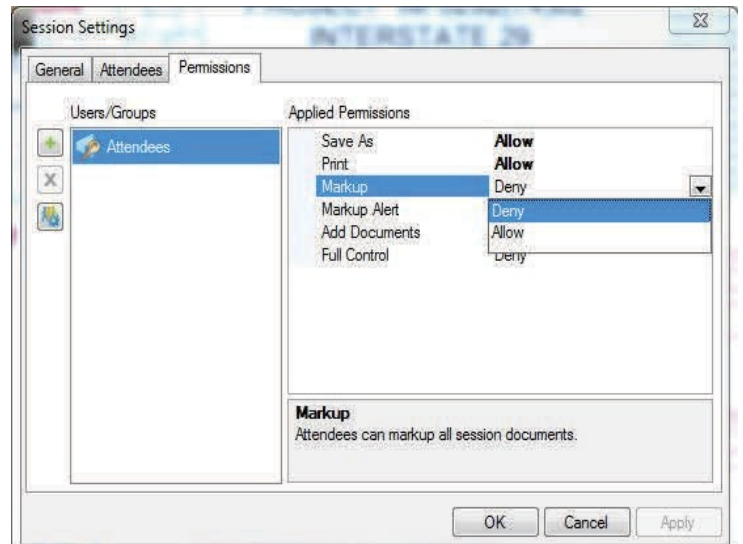
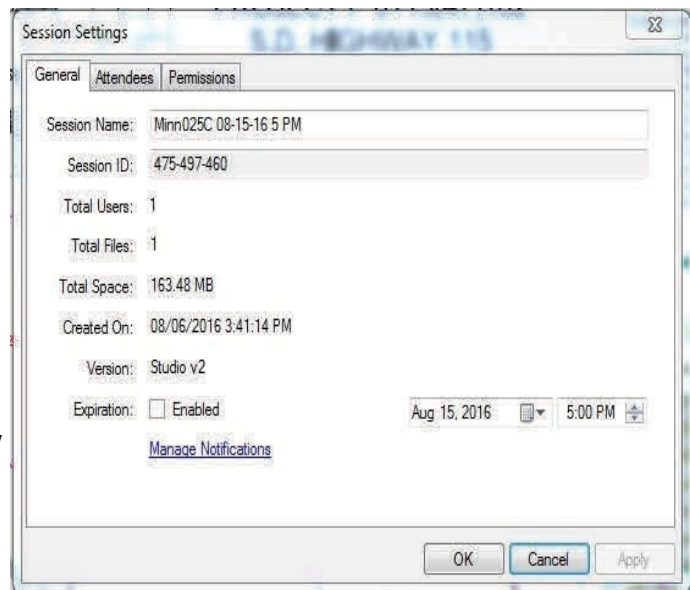
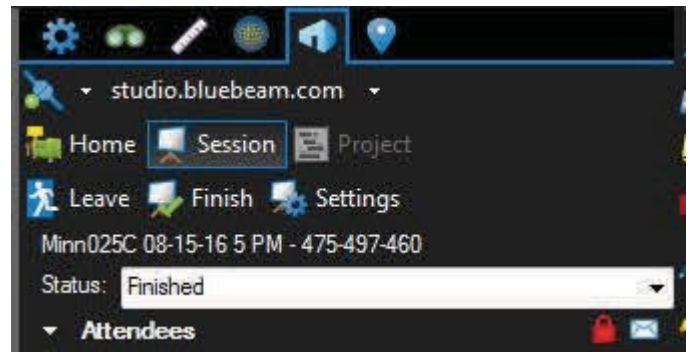
Print - Allow


Markup - Deny

Markup Alert - Allow

Add Documents - Deny

Full Control - Deny



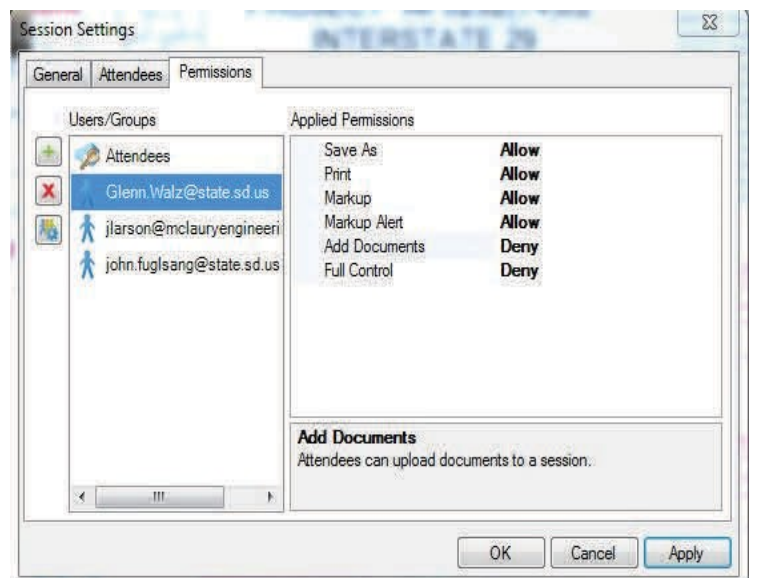
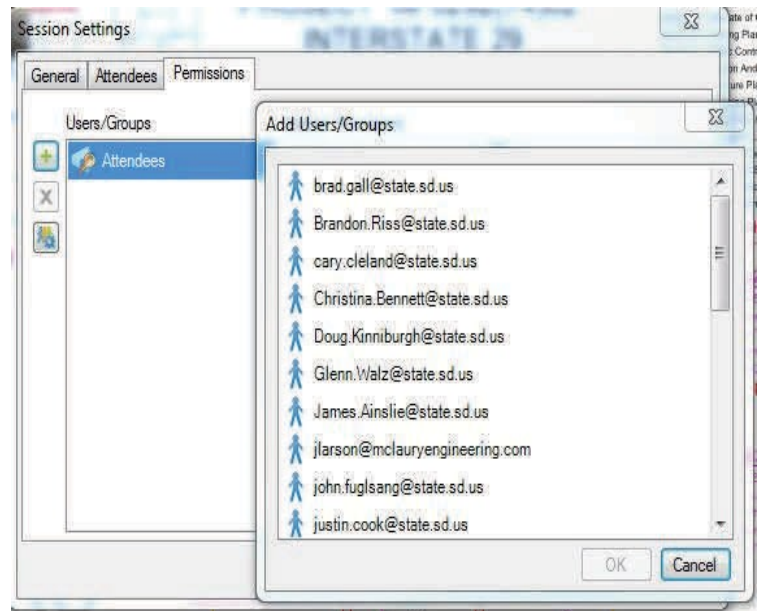
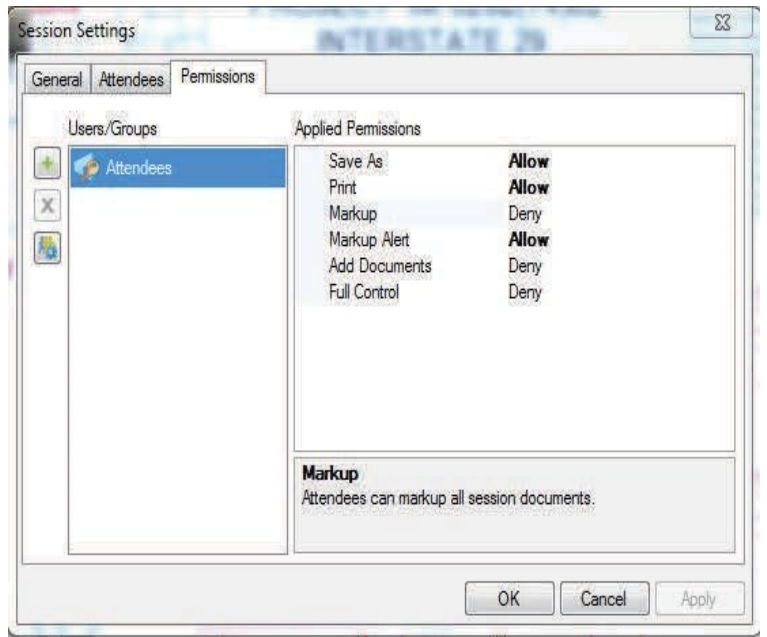
2. The Project Manager is required to give the Consultants/Designers permissions to make the responses to the comments. Click on  a list of the names of the review attendees will appear. Since the Consultants/Designers were part of the review their names should be on this list. Using the Ctrl button on the keyboard and mouse you can select multiple names from the list. Set the permissions for **each** Consultant/Designer to the following:

- Save As - Allow
- Print - Allow
- Markup - Allow
- Markup Alert - Allow
- Add Documents - Deny
- Full Control - Deny

Click **OK**


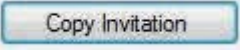
With the Permissions set for the Attendees/Reviewers they will now be able to view the plans if they receive review comment rejection notices but will not be able to make any changes or additional comments. Only the Consultants/Designers will be able to set the status and add their responses to the comments.

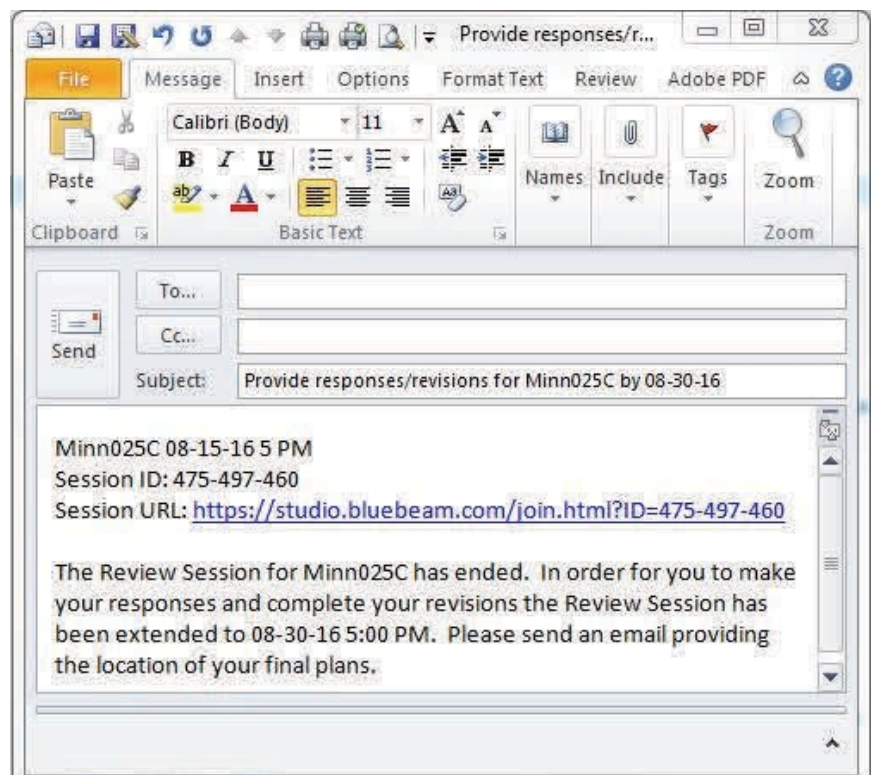
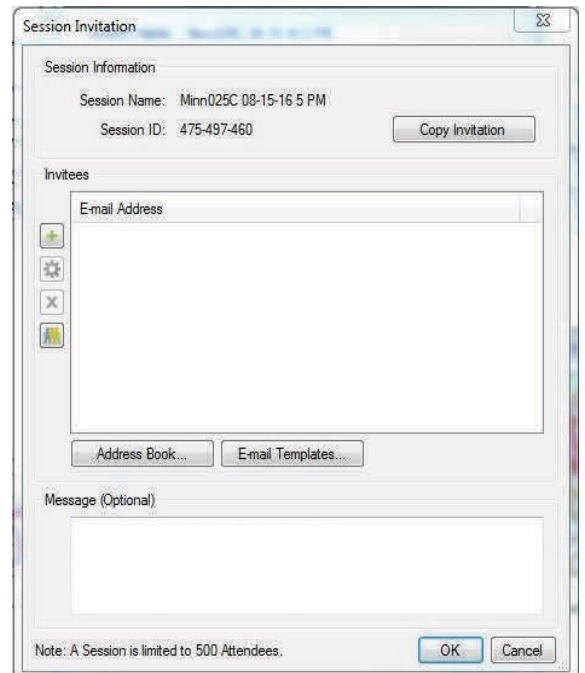
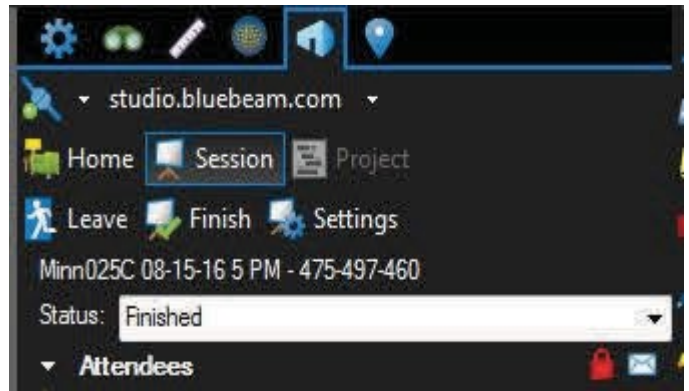
Note: If Reviewers want to contest the rejected comments they can send the Consultant/Designer that rejected the comment an email by right mouse button clicking on the Consultant/Designer name in the attendee list (upper right corner of the screen) then select E-mail. The Project Manager shall be included in the email.



An email shall be sent out to all Consultants/designers of the plans to notify them that the responses/revisions are needed by a required date.

To create the email follow these steps:

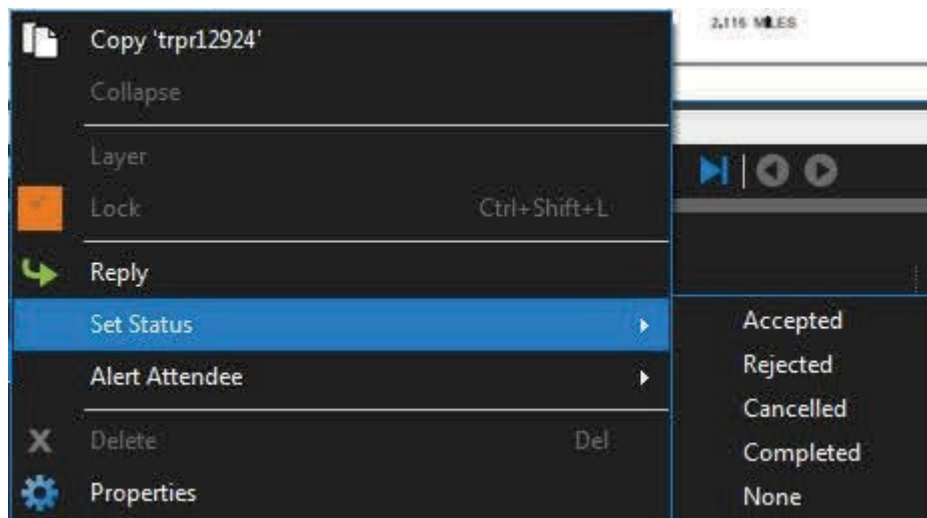
1. Click on  in the Session Attendees. The Session Invitation dialogue box opens.
Click  then open a new email in Outlook.
2. Right Click in the body of the email and paste the link information of the Session into the email.
3. Type in the message “The Review session for CountyPCN# has ended. In order for you to make your responses and complete your revisions the Review Session has been extended to “Date” “Time”. Please send and email providing the location of your final plans.
4. Type in the Subject line “Provide responses/revisions for CountyPCN# by “Date”.



Responses To Review Comments and Revisions Continued

Statuses are useful for keeping track of comments and letting review participants know how you are going to handle the comments. Each Consultant/designer that are responsible for responding to the comment shall set the status of their part of the comment. The review status appears in the Markup List along with the name of the designer setting the status. If more than one designer sets the review status for the comment, both names and review statuses appear in the comment.

Select the comment in the comments list and right-click to show the options menu. Then choose an option from the Set Status menu. If the designer has complied with the changes requested by the comment the option would be "Completed". The Status "Completed" can be both the Status and the Reply when the comment is totally complied with. If the designer has not complied with the changes requested by the comments the option would be "Rejected". If the comment is rejected then the Consultant/designer shall explain why it was rejected by Replying to the Comment. With a Filter of the comments for the word "Rejected" the Project Managers and reviewers can see the comments not complied with.



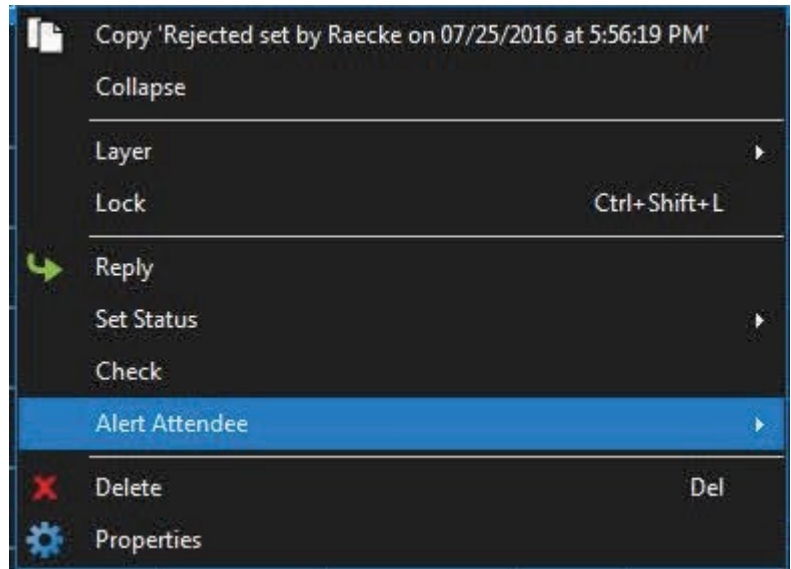
Any Consultant/Designer that rejects a comment shall Alert the person that made the review comment and the Project Manager with their Reply to notify the reviewer. The Project Manager shall confirm that all comments have been given a status and if the comment has been rejected an Alert has been sent to the reviewer. All Alerts are recorded and will become a part of the Session Report.

Rejecting comments, Replying to the Rejected Comments and Alerting the Reviewers that made the comments

In the Markup List if you set the Status of a comment to “Rejected” the Consultant/Designer shall first reply to the rejected comments by right clicking on the comments and giving the reasons for the rejection. Then the Consultant/Designer shall Alert the Reviewer and Project Manager by selecting both the Rejected Status and the reply in the Markup List and then right clicking on the selected comments.

Then click on Alert Attendee and select the **reviewers name and the Project Manager**.

An email will automatically be sent to the reviewer and Project Manager with a picture of the review comment and the response. Hyperlinks in the email will take the reviewer to the exact location of the comment and response in the plan review.



Markup Alert in Minn025C (614-976-167)

Raecke has alerted you to this **Re Cloud+**:

Subject: Re: Cloud+
Document: Minn025C.pdf
Space:
Comment: A Type II lab is to small for this size of project. Will keep the Type III lab in the plans.

Author: John Smith
Page: Page 9 - B3
Layer:
Status:

Raecke has alerted you to this **Cloud+**:

Subject: Cloud+
Document: Minn025C.pdf
Space:
Comment: Should be a Type II Lab

Author: Brian Raecke
Page: Page 9 - B3
Layer:
Status: Rejected

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.

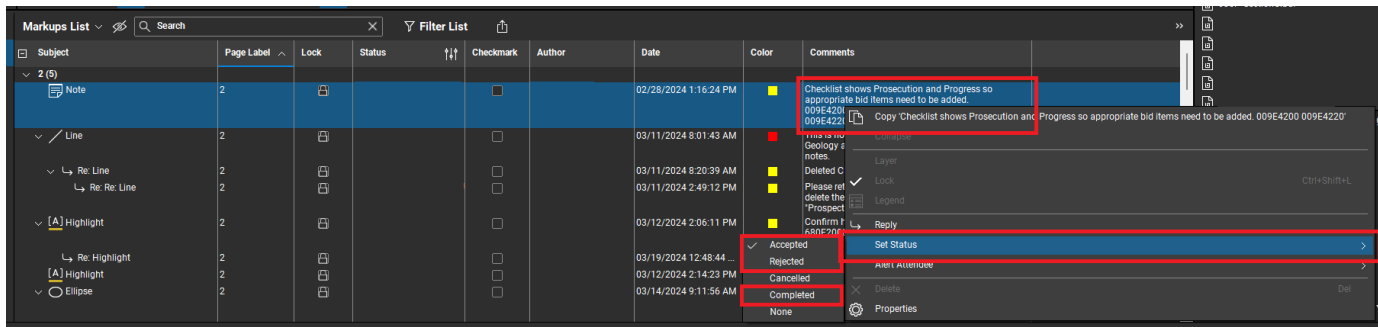
If a comment is marked **“Rejected”** this means the comment was not partially or totally complied with. In this case the consultant/designer must reply to the comment with the reasoning for not complying with the comment (ie. Standard Plate/Note, RD Manual, Spec Book, etc.). When a reply is complete 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:

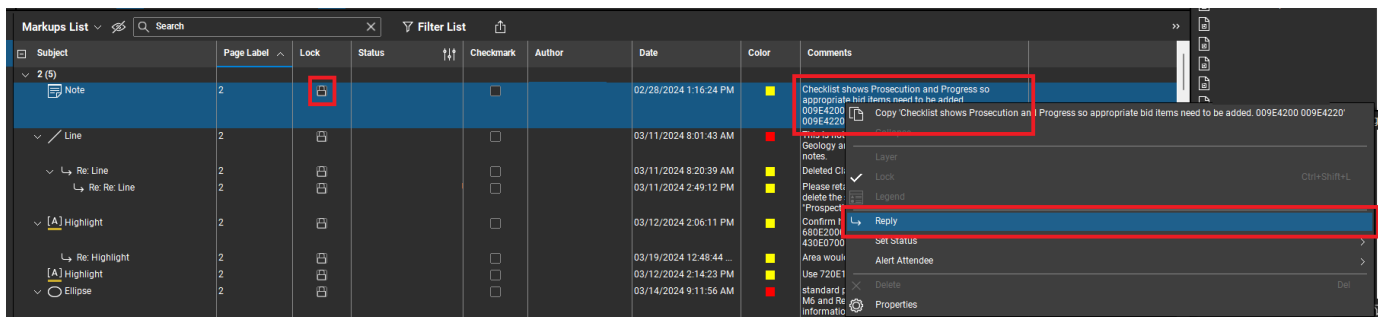
In the Session Markup List > right click on the comment > hover over **“Select Status”** > Select the Status of the comment (ie. Accepted, completed, or rejected)



How to Reply to a comment:

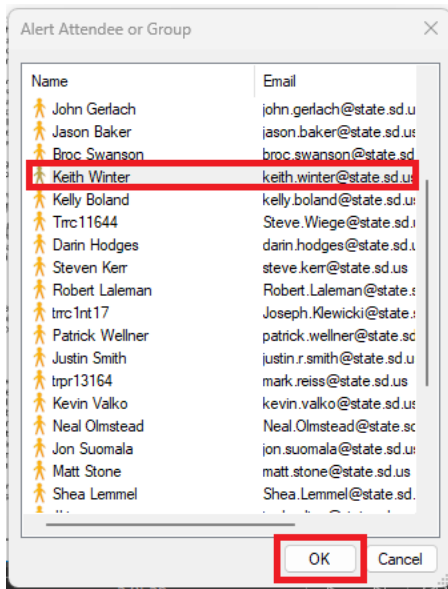
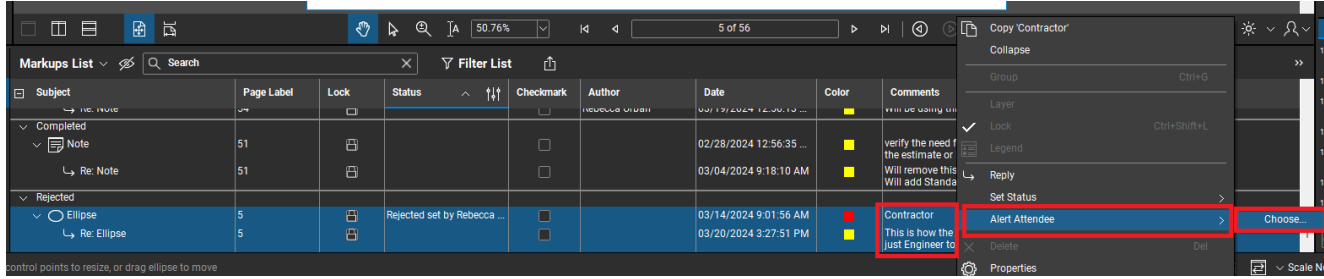
In the Session Markup List > Right Click on the comment > Click **“Reply”**

Once you have completed your reply you should lock it, so it can not be edited or deleted.



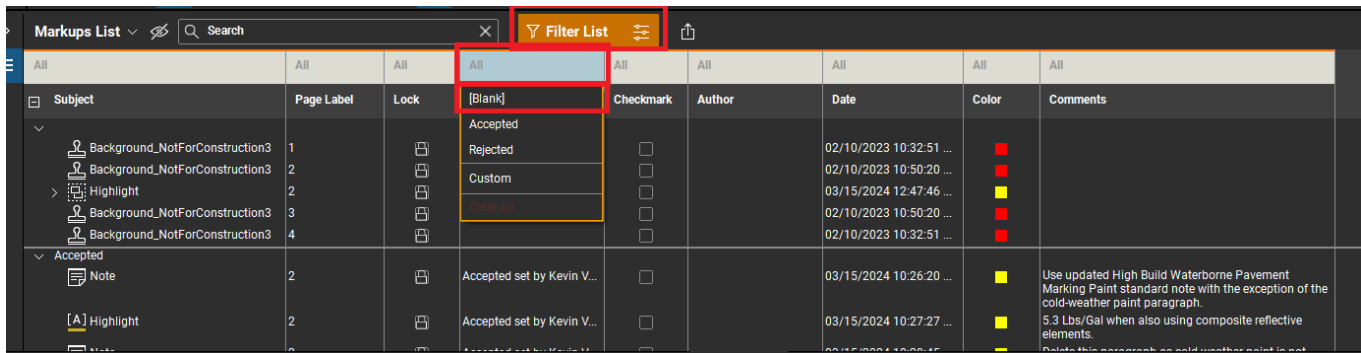
How to Alert an Attendee to a rejected comment and reply:

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”



How to filter comments:

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.)



Completed Review Session Report

Note: Before creating the Session Report the Project Manager shall verify that all Rejected Comments have a corresponding Alert record or e-mail that the reviewer was notified of the rejected comment.

After the plan review and responses are complete the SDDOT Project Manager shall generate a Session Report that has a record of all activity and comments/responses.



Click  **Report** in the Record Section of the Studio tab.

Click **PDF Package Report** which creates a PDF package containing the Record Summary and all of the documents in the session with the review comments and responses.

The PDF Package Report contain hyperlinks in the Record Summary that link to the corresponding markup in the document.

The Title of the Session Report shall be CountyPCN#_archive.

Ex. Minn025C_archive

Notes, If needed, will be included at the top of the Session Report.

Select the Page Size (Letter)

Include the Attendees List

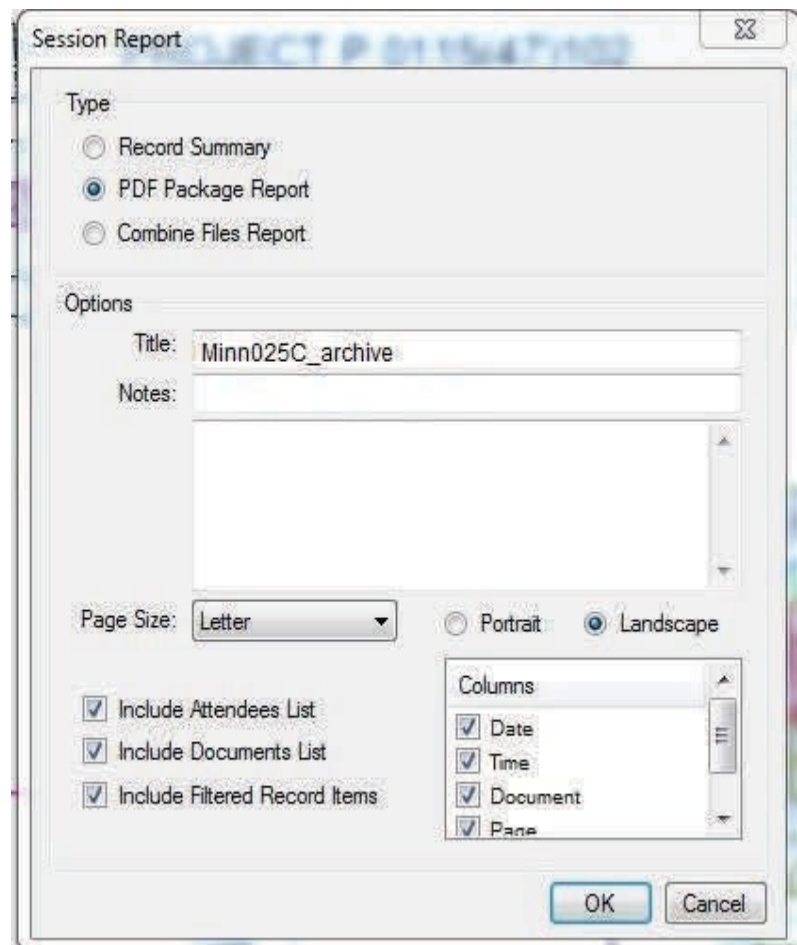
Include the Documents List

Include Filtered Record Items

In the Columns Box Check: Date, Time, Document and Page.

Click OK to create the Session Report.


Place this file in your project folder under Review.

A screenshot of a 'Session Report' dialog box. The window title is 'Session Report'. It has a 'Type' section with three radio buttons: 'Record Summary', 'PDF Package Report' (which is selected), and 'Combine Files Report'. Below this is an 'Options' section with a 'Title' field containing 'Minn025C_archive' and an empty 'Notes' text area. There is a 'Page Size' dropdown menu set to 'Letter' and two radio buttons for 'Portrait' and 'Landscape', with 'Landscape' selected. At the bottom, there are three checked checkboxes: 'Include Attendees List', 'Include Documents List', and 'Include Filtered Record Items'. To the right of these is a 'Columns' list box containing 'Date', 'Time', 'Document', and 'Page', all of which are checked. At the bottom right are 'OK' and 'Cancel' buttons.

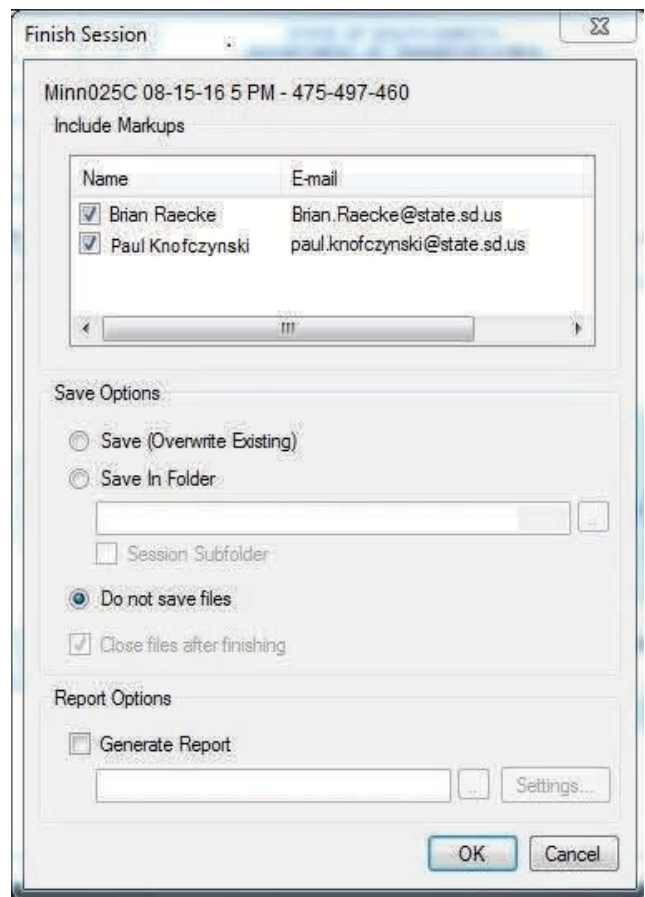
A copy of the PDF Package Report shall be sent to the Consultants for their records using the DOT FTP Site or using the "Projects Folder" in Bluebeam Revu.

Finish a Session

Finish the Session ends the session and removes the documents from the Studio server. The Finish Session dialog lets you create the Session Report and select how you want to save or discard the documents. **Before the Project Manager Finishes the Session for the project they shall verify that the PDF Package Session Report CountPCN#_archive was already created and stored under the Project "Review" folder.** Since the PDF Package Report contains the Session Report and all of the documents with comments and responses that were included in the Plan Review Session the Session files do not need to be saved and the Session does not need to be generated with the Finish Session process.

- Click  **Finish** in the Studio button bar and the **Finish Session** dialog displays.
 - **Include Markups:** All reviewers will be selected by default.
 - **Save Options:**
 - Click **Do not save files:** A Session Report has already been created with all files attached.
 - Uncheck Generate Report. A Session Report has already been created.
 - Click **OK** to Finish the Session.

Note: The Session and all of its files are removed from the Studio server when the session is finished. To gain access to a session that you have already completed, go to <https://studio.bluebeam.com>



Memorandum/Letter to Bid Letting

Since all of the review responses are included in the Session Report a review response letter is not required. A hyperlink to the Session Report of the review PDF in the memorandum/letter is all that is needed. See example of this Memorandum at this link: <U:\ms\Misc\Acrobat Pro X Electronic Review\Memorandum to Bid Letting.doc> **The Project Manager shall send this memorandum to the Bid LeUng Office and copied to the field offices (Region Engineer, Region Operations Engineer, Region Traffic Control Engineer, Region Designer, Area Engineer and Area Engineering Supervisor), all reviewers as listed in the Session Report, FHWA and any Local Government Offices.** This memorandum shall have a link to the Session Report and a link to the final plans that go to Bid Letting. If FHWA or Local Government Offices are involved then a link to those files on the FTP site needs to be included. The field offices and reviewers will then have an opportunity to compare the review responses to the final plans to see if their comments were addressed at an early stage of the bid letting process vs. when they receive their copies of the plans/proposals for construction from Project Development.

Appendix

Electronic PDF Plans

This documentation assumes:

PDF Software Used — Bluebeam Revu Extreme

Naming Convention:

		Addendum	CCO
Section Method	PCN#_Section?.pdf	PCN#_Section? Add#.pdf	PCN#_Section? CCO#.pdf
Non-Section Method	PCN#_Nonsection.pdf	PCN#_NonsectionA dd#.pdf	PCN#_NonsectionC CO#.pdf

Note: Each Addendum or CCO includes only the revised sheet(s) for that Section.

Original File Location: Office's prj folder (Ex. U:\rd\prj\CNTYPCN#\ for Road Design)

Page Size: Match Paper Size (8.5 in. x 11 in. or 11 in. x 17 in)

Rotation: Match Paper (Landscape or Portrait)

Color: Match Paper (One set matching Bid Letting Submittal)

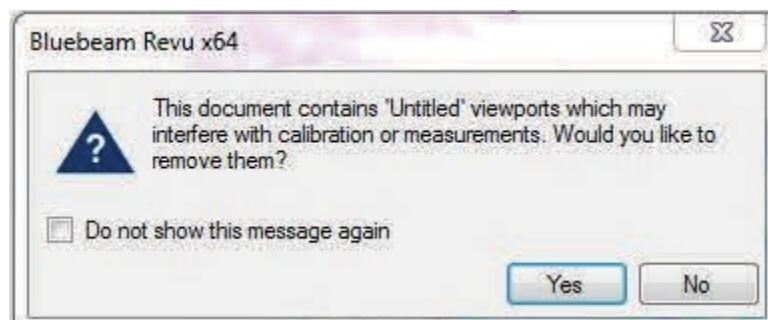
Resolution: 600dpi

Number pages to match Section in PDF (Ex. B for Section B)

File size of PDFs usually is between 100 KB to 300 KB per page. Rarely should it exceed 500 KB per page. Large files can cause performance issues viewing and printing.

Document Untitled Viewports Message

If you receive this message when opening a PDF in BlueBeam Revu check the "Do not show this message again" and click on No.



PDF from Word or Excel with Bluebeam Revu

Open file

File>Print

Select Bluebeam PDF as the printer

Note: If the file is Color but Black and White is desired:

Click on Print Print Properties > Paper/Quality

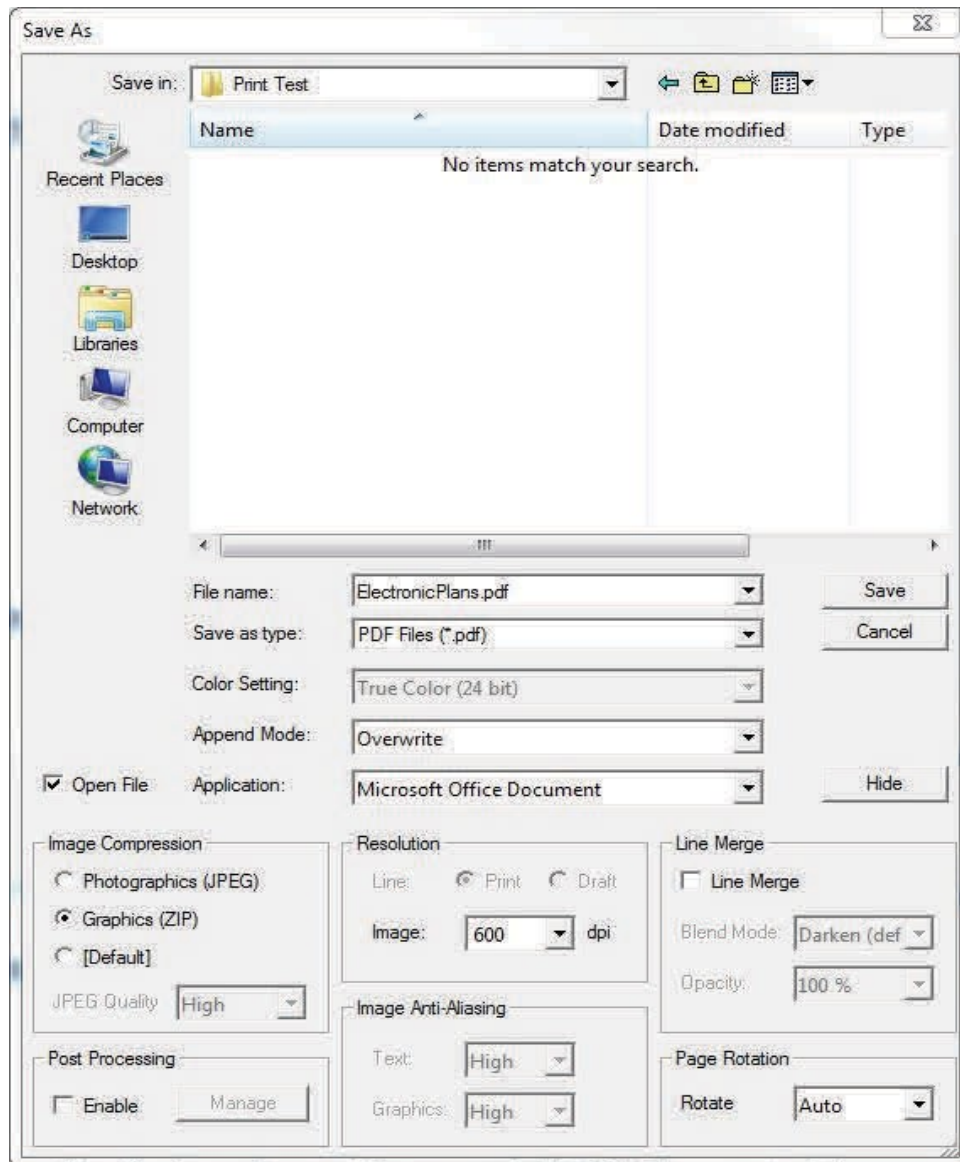
Color: Select Black & White

OK

Click on Print>Select folder to save PDF

Verify Print options

Click on Save



Adding “Not For Construction” as a Stamp

Refer to pages 44 and 45 of this manual to add “Not For Construction” to the plans.

Removing the Stamp “Not For Construction”

Refer to page 45 of this manual to remove “Not For Construction” Stamp from the plans.

Adding “Preliminary” as a Stamp (ROW Plans – Only)

Refer to pages 44 and 45 of this manual to add “Preliminary” to the plans.

Removing the Stamp “Preliminary” (ROW Plans – Only)

Refer to page 45 of this manual to remove “Preliminary” Stamp from the plans.

Numbering PDF Pages using Header and Footers

Refer to pages 61 to 68 for Numbering PDF Pages using Header and Footers

For Plan Sheets use Template - Title Block (Plans 11x17)

For Title Block (Cross Sections 11x17 Portrait) use template - TB Cross Sec Portrait

For Title Block (Cross Sections 11x17 Landscape) use template - TB Cross Sec Landscape

Standard Plates in Bluebeam Revu 11x17 sheets

If you have MicroStation V8i it is recommend you use MicroStation for this procedure.

Download Standard Plates needed from the Office of Road Design's WEB page (<http://www.sddot.com/business/design/plates/Default.aspx>).

Right Click on Standard Plate Number > Save Target As...

Note: Standard Plates are also stored at <U:\pd\Standards\StandardPlatesPDF>

Print an empty border sheet to PDF, with or without project numbers & page numbers. Or get a copy from <U:\rd\Doc\PDF> or the Office of Road Design's WEB page. (<http://www.sddot.com/business/design/docs/downloads/emptyborder.pdf>)

2. Open a PDF with an empty border sheet.

- If not landscape rotate page.

4. Select Markup > Stamp > Change Stamp Folder

5. Select Standard Plate Download Folder

6. Select Standard Plate(s) from Stamp Folder> Place Standard Plate(s) as a Stamp > **Horizontal Alignment** from **Left**.

7. When Standard Plate placement is complete change Stamp folder back to original folder which is located at C:\ProgramData\Bluebeam Software\Bluebeam Revu\Stamps.

8. Place "Not For Construction" Stamp on the Standard Plate Sheets.

Note: You can add project numbers & page numbers using "Add Header & Footers" in Adobe. Do not use any commenting Tools to fill in project numbers & page numbers.

Alternate Procedures for Comments Outside of the Studio Session

1. A full copy of the review plans pdf was sent to an entity for review outside of the Studio Session and that copy was sent back to the Project Manager by the end of the review with comments included in the pdf.

The pdf that was received shall be named to identify who made the comments and then added to the Studio Session as a second document. The Consultants/designers can then proceed to reply to the comments and make revisions. Separate e-mails will be required if comments are rejected.

2. A full copy of the review plans pdf was sent to an entity for review outside of the Studio Session and A separate document was received that was not a pdf either electronically or hard copy.

If the document was sent electronically then it should be converted to a pdf and named too identify who made the comments and then added to the Studio Session as a second document. If the document was sent hard copy the document should be scanned into a pdf and named to identify who made the comments and then added to the Studio Session as a second document. Separate e-mails will be required if comments are rejected.

Bluebeam Revu Studio Session Procedures for SDDOT Projects

Once proper electronic documents are submitted, the SDDOT project manager shall combine the separate PDF's into a single PDF and name the combined file as shown on pages 56-57. Note: The Project Manager may add the Utility Spec., Utility Plans, Building Spec. and Building Plans as a separate document(s) in the Session Review.

1. The SDDOT project manager shall start a Session as shown on pages 75-79 of this manual. Make sure that the Session Name in the Session Invitation has the CountyPCN# Review Due Date Time Ex: Minn025C 08-15-16 5 PM. The project description shall also be placed in the Message of the Session Invitation. If the project is a FHWA oversight project, include the FHWA reviewers email addresses in the review attendee list when you set the Session up. FHWA already has Bluebeam Vu installed on their computers. If Local Governments or other entities would prefer to do a electronic review include their email addresses in the attendee list. They will be able to download the free Bluebeam Vu software from a link in the Bluebeam Revu Session invite email that they will receive. Make sure that all Consultants/Designers are included in the Session along with the list of Reviewers.
2. The Reviewers shall follow the instructions on Pages 9-11 of this manual. If review comments are going to be late and can not be added to the Session before it ends please notify the project manager that invited you to the Session.
3. When the Session has ended the SDDOT project manager shall proceed with the review response process for the Consultants/Designers so that they can make review responses/ revisions (See pages 80-84). Every comment shall have a "Reply" and a "Status". Any Consultant/Designer that rejects a comment shall Alert the person that made the review comment with the Bluebeam Alert process (See pages 83-84). The SDDOT project manager shall assure that all reviewers with rejected comments be notified with a justification/response by reviewing the Session Report Record Summary that is created (Page 85) when the plan review is archived or by checking their emails. The SDDOT project manager shall send the Consultants a copy of the PDF Package Report on the DOT FTP Site. After the Session Report is created the SDDOT project manager shall Finish the Session by following the instructions on page 86. The SDDOT project manager shall then send a Memorandum/Letter to Bid Letting following the requirements as shown on page 87.