Bluebeam User Guide

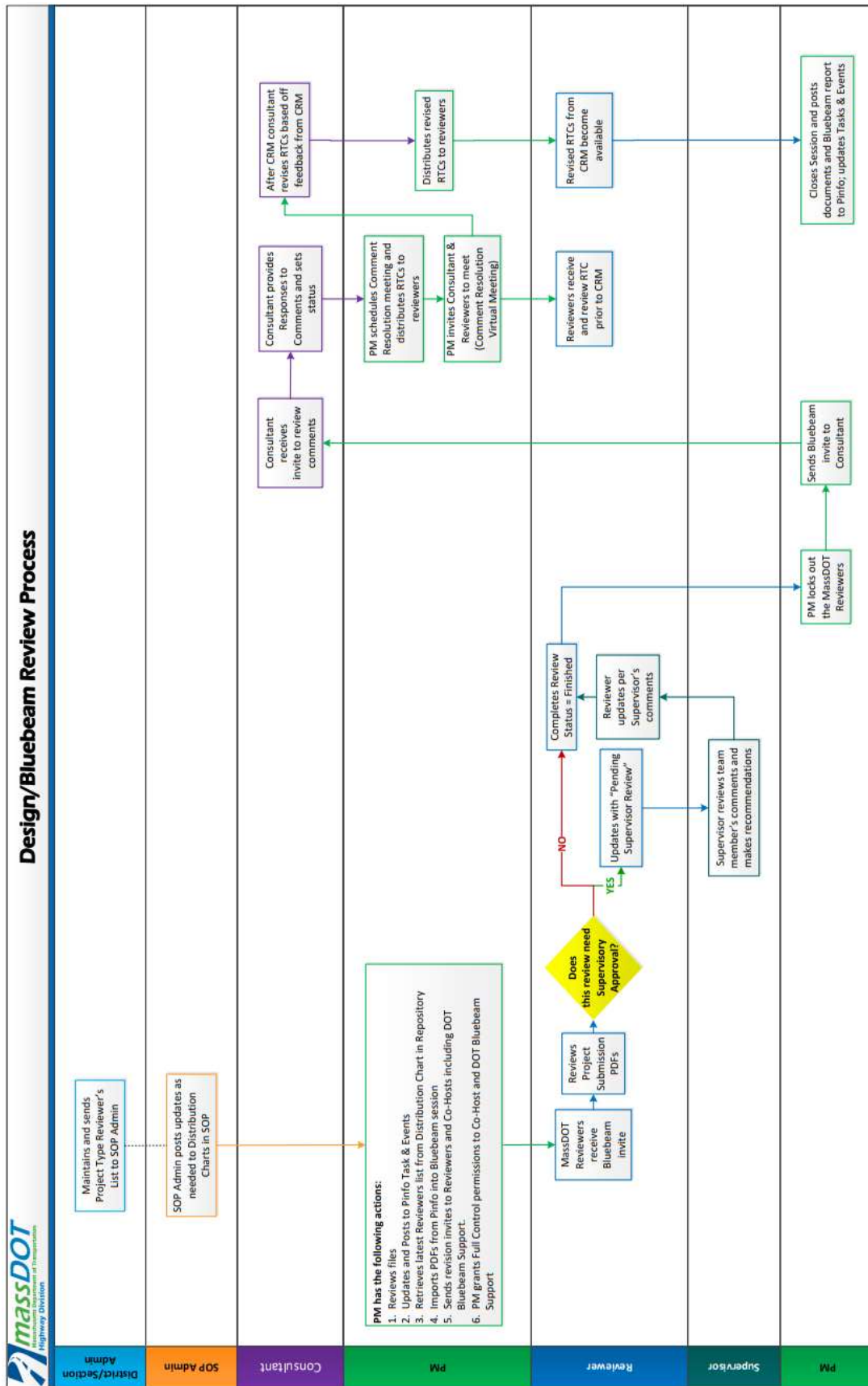## **Managing Bluebeam**

Version 3.1

Table of Contents

What is Bluebeam?

Bluebeam is a cloud-based external collaborative tool that allows both MassDOT and external consultants the ability to manage, comment and share updates to documents and drawings in real-time during the 25%, 75%, 100% and PS&E review phases. This process allows reviewers to follow the changes to the documents and drawings and expedites the review time, as it is all captured electronically. Bluebeam eliminates the need to generate response to comment forms in Word or Excel and distribute them to the PM.

The Bluebeam session can be easily accessed through an invitation link from the session creator, the Project Manager. Users also have the option to access a session using the session number.

Per Engineering Directive E-18-002, Bluebeam Revu is the platform that shall be used for all phases of projects in the project delivery program. The current version of Bluebeam is Bluebeam 2020. This guide, including tutorial information, shall be based on that version.

Depending on the nature of the review - design, construction, design-build - there are different ways that the digital review process is built into the project delivery schedule. This is illustrated in the following flow charts:

Bluebeam Process Charts

Design/Bluebeam Review Process

District/Section Admin
- Maintains and sends Project Type Reviewer's List to SOP Admin

SOP Admin
- SOP Admin posts updates as needed to Distribution Charts in SOP

Consultant
- Consultant receives invite to review comments
- Consultant provides Responses to Comments and sets status
- After CRM consultant revises RTCs based off feedback from CRM

PM
- PM has the following actions:
  1. Reviews files
  2. Updates and Posts to Pinfo Task & Events
  3. Retrieves latest Reviewers list from Distribution Chart in Repository
  4. Imports PDFs from Pinfo into Bluebeam session
  5. Sends revision invites to Reviewers and Co-Hosts including DOT Bluebeam Support.
  6. PM grants Full Control permissions to Co-Host and DOT Bluebeam Support
- PM schedules Comment Resolution meeting and distributes RTCs to reviewers
- PM invites Consultant & Reviewers to meet (Comment Resolution Virtual Meeting)
- Distributes revised RTCs to reviewers

Reviewer
- MassDOT Reviewers receive Bluebeam invite
- Reviews Project Submission PDFs
- Does this review need Supervisory Approval?
  - NO → Completes Review Status = Finished
  - YES → Updates with "Pending Supervisor Review"
- Reviewer updates per Supervisor's comments
- PM locks out the MassDOT Reviewers
- Reviewers receive and review RTC prior to CRM
- Revised RTCs from CRM become available

Supervisor
- Supervisor reviews team member's comments and makes recommendations
- Sends Bluebeam invite to Consultant

PM
- Closes Session and posts documents and Bluebeam report to Pinfo; updates Tasks & Events

Construction Design-Build SharePoint/Bluebeam Review Process

massDOT
Massachusetts Department of Transportation
Highway Division

Design-Builder

- Design-Builder creates Document Set in SharePoint
- Posts PDFs files* to SharePoint (*to include Contract No. and Submittal No.)
- Design-Builder corrects and resubmits
- Design-Builder Receives Transmittal

Router — 48 Hours

- SharePoint QA Verification Accepted?
  - NO → Returns to Design-Builder
  - YES → Moves to Bluebeam
- Creates Bluebeam session
- Imports Submittal PDFs from SharePoint
- Sends session invite for Reviewers
- Modifies SharePoint status to Technical Review

Reviewer — 21 Days

- MassDOT/ Consultant and FHWA Reviewers receive Bluebeam invites
- Reviews Submittal PDFs
- Reviewers must resolve any conflicting comments with other Reviewers, PDC & PM

DB-PM — 6 Days

- Conducts review of all comments with DB-PM
- Coordinates with reviewers to resolve conflicting or prescriptive comments
  - YES → Reviewer deletes comment
  - NO → Posts Submittal PDFs to SharePoint as "MassDOT Reviewed" and includes PDF Summary Report

DB-PM — 1 Day

- DB-PM determines appropriate disposition: Accepted, Accepted as noted, Revise and Resubmit
- Sends Transmittal to Design-Builder

Design Builder

Construction Design-Bid-Build SharePoint/Bluebeam Review Process

massDOT — Highway Division

Contractor

- Contractor creates Document Set in SharePoint
- Posts PDFs files* to SharePoint (* to include Contract No. and Submittal No.)
- Contractor corrects and resubmits
- Contractor Receives Transmittal

Router — 48 Hours

- SharePoint QA Verification Accepted?
  - NO → Returns to Contractor
  - YES → Sends session invites for Reviewers
- Modifies SharePoint status to Technical Review

Reviewer — 14 Days

- MassDOT/Consultant Reviewers receive Bluebeam invites
- Reviews Submittal PDFs
- Completes Review with Status = Finished
- Reviewer deletes comment

RE/Router

- Conducts review of all comments with RE
- Coordinates with Reviewers. Required to delete comment?
  - YES → Reviewer deletes comment
  - NO → Posts Submittal PDFs to SharePoint as "MassDOT Reviewed" and includes PDF Summary Report

RE

- Dispositions Submittal in SharePoint
- Sends Transmittal to Contractor

Design-Bid-Build

Bluebeam Functional Area/Activities and Roles

Bluebeam Functional Area/Activities and Roles					
Functional Area/Activities	**Roles**				
	PM	**Co-Host**	**Reviewer**	**Supervisory Review**	**Designer of Record**
Creates Session	Y	N	N	N	N
Ability to Comment on Documents via Bluebeam invite	Y	Y	Y	Y	Y
Ability to Add Additional Reviewers to the Session	Y	Y	N	N	N
Ability to Open and Close Session	Y	Y	N	N	N

Business Roles and Definitions

Project Manager – Project Manager assigned in Project Info for a specific Project. Responsible for the management of Submittal Reviews utilizing Bluebeam.

Co-Host – Ability to add additional Reviewers to the session. Ability to act as PM in full capacity if PM is unavailable.

MassDOT Reviewers – MassDOT technical subject matter experts who have been identified by discipline.

Designer of Record – Selected Designer of Record (DOR), either in-house MassDOT designer, or a consultant hired for a specific project.

Supervisor Review – Reviewer's supervisor. When a Reviewer sets status to "Pending Supervisor Review", Supervisor will review sessions and recommend modifications or approval for the Reviewer to implement.

General Guidance

What are studio sessions?

Sessions enable document-based online collaboration. They are accessible through the Revu interface. Only the host needs a Revu license to initiate a Studio Session, and all invited attendees can participate in the Session through Revu, Revu for iPad or even our free PDF viewer, Bluebeam Vu for Windows and iPad.

Each session is unique to a specific submission within a project.
Project Info – Project Info entries and responsibilities are still mandated and required.
All Project Info updates must include the session start date under "Package Distributed", and review time frame.

Changing Author Settings

Please follow the steps below to change your author settings within Bluebeam (will take effect in new BB sessions). Please use the [District or HQ Section] [First Name] [Last Name] format; Example: D1 John Smith, HQ Traffic Jane Smith.

This will help the PM and the Designer know who the review comment is coming from and will also help organize the CRM.
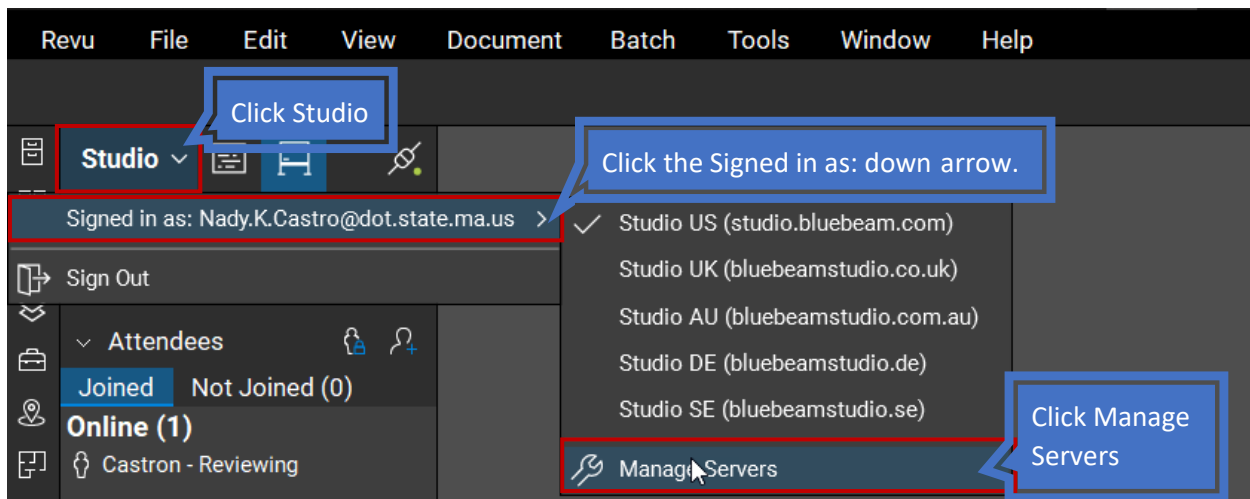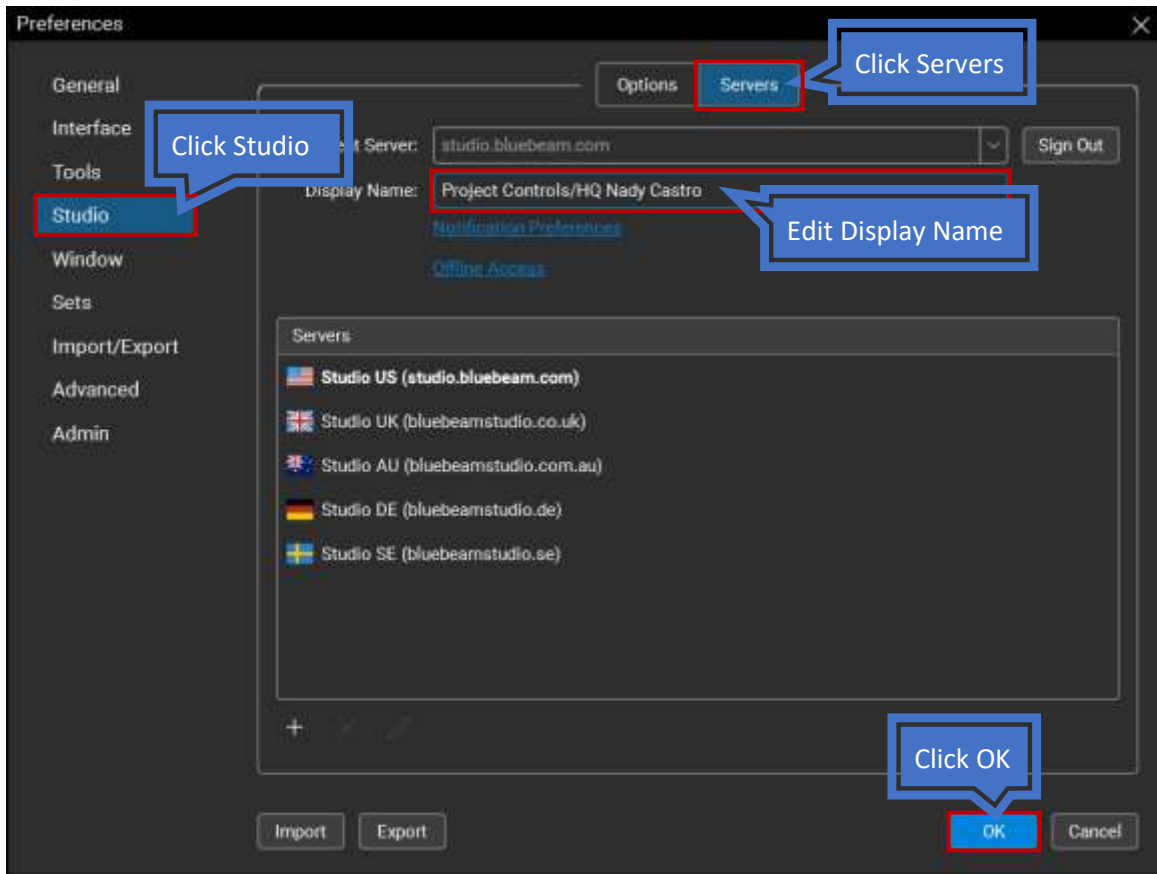
- It is especially important to initiate your session by confirming you are connected. It is recommended never to work "Offline"

October 2022
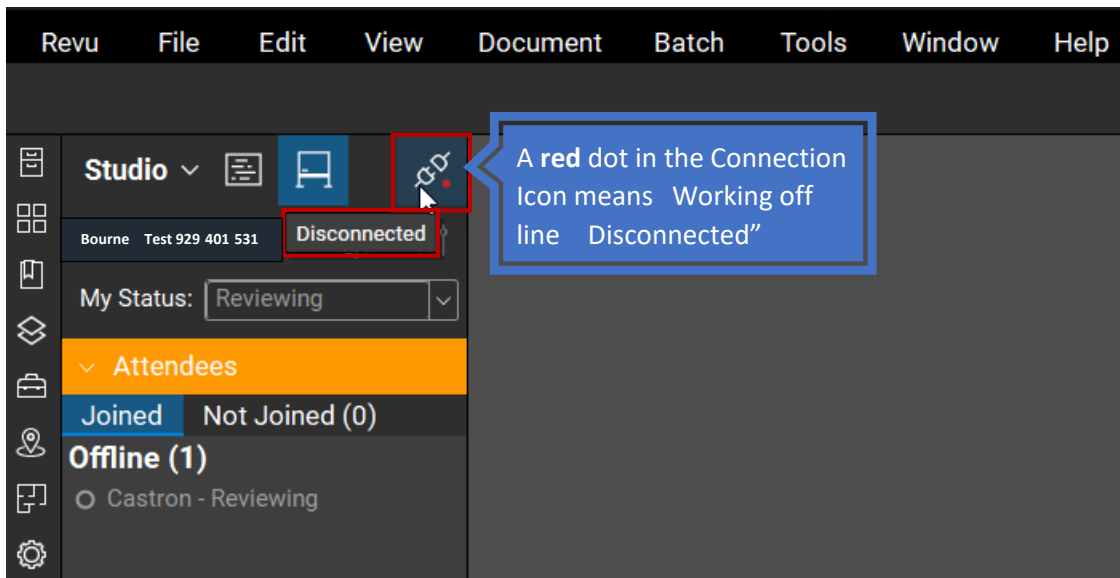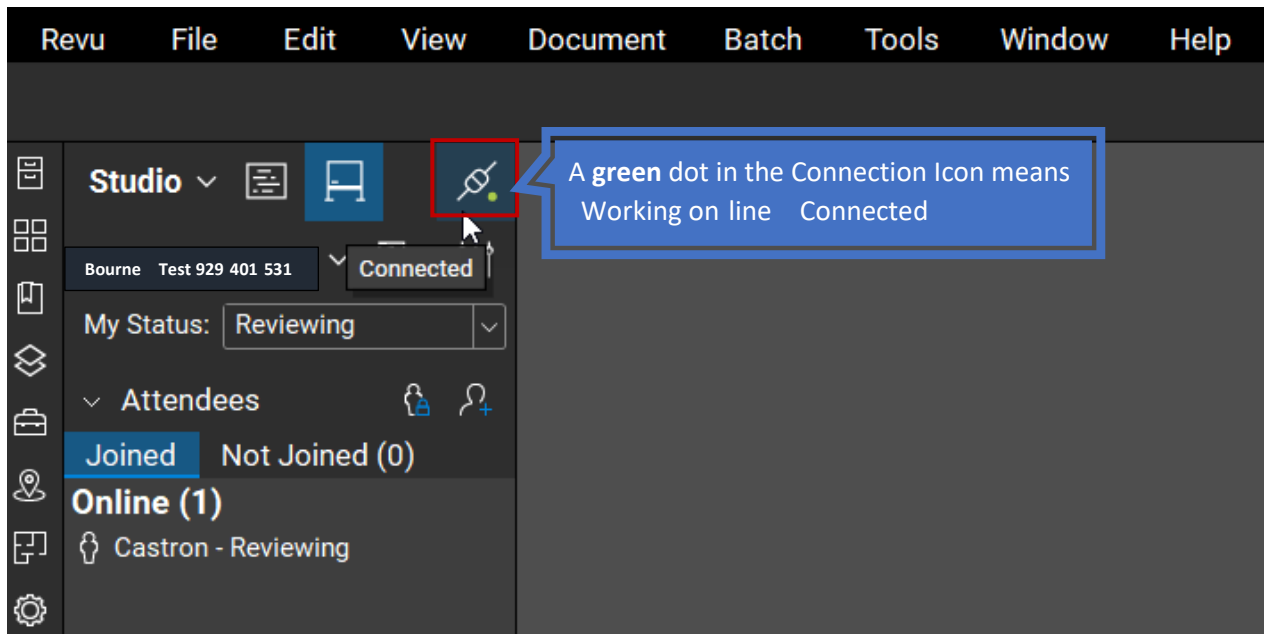
- All "General Comments" should be posted on the first page of the document set.

- **Consultant evaluation scores shall be provided by the reviewers. The Project Manager is responsible for including the data entry form from SOP 810 Attachment E for reviewers to fill in scores at each design stage (25%, 75%, 100%).**

- Only the creator of the comment(s) has the ability to delete the comment or information.

- It is critical to only use objective language when writing a comment or replying to one.

Setting-up Your User Interface

In Revu, tools and data are organized in panels that appear in specialized pull-outs found at the left, right, and bottom of the application. The two panels most frequently used are the Studio panel and the Markups panel.

Whether a particular panel is visible in the workspace or not is customizable. To show or hide panels, go to **Window** > **Panels** and select the desired panel: highlighted panels appear in the interface and the others are hidden.

The Studio panel can be enabled/disabled by clicking the Studio button
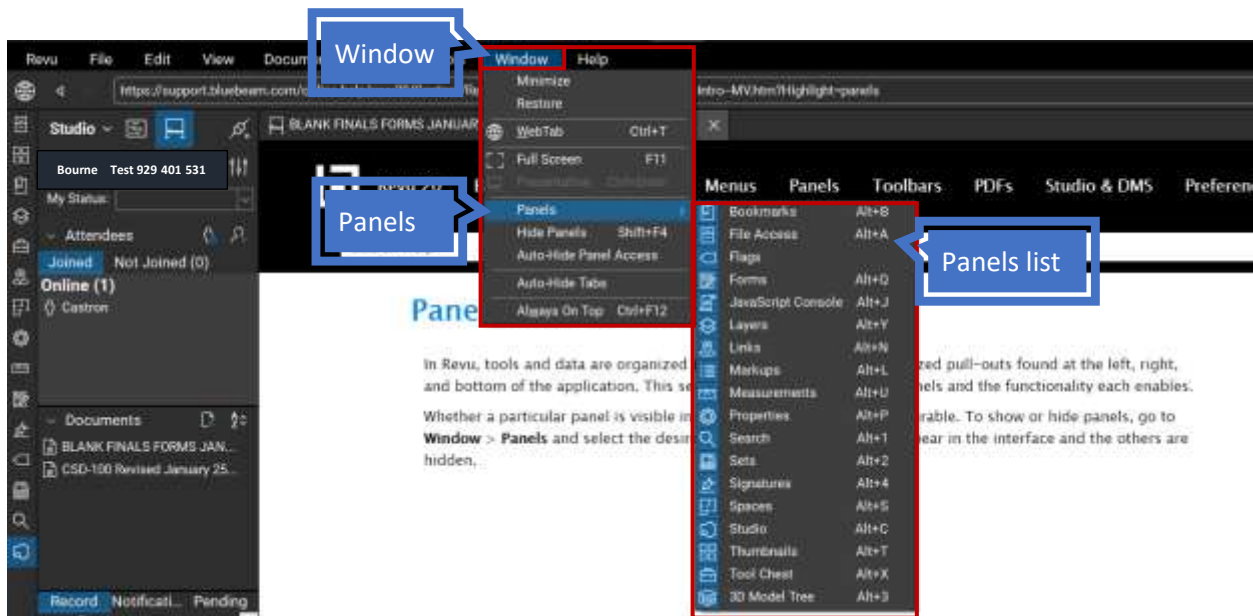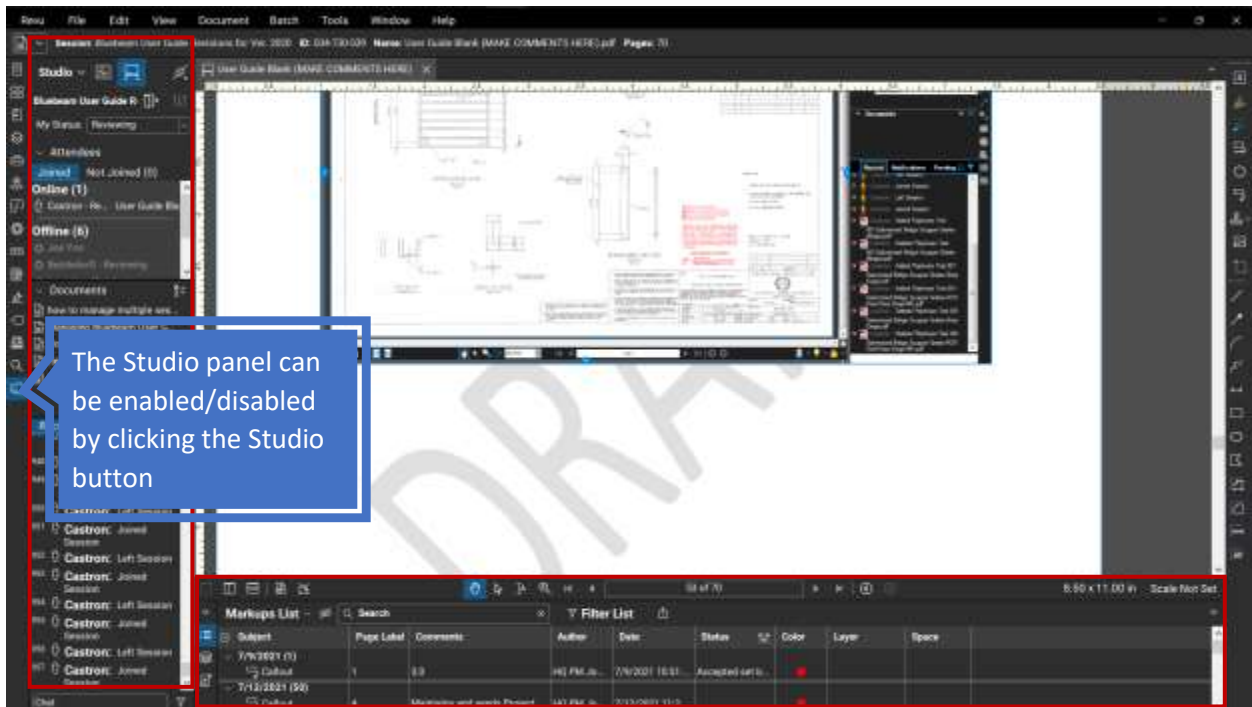
Session Status

Setting this session status is an important step in Bluebeam. The purpose of setting status will be used by the PM and other users to identify participation in the session and notify when complete.

Each Reviewer is responsible for setting their respective Status.

1. Reviewing
2. Waiting
3. Finished

Once the session is opened, Reviewer is required to set the status to "Reviewing". Upon completion of the review and prior to the review due date timeline, the reviewer is required to set the status to "finished".

Status Definitions

1. **Reviewing:** Reviewer is currently reviewing documents during defined review timeline.
2. **Waiting:** Reviewer has reached out to other Reviewers and is waiting for feedback or waiting for supervisor approval.
3. **Finished:** Review is complete – Review status "Finished".
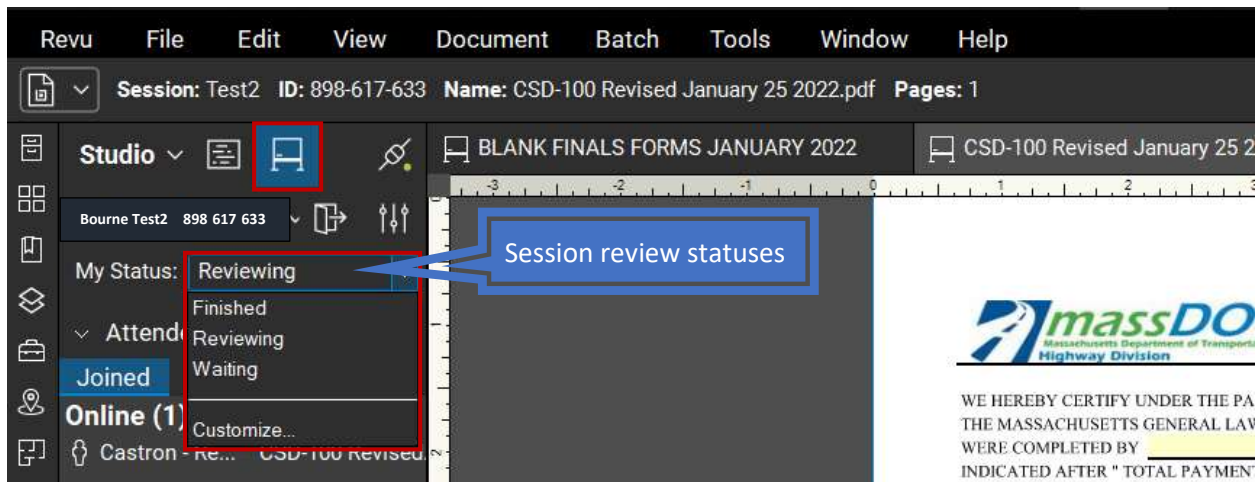
Designer of Record Role

General

The designer of record (consultant or in-house) is responsible for assembling and organizing documents for each of the scheduled phases. In addition, the designer is responsible for ensuring that all comments have been addressed, including documenting, and tracking comments that are not addressed through the comment resolution meeting.

Design Submission

All files to be reviewed shall be submitted to the MassDOT PM in .pdf format. All other file types shall be submitted as required by MassDOT.

Files to be reviewed shall be named with the following prefixes. The file name after the prefix can be determined by the Consultant. For example, 001_XXXXXX_Bridge B-01-001 Sketch Plans

Naming convention prefix:

- 000 – Table of contents
- 001 – Plan submittals
- 002 – Utilities
- 003 – ROW
- 004 – Environmental
- 005 – Reports
- 006 – Specifications
- 007 – Estimate
- 008 – Schedules
- 009 – Other

Provide a Table of Contents with the submission which describes all the files provided in the submission.

When plotting AutoCAD drawings to .pdf, prior to plotting, set EPDFSHX to 0 within AutoCAD.

All other PDF files shall be "flattened" prior to submitting. Certified PDF files will not be accepted.

Highway plan sets shall consist of a single volume and be submitted as a single PDF. Color utility plans shall be included within the highway plan set in lieu of black and white plans.

Designer Response to Comments

After the review is complete the MassDOT PM will invite the designer (in-house or consultant) to the review session to respond to comments. While comments are being responded to, only the designer and the MassDOT PM will have access to the review session. **Access to the session for the MassDOT reviewers will be denied once review comments are finalized**.

The designer will respond to comments by setting a status to the comment within Bluebeam and providing a written response to the comment within Bluebeam. The available statuses are: Accepted, Rejected, Cancelled, Completed, and None.

1. To set the status of the comment, click on the comment in the comment log, and from the Status pull down at the top of the comment log, set the status of the comment.

Figure 1 Set Comment Status
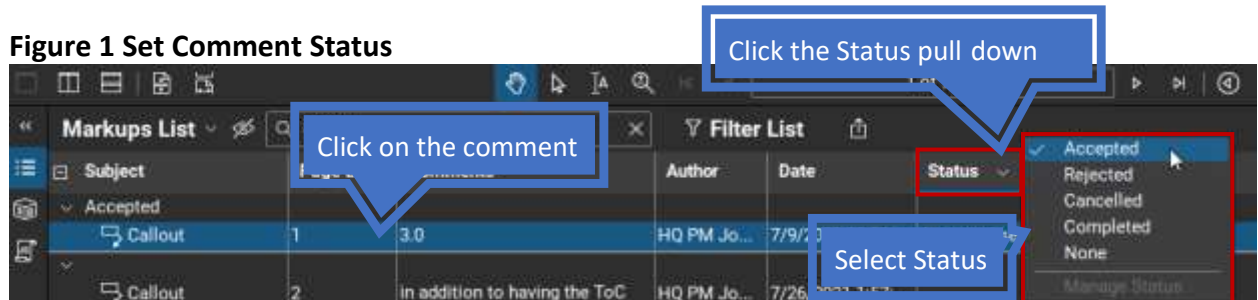
2. To provide a written response to the comment, right-click on the comment, and then select Reply. Provide a written response in the text box.

Figure 2a Reply to Comment
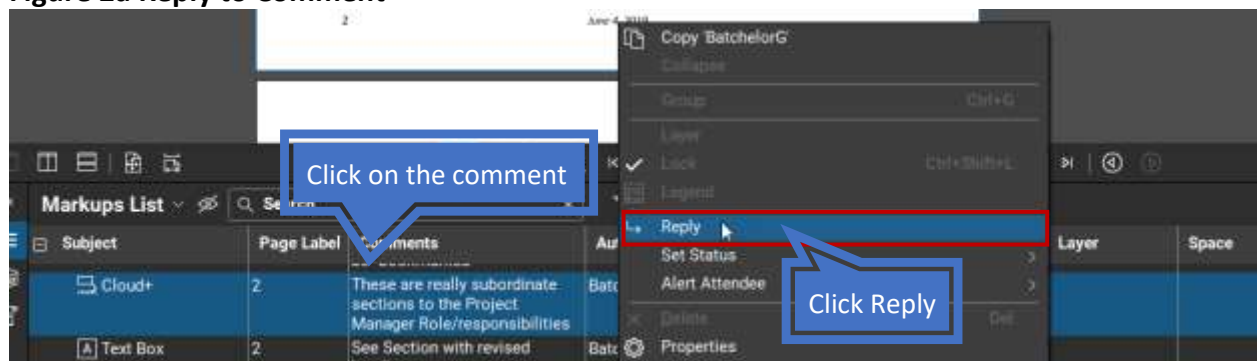
Figure 2b Reply to Comment

Begin typing your comment on the provided text box

3. When the comment has been responded to, the response will appear below the comment in the comment log.

Your reply to the comment will appear on the comment panel as shown below
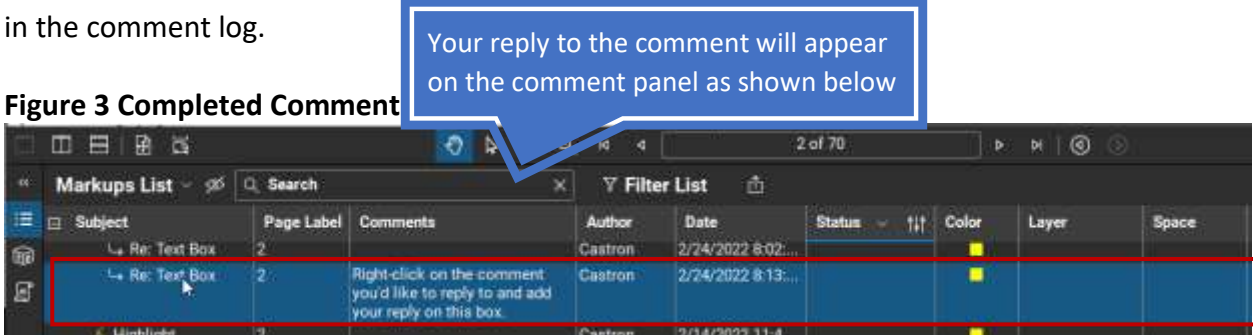
Figure 3 Completed Comment

After all comments have been responded to, the designer will coordinate with MassDOT PM to set up a Comment Resolution Meeting (CRM). During the CRM, Bluebeam will be utilized to review comments/responses as needed. Note that comments may be sorted by Subject, Page Label, Comments, Author, Date, Status, etc. After comments/responses have been resolved, the Consultant will modify any responses as needed and then notify MassDOT PM when completed.

Project Manager Role
Getting started

OVERVIEW OF BLUEBEAM FOR REVIEWERS

Per Engineering Directive E-18-002, Bluebeam Revu is the platform that shall be used for all phases of projects in the project delivery program.

The current version of Bluebeam is Bluebeam 2020. This guide, including tutorial information, shall be based on that version.

Training: Periodic introductory training is available. Section supervisors shall be responsible for ensuring that reviewers are adequately trained.

SUBMITTAL DOCUMENTS
- Per the Design Schedule, the Designer will submit Submittal Documents for review using the defined File Template

   Naming convention prefix:

   - 000 – Table of Contents
   - 001 – Plan Submittals
   - 002 – Utilities
   - 003 – ROW
   - 004 – Environmental
   - 005 – Reports
   - 006 – Specifications
   - 007 – Estimate
   - 008 – Schedules
   - 009 – Other

- **The Project Manager is responsible for including the data entry form from SOP 810 Attachment E for reviewers to fill in scores at each design stage (25%, 75%, 100%). "See Appendix A-D"**
- Must be part of a single review session
- The PM is responsible for ensuring the Designer adheres to the directed file naming convention
- The PMs will fully utilize the Design Project Checklist in PDGG to align with the Submittal Review for the Project
- The PM will be responsible for ensuring the Distribution list follows the SOP
- The PM will be responsible for inviting their Co-Host (contact your supervisor for assigned Co-Host).

- The PM will be responsible for inviting DOTBluebeamSupport@dot.state.ma.us as Co-Host
- The PM will be responsible for managing and maintaining access for the internal MassDOT Reviewers and the External Consultant Reviewers via the "Allow/Deny Process"
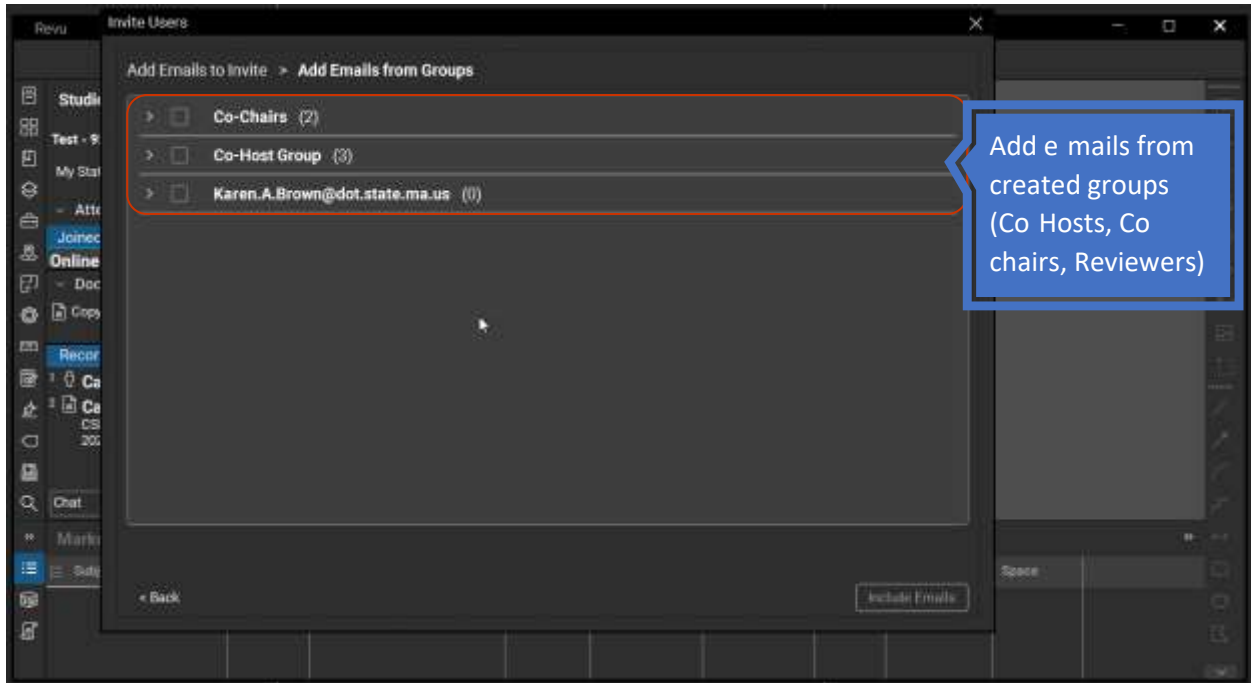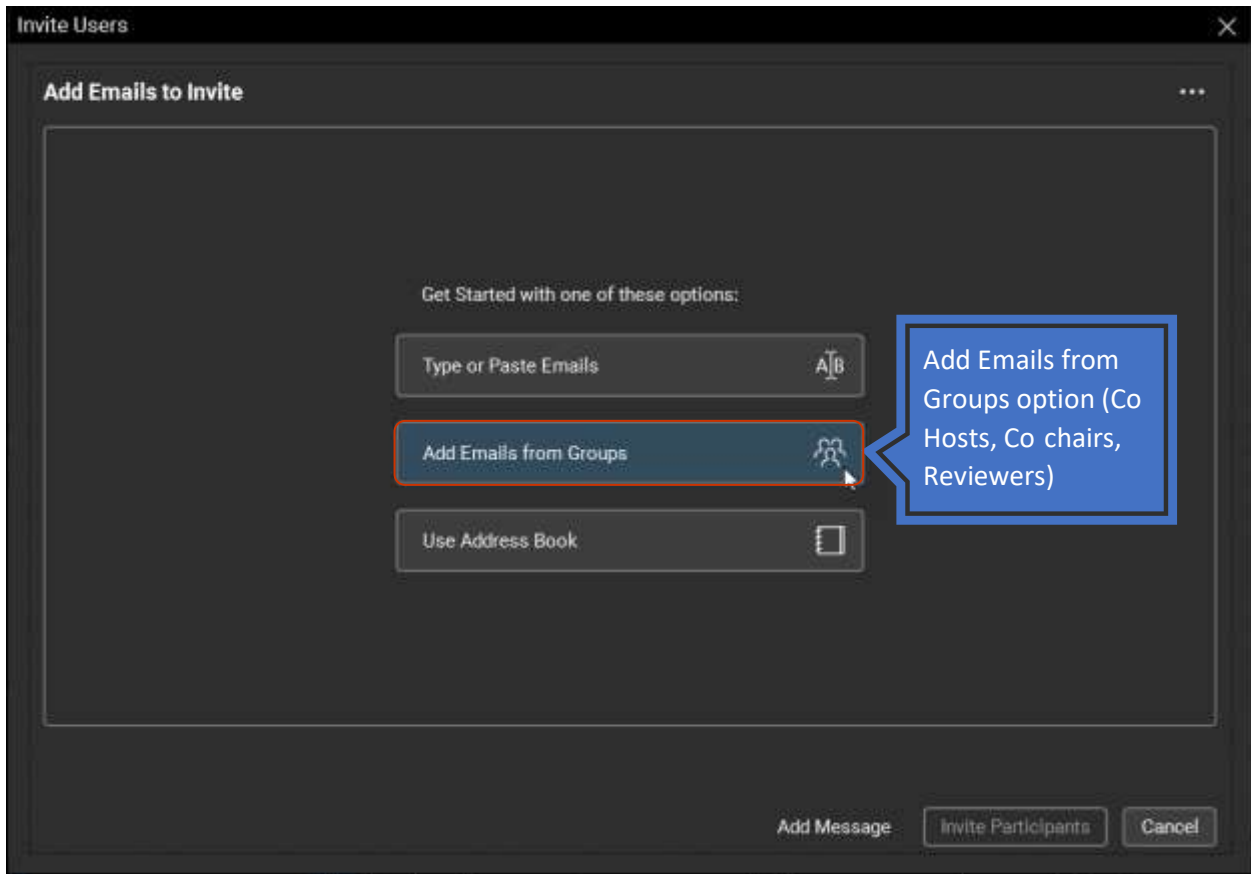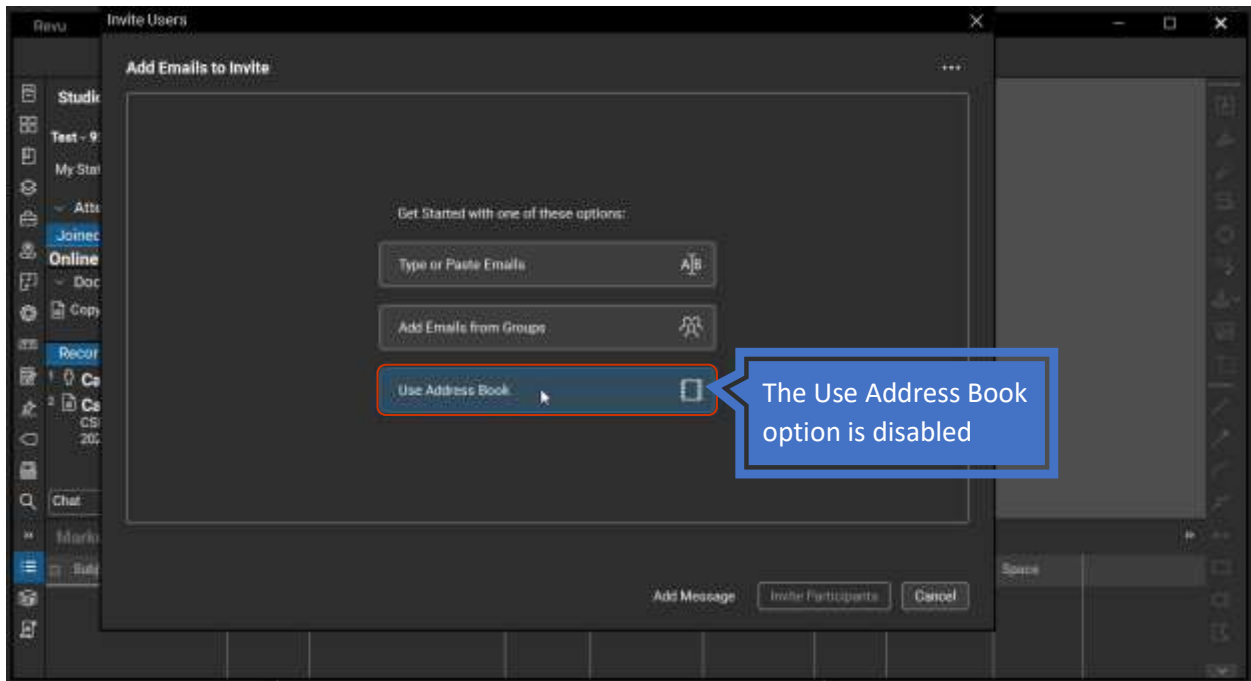- The PM will be responsible for setting the expiration date in Bluebeam
- Recommended language for the "Add Message"

    [Project Number [TOWN/Municipality]- [DESCRIPTION FROM PINFO]
    Design Stage: XX% Submission
    Review Comments due: MM/DD/YY
    Advertising Date: MM/DD/YY
    Designer: XXXXXXXX
    Co-Hosts: MASSDOT CO-HOST, DOTBluebeamsupport
    Link to submission: PROJECTINFO LINK

- The PM will be responsible for reviewing all responses and coordinating any conflicts
- The PM will be responsible for managing and facilitating Comment Resolution Meetings
- Recommended tools for online meeting/conference tools:
  - Conference room meeting with computer and smartboard
  - Virtual Meetings

- The PM ensures the designer has finalized RTCs following the Comment Resolution Meeting
- The PM will Finalize Sessions
- The PM will be responsible for updating ProjectInfo and updating the ProjectInfo File Repository with the reviewed PDF documents
- The PM records dates in Tasks and Events in ProjectInfo
- All review sessions shall end at 11pm
- Consider adding any reviewers who previously reviewed prior submissions

Creating a Session

To begin creating your new session, select "New Session" [NOTE: DO NOT create a "New Project"].
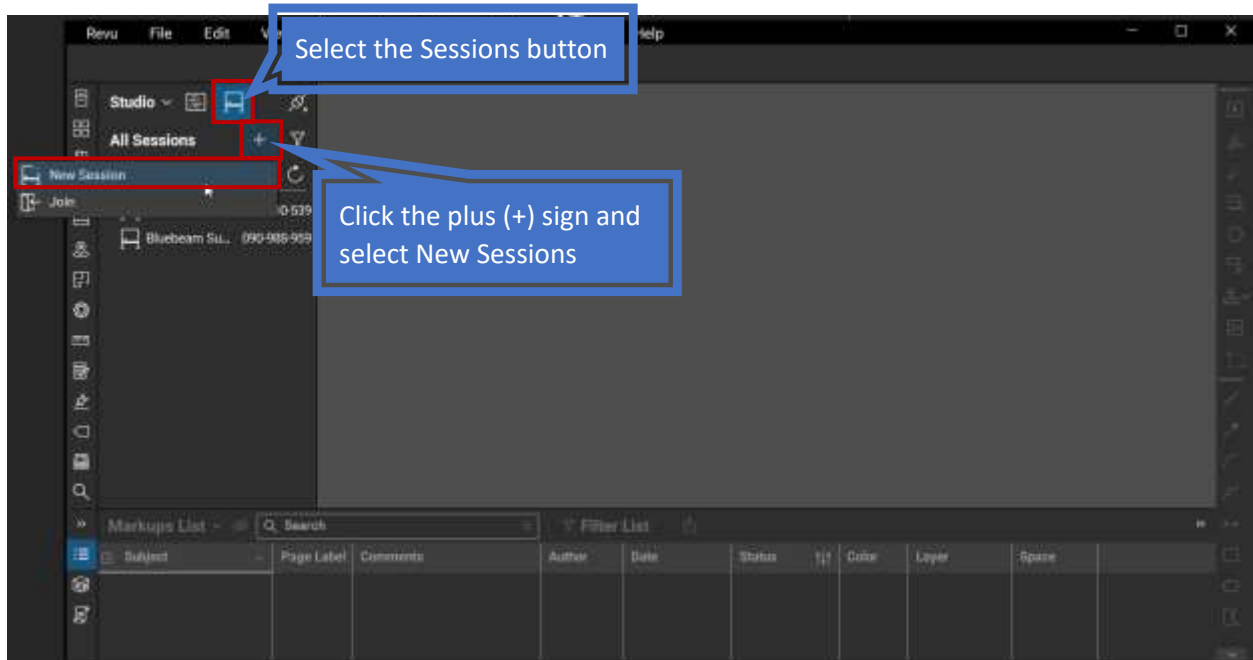
1. Name your session. Sessions must be named with the Project Number + Town/Municipality and Submission description; click "**OK**". Example: **606060_Town/Municipality_25% Review**
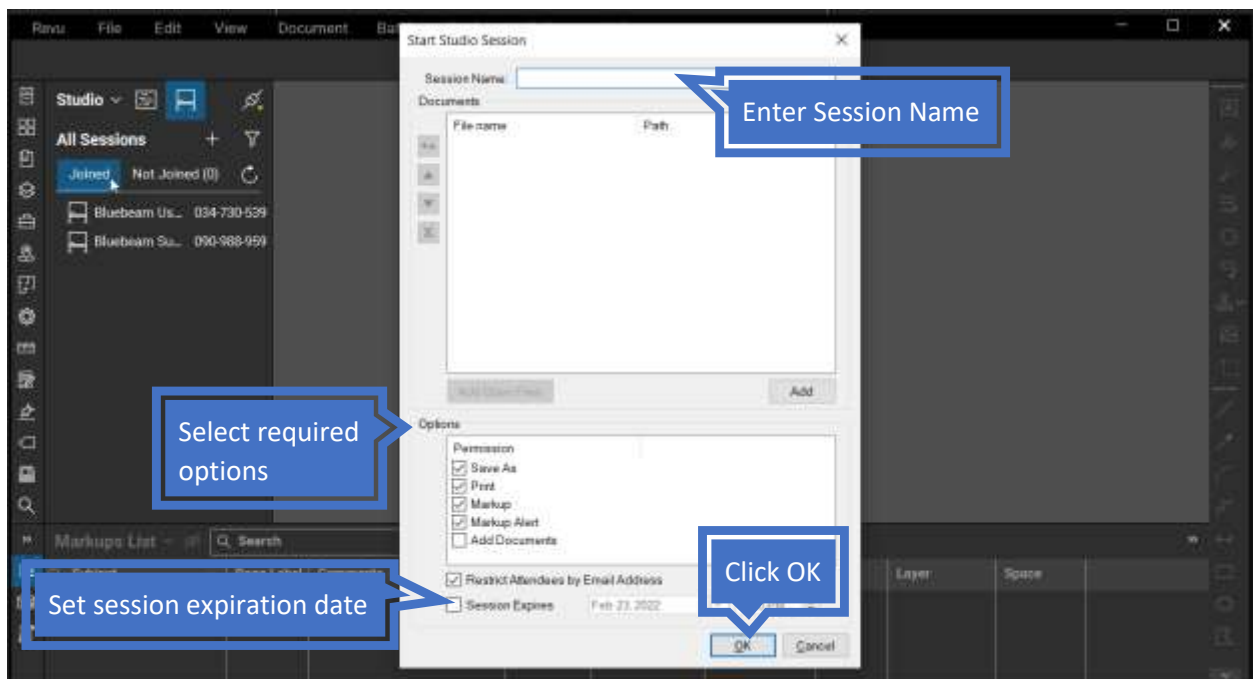
> All files should be added prior to sending session invites. This will allow the PM to make sure files are acceptable (named correctly, flat, not certified).

2. The "**Session Invitation**" screen will pop-up. Project Manager will need to refer to the Reviewer Distribution Lists in the SOPs.

Enter email addresses or copy and paste from a list

Invite Users

Add Emails to Invite > **Type or Paste Emails**

Type, or copy and paste emails from Excel, Outlook, etc. delimited by a space or special character (,;)

Example: John Smith <jsmith@email.com> Jane Smith <janesmith@email.com> abc@email.com xyz@otheremail.com

Don't worry, we only take the emails and remove extra characters.

< Back

Check & Include Emails

Invite Users

Add Emails to Invite > **Type or Paste Emails**

Karen.A.Brown@dot.state.ma.us

Type

Don't worry, we only take the emails and remove extra characters.

< Back

Check & Include Emails

Invitations sent

Click OK

Recommended language for the "Add Message"

[Project Number [TOWN/Municipality]- [DESCRIPTION FROM PINFO]
Design Stage: XX% Submission
Review Comments due: MM/DD/YY
Advertising Date: MM/DD/YY
Designer: XXXXXXXX
Co-Hosts: MASSDOT CO-HOST, DOTBluebeamsupport
Link to submission: PROJECTINFO LINK

Invite Users

Add Emails to Invite

Get Started with one of these options:

Type or Paste Emails

Add Emails from Groups

Use Address Book

Add Emails from Groups option (Co Hosts, Co chairs, Reviewers)

Add Message   Invite Participants   Cancel

Invite Users

Add Emails to Invite > **Add Emails from Groups**

> ☐ Co-Chairs (2)
> ☐ Co-Host Group (3)
> ☐ Karen.A.Brown@dot.state.ma.us (0)

Add e mails from created groups (Co Hosts, Co chairs, Reviewers)

< Back   Include Emails

The Use Address Book option is disabled

3. To delete an email address, click on the email address you wish to delete and click the "delete" button or click the email address and then click remove.

To delete an e mail, click on the e mail you wish to delete and click the trash (delete) icon.

To delete an e mail, click on the e mail you wish to delete and click the remove button.
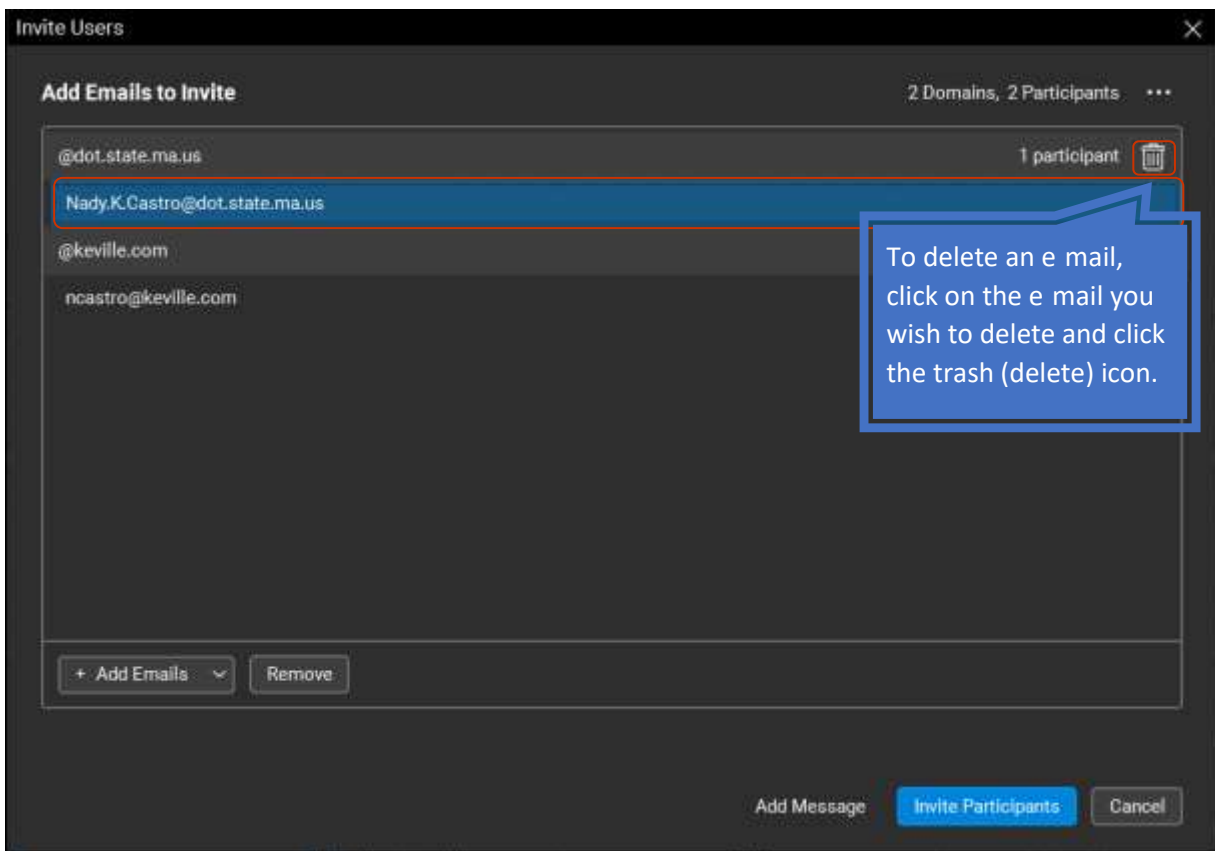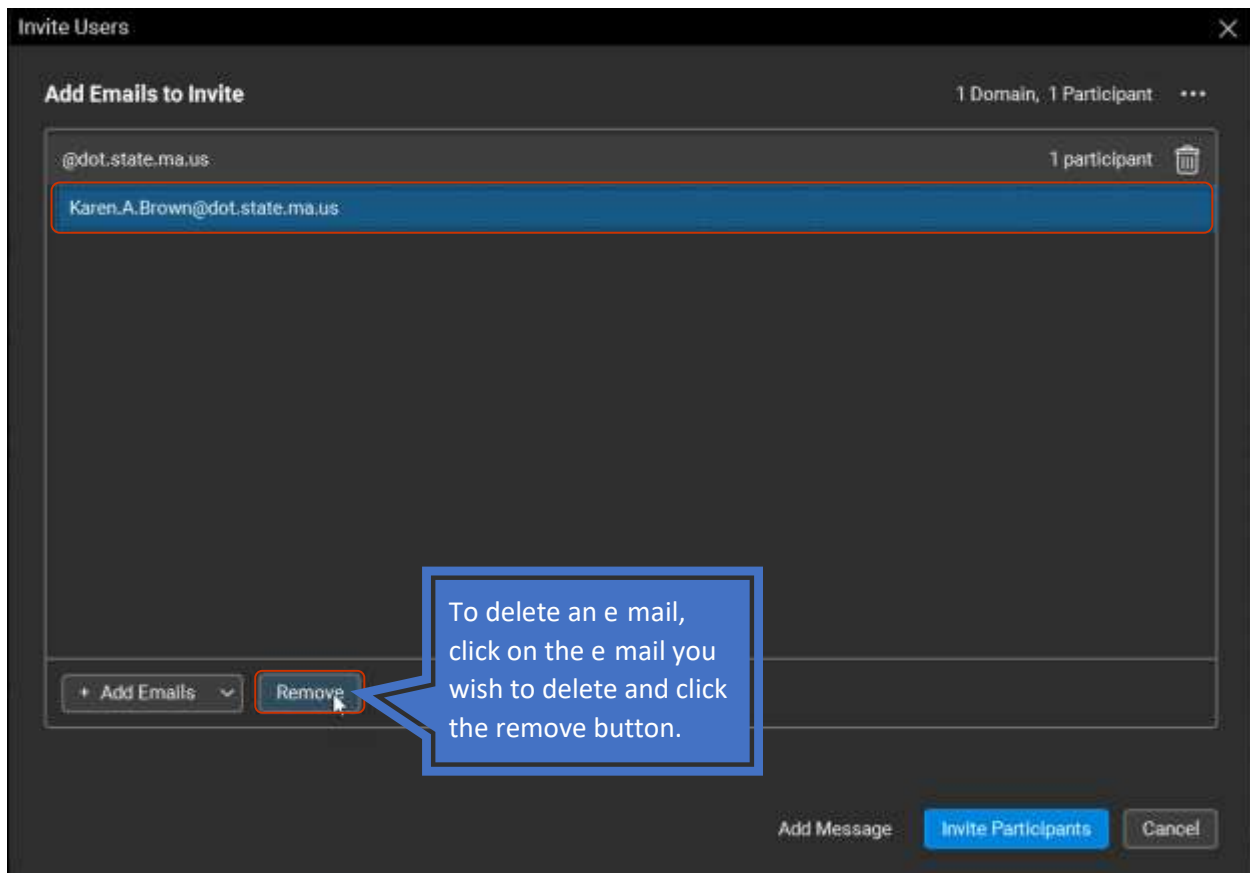
Helpful hints:

- You don't need to initiate another session to add reviewers.
- You don't need to initiate another session to add documents.
- Documents can always be added or removed.
- Reviewers can only be added, but not removed.

Setting A Bluebeam Session Co-Host

A Co-host is a person assigned by the PM and will have the ability to Add or Deny invitees. In rare cases, and only at the direction of their manager would they take full control of the session, due to long term absence or critical issues.

Only the Bluebeam Support Co-Host will have the ability to allow or deny an additional invitee at the direction of the Manager.

- A. To edit attendees access, click the "Attendee Access" icon next to the "Attendees" row.
- B. Click on the "**Attendees**" tab to add your co-host
- C. Enter the Co-Host email address.
    1. Click on the plus button (🔲) to add co-host's email address
    2. Enter your invitee's email address
    3. Click **OK**.
    4. Repeat steps above to add DOTBluebeamSupport@dot.state.ma.us

Invite Users

Add Emails to Invite   ...

Get Started with one of these options:

> **Click on Type or Paste Emails**

Type or Paste Emails   A|B

Add Emails from Groups   👥

Use Address Book   📖

Add Message   Invite Participants   Cancel

Invite Users

Add Emails to Invite > **Type or Paste Emails**

> **Enter co host email address**

Type, or copy and paste emails from Excel, Outlook, etc.

Example: John Smith <jsmith@email.com>;Jane Smith <janesmith@email.com> abc@email.com xyz@otheremail.com

Don't worry, we only take the emails and remove extra characters.

< Back   Check & Include Emails

Manage Attendee Access

Following the review period, the PM will manage attendee access to the studio session, by denying access to Reviewers and inviting the Design Engineers.

To access the permissions, click on the Session Settings button.

Select the Permissions tab
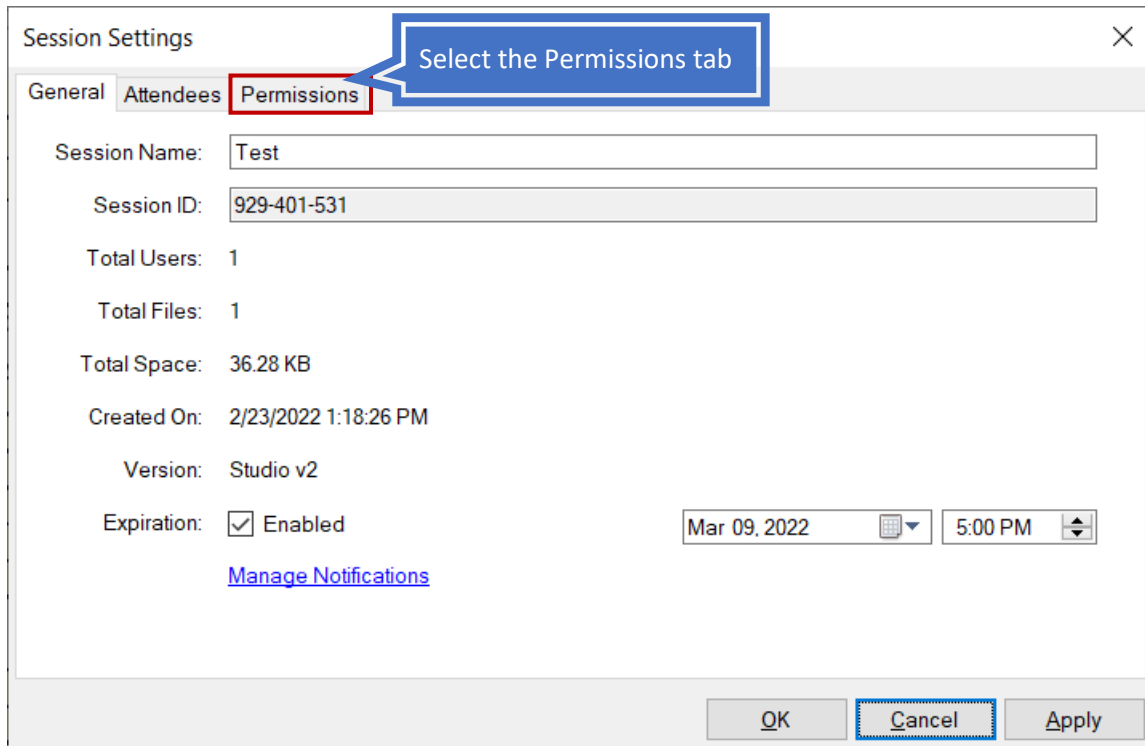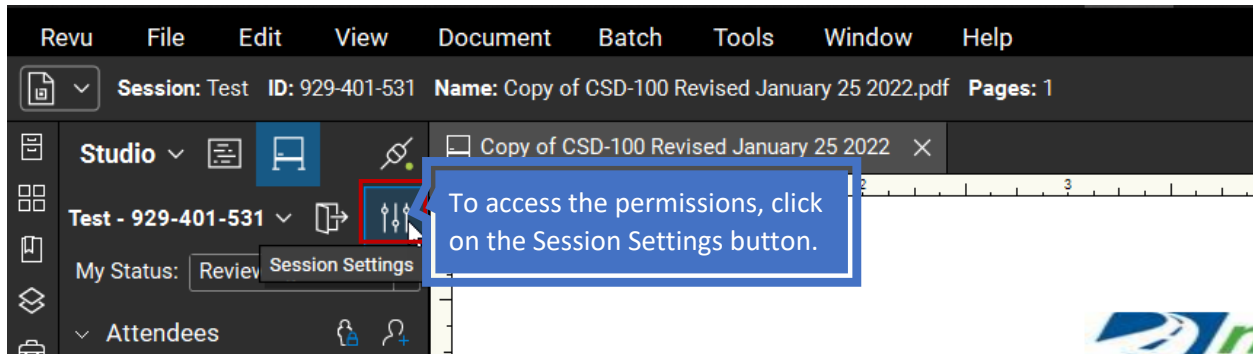
Managing access at the Attendees tab:
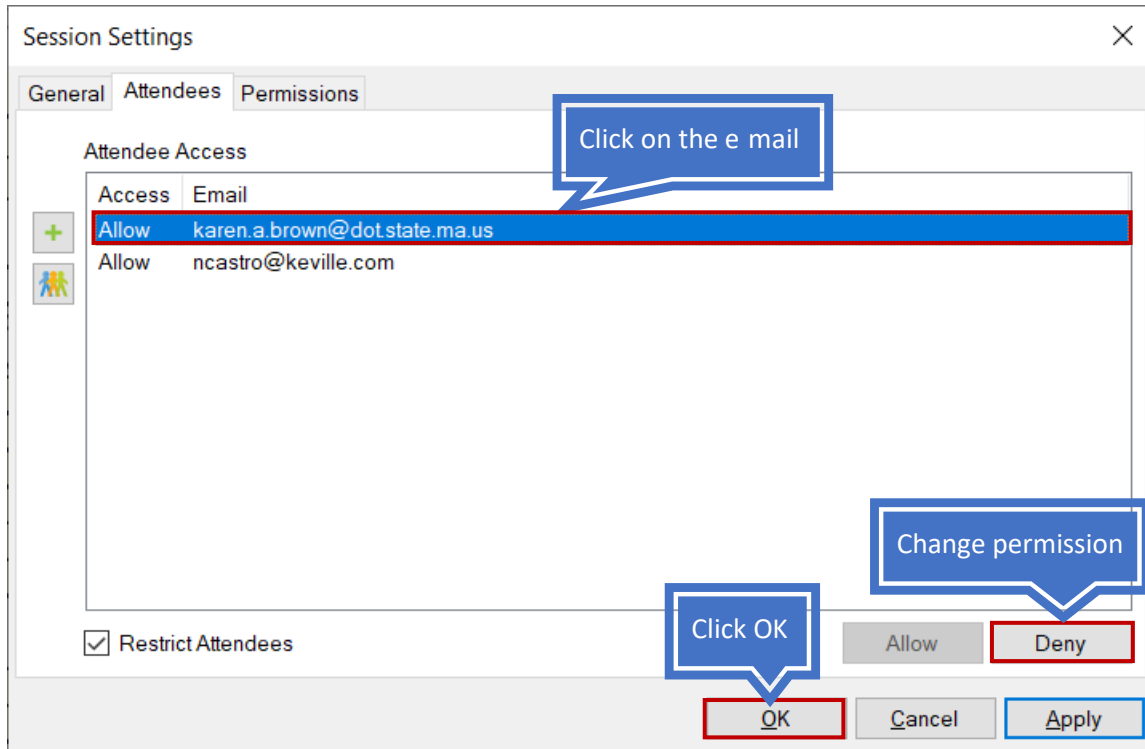
Managing access at the Permissions tab:
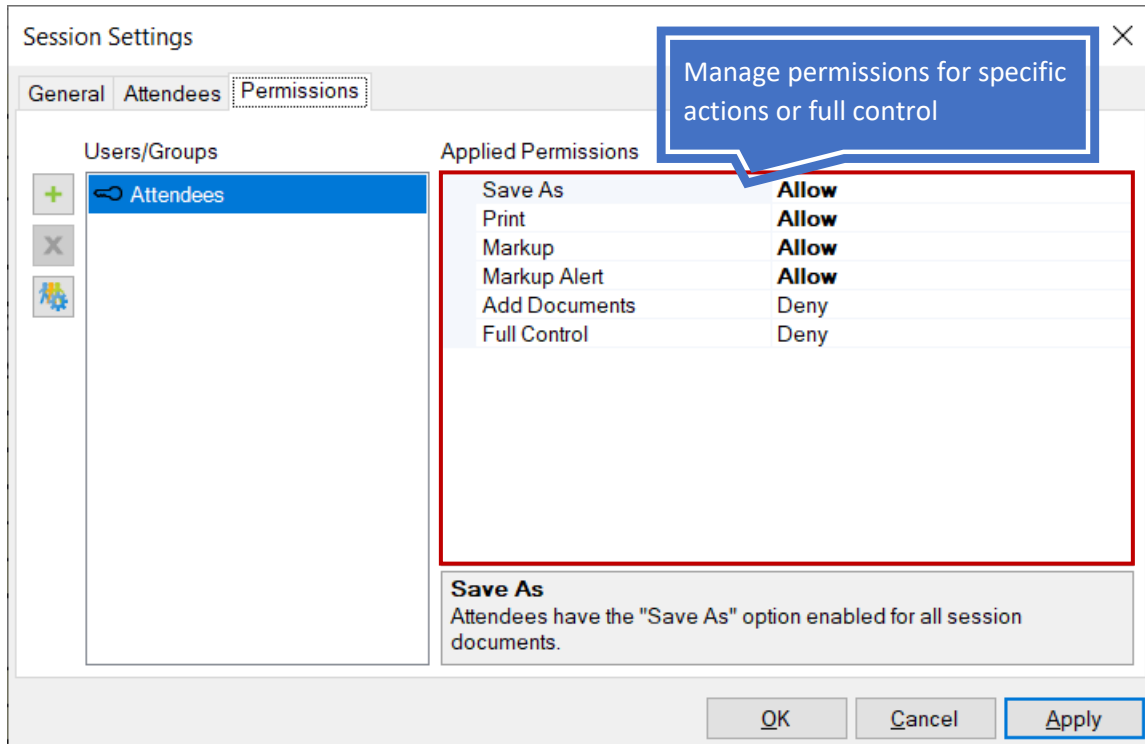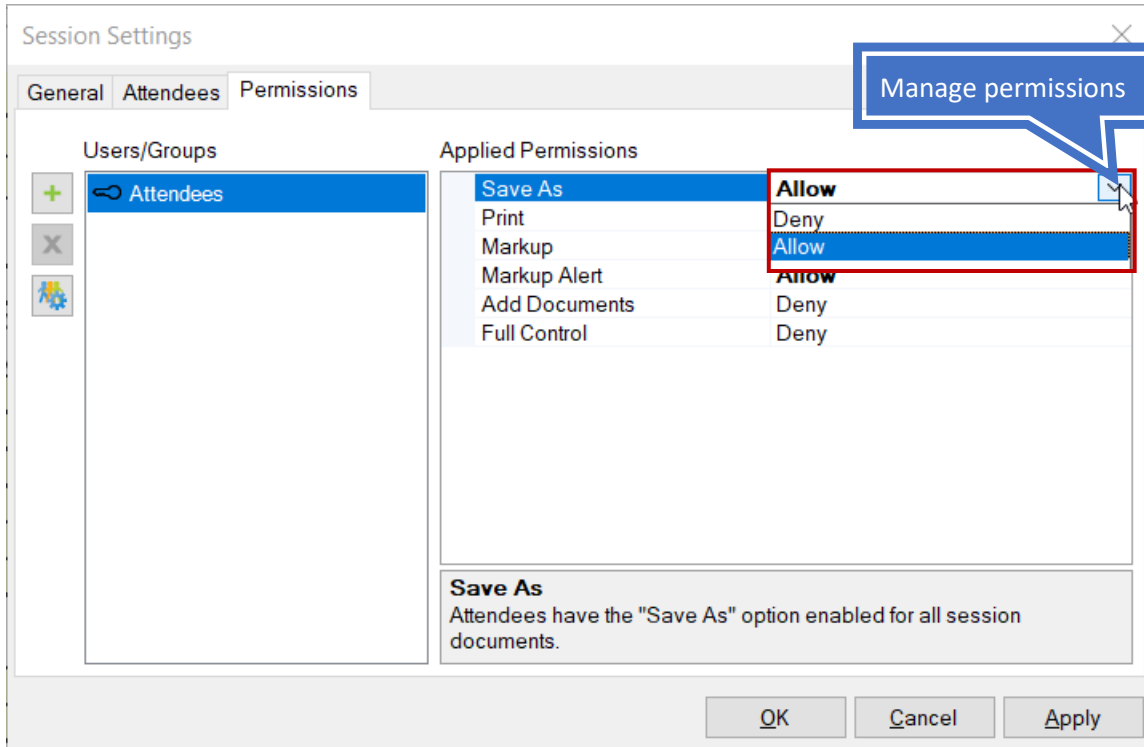
- Follow invitation instructions to invite Design Consultant.
- Design Consultant conducts their response to comments.

After attendees are locked out, add the Design Consultant using the same invitation method:
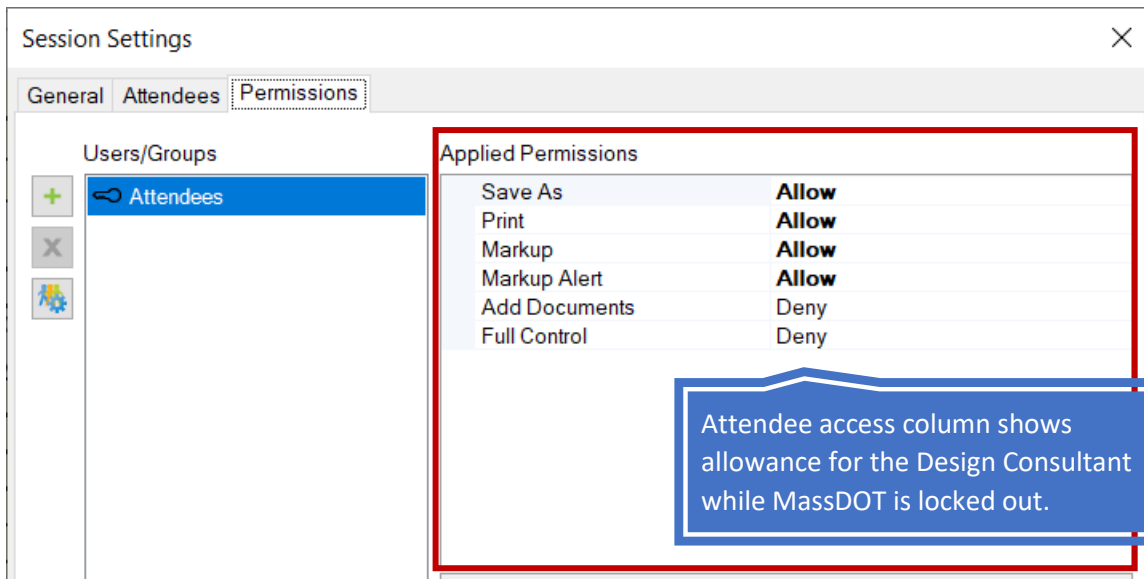
Helpful hint:

- **You don't need to initiate another session to add reviewers.**

Finishing and saving a Bluebeam Studio Session

Create the folder in Pinfo that the session will be saved to. Ensure the folder name reflects Submission + Date (25% 5-1-2019). Example: Within the design submission folder in ProjectInfo would be folders "00_Original Submission", "01_Review Comments", "02_RTCs", "03_Finals". All reviewed documents must be saved in ProjectInfo.

Best practice would be to save files four times thru the session lifecycle:

1. Originals received from designer.
2. Reviewers made their comments.
3. Designer responded to comments.
4. Designer updated responses after CRM.

Once the Bluebeam session is complete, you need to "Finish" the session. Begin by closing all the session documents then click the "Finish" button. Continue to follow the steps below to complete the process.
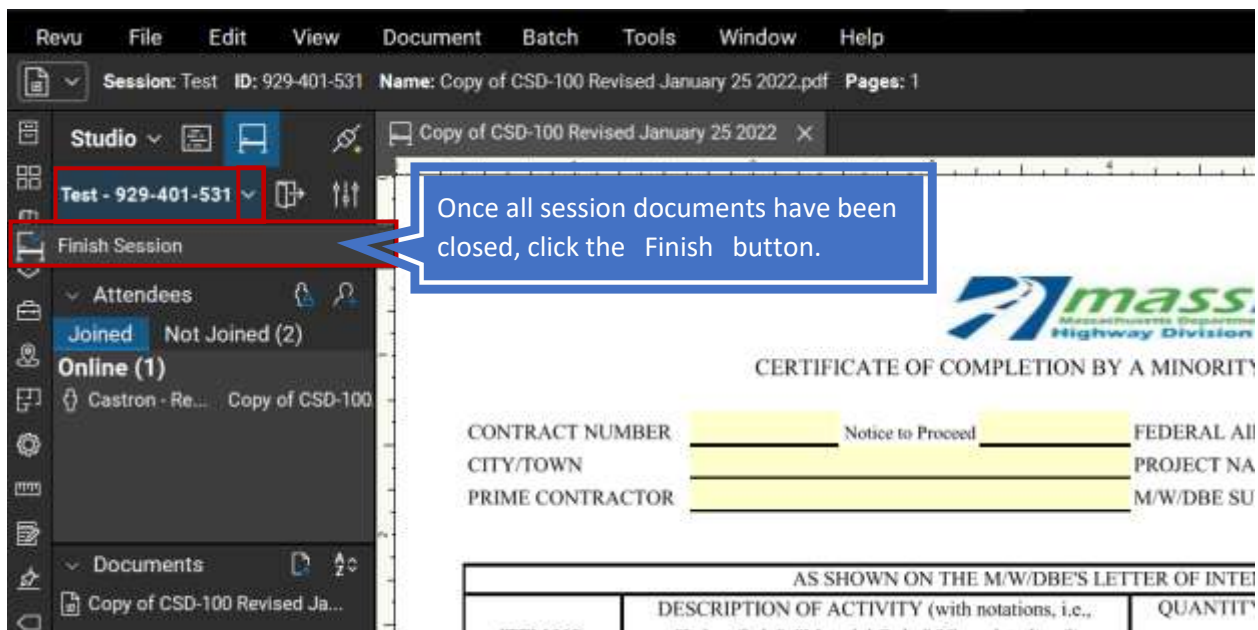
The "**Finish Session**" pop-up window will display.

Finish Session

Test - 929-401-531

Include Markups

Name	Email
☑ Castron	Nady.K.Castro@dot.state.ma.us

Save Options

○ Save (Overwrite Existing)

◉ Save In Folder

C:\Users\Castron\Documents

☐ Session Subfolder

○ Do not save files

☐ Close files after finishing

Report Options

☑ Generate Report

C:\Users\Castron\Documents\Test - 929-401-53   ...   Settings..

OK   Cancel
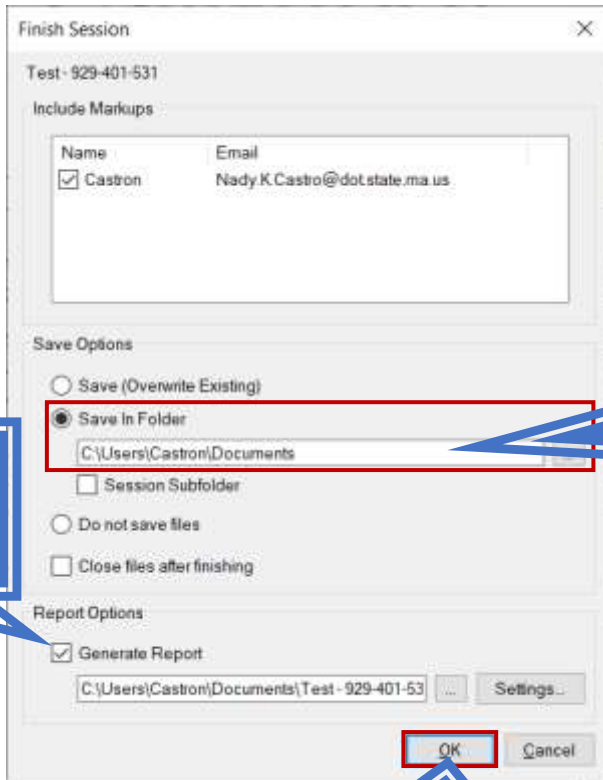
Please ensure "Generate Report" is checked

Select the "Save In Folder" path by clicking on ellipsis button.

*Click **OK;** the session will be saved in folder selected. (Bluebeam session is now over)*

It is imperative you close the session when complete. Leaving your session open will cause the following:

- After 80 days, a notification email is sent to the Host saying the Session will be archived.

- After 90 days, the Session will be archived.

- After 170 days, the Host will receive another email stating that the Session will be deleted.

<div style="border: 2px solid black; padding: 20px; text-align: center; color: red; font-weight: bold; font-size: 1.5em;">

CRITICAL INFORMATION:
AFTER 180 DAYS, THE SESSION WILL BE DELETED PERMANENTLY.
IT CANNOT BE RECOVERED!!!
ALL FILES MUST BE SAVED TO PINFO

</div>

Creating Comment Resolution Document

1. Open your session
2. Open your file(s) with review comments/responses within the session
3. Click **Batch→Summary**
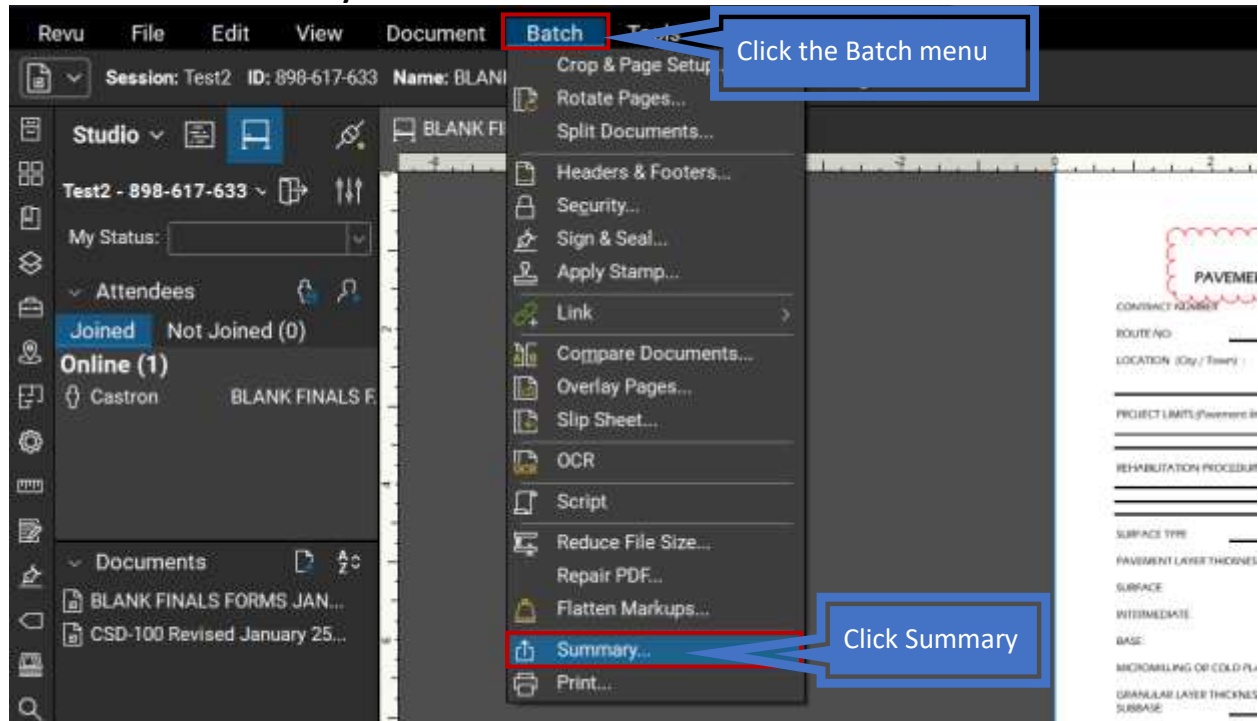
4. Click the Add pulldown button and click **Add Open Files**
5. Click **Next**
6. Uncheck all and recheck and reorder with the following columns – File Name -> Author ->Page Label -> Status -> Comments

7. Sort the information that appears on the report, choose one or more sort options, starting with **Sort by**. All remaining options will be labeled **Then by**.
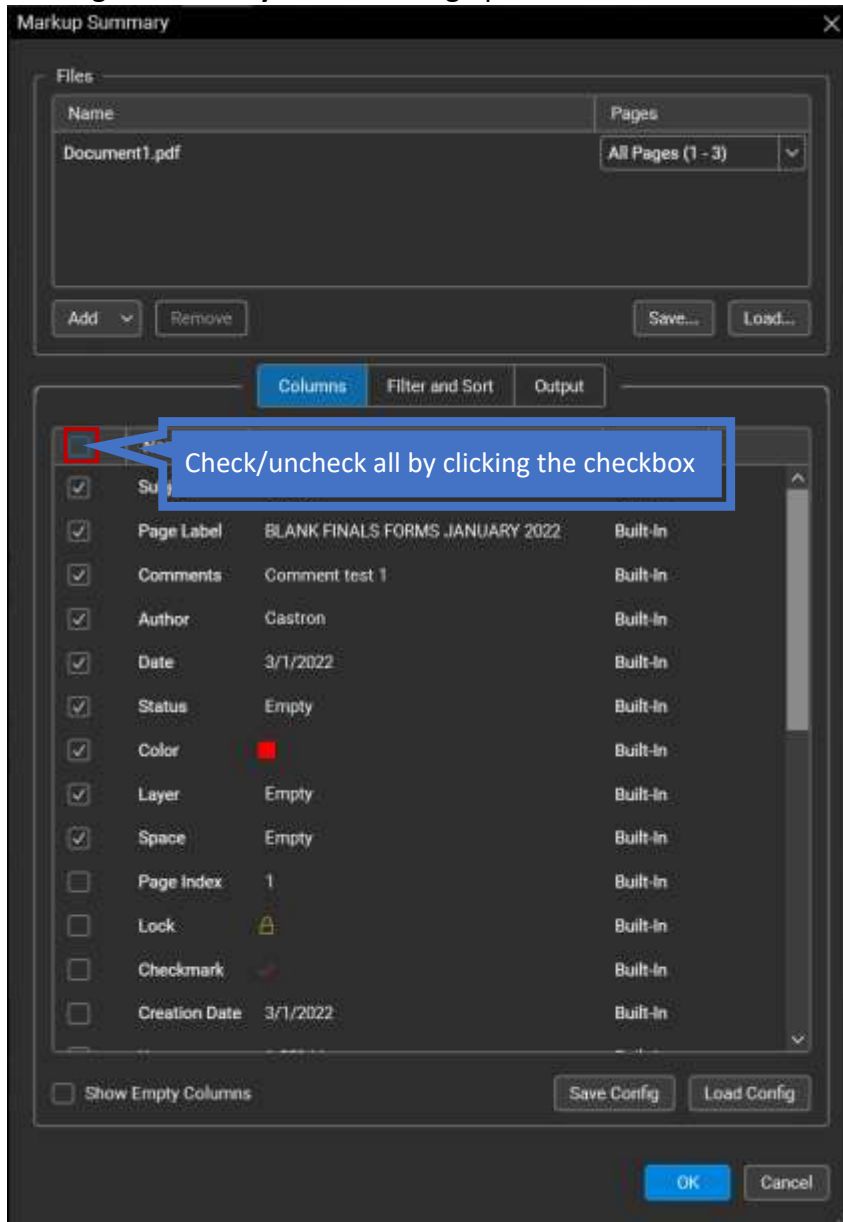
8. Sort by Author (**Ascending**), then by File Name (**Ascending**), then by Page Index (**Ascending**)
9. Select **PDF** as the desired format for the summary report from the **Export as** menu
10. Select **Open File After Creation**
11. Confirm that the location in the **Export to** field is acceptable. To change it, click **Change** and select the desired location. It is recommended that you save the file directly to the appropriate folder in ProjectInfo.
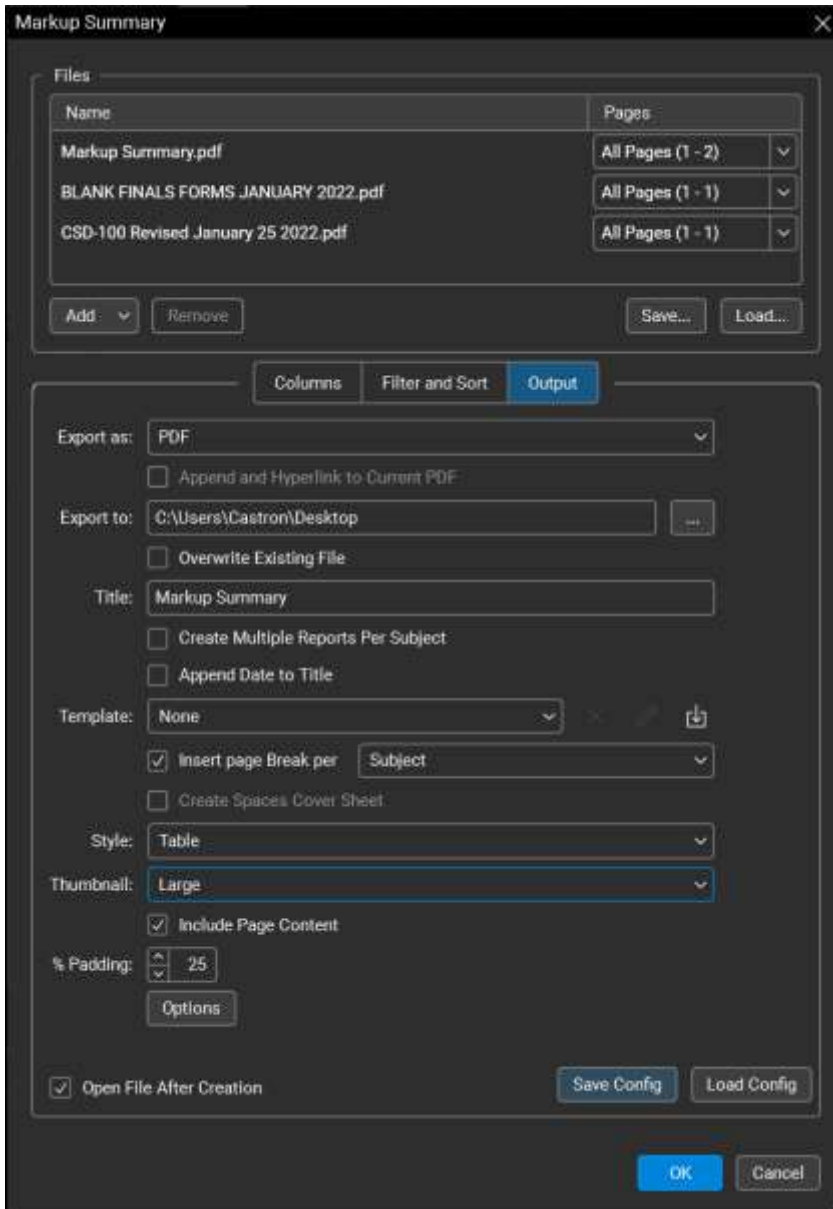
1. Change the **Title** to **Project Number, Municipality, Response to Comments**. The name of the summary file will be based on this information.

Title: 608469 25% Markup Summary

2. Confirm under PDF Options that the style is **Table,** and the Thumbnail is **Large**.
3. Before moving on, you can save the entire configuration and set of options to use on future projects or future submissions of the same project. To do so, simply click **Save Config** and save to the same location as your **Export To** field.
4. Click **OK**. The report is generated. This may take some time.
5. Save a copy of the report to the Bluebeam session. If you did not export to ProjectInfo in Step 10, save a copy of the report to ProjectInfo in the appropriate folder format and naming convention.

Example Output:

607342 25% Rev1 RTCs Markup Summary

Markup	File Name	Author	Page Label	Status	Comments
	607342_DJW_Route 28 at Chickatawbut Rd_05_07_2021.pdf (7)				
	607342_DJW_Route 28 at Chickatawbut Rd_05_07_2021.pdf	D6 Projects - Brian Levine	2	Accepted set by jlizza on 10/4/2021 at 5:25:39 PM	This DJW will be approved by District 6. We will start drafting up an official approval letter now and forward when available for sign off from the appropriate parties. Please note that the DJW will still need separate approval by the MassDOT Complete Streets section
	607342_DJW_Route 28 at Chickatawbut Rd_05_07_2021.pdf	D6 Traffic/Transit - Amitai Lipton	2	Accepted set by jlizza on 10/4/2021 at 5:27:51 PM	D6 Transit Coordinator: No exceptions taken to approving the DJW. Request that the two minor comments be addressed for the final DJW.
	607342_DJW_Route 28 at Chickatawbut Rd_05_07_2021.pdf	D6 Traffic/Transit - Amitai Lipton	7	Accepted set by jlizza on 10/4/2021 at 5:25:50 PM	
	607342_DJW_Route 28 at Chickatawbut Rd_05_07_2021.pdf	jlizza	7		Wording will be changed to project area.
	607342_DJW_Route 28 at Chickatawbut Rd_05_07_2021.pdf	D6 Traffic/Transit - Amitai Lipton	7	Accepted set by jlizza on 10/4/2021 at 5:25:50 PM	Is this accurate? Confirm whether existing NB stop is near side or far side.
	607342_DJW_Route 28 at Chickatawbut Rd_05_07_2021.pdf	jlizza	7		NB bus stop is far side, this text will be revised.

To link Markup Thumbnails with the actual comments, follow the steps below:
1. Save each PDF individually
2. Make sure "absolute hyperlinks" checkbox in the Options is checked.

Overview of Bluebeam for Reviewers

Per Engineering Directive E-18-002, Bluebeam Revu is the platform that shall be used for all phases of projects in the project delivery program.

The current version of Bluebeam is Bluebeam 2020. This guide, including tutorial information, shall be based on that version.

Training: Periodic introductory training is available. Section supervisors shall be responsible for ensuring that reviewers are adequately trained.

Procuring access to Bluebeam

1. Users must request **Bluebeam Revu** via MassDOT Help Desk Ticket e-mail:
   MassDOT/MBTA - Login - MyMassDOT (service-now.com)
2. User must create a Bluebeam account
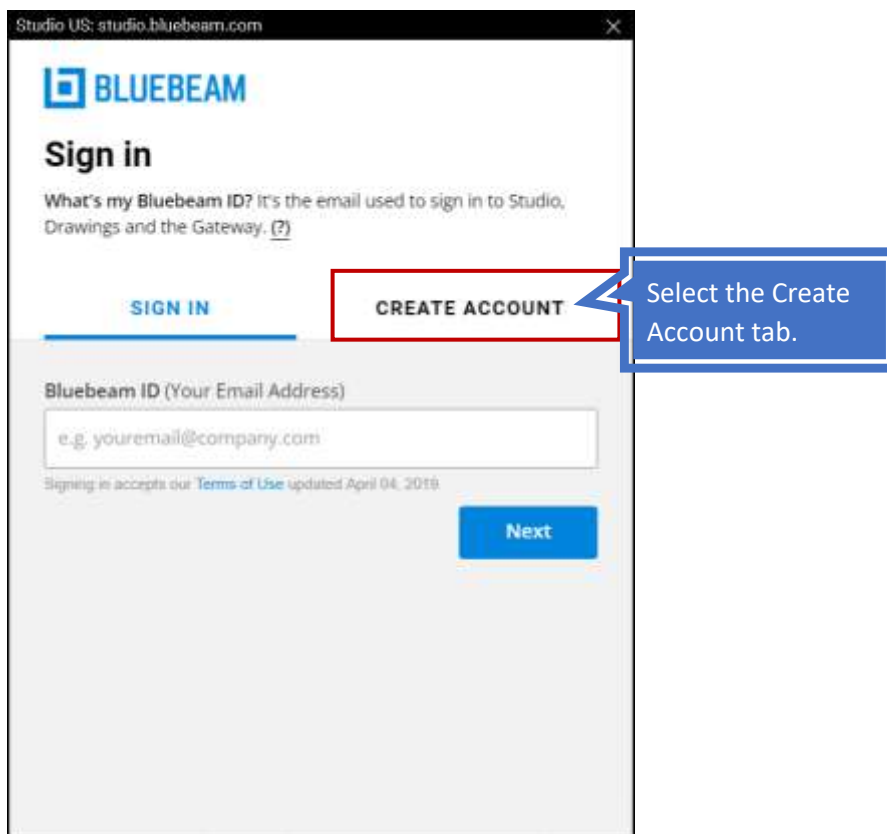
Please use the [District or HQ Section] [First Name] [Last Name] format; Example: D1 John Smith, HQ Traffic Jane Smith

Managing your Account

Please beware, the e-mail address you provide for the Bluebeam account must be a MassDOT email address. E-mail address must include "**@dot.state.ma.us**" in order for your account to work properly. At this time, please create your username.

Review Session Setup

Reviewer will receive e-mail invitation (invite) to join the review process. To open the session and join the review process, simply click on the Session ID No. and you will be directed to the Bluebeam session.
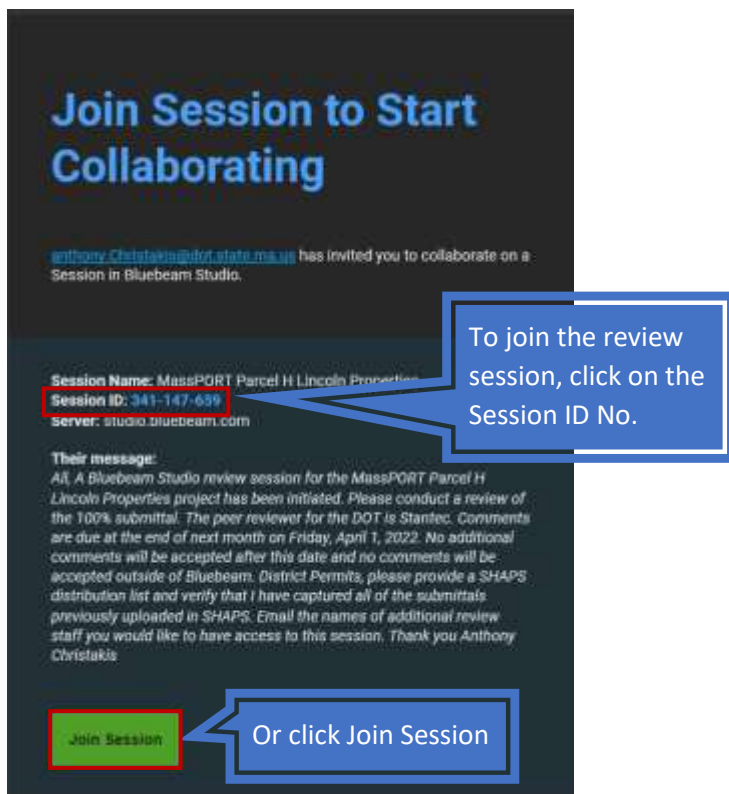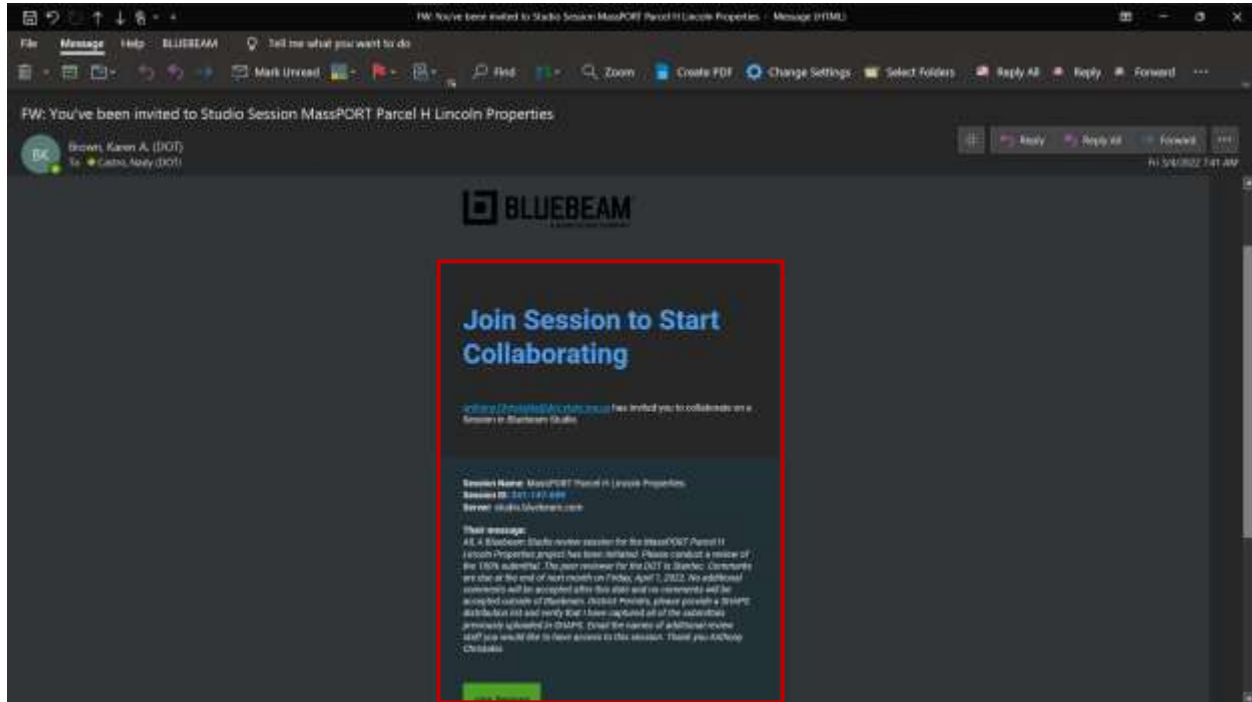
Firewalls and web security may ask for confirmation when trying to open the Bluebeam session. MassDOT reviewers may have to confirm the prompts shown below. Please click "Allow" on both prompts to open the session.
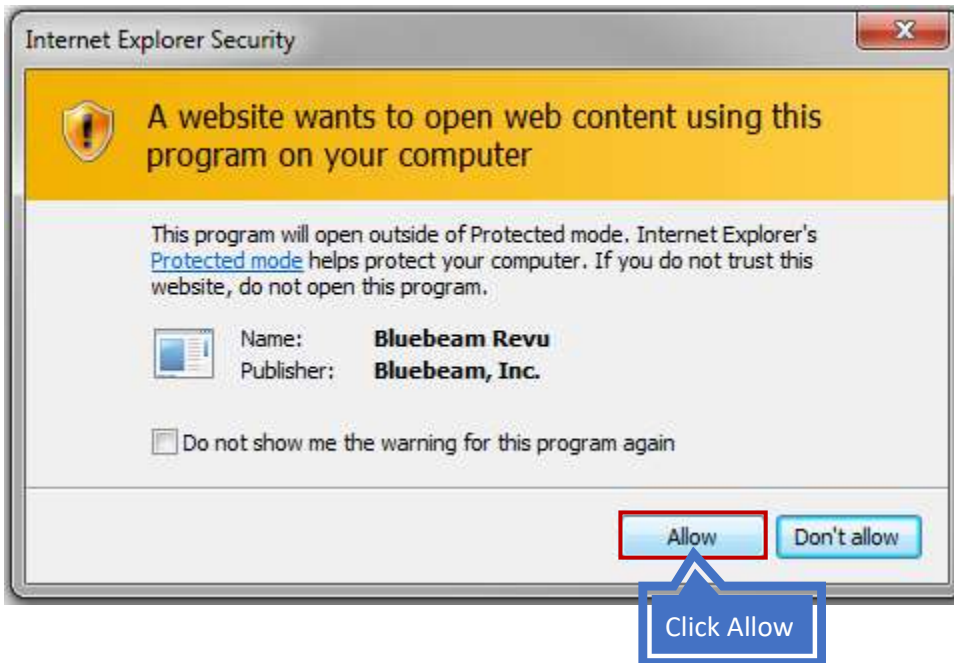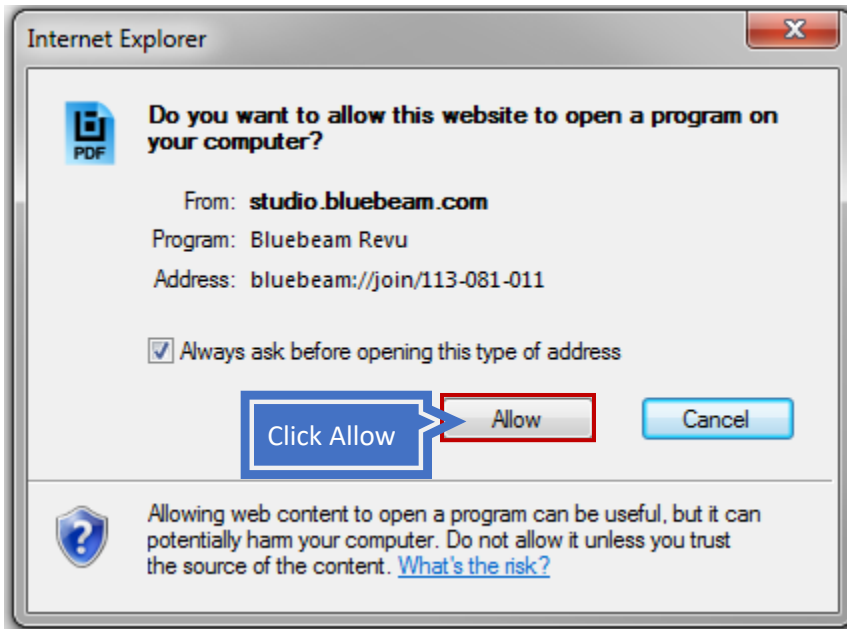
In some cases, users may have to copy and paste the Bluebeam Session ID included in the invite.

Managing Email Notifications Preferences

1. Click the "**Session Settings**" button
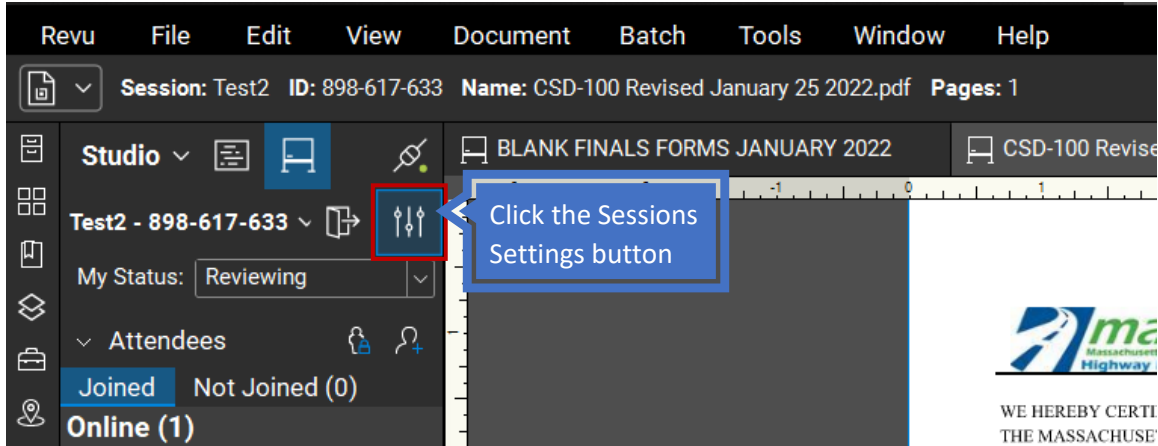
2. Under Session Settings, General tab, click on the Manage Notifications link.
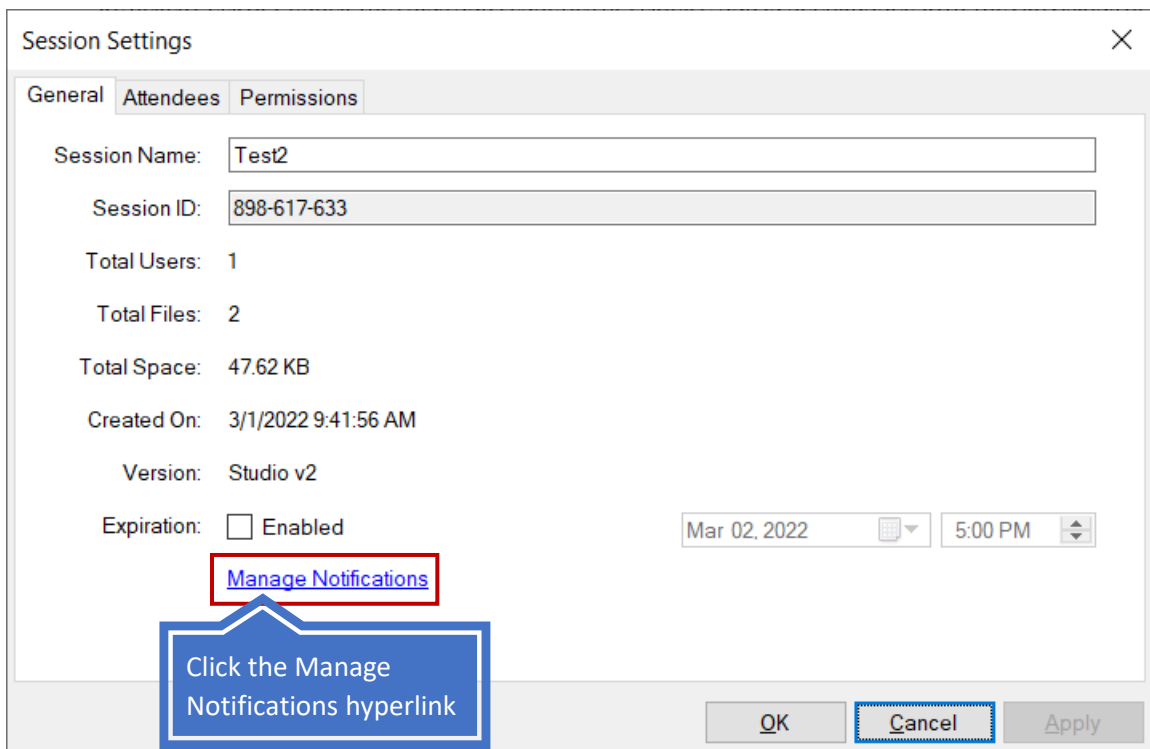
3. The Studio Notifications Preferences form will display as shown below. Select your account preferences

Enable Notifications for this session

Manage Account Preferences
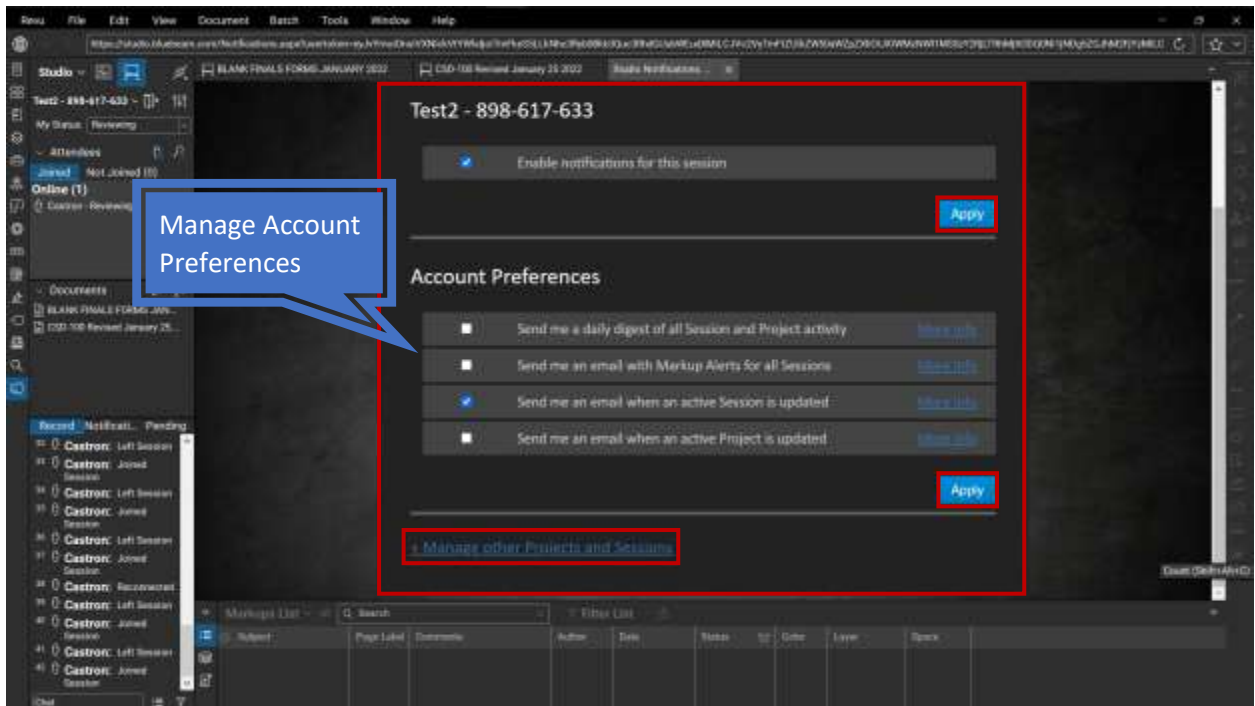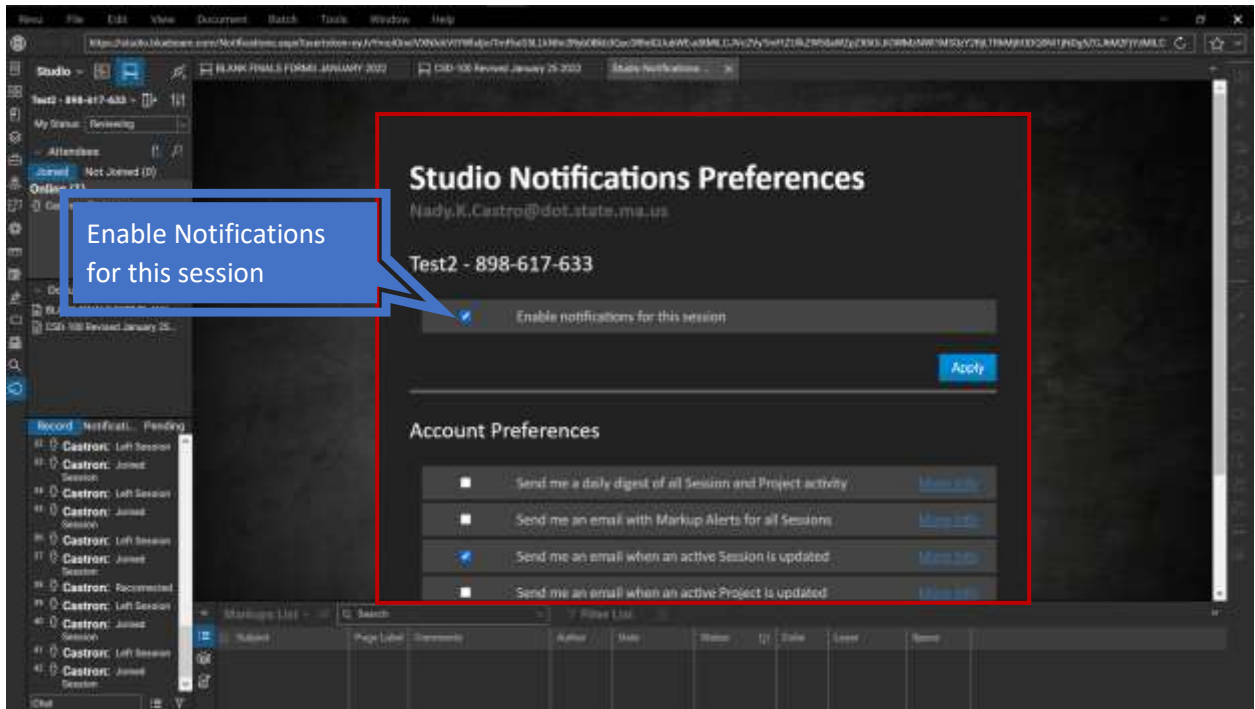
4. Click "Apply"
5. Click the +Manage other Projects and Sessions link for more

If you'd like to receive/stop receiving notifications for other Projects or Sessions you've previously logged into, make all appropriate selections under the Sessions and Projects Subscriptions.

6. Click "**Apply**" to save your changes.
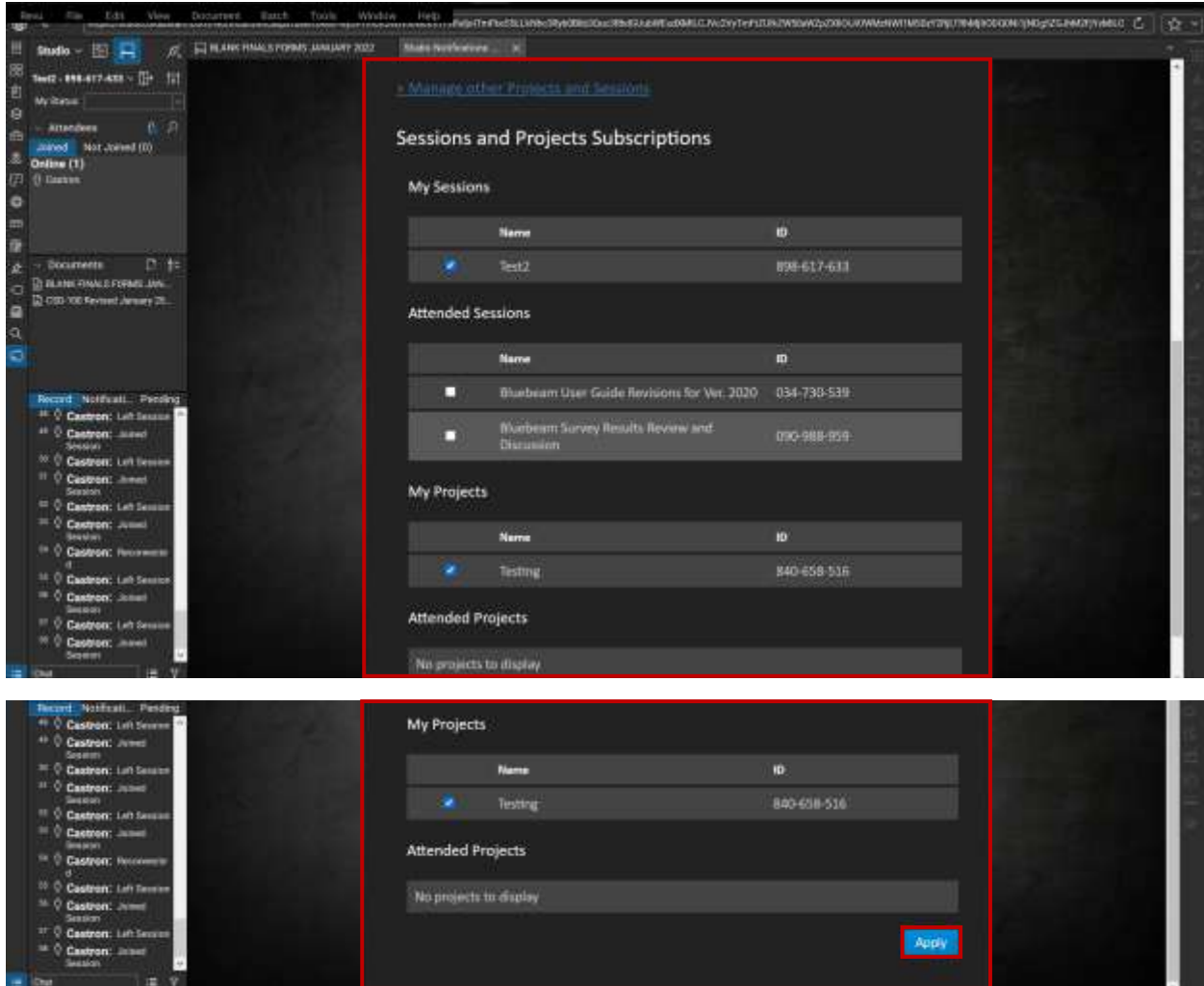
Alternatively, users can create rules in MS Outlook to manage emails from Bluebeam.

Please note: Users will still receive emails for "Session Invite" and "Session Ended". If the Host makes any changes to the date/time field of the session expiration, users will also be notified through email regardless of any preferences changes.

MassDOT Recommended Markup Tools

The MassDOT markup tools typically used are the following:

- Text Box
- Callout
- Cloud+
- Measure Tool

Note: When marking up submittal documents, reviewers should take care that markings and comments are clear and concise and do not obscure document content or other comments.

Markup menu
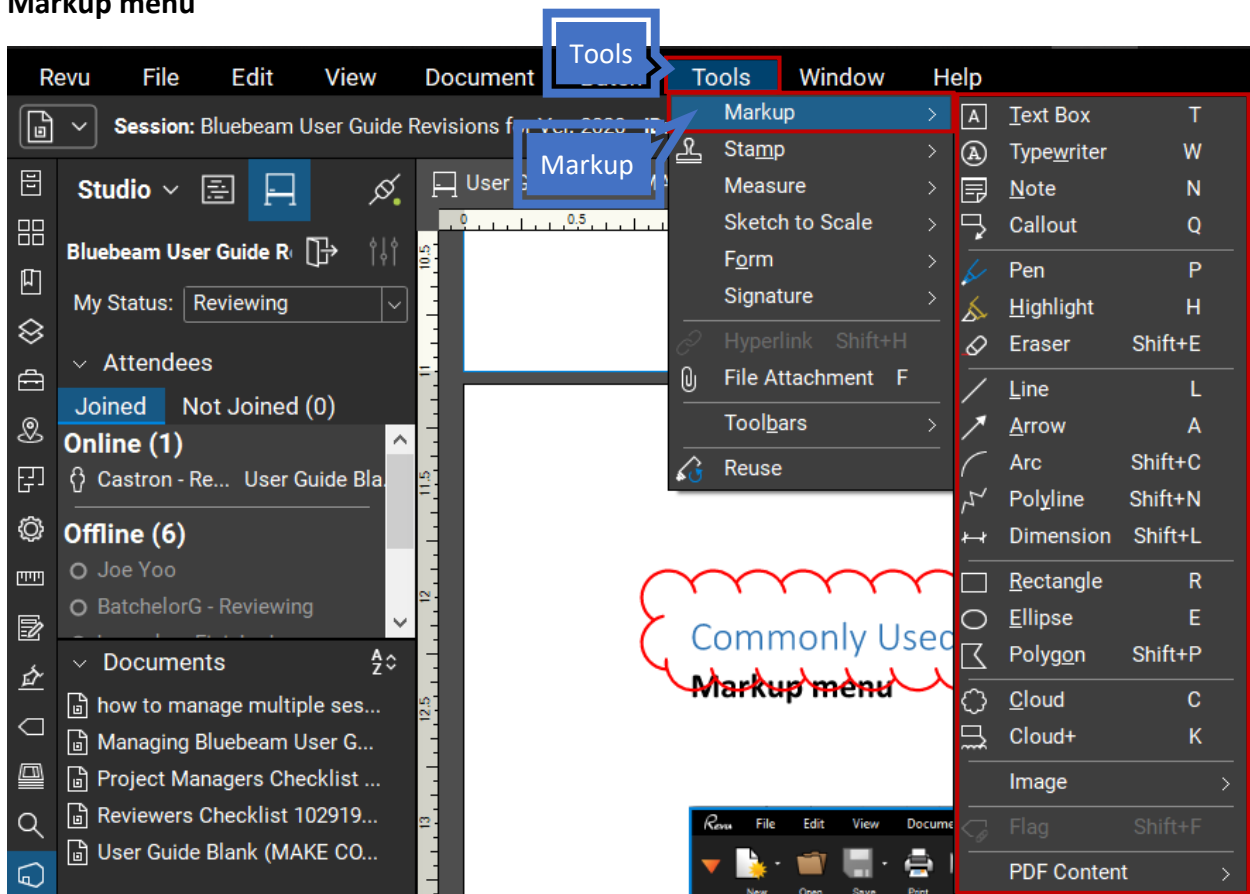
Use of tools other than those listed above, are not recommended because they don't translate well in the markup summary.

Common Text Menu commands:
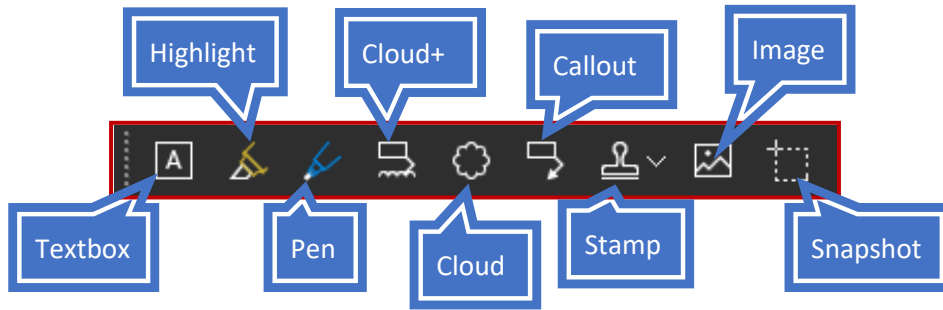
Callout note: If you add a "callout", after you create it, you can right-click and add "leaders" rather than arrows and lines.

SECTION "B"
SCALE 6'=1'-0'
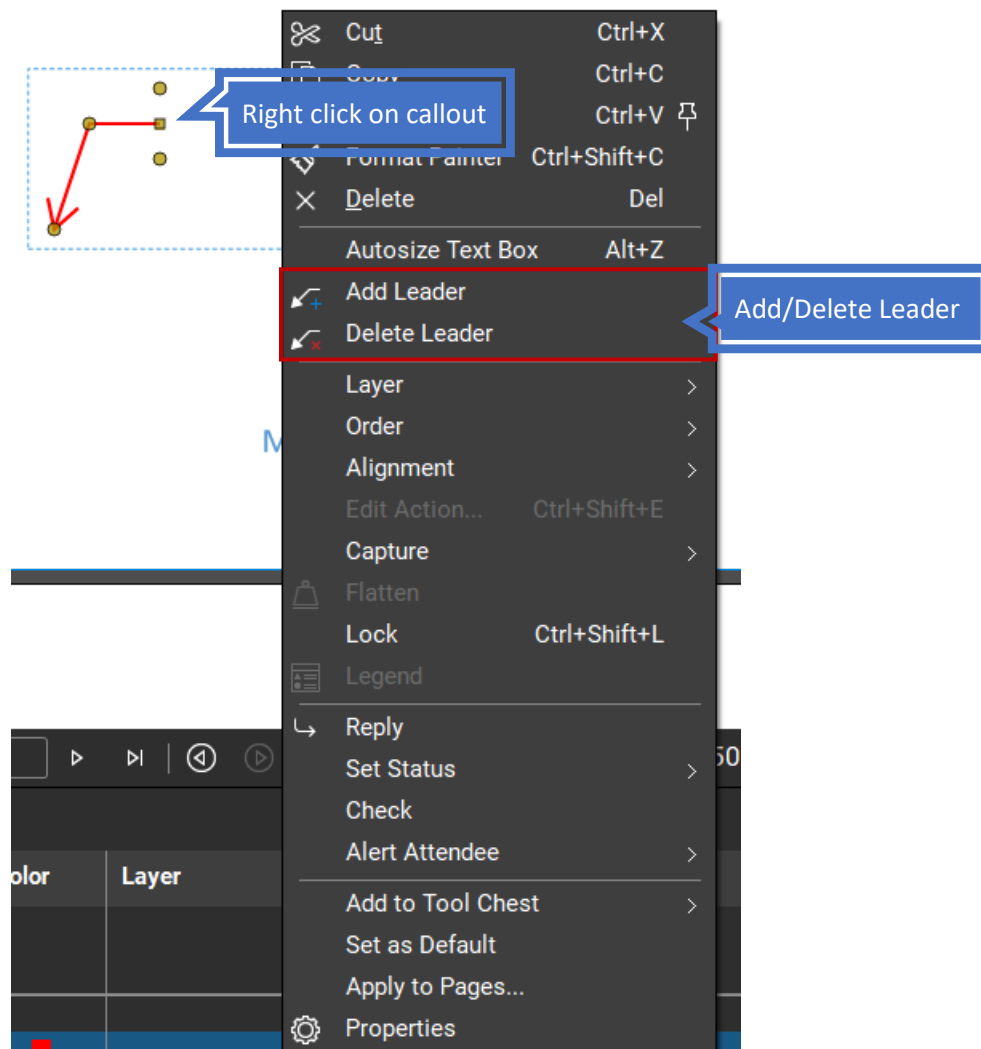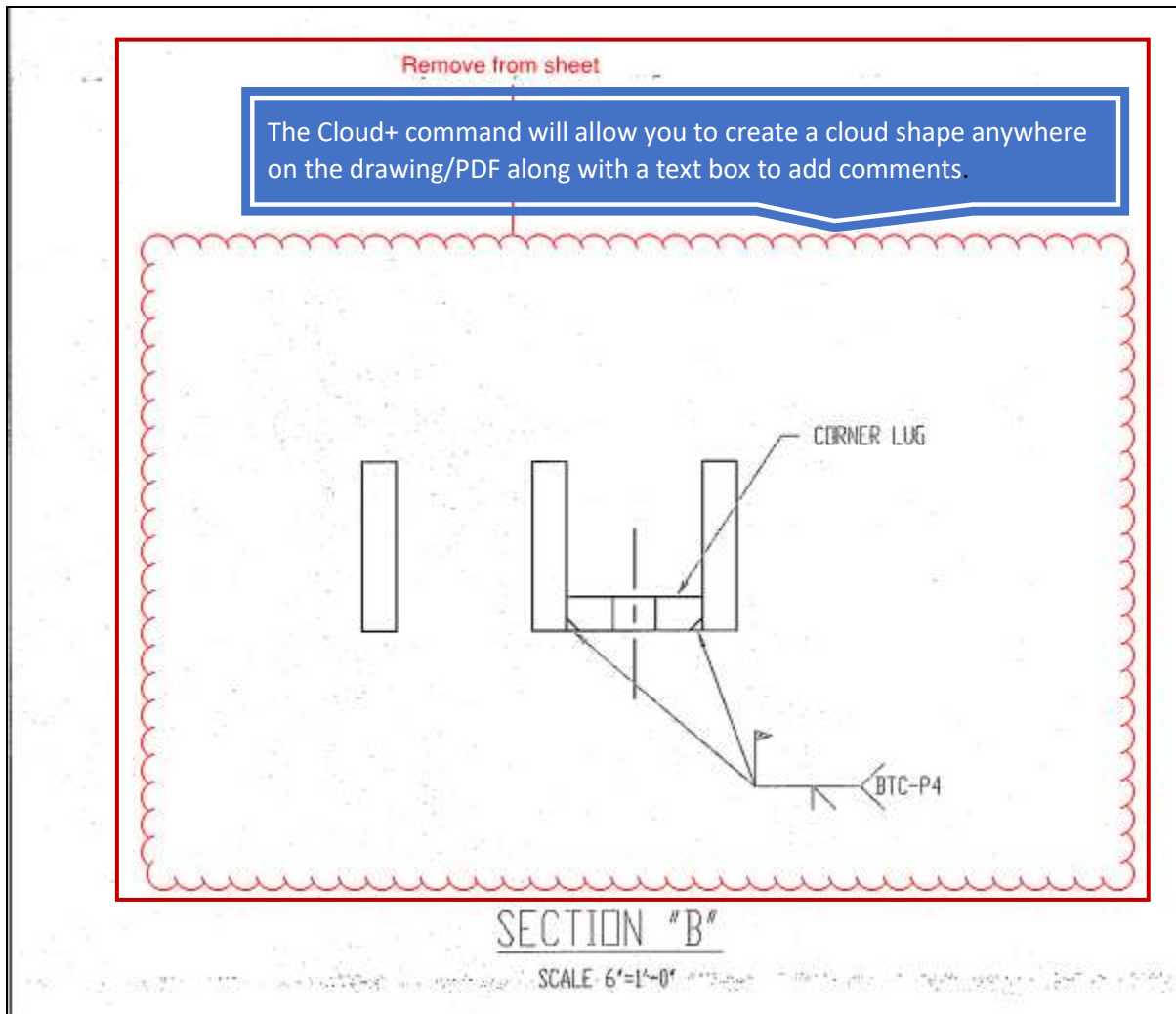
Cloud+ note: You cannot add more than one leader using Cloud+

Other Useful Bluebeam Tools

Grouping Shapes and Textbox

To create your own box and add a callout comment, utilize the line and text commands in the Markup toolbar. Once completed, select every line and text box and right click on top of the selected shapes, then select "Group"
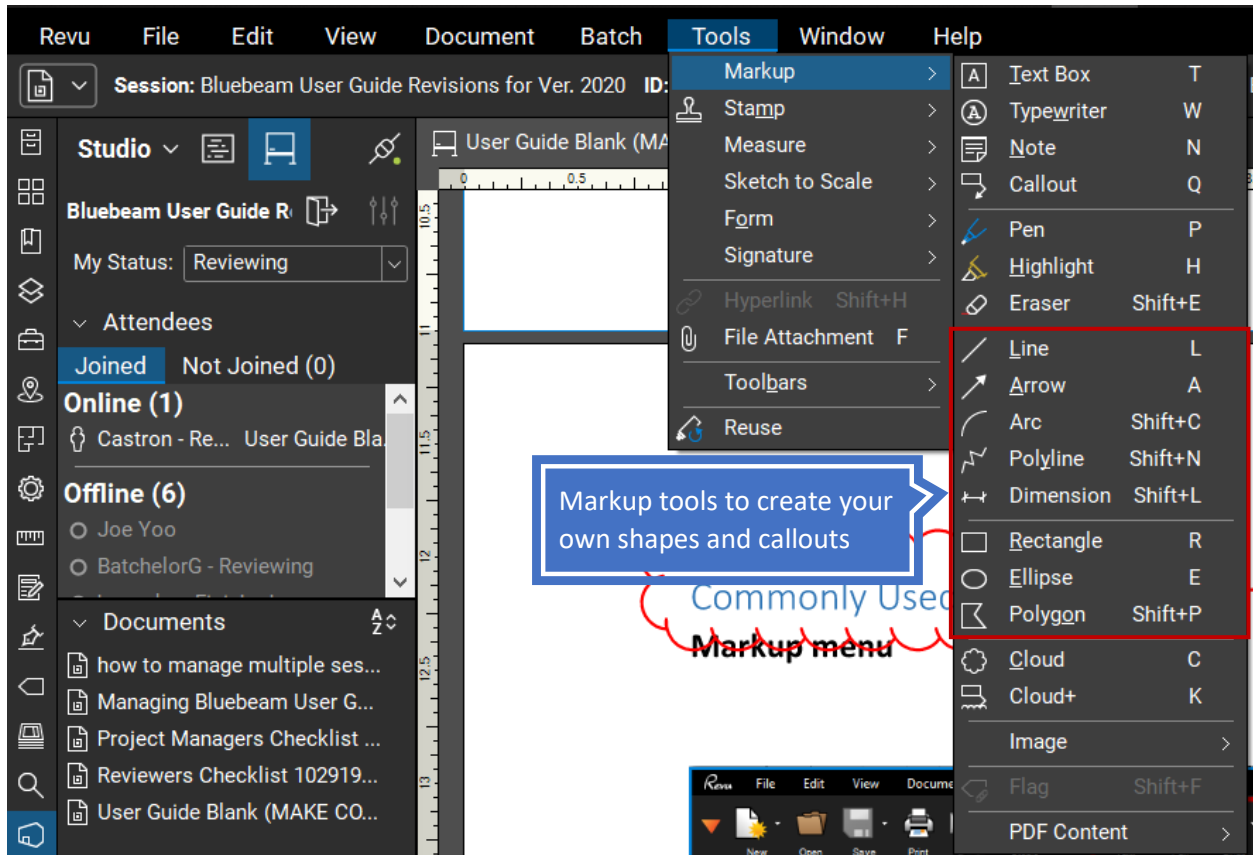
Note: After grouping objects, add a description of the group. Do this by right clicking on the group comment in the markups list and type a comment in the description.

Adding Images and Documents

To add images to the document in review, select the "Tools" menu and click the Markup, then Image, and select from the list of options.
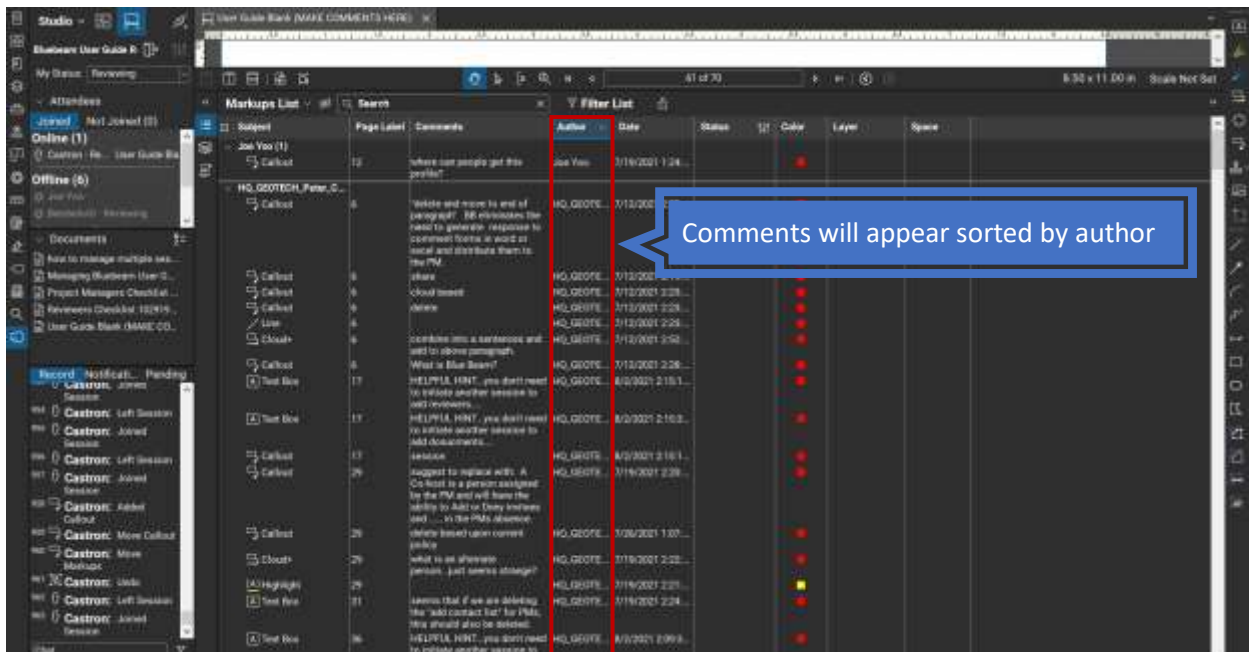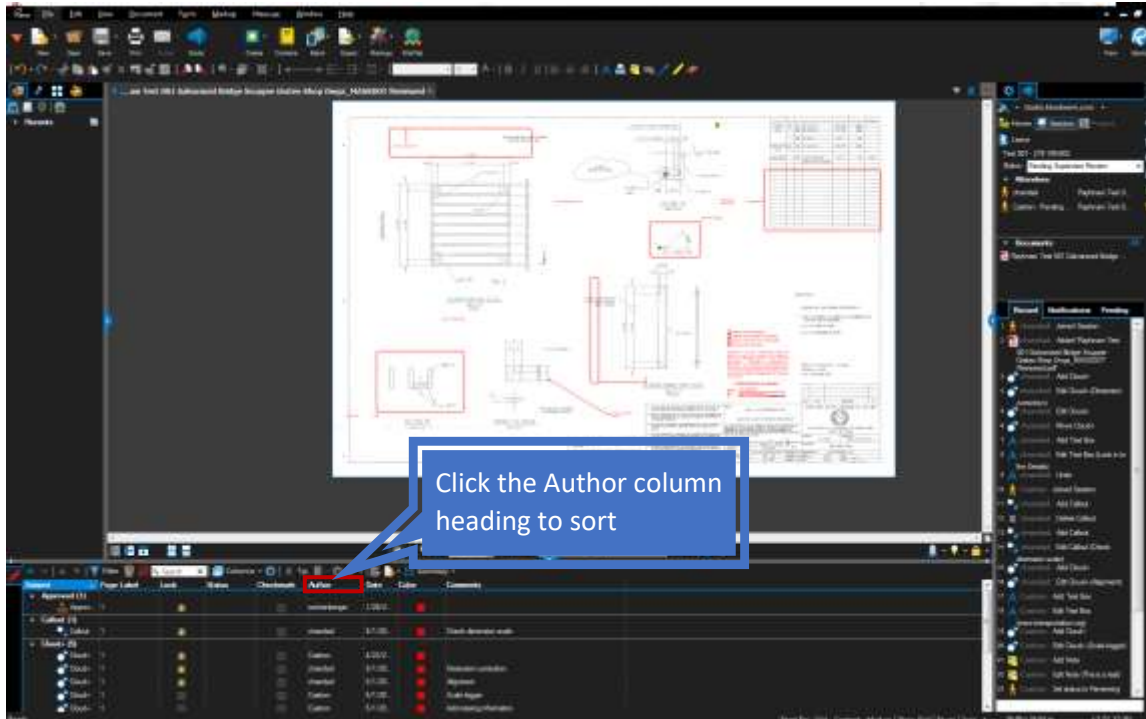
Attaching Documents

Note: After attaching a document, add a description of the attachment. Do this by right clicking the paper clip or adding the description in the comment field.

Sorting by Name

To sort comments by Author, click the Author title column

Click the Author column heading to sort

Comments will appear sorted by author

Applying Filters

To apply filters to all columns, click the Filter button. Filter arrows will become enabled on each applicable column as shown below.

Click Filter List for all column heading filters to become enabled

Filter by date

Filter by Author

Filter by Status
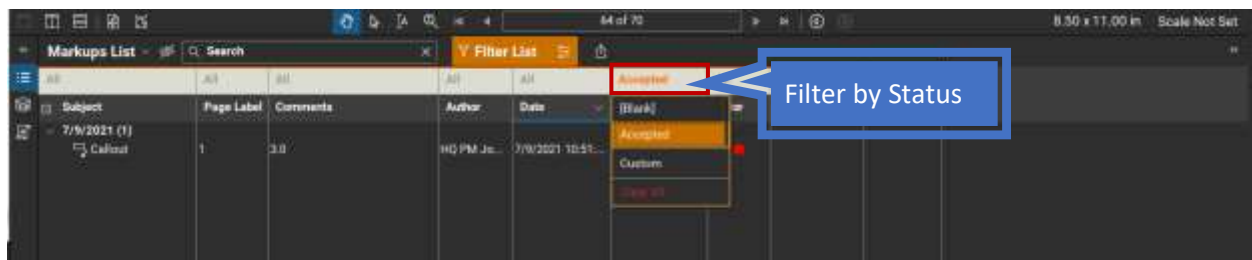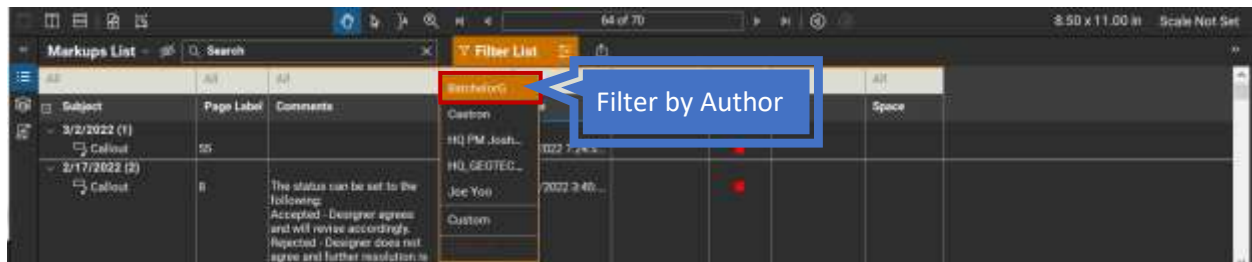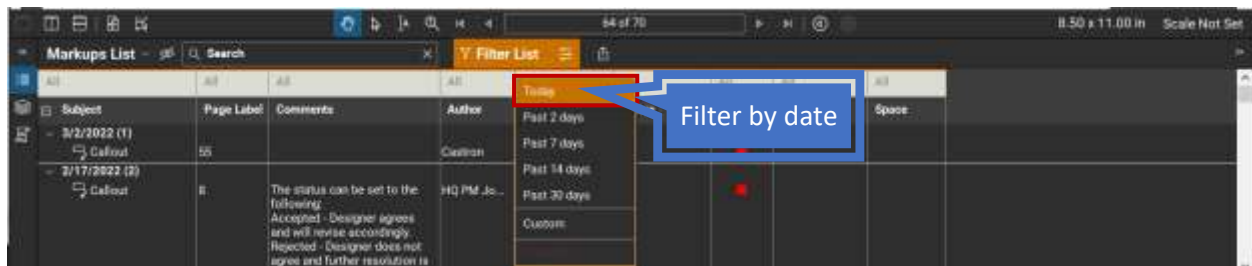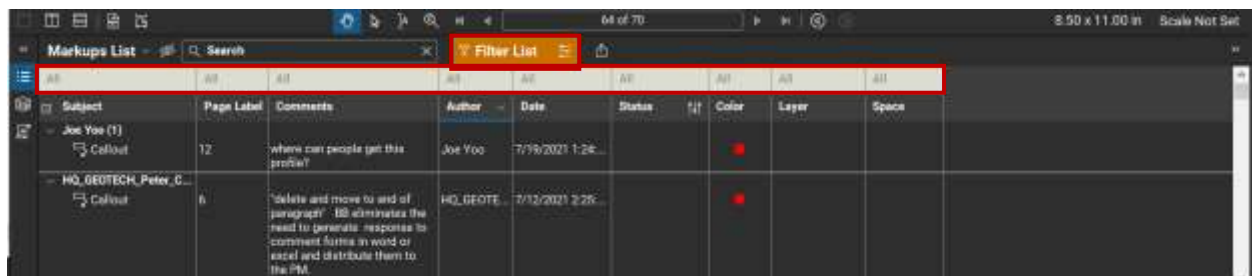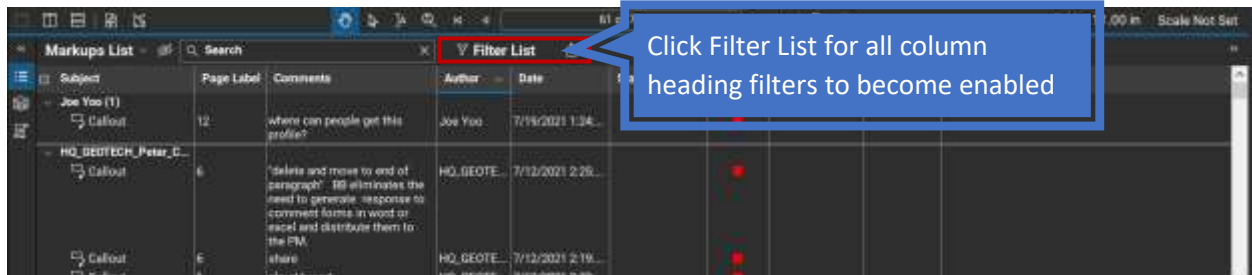
Comparing documents in a Bluebeam Session

When reviewing documents, comparing two versions of the same document in the Bluebeam session is possible by opening both documents and splitting the window in two. Documents in the Bluebeam session have the blue studio symbol (icon) on the left of the document name tab.

To split the window and view both documents at the same time select the Window menu and click on "Split Vertical".
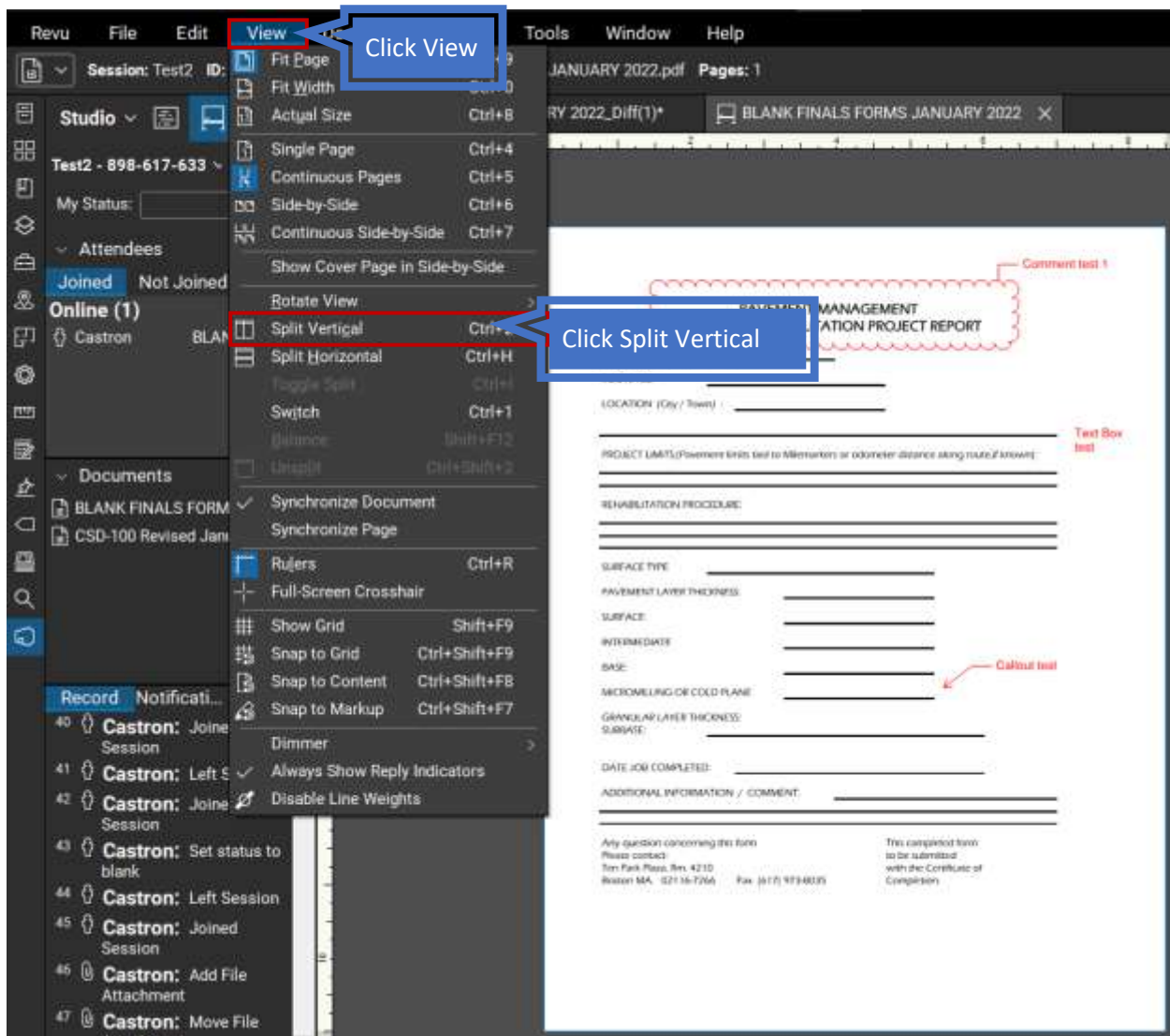
Note: Reviewers can see the same place on both documents simultaneously using the Synchronize Document tool.

The split screen will display both documents as shown below.
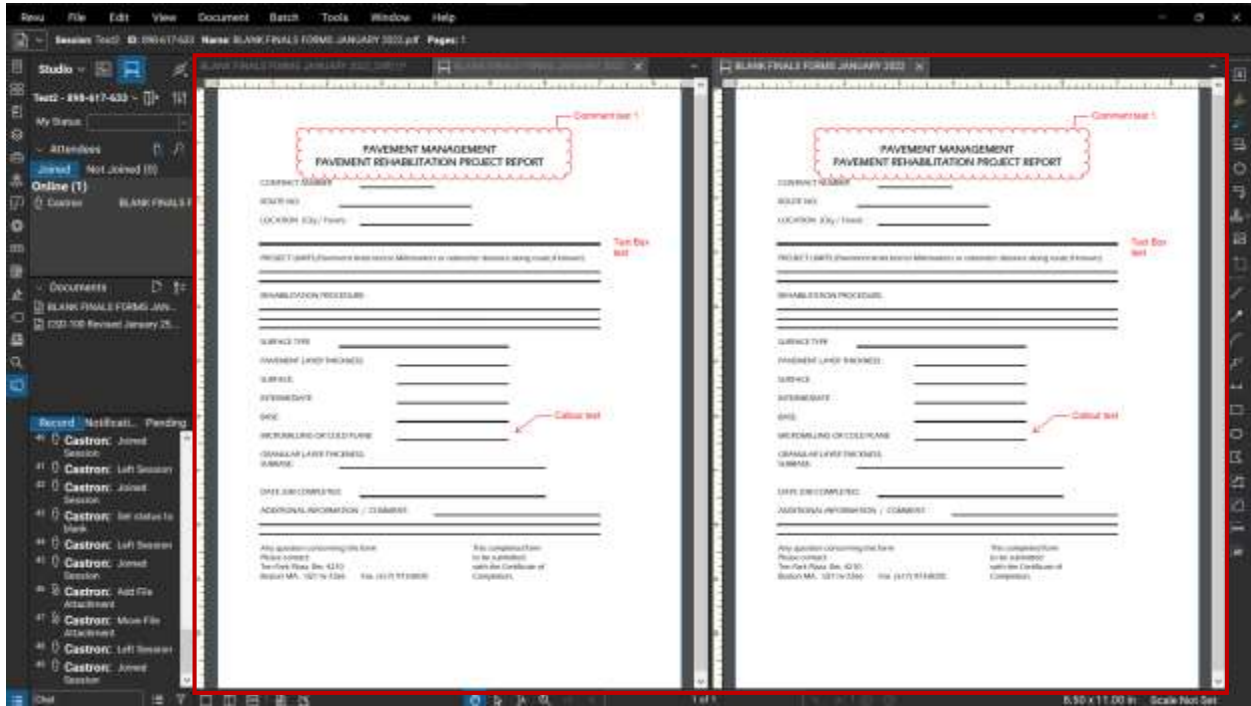
Measure Tools

The Measure tool creates measurements in any of several measurement modes. Measurements can persist as markups, allowing for processing and summarization through the Markups list, which is useful for estimation and takeoffs, or be temporary, which is useful for quickly measuring and adding up measurements without creating a visual record on the PDF.

When the Measure Tool is activated, the last measurement mode used is automatically selected. This makes it easier to employ your most commonly used measurement mode.

To enable accurate measurements, the user must first calibrate the page/drawing; then, proceed to use any of the measurement and calibrate tools available.
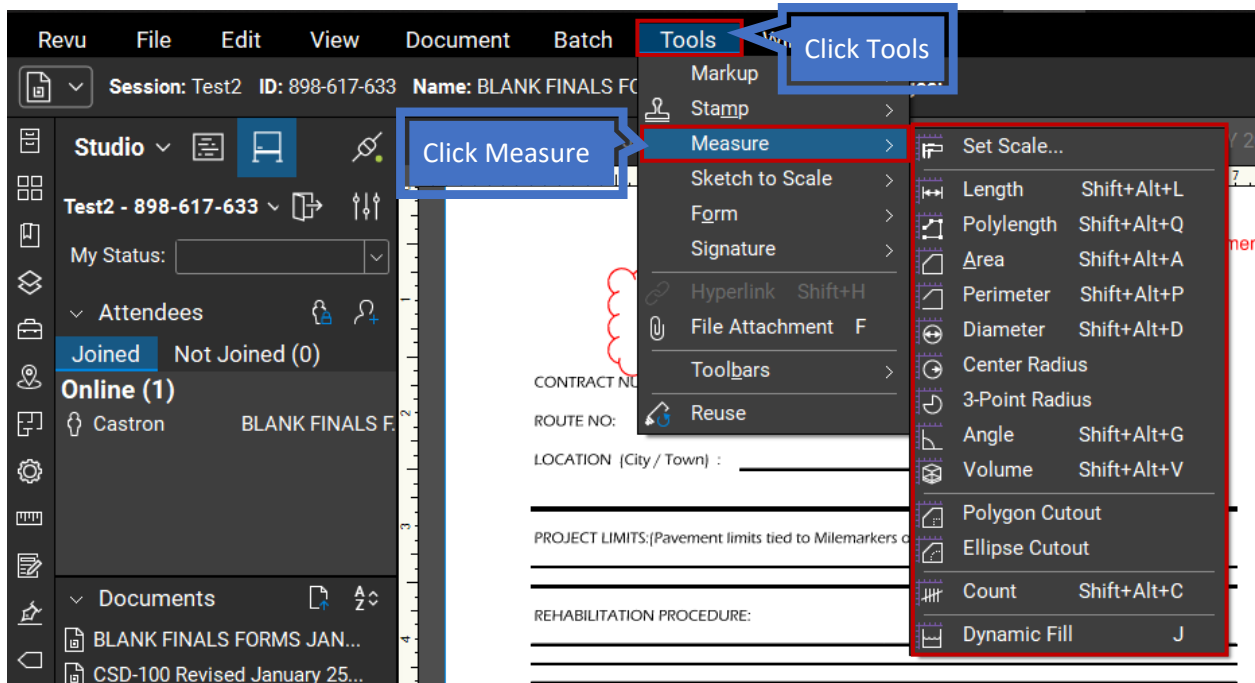
Calibrate
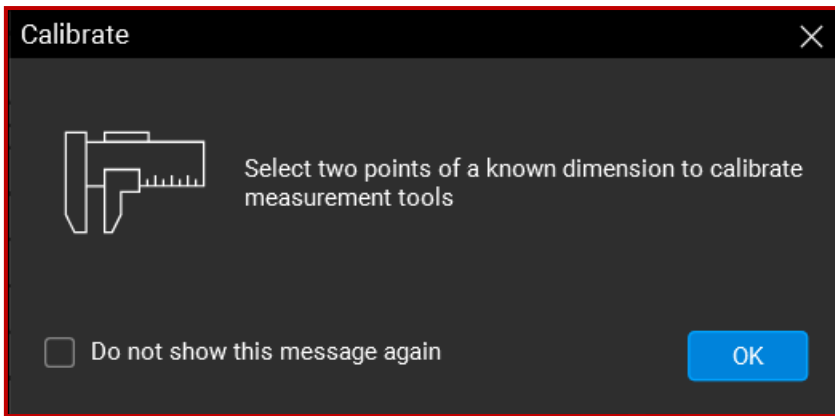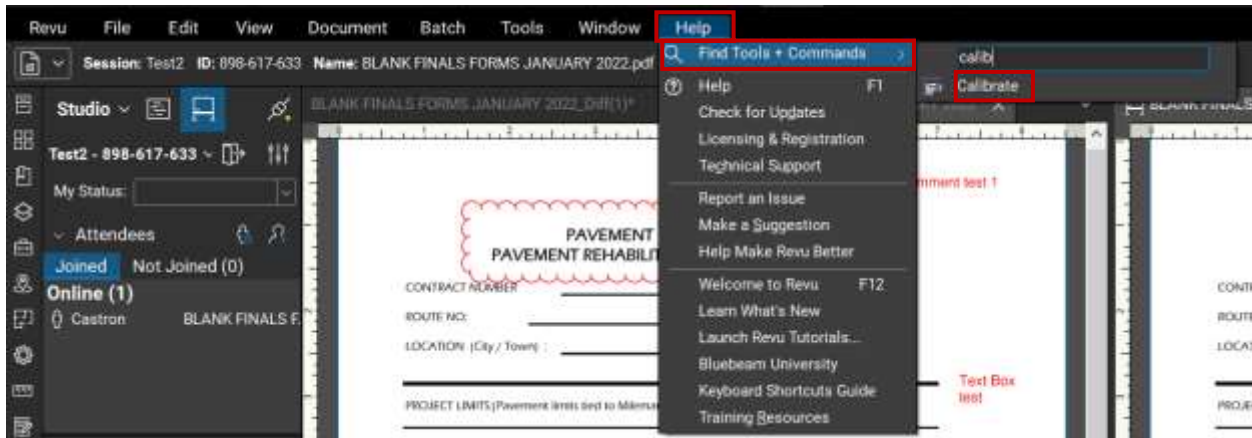
Review Closure and Responses

Review period will end at 11PM on the date indicated. At that point, the Project Manager will close access to reviewers, and open access to designers. Designers typically have 10 days to respond.

Designer completes response to comments, Project Manager will notify all reviewing sections. Comments will be output to PDF, organized by reviewing unit, with dynamic links to reference documents.

Project Manager will schedule a Comment Resolution Meeting to resolve any questions.

Comment Resolution

Designer shall be responsible for ensuring comments are either addressed or that recommendations for next steps on unresolved issues be noted in follow-up memo.

Appendix A: Bluebeam Manual Consultant Evaluation Form Guidance

Guidance for MassDOT Project Managers:

- Consultant Evaluation Forms shall be uploaded into the Bluebeam Session by the MassDOT Project Manager at the 25%, 75% and 100% design stages, including any resubmissions. This form will become part of the design submission package. Design consultant performance evaluations are required per Engineering Directive E-10-005.
- The 25%, 75% and 100% Consultant Evaluation Forms can be found in Section 810 – Contract Award Process, Attachment E in the Project Management SOPs.
- Once located in the SOP, please save a copy of the Consultant Evaluation Form to a pdf using the following file naming structure: [009]-[Project File #]-[XX% Consultant Evaluation Form].
    a) File naming example: "009-612190-100% Consultant Evaluation Form".
- After uploading the form into the Bluebeam session, the Project Manager is required to edit the applicable fields in red; see image below. The PM shall enter the Project file number and the Project description. The Bluebeam "Text Box" markup tool shall be used to input this information.

- The PM is responsible for making sure that all applicable review sections have included a score by the review session due date. If a score is missing the PM is responsible for contacting the reviewer(s) for compliance.
- The PM will enter "NA" in place of a score when review sections are not required to provide a score for a particular submission. For example, a Highway Project may not require a score from the HQ-Bridge Section.
- When the Bluebeam session ends, the MassDOT PM will save the Consultant Evaluation Form in the applicable folder in ProjectInfo with the entire design submission package.
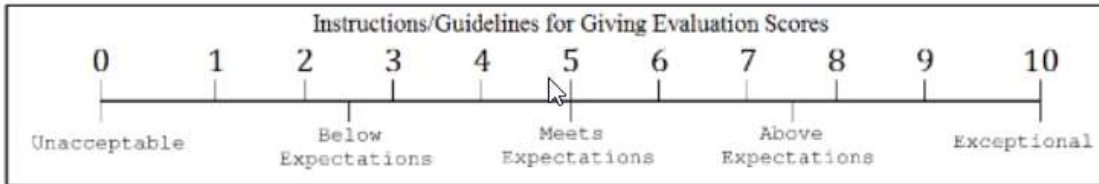
Guidance for MassDOT Reviewers:

- At the 25%, 75% and 100% design stages, all applicable reviewers shall provide a score on the Consultant Evaluation Form, which will be located within the Bluebeam Session. Design consultant performance evaluations are required per Engineering Directive E-10-005.
- When in the Bluebeam session, the reviewer can refer to the Consultant Evaluation Form for guidance on scoring a design submission. To locate the form within the review session, please note *example* of the file naming structure, "009-612190-75% Consultant Evaluation Form".
- The Bluebeam "Text Box" markup tool shall be used to input a score. Each review section will include their score in the applicable colored cell of the form; see image below.

75% Design Submission						
Reviewers	**Design Plans***	**MEPA/NEPA**	**Wetlands/ Water**	**Hazardous Materials**	**Special Provisions**	**Estimate/ Calculations**
District-Projects/DUCE	🟩					
District-Traffic	🟩					
HQ-Bridge	🟩				🟩	🟩
HQ-Traffic	🟩					
HQ-Environmental		🟩	🟩	🟩		
ROW	🟩					
ADA/AAB	🟩					
Landscape	🟩					

- Review sections that are not required to provide a score for a particular submission will enter "NA" in the required field. For example, a Safe Routes to School Project may not require a review by the Landscape Section.
- The Consultant Evaluation Form will be stored with the design submission package and can be located in ProjectInfo for future reference.

Appendix B: 25% Stage Consultant Evaluation Form

25% Stage Consultant Evaluation Form to be completed by applicable Reviewers - Please edit fields in Yellow.

Instructions/Guidelines for Giving Evaluation Scores

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Unacceptable   Below   Meets   Above   Exceptional
                    Expectations   Expectations   Expectations

Factors to consider when scoring:

1. Completeness of Submission -(Please reference 25% Highway Design Submission & Review Checklist as well as the Bridge Checklist for additional guidance.)
2. Followed Division guidelines for plan preparation and survey control - clarity, accuracy, and completeness of plans.
3. Responsiveness and cooperation.
4. If your section is not required to provide a score for this submission then please enter "NA" in the applicable field.

Consultant Evaluation Form

Project File # :

Municipality, Project Description :

25% Design Submission

Reviewers	Design Plans	DJW	Environmental Documents
District - Projects/DUCE			
District - Traffic			
HQ - Bridge			
HQ - Traffic			
HQ - Environmental			
ROW			
HQ - Complete Streets			

Appendix C: 75% Stage Consultant Evaluation Form

Instructions/Guidelines for Giving Evaluation Scores

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Unacceptable — Below Expectations — Meets Expectations — Above Expectations — Exceptional
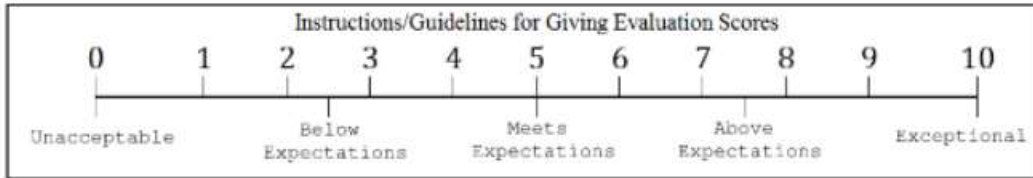
Factors to consider when scoring:

1. Completeness of Submission -(Please reference 75% Highway Design Submission & Review Checklist as well as the Bridge Checklist for additional guidance.)
2. Adequately addressed previous submission comments.
3. Followed Division guidelines for plan preparation and survey control - clarity, accuracy, and completeness of plans.
4. Included required special provisions.
5. Limiting cost increase due to design errors & quality of estimate.
6. Responsiveness and cooperation.
7. If your section is not required to provide a score for this submission then please enter "NA" in the applicable field.
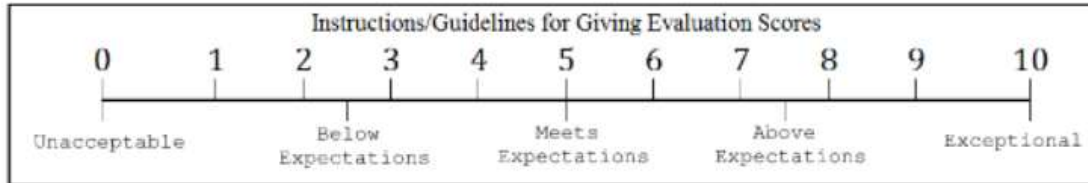
Consultant Evaluation Form

Project File # :

Municipality, Project Description :

75% Design Submission

Reviewers	Design Plans*	MEPA/NEPA	Wetlands/ Water	Hazardous Materials	Special Provisions	Estimate/ Calculations
District-Projects/DUCE						
District-Traffic						
HQ-Bridge						
HQ-Traffic						
HQ-Environmental						
ROW						
ADA/AAB						
Landscape						

* District Projects/DUCE score based on entire submission.

* District Traffic score based on entire submission.

* Landscape score based on entire submission.

Appendix D: 100% Stage Consultant Evaluation Form

100% Stage Consultant Evaluation Form to be complete by applicable Reviewers - Please edit fields in Blue

Instructions/Guidelines for Giving Evaluation Scores

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Unacceptable — Below Expectations — Meets Expectations — Above Expectations — Exceptional

Factors to consider when scoring:

1. Completeness of Submission -(Please reference 75% Highway Design Submission & Review Checklist as well as the Bridge Checklist for additional guidance.)
2. Adequately addressed previous submission comments.
3. Followed Division guidelines for plan preparation and survey control - clarity, accuracy, and completeness of plans.
4. Included required special provisions.
5. Limiting cost increase due to design errors & quality of estimate.
6. Responsiveness and cooperation.
7. If your section is not required to provide a score for this submission then please enter "NA" in the applicable field.

Consultant Evaluation Form

Project File # :

Municipality, Project Description :

100% Design Submission

Reviewers	Design Plans*	Special Provisions	Estimate/Calculations
District-Projects/DUCE			
District-Traffic			
HQ-Bridge			
HQ-Traffic			
ROW			
ADA/AAB			
Landscape			

* District Projects/DUCE score based on entire submission.

* District Traffic score based on entire submission.

* Landscape score based on entire submission.

Change Log

- Version 3.0 – Official Release, October 2022
- Version 3.1 – Revised Appendix, November 15, 2022