

DSA PR 18-09.BB17

PROCEDURE: ELECTRONIC PLAN REVIEW FOR OVER-THE-COUNTER (OTC) PROJECTS USING BLUEBEAM 2017

DISCIPLINES: Design Professional of Record

PURPOSE: This procedure facilitates Division of the State Architect's (DSA) change from the paper design review process to a digital design review process using DSAbbox, Bluebeam Studio Projects and Sessions. This document will introduce the new process for submitting OTC documents in a digital platform. The new back check and post approval document review steps are also outlined within. This procedure applies to Bluebeam 2017 and earlier versions. For Bluebeam 2018 refer to PR 18-04.BB18.

BACKGROUND: DSA offers OTC project reviews for eligible projects (see DSA policy [PL 07-02 Over-the-Counter Review of Projects Using Pre-Check Approved Designs](#)) to expedite the review and approval process. DSA's OTC process is primarily intended for single-story relocatable buildings, and other simple projects, utilizing designs that have been "pre-approved" in accordance with DSA procedure [PR 07-01: Pre-Check Approval](#).

All DSA reviews will be completed in a digital format using Bluebeam Studio Projects and Sessions. All new submittals by the Design Professional of Record will be submitted in PDF file format to DSAbbox per PR 18-09. A Bluebeam EPR Administrator will then create a Bluebeam Studio Project for document control and Bluebeam Studio Sessions for collaborative design reviews as outlined in this procedure.

Each submitted project will have a single Bluebeam Studio Project. Within each Bluebeam Studio Project five Bluebeam Studio Sessions will be generated as required for plan review, addendums, revisions, deferred submittals and construction change documents. This gives organization to projects and allows for a well-managed project from registration through certification.

Bluebeam Studio Sessions allows for all Plan Reviewers to join a single session and comment on a single document set. Color coded markup tools will be used to distinguish each discipline's reviews. This new procedure reduces resources used and is in agreement with both the Governor's Office's and Department of General Services' sustainable policies and goals.

SCOPE: This procedure includes the steps to submit documents for an in-person OTC review. The Design Professional of Record will upload documents in DSAbbox prior to the meeting to be validated by a DSA EPR Administrator. The DSA EPR Administrator will set up the Bluebeam Studio and transfer the files into Bluebeam Studio Project. The Plan Reviewer and Design Professional of Record will meet in person to confirm the submission is complete and the project qualifies for OTC review. The DSA Lead Plan Reviewer will upload documents to Bluebeam Studio Session. The DSA Plan Reviewers will review the plans in a Bluebeam Studio Session which will include a period for markups and comment incorporation. Once all comments are closed and the project is determined to be code compliant the documents will be approved by the EPR Administrator. All approved documents will be uploaded into DSAbbox and Bluebeam Studio.

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NOTE: Prior to participating in the digital plan review see Appendix A for set up of a Bluebeam Studio Account

PROCEDURE:

NOTE: Refer to [DSA PL 07-02: Over-the-Counter Review of Projects Using Pre-Check Approved Designs](#) for qualifications, appointment scheduling and document submittal requirements

1. OTC DOCUMENT SUBMITTAL

1.1. Installing Bluebeam and Setting up a Bluebeam Studio Account

1.1.1. Prior to preparing drawings, consult Appendix A to install Bluebeam, set up a Bluebeam Studio Account and join a demo session

1.2. Prepare Documents

NOTE: This preparation is required on all submissions that will be put in DSAbox and Bluebeam. Non-compliance with the following can be cause for the submittal to be rejected.

As described in this procedure Bluebeam ReVu or eXtreme is necessary to prepare the PDF documents; if the software cannot be procured please contact DSA Regional Office for possible solutions at the following email accounts:

- Oakland – OakEPR@dgs.ca.gov
- Sacramento – SacEPR@dgs.ca.gov
- Los Angeles – LAEPR@dgs.ca.gov
- San Diego – SDEPR@dgs.ca.gov

1.2.1. Prepare Scanned Drawings (If not applicable skip to 1.2.2)

Note: Scanned (raster) documents are not allowed, except when documents are not available in their native format, such as PC drawings and old referenced drawings, etc. If scanned documents are used they shall be prepared as follows:

1.2.1.1. If the file is an Image file (i.e. JPEG, TIFF, PNG, GIF, BMP) skip to 1.2.1.2.2

1.2.1.2. If the File is a PDF file

1.2.1.2.1. Export file to JPEG – Go the File Ribbon (located at the top of the Bluebeam screen)

1.2.1.2.1.1. Select the Export Icon

1.2.1.2.1.2. Select JPEG

1.2.1.2.1.3. Select New Folder

1.2.1.2.1.4. Double left-click on the New Folder to open

1.2.1.2.1.5. Select Staple

1.2.1.2.1.6. Close JPEG Viewer

1.2.1.2.2. Convert Image file to PDF file

1.2.1.2.2.1. Select Create Icon

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- 1.2.1.2.2.2. Select From Multiple files
- 1.2.1.2.2.3. Select Image File
- 1.2.1.2.2.4. Type Ctrl+A (the stapler dialog box will open)
- 1.2.1.2.2.5. Select Open
- 1.2.1.2.2.6. Select Advanced Button
- 1.2.1.2.2.7. Select 96 from the resolution image drop down
- 1.2.1.2.2.8. Select OK
- 1.2.1.2.2.9. Add a file name to the One Output File field
- 1.2.1.2.2.10. Select Staple
- 1.2.1.2.3. Combine Scanned Drawings with PDF Printed Files from CAD Program
 - 1.2.1.2.3.1. Open all files
 - 1.2.1.2.3.2. Click Add Open Files
 - 1.2.1.2.3.3. Highlight a file and use the up and down arrows to reorganize as needed
 - 1.2.1.2.3.4. Click Okay
 - 1.2.1.2.3.5. If Further reorganization is needed use the thumbnail tab
 - 1.2.1.2.3.6. Click and drag page to move, shift click for multiple files
- 1.2.2. Format Drawings
 - 1.2.2.1. Provide sheet count on the sheet index and verify it matches Bluebeam sheet count
 - 1.2.2.2. A blank area 2 ½ inches wide by 2 inches high must be created in the same location on all sheets for the DSA digital Identification Stamp

The only exception to this formatting requirement is PC drawings and existing relatable building drawings
 - 1.2.2.3. Export documents to PDF format per Appendix D – PDF Creation Guidelines
 - 1.2.2.3.1. Submittal needs to be combined in a single PDF that is 1 GB max
 - 1.2.2.3.2. If size exceeds 1 GB, the submittal shall be broken up into volumes
 - 1.2.2.4. Open PDF file in Bluebeam
 - 1.2.2.5. Create bookmarks

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- 1.2.2.5.1. Review native file
 - 1.2.2.5.1.1. Click the Audit Bookmarks icon to confirm no broken bookmarks are found
 - 1.2.2.5.1.2. Confirm all sheet numbers and sheet labels are correct
 - 1.2.2.5.1.3. If everything has loaded correctly, continue to step 1.2.2.5.2
 - 1.2.2.5.1.4. If anything has loaded incorrectly, delete previous bookmarks and continue to step 1.2.2.4.2.
- 1.2.2.5.2. Zoom into area on the document containing information for bookmark
- 1.2.2.5.3. Go to Bookmarks Tab
- 1.2.2.5.4. Create Bookmarks
- 1.2.2.5.5. Page Range > Select All Pages
- 1.2.2.5.6. Page Region > Click Select
- 1.2.2.5.7. Select region one of bookmark – Sheet Number
 - 1.2.2.5.7.1. Example: G0001
 - 1.2.2.5.7.2. Click Add to select a second region for bookmark
- 1.2.2.5.8. Select second region of bookmark – Sheet Title
 - 1.2.2.5.8.1. Example: COVER SHEET AND INDEX OF DRAWINGS
 - 1.2.2.5.8.2. Example: G0001 COVER SHEET AND INDEX OF DRAWINGS
- 1.2.2.5.9. Click Okay > Bookmarks will generate
- 1.2.2.5.10. Review bookmark label generation – sheet number and sheet name have been captured properly
- 1.2.2.5.11. If incorrect, double left click and change the title of the bookmark in question
- 1.2.2.5.12. Click the Audit Bookmarks icon to confirm no broken bookmarks are found
- 1.2.2.5.13. If broken bookmarks are found, repeat all steps in Section 1.2.2.5.4. and edit the page range in step 1.2.2.5.5. to include just the pages in question
- 1.2.2.6. Thumbnail Page Labels
 - 1.2.2.6.1. Go to Thumbnail Tab

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- 1.2.2.6.2. Click Create Page Labels > Click Okay
- 1.2.2.6.3. Page Labels will appear on Thumbnails
- 1.2.2.7. Nesting Bookmarks
 - 1.2.2.7.1. After generating thumbnail page labels
 - 1.2.2.7.2. Go to Bookmarks Tab
 - 1.2.2.7.3. Select the first sheet in each section
 - 1.2.2.7.4. Right click on first bookmark label from nesting group > Click Add > Click Add Before
 - 1.2.2.7.5. Name new bookmark by section
 - 1.2.2.7.6. Example: Structural
 - 1.2.2.7.7. Select all “S” sheets and nest by pulling the documents over to right under Structural
 - 1.2.2.7.8. Repeat for all disciplines
- 1.2.2.8. Flatten Existing Markups
 - 1.2.2.8.1. Go to Document > Flatten
 - 1.2.2.8.1.1. Click Check All
 - 1.2.2.8.1.2. Verify “Allow Markup Recovery Unflatten” is unchecked
 - 1.2.2.8.1.3. Select Flatten
- 1.2.2.9. Remove Layers
 - 1.2.2.9.1. Go to Layer tab
 - 1.2.2.9.2. Select layers listed
 - 1.2.2.9.2.1. To select all quickly, select the top layer of the list, hold the shift key and select the bottom layer simultaneously
 - 1.2.2.9.3. Click Delete Layer
 - 1.2.2.9.4. Uncheck all options
 - 1.2.2.9.5. Click Delete
- 1.2.2.10. Hyperlink Documents (Bluebeam eXtreme required)
 - 1.2.2.10.1. Go to File > Batch > Link > New
 - 1.2.2.10.2. Select “Add Open Files”
 - 1.2.2.10.3. Uncheck all non DWG_V# Files
 - 1.2.2.10.4. Click Next
 - 1.2.2.10.5. Select Settings
 - 1.2.2.10.5.1. Select Filter Mode: “First from start”

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- 1.2.2.10.5.2. Select Filter Character: "Space"
- 1.2.2.10.5.3. Click Okay
- 1.2.2.10.6. Select Page Label
- 1.2.2.10.7. Then click "Generate"
- 1.2.2.10.8. Click "Run" to create hyperlinks
- 1.2.2.10.9. Click Finish and Close
- 1.2.2.10.10. Save Documents
- 1.2.2.11. Reference Drawings – All reference drawings shall be submitted as separate supporting documents per section 1.2.5
- 1.2.3. Format PDF Specification files (if applicable)
- 1.2.4. Specifications shall be combined to a single PDF
 - 1.2.4.1. Flatten Existing Markups
 - 1.2.4.1.1. Go to Document > Flatten
 - 1.2.4.1.1.1. Click Check All
 - 1.2.4.1.1.2. Verify "Allow Markup Recovery Unflatten" is unchecked
 - 1.2.4.1.2. Select Flatten
 - 1.2.4.2. Create bookmarks

The bookmarking procedure specified below is using Bluebeam. Other methods using native software (i.e Microsoft Word) are beyond the scope of this procedure.
 - 1.2.4.3. Bookmarks shall be for the first page of each section and be collapsible by the first page of each section
 - 1.2.4.3.1. Review native file
 - 1.2.4.3.1.1. Click the Audit Bookmarks icon to confirm no broken bookmarks are found
 - 1.2.4.3.1.2. If everything has loaded correctly, continue to step 1.2.4
 - 1.2.4.3.1.3. If anything has loaded incorrectly, delete previous bookmarks and continue to step 1.2.3.4.2
 - 1.2.4.3.2. Zoom into area on the document containing information for page label
 - 1.2.4.3.3. Go to Bookmarks Tab
 - 1.2.4.3.4. Create Bookmarks
 - 1.2.4.3.5. Page Range > Select Current Page
 - 1.2.4.3.6. Page Region > Click Select

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- 1.2.4.3.7. Select region of bookmark on page
Example: 05 12 00 STRUCTURAL STEEL
- 1.2.4.3.8. Click Okay > Bookmark will generate
- 1.2.4.3.9. Review bookmark label generation – spec section and name have been captured properly
- 1.2.4.3.10. If incorrect, double left click and change the title of the bookmark in question
- 1.2.4.3.11. Repeat steps 1.2.3.4.4 through 1.2.3.4.10 for the first page of each spec section
- 1.2.4.3.12. Click the Audit Bookmarks icon to confirm no broken bookmarks are found
- 1.2.4.3.13. If broken bookmarks are found, repeat all steps in Section 1.2.3.4.4
- 1.2.4.3.14. Verify bookmarks match table of contents
 - 1.2.4.3.14.1. If bookmarks are out of order click bookmark in question and drag to new location
- 1.2.5. Format PDF DSA 103 (if applicable)
 - 1.2.5.1. Flatten Existing Markups
 - 1.2.5.1.1. Go to Document > Flatten
 - 1.2.5.1.1.1. Click Check All
 - 1.2.5.1.1.2. Verify “Allow Markup Recovery Unflatten” is unchecked
 - 1.2.5.1.1.3. Select Flatten
- 1.2.6. Format PDF Supporting Documents

NOTE: Supporting documents include the additional documents required per [DSA 3: Project Submittal Checklist](#) (i.e. DSA forms, cut sheets, structural calculations, hydraulic calculations, geotechnical reports, existing drawings etc.)

 - 1.2.6.1. Bookmark the items listed in the table of contents or sheet index

NOTE: For structural calculations provide bookmarks that are broken down into its design elements. (i.e. Foundation Design shall be broken into non-shear wall footing design, sheer wall footing design, column footing design, etc.)
 - 1.2.6.2. Create bookmarks
 - 1.2.6.2.1. Review native file
 - 1.2.6.2.1.1. Click the Audit Bookmarks icon to confirm no broken bookmarks are found

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- 1.2.6.2.1.2. Confirm all sheet numbers and sheet labels are correct
If everything has loaded correctly, continue to Section 1.2.5.3
- 1.2.6.2.1.3. If anything has loaded incorrectly, delete previous bookmarks and continue to step 1.2.5.2.2
- 1.2.6.2.2. Zoom into area on document containing information for bookmark
- 1.2.6.2.3. Go to Bookmarks Tab
- 1.2.6.2.4. Create Bookmarks
- 1.2.6.2.5. Page Range > Select Current Page
- 1.2.6.2.6. Page Region > Click Select
- 1.2.6.2.7. Select region of bookmark on page
 - 1.2.6.2.7.1. Example: FOOTING DESIGN
- 1.2.6.2.8. Click Okay > Bookmarks will generate
- 1.2.6.2.9. Review bookmark label generation – sheet number and sheet name have been captured properly
- 1.2.6.2.10. If incorrect, double left click and change the title of the bookmark in question
- 1.2.6.2.11. Click the Audit Bookmarks icon to confirm no broken bookmarks are found
- 1.2.6.2.12. If broken bookmarks are found, repeat all steps in Section 1.2.5.2.3
- 1.2.6.2.13. For documents that do not have Bluebeam readable font (i.e. scanned documents or handwritten sheet labels)
 - 1.2.6.2.13.1. Go to page requiring bookmark
 - 1.2.6.2.13.2. Click add bookmark, blue ribbon with green plus icon
 - 1.2.6.2.13.3. Enter bookmark name
- 1.2.6.3. Flatten Existing Markups
 - 1.2.6.3.1. Go to Document > Flatten
 - 1.2.6.3.1.1. Click Check All
 - 1.2.6.3.1.2. Verify “Allow Markup Recover Unflatten” is unchecked
 - 1.2.6.3.1.3. Select Flatten
- 1.2.6.4. Non PDF Supporting Documents – Other supporting documents shall be provided (i.e. excel files, engineering

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- software files, etc.)
- 1.2.7. As required per [DSA PL 07-02: Over-the-Counter Review of Projects Using Pre-Check Approved Designs](#) upload submittal documents to DSAbox two business days prior to appointment
- 1.2.8. Refer to Section 1 of this document for instructions on document preparation
- 1.2.9. Name files with V1 Version label per the table below:

	Document Type	Naming Convention (For no increment)	Naming Convention with Increment (Increment 1 example shown)
Initial Plan Review Submittal Docs with Version 1 (_V1) Identifier	Drawings	DWG_V1	INC 01_DWG_V1
	Specifications	SPC_V1	INC 01_SPC_V1
	DSA 103	103_V1	INC 01_103_V1
	Supporting Document Type (examples shown)	Structural Calcs_V1	INC 01_Structural Calcs_V1
		Hydraulic Calcs_V1	INC 01_Hydraulic Calcs_V1
		Geotechnical Report_V1	INC 01_Geotechnical Report_V1
		DSA1_V1	INC 01_DSA1_V1
		DSA1-MR_V1	INC 01_DSA1-MR_V1
	A#_____ Existing Drawings	INC 01_A#_____ Existing Drawings	

- 1.2.10. If the preparation of documents is not sufficient, the DSA EPR Administrator will send an email notification to update the formatting
 - 1.2.10.1. Revised documents will need to be resubmitted to DSAbox prior to appointment

Note: All submittal documents shall be uploaded at the same time

BOX folder: OFFICE-APPNO

AE – AE License #

Submissions to DSAPlan Review phase
 - 1.2.10.2. If documents were not uploaded into DSAbox, DSA will send email notification to the Design Professional of Record and the client with instructions requiring the project to be re-registered and rescheduled for OTC
- 1.2.11. DSA will receive a Box notification that the project Files have been uploaded
- 1.2.12. If documents were not uploaded into DSAbox, DSA will send an “Incomplete Notice” notification with instructions requiring projects to be re-registered
- 1.2.13. If the preparation is sufficient, the DSA EPR Administrator will upload the documents into Bluebeam Studio Project and the Lead Plan Reviewer will upload the documents into the Session. Then an in person OTC will take place.
- 1.2.14. DSA fees are due at the time of the scheduled appointment. The fees shall be physically delivered to DSA in the form of Check or a money order. No electronic transfer, credit card or cash payments are allowed. The DSA Application # shall be included on the check or money order.

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2. OTC DOCUMENT REVIEW

2.1. Phase 1 Review

- 2.1.1. The Design Professional shall go to the DSA Regional Office at scheduled OTC appointment

NOTE: Access to Bluebeam Studio by the Design Professional may be required. Refer to Appendix A for sets on setting up a Bluebeam Studio Account

- 2.1.2. DSA Plan Reviewer will confirm that the submission is complete
 - 2.1.2.1. If the submission is complete, the Plan Reviewer will review the documents to determine whether or not they are OTC qualified
 - 2.1.2.1.1. If the submission is not OTC qualified, a Regular Project Review submission will be required as referenced in PR 18-04
 - 2.1.2.1.2. If the submission is OTC qualified, the DSA Plan Reviewer will proceed to review plan
 - 2.1.2.2. If the Plan Reviewer decides the submission is not complete, the OTC appointment will have to be rescheduled

2.2. Phase 2 Review

- 2.2.1. DSA Plan Reviewer will open prepared documents from the Bluebeam Studio Project and Session
- 2.2.2. DSA Plan Reviewer will make comments in the Bluebeam Plan Review Session

2.3. Incorporate Comments

- 2.3.1. To incorporate DSA comments
 - 2.3.1.1. View comments in Markups located on the bottom of the Bluebeam Studio Session
 - 2.3.1.2. Filter comments based on individual DSA Plan Reviewer (as required)
 - 2.3.1.2.1. Go to Bluebeam Studio tab
 - 2.3.1.2.2. Click Session
 - 2.3.1.2.3. Select session containing documents for review
 - 2.3.1.2.4. Under Attendees right-click on DSA Plan Reviewer name and Select Filter Markups
 - 2.3.1.3. Incorporate comments into documents
 - 2.3.1.3.1. In Bluebeam Studio Session select each comment
 - 2.3.1.3.2. Double left click on status column
 - 2.3.1.3.3. Select INCORPORATE from DSA Back Check Status menu (Incorporating comment turns red mark-up to green) if the comment is

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inadvertently incorporated, the comment can be changed to OPEN until Ready to be change to INCORPORATE

2.3.1.3.4. To provide a response to the DSA Comment, use the green reply arrow on markup list and type a response in the open text box

2.3.1.3.5. Verify all comments have been "Incorporated"

2.3.1.3.5.1. Expand Markup list

2.3.1.3.5.2. Select Color; if red comments occur select comments and Incorporate

2.3.2. While in the Bluebeam Studio Session ensure online connectivity; under the Studio tab confirm that the plug icon is green and connected

2.4. Code Compliancy

2.4.1. DSA Plan Reviewer will confirm if documents are code compliant

2.4.1.1. If the documents are not code compliant, the Design Professional will make necessary fixes using one (or a combination) of the following:

2.4.1.1.1. Make corrections in the Bluebeam Studio Session during back check appointment

2.4.1.1.2. Make corrections outside of the Bluebeam Studio Session during the back check appointment

2.4.1.1.2.1. Prepare drawings per Section 1

2.4.1.1.2.2. Upload the revised documents to the Bluebeam Studio Project Submission folder for back check

2.4.1.1.3. Make corrections after the back check appointment and schedule an In Person Back Check per PR 18-04: Electronic Plan Review for Design Professional, Section 4.3

2.4.1.2. If documents are code compliant, the DSA EPR Administrator will approve and proceed with stamp out process

2.4.1.2.1. Stamped documents will be placed in the Bluebeam Studio Project Approval folder by the DSA EPR Administrator and uploaded to DSAbbox

3. POST APPROVAL DOCUMENTS

3.1. Refer to Sections 5-8 of PR 18-04

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APPENDIX A

NOMENCLATURE

Bluebeam Studio Project	Digital space to manage project files and project review sessions.
Bluebeam Studio Session	Collaborative digital space for reviewing, commenting of documents and the closeout of comments.
Consultant Plan Reviewer	A plan reviewer hired and trained by DSA to perform document review and the back check with the design professional.
Design Professional	The design professional in responsible charge of the project, or his or her authorized representative.
DSABox	A cloud-based storage site where DSA project files are located.
DSA Point of Contact	DSA employee assigned to a consultant reviewer to complete internal DSA tasks, uploading resubmittal documents, updating eTracker completion percentages, etc.
Electronic Back Check	A paperless DSA back check performed using a computer and monitors.
EPR Administrator	A DSA EPR Administrator will set-up Bluebeam Studio Projects and Session, and will assign collaborators in DSABox, Bluebeam Studio Projects and Sessions.
Lead Plan Reviewer	The DSA plan reviewer (usually the structural reviewer) who arranges the back check with the design professional and the other plan reviewers, and notifies DSA EPR Administrator when the plan review documents are approvable.
OTC Review	DSA offers OTC project review for eligible projects to expedite the review and approval process. DSA’s OTC process is primarily intended for single-story relocatable buildings, and other simple projects, utilizing designs that have been pre-approved in accordance with DSA procedure PR 07-01: Pre-Check Approval .
Plan Review Tracking Table	A document (_PR Tracking Table.pdf) that is placed in the Plan Review Session and is used to keep track of the plan review status of each document. This document is for DSA use only.
Record Set	The documents that get approved, stamped, and uploaded to the DSABox and Bluebeam Studio Project approved folder.
Registration Administrator	The DSA Registration Administrator will monitor the initial submittals to DSABox and update eTracker after fees and submittal documents have been received by DSA.

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SETUP OF BLUEBEAM STUDIO ACCOUNT

1. INSTALLING BLUEBEAM

- 1.1. If you cannot procure Bluebeam Revu or eXtreme, then download the free Bluebeam software from the following link: <https://www.bluebeam.com/solutions/vu> and use the View Mode in Revu 2018

Note: Bluebeam eXtreme is necessary to prepare the PDF documents, see section 1.2 for additional information

2. SETUP BLUEBEAM STUDIO ACCOUNT

- 2.1.1. First Time User – Section 2.2 – Setup with New Account
2.1.2. Previous Bluebeam User – Section 2.3 – Setup/Verify Existing Account

2.2 Setup with New Account

- 2.2.1. Open Bluebeam Studio software
2.2.2. Window will appear (If it does not, go to Appendix B)
 2.2.2.1. Click Create New
 2.2.2.2. Click Agree
2.2.3. Change user name to (First Last, Company)
2.2.4. Add your email
 2.2.4.1. Example: John Doe, ABC Company
2.2.5. Create a password (must include: upper case, lower case, # and special character)
2.2.6. Check Remember Password
2.2.7. Click Okay
2.2.8. You have now created your Bluebeam Studio account
 2.2.8.1. If you receive an error message please see Appendix B
2.2.9. Open Welcome email from Bluebeam Studio
 2.2.9.1. Click Validate Email
 2.2.9.2. Return to Bluebeam
2.2.10. Go to Settings (upper right) > Click Preferences
2.2.11. Go to General
 2.2.11.1. Confirm name in user box (First Last, Company)
 2.2.11.2. Click Okay
2.2.12. Proceed to Section 3.

2.3. Setup/Verify Existing Account

- 2.3.1. Open Bluebeam Studio software
2.3.2. Go to Setting (upper right) > Click Preferences
2.3.3. Go to Studio

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- 2.3.3.1. Click Login
- 2.3.4. Enter Email and Password
 - 2.3.4.1. Check Remember Password
 - 2.3.4.2. Click Okay
- 2.3.5. Click Manage Servers
- 2.3.6. Double left click email address
- 2.3.7. Check name for proper naming convention
 - 2.3.7.1. First Last, Company
Example: Jaclyn Duran, AECOM
 - 2.3.7.2. Click Okay
 - 2.3.7.3. Click Close
- 2.3.8. If Incorrect go to Appendix B Section 1.3
- 2.3.9. Click on Markup > Check Autosize Text Box and Callout Markups
- 2.3.10. Go to General
 - 2.3.10.1. Confirm Name in user box (First Last, Company)
 - 2.3.10.2. Click Okay
- 2.3.11. Proceed to Section 3

3. DEMO BLUEBEAM STUDIO PROJECT/SESSION

(NOTE: The following procedure is a one-time process)

- 3.1.1. Join Bluebeam Studio Project
 - 3.1.1.1. Click Join
 - 3.1.1.2. Enter Bluebeam Studio Project ID Number: **543-932-143**
 - 3.1.1.3. Bluebeam Studio Project Folder structure contains the following; to expand collapsed folders double left click on parent folder

Bluebeam Project Folders	Description
Project Root – OFFICE_APPNO INC# PROJECT NAME	
Increment Number	
A. Submission	This is the Bluebeam Studio Project folder where the Design Professional submits Version 2 (_V2) and greater documents
1. Plan Review Documents	
2. Post Approval Documents	
A. Deferred Submittals	
B. Revisions	
C. Addenda	
D. Construction Change Documents	

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B. DSA Review	This Bluebeam Studio Project folder is for DSA USE ONLY. The Design Professional and Consultant Reviewer (if applicable) will not see it listed in the Bluebeam Studio Project
1. Plan Review Documents	
2. Post Approval Documents	
A. Deferred Submittals	
B. Revisions	
C. Addenda	
D. Construction Change Documents	This is the Bluebeam Studio Project folder where DSA places the approved documents
C. Approval	
1. Plan Review Documents	
2. Post Approval Documents	
A. Deferred Submittals	
B. Revisions	
C. Addenda	
D. Construction Change Documents	

- 3.1.1.4. Documents will be submitted to the submission folders by the Design Professional
- 3.1.1.5. DSA Plan Reviewers will copy documents from the submission folders to the DSA Review folders.
- 3.1.1.6. Five DSA review Sessions will be set-up as needed to review submittals including the following:
 - 3.1.1.6.1. Plan Review
 - 3.1.1.6.2. Deferred Submittals
 - 3.1.1.6.3. Revisions
 - 3.1.1.6.4. Addenda
 - 3.1.1.6.5. Construction Change Documents
- 3.1.1.7. After joining the Bluebeam Studio Project there are several ways to join the Bluebeam Studio Sessions within each project
- 3.1.1.8. Open Bluebeam software
- 3.1.1.9. Connect to Bluebeam Studio
- 3.1.1.10. Under Studio tab select Join
- 3.1.1.11. Enter Bluebeam Studio Session ID Number: **545-676-364**
- 3.1.1.12. Click Okay
- 3.1.2. Additional methods to join Bluebeam Studio Sessions
 - 3.1.2.1. Via Bluebeam Studio Project
 - 3.1.2.1.1. Right click Project Name
 - 3.1.2.1.2. Select Show Sessions
 - 3.1.2.1.3. Select Plan Review Session to join
 - 3.1.2.2. Via Bluebeam Studio Session List

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- 3.1.2.2.1. Select session containing document for review
- 3.1.2.3. While in the Bluebeam Studio Session ensure online connectivity; under the Studio tab confirm that the plug icon is green and connected
- 3.1.3. Check that naming convention is correct under "Attendees"
 - 3.1.3.1. First Last, Company
- 3.1.4. Open test document listed under "Documents"
 - 3.1.4.1. DWG_V1
- 3.1.5. View Bookmarks
 - 3.1.5.1. Located under blue ribbon tab
 - 3.1.5.2. Select a Page

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APPENDIX B

1. TROUBLESHOOTING IN BLUEBEAM

1.1. Creating an Account – Window with option to create account does not appear

- 1.1.1. Go to Settings > Preferences
- 1.1.2. Go to Studio > Login
- 1.1.3. Click: Create Account
- 1.1.4. Return to Appendix A Section 2.2.1

1.2. Login Errors

- 1.2.1. IF - You created new account, but email is already in use
 - 1.2.1.1. Click: Okay > Cancel
 - 1.2.1.2. Login using Company email
- 1.2.2. IF - Forgot Password, but email or password provided is incorrect
 - 1.2.2.1. Enter email in login window then click: Lost Password
 - 1.2.2.2. Follow emailed instructions (Email is from Bluebeam; if it does not appear in inbox, check spam or other folders)
 - 1.2.2.3. Return to Appendix A Section 2.2.4
- 1.2.3. IF - Other Errors, but the email or password provided is incorrect
 - 1.2.3.1. Confirm email and password were entered properly
 - 1.2.3.2. Clicked forgot password – no email received
 - 1.2.3.3. Confirm email was entered properly
 - 1.2.3.4. Check spam folder in email
 - 1.2.3.5. Account may not exist – Go to Appendix B Section 1.1 to create account

1.3. Incorrect Naming Convention

- 1.3.1. Your name in the edit server window is incorrect
 - 1.3.1.1. If it is selectable and you can edit it, do so at this time
 - 1.3.1.1.1. First Last, Company
 - 1.3.1.1.2. Return to Section
 - 1.3.1.2. If it is grayed out and cannot be selected, go to studio.bluebeam.com
 - 1.3.1.3. Login using @company.com email and Bluebeam password
 - 1.3.1.4. Go to My Profile
 - 1.3.1.4.1. Update Default Name
 - 1.3.1.4.2. First Last, Company
 - 1.3.1.4.3. Click Update Profile

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1.3.1.5. Return to Bluebeam software

1.3.1.5.1. Log out

1.4. Change Bluebeam Default Save Location to Bluebeam Projects

1.4.1. Go to the setting icon in the upper right hand corner of the Bluebeam Screen

1.4.2. Go to Preferences at the bottom of the drop down menu

1.4.3. In the preferences window on the left hand side bar, scroll to Studio

1.4.4. Select Studio

1.4.5. Uncheck the box "Toolbar Integration Only"

1.4.6. Click Okay

1.5. Send Bluebeam Studio Support Ticket

1.5.1. Across the top of the Bluebeam Window go to Help

1.5.2. Click Contact (Life Preserver Ring Icon)

1.5.3. Select Technical Support

1.5.4. Attach Log Files window will appear

1.5.4.1. Click Yes to send all information to Bluebeam Studio

1.5.5. Email will open in local email application

1.5.6. Include a brief description of the issue and send

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APPENDIX C

DOCUMENT NAMING TABLE

	Document Type	Naming Convention	Naming Convention with Increment (Increment 1 example shown)
Initial Plan Review Submittal Docs with Version 1 (_V1) Identifier	Drawings	DWG_V1	INC 01_DWG_V1
	Specifications	SPC_V1	INC 01_SPC_V1
	DSA 103	103_V1	INC 01_103_V1
	Supporting Document Type (examples shown)	Structural Calcs_V1	INC 01_Structural Calcs_V1
		Hydraulic Calcs_V1	INC 01_Hydraulic Calcs_V1
		Geotechnical Report_V1	INC 01_Geotechnical Report_V1
		DSA1_V1	INC 01_DSA1_V1
		DSA1-MR_V1	INC 01_DSA1-MR_V1
	A#_____ Existing Drawings	INC 01_A#_____ Existing Drawings	
Additional blank pages as required by DSA	DSA Additional Comments	INC 01_DSA Additional Comments	

	Document Type	Naming Convention	Naming Convention with Increment (Increment 1 example shown)
Resubmitted Plan Review Docs with Version 2* (_V2*) Identifier	Drawings	DWG_V2	INC 01_DWG_V2
	Specifications	SPC_V2	INC 01_SPC_V2
	DSA 103	103_V2	INC 01_103_V2
	Supporting Document Type (examples shown)	Structural Calcs_V2	INC 01_Structural Calcs_V2
		Hydraulic Calcs_V2	INC 01_Hydraulic Calcs_V2
		Geotechnical Report_V2	INC 01_Geotechnical Report_V2
		DSA1_V2	INC 01_DSA1_V2
		DSA1-MR_V2	INC 01_DSA1-MR_V2
	A#_____ Existing Drawings	INC 01_A#_____ Existing Drawings	
Additional blank pages as required by DSA	DSA Additional Comments	INC 01_DSA Additional Comments	

*All documents submitted after the initial submittal must have sequential version numbers

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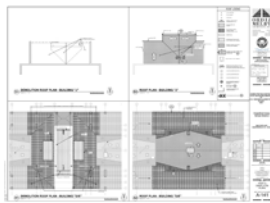
APPENDIX D

NOTE: These guidelines are provided to help develop consistent formatting across all disciplines. Design Professionals who submit electronic documents to DSA shall follow the guidelines below for the construction of PDF documents.

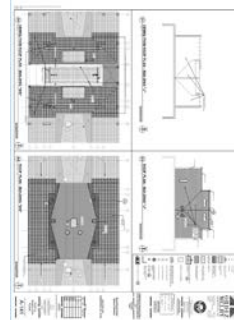
1. PDF CREATION GUIDELINES

1.1. Formatting

- 1.1.1. Alignment: plan drawings created in CAD program must line up when overlaid electronically.
- 1.1.2. Consistent plot location in paper space
- 1.1.3. Consistent gridline visibility across disciplines
- 1.1.4. Naming convention of structures should be consistent across disciplines.
- 1.1.5. Sheet size and orientation of sheets should be consistent

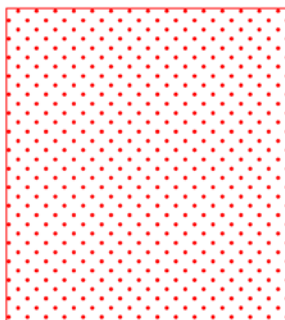


CORRECT

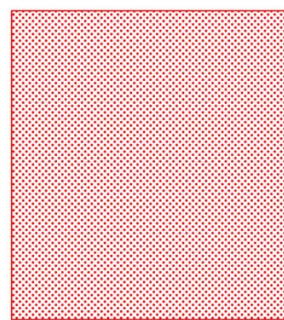


INCORRECT

- 1.1.6. All submittals should be black and white. The use of colors on PDFs should be kept to a minimum as not to impact file size and rendering speed
 - 1.1.6.1. If colors are used they should not be used in a way that will impact the content of the document if printed in black and white
- 1.1.7. Minimize the use of hatch fills. If hatch fills are used then provide efficient fills (see below) to prevent slowdown rendering speed and to reduce



CORRECT



INCORRECT

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1.1.8. Use true type font to allow search ability within the PDF document

1.2. PDF Creation

1.2.1. PDF's should be created directly from authoring application

1.2.2. Use Vector based lines. No Raster and no scanned documents except when documents are not available in their native format such as PC drawings and old referenced drawings, etc. Scanned documents shall be legible and free from streaks and shall be prepared as specified per Section 1.2.1

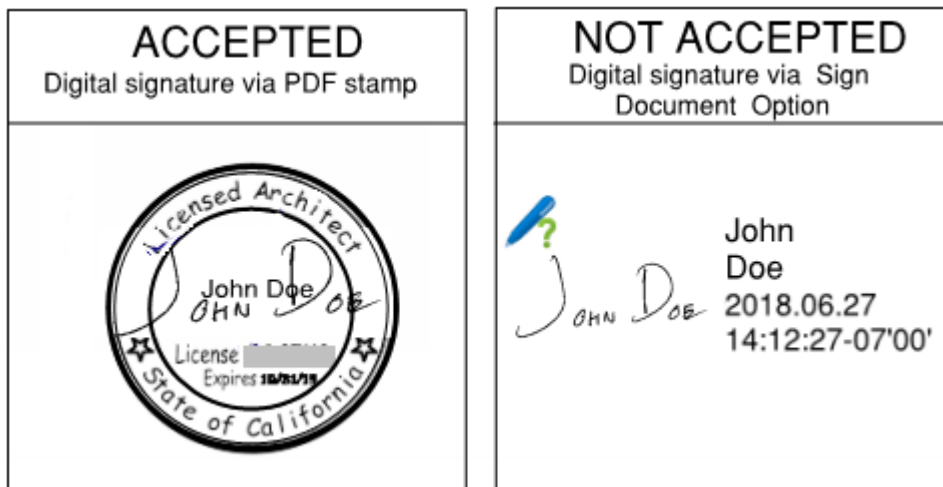
1.2.3. Remove all unnecessary viewports.

1.2.4. Remove all Meta Data

1.2.5. Maintain output scale when printing to PDF. Use Print to Scale, do not Print to Fit Page.

1.2.6. Do not submit password protected documents or 'Restricted' documents.

1.2.7. Do not use digital signatures via Sign Document option. See images below for clarification of what is ACCEPTED and what is NOT ACCEPTED.



A Division of the State Architect (DSA) Procedure documents are a process or series of steps that DSA staff and/or external stakeholders must complete in order to fulfill one or more administrative requirements of DSA's plan and construction review programs.