Purpose

This procedure facilitates the University of California San Diego’s (UCSD’s) Electronic Plan Review (EPR) process using Bluebeam Studio Projects and Sessions. This document will introduce the Design Team to the steps required to submit, view, coordinate and respond to UCSD’s EPR comments in Bluebeam Studio Sessions from the start of the project through approval from UCSD. It will be determined by UCSD’s project management team at the project kick off if the Design Team or UCSD will be the Bluebeam Studio manager. This procedure outlines the steps if it is determined the Design Team will be the Bluebeam Studio Manager.

Please note that Bluebeam software will be needed in order to create the documents for UCSD plan review. Following this procedure requires use of Bluebeam Revu eXtreme 2020, 2019, or 2018. Screenshots and instructions in this procedure use Bluebeam 2018/2019.
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Section A – Registration Process

1.0 Using this Procedure

This workflow is for Design Team comfortable using Bluebeam & Bluebeam Studio software. Workflow steps explained in this procedure include creating a Bluebeam Studio Account, prepping PDF files for submittal and resubmittal using Bluebeam, creating Bluebeam Studio Projects and Sessions (as applicable), submitting files into Bluebeam Projects and Sessions, and the Design Team response to University of California San Diego (UCSD) review comments inside a Bluebeam Studio Session.

Prior to each submittal to UCSD, the Design Team must first format all PDF plans and documents following the steps outlined in this procedure. PDF formatting greatly benefits the UCSD review process.

As determined in the Project kickoff meeting, UCSD will also require the Design Team to create the Bluebeam Studio Project for submittal and/or the Bluebeam Studio Session for review. This will be determined by the UCSD Project team at the start of the project, and when filling out the UCSD Electronic Plan Review Cover Sheet.

As determined in the Project kickoff meeting, UCSD may require the Design Team to insert the UCSD Electronic Plan Review Cover sheet into their own submission documents. The UCSD Electronic Plan Review Cover sheet defines the responsible party for each of the Bluebeam-related project tasks, and the UCSD Departments reviewing the project. It is inserted as the first page in all submission documents requiring UCSD review.

Once the Bluebeam Studio Project is created, the Design Team will then submit formatted plans and documents electronically into a Bluebeam Studio Project. The Bluebeam Studio Project serves as UCSD’s online storage location for all digital files for each Project receiving a permit. Once the Design Team uploads to the Bluebeam Studio Project, the Bluebeam Studio Administrator from UCSD will then perform a QAQC verification of the documents.

Once the Design Team’s submittal files have been accepted, a Bluebeam Studio Session will be created for UCSD review. The Bluebeam Studio Review Session is an online location for digital plan review. Once UCSD electronic review is complete, the Design Team will join the Bluebeam Studio Session to review and incorporate UCSD review comments.

2.0 Account Setup for Bluebeam Studio

Note: For the Design Team to use EPR in Bluebeam, the Design Team must use Bluebeam Studio and create a Bluebeam Studio account. Bluebeam Studio is a cloud-enabled system that is built into Bluebeam, that allows UCSD to store files and perform simultaneous plan review of PDFs collaborating with the Design Team. Although the Bluebeam Studio Account will not be needed until review reconciliation, it should be the very first item completed within this procedure.

Participation in Bluebeam Studio and account setup does not require a paid version of Bluebeam.

2.1 New Bluebeam Account: Set General Account Name & Create a New Bluebeam Studio Account

2.1.1 Set Bluebeam General user name for Markups on Bluebeam Revu only and not in a Bluebeam Studio Session. Bluebeam Preferences dialog: The “User” field located in the “General” then “Options” tab.
Create a New Bluebeam Studio Account

2.1.2.1 Locate and click the “Bluebeam Studio” button

2.1.2.2 Within the Bluebeam Studio tab click the “Sign In” button to sign in or to create a new Bluebeam Studio account

Note: When creating an account for the first time, be sure to enter the Display Name in the following manner: First Last – Company (ex: Mary Smith – XYZ Architects).

Existing Bluebeam Account: Set General & Studio Account Display Name

Note: Design Team name information shall abide by the following protocol: First Last – Company (ex: Mary Smith – XYZ Architects). Once the Design Team has signed into Bluebeam, the user Display Name must be correctly entered in the following locations within the Preferences Dialog (found in the Revu pull-down menu, or press Ctrl + K)

2.2.1 Set Bluebeam General user name for Bluebeam Revu only and not in a Bluebeam Studio Session. Bluebeam Preferences dialog: The “User” field, located in the “General” then “Options” tab

2.2.2 Set Bluebeam Studio user name for all activities in a Bluebeam Studio Project or Session. Bluebeam Preferences dialog: The “Display Name” field, located in the “Bluebeam Studio” tab in the “Server” section

2.2.3 Alternatively set Bluebeam Studio user name in a web browser, enter “studio.bluebeam.com” and log in with the Bluebeam Studio login username and password.
2.2.3.1 Select the “My Profile” tab on the left
2.2.3.2 Verify the name located in the “Default Name” box
2.2.3.3 Correct the name and click the “Update Profile” button

2.2.4 Log out and then back into Bluebeam Studio once all changes have been made
Section B – Initial Document Submission Process

3.0 Prepare Drawing Documents for Initial Submittal

Note: All documents, including drawing documents, that require UCSD review and/or review comments must be PDF file type. Follow the steps outlined in this procedure to prepare applicable PDF files prior to submittal to UCSD.

Many of the steps for preparing a PDF documents require a paid version of Bluebeam.

3.1 Best Practices for PDF Creation

Note: Design Team is to ensure all best practices for PDF creation are used as applicable.

3.1.1 Design Teams are recommended to review UCSD’s “EXHIBIT C SUPPLEMENTAL REQUIREMENTS EXECUTIVE DESIGN PROFESSIONAL AGREEMENT” for additional requirements, including vector-based line, TrueType font, and print-to-page requirements.

3.1.2 A note on Cross-Hatch fills:
Avoid the use of dense crossed-line fills within drawings whenever possible, as use of dense (i.e. less than 1/8” apart on the plotted page) cross-line hatching can lead to rendering issues on PDFs. Dot patterns, earth patterns, and brick patterns are okay, as lines within those hatch patterns do not typically cross. Solid fill patterns are also generally okay if the solid pattern is not made from crossed lines. Use parallel lines instead.

3.1.3 A note on Digital Signatures:
Do not add certificate-type digital signatures on submittal documents. Files submitted to UCSD must be unlocked/unrestricted to editing, and applying a digital signature restricts changes to the file. Use only scanned graphic-type signatures if required.

3.2 Verify Document Naming Conventions for Document Submittal

3.2.1 Ensure all documents are named per Exhibit D: Document Naming Table for Submissions

3.3 Include Drawing Index and Total Sheet Count

Note: Ensure set is coordinated and complete prior to creating PDF of document.

3.3.1 In drafting software, list total sheet count on drawing sheet index page
3.3.2 Verify sheet count on the sheet index matches total PDF document sheet count.

3.4 Include Blank Area in Title block for Fire Marshal and other Approval Stamps

Note: Each drawing page must have a space reserved for UCSD approval stamps. Areas defined must be completely blank.

3.4.1 A 3.3" wide x 2.5" high blank area shall be provided within the title block of the project drawings to accommodate the Schematic Review Stamp and/or the Fire Marshal’s electronic approval stamp. Top of box is 3.5" down from the top right physical corner of the sheet. This reserved blank area must be in the same location for every page in the plan set.
3.5 Verify Document Size

3.5.1 Do not exceed 1 GB size for any single PDF document. If file size exceeds 1 GB, the document shall be broken up into volumes by discipline or consistent number of sheets. Refer to Exhibit D: Document Naming Table for Submissions for Volume Naming

3.6 Verify Document Scale

3.6.1 PDF Drawings shall be plotted/printed at 100% Scale from authoring software. Do not “Scale to Fit” or “Fit to Page”. Do not reduce the PDF page size to be smaller than the original printed page size.

3.7 Prepare Legacy Scanned Documents (as Applicable)

Note: Scanned documents are slow to regenerate in Bluebeam – typically defined as taking more than 5 seconds per-page to regenerate. All scanned documents or pages that are slow to regenerate are required to go through this scanned document preparation section. It is not recommended that documents are scanned dots (raster) – ideally, they should be “printed” lines (vector). See below.

3.7.1 Open the scanned PDF file
3.7.2 From the File Menu (located at the top of the Bluebeam screen), select “Export”
3.7.3 Click “JPEG”

3.7.4 Browser window will open
3.7.5 Browse to save to a local folder (ideally a new folder). Note the folder location
3.7.6 Select “Save”

Note: The next steps convert JPG image files created above back to usable PDFs

3.7.7 From the File menu, select “Create”

![Image of Create option in File menu]

3.7.8 Click “From Multiple Files”

3.7.9 Browser window will open

![Image of browser window with multiple JPG files]
3.7.10 Locate folder containing JPEGs saved from previous section
3.7.11 Select image files
3.7.12 Select Open
3.7.13 Stapler dialog will open
3.7.14 Select “Advanced…” Button

3.7.15 Select 96 dpi from the resolution image drop down
3.7.16 Select OK
3.7.17  Add a file name to the “One Output File” field
3.7.18  Select “Use source file folder”

3.7.19  Click OK

3.8  Run Optical Character Recognition (OCR) on any Scanned PDF files

   Note: this OCR Section requires the Bluebeam eXtreme software version.

3.8.1  From the “Batch” pull-down menu, select “OCR”
3.8.2 Confirm All Pages are selected
3.8.3 Set Document Type to CAD Drawings
3.8.4 Check “Detect Vertical Text”
3.8.5 Check “Detect text in pictures and drawings”

![Image of OCR interface]

3.8.6 Uncheck all other options
3.8.7 Click OK

3.9 Create Page Labels

3.9.1 From any page, zoom into the area containing the sheet's page number and label
3.9.2 Go to Thumbnails icon
3.9.3 Click the Create Page Labels icon to the right of the Thumbnails drop-down

![Image of Thumbnails icon]
3.9.4 Select Page Range > Select All Pages
3.9.5 Select Page Region > Click Select

![Image of Create Page Labels dialog box]

3.9.6 Select Region of Page Label > Sheet Number

Note: Draw a window around the Sheet Number as big as possible while staying inside the Title block lines. Avoid selecting additional text besides the Sheet Number. Notice the window being sketched within the area highlighted with the red box.

![Image of sheet number highlighted]

3.9.7 Enter a space, a hyphen, and a space after [Region 1]
3.9.8 Click add to select a second region for the bookmark

![Image of AutoMark dialog box]
3.9.9 Select Region of Page Label > Sheet Name

Note: Draw a window around the Sheet Title as big as possible while staying inside the Title block lines. Avoid selecting additional text besides the Sheet Name. Notice the window being sketched within the area highlighted with the red box.

3.9.10 Review AutoMark Preview and Click OK. Page Labels will generate

3.9.11 Review in the Thumbnails tab to verify the sheet number and sheet name have been captured properly

3.9.12 If incorrect, double left-click and change incorrect title(s), or redo Page Labels
3.10 Create Bookmarks

Note: Bookmarks are important for document navigation, and can be created directly from Page Labels. Verify all Page Labels are complete and correct before creating Bookmarks

3.10.1 Go to Bookmarks Tab

3.10.2 Click the “Create Bookmarks” icon

3.10.3 Select Page Labels and verify Page Range > Click OK

![Create Bookmarks](image)

3.10.4 Page Label content will appear in the Bookmarks tab

3.10.5 Click the Bookmarks icon and select “Audit Bookmarks” from drop-down menu to confirm no broken bookmarks are found

![Audit Bookmarks](image)

3.11 Create Nested Bookmarks

Note: Before Nesting Bookmarks, verify all Bookmarks contain correct page label names matching the names in the Thumbnails (which match drawing sheet numbers & labels)
3.11.1 Go to ‘Bookmarks’ Tab
3.11.2 Select the first sheet in each section
3.11.3 Right-click > Click “Add” > Select “Add Before…”

3.11.4 Name new bookmark by section - Example: ELECTRICAL
3.11.5 Select all “E” sheets and nest by pulling the documents over to the right under the ELECTRICAL bookmark
3.11.6 Repeat for all disciplines and other applicable documents (i.e. specifications which contain bookmarked sections)

3.12 Set Scale on Floor Plans (as Applicable)

Note: In addition to PDF plotting at Full 1:1 Scale, all Floor Plan Sheets should contain an appropriate measurement Scale that is stored in the PDF page. This is set within Bluebeam in the "Measurements" tab.

3.12.1 Locate the Floor Plans

3.12.2 Verify a scale is listed in the title of the Floor Plan. Design Teams must include a scale identification on all Floor Plans

1 MAIN LEVEL FLOOR PLAN

1/8" = 1'-0"

3.12.3 Within the "Measurements" panel locate the Page Scale section

3.12.4 Set Precision to 1/2
3.12.5 Manually enter the Scale to match the Scale of the Floor Plan, or select the scale from the “Preset” Scales (Bluebeam 2019/2020)

![Bluebeam 2019/2020](image)

![Bluebeam 2018](image)

3.12.6 Once the scale has been applied on a page, that scale is stored in the page. In Bluebeam 2018, the “Store Scale in Page” option is checked. In Bluebeam 2019, the page scale is listed within the Thumbnail. Check “Page Scale” in the Bluebeam 2019 Label Options.

![Thumbnail](image)

3.12.7 Repeat for all Floor Plans

Note: Once a Scale is set on one page, it will become the default to set other pages in Bluebeam 2018 - by checking “Store Scale in Page”. In Bluebeam 2019 & 2020, use the “Apply to Page Range” button to set multiple pages.

3.13 Remove All Layers

3.13.1 Go to Layers Tab

3.13.2 Select layers listed
Note: To select all quickly, select the top layer of the list, hold the shift key and select the bottom layer simultaneously.

3.13.3 Right-click on highlighted layers and select Delete from the drop-down menu

3.13.4 Uncheck all options

3.13.5 Click Delete

3.14 Create Hyperlinks

Note: Creating Hyperlinks as defined in this Section requires the Bluebeam eXtreme software version.
3.14.1 From the Batch pull-down menu, select Link > New

3.14.2 Select “Add Open Files” uncheck any files that are not drawing files
3.14.3 Click Next
3.14.4 Select Settings
3.14.5 Select Filter Mode: "First from start"
3.14.6 Select Filter Character. "Space"
3.14.7 Click OK

3.14.8 Click Link Options
3.14.9 Check Include Appearance Properties
3.14.10 Select a light-yellow color
3.14.11 Set Style to Highlight
3.14.12 Click OK
3.14.13 Select Page Label
3.14.14 Click "Generate"
3.14.15 Search Terms will generate
3.14.16 Click run to create hyperlinks

3.14.17 Once the hyperlinks are created, click "Finish and Close"
3.15 Flatten the Document

3.15.1 From the “Document” pull-down menu, select “Flatten”
3.15.2 In the “Flatten Markups” dialog, check “All Markups”
3.15.3 Verify ‘Allow Markup Recovery (Unflatten)’ is unchecked

3.15.4 Click Flatten
3.15.5 Save Documents

4.0 Prepare Specifications and other Files for Initial Submittal

Note: Additional document such as Specifications, Calculations, and other supporting files must be prepared in addition to the drawings to allow for proper review by UCSD.

Files requiring review and/or comments by UCSD within a Bluebeam Session must be PDF file type. Files that are for reference may be other typical file types (Word, Excel, etc.)

Preparation for non-drawings PDFs typically does not require a paid version of Bluebeam.

4.1 Prepare Specifications

4.1.1 Specifications shall contain bookmarks identifying Specification Divisions
4.1.2 Specifications shall be free of Layers
4.1.3 Specifications shall be Flattened
4.1.4 Include 3.3” wide x 2.5” high blank area on the Specifications cover page for the Schematic Review Stamp and/or the Fire Marshal approval stamps
4.1.4.1 Bottom of box is 1” down from the lower right physical corner of the cover page and the top of the box is 3.5” up from the same corner.

4.2 Prepare additional Supporting Documents

4.2.1 All additional supporting documents shall be free of Layers
4.2.2 All additional supporting documents shall be Flattened
4.2.3 On any additional documents requiring approval, include 3.3” wide x 2.5” high blank area on the Cover page for the Schematic Review Stamp and/or the Fire Marshal and approval stamps

4.2.3.1 Bottom of box is 1” down from the lower right physical corner of the sheet and the top of the box is 3.5” up from the same corner.

5.0 Insert the UCSD Cover Page, including the Back-Check Status Menu (as Applicable)

No If it is determined in the kick off meeting that the Design Team will be the Bluebeam Studio Manager then UCSD will supply a UCSD Cover Page to the Design Team (via email) and require the Design Team to attach the UCSD Cover Page as the first page of their submittal documents. Perform this step on any submittal document where UCSD Reviewers may add comments in a Bluebeam Studio Session. If UCSD is the Bluebeam Studio Manager, UCSD will insert the cover page and manage the Bluebeam Studio Project and Session.

Inserting the UCSD Document Cover Page automatically adds the UCSD Custom Status Menu. The Status Menu applied to the document allows the Design Team to track the review & incorporation comments, and UCSD Reviewers to track OPEN and CLOSED comments.

**IF THE UCSD COVER PAGE (INCLUDING THE BACK-CHECK MENU) IS NOT PROPERLY ADDED, THE REVIEWER BACK CHECK CANNOT BE PERFORMED PROPERLY**

5.1 Open the UCSD Cover Page and Verify Cover Page Completeness

Note: Be sure to open the PDF in Bluebeam, not in Adobe. The Cover Page is filled out in the project kickoff meeting with input from both the Design Team and UCSD.

5.1.1 Open the UCSD Cover Page.pdf file received from UCSD
5.1.2 Update and/or Verify UCSD Cover Page Completeness. Add or verify the following information

5.1.2.1 The Project Name
5.1.2.2 The Project Number
5.1.2.3 Project Workflow Steps assignments, including Roles & Responsibilities for specific workflow tasks
5.1.2.4 UCSD Departments Reviewing the Project (add & remove Reviewers from the list as needed)

5.1.3 Save and Close the file

Note: If the Cover Page has not been completed, coordinate with the UCSD Project Manager to assure the information added to the Cover Page is correct.

5.2 Insert Cover Page

Note: The UCSD cover page will be sent to the Design Team via email. Update the cover page prior to inserting into the individual documents. The page must be inserted using Bluebeam.

5.2.1 In Bluebeam, open the submittal files (all documents where comments are required)
5.2.2 Once all files are open, insert the cover page as the first page in each document
5.2.2.1 From the “Document” pull-down menu, select “Insert > Pages from Document”

Note: If the “Open Project File” dialog appears, click “Open from Disk”. If “Insert Pages” dialog opens, click the “Add” button.

5.2.2.2 Browse to the locate the file titled “UCSD EPR Cover Page” and open the file.

5.2.2.3 In the “Insert Pages” dialog, select “Before” and check “First Page” to insert the cover page at the beginning of the document.

5.2.2.4 Click OK.

5.2.3 Verify the Cover Page has been added as the page 1 of the document.

5.2.4 Repeat for all submitted files that require Session review or addition of the back-check menu.
6.0 Create the Bluebeam Studio Project (as Applicable)

Note: In some instances, UCSD will require the Design Team to create the Bluebeam Studio Project for the Submittal upload. Creating a Bluebeam Studio Project requires a paid version of Bluebeam.

A new Bluebeam Studio Project will be created for submission files to be added. Subsequent submission files will be uploaded into the same Studio Project and related Studio Session. Do not create new Studio Projects and Sessions for each revision submission.

6.1 Log into Bluebeam Studio & Create the Studio Project

6.1.1 Sign into Bluebeam Studio. Refer to the Section titled “Account Setup for Bluebeam Studio”.

6.1.2 Click the Studio tab

6.1.3 Click the Project icon > Click the Plus “+” icon > Select New Project

![Create New Project](image)

6.1.4 Name the Project:

6.1.4.1 Studio Project Naming Structure: [Project #]_[UCSD]_[Project Name]

Naming Example – Major Cap: 4466_UCSD Altman Research Institute
Naming Example – Minor Cap: 55555_UCSD Altman Bldg AC System Update

Note: Refer to Exhibit C: Bluebeam Studio Project Folders for Naming Instructions for both Bluebeam Studio Projects and Bluebeam Studio Sessions

6.1.5 Click “OK”. A new Bluebeam Studio Project will be created

6.2 Create Bluebeam Studio Project Folder Structure

Note: the Bluebeam Project folder structure will be sent to the Design Team via email. Save the folder to a local drive prior to uploading.

6.2.1 Once the Bluebeam Studio Project is created, click “Upload Folder”
6.2.2 Browse to locate the "UCSD EPR" folder provided by UCSD. Click & Select
Note: Be sure to select the "UCSD EPR" folder, not a subfolder

6.2.3 Folder and sub-folders will upload

6.3 Set Up Bluebeam Studio Project Settings & Permissions

6.3.1 In Bluebeam Studio Project, click Project Settings
6.3.2 In the “General” tab, note the nine-digit Project ID number.
   Note: The nine-digit Bluebeam Studio Project ID number is the “key” needed to join Bluebeam Studio Projects
6.3.3 Select the “User Access” tab
6.3.4 Uncheck the “Restrict Users” checkbox
6.3.5 Click “Apply”
6.3.6 Select the “Permissions” tab
6.3.7 Set the Applied Permissions for to “Allow” for the following Permissions: “Send Invitations”, “Manage User Access”, “Send PDFs to Sessions”, “Revoke Check Out”, and “Share File Links”.

6.3.8 Click the Groups button and create a group, titled “UCSD Administrator”, containing the following emails:
AdminBBMajor@ucsd.edu (for Major Cap projects)
AdminBBMinor@ucsd.edu (for Minor Cap projects)
6.3.9 Add the “UCSD Administrator” group and assign the “Full Control” Permission
6.3.10 Click “Apply”
6.3.11 Click the “Folder Permissions” tab
6.3.12 Change applied permissions on the “Project Root” folder to “Read / Write / Delete”

6.3.13 Click “Apply”
7.0 Upload Documents to the Bluebeam Studio Project

7.1 Submit files directly into a Bluebeam Studio Project

Note: The Design Team will upload directly to the Bluebeam Project. If the UCSD Studio Administrator was the creator of the Bluebeam Studio Project, the Design Team will receive an invitation and a link to submit to the Bluebeam Studio Project via email. This invitation will be separate from the invitation to join the Bluebeam Studio Session.

Uploading files directly to a Bluebeam Studio Project requires a paid version of Bluebeam.

Access to a Bluebeam Studio Project requires a Bluebeam Studio Account. Refer to the “Account Setup for Bluebeam Studio” section located at the beginning of this Procedure for instructions on setting up a Bluebeam Studio account and required display name conventions for Bluebeam Studio accounts. The Account and display name must be set prior to submitting.

7.1.1 Ensure all documents are named and formatted as defined within this procedure. Improperly formatted documents will be rejected by UCSD

7.1.2 Open Bluebeam Software

7.1.3 Verify connection to Bluebeam Studio (i.e. the icon is “plugged in”)

7.1.4 Open the Bluebeam Studio Project by clicking the link included in the email invitation (provided by UCSD). As long as the Design Team is connected to Bluebeam Studio, the link will open the Bluebeam Studio Project tab automatically.

7.1.5 If a link is not available or not working, the Design Team may also open the Studio Project manually if they have been invited and have the Bluebeam Studio Project ID

Note: The Bluebeam Studio Project ID is a random nine-digit code provided by UCSD. It is unrelated to the Application number or project address, etc.

7.1.5.1 Click the Bluebeam Studio Projects button

7.1.5.2 Under Bluebeam Studio drop-down menu select +. The “Join” dialog box appears.

7.1.5.3 Enter the nine-digit Bluebeam Studio Project ID

7.1.5.4 Click OK. The Bluebeam Project tab will open
7.1.6 Once the Bluebeam Studio Project tab is open, locate the correct folder / phase for the package upload in the “B. Design Team Submissions” folder.

Note: Verify all file names are correct prior to upload. Refer to Exhibit D: Document Naming Table for Submissions for correct naming convention for all files.

7.1.6.1 Right click on folder
7.1.6.2 Select Upload Files Icon

7.1.6.3 Browser window will open
7.1.6.4 Select the file to upload (Hold Ctrl or Shift to select Multiple files)
7.1.6.5 Select Open to upload the files

Note: Bluebeam Studio Projects have a 180-character limit, including file names and folder names combined. If files fail to upload, verify the names of files and/or folders are not exceedingly long.

7.2 Notify UCSD of Bluebeam Studio Project Submission

Note: Once all submittal files have been successfully uploaded to Bluebeam Studio Project, notify UCSD Bluebeam Studio Administrator of Bluebeam Project submittal via email.

7.2.1 Send to Bluebeam Studio Project invitation to the UCSD Studio Administrator and/or UCSD Project Managers

7.2.1.1 In the Bluebeam Studio Project, click the (envelope) “invite” button
7.2.1.2 Click the “Copy invitation” button

Note: This copies the Bluebeam Studio Project invitation-link to the computer's clipboard.

7.2.1.3 Open Outlook (or default email program) and open a new email message
7.2.1.4 Address email to the UCSD Studio Administrator and/or UCSD Project Managers' Email address
7.2.1.5 Click "Ctrl-V" to paste the Bluebeam Studio Project invitation
7.2.1.6 Send the invitation email to UCSD

8.0 Description of Intake: Design Team Submittal Files

Note: Once UCSD receives notification of the Design Team submission into the Bluebeam Studio Project, the UCSD Bluebeam Studio Administrator may perform a QAQC review of the submitted files. Please ask/confirm with UCSD if this will happen prior to adding submission files to the Session (if applicable).

If document preparation is incomplete and/or not in compliance with this procedure, the Bluebeam Studio Administrator will notify the Design Team and request an updated resubmittal to the Bluebeam Studio Project.

9.0 Create the Bluebeam Studio Session & Invite UCSD (as Applicable)

Note: In some instances, UCSD will require the Design Team to create the Bluebeam Studio Session for the Submittal review. Bluebeam Studio Sessions are typically created directly from the Bluebeam Studio Project's files for Electronic Plan Review. This is a best practice and should be followed whenever possible.
Create the Bluebeam Studio Session

9.1.1 Log into Bluebeam Studio and open the Bluebeam Studio Project by joining the Bluebeam Studio Project ID number

9.1.2 In the Bluebeam Project, locate the Document(s) to be uploaded to the Bluebeam Session for UCSD review

9.1.3 Right-click on all PDF(s) to be reviewed by UCSD (Ctrl or Shift to select multiple)

9.1.4 Select “Add to New Session…”

9.1.5 Name the Session:

Studio Project Naming Structure:  Project # _UCSD Project Name - REVIEW
Major Cap Example:  4444_UCSD Kanzler Lecture Hall - REVIEW
Minor Cap Example:  55555_UCSD Altman Bldg AC Update – REVIEW

9.1.6 Click OK

9.1.7 In Bluebeam Session tab, click on the Session name select “Settings” from the drop-down menu

9.1.8 Click “Permissions” Tab
9.1.9 Set the Applied Permissions Attendees to “Allow” for the “Save As”, “Print”, “Markup”, “Markup Alert” and “Add Documents” Permissions

9.1.10 Click Apply
9.1.11 Click the “Attendees” tab
9.1.12 Uncheck the “Restrict Attendees” checkbox

Note: Sessions will typically be set to be “Open” (anyone with the Session ID can join). A Session that is “Restricted” means that only users invited or added in a Session Group can join.

9.2 Notify UCSD of the New Bluebeam Studio Session

NOTE: Once the Bluebeam Studio Session has been created, notify UCSD. The UCSD Administrator will then invite the Reviewers to the Session for the initial Review. Once the initial review is complete, the Design Team will join the Bluebeam Session to view and respond to the Reviewer’s markup comments.

9.3 Send a Bluebeam Studio Session Invitation to UCSD

9.3.1 Open the Bluebeam Studio Session tab
9.3.2 Click on the envelope icon located to the right of the Attendees list
9.3.3 In the Session Invitation dialog, click the “Copy Invitation” button

9.3.4 Paste into an individual email and send to the UCSD Studio Administrator and/or UCSD Project Manager(s). The pasted information will include the Session name, the Session ID number, and a Session link.
Section D – UCSD Plan Review Process

10.0 Description of the UCSD Initial Electronic Plan Review Process

Note: Once the initial review documents have been uploaded by the Design Team and have received approval from the Bluebeam Studio Administrator, UCSD Reviewers will begin the plan review process. Review time starts when the documents are found to be satisfactory. Reviews may be performed sequentially or simultaneously.

11.0 Respond to UCSD Review Comments

Note: Once the UCSD initial document review has been completed, Design Team will be invited via email into a Bluebeam Review Session to incorporate comments. Incorporating comments is a joint process between the UCSD review team and the Design Team.

Design Teams will respond, using the custom Status Menu in the Markups List, prior to resubmitting any revised documents. Once changes have been addressed by the Design Team using the custom Status Menu, the Design Team will create and upload subsequent submittal documents.

Incorporation and response to Reviewer comments does not require a paid version of Bluebeam, but access to a Bluebeam Studio Session does require proper setup of a Bluebeam Studio Account. Before joining the Session, refer to the “Account Setup for Bluebeam Studio” section located within this Procedure for instructions on setting up a Bluebeam Studio account and required naming conventions for Studio accounts.

11.1 Join the Bluebeam Studio Session

11.1.1 Join via an Email Link

11.1.1.1 Open Bluebeam Software

11.1.1.2 Ensure Bluebeam Studio is Connected (icon is “plugged in”)

11.1.3 Locate the Bluebeam Studio Session invitation email

11.1.4 Click the link within the invitation to connect to the Bluebeam Studio Session

11.1.2 Join via a Session ID

11.1.2.1 Locate the Bluebeam Studio Session invitation email containing the nine-digit Bluebeam Session ID (ex. 111-222-333)

11.1.2.2 Open Bluebeam Software
11.1.2.3 Connect to Bluebeam Studio and click the Session button.
11.1.2.4 Ensure Bluebeam Studio is Connected (icon is “plugged in”).
11.1.2.5 Within the Studio tab, locate and click the ‘plus’ button +. The “Join” dialog box appears.

11.1.2.6 Enter the nine-digit Bluebeam Session ID and click “OK”.

11.2 Navigate Documents & Locate UCSD Reviewers’ Comments

Note: For Bluebeam Studio Session layout, refer to QR4: Bluebeam Studio Session Layout.

11.2.1 Right-click on Session document. Select Open.

11.2.2 Open the Markups List Panel.

Note: the Markups List panel is typically located on the bottom of the Bluebeam software. In the “Window” pull-down menu, select “Panels > Markups” or press ALT+L to show the Markups list if it is hidden.

11.2.3 Locate Reviewers’ markup comments in the Markups List.

Note: The Markups List automatically tracks information for each Reviewer markup placed on a PDF, including Date, Page Label, Author, Color, Comments and Status. By default, it is found in the bottom panel.
11.3 Filter UCSD Reviewers’ Comments

Note: The Filter feature within the Markups List allows a user to temporarily remove markup comments – “filtering”, or removing those comments based upon specific parameters. One can filter to only show a specific Author of comments, a specific page of comments, etc.

11.3.1 On the Markups list toolbar, click the Filter icon

11.3.2 A filter icon then appears next to each column heading in the Markups list

11.3.3 Click the filter icon associated with the desired column and select the value to filter

11.3.4 Repeat as desired to filter by other values.

Note: While filters are active, the markups list shows only those markups that match the selected filters. All other markups are hidden.

11.4 Incorporate and Reply to UCSD Reviewer Comments

Note: Design Teams must respond to each and every comment inside the Bluebeam Studio Session to indicate a reconciliation action or inaction to the reviewer.

To notify the reviewer that the markup comment will be integrated into a revised document submission, the Design Team will set the Status of the comment to “AGREE - INCORPORATED in next Submittal (Reply as Needed for Clarity)”. There are two ways to do this: Right-clicking on the comment or double-clicking in the status column of the comment.
The Design Team will also indicate to the reviewer any changes related to the comments in the revised drawing, such as location or page changes, by using the “Reply” function.

Once the Design Team has updated/revised the drawings and other documents per the review comments (prior to the subsequent submittal), the Design Team will use the Markups List “Status” column to indicate to UCSD that the Reviewers’ comment has been incorporated.

11.4.1 Incorporate Comments by Right-Clicking

11.4.1.1 Locate the Reviewer’s comment (either on the page or in the Markups List)

11.4.1.2 Right-click on the comment and select the Set Status

11.4.1.3 From UCSD Back Check Status menu titled:

*****Design Team reply to Reviewer's comment***** and select:
“AGREE - INCORPORATED in next Submittal (Reply as Needed for Clarity)”

11.4.1.4 Repeat until all comments have been incorporated completely

11.4.2 Incorporate Comments using the Status Column

11.4.2.1 Double-click on the comment inside of the status column and select:
“AGREE - INCORPORATED in next Submittal (Reply as Needed for Clarity) " from the menu titled: *****Design Team reply to Reviewer's comment****

11.4.3 Add an additional “Reply” to comments as Needed for Clarity

11.4.3.1 To add a comment/note related to a markup response, Right-click on the comment (either on the page or in the Markups List) and select “Reply” from drop-down menu. Type a response in the open text box stating how the comment has been addressed. Clearly indicate the location of the changes,
especially if they will deviate from the original page / location on the drawings.

11.5 Non-Incorporated Status and Reply to UCSD Reviewers’ Comments

Note: Design Teams must respond (using the “Reply” function) to each non-incorporated comment to indicate a reconciliation action or inaction to the reviewer.

To notify the reviewer that the markup comment will NOT be integrated into a revised document submission, the Design Team will first set the Status of the comment to “DISCUSS or NEED UCSD INPUT (per reply)”. There are two ways to do this: Right-clicking on the comment or double-clicking in the status column of the comment. The Design Team must also add a response using the “Reply” function for each unincorporated comment, to explain the reason for non-compliance / not integrating the reviewer’s comment into the revised submission. After discussion, the Design Team can set a second status for the comment to denote the incorporated status.

11.5.1 Locate the Reviewer’s comment
11.5.2 Double-click on the comment inside of the status column, and select: “RECONCILED & NOT INCORPORATED (per reply)” from UCSD Back Check Status menu titled:

*****Design Team Reconciliation of DISCUSSED comments*****

11.5.3 Another method is to Right-click on the comment and click:
“Set Status > RECONCILED & NOT INCORPORATED (per reply)” from UCSD Back Check Status menu titled:

*****Design Team Reconciliation of DISCUSSED comments*****

11.6 Add an additional “Reply” to reviewer comments as Required

11.6.1 Add the required “Reply” comment to the response by right-clicking on the comment and selecting “Reply” from the drop-down menu.
11.6.2 Type a response in the text box stating the reason that the comment was not addressed. Clearly indicate the reasoning and explanation for non-compliance.

![Markup List - Bluebeam](image)

12.0 Subsequent Submittals

Note: Subsequent submittals shall be submitted as entire sets of drawing plans – responding to corrections requested in the prior review. Resubmit the entire drawing set even if markup comments/changes only appear on a few of the individual pages.

12.1 Add the UCSD Back Check Menu using the UCSD Bluebeam Profile

Note: The first submittal requires the UCSD Cover Sheet. Addition of the Cover Sheet automatically adds the UCSD back check menu.

Subsequent submittals do not require the UCSD Cover Sheet, but they do require the back check menu to be added. To add the back check menu to a document, the Design Team must load the UCSD profile, open the document, add the status menu, and then save the document.

Perform this step on all documents where UCSD Reviewers will add comments. The Back Check Status Menu allows the Reviewers to track OPEN and CLOSED comments.

**IF THE BACK CHECK MENU IS NOT PROPERLY LOADED IN THIS STEP, THE BACK CHECK WILL NOT BE PERFORMED PROPERLY.**

12.2 Save Existing Profile Customizations (as applicable)

Note: For experienced users that have predefined custom tools and/or profiles, verify that customizations have been saved in the current profile. Tool customizations must be saved before loading another profile, or they may be lost.

12.2.1 Click the “Revu” drop-down menu
12.2.2 Hover over “Profiles”. Note the Profile that is checked, and click “Save Profile” in the submenu

12.3 Locate and Load the UCSD Profile

Note: UCSD will supply the Bluebeam profile to the Design Team

12.3.1 Locate the Bluebeam Profile, titled “UCSD Major Cap.bpx” (Capital Program Management jobs) or “UCSD Minor Cap.bpx” (Facilities Management jobs)
12.3.2 Verify that Bluebeam software is open
12.3.4 Double-click the downloaded “UCSD Major Cap.bpx” or “UCSD Minor Cap.bpx” file. If the Profile loads correctly, Bluebeam will display the message “Successfully Imported Profile”
12.4 Load the UCSD Back Check Menu using the “Manage Status” Setting

Note: If multiple Bluebeam profiles are used, verify that the UCSD Profile is the current active (checked) profile in the Revu pull-down menu > Profiles

12.4.1 Open all revised submittal files requiring UCSD review

12.4.2 Once all files are open, locate the Status Column in the Markups List (typically located on the bottom of the Bluebeam software).

12.4.3 Locate the Column titled “Status” within the Markups List

12.4.4 Click the Settings icon within the Status Column

Select “Manage Status” from drop-down

12.4.5 In the “Models” window, Verify the two state models titled “Design Team (Document Originator)” and “UCSD Reviewer Back Check” appear and are checked

12.4.6 If Models appear correctly, click “OK”

12.4.7 If the model states listed above do not appear or are listed differently:

12.4.7.1 Select incorrect model state in “Models” window
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12.4.7.2 Select Red “X” to delete
12.4.7.3 Click "OK"

12.4.7.4 Click the Settings icon again in the Status Column
12.4.7.5 Select “Manage Status” from drop-down again
12.4.7.6 Verify model states appear correctly, as defined above
12.4.7.7 Click “OK”

12.4.8 Once the Status Menu has been applied correctly, save the file

Note: All files that will be reviewed electronically MUST BE SAVED to apply Status menus to PDFs for review.

12.4.9 Repeat for all submitted files that require Session UCSD review or addition of the backup check menu

12.5 Submit Subsequent Revised Files Directly to the Bluebeam Studio Project

Note: As Built and Record documents shall also be submitted into UCSD’s E-Builders system, as directed by UCSD.

12.5.1 Ensure all documents are named per Exhibit D: Document Naming Table for Submissions.
12.5.2 Ensure all documents are correctly formatted as defined within this procedure. Improperly formatted documents will be rejected by UCSD.
12.5.3 Open Bluebeam Software and ensure Bluebeam Studio is connected
12.5.4 Join the Bluebeam Studio Project
12.5.5 Upload the documents into the corresponding phase in the “B. Design Team Submissions” folder.

Note: Refer to the previous “Submitting files directly into a Bluebeam Studio Project” Section of these Procedures for instructions on both joining the Bluebeam Studio Project and Uploading documents.

12.5.6 Once the files are submitted, notify UCSD Bluebeam Studio Administrator of Subsequent Submittal via email

12.6 Submit Subsequent Revised Files into E-Builders

Note: Construction submittal documents (As Built and Record documents) shall typically be submitted to into both Bluebeam Studio Project and into UCSD’s E-Builders system as directed by the UCSD Project Manager.
12.7 Description of Intake: Design Team Subsequent Submittal files

Note: Once UCSD receives notification of the Design Team submission into the Bluebeam Studio Project, the UCSD Bluebeam Studio Administrator may perform a QAQC review of the submitted files. Please ask/confirm with UCSD if this will happen prior to adding submission files to the Session (as applicable).

When the Bluebeam Studio Administrator has completed the intake and QAQC review and found the submitted files to be satisfactory, they will send out a notification to the UCSD reviewers to resume the Subsequent Electronic Plan Review in the Bluebeam Studio Session.

12.8 Add Subsequent Submittals into a Bluebeam Studio Session (as Applicable)

Note: In some instances, UCSD will require the Design Team to add the subsequent submittal files from the Bluebeam Studio Project into the Bluebeam Studio Session. UCSD may also ask the Design Team to set up new Studio Sessions for new Packages, Addendums, or milestone phases on large projects.

12.8.1 Locate the new revised files to be added to the existing Bluebeam Studio Session
12.8.2 Verify the UCSD Cover Page has been added. The Cover Page must be added as the first page of all submittal files requiring UCSD markup comments.
12.8.3 Right-click the PDF files and select “Add to Existing Session” and select the existing UCSD Session.

Note: If the “Add to Existing Session” option is not available, it is possible the Bluebeam Studio Session was created independently from the Bluebeam Studio Project. In that case the files must be temporarily saved from Bluebeam Studio Project to a local drive (right-click and “Download Copy”) and then added to the open Studio Session using the “Add Files” button.

12.8.4 If creating a New Bluebeam Studio Session, Right-click the PDF files and select “Add to New Session”

12.8.4.1 Name the Session, and set Permissions for the Session, following the instructions in the section titled “Create the Bluebeam Studio Session & Invite UCSD (as Applicable)” within this document.

12.8.5 Notify UCSD of Revised Submittal (as Applicable)

NOTE: Once the subsequent submittal files have been uploaded into the Bluebeam Studio Session by the Design Team, notify UCSD via email.
12.9 Description of Subsequent Electronic Plan Review Process

Note: Once the subsequent submittal files are in the Session, UCSD Reviewers will resume the plan review.

After the Subsequent review phase has been completed, the Design Team will be notified to rejoin the Electronic Plan Review session to incorporate subsequent comments. The subsequent electronic plan review session will almost always be the same session as the initial review session. Refer to the “Joining the Bluebeam Studio Session” Section of these Procedures.

Design Teams will respond to reviewer’s comments using the custom Status menus in the Bluebeam Markups List prior to resubmitting revised documents. Once changes have been addressed by the Design Team, the Design Team will create and upload additional subsequent submittals as required, until all submittal documents comply with UCSD requirements.
Section E – Approval & Closeout of Documents

13.0 Stamp-Out and Approval

Note: Once all Reviewers and Departments, including the Fire Marshall and Director of Construction Inspections have reviewed and approved the documents, the Design Team will be notified that the electronic plan review is complete and the project is approved. Once that process is completed, the Design Team will be notified of “Final Approval” of the project by the UCSD Bluebeam Studio Administrator.

The Design Team will receive notification to download the approved files from the Bluebeam Studio Project. Typically the approved files will reside in the Bluebeam Studio Project folder titled “C.UCSD Approved Documents.”
Appendix 1: Bluebeam Versions and Use for Design Teams

Design Teams who choose to use Bluebeam for the Electronic Plan Review process should understand that some components of that process use a paid (licensed) version of Bluebeam, and some components use a free (unlicensed) version of Bluebeam.

Breaking down the EPR workflow described in these Procedures into the four main components: formatting PDFs, creating Bluebeam Studio Projects & Sessions, submitting/resubmitting files, and responding to Reviewers’ comments, it is important to note which components use free or paid Bluebeam Revu software:

- **Formatting PDF Documents for submittal / resubmittal requires:**
  Bluebeam Revu Standard (for most formatting) and Bluebeam Revu eXtreme (for OCR and Hyperlink creation)

- **Creating Bluebeam Studio Projects & Sessions requires:**
  Any licensed (paid) version of Bluebeam Revu

- **Submitting / resubmitting documents via a Bluebeam Studio Project requires:**
  Any licensed (paid) version of Bluebeam Revu

- **Joining the Bluebeam Session and responding to Reviewers’ comments requires:**
  Any licensed (paid) or unlicensed (free) version of Bluebeam Revu

Design Teams or Design Team Subcontractors wishing to review and respond to in-Session UCSD Review comments can do so using a free (unlicensed) version of Bluebeam. The free (unlicensed) version of Bluebeam is simply an installed trial version where the trial has expired. Note that this functionality will only be available when working on Session documents while inside a Bluebeam Session.