



**Bluebeam Revu Extreme 2020**  
**Basics and quick start guide**  
**Texas Department of Transportation**  
**EL Paso District Headquarters**



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El Paso District

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Purpose of this Bluebeam Basics manual is to assist in the operation of the Bluebeam Revu Extreme 2020 software rollout.

This software is now implemented by TXDOT to be used for the review of all documents, highway construction plans, images, estimates, interdepartment correspondence, and change orders. Each department is different and each section has their own review process. This software can be tailored towards different review processes for that particular discipline. What this software does is to help collaborate engineering sections review of plans, coordinate updates, corrections and ideas in the design and review process. Its main goal is to collaborate communication between disciplines and sections in a virtual cloud setting.

Please take advantage of this new technology and its benefits toward the departments vision , goals and objectives for inhouse PS&E and consultant contracted deliverables. The department is working in conjunction with the consultants and contractors in using the Bluebeam Revu software as a standard of communication and design which is in the process to be utilized in very near future and set as a national standard to other state DOTs.

This virtual basics course will give you a good overview of the functions, project creations methods , sessions and the necessary tools to implement for your daily work routines and assist in QCQA of all projects TXDOT produces on a daily basis.

I hope this will assist you in your daily Bluebeam operation and if you need any form of assistance with this software please feel free to contact me:

Luis M. Sanchez III—Txdot El Paso District

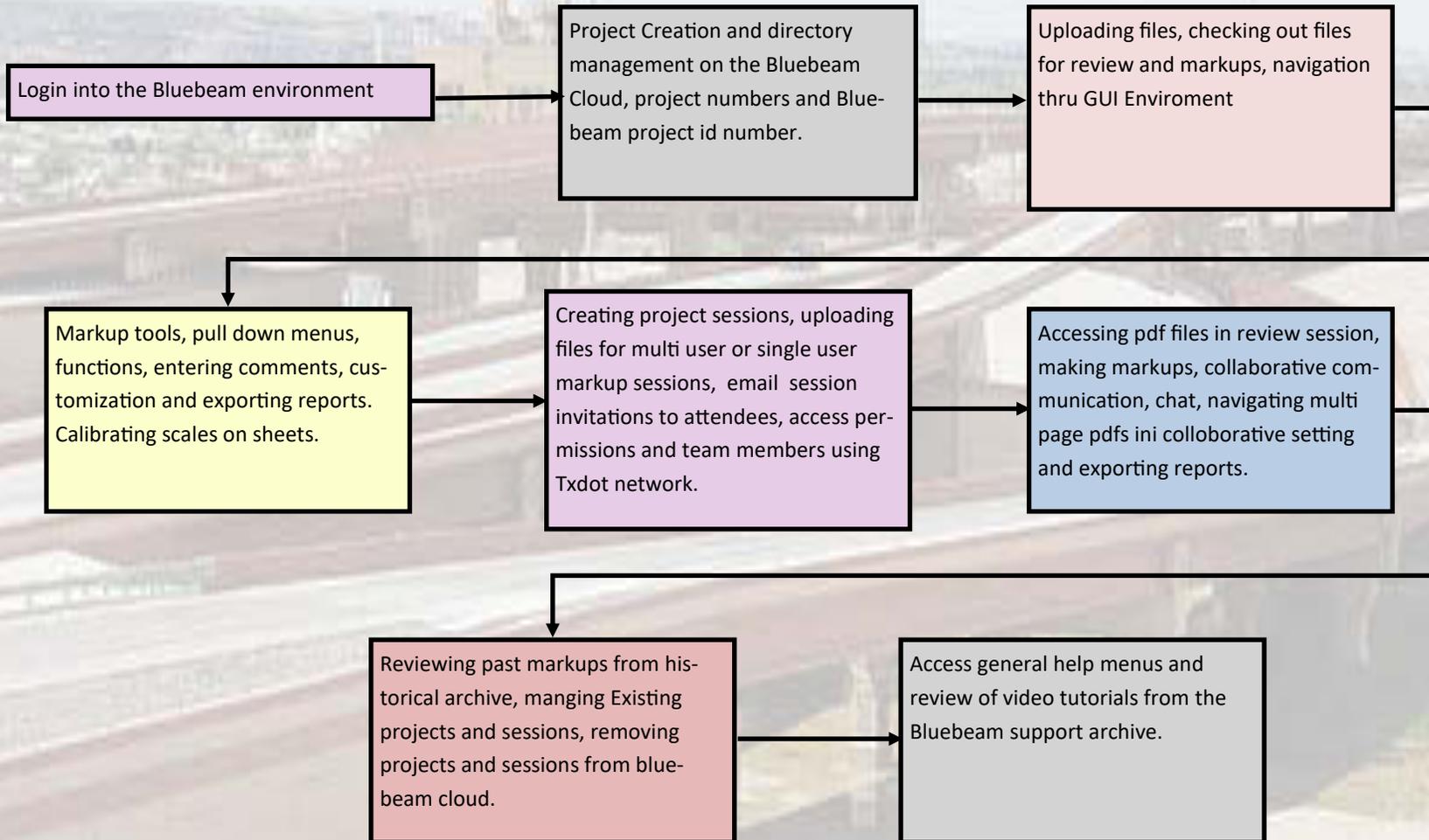
Engineering-Surveying Specialist III

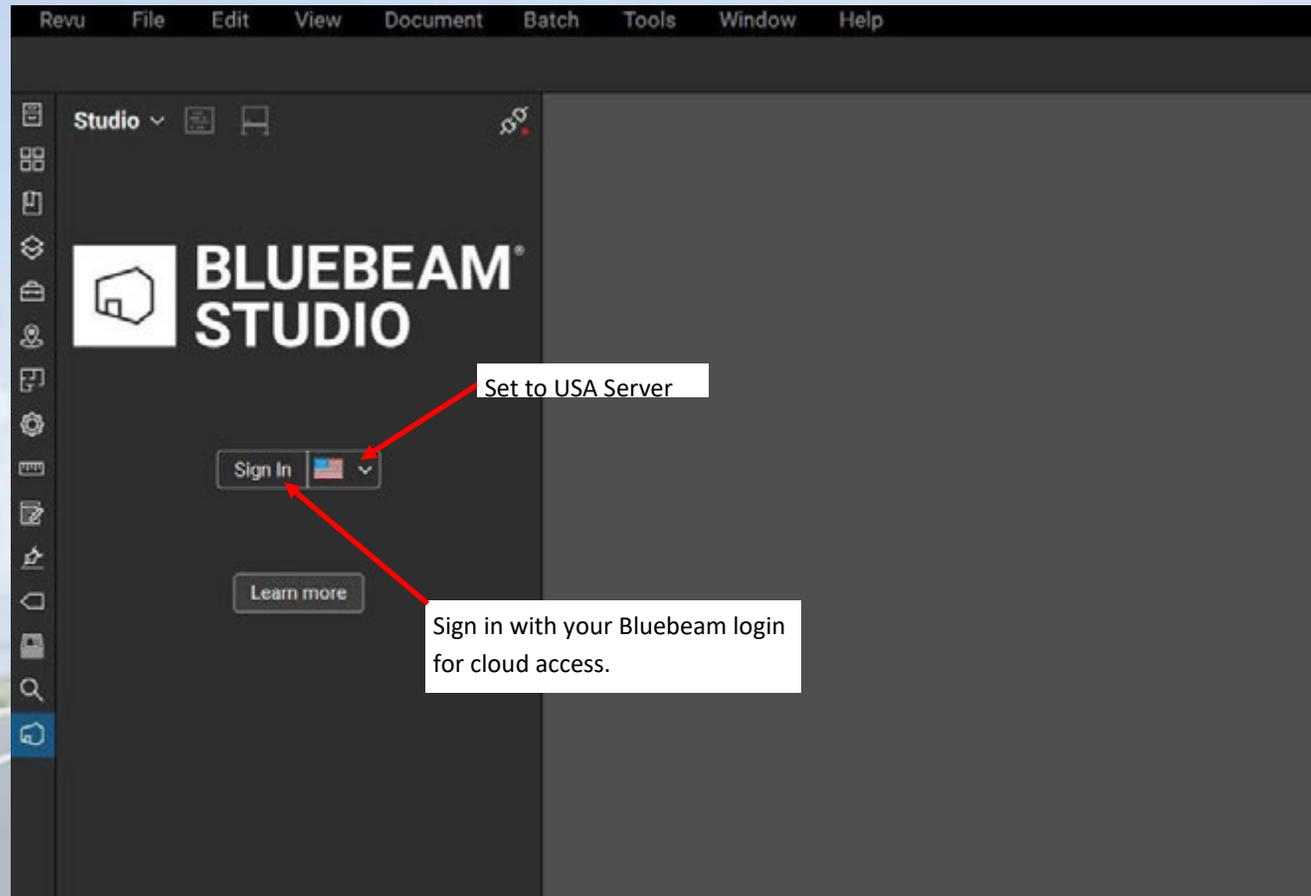
Engineering Systems Analyst II

District GIS-CAD Graphics Coordinator/GPS Operations and Support



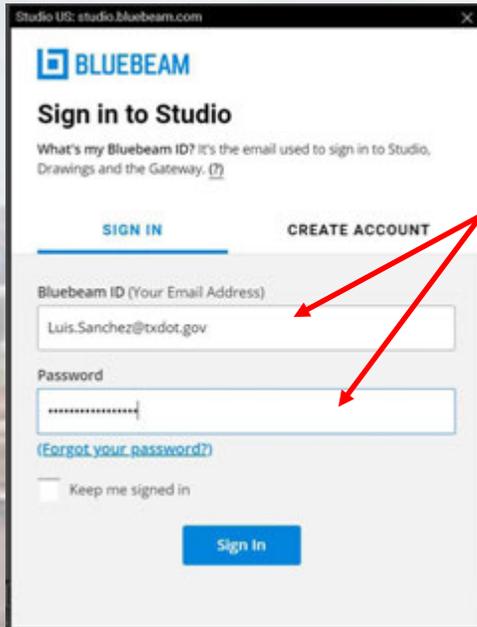
# Bluebeam Basic Operations Short Course



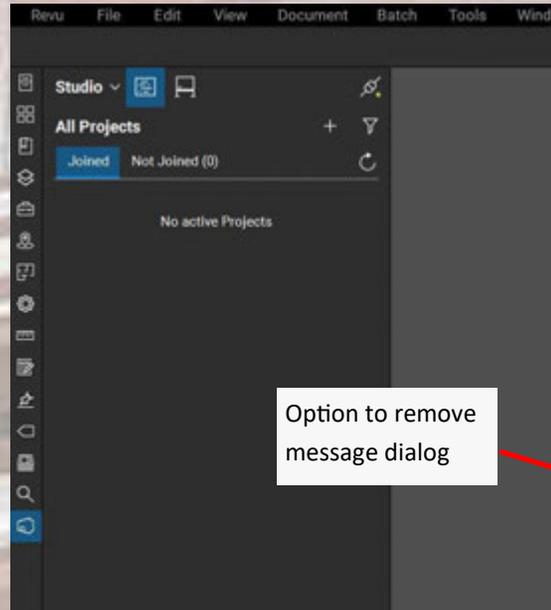


First when starting Beam please login to your bluebeam account, this will log you into the Bluebeam's project cloud where you can access any projects stored and reviewed with other departments and partnering consultant project managers.

Bluebeam helps in review and collaboration for engineering and construction personnel to check plans, relay comments, corrections and backchecking for PS&E reviews, billing, change orders and other documents in our daily workflow. Blue beam has the capability to make corrections and comments to various documents like PDF, DOC, and image files like JPG. As you log in, please make sure the settings is set to USA server and sign in with your bluebeam login. It will automatically place you on the Bluebeam cloud and you will have access to all various projects and sessions to do review either independently or in groups, you will also have a chat window to communicate with other attendees when reviewing projects in Bluebeam Sessions.



Sign in dialog to Bluebeam Studio

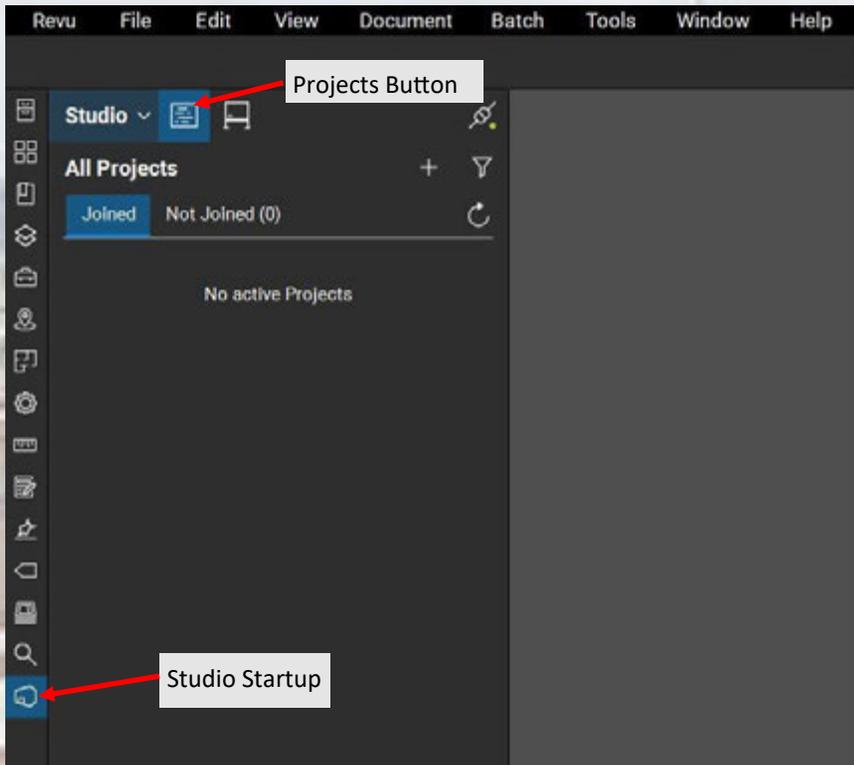


After you login, it will ask you to choose a default PDF viewer, please check the "X" box or cancel out. If not this will effect your plotting and printing configurations, if you like check the "Do Not Show this message again" box before you click the cancel X button at the top right of the dialog.

Option to remove message dialog



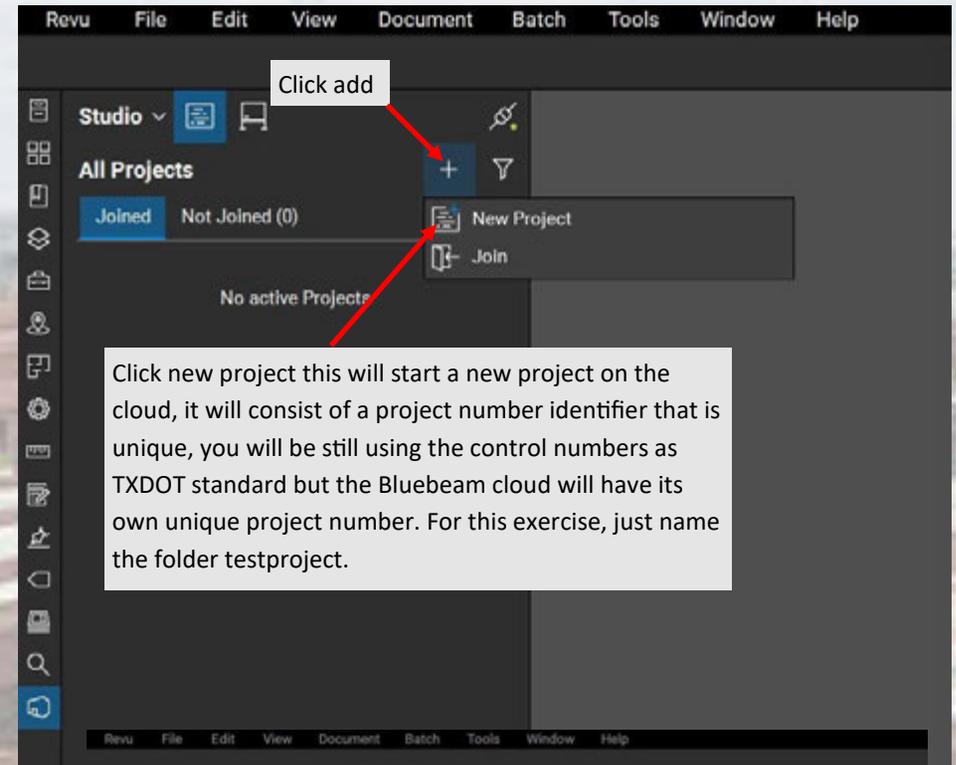
Please remember if you do forget your password you can reset it and the Bluebeam server will send you a password reset email to your TXDOT account. Due to security issues with todays cyber infiltration of government servers please do not have your password the same as your regular TXDOT login. This will protect TXDOT servers and networks in case the Bluebeam cloud server gets compromised and also protect you and your coworkers information on your state issue desktop/laptop.



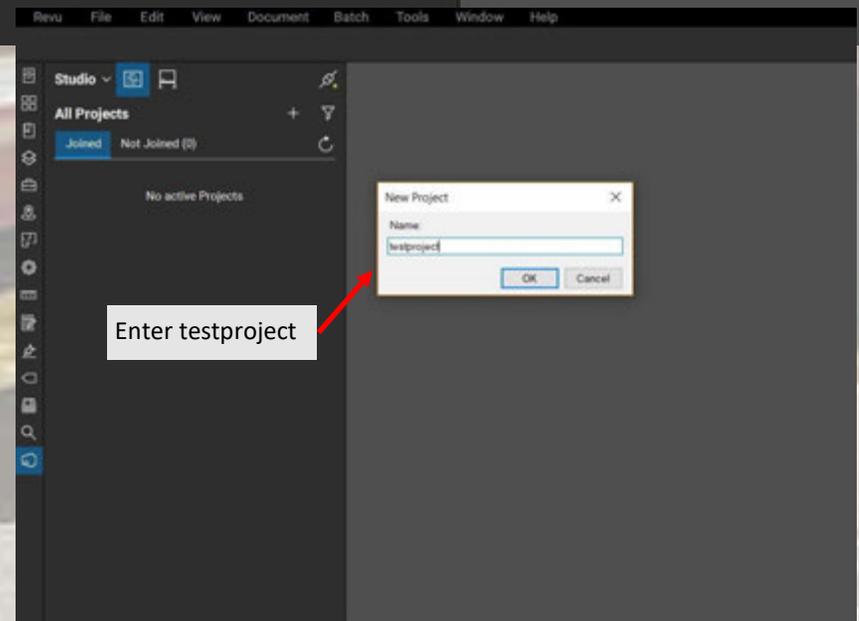
At the top you will find the Studio Pull-down tab, there will be two icons, the first is your Projects button which loads and also starts the project creation process, this will be utilized for in house review of pdf and other documents, the other button next to it is the sessions button, this will be used in the future when inviting attendees for the review process from both internal and external attendees such as consultants, partnering government agencies and contractors.

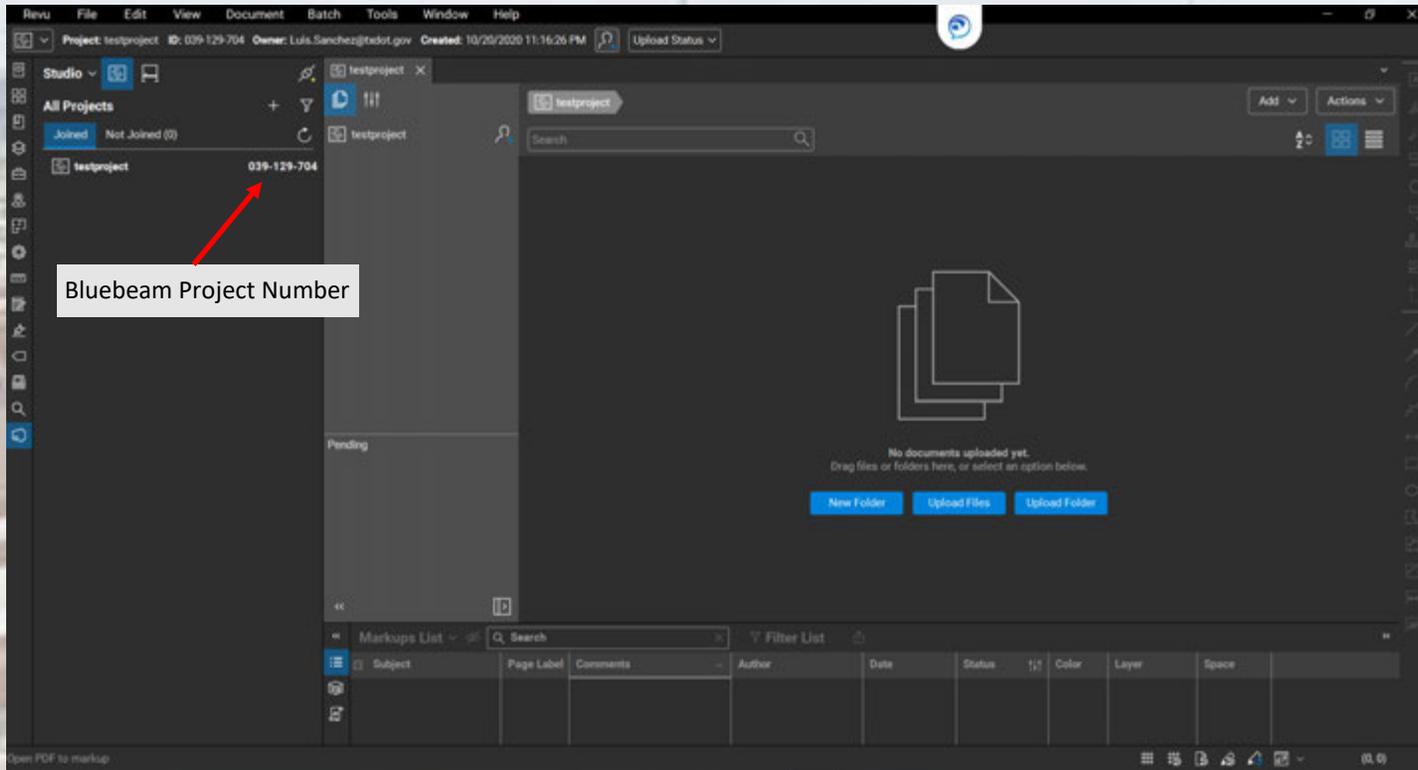
For right now we will just concentrate on the Projects workflow.

If your Project button is not loaded at the top, then click the Studio Startup icon at the bottom left to initiate it.

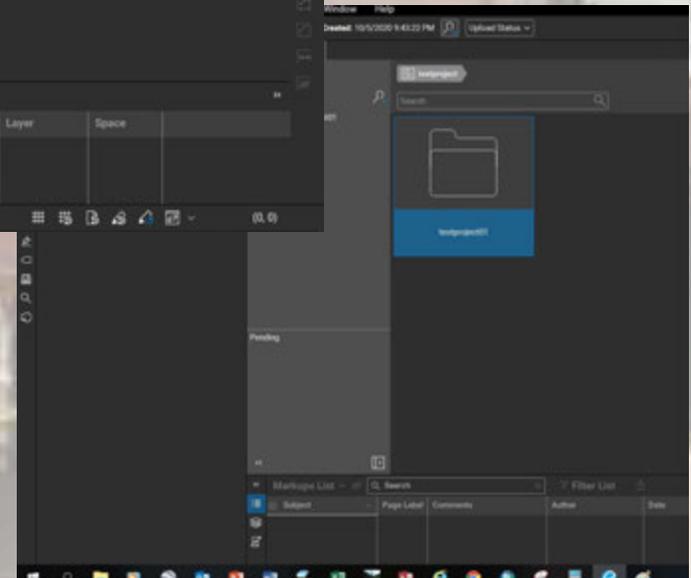


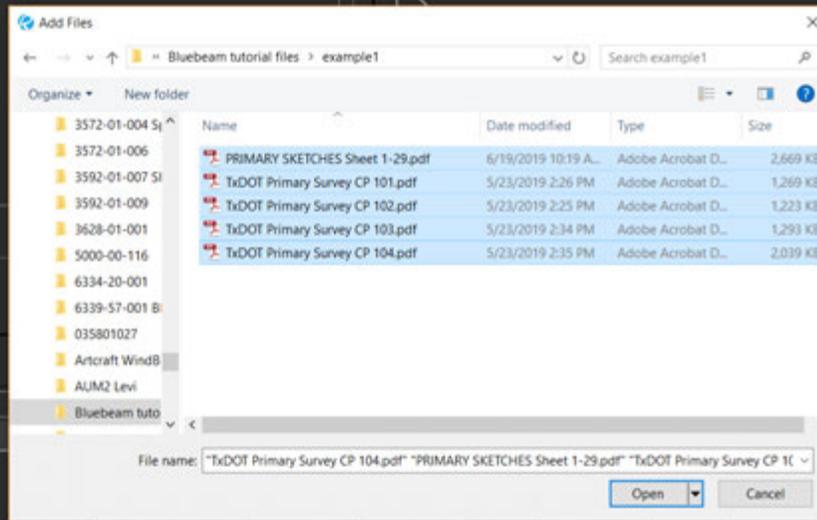
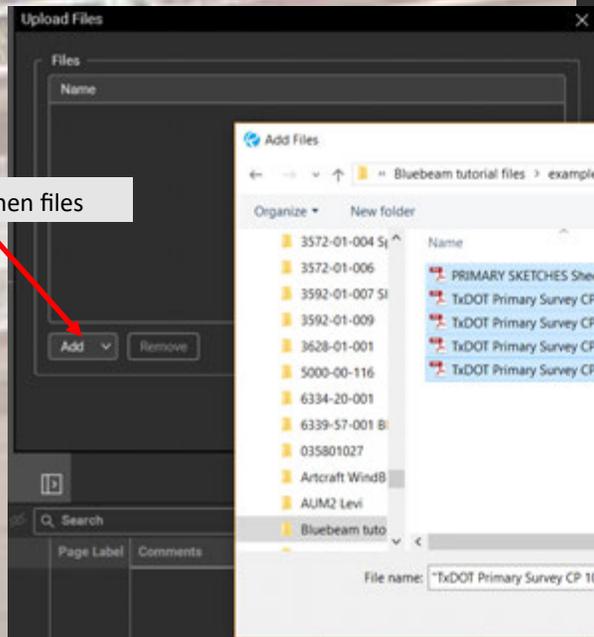
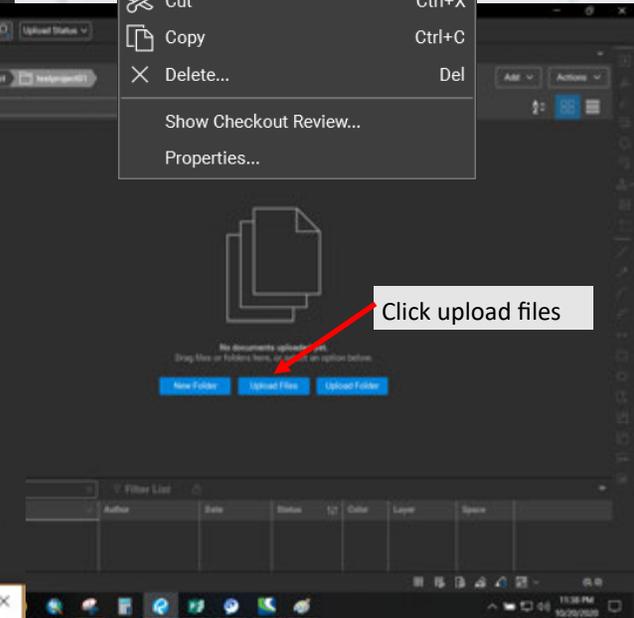
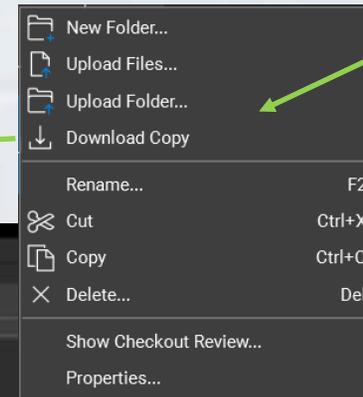
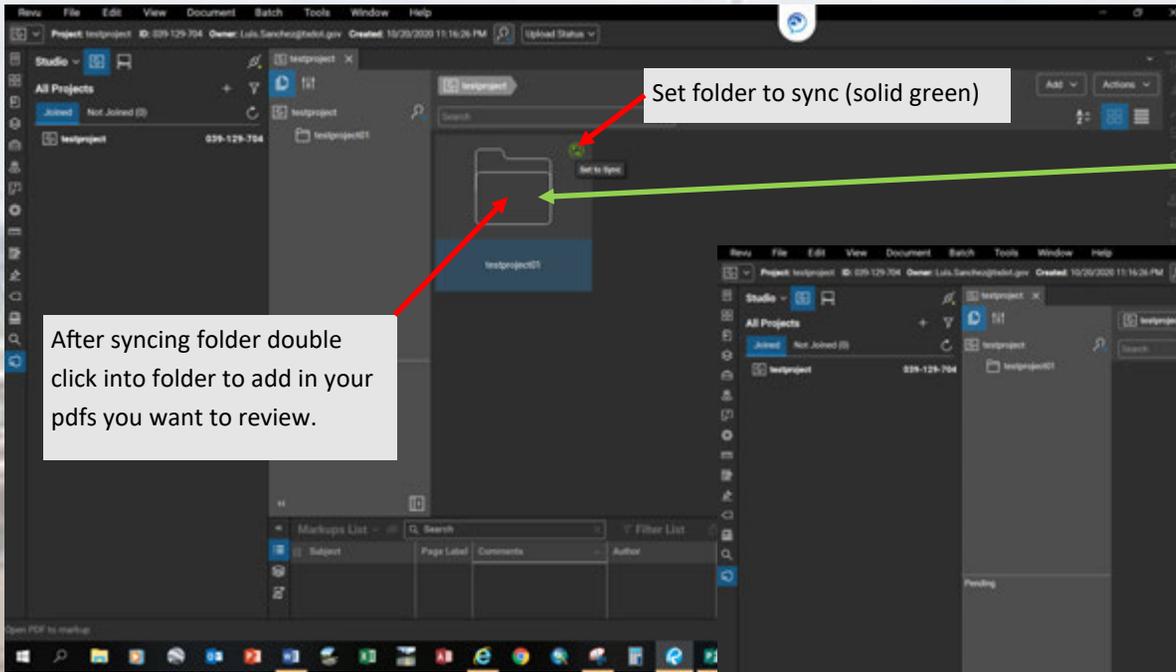
Click new project this will start a new project on the cloud, it will consist of a project number identifier that is unique, you will be still using the control numbers as TXDOT standard but the Bluebeam cloud will have its own unique project number. For this exercise, just name the folder testproject.



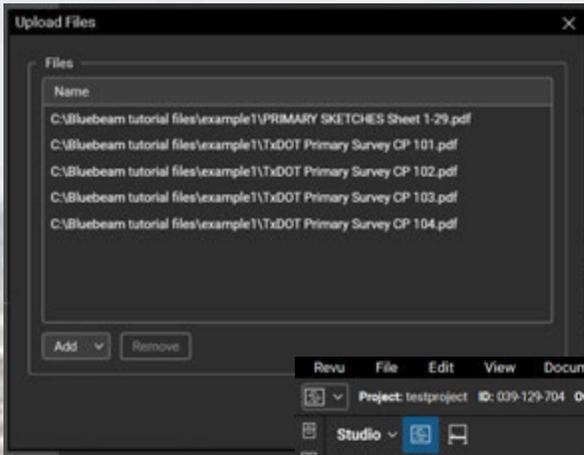


Click New folder, this will be the folder where you will upload your pdfs that pertains to your project, Bluebeam can read pdfs, and images. It has the capability to read multiple page pdfs and single pdfs with different scale settings and criteria. After you create your folder you can upload files from the network or local drive. For this exercise please create the folder named testproject01. After the folder has been created it will then have a green sync symbol at the corner of the folder icon, please click it on to a solid green status. (see next page)

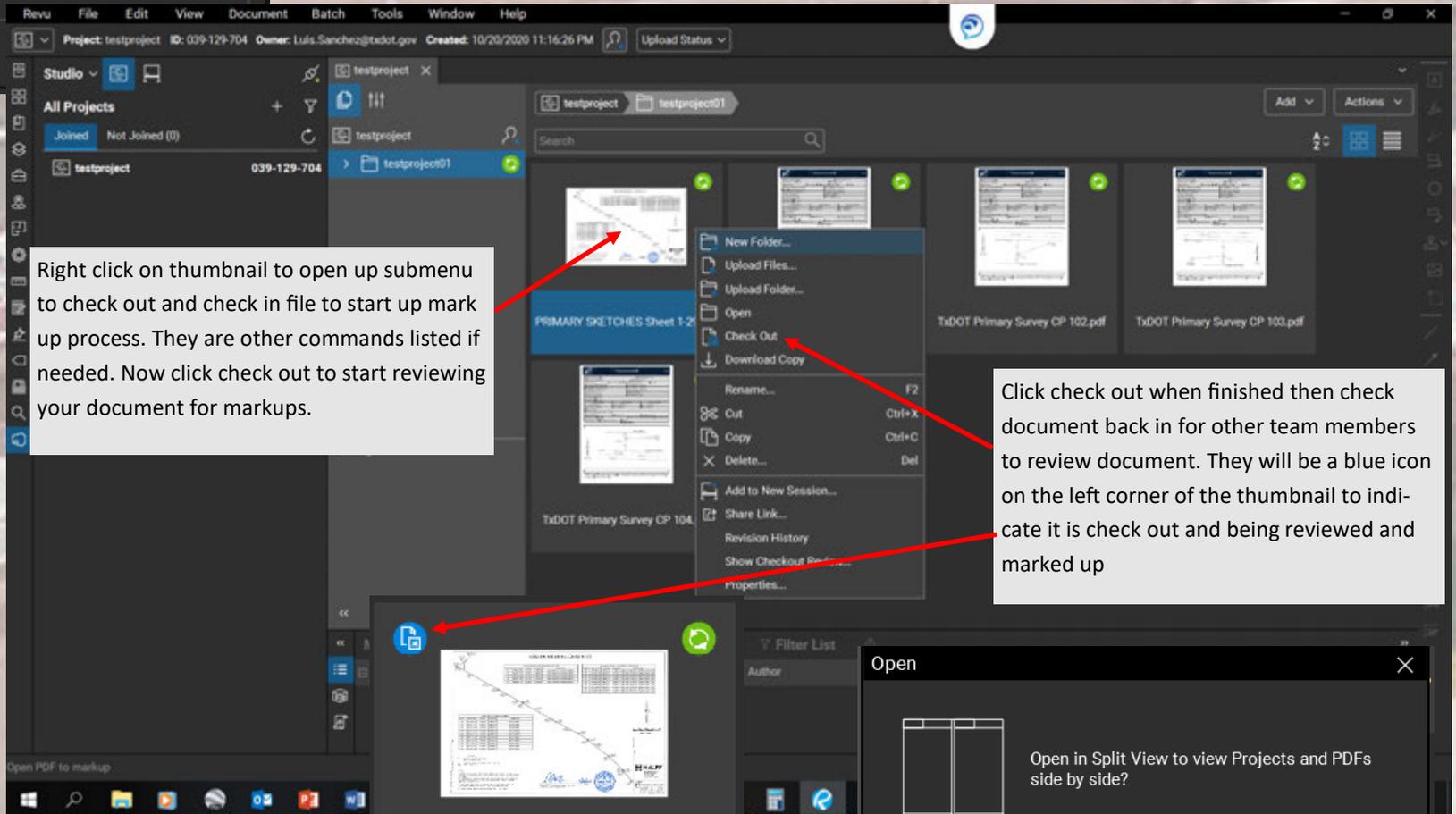




You have three options when you click into your project folder, you can create a New Folder, upload files, or upload a folder that has files already in it. Click upload files and navigate to the M:/Bluebeam tutorial files/example1 and upload all the files in that folder to the bluebeam cloud. After your files are loaded into the cloud they are ready to be synced to be reviewed and marked up.



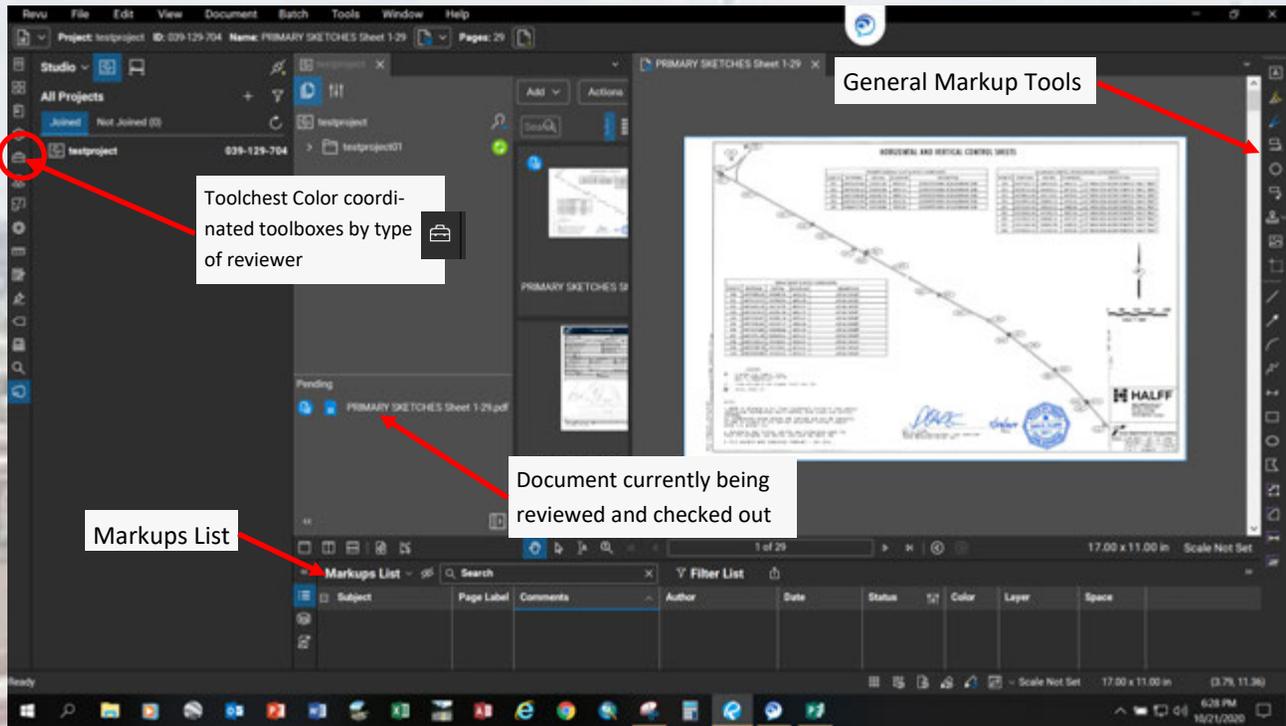
A dialog box will then confirm that all the pdf files you selected you want uploaded to the bluebeam cloud server via dialog list then click ok, you have the option of removing the files if you click one by accident that you did not want uploaded. After they are loaded they will be in thumbnail mode and make sure that all the pdfs you uploaded are set to the sync setting to be set to on (solid green icon on corner of thumbnail).



Right click on thumbnail to open up submenu to check out and check in file to start up mark up process. They are other commands listed if needed. Now click check out to start reviewing your document for markups.

Click check out when finished then check document back in for other team members to review document. They will be a blue icon on the left corner of the thumbnail to indicate it is check out and being reviewed and marked up

Double click thumbnail after check out and select yes for split view dialog



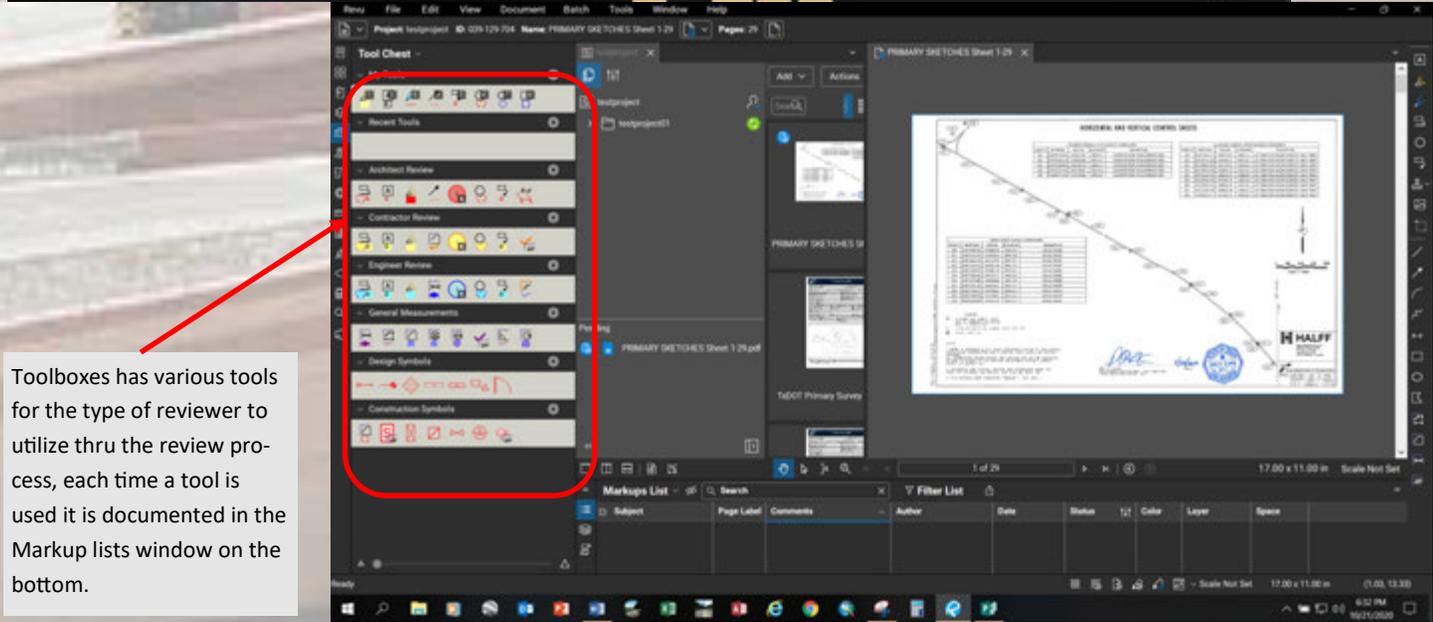
Toolchest Color coordinated toolboxes by type of reviewer

General Markup Tools

Document currently being reviewed and checked out

Markups List

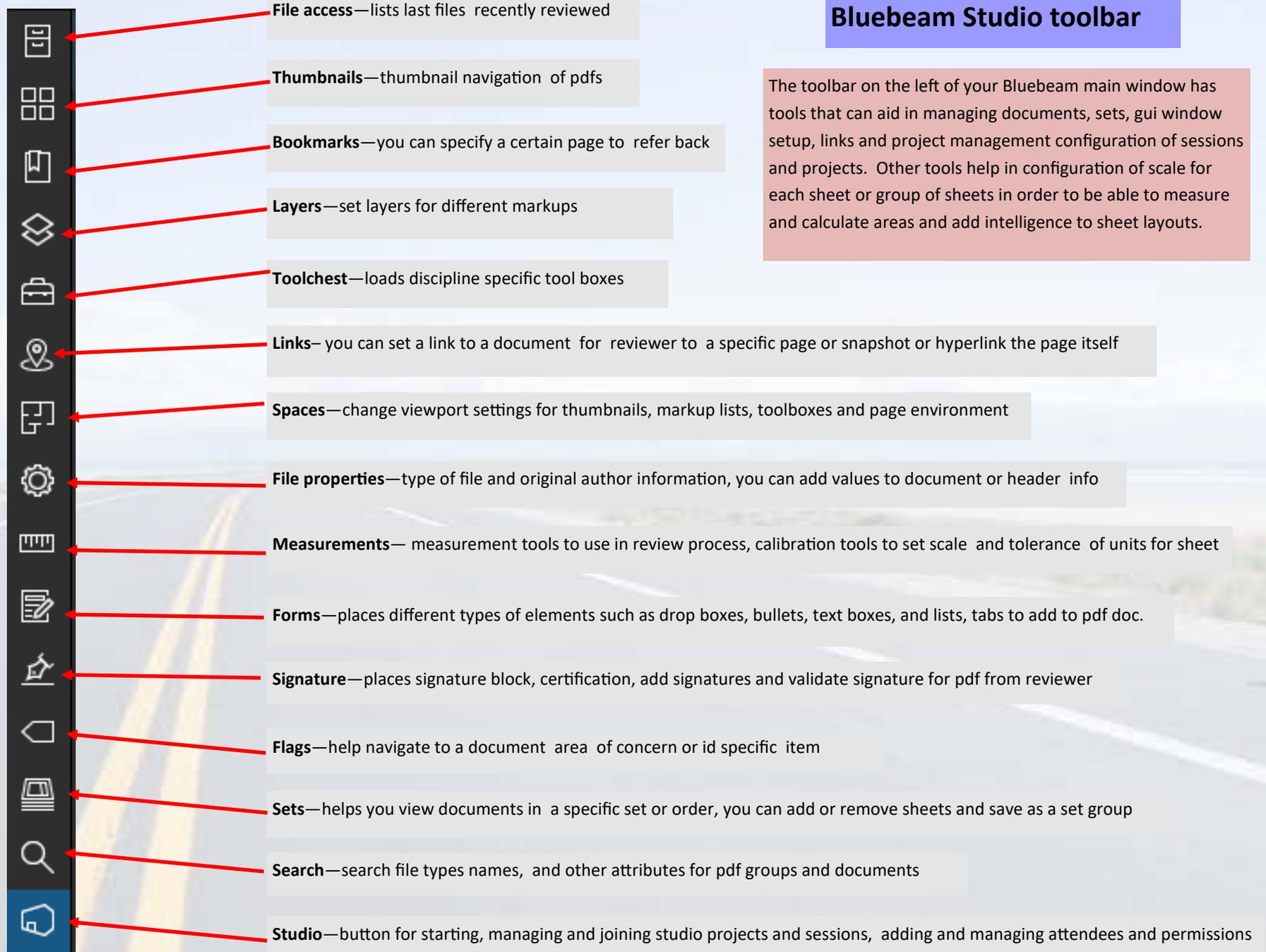
You have various interfaces, you can set up thumbnails next to your reviewed document, and add additional screens if necessary. You can also initiate different review tab interfaces that are color coded on the left for each stage of the review or the general comments tools on the right side, it will sort these comments according to the reviewer and comments made associated with that team member.



Toolboxes has various tools for the type of reviewer to utilize thru the review process, each time a tool is used it is documented in the Markup lists window on the bottom.

## Bluebeam Studio toolbar

The toolbar on the left of your Bluebeam main window has tools that can aid in managing documents, sets, gui window setup, links and project management configuration of sessions and projects. Other tools help in configuration of scale for each sheet or group of sheets in order to be able to measure and calculate areas and add intelligence to sheet layouts.



## General Markup Tools

**Text Box**—place text box with comment

**Highlighter**—highlight markup with comment

**Pen**—Pen markup and comments

**Line**— place line segment with comment

**Arrow**—place arrow segment with comment

**Curve**—place curve with comment

**Polygon**—places polygon shape with comment

**Polylength**—polyline segment by calibrated scale

**Area**—Area by calibrated scale

**Length**—places dimension length by calibrated scale

**Count**—places point to make quantity count

**Cloud (K)**—place cloud with callout annotation box

**Cloud (C)**—Place cloud with comment only

**Callout**—place annotated comment callout box with arrow

**Stamp** - to place review stamps with dates, certification, seals or review process

**Image**—to place image such as a jpg, gif or bmp on document as a sub detail

**Snapshot**—capture a snapshot from the reviewed pdf, set different scale, line color or overlap of paste for a sub detail, has multiple settings

**Polyline**—places connected polyline element with comment

**Dimension**—Dimension with comment and no set scale

**Rectangle**—places rectangle with comments

**Ellipse**—places ellipse shape with comment

The toolbar on the right is your General Markup tools, it is used for placing comments, markups and annotations with review comments and scaled measurements and areas, also sub details and review stamps, these tools are itemized as you place them and found on the markups dialog at the bottom by users and detailed attributes and comments in a itemized list that can be places intelligence for each comment to be exported to a report or csv file. .

Revu File Edit View Document Batch Tools Window Help

## Bluebeam Revu Top Pulldown Menus

**Revu**

- About
- Preferences **Ctrl+K**
- View Mode
- Markup Mode**
- Profiles >
- Keyboard Shortcuts
- Administrator
- Unregister
- Exit

**File**

- New PDF...
- New PDF from Template... >
- Open **Ctrl+O**
- Open Recent >
- New Studio Project... >
- Create >
- Combine...
- Close **Ctrl+F4**
- Close All **Ctrl+Shift+W**
- Save **Ctrl+S**
- Save As... **Ctrl+Shift+S**
- Save All **Shift+F2**
- Revert As
- Publish >
- Email... **Ctrl+E**
- Email Templates >
- Export >
- Print... **Ctrl+P**

**Edit**

- Undo **Ctrl+Z**
- Redo **Ctrl+Y**
- Undo History
- Cut **Ctrl+X**
- Copy **Ctrl+C**
- Paste **Ctrl+V**
- Paste in Place **Ctrl+Shift+V**
- Delete **Del**
- Pan **Shift+V**
- Select **V**
- Select All **Ctrl+A**
- Lasso **Shift+O**
- Snapshot **G**
- Format Painter **Ctrl+Shift+C**
- PDF Content >
- Check Spelling >

**View**

- Fit Page **Ctrl+9**
- Fit Width **Ctrl+0**
- Actual Size **Ctrl+8**
- Single Page **Ctrl+4**
- Continuous Pages **Ctrl+5**
- Side-by-Side **Ctrl+6**
- Continuous Side-by-Side **Ctrl+7**
- Show Cover Page in Side-by-Side
- Rotate View >
- Split Vertical **Ctrl+2**
- Split Horizontal **Ctrl+H**
- Toggle Split **Ctrl+I**
- Switch **Ctrl+1**
- Balance **Shift+F12**
- Unsplit **Ctrl+Shift+2**
- Synchronize Document
- Synchronize Page
- Rulers **Ctrl+R**
- Full-Screen Crosshair
- Show Grid **Shift+F9**
- Snap to Grid **Ctrl+Shift+F9**
- Snap to Content **Ctrl+Shift+F8**
- Snap to Markup **Ctrl+Shift+F7**
- Dimmer >
- Disable Line Weights

Continued on next page

# Bluebeam Revu Top Pulldown Menus (Continued)

Revu File Edit View Document Batch Tools Window Help

**Document**

- Document Properties Ctrl+D
- Page Setup...
- Rotate Pages... Ctrl+Shift+R
- Insert >
- Extract Pages... Ctrl+Shift+X
- Split Document...
- Replace Pages... Ctrl+Shift+Y
- Delete Pages... Ctrl+Shift+D
- Crop Pages... Shift+Alt+O
- Number Pages...
- Create Page Labels...
- Headers & Footers >
- Security... Ctrl+L
- Compare Documents...
- Overlay Pages...
- OCR... Ctrl+Shift+O
- Script...
- Translate Markups...
- Color Processing...
- Reduce File Size...
- Repair PDF...
- Archive as PDF/A...
- Flatten... Ctrl+Shift+M
- Unflatten Ctrl+Shift+U

**Batch**

- Crop & Page Setup...
- Rotate Pages...
- Split Documents...
- Headers & Footers...
- Security...
- Sign & Seal...
- Apply Stamp...
- Link >
- Compare Documents...
- Overlay Pages...
- Slip Sheet...
- OCR
- Script
- Reduce File Size...
- Repair PDF...
- Flatten Markups...
- Summary...
- Print...

**Tools**

- Markup >
- Stamp >
- Measure >
- Sketch to Scale >
- Form >
- Signature >
- Hyperlink Shift+H
- File Attachment F
- Toolbars >
- Reuse

**Window**

- Minimize
- Restore
- WebTab Ctrl+T
- Full Screen F11
- Presentation Ctrl+Enter
- Panels >
- Hide Panels Shift+F4
- Auto-Hide Panel Access
- Auto-Hide Tabs
- Always On Top Ctrl+F12

**Help**

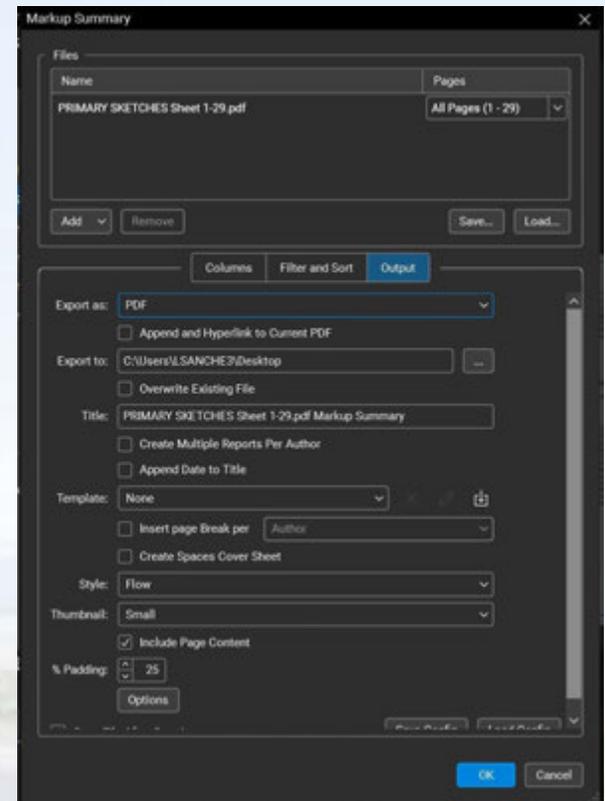
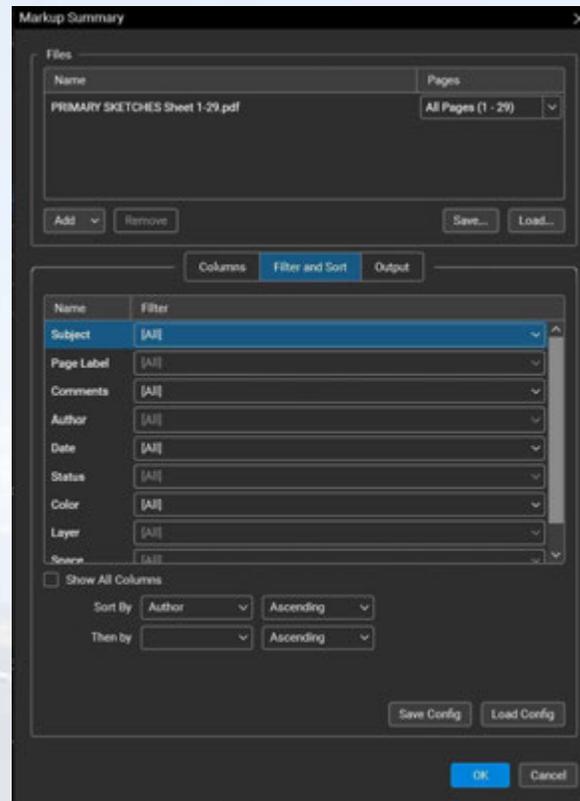
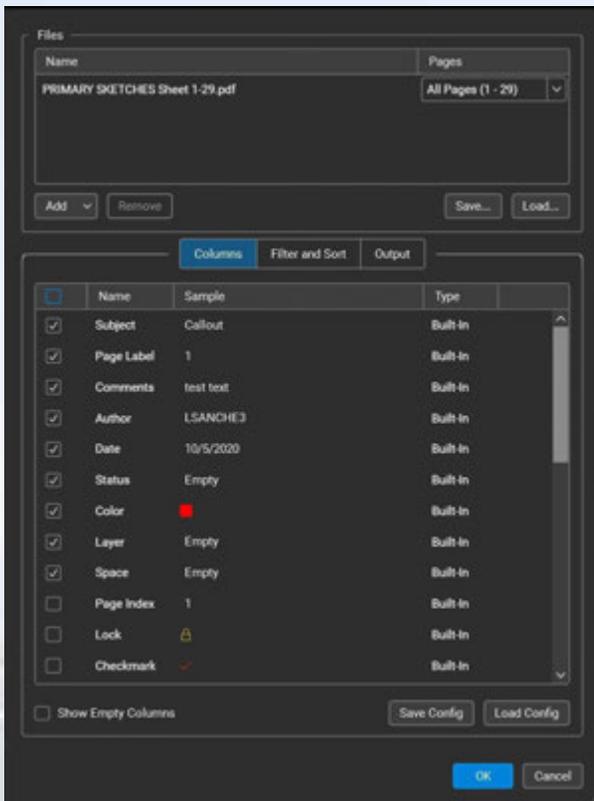
- Find Tools + Commands >
- Help F1
- Check for Updates
- Licensing & Registration
- Technical Support
- Report an Issue
- Make a Suggestion
- Help Make Revu Better
- Welcome to Revu F12
- Learn What's New
- Launch Revu Tutorials...
- Keyboard Shortcuts Guide
- Training Resources

The screenshot displays the Revu software interface. The top menu bar includes Revu, File, Edit, View, Document, Batch, Tools, Window, and Help. The left sidebar contains a Tool Chest with categories like My Tools, Recent Tools, Architect Review, Contractor Review, Engineer Review, General Measurements, Design Symbols, and Construction Symbols. The main workspace shows a technical drawing titled 'PRIMARY SKETCHES Sheet 1-29\*' with various annotations and tables. A 'Markups List' table is visible at the bottom, listing subjects, page labels, comments, authors, dates, status, color, layer, and space.

Subject	Page Label	Comments	Author	Date	Status	Color	Layer	Space
Length Measure...	4	1,452.80 ft	LSANCHE3	10/21/2020 11:...		■		
2,167,442 sf (1)								
Area Measurement	4	2,167,442 sf	LSANCHE3	10/21/2020 11:...		■		
30 present review (1)								

Annotations on the drawing include 'Filter for exporting reports' pointing to the 'Filter List' button in the Markups List, and 'Summary Export to PDF, CSV, XML or print markup list directly.' pointing to the 'Summary Export' button. A note at the bottom left states: 'Markups list get populated with attendees comments and notes which you can filter and export.'

When using markup tools and measurement tools the top menu will have various settings that you can customize, you can change color, font, shape, linetype fill, tyle and so on. Each time you place a markup on the sheet it populates the Markups list with each edit or markup you make, it lists areas, comments, author of the comment or markup ,date, layer color and subject. After all markups and comments are finalized, you can export the comments. When finished with the document check the document back in and start on another document.



For each type of report you have the ability to export and set what information you want, and turn off certain field you don't want in a pdf report. As for the CSV function you can use filters to get areas, counts, and other quantities so you can add and sum the numerical values to get a final total. You can filter team members comments , what layers they are on and so on. It is up to you how you want to output your PDF, XML or CSV. Also when you do export a report you have the option of adding thumbnails of the markup area so you can itemize it and easily locate the comment in the report to send or use along with the marked up PDF plan sheet or Doc. You tell where you like the report or csv saved either on your local drive or on the network. You can customize your own output settings and save it in a configuration file as a template to use as a standard for other projects.

Markup	Subject	Page	Comments	Author	Date	Status	Layer	Space
			1,452.80 ft (1)					
	Length Measurement	4	1,452.80 ft	LSANC HE3	10/21/2020 11:05:56 PM			
			2,167,442 sf (1)					
	Area Measurement	4	2,167,442 sf	LSANC HE3	10/21/2020 11:06:34 PM			
			30 percent review (1)					
	Preliminary	4	30 percent review	LSANC HE3	10/21/2020 11:00:16 PM			
			111 14042423.52 566712.49 4591.57 CONCRETE MON. WALLUMNUM DISK (1)					
	Highlight	4	111 14042423.52 566712.49 4591.57 CONCRETE MON. WALLUMNUM DISK	LSANC HE3	10/21/2020 10:59:02 PM			
			Add Revision date box (1)					
	Cloud	4	Add Revision date box	LSANC HE3	10/21/2020 10:58:27 PM			
			All sheets will have revision blocks placed next to company logo of consultant. (1)					

File	Path
PRIMARY SKETCHES Sheet 1-29.pdf	studio://studio.bluebeam.com/039-129-704-

After you export the report it will give you a preview and save it to your hard drive to the directory you set, as you can see you can add or remove fields from the report or sort by user, markup or subject. After you have finished double check the document, save changes and lose it out, then make sure you also save your changes on your plansheet check your pdf plan sheet you marked up back in. This will bring us back to the thumbnail window and you are ready to review another document.

## Single and Multi-Attendee collaboration Sessions

The screenshot displays the Revu software interface with the 'Start Studio Session' dialog box open. The dialog box is titled 'Start Studio Session' and contains the following elements:

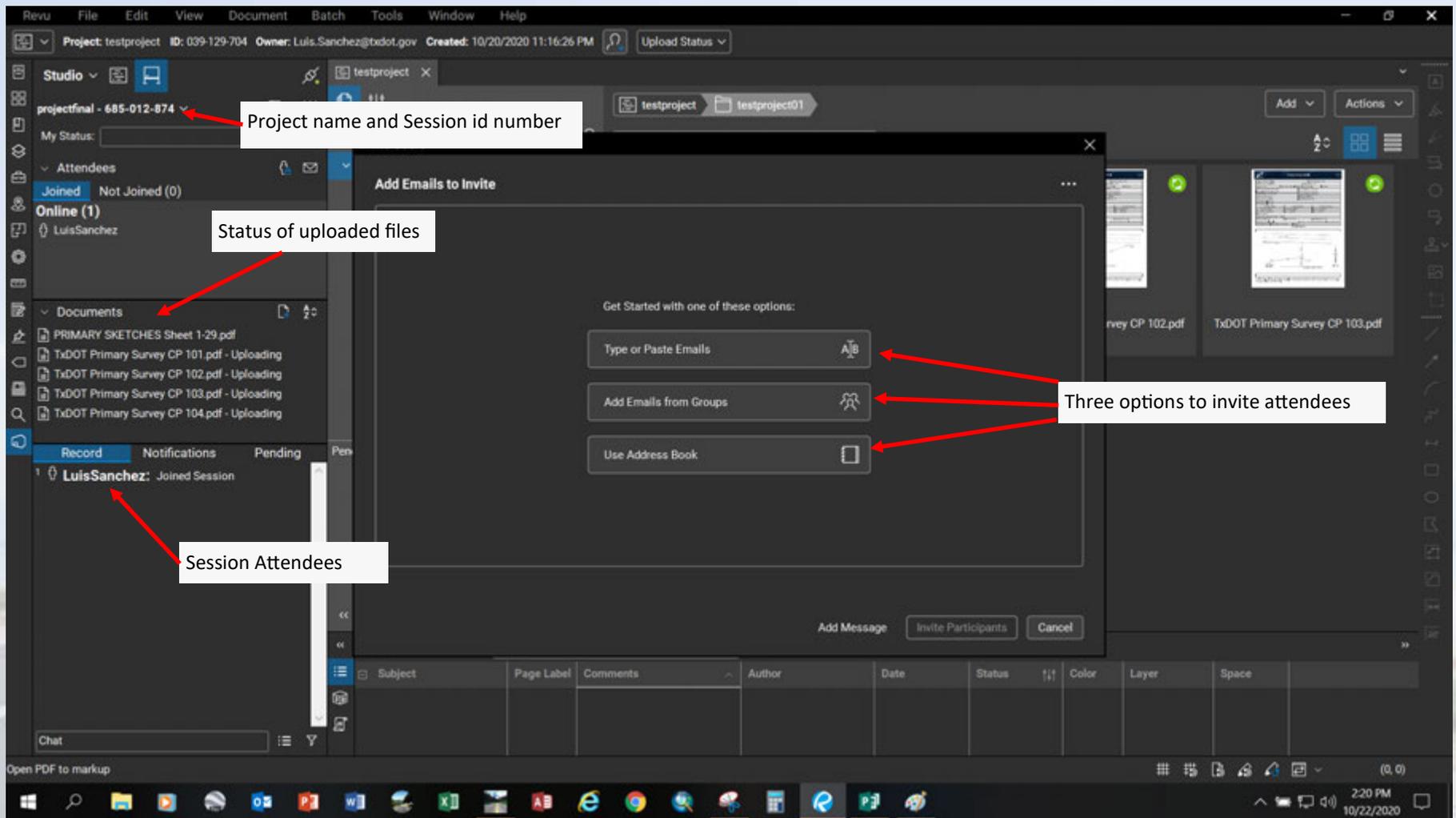
- Session Name:** A text field containing 'projectfinal'. A red arrow points to this field with the annotation 'Name your session'.
- Documents:** A table with columns 'File name' and 'Path'. It lists several PDF files, including 'PRIMARY SKETCHES Sheet 1-29.pdf' and 'TxDOT Primary Survey CP 101.pdf'. A red arrow points to the 'Add' button at the bottom right of this section with the annotation 'Click add to add files'.
- Options:** A section with several checkboxes:
  - Save As
  - Print
  - Markup
  - Markup Alert
  - Add Documents
  - Restrict Attendees by Email Address
  - Session Expires (with a date and time selector set to Oct 22, 2020, 5:00 PM)

At the bottom of the dialog box are 'OK' and 'Cancel' buttons. A red arrow points to the 'OK' button with the annotation 'Click OK when your done'.

Annotations in the background interface include:

- A red arrow pointing to the 'Sessions' icon in the top toolbar with the text 'Click the Session icon then click the add plus icon create the session.'
- A red arrow pointing to the 'Add' button in the 'Documents' section of the dialog box with the text 'Click add to add files'.
- A red arrow pointing to the 'OK' button in the 'Options' section of the dialog box with the text 'Set permissions, session expiration and restrictions'.

The next type of collaborative review is Sessions to your Project, you would click the sessions Icon, name your projects Studio Session, and upload the files and set the options and restrictions, including setting a expiration for the session review by date and time. Then Click ok this will upload the files to a session tab and will start up the next phase to invite attendees via email. A email will be sent to the attendees for access to the review session, the attendee will have either option to attend with other invited attendees or enter the session at his or her schedule before the session expiration date and time. Next Page for Session interface



Project name and Session id number

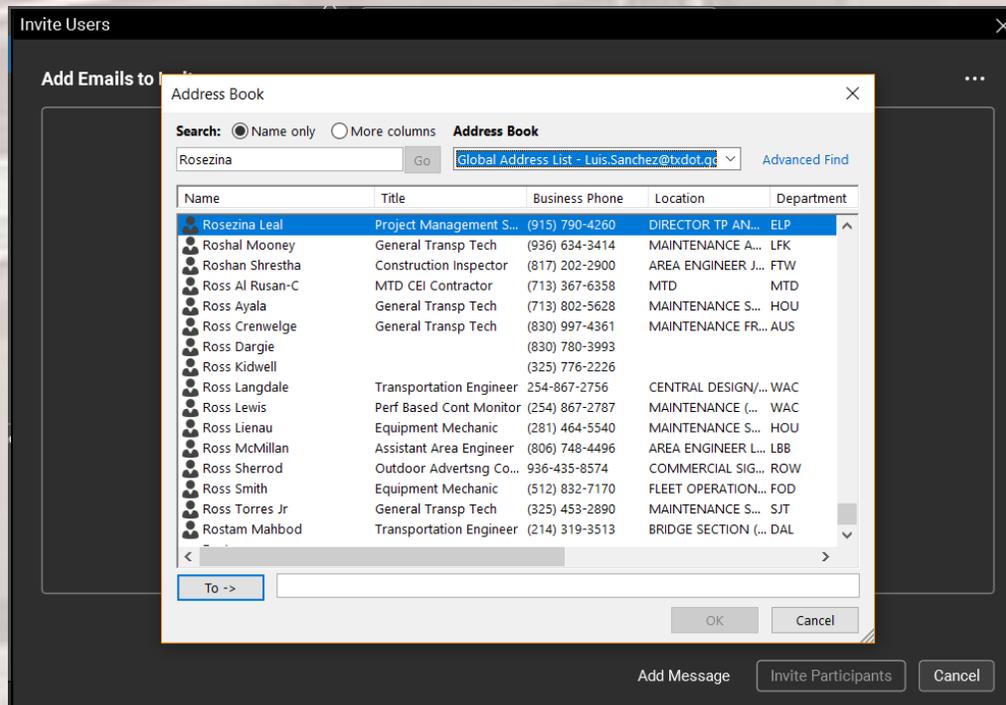
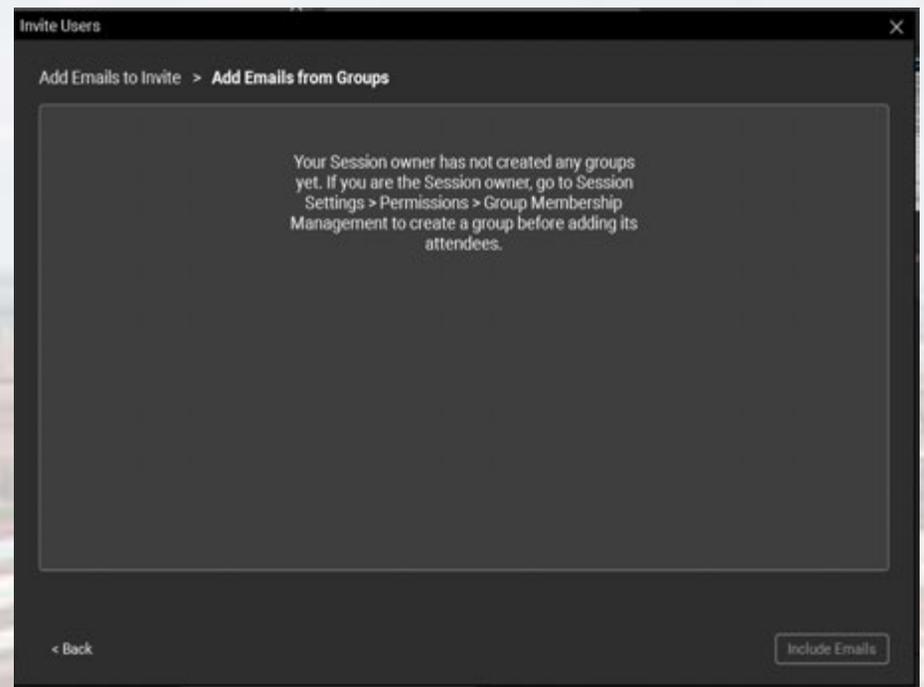
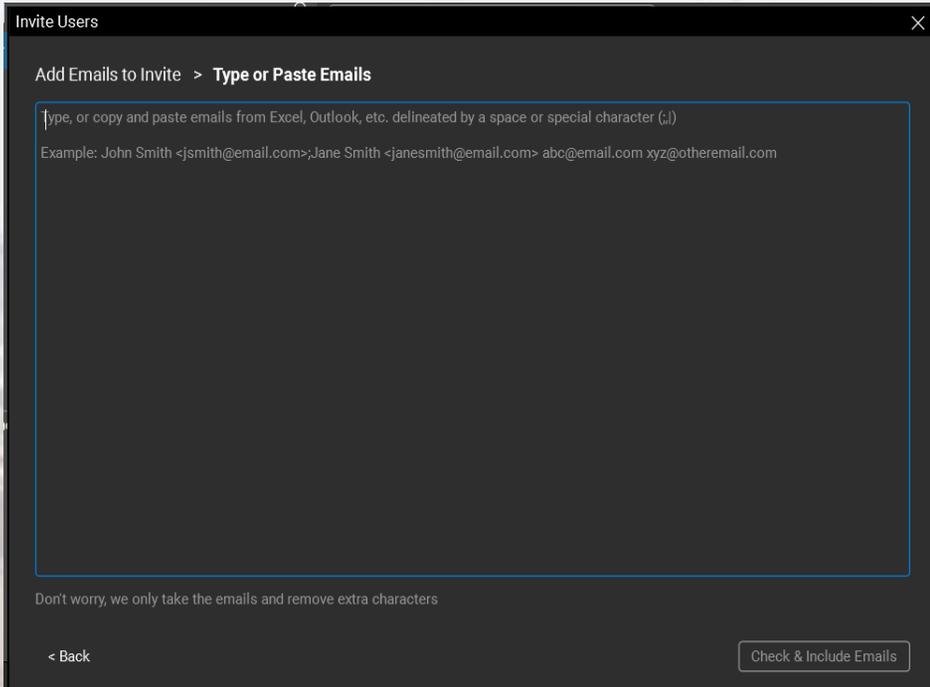
Status of uploaded files

Three options to invite attendees

Session Attendees

After you click okay to uploaded the files you want reviewed in the session, it will give you a status of documents being uploaded to the Bluebeam cloud, at the same time you will get a dialog box that will be asking you three different options of how to invite attendees to your Session review of the documents you uploaded.

It will be connected to the Txdot network so you can select from the usual outlook type interface using the Use Address book, also you can type or paste the emails and finally a address book that you can save with selected individuals to your project group. The individuals will receive a invitation to the review session with the project name you specified, Bluebeam identification Session number assigned by the bluebeam cloud, and message you add into the invite. From that email they then can click the link, and access the files to be reviewed for that session. (Examples of the options for attendee invites is on the next page.)



Continued on next page

**Exit session**

**Attendees active**

**click to add more sheets to during session**

**Click on sheet or sheet groups to start up your markups and comments.**

**Attendees that are active and markups made realtime.**

**tab over to other pdfs with multiple sheets and other view controls**

MARKUP ID	SUBJECT	PAGE LABEL	COMMENTS	AUTHOR	DATE	STATUS	COLOR	LAYER	SPACE
Cloud		1		LuisSanchez	10/22/2020 4:2...		■		
Cloud		2		LuisSanchez	10/22/2020 4:2...		■		

After you gain entry to the session the documents that were uploaded will be ready for you to start using markup tools and comments, they will be a list of attendees in the Record tab, also list of people notified and those that are pending that have not entered the session. In order to markup the document you would select from the Documents tab on the left, and start markups and comments, when your finished you can select the next document on the list, if a pdf has multiple sheets you can advance the page at the bottom of the pdf view window, plus other viewing control functions. You will see in realtime other attendees markups come up while you are making your own. There is a chat window if you like to make a comment to another attendee while working on your markups. You can also take advantage of Microsoft teams and have a group voice conference on a project by sharing a screen since all attendees can visually see each others markups. After you finished your markup review you click the exit icon at the top by the session project and id number and your done and can go to other sessions from other projects.

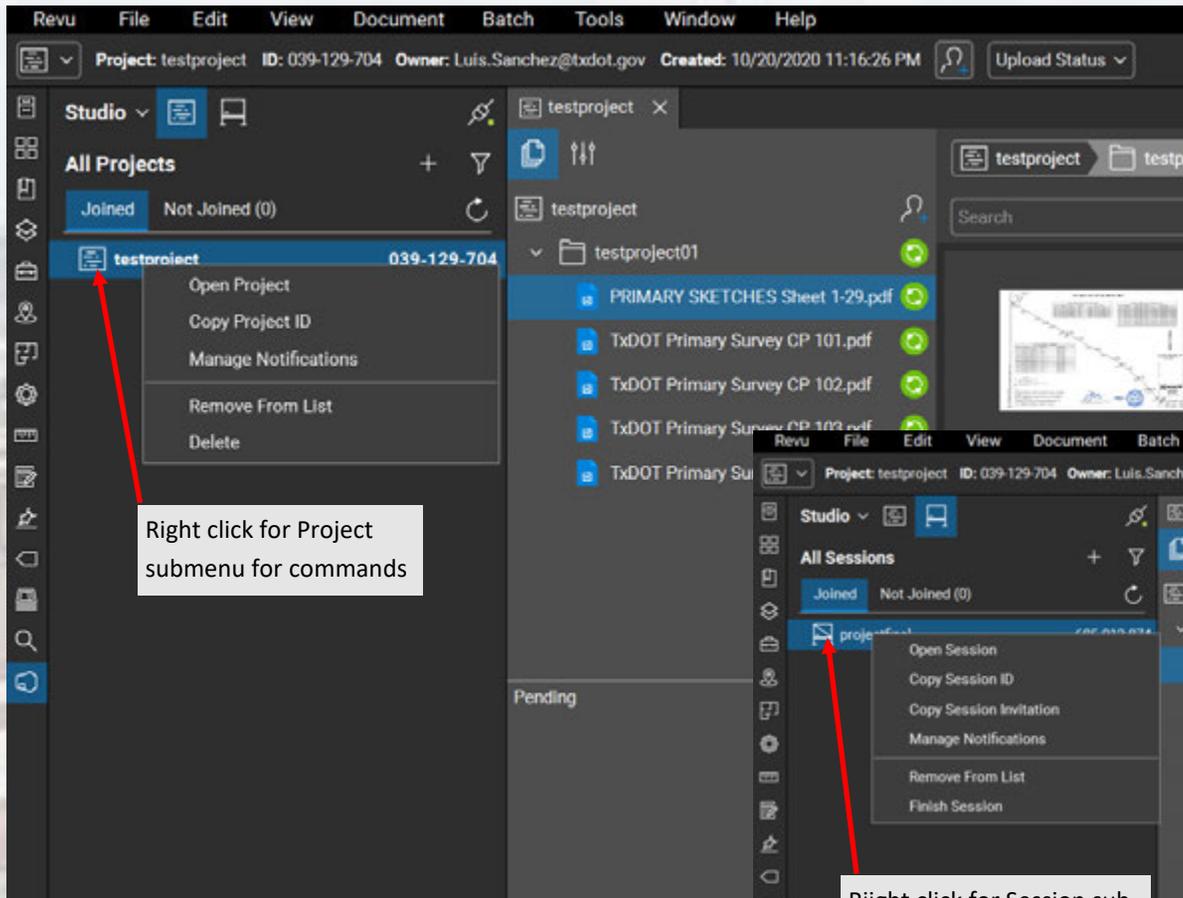
Right click to initiate sub menu

Click for past revisions

Click to see checkout history

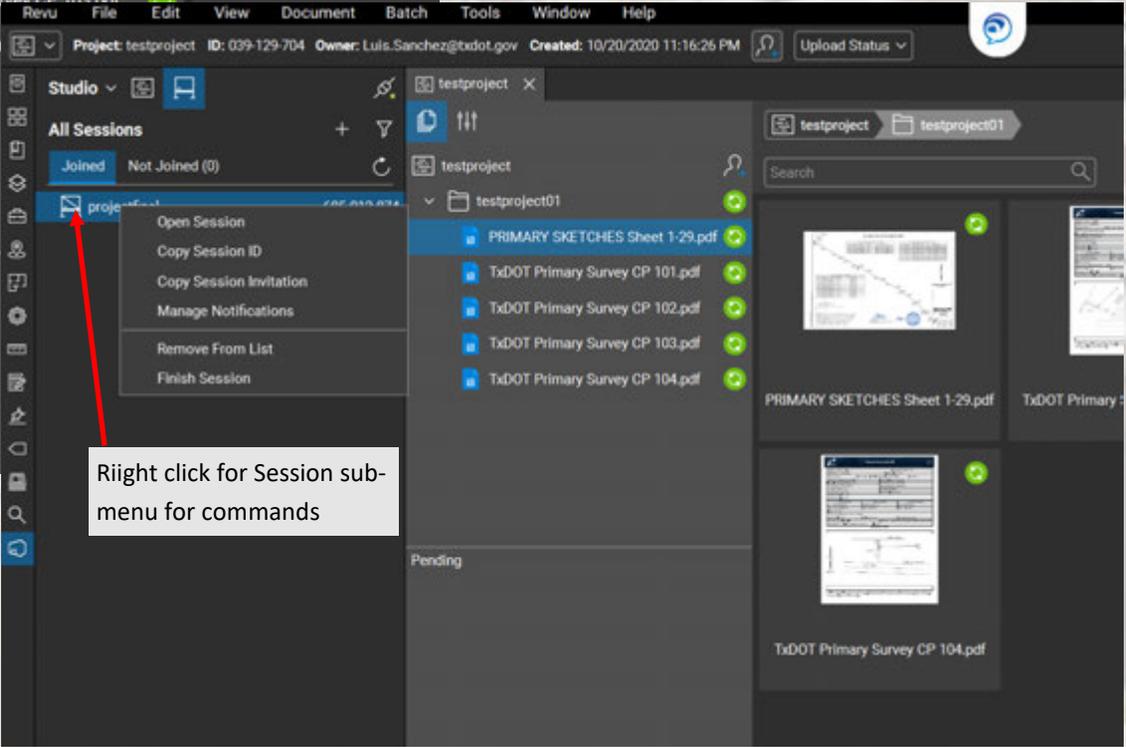
#	Version #	Date	Operation	Email	Comment
7	1.6	10/5/2020 11:15:18 PM	Checked In	Luis.Sanchez@txdot.gov	
6	1.5	10/5/2020 11:08:06 PM	Checked In	Luis.Sanchez@txdot.gov	
5	1.4	10/5/2020 10:59:15 PM	Checked In	Luis.Sanchez@txdot.gov	reviewed
4	1.3	10/5/2020 10:42:10 PM	Checked In	Luis.Sanchez@txdot.gov	
3	1.2	10/5/2020 10:39:27 PM	Checked In	Luis.Sanchez@txdot.gov	
2	1.1	10/5/2020 10:38:19 PM	Checked In	Luis.Sanchez@txdot.gov	
1	1.0	10/5/2020 9:59:03 PM	Added	Luis.Sanchez@txdot.gov	

After you leave a session, you can go back into the project or session, right click on the document and you can backcheck its revision history and checkout history for historical document info on who did last markups, time of markups and past renditions of the document from other sessions or reviews. Just click on the revision and it will load the pdf of the markups you did for that particular day. Nothing is lost and it keeps records in chronological order.



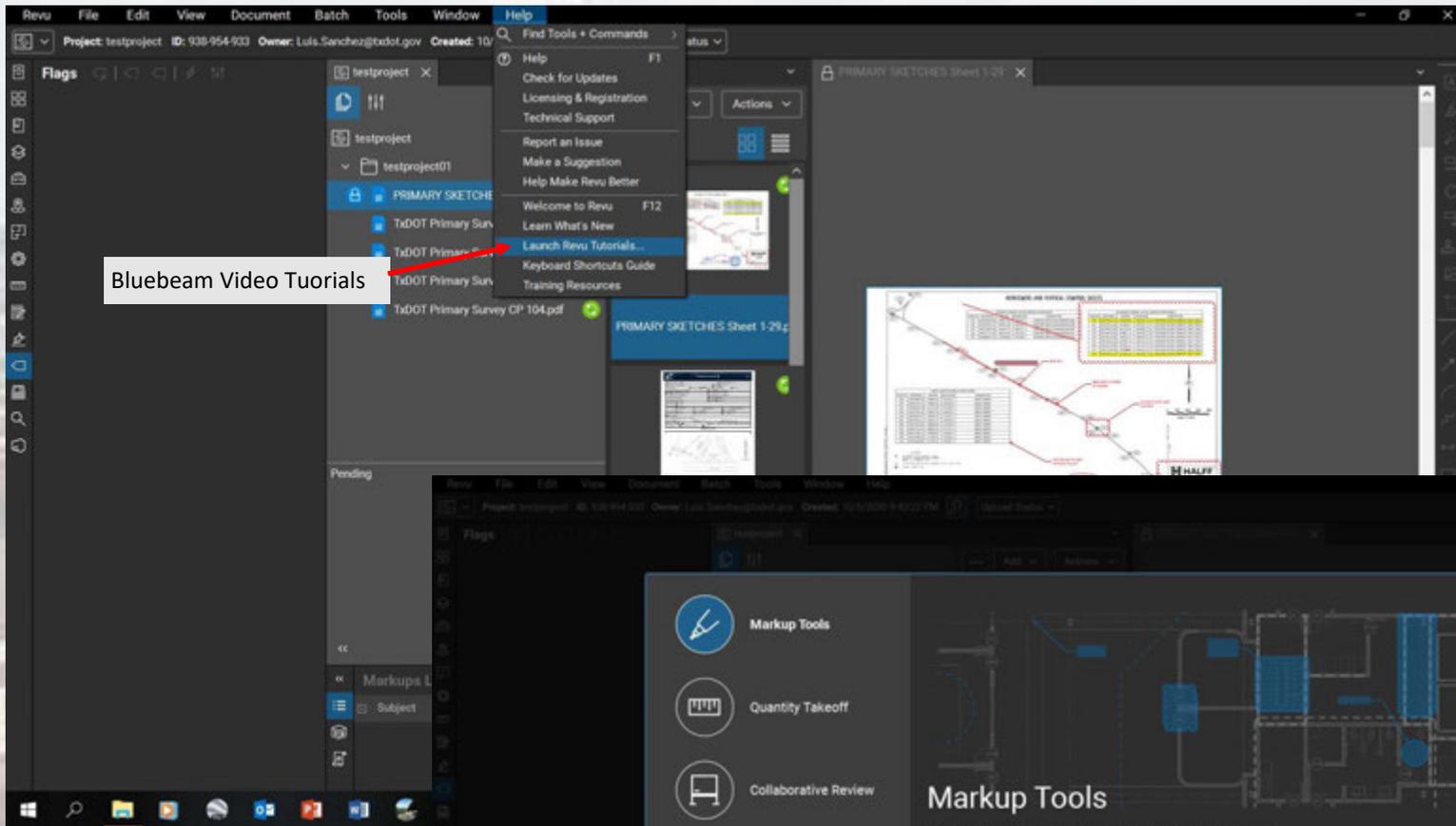
Right click for Project submenu for commands

Also there is that time when you have to remove the Project completely from the Bluebeam cloud, all you have to do is right click on the Project header, and id number and it will give you options in deleting the project, copying info and manage invites and other pertinent information. Remember once you delete a project from the cloud its gone. So make sure you copy your finalized pdfs sheet sets and archive as per Txdot policy states in Records and Retention guidelines as set by General counsel.

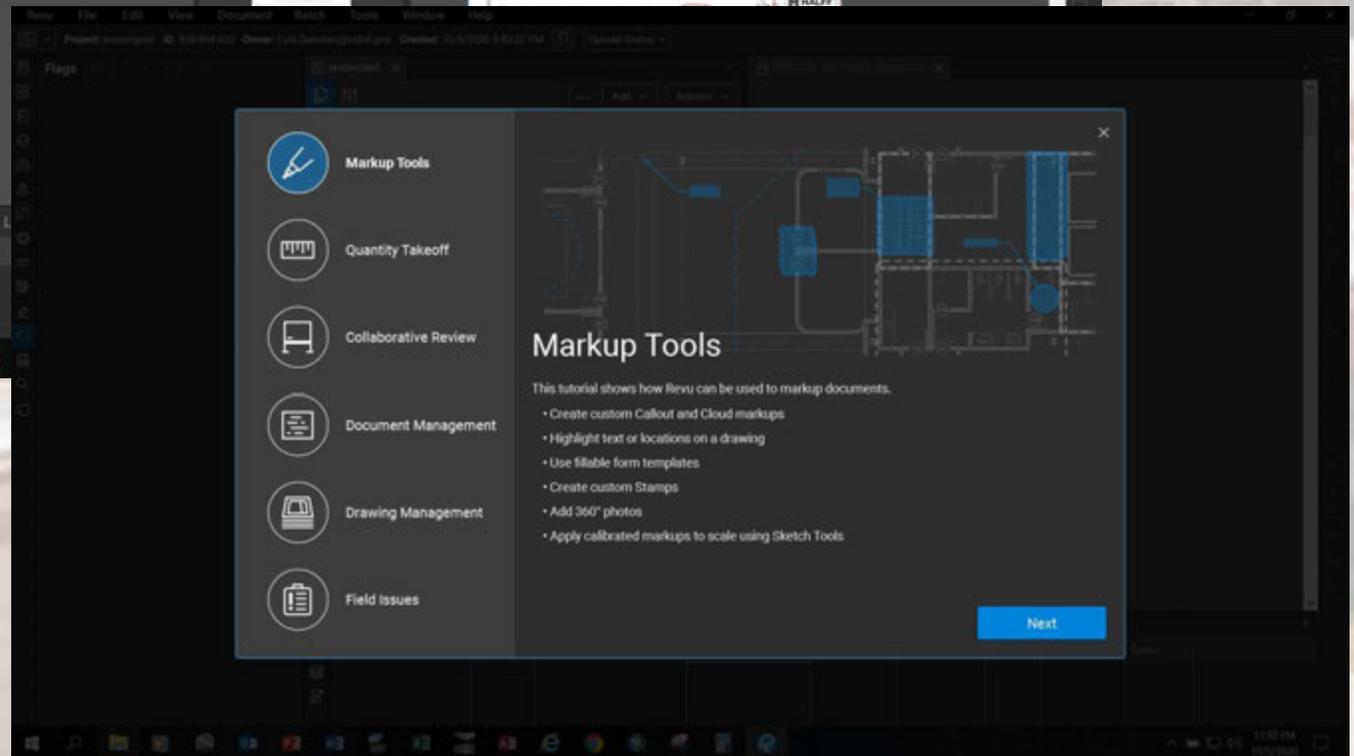


Right click for Session submenu for commands

Same process for removing a session, right click on session header and Bluebeam Id number, and it will give you a series of commands just as the project header. Note if you delete A project make sure the session related to it is removed also. Always remember your in control of the project and the backup of files once its removed, its gone from the cloud. That is why permissions and access to attendees is important .



Bluebeam Video Tuorials



Finally we all know we can't learn everything a software can offer, so the Bluebeam developers have provided videos and help menus and tool searches under the help menu. If you like further information of how a tool or function of Bluebeam works that I have not covered please feel free to check out the Launch Revu Tutorials under the help menu. You click the subject you like more info and training on, and it will load a video tutorial. They also provide the standard search help menus for each function of Bluebeam. If you need assistance please feel free to contact me.

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**Deputy District Engineer: Eddie Valtier, PE**

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# Thank you for coming!

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