



Customizations, Workflows & Best Practices: Streamlining Large-Agency Design Reviews & Permit Agency Reviews

Troy Barbu



Agenda

- 01 Introduction
- 02 Best Practices and Workflows: Implementation
 - Workflow Setup
- 03 Starting Points for Bluebeam Customizations for Reviews
 - Status Options
- 04 Large-Agency & Permitting Agency “Pain-Points”
 - Completion of Review Options
 - Comment Exporting “Hacks”
- 05 Top 10 Things you are doing WRONG in Bluebeam!

Troy Barbu

Digital Solutions and Workflows



Current Role at AECOM - PPM West Digital Technical Lead

- Architecture Background
- Specialty: Project Lifecycle Digital Strategies: from Procurement through Design & Construction to Closeout & Facilities' Operations.
- Recognized as one of the top Bluebeam Implementation experts in the U.S.
- More than nine years of Bluebeam Implementations with AECOM
- Multiple CMAA Award Winner and Multiple Historic Preservation Award Winner

“My overall goal is CLARITY. When I have moved a client's understanding of technology from complex to intuitive - only then have I ‘done my job’.”

12+ Years

Owner-Focused Digital Transformation / Implementations

9+ Years

Bluebeam SME

20+ Years

BIM Solutions & Management

20+ Years

Developing & Managing Teams

Troy Barbu

Digital Solutions and Workflows



AECOM's Global Subject Matter Expert (SME) for Bluebeam
(AECOM has approximately 51,000 employees worldwide)

12+ Years

Owner-Focused Digital
Transformation / Implementations

9+ Years

Bluebeam SME

20+ Years

BIM Solutions & Management

20+ Years

Developing & Managing Teams

Leading Digital Culture Change across the U.S.



CA Division of the State Architect

\$6B/year, 2017-2018



Los Angeles Unified School District

\$7B bond 2017-2018



Los Angeles Community College District

\$6B bond 2017



Department of General Services

2018



Los Angeles World Airports

2022-2023



San Bernardino Community College District

\$500K, 2018



University of California San Diego

2021



City and County of San Francisco (DBI, Planning, Ports, etc.)

90,000 permits, 2021 - 2025



San Francisco Public Works

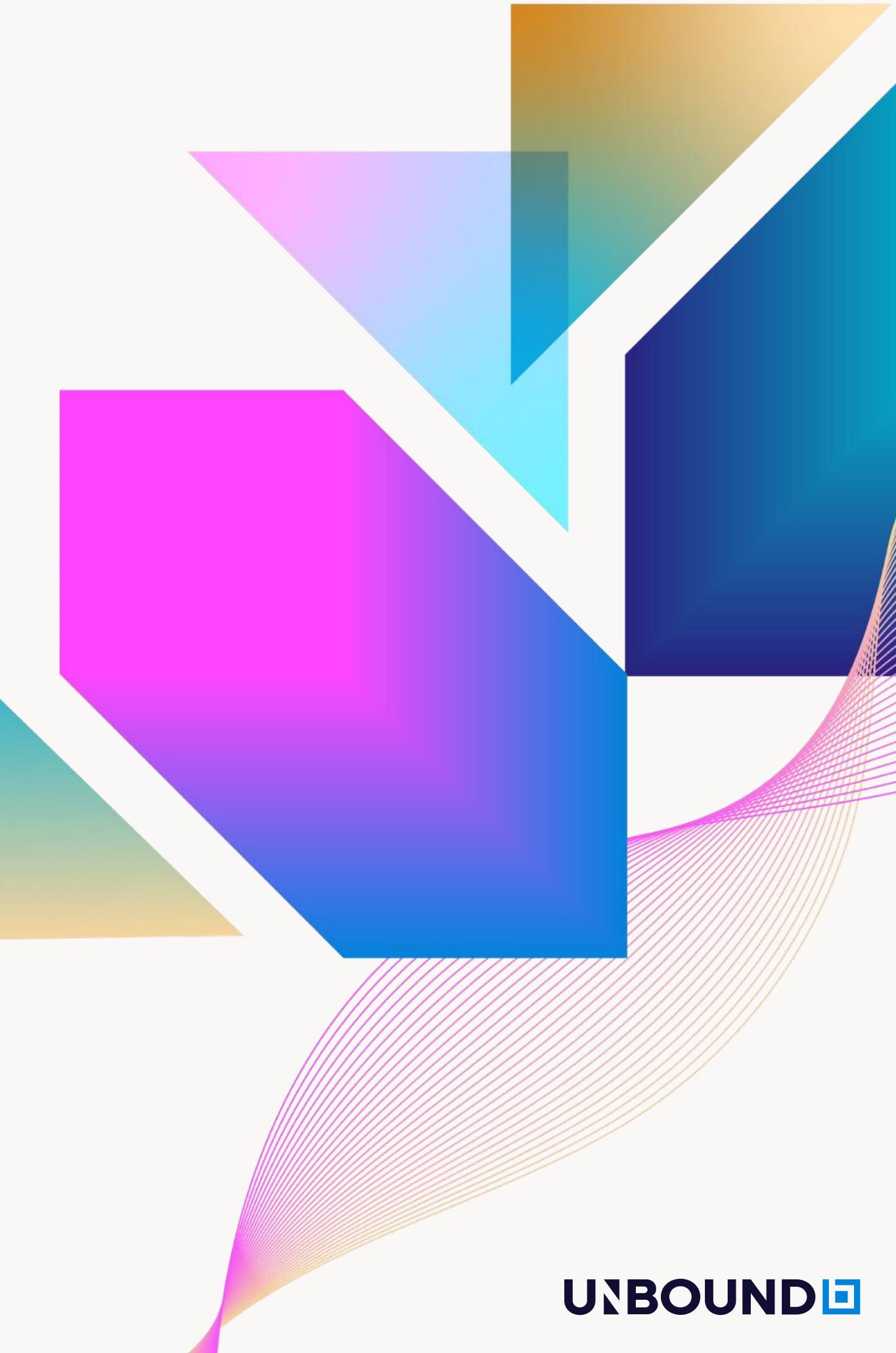
2025



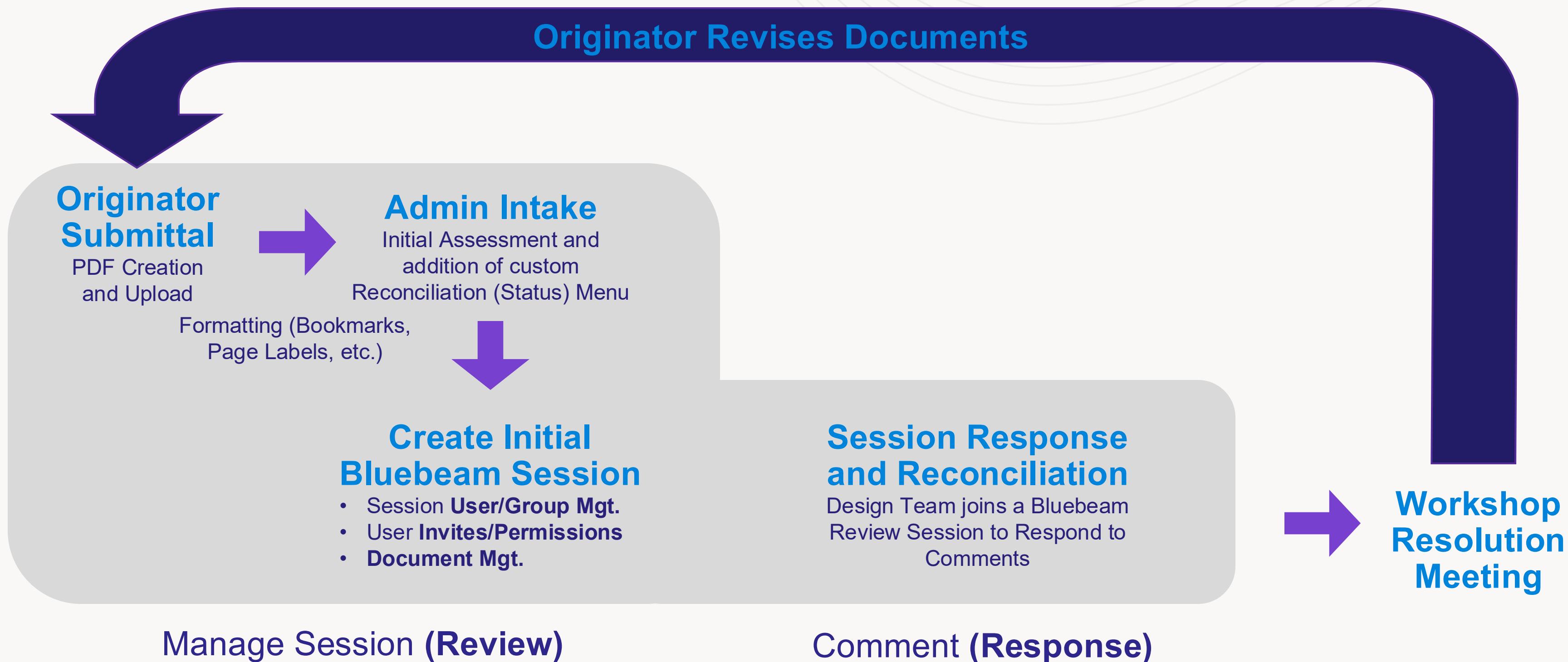
US Department of State

2022

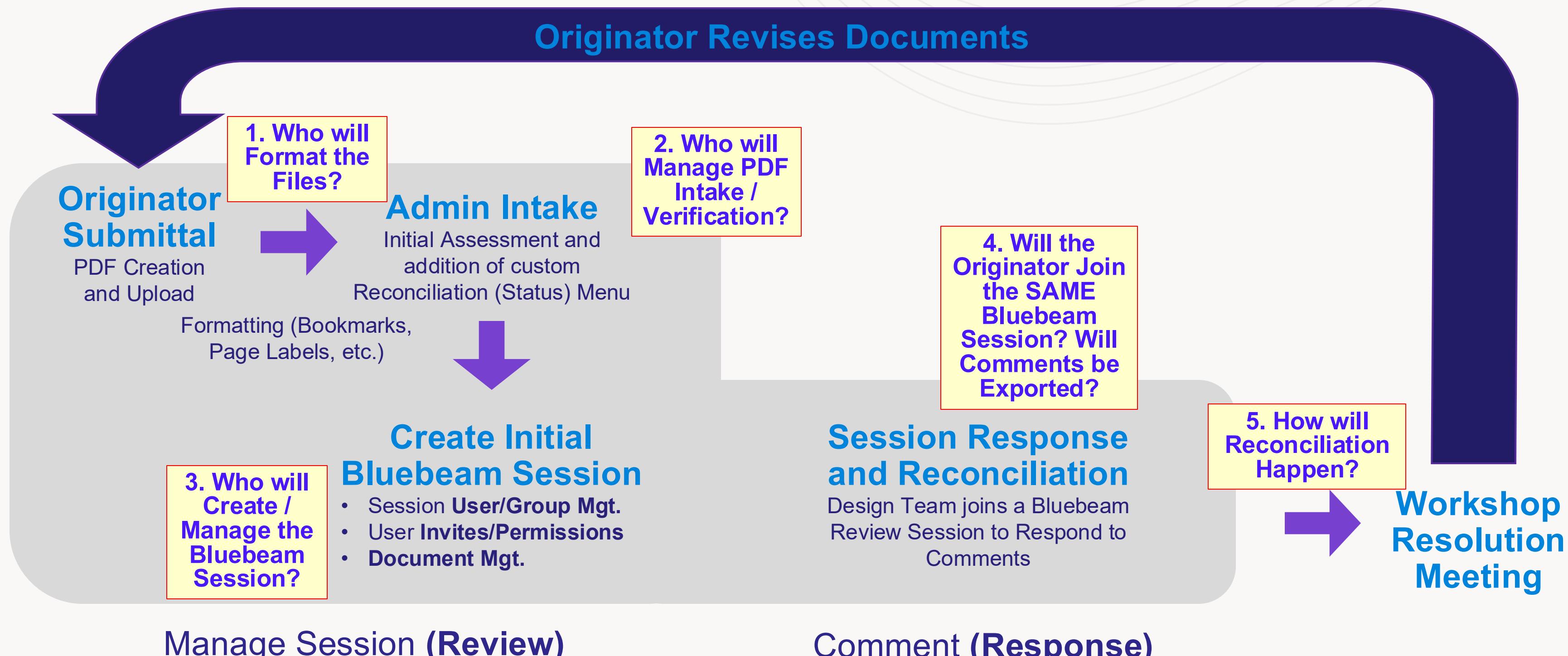
Best Practices and Workflows: Implementation



Bluebeam Review Workflow: Studio Session Setup



Bluebeam Review Workflow: Studio Session Setup



Bluebeam Implementation



Bluebeam Implementation



Exhibit A2 – Workflow for Design Build (DB)

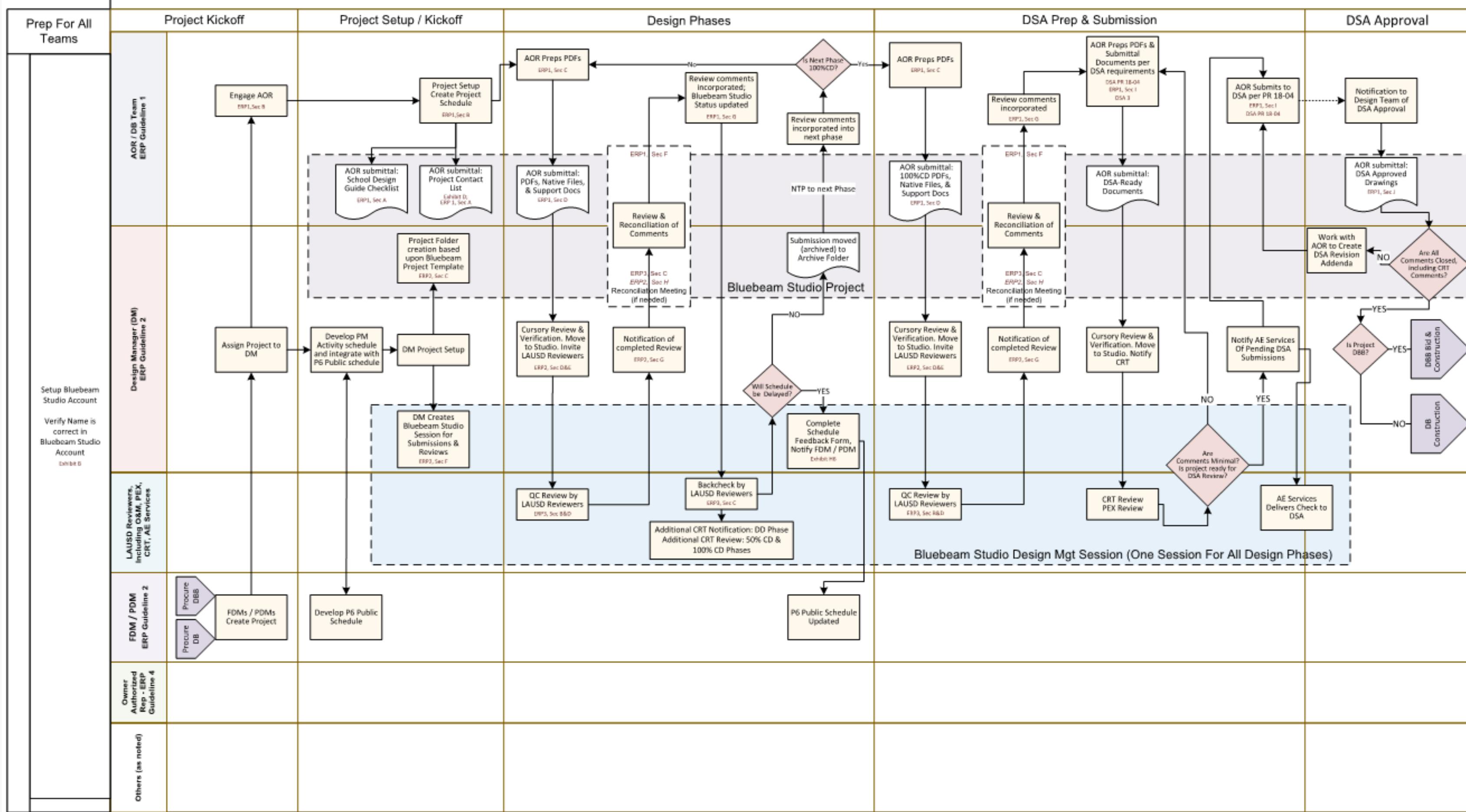
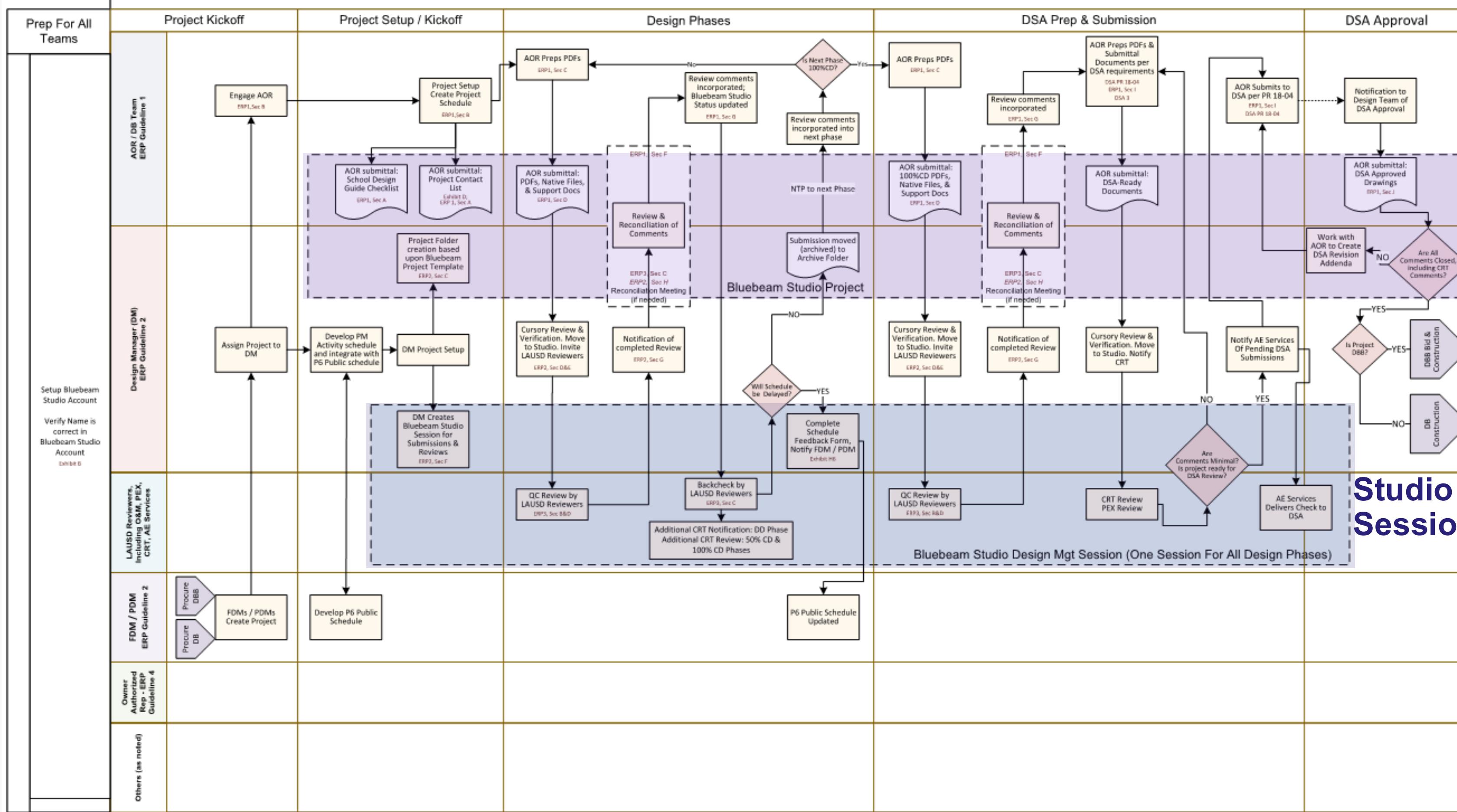
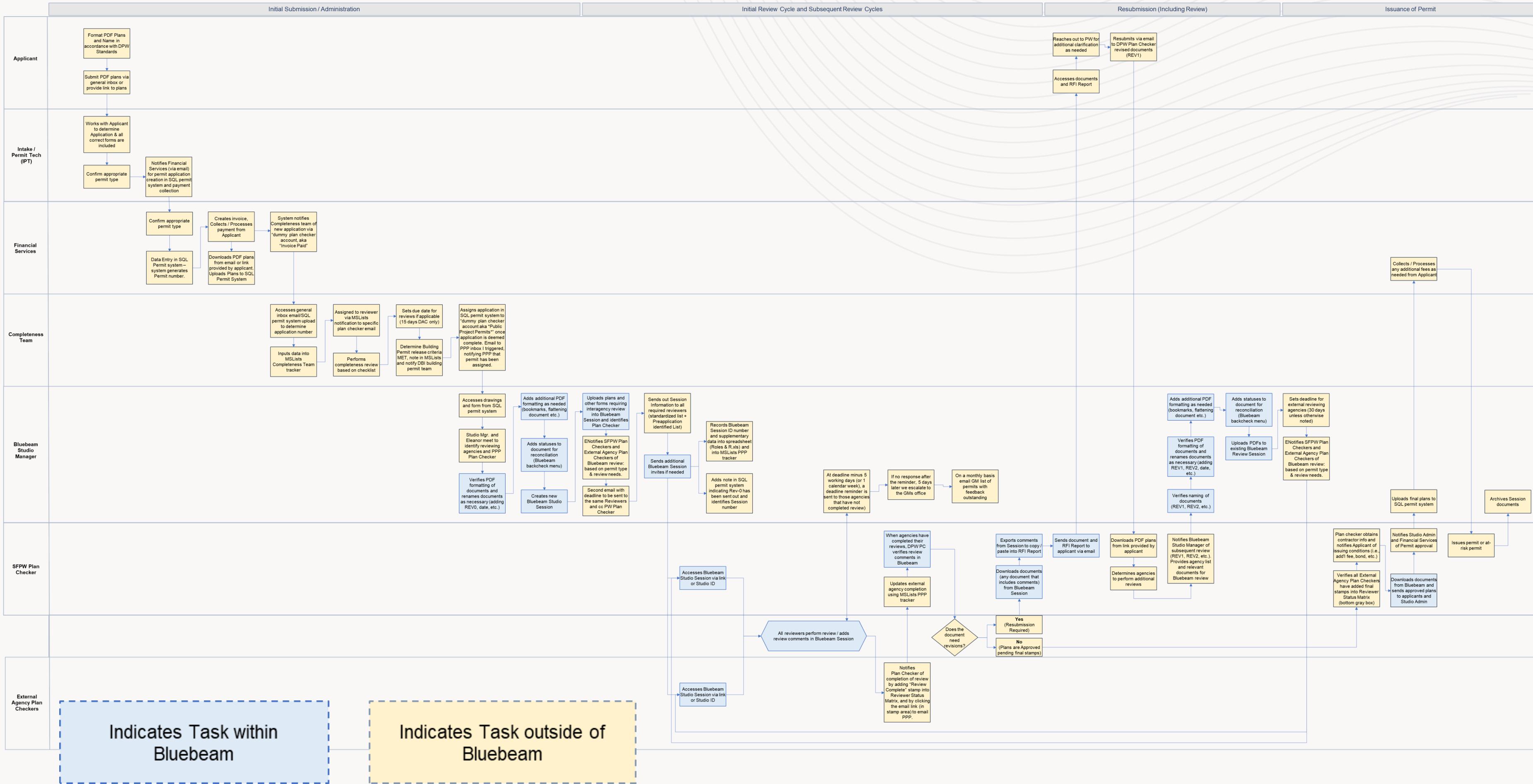


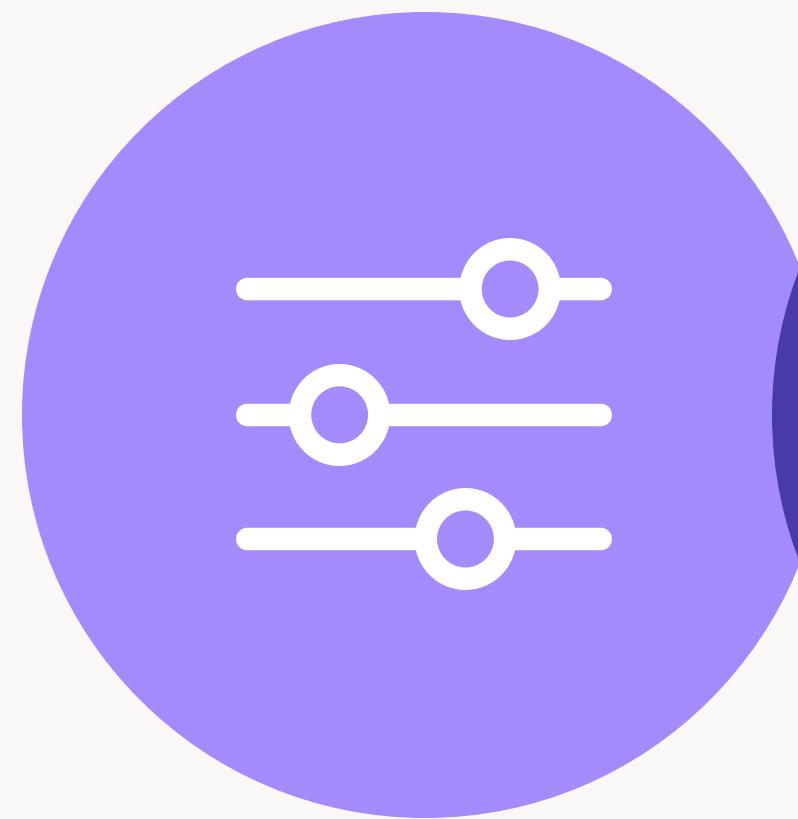
Exhibit A2 – Workflow for Design Build (DB)



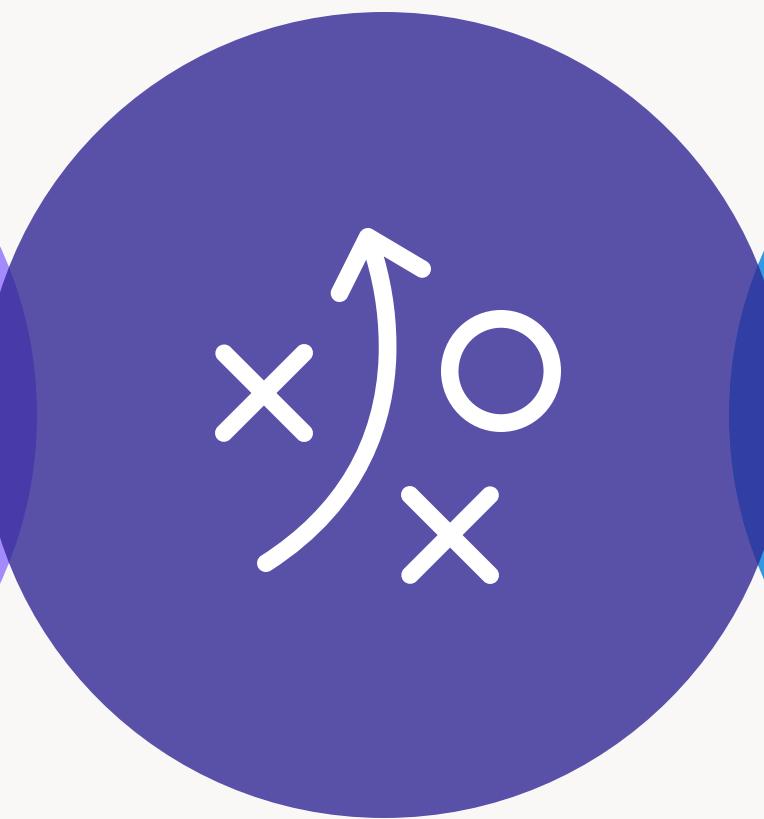
Bluebeam Studio Workflow – SF Public Works



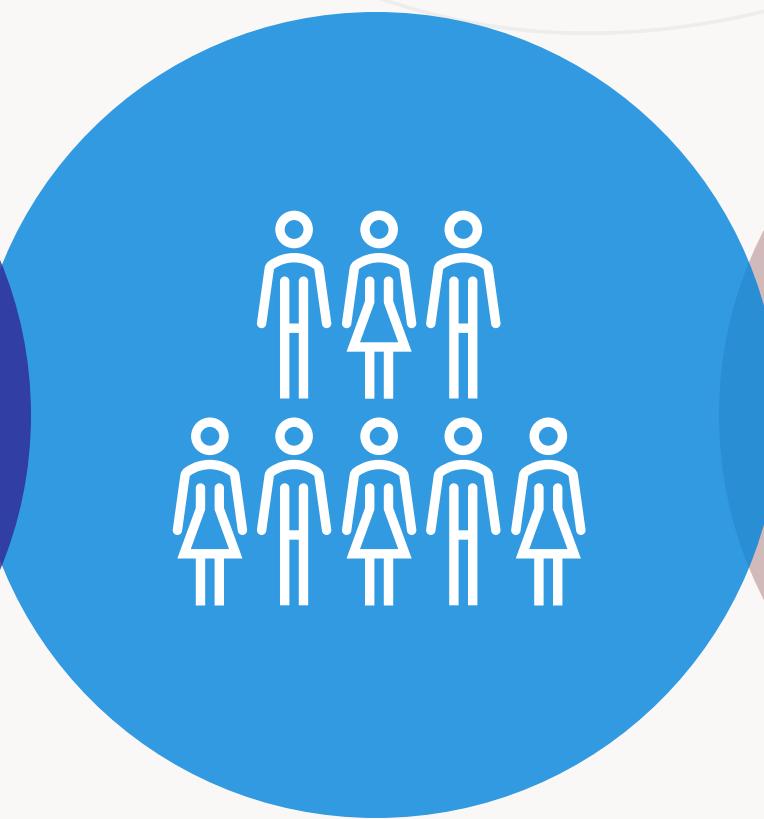
Why Workflow?



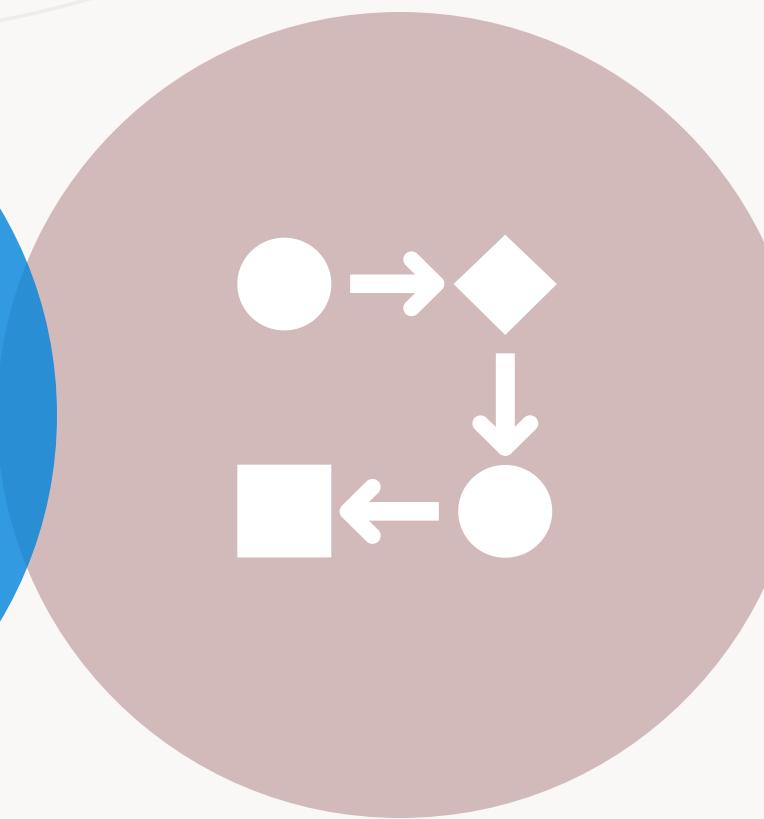
Workflow includes **all elements of the process** (such as portals, administration functions, ball in court, approval, etc.)



All groups defined as swim lanes on the left-hand side



Workflows are important for team members to **understand how they fit in**



Determine **software alignment** with the Roles / Responsibilities for each Team Member

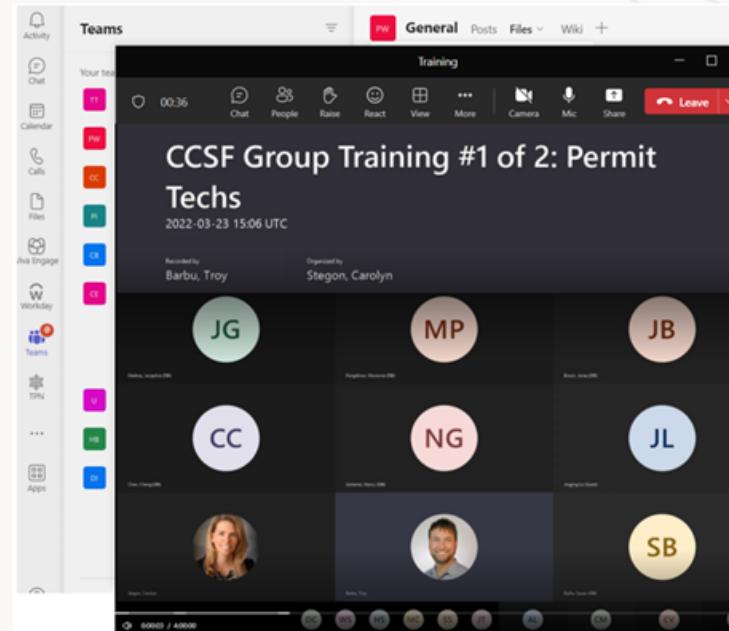
Training & Procedures

Training and Procedures are Built from the Workflow (Role-Based)

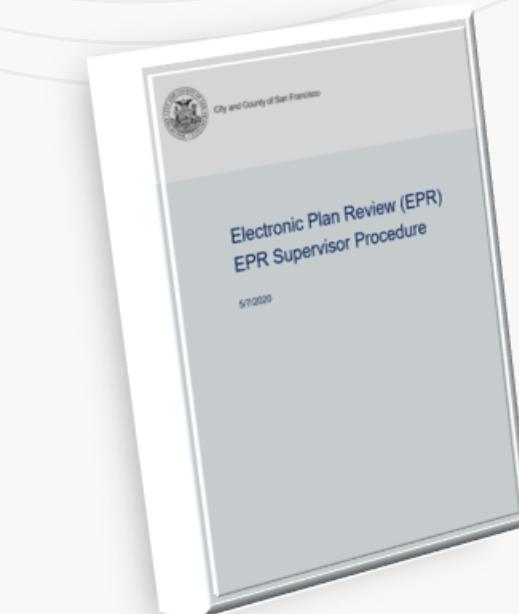
The Best Training is...

- **Cost effective**
- **Easy to follow**
- **High attendance/attention**
- **Instant feedback** from trainer(s)
(training is active vs. passive)
- Can be viewed **anytime** (pulled)
- Can be viewed **anywhere**
- Can be watched over and over
(go at your own pace)
- **Practical application** of lesson
- **Time to practice** (with reviews/reinforcement)
- **Can be used as reference**
- **Track progress** of students

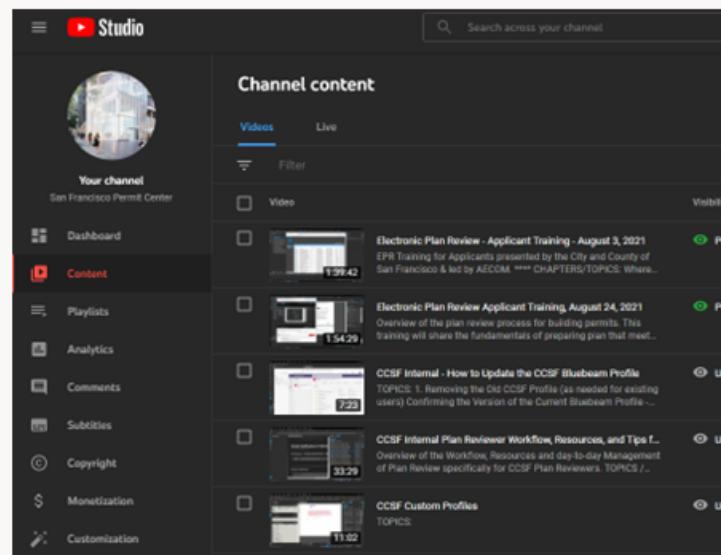
Synchronous



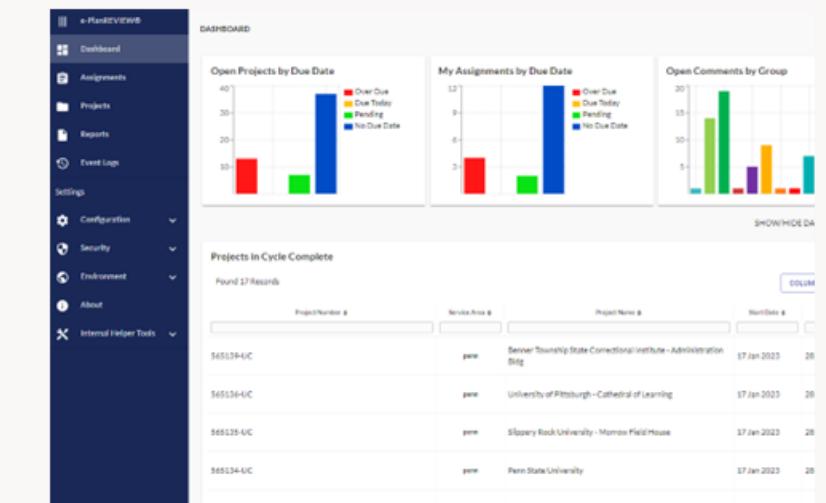
Manuals / SOPs



Asynchronous



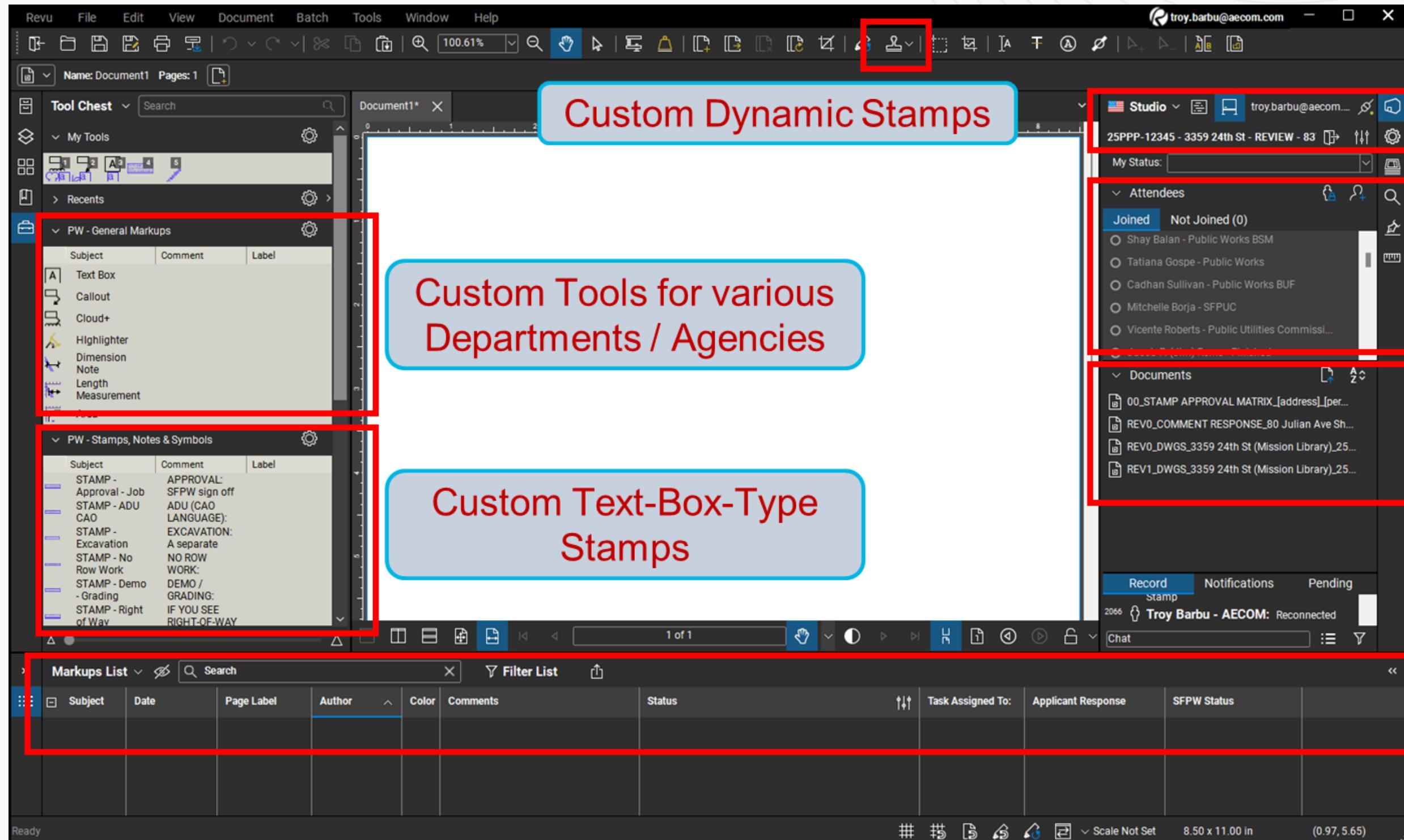
Pilot Projects / Sandboxes



Starting Points for Bluebeam Customizations for Reviews



Goal: Create a Consistent Digital Platform



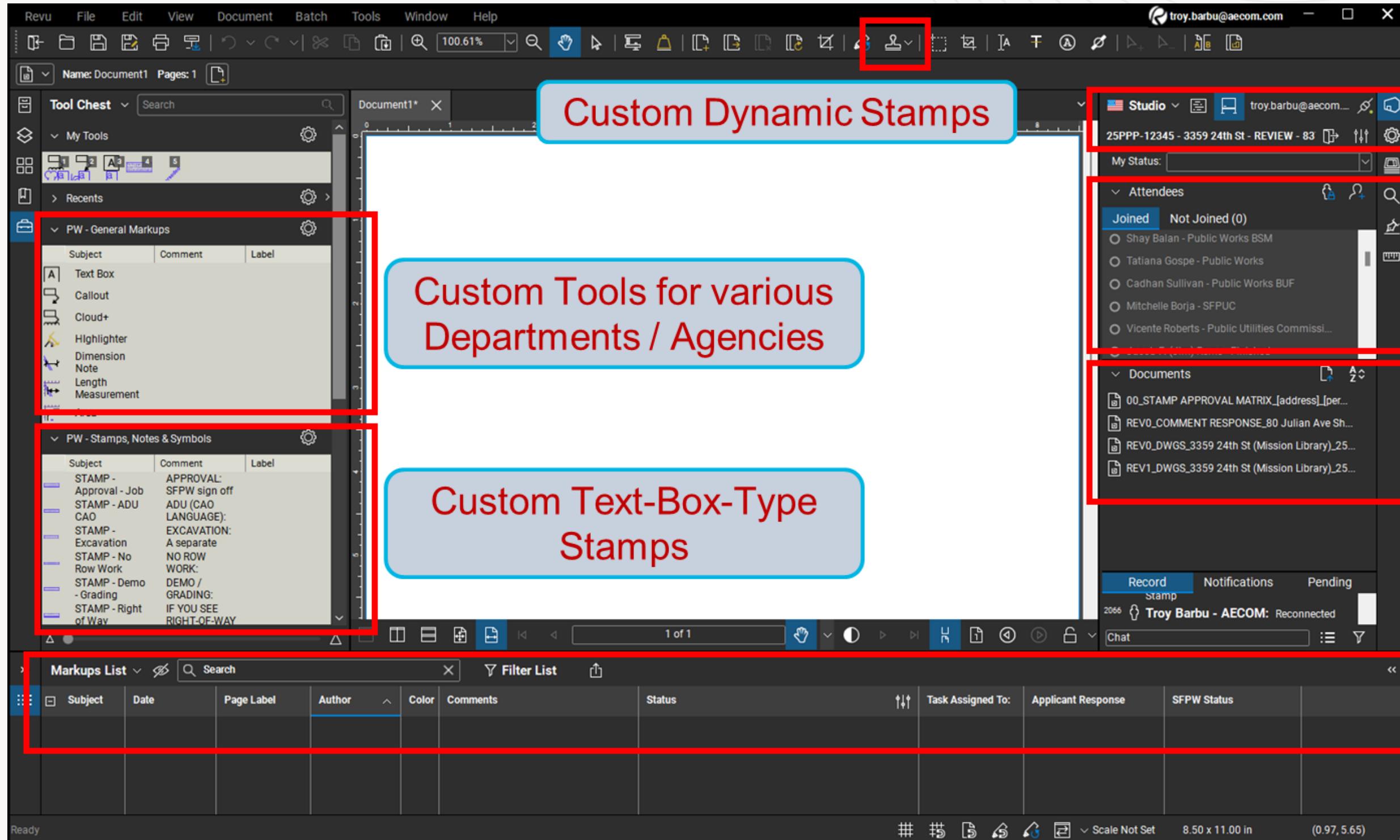
Custom Setup of
Bluebeam Projects and
Sessions

Custom (Display) Naming
of Reviewers

Custom Naming &
Prefixes of Documents

Custom Markup Columns
& Statuses

Goal: Create a Consistent Digital Platform



Bluebeam Review / Reconciliation Process (Statuses)

Metro Reviewer		⚙️
	Subject	Comment
 A	Metro Reviewer	Text Box
 ↗	Metro Reviewer	Callout
 ↗	Metro Reviewer	Cloud w Callout
 ✓	Metro Reviewer	Verified

Comment	Comment Color (Original)
Original Comment Added by Reviewer	Blue Comment
Status Selection by Design / Builder Team	Comment Color (Change)
** RESPONSE to Reviewer Comment	
1 - Agree: Incorporation Planned Next Submittal -	Green Comment
2 - Discussion / Clarification Required (see Reply) -	Orange Comment
3 - Not Applicable / No Action Required (see Reply) -	Red Comment
** BACKCHECK Final Disposition (Completed by Reviewer)	
RESOLVED - Review Comment Addressed / Complete -	Green Comment
UNRESOLVED - Review Comment NOT Addressed -	Red Comment
PENDING - Resolved Pending Confirmation (in next submittal) -	Orange Comment

Bluebeam Review / Reconciliation Process (Statuses)

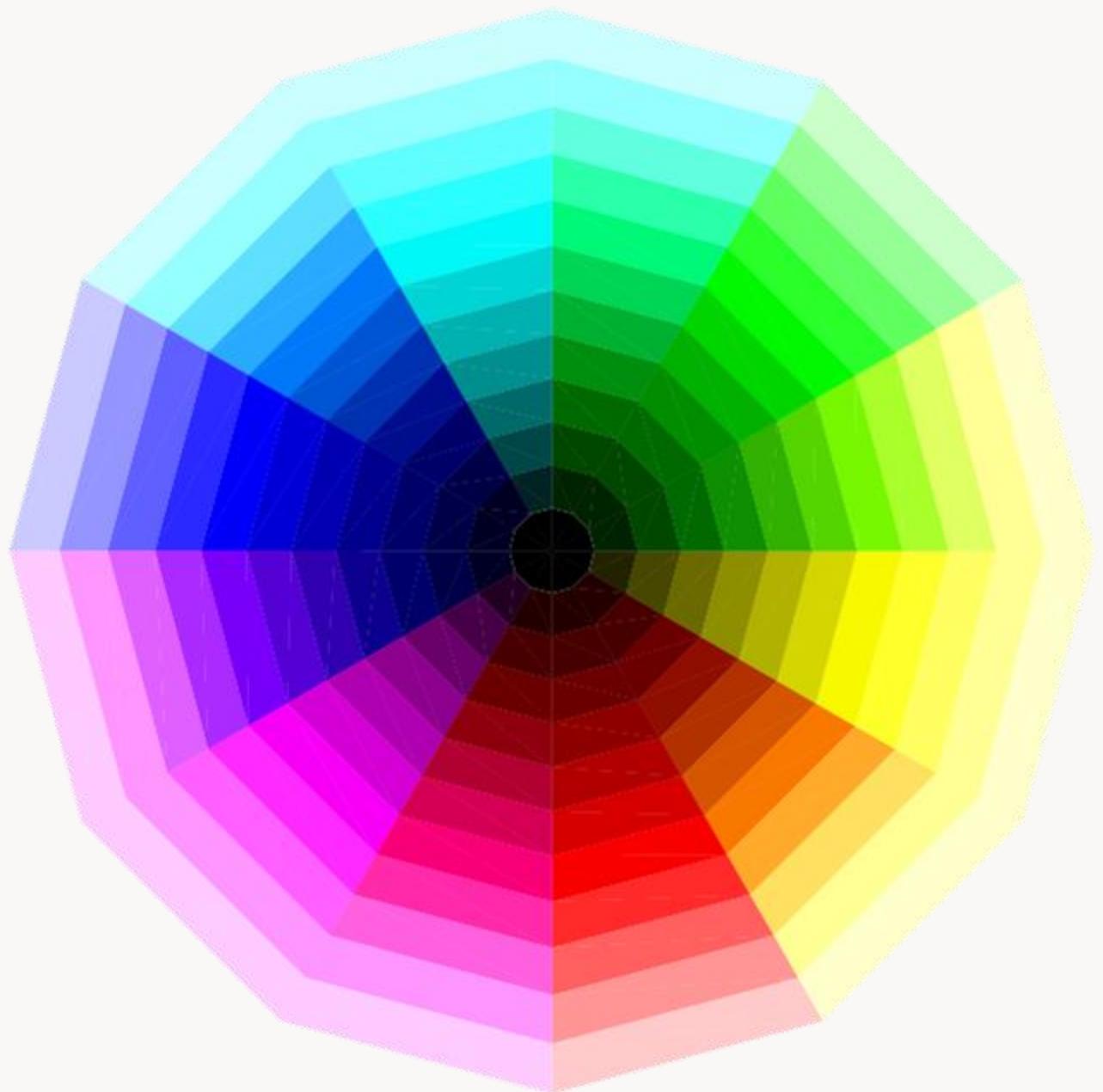
Step 1 - Digital Review Bluebeam Session: Reviewers Add Comments

The screenshot shows a Bluebeam Review session for a document titled "LA Metro 30pct Submission Example". The interface includes a "Tool Chest" on the left with various review tools, a "Markups List" at the bottom left, and a status table on the right. The document page displays several "Original Reviewer Comments" with blue callouts and a blue cloud icon labeled "5200". A purple arrow points from the status table to the "Original Comment Added by Reviewer" row.

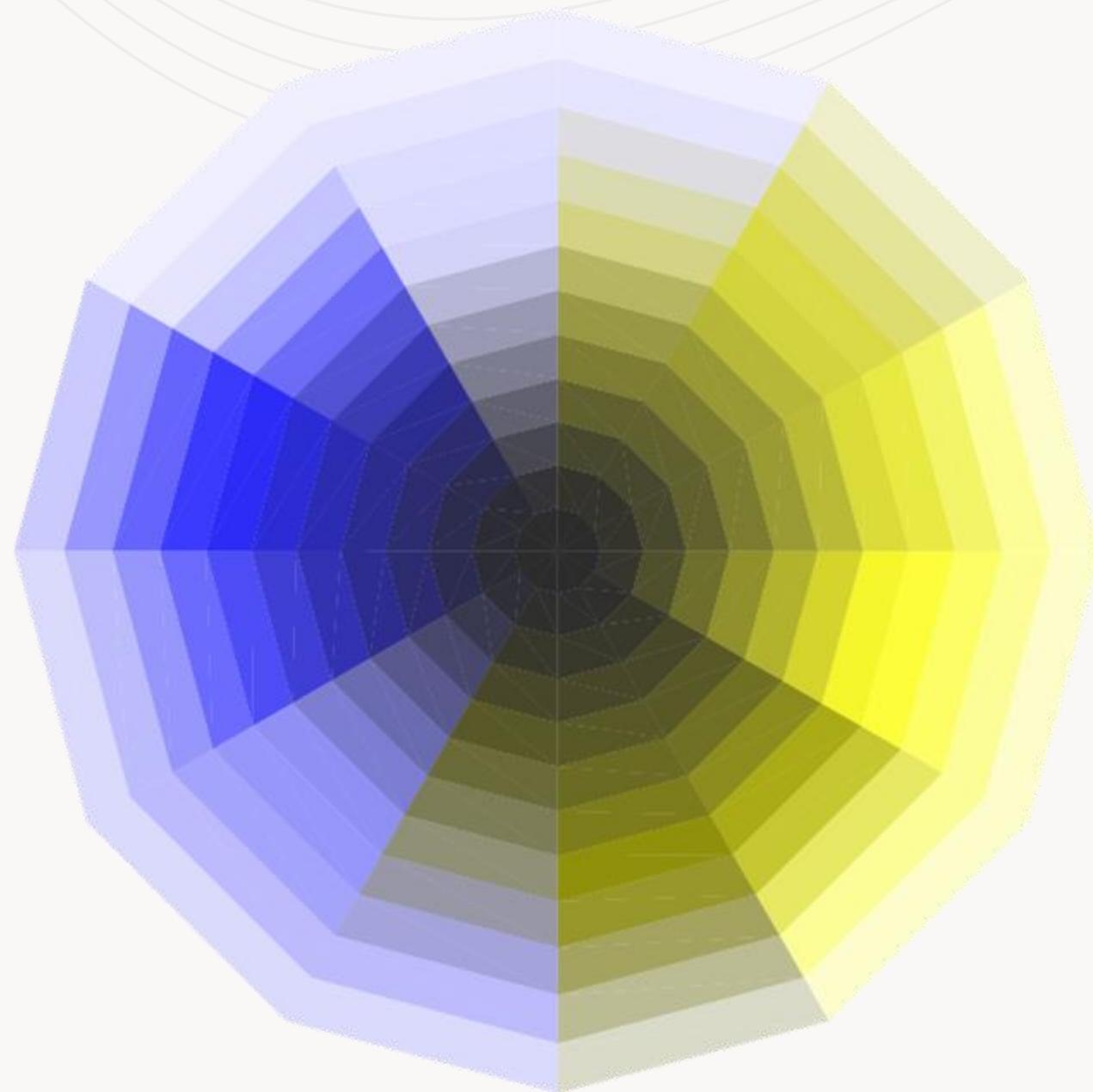
Comment	Comment Color (Original)
Original Comment Added by Reviewer	Blue Comment
Status Selection by Design / Builder Team	Comment Color (Change)
** RESPONSE to Reviewer Comment	
1 - Agree: Incorporation Planned Next Submittal -	Green Comment
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PENDING - Resolved Pending Confirmation (in next submittal) -	Orange Comment

Bluebeam Review / Reconciliation Process (Statuses)

Normal Vision:



Common Color Blindness:



Bluebeam Review / Reconciliation Process (Statuses)

Step 2 - Digital Review Bluebeam Session: Design Team Responds

The screenshot illustrates the Bluebeam Review process, specifically Step 2 where the Design Team responds to review comments. The interface shows a document with various review marks (Text Box, Callout, Cloud w Callout) and a list of comments in the Markups List. A status table on the right provides a color-coded key for comment responses.

Original Reviewer Comments: Several comments are highlighted with callouts, including "Original Reviewer Comments" in green, orange, and red boxes. A red arrow points from the red comment box to the "Not in Scope" status in the Markups List table.

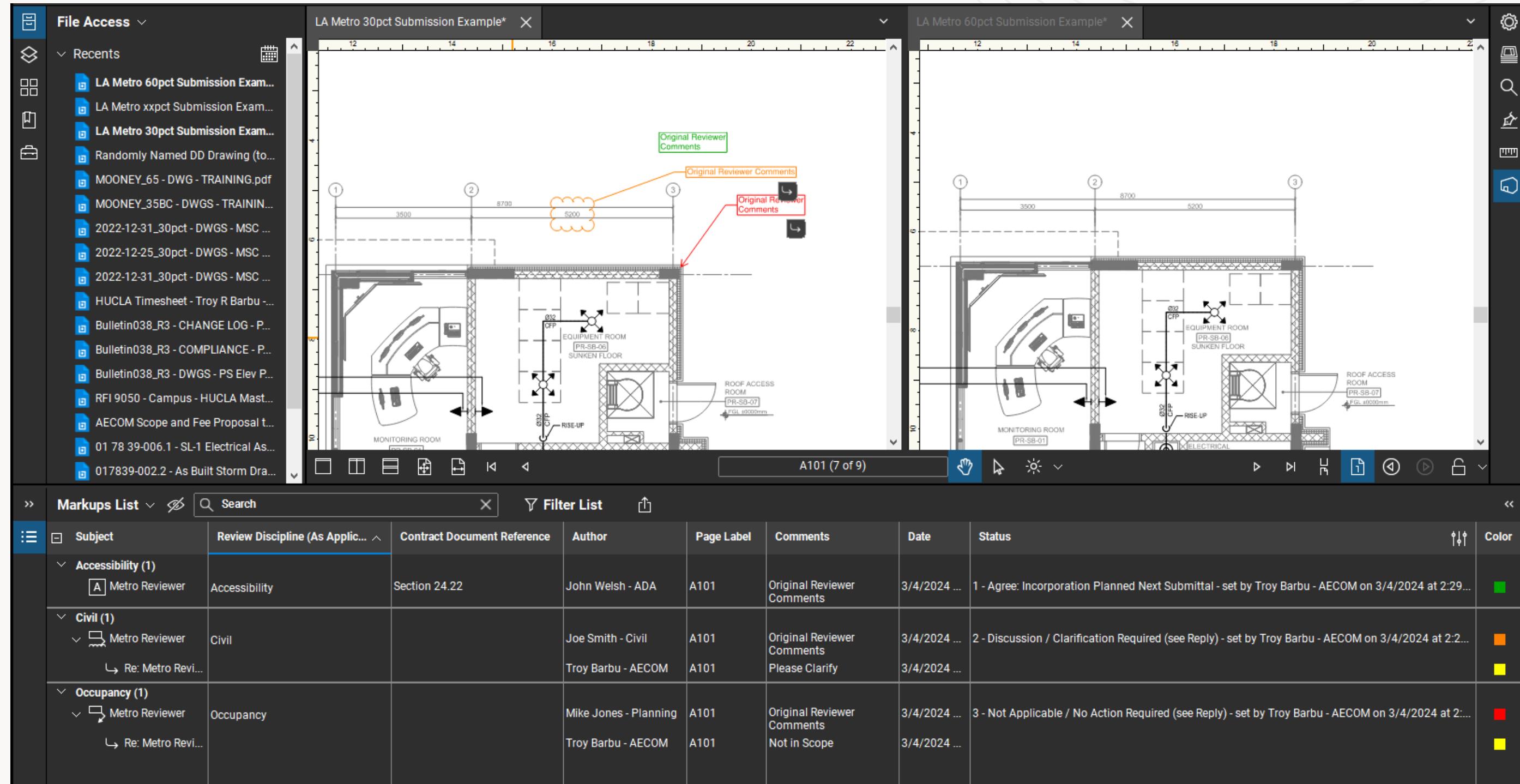
Status Selection by Design / Builder Team: A purple arrow points to the status table, which defines the following response types:

Comment	Color
Original Comment Added by Reviewer	Blue Comment
Status Selection by Design / Builder Team	Green Comment
** RESPONSE to Reviewer Comment	Green Comment
1 - Agree: Incorporation Planned Next Submittal -	Green Comment
2 - Discussion / Clarification Required (see Reply) -	Orange Comment
3 - Not Applicable / No Action Required (see Reply) -	Red Comment
** BACKCHECK Final Disposition (Completed by Reviewer)	Green Comment
RESOLVED - Review Comment Addressed / Complete -	Green Comment
UNRESOLVED - Review Comment NOT Addressed -	Red Comment
PENDING - Resolved Pending Confirmation (in next submittal) -	Orange Comment

Markups List: A table showing review details, with the "Status" column highlighted by a red box. The table includes rows for Accessibility, Civil, and Occupancy categories, with specific comments and their status (e.g., "1 - Agree: Incorporation Planned Next Submittal - set by Troy Barbu - AECOM on 3/4/2024 at 2:29...").

Bluebeam Review / Reconciliation Process (Statuses)

Step 3 - Digital Review Bluebeam Session: Design Team Subsequent Submittal



Subject	Review Discipline (As Applicable)	Contract Document Reference	Author	Page Label	Comments	Date	Status	Color
Accessibility (1)	Metro Reviewer	Accessibility	Section 24.22	John Welsh - ADA	A101	Original Reviewer Comments	3/4/2024 10:29:30 AM	Green
Civil (1)	Metro Reviewer	Civil		Joe Smith - Civil	A101	Original Reviewer Comments	3/4/2024 10:29:30 AM	Orange
				Troy Barbu - AECOM	A101	Please Clarify	3/4/2024 10:29:30 AM	Yellow
Occupancy (1)	Metro Reviewer	Occupancy		Mike Jones - Planning	A101	Original Reviewer Comments	3/4/2024 10:29:30 AM	Red
				Troy Barbu - AECOM	A101	Not in Scope	3/4/2024 10:29:30 AM	Yellow

Bluebeam Review / Reconciliation Process (Statuses)

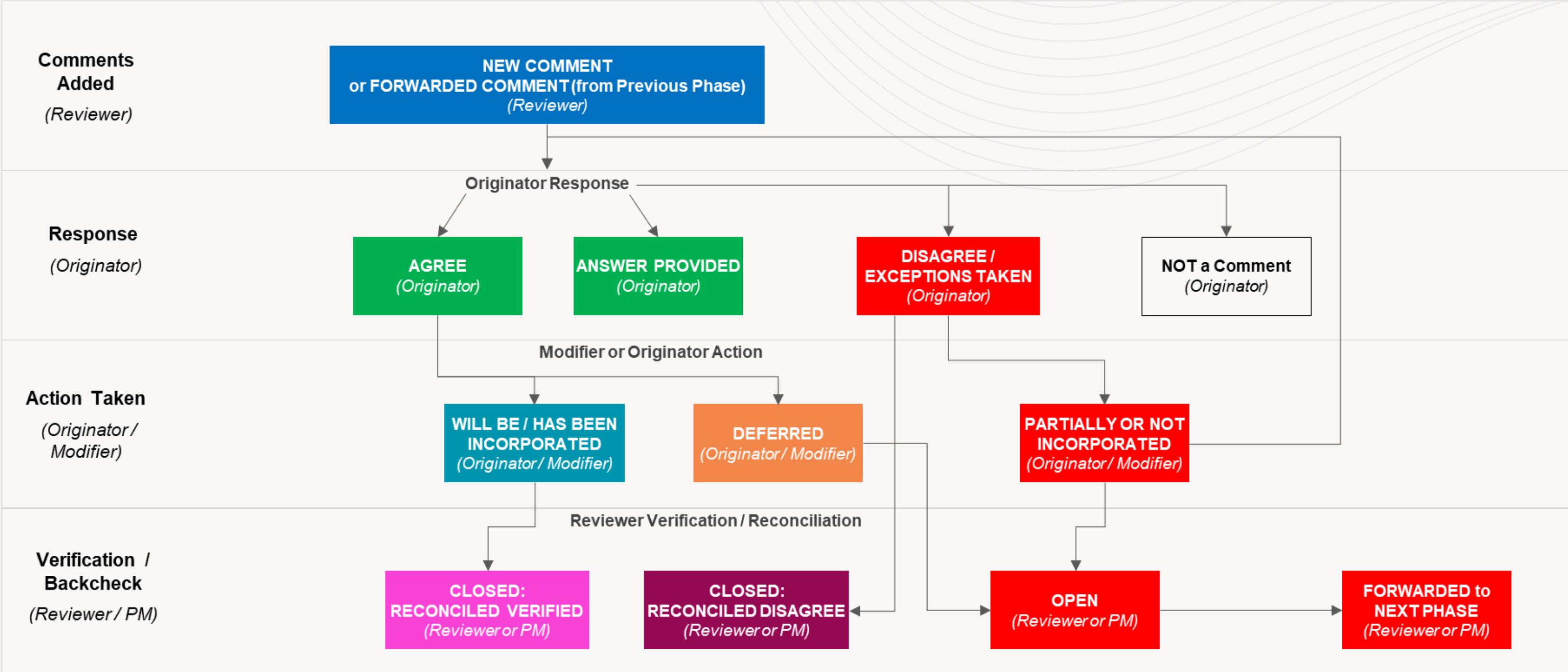
Step 4 - Digital Review Bluebeam Session: Reviewer Backcheck

The screenshot illustrates the Bluebeam Review / Reconciliation Process. On the left, the 'Tool Chest' panel shows 'My Tools' and 'Metro Reviewer' sections. The 'Metro Reviewer' section contains three types of comments: 'Text Box', 'Callout', and 'Cloud w Callout'. The 'City of LA Reviewer' section also contains these three types. A drawing of a building floor plan is displayed in the center, with several review comments overlaid. Three specific comments are highlighted with colored boxes and arrows: an orange box labeled 'Original Reviewer Comments' points to a callout comment; a red box labeled 'Original Reviewer Comments' points to a text box comment; and a green box labeled 'Original Reviewer Comments' points to a cloud w callout comment. A purple arrow on the right points down to a table titled 'Comment' and 'Status Selection by Design / Builder Team'. The table defines the following colors for comment status:

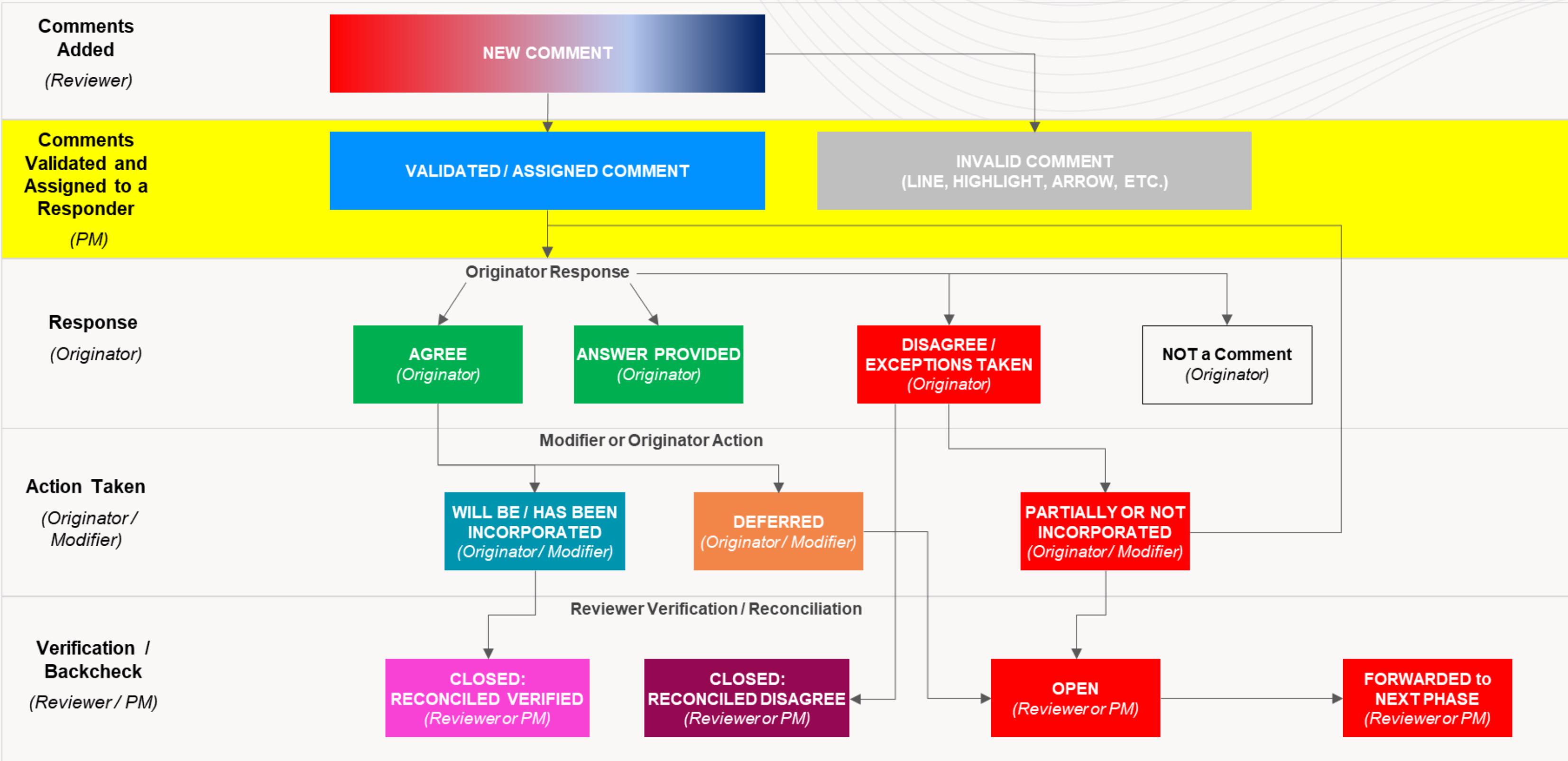
Comment	Color
Original Comment Added by Reviewer	Blue Comment
Status Selection by Design / Builder Team	Comment (Change)
** RESPONSE to Reviewer Comment	
1 - Agree: Incorporation Planned Next Submittal -	Green Comment
2 - Discussion / Clarification Required (see Reply) -	Orange Comment
3 - Not Applicable / No Action Required (see Reply) -	Red Comment
** BACKCHECK Final Disposition (Completed by Reviewer)	
RESOLVED - Review Comment Addressed / Complete -	Green Comment
UNRESOLVED - Review Comment NOT Addressed -	Red Comment
PENDING - Resolved Pending Confirmation (in next submittal) -	Orange Comment

Below the drawing, the 'Markups List' pane shows a table of review items. The table includes columns for Subject, Review Discipline (As Applicable), Contract Document Reference, Author, Page Label, Comments, Date, Status, and Color. The 'Status' column for the first item is highlighted with a red box. The table also contains status and color information for other items, such as 'RESOLVED' with a green status and color, and 'PENDING' with an orange status and color. The 'Color' column indicates the color of the status text.

Bluebeam Review / Reconciliation Process (Statuses)

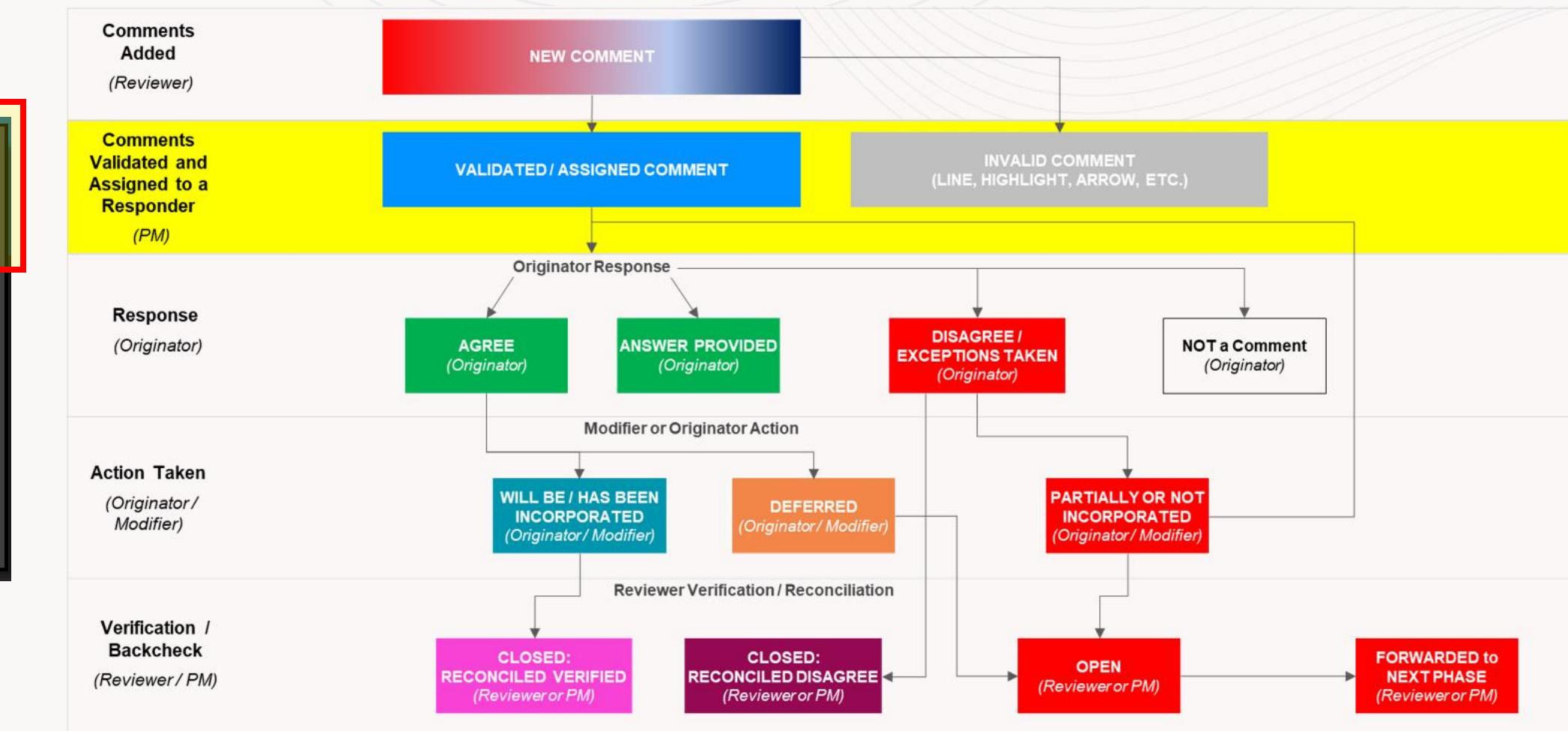
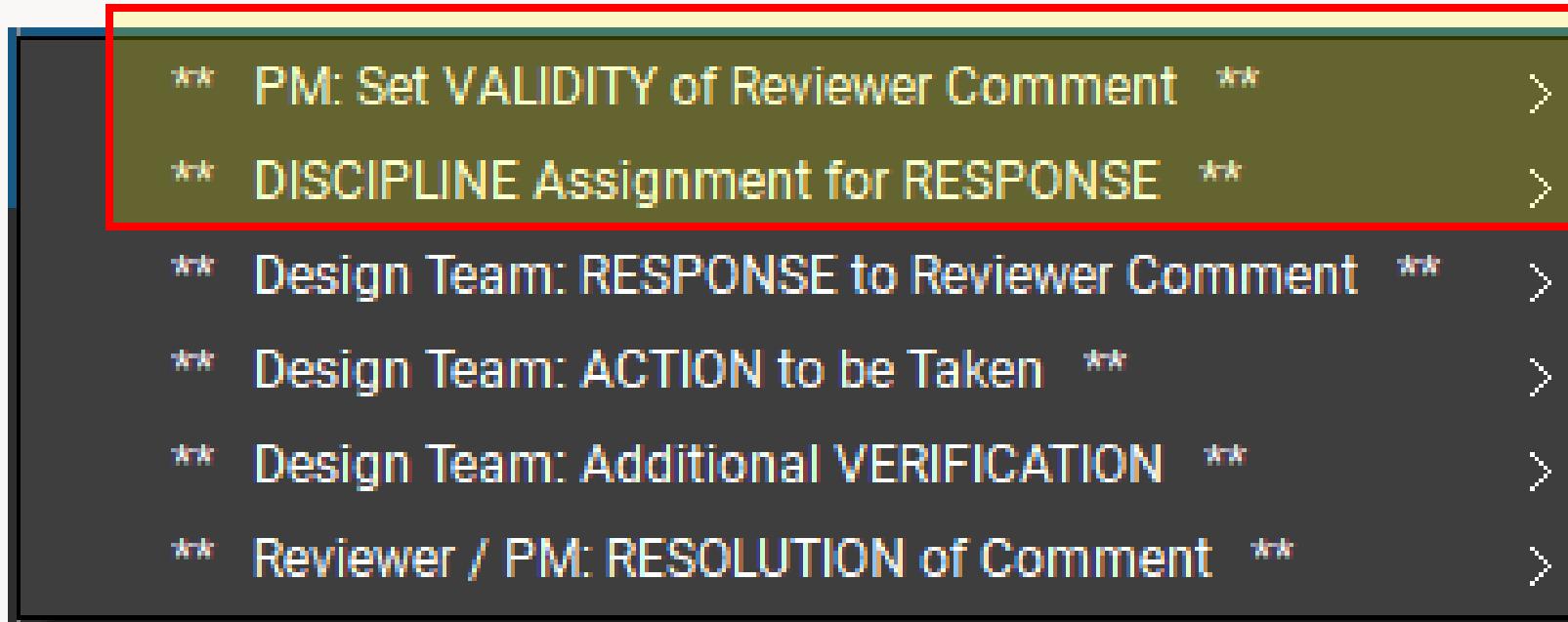


Bluebeam Review / Reconciliation Process (Statuses)



Bluebeam Review / Reconciliation Process

Statuses in Action:



Bluebeam Review / Reconciliation Process

Statuses in Action:



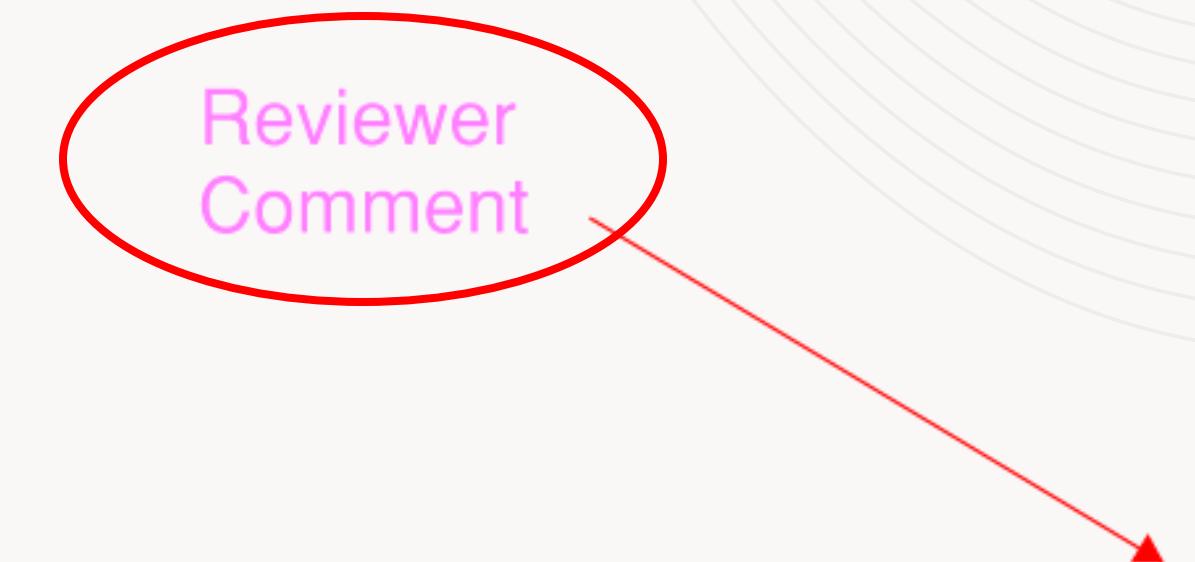
Reviewer Comment

A screenshot of the Bluebeam Markups List interface. The table has columns: Subject, Author, Page ..., Comments, Date, Status, Color, and Design Team: Additional Response (use Reply- Add in this Column). The data is as follows:

Subject	Author	Page ...	Comments	Date	Status	Color	Design Team: Additional Response (use Reply- Add in this Column)
C003 - GENERA...	Marshall Pac...	C003 - GE...	Flagging this infrastructure here will need to be removed ahead of the planned excavation activities in this area	3/28/2025 10:24:55...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...	Blue	
	dan.tarasoff	C003 - GE...		5/7/2025 7:26:01 AM		Yellow	John M, Dan T to review scope and revise specs and drawings as appropriate.
	Marshall Pac...	C003 - GE...		3/28/2025 10:24:14...	INVALID: Comment is INVALID set by Rebecca Halbach - DXB o...	Grey	
Ⓐ Text	Joshua	C003 - GE...	Why aren't we remediating these roads and pads? - Joshua Linseman	4/11/2025 10:45:45...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...	Blue	
	dan.tarasoff	C003 - GE...		5/7/2025 7:21:03 AM		Yellow	Andrew B
	Pamela Gasc...	C003 - GE...		5/23/2025 10:13:25...		Yellow	The extent of the roadway network adjacent to the B1 Pit will be reviewed as part of RevB.

Bluebeam Review / Reconciliation Process

Statuses in Action:



Subject	Author	Page ...	Comments	Date	Status	Color	Design Team: Additional Response (use Reply- Add in this Column)
C003 - GENERA...	Marshall Pac...	C003 - GE...	Flagging this infrastructure here will need to be removed ahead of the planned excavation activities in this area	3/28/2025 10:24:55...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...	■	
	↳ Callout	dan.tarasoff	Re: Cal...	5/7/2025 7:26:01 AM		■	John M, Dan T to review scope and revise specs and drawings as appropriate.
	↳ Arrow	Marshall Pac...	Why aren't we remediating these roads and pads?	3/28/2025 10:24:14...	INVALID: Comment is INVALID set by Rebecca Halbach - DXB o...	■	
	Ⓐ Text	Joshua	Joshua Linseman	4/11/2025 10:45:45...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...	■	Andrew B
	↳ Re: Text	dan.tarasoff		5/7/2025 7:21:03 AM		■	The extent of the roadway network adjacent to the B1 Pit will be reviewed as part of RevB.
	↳ Re: Text	Pamela Gasc...		5/23/2025 10:13:25...		■	

Bluebeam Review / Reconciliation Process

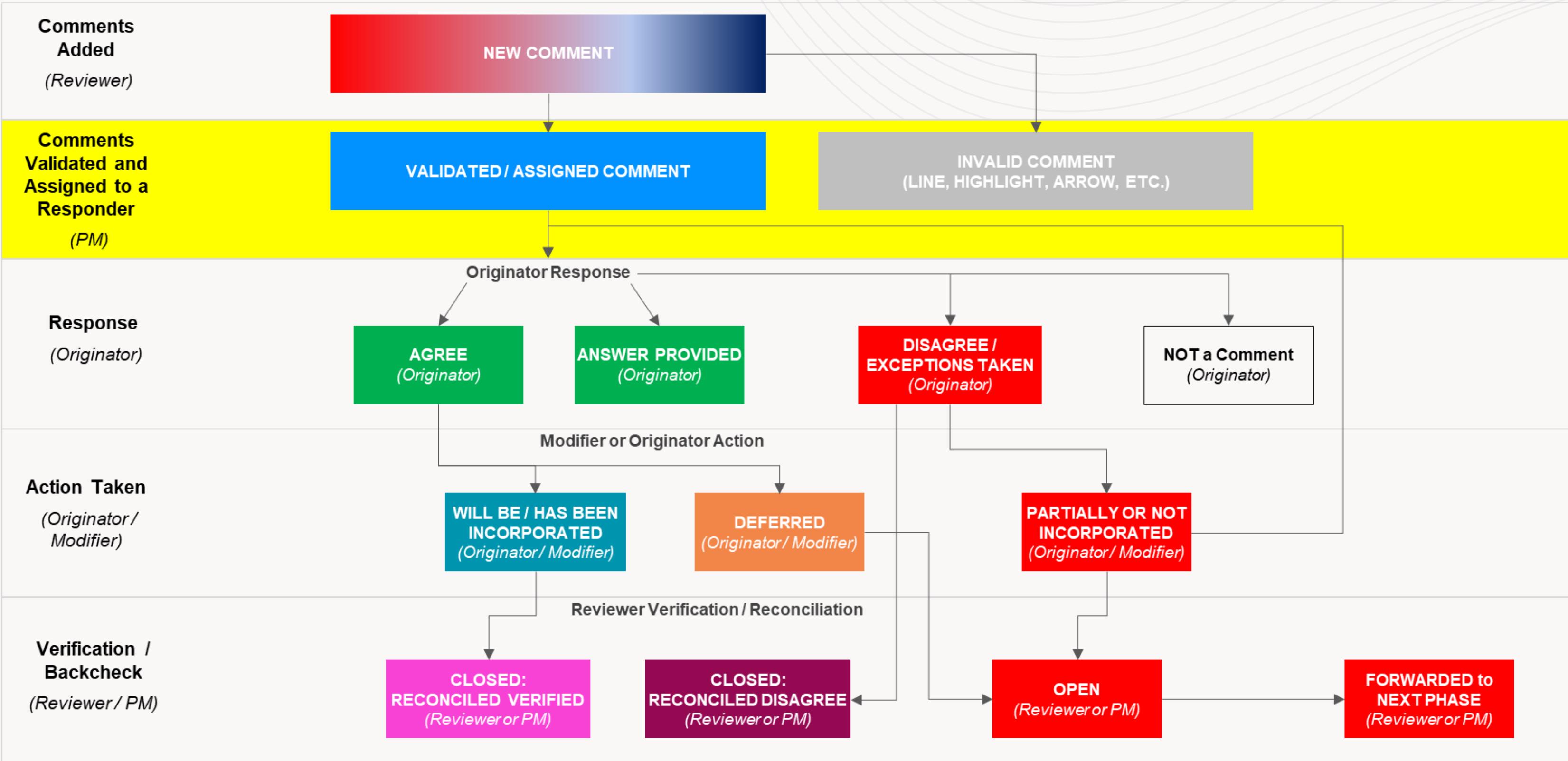
Statuses in Action:

Reviewer
Comment



Subject	Author	Page ... ^	Comments	Date	Status	↑↑	Color	Design Team: Additional Response (use Reply- Add in this Column)
✓ C003 - GENERA...								
✓ Callout	Marshall Pac...	C003 - GE...	Flagging this infrastructure here will need to be removed ahead of the planned excavation activities in this area	3/28/2025 10:24:55...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...		■	
↳ Re: Cal...	dan.tarasoff	C003 - GE...		5/7/2025 7:26:01 AM			■	John M, Dan T to review scope and revise specs and drawings as appropriate.
✓ Arrow	Marshall Pac...	C003 - GE...		3/28/2025 10:24:14...	INVALID: Comment is INVALID set by Rebecca Halbach - DXB o...		■	
✓ (A) Text	Joshua	C003 - GE...	Why aren't we remediating these roads and pads? Joshua Linseman	4/11/2025 10:45:45...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...		■	Andrew B
↳ Re: Text	dan.tarasoff	C003 - GE...		5/7/2025 7:21:03 AM			■	The extent of the roadway network adjacent to the B1 Pit will be reviewed as part of RevB.
↳ Re: Text	Pamela Gasc...	C003 - GE...		5/23/2025 10:13:25...			■	

Bluebeam Review / Reconciliation Process (Statuses)



Bluebeam Review / Reconciliation Process

Statuses in Action:

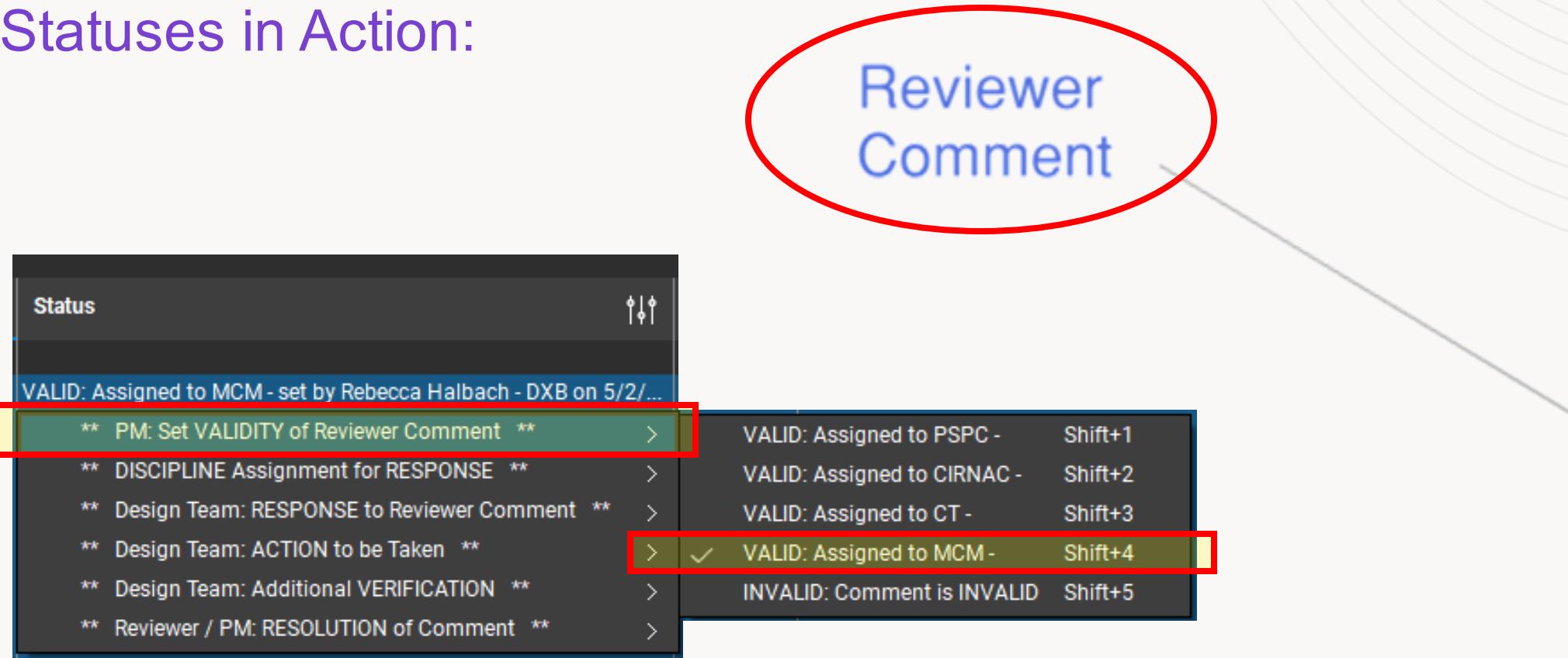
Reviewer
Comment



Subject	Author	Page ... ^	Comments	Date	Status	Color	Design Team: Additional Response (use Reply- Add in this Column)
✓ C003 - GENERA...							
✓ Callout	Marshall Pac...	C003 - GE...	Flagging this infrastructure here will need to be removed ahead of the planned excavation activities in this area	3/28/2025 10:24:55...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...	■	
↳ Re: Cal...	dan.tarasoff	C003 - GE...		5/7/2025 7:26:01 AM		■	John M, Dan T to review scope and revise specs and drawings as appropriate.
✓ Arrow	Marshall Pac...	C003 - GE...		3/28/2025 10:24:14...	INVALID: Comment is INVALID set by Rebecca Halbach - DXB o...	■	
✓ (A) Text	Joshua	C003 - GE...	Why aren't we remediating these roads and pads? Joshua Linseman	4/11/2025 10:45:45...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...	■	
↳ Re: Text	dan.tarasoff	C003 - GE...		5/7/2025 7:21:03 AM		■	Andrew B
↳ Re: Text	Pamela Gasc...	C003 - GE...		5/23/2025 10:13:25...		■	The extent of the roadway network adjacent to the B1 Pit will be reviewed as part of RevB.

Bluebeam Review / Reconciliation Process

Statuses in Action:



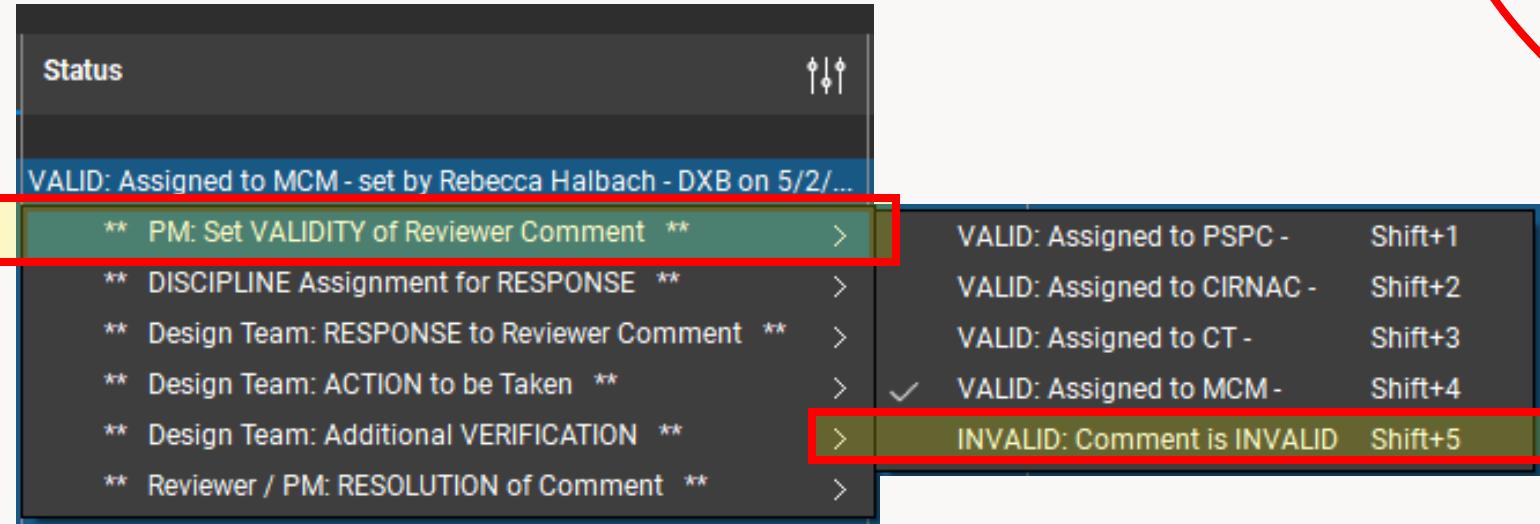
A screenshot of the Bluebeam Markups List table. A red box highlights a row for a 'Text' markup from 'Joshua' on 4/11/2025, which is marked as 'VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...'. The table includes columns for Subject, Author, Page, Comments, Date, Status, Color, and Design Team: Additional Response.

Subject	Author	Page ...	Comments	Date	Status	Color	Design Team: Additional Response (use Reply- Add in this Column)
C003 - GENERA...	Marshall Pac...	C003 - GE...	Flagging this infrastructure here will need to be removed ahead of the planned excavation activities in this area	3/28/2025 10:24:55...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...	■	
	dan.tarasoff	C003 - GE...		5/7/2025 7:26:01 AM		■	John M, Dan T to review scope and revise specs and drawings as appropriate.
	Marshall Pac...	C003 - GE...		3/28/2025 10:24:14...	INVALID: Comment is INVALID set by Rebecca Halbach - DXB o...	■	
Ⓐ Text	Joshua	C003 - GE...	Why aren't we remediating these roads and pads? - Joshua Linseman	4/11/2025 10:45:45...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...	■	
	dan.tarasoff	C003 - GE...		5/7/2025 7:21:03 AM		■	Andrew B
	Pamela Gasc...	C003 - GE...		5/23/2025 10:13:25...		■	The extent of the roadway network adjacent to the B1 Pit will be reviewed as part of RevB.

Bluebeam Review / Reconciliation Process

Statuses in Action:

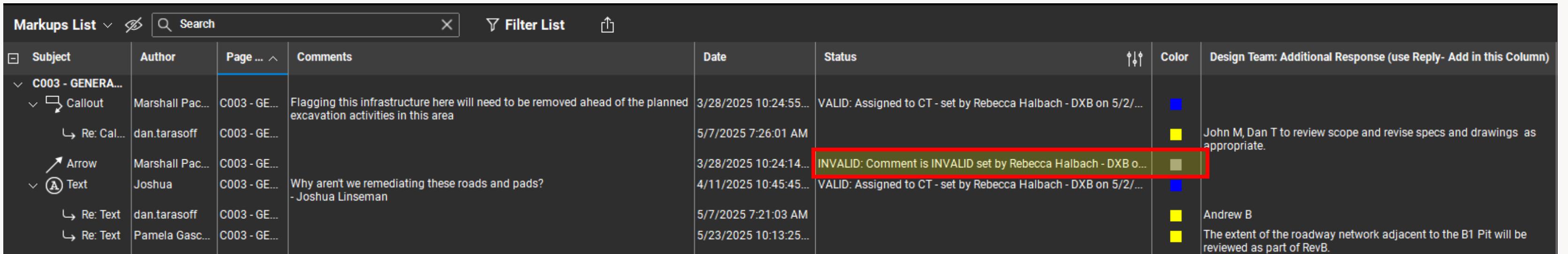
Reviewer Comment



The screenshot shows a list of statuses in the Bluebeam interface. The 'INVALID: Comment is INVALID' status is highlighted with a red box and circled in red. Other statuses include 'VALID: Assigned to MCM - set by Rebecca Halbach - DXB on 5/2/...', 'PM: Set VALIDITY of Reviewer Comment', 'DISCIPLINE Assignment for RESPONSE', 'Design Team: RESPONSE to Reviewer Comment', 'Design Team: ACTION to be Taken', 'Design Team: Additional VERIFICATION', and 'Reviewer / PM: RESOLUTION of Comment'.

Status	Color	Details
VALID: Assigned to MCM - set by Rebecca Halbach - DXB on 5/2/...	Green	
** PM: Set VALIDITY of Reviewer Comment **	Green	
** DISCIPLINE Assignment for RESPONSE **	Green	
** Design Team: RESPONSE to Reviewer Comment **	Green	
** Design Team: ACTION to be Taken **	Green	
** Design Team: Additional VERIFICATION **	Green	
** Reviewer / PM: RESOLUTION of Comment **	Green	
INVALID: Comment is INVALID	Red	Shift+5

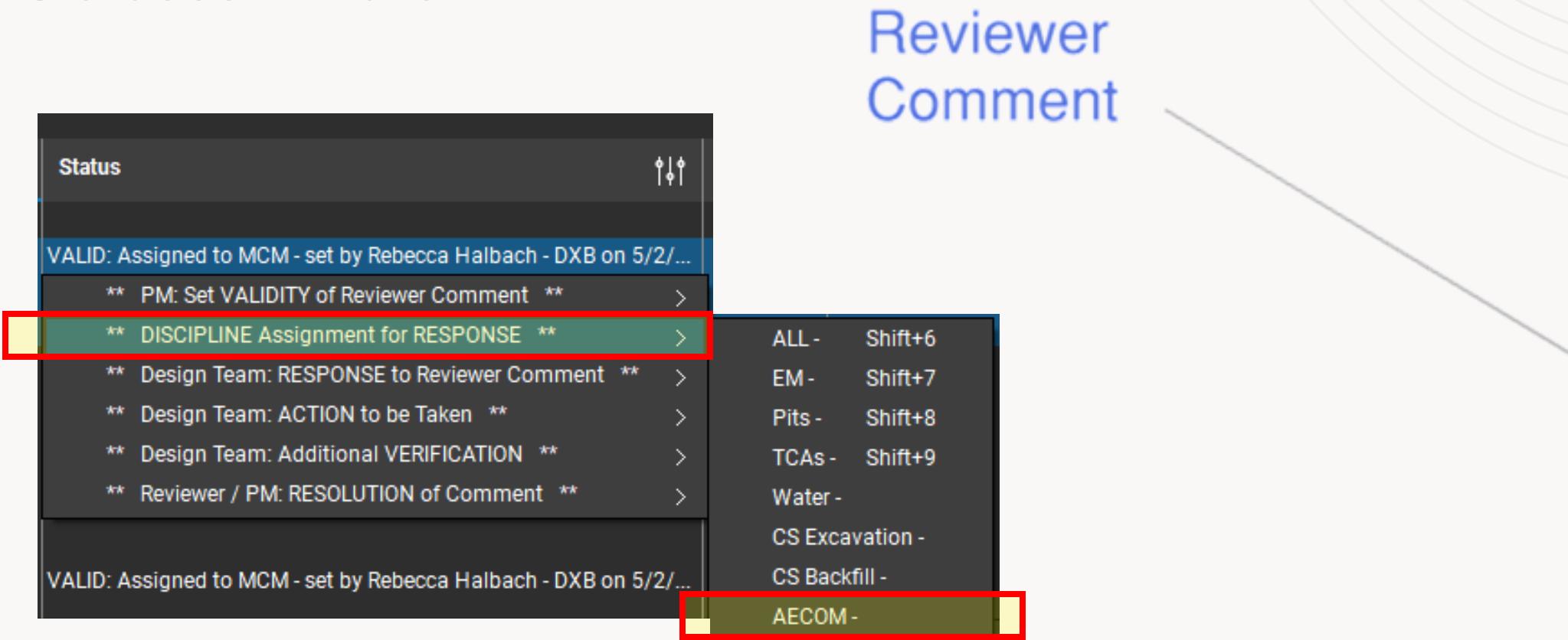
Markups List



Subject	Author	Page ...	Comments	Date	Status	Color	Design Team: Additional Response (use Reply- Add in this Column)
C003 - GENERA...	Marshall Pac...	C003 - GE...	Flagging this infrastructure here will need to be removed ahead of the planned excavation activities in this area	3/28/2025 10:24:55...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...	Blue	
	dan.tarasoff	C003 - GE...		5/7/2025 7:26:01 AM		Yellow	John M, Dan T to review scope and revise specs and drawings as appropriate.
Callout	Marshall Pac...	C003 - GE...		3/28/2025 10:24:14...	INVALID: Comment is INVALID set by Rebecca Halbach - DXB o...	Grey	
Arrow	Marshall Pac...	C003 - GE...		4/11/2025 10:45:45...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...	Blue	
(A) Text	Joshua	C003 - GE...	Why aren't we remediating these roads and pads? - Joshua Linseman	5/7/2025 7:21:03 AM		Yellow	Andrew B
Re: Callout	dan.tarasoff	C003 - GE...		5/23/2025 10:13:25...		Yellow	The extent of the roadway network adjacent to the B1 Pit will be reviewed as part of RevB.
Re: Text	Pamela Gasc...	C003 - GE...					

Bluebeam Review / Reconciliation Process

Statuses in Action:



Subject	Author	Page ...	Comments	Date	Status	Color	Design Team: Additional Response (use Reply- Add in this Column)
C003 - GENERA...	Marshall Pac...	C003 - GE...	Flagging this infrastructure here will need to be removed ahead of the planned excavation activities in this area	3/28/2025 10:24:55...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...	■	
	dan.tarasoff	C003 - GE...		5/7/2025 7:26:01 AM		■	John M, Dan T to review scope and revise specs and drawings as appropriate.
	Marshall Pac...	C003 - GE...		3/28/2025 10:24:14...	INVALID: Comment is INVALID set by Rebecca Halbach - DXB o...	■	
Ⓐ Text	Joshua	C003 - GE...	Why aren't we remediating these roads and pads? - Joshua Linseman	4/11/2025 10:45:45...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...	■	
	dan.tarasoff	C003 - GE...		5/7/2025 7:21:03 AM		■	Andrew B
	Pamela Gasc...	C003 - GE...		5/23/2025 10:13:25...		■	The extent of the roadway network adjacent to the B1 Pit will be reviewed as part of RevB.

Bluebeam Review / Reconciliation Process

Statuses in Action:

Reviewer Comment

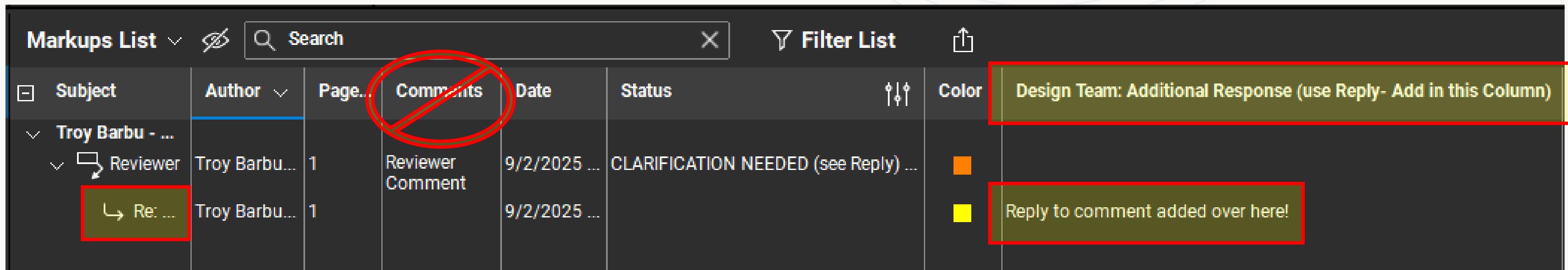
The screenshot shows a dropdown menu titled 'Reviewer Comment' with the following options:

- ALL - Shift+6
- EM - Shift+7
- Pits - Shift+8
- TCAs - Shift+9
- Water -
- CS Excavation -
- CS Backfill -
- AECOM -

Subject	Author	Page ...	Comments	Date	Status	Color	Design Team: Additional Response (use Reply- Add in this Column)
C003 - GENERA...	Marshall Pac...	C003 - GE...	Flagging this infrastructure here will need to be removed ahead of the planned excavation activities in this area	3/28/2025 10:24:55...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...	■	John M, Dan T to review scope and revise specs and drawings as appropriate.
	dan.tarasoff	C003 - GE...		5/7/2025 7:26:01 AM		■	
	Marshall Pac...	C003 - GE...		3/28/2025 10:24:14...	INVALID: Comment is INVALID set by Rebecca Halbach - DXB o...	■	
Ⓐ Text	Joshua	C003 - GE...	Why aren't we remediating these roads and pads? - Joshua Linseman	4/11/2025 10:45:45...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...	■	Andrew B
	dan.tarasoff	C003 - GE...		5/7/2025 7:21:03 AM		■	
	Pamela Gasc...	C003 - GE...		5/23/2025 10:13:25...		■	The extent of the roadway network adjacent to the B1 Pit will be reviewed as part of RevB.

Bluebeam Review / Reconciliation Process

Statuses in Action:



The screenshot shows the Bluebeam Markups List interface. The table has the following columns: Subject, Author, Page, Comments, Date, Status, and Color. A red circle highlights the 'Comments' column header. A red box highlights the 'Color' column header. The 'Color' column contains two entries: an orange square and a yellow square. The table rows are as follows:

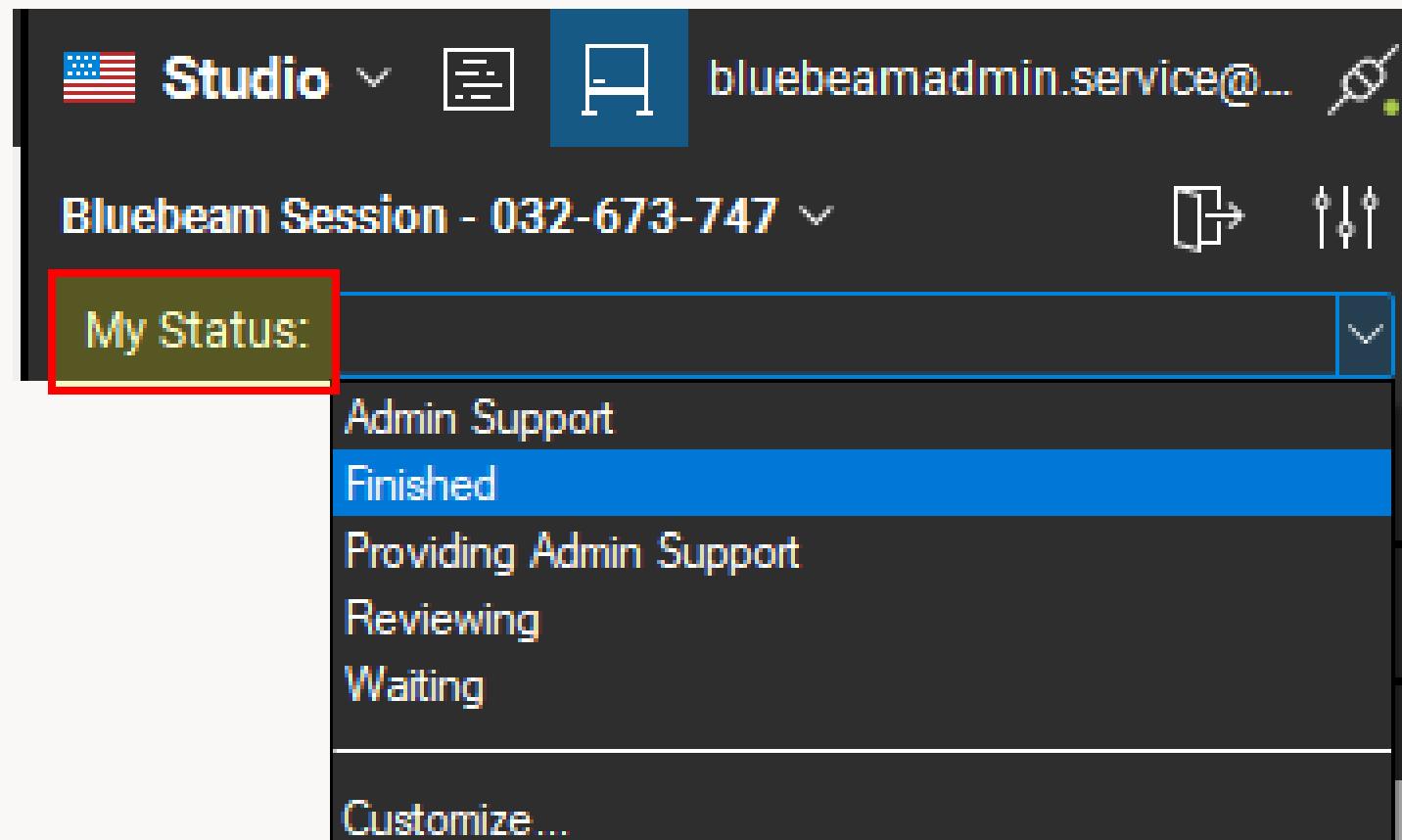
Subject	Author	Page	Comments	Date	Status	Color	Content
Troy Barbu - ...	Troy Barbu...	1	Reviewer Comment	9/2/2025 ...	CLARIFICATION NEEDED (see Reply) ...	Orange	Design Team: Additional Response (use Reply- Add in this Column)
Reviewer	Troy Barbu...	1	Re: ...	9/2/2025 ...		Yellow	Reply to comment added over here!

Large-Agency & Permitting Agency “Pain-Points”



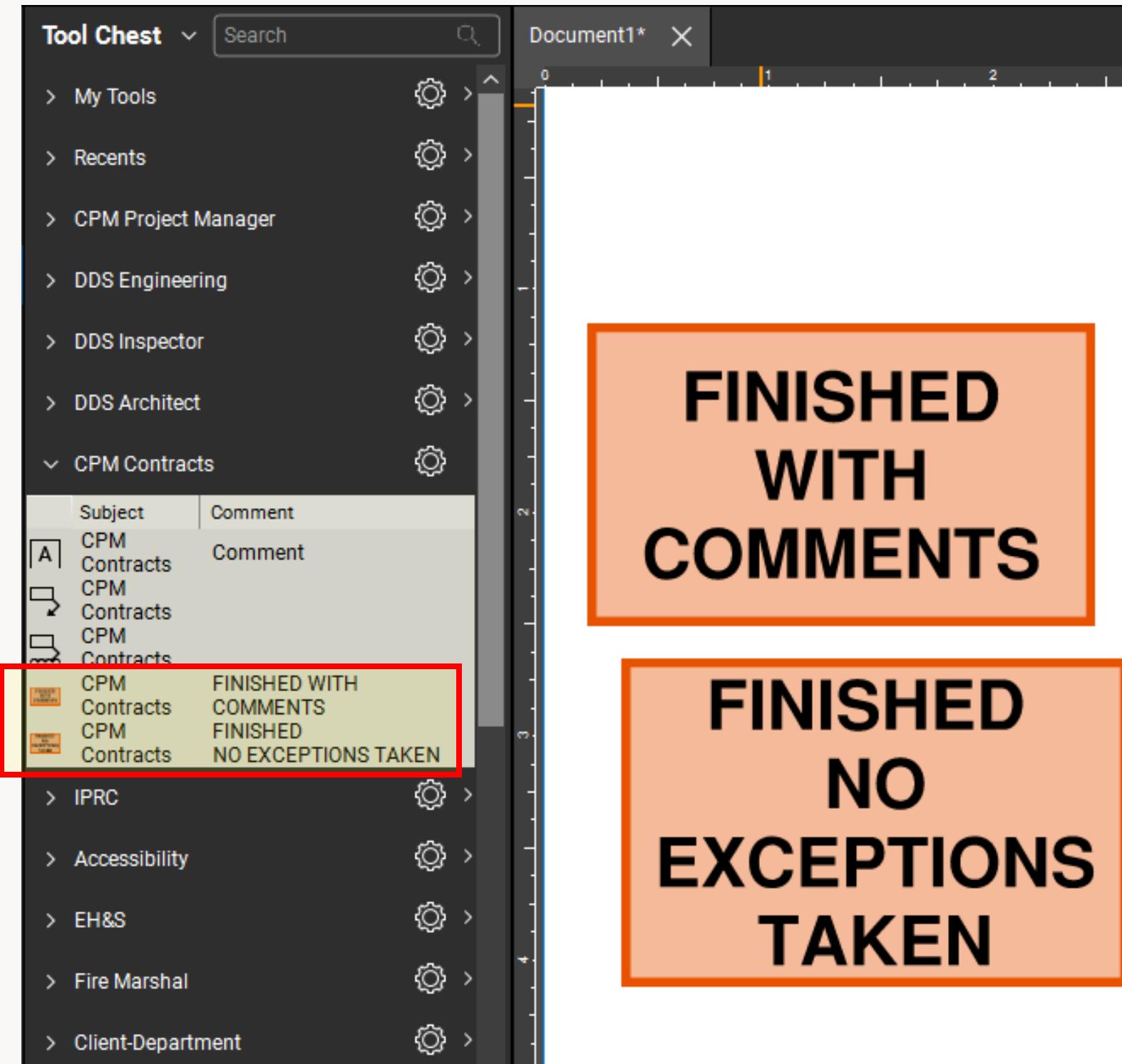
Reviewer to Admin/PM Collaboration - Completion

Completion of Review: Option 1: “My Status” in Bluebeam



Reviewer to Admin/PM Collaboration

Completion of Review: Option 2: “Fancy Text Box” Tool

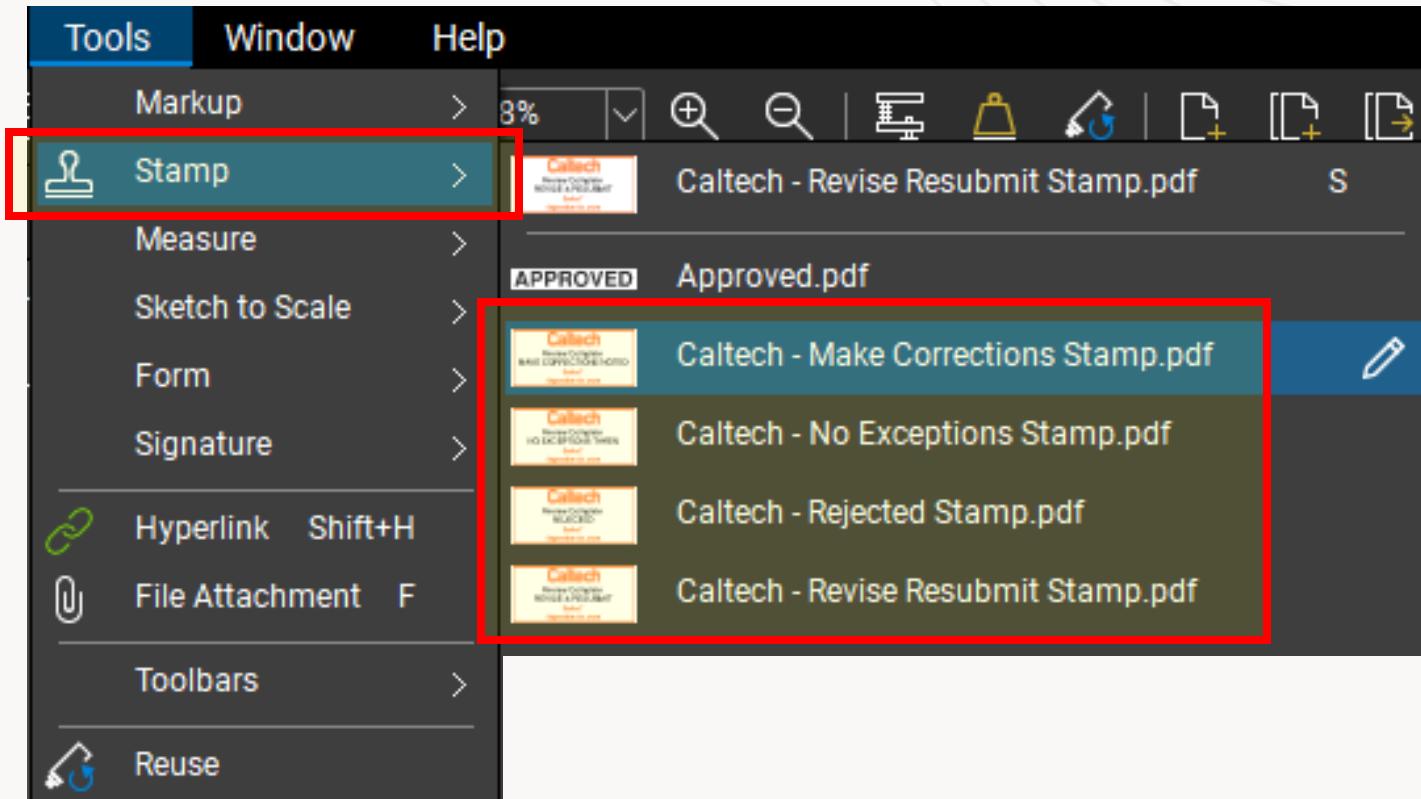


The screenshot shows the Bluebeam interface with the 'Tool Chest' open on the left. The 'Tool Chest' menu is expanded, showing various tools under 'My Tools' and 'Recents'. The 'CPM Contracts' section is also expanded, showing a list of contracts. A red box highlights the last item in the list, which is a summary of the review status: 'CPM Contracts FINISHED WITH COMMENTS' and 'CPM Contracts FINISHED NO EXCEPTIONS TAKEN'. The main document window shows two orange text boxes with the text 'FINISHED WITH COMMENTS' and 'FINISHED NO EXCEPTIONS TAKEN' respectively.

Subject	Comment
CPM Contracts	Comment
CPM Contracts	FINISHED WITH COMMENTS
CPM Contracts	FINISHED NO EXCEPTIONS TAKEN

Reviewer to Admin/PM Collaboration

Completion of Review: Option 3: “Bluebeam Stamp” using Dynamic Data



The screenshot shows the Bluebeam interface with the 'Stamp' tool selected in the 'Tools' menu. A list of available stamps is displayed, including 'Caltech - Make Corrections Stamp.pdf', 'Caltech - No Exceptions Stamp.pdf', 'Caltech - Rejected Stamp.pdf', and 'Caltech - Revise Resubmit Stamp.pdf'. The 'Caltech - Revise Resubmit Stamp.pdf' option is highlighted with a red box.

Tool Chest

- My Tools
- Recents
- O-D&C
 - Check for Stamp
 - O-User Representative
 - O-Operations
 - O-Architectural
 - O-MEPC
 - O-ELS

Caltech Review Complete
REVISE & RESUBMIT
Troy Barbu - AECOM
September 02, 2025

Caltech Review Complete
NO EXCEPTIONS TAKEN
Troy Barbu - AECOM
September 02, 2025

Caltech
FACILITIES
DESIGN & CONSTRUCTION

NO EXCEPTIONS TAKEN MAKE CORRECTIONS NOTED
 REVISE AND RESUBMIT REJECTED _____

SUBMITTAL WAS REVIEWED FOR DESIGN CONFORMITY AND GENERAL CONFORMITY TO CONTRACT DOCUMENTS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT JOB SITE FOR TOLERANCE, CLEARANCE, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES FOR CONSTRUCTION, COORDINATION OF HIS WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH CONTRACT DOCUMENTS.

REVIEWED BY: Troy Barbu
DATE: September 09, 2025

Reviewer to Admin/PM Collaboration

Completion of Review: Option 4a: “Form-Like” or “Document-Like” Fancy Text Box (Signed)

Tool Chest Search

- > My Tools
- > City of LA Reviewer
- > Metro Reviewer
- > SFTC Reviewer
- > AECOM Checker
- > AECOM Check Stamp

Subject	Comment
Check Stamp	
IDR Review Stamp	
<input checked="" type="checkbox"/> A Check Stamp Text	12-12-2025
<input checked="" type="checkbox"/> Check Mark	3
Shop Drawing	
Review Stamp	

Document1* X

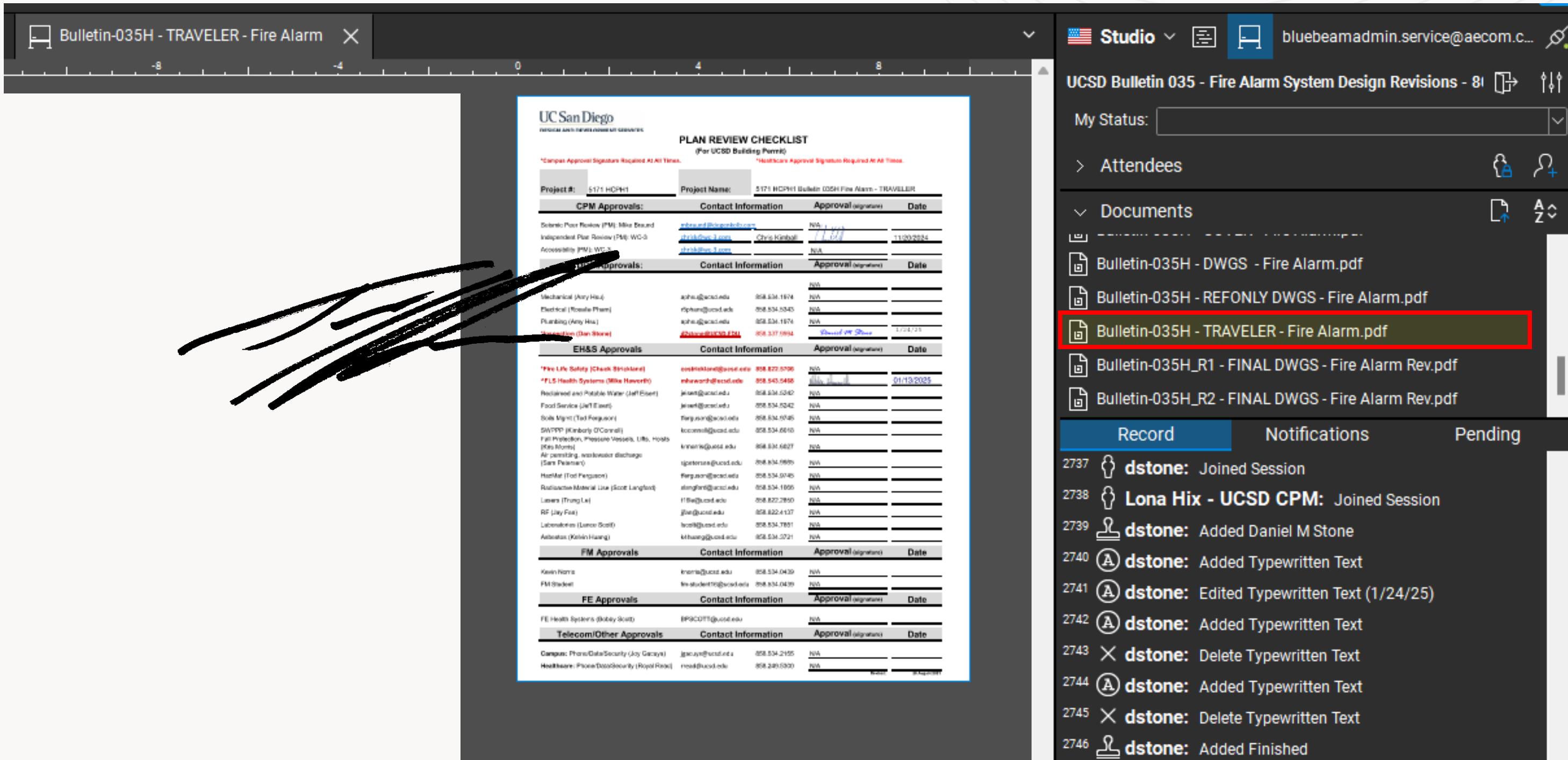
1 2 3 4 5

INTERDISCIPLINARY REVIEW

DISCIPLINE	REVIEWER	DATE	C/NC
<input type="checkbox"/> CAD			
<input type="checkbox"/> Civil			
<input type="checkbox"/> Track			
<input type="checkbox"/> Roadway			
<input type="checkbox"/> Drainage			
<input type="checkbox"/> MSF			
<input type="checkbox"/> Stations			
<input type="checkbox"/> Geotechnical			
<input checked="" type="checkbox"/> Systems	TRB	9-2-2025	C
<input type="checkbox"/> Traction Power			
<input type="checkbox"/> Systemwide Ductbank			
<input type="checkbox"/> OCS			
<input type="checkbox"/> Communications			
<input type="checkbox"/> Train Control			
<input type="checkbox"/> Radio			
<input type="checkbox"/> Street Lighting			
<input type="checkbox"/> Mechanical			
<input type="checkbox"/> Electrical			
<input type="checkbox"/> Plumbing			

Reviewer to Admin/PM Collaboration

Completion of Review: Option 4b: Separate Form in the Session (Signed)



The image shows a screenshot of the Bluebeam Studio interface. On the left, a PDF document titled "UC San Diego PLAN REVIEW CHECKLIST" is displayed. The checklist includes sections for CPM Approvals, EH&S Approvals, FM Approvals, and FE Approvals, each with a table of names, emails, and approval status. A large black redaction box covers the majority of the checklist content. On the right, the Bluebeam Studio interface shows a list of documents: "Bulletin-035H - DWGS - Fire Alarm.pdf", "Bulletin-035H - REFONLY DWGS - Fire Alarm.pdf", "Bulletin-035H - TRAVELER - Fire Alarm.pdf" (which is highlighted with a red box), "Bulletin-035H_R1 - FINAL DWGS - Fire Alarm Rev.pdf", and "Bulletin-035H_R2 - FINAL DWGS - Fire Alarm Rev.pdf". Below the documents is a "Record" table showing session history:

Record	Notifications	Pending
2737	dstone: Joined Session	
2738	Lona Hix - UCSD CPM: Joined Session	
2739	dstone: Added Daniel M Stone	
2740	dstone: Added Typewritten Text	
2741	dstone: Edited Typewritten Text (1/24/25)	
2742	dstone: Added Typewritten Text	
2743	dstone: Delete Typewritten Text	
2744	dstone: Added Typewritten Text	
2745	dstone: Delete Typewritten Text	
2746	dstone: Added Finished	

Reviewer to Admin/PM Collaboration

Completion of Review: Option 4c:
Separate Form in the Session (Stamped)



The screenshot shows a Bluebeam session window. At the top, the title bar reads '1011 Turk St - 202201065473 REVIEW - 4c'. The main area displays a stamped application form for '1011 Turk Street, 2nd Floor' dated '202201065473'. The form includes sections for 'APPLICANT'S CERTIFICATION', 'CONDITIONS AND STIPULATIONS', and 'NOTIFICATION'. The 'NOTIFICATION' section lists various departments with checkboxes for 'APPROVED' and fields for 'DATE' and 'REASON'. A note at the bottom states: 'I agree to comply with all conditions or stipulations of the individual business or departments listed on this application, and attached statements of conditions or stipulations, which are hereby made a part of this application.' Below the application form is a list of documents in the 'Documents' panel:
202201065473_BLDG CALCS.pdf
202201065473_BLDG DWGS.pdf
202201065473_BLDG DWGS_REV1.pdf
202201065473_BLDG DWGS_REV2.pdf
202201065473_Customer Fixture Count.pdf
202201065473_FORM 3.pdf (This file is highlighted with a red box.)
202201065473_Permit Applicant Disclosure....

On the right side of the screen, there is a 'Record' panel showing a list of recent actions:

Record	Notifications	Pending
1393 EPR Support Staff: Set State as A - GEC agrees and will comply		
1394 EPR Support Staff: Set State as No Action		
1395 EPR Support Staff: Set State as Requires Resolution Meeting		
1396 EPR Support Staff: Set State as Verified - Change has been incorporated		
1397 Eddie Chan - DBI PPC: Joined		

At the bottom of the screen, there is a 'Chat' input field.

Reviewer to Admin/PM Collaboration

Completion of Review: Option 5: Separate Hybrid Form / Stamp Document with Hyperlinks

Reviewer to Admin/PM Collaboration

Rev 0

Rev 1

City Planning (CPC)

SF Port (Port)

San Francisco Fire Department (SFFD)

City Attorney (CAT)

Board of (B)

Subject Comment

Check Mark 3

Plan Sheets Reviewed

Specifications Reviewed

FINAL DETERMINATION

A AN MCN R&R

No Comments Comments Issued

Troy Barbu - AECOM

SAN FRANCISCO PUBLIC WORKS

September 02, 2025

Please click EMAIL to confirm

Plan Sheets Reviewed

Specifications Reviewed

FINAL DETERMINATION

A AN MCN R&R

No Comments Comments Issued

REVIEWER STAMP

Please click EMAIL to confirm

Plan Sheets Reviewed

Specifications Reviewed

FINAL DETERMINATION

A AN MCN R&R

No Comments Comments Issued

REVIEWER STAMP

Please click EMAIL to confirm

Plan Sheets Reviewed

Specifications Reviewed

FINAL DETERMINATION

A AN MCN R&R

No Comments Comments Issued

REVIEWER STAMP

Please click EMAIL to confirm

Plan Sheets Reviewed

Specifications Reviewed

FINAL DETERMINATION

A AN MCN R&R

No Comments Comments Issued

REVIEWER STAMP

Please click EMAIL to confirm

Plan Sheets Reviewed

Specifications Reviewed

FINAL DETERMINATION

A AN MCN R&R

No Comments Comments Issued

REVIEWER STAMP

Please click EMAIL to confirm

Reviewer to Admin/PM Collaboration

Rev 0

Rev 1

City Planning (CPC)

SF Port (Port)

San Francisco

City Attorney

Board of (E)

Plan Sheets Reviewed

Specifications Reviewed

FINAL DETERMINATION

A AN MCN R&R

No Comments Comments Issued

Troy Barbu - AECOM

SAN FRANCISCO PUBLIC WORKS

September 02, 2025

Please click EMAIL to confirm

Plan Sheets Reviewed

Specifications Reviewed

FINAL DETERMINATION

A AN MCN R&R

Comments Resolved and No Additional Comments Additional Comments Issued

REVIEWER STAMP

Please click EMAIL to confirm

mailto: mailto:dpw-publicprojectpermits@sfdpw.org?subject=Planning%20review%20complete&body=Please%20click%20the%20link%20above%20to%20confirm%20the%20review%20is%20complete.

Action

Jump to: 00 SFPW STAMP APPROVAL MATRIX.pdf

Page: 1 Scale: Fit Page

Place

Space

Snapshot View: Get Rectangle (Not Set)

Hyperlink: mailto:dpw-publicprojectpermits@sfdpw.org?subject=Planning%20review%20complete&body=Please%20click%20the%20link%20above%20to%20confirm%20the%20review%20is%20complete.

Open

OK Cancel

Reviewer to Admin/PM Collaboration

The screenshot illustrates a workflow for document review and collaboration, specifically for a '00 SFPW STAMP APPROVAL MATRIX' document.

Left Panel (Rev 0): Shows the Bluebeam Revu interface with a document titled '00 SFPW STAMP APPROVAL MATRIX'. The 'Tool Chest' panel is open, showing various stamp and annotation tools. A red box highlights the 'Check Mark' tool under 'Stamp & Annotation'.

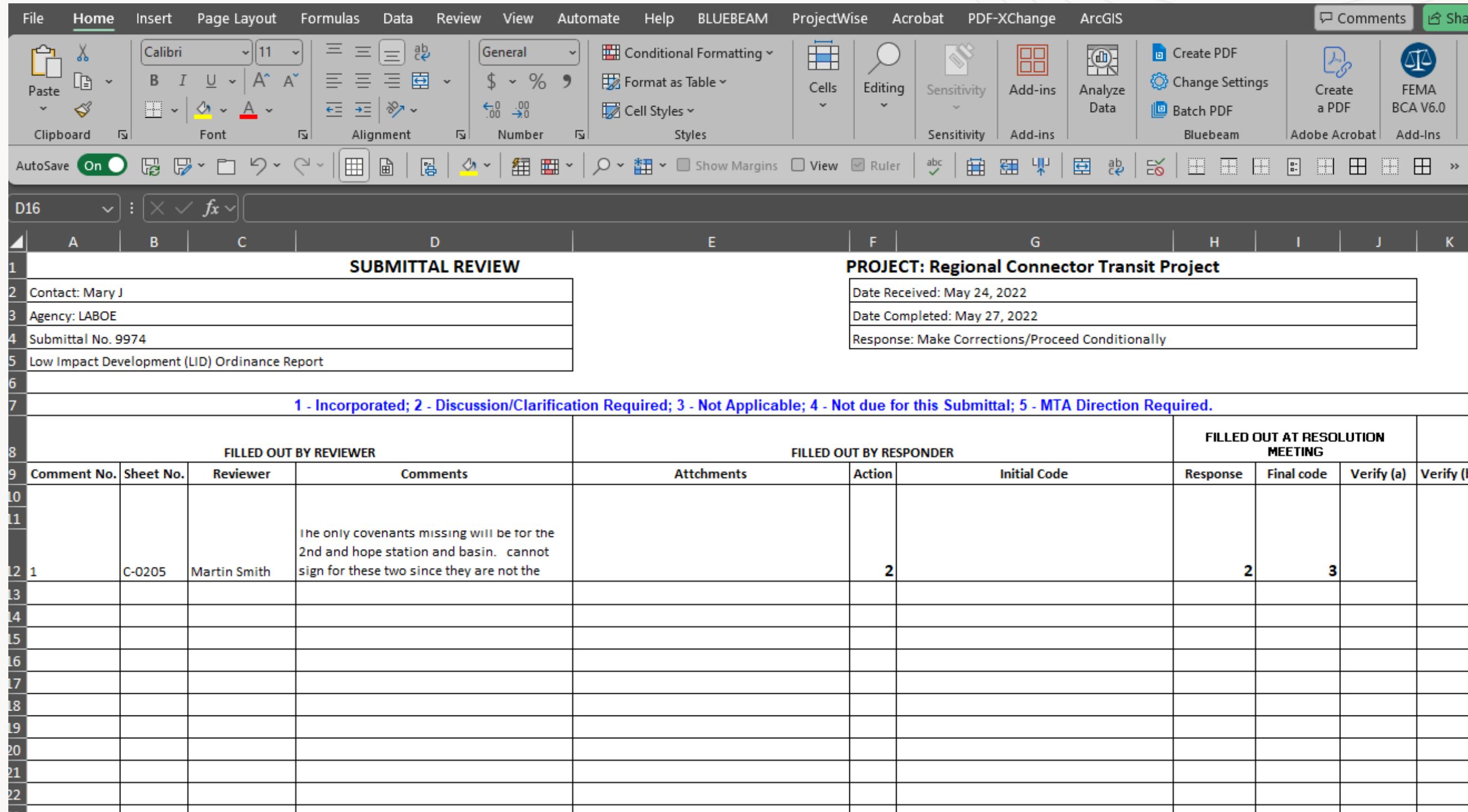
Document Content: The document contains several review sections. One section is titled 'City Planning (CPC)' and includes a table with 'Subject' and 'Comment' rows. Another section is titled 'SF Port (P)' and contains 'FINAL DETERMINATION' checkboxes. A 'REVIEWER STAMP' section is present at the bottom of each page.

Right Panel (Rev 1): Shows the document after review. The 'Check Mark' tool has been used to mark the 'Plan Sheets Reviewed' and 'Specifications Reviewed' checkboxes. The 'Comments Issued' checkbox is also checked. The 'REVIEWER STAMP' section remains the same.

Collaboration Window: A 'Planning review complete - Message (HTML)' window is open, indicating the review is complete. The 'Message' tab is selected. The 'To' field is populated with 'dpw-publicprojectpermits@sfdpw.org'. A purple arrow points from the 'Email' button in the document to the 'mailto:' link in the message window. The message body asks for project details: 'Please provide the permit number, street address or Bluebeam session number for the project you just reviewed:'.

Bluebeam Review Comment Exporting

The Long-Established Legacy Process



SUBMITTAL REVIEW

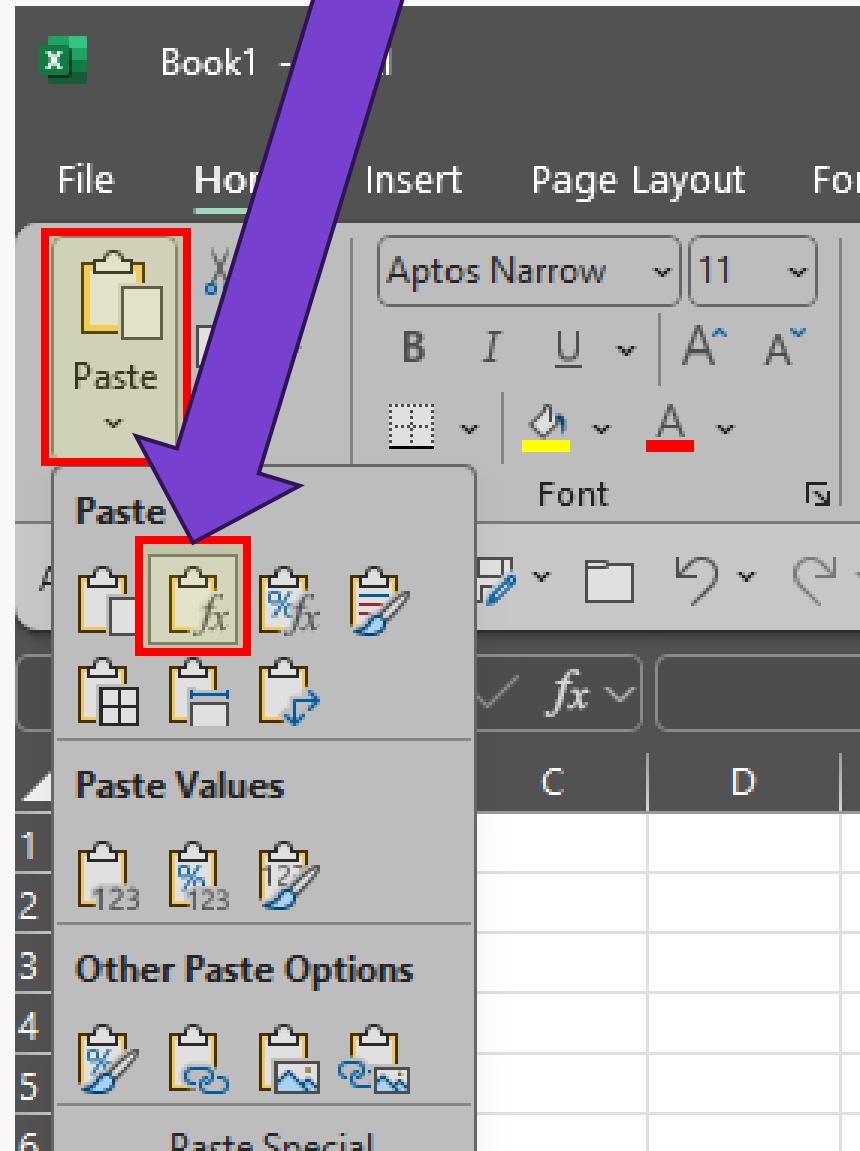
PROJECT: Regional Connector Transit Project

1 - Incorporated; 2 - Discussion/Clarification Required; 3 - Not Applicable; 4 - Not due for this Submittal; 5 - MTA Direction Required.

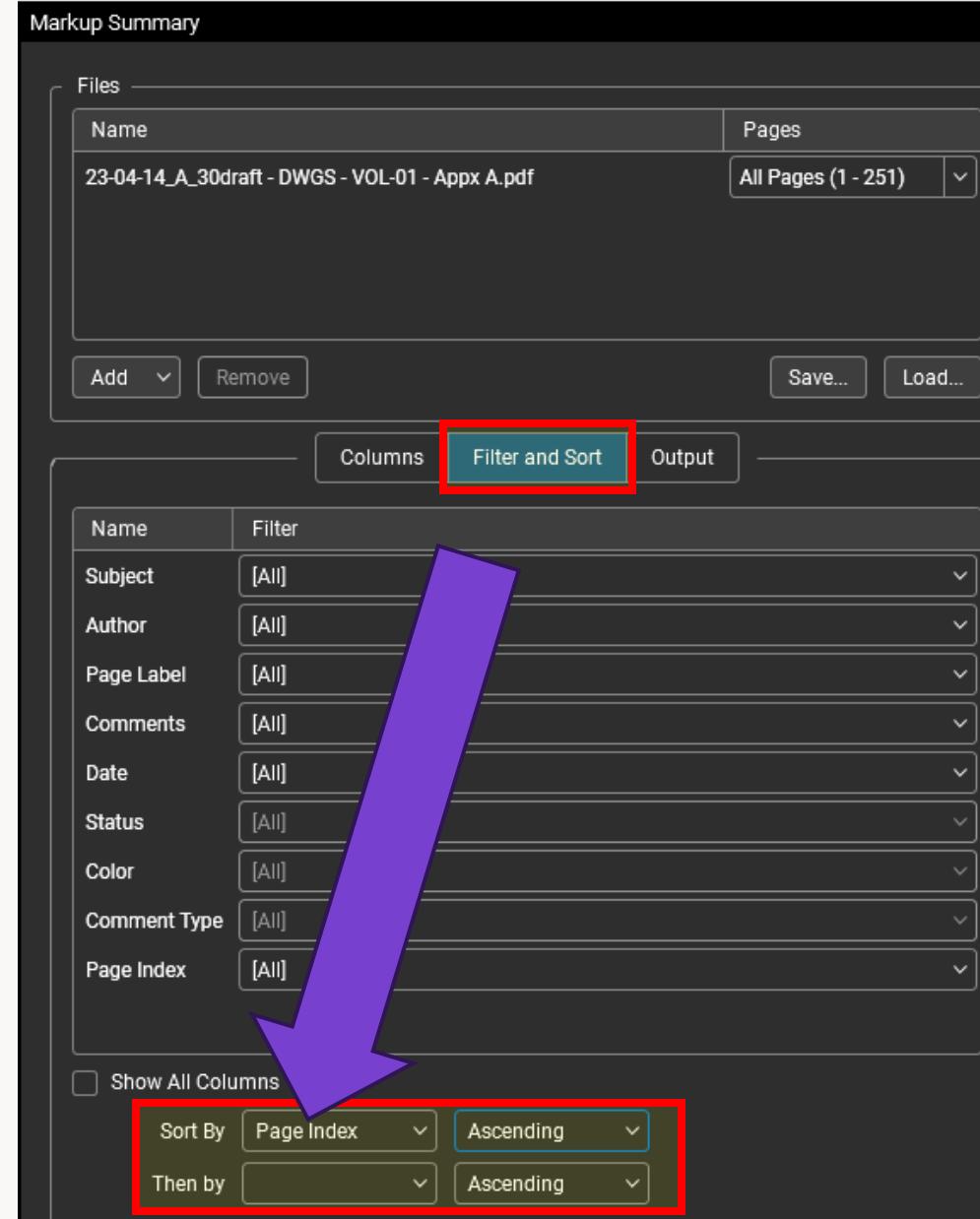
Comment No.	Sheet No.	Reviewer	Comments	Attachments	Action	Initial Code	Response	Final code	Verify (a)	Verify (b)
1	C-0205	Martin Smith	The only covenants missing will be for the 2nd and hope station and basin. cannot sign for these two since they are not the		2		2	3		
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

Bluebeam Review Exporting

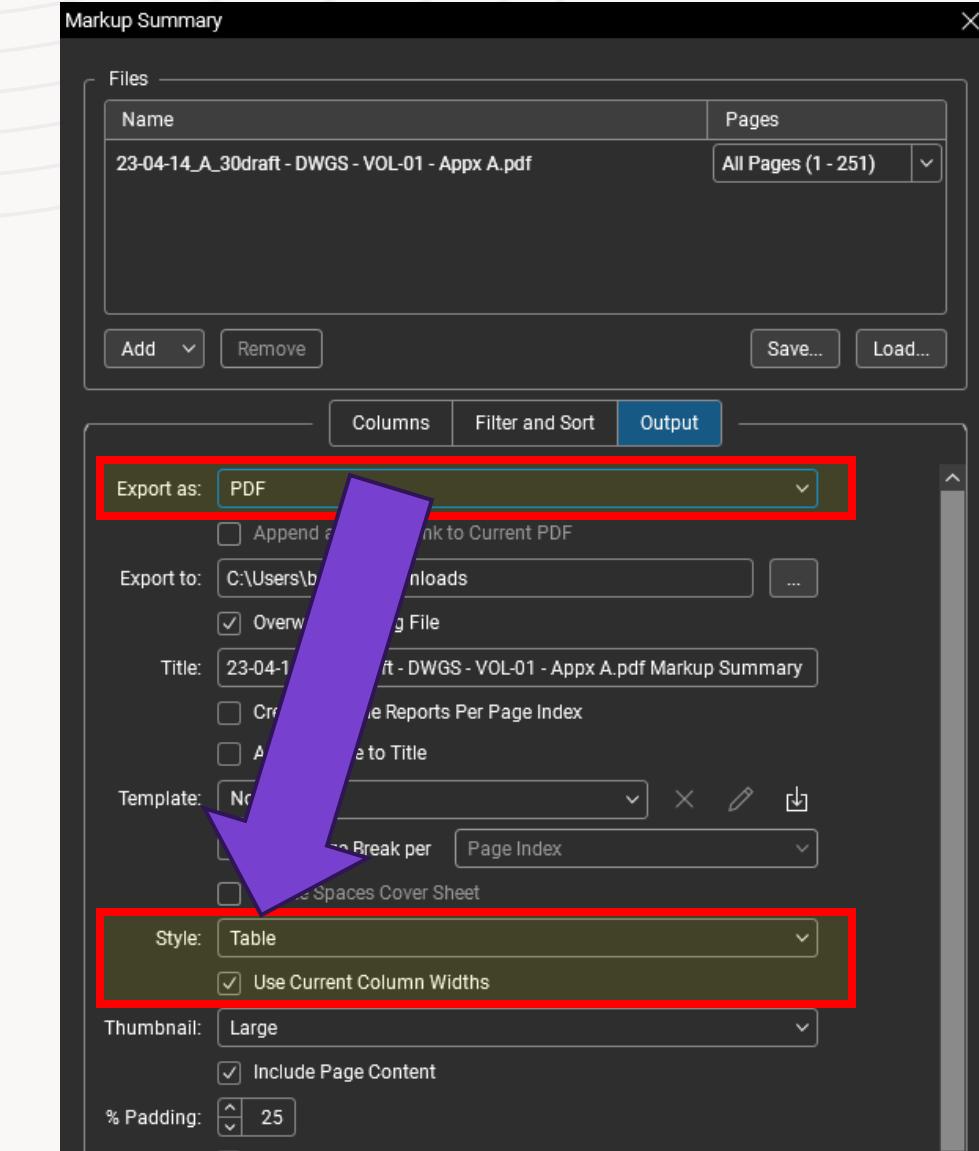
Top Three “Hacks” for Exporting Comments:



1. In Excel, Paste from the CSV into the Excel Template using the **“Formulas”** paste option



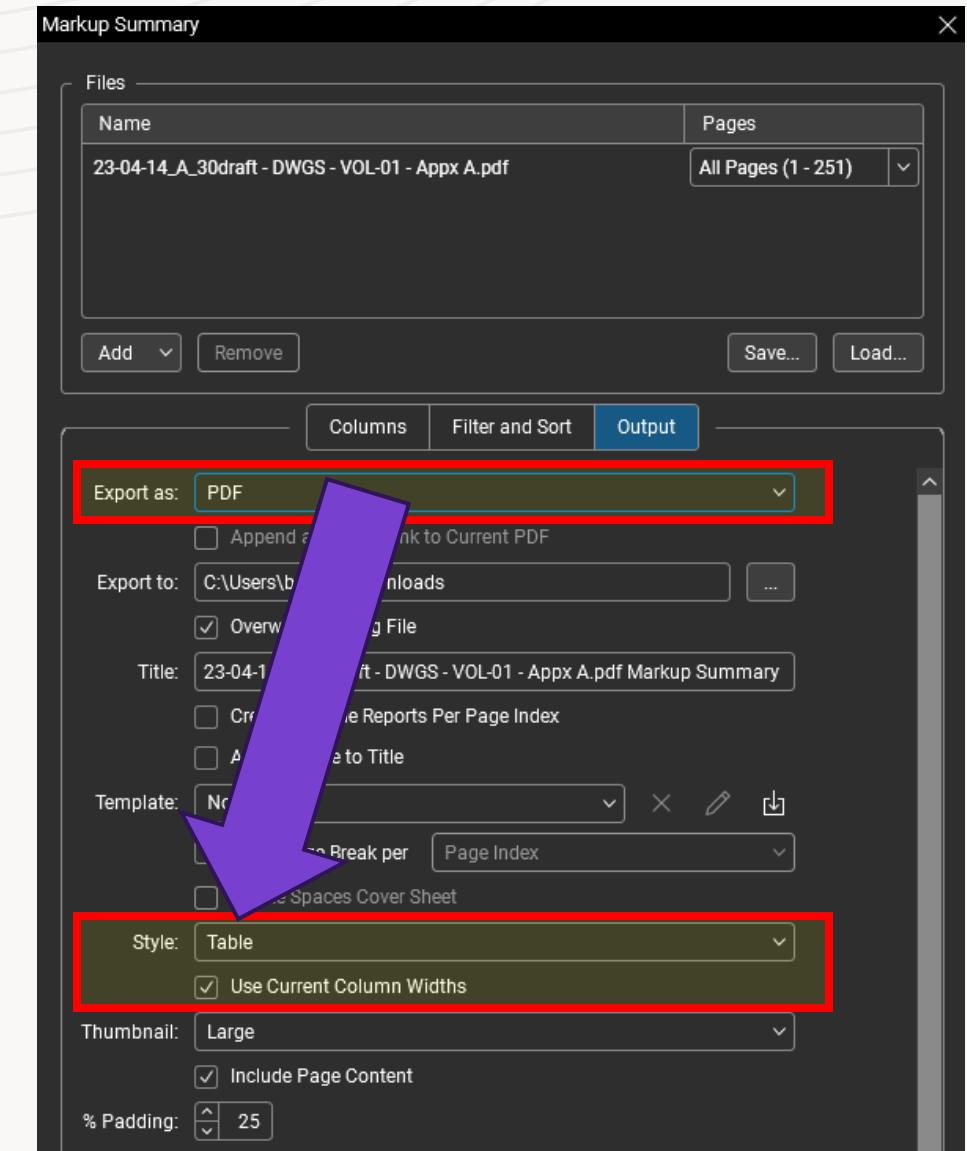
2. When Exporting Drawing Pages, Sort by **Page Index** First



3. For PDF Exports, use the **Table Style & Current Column Widths** Options

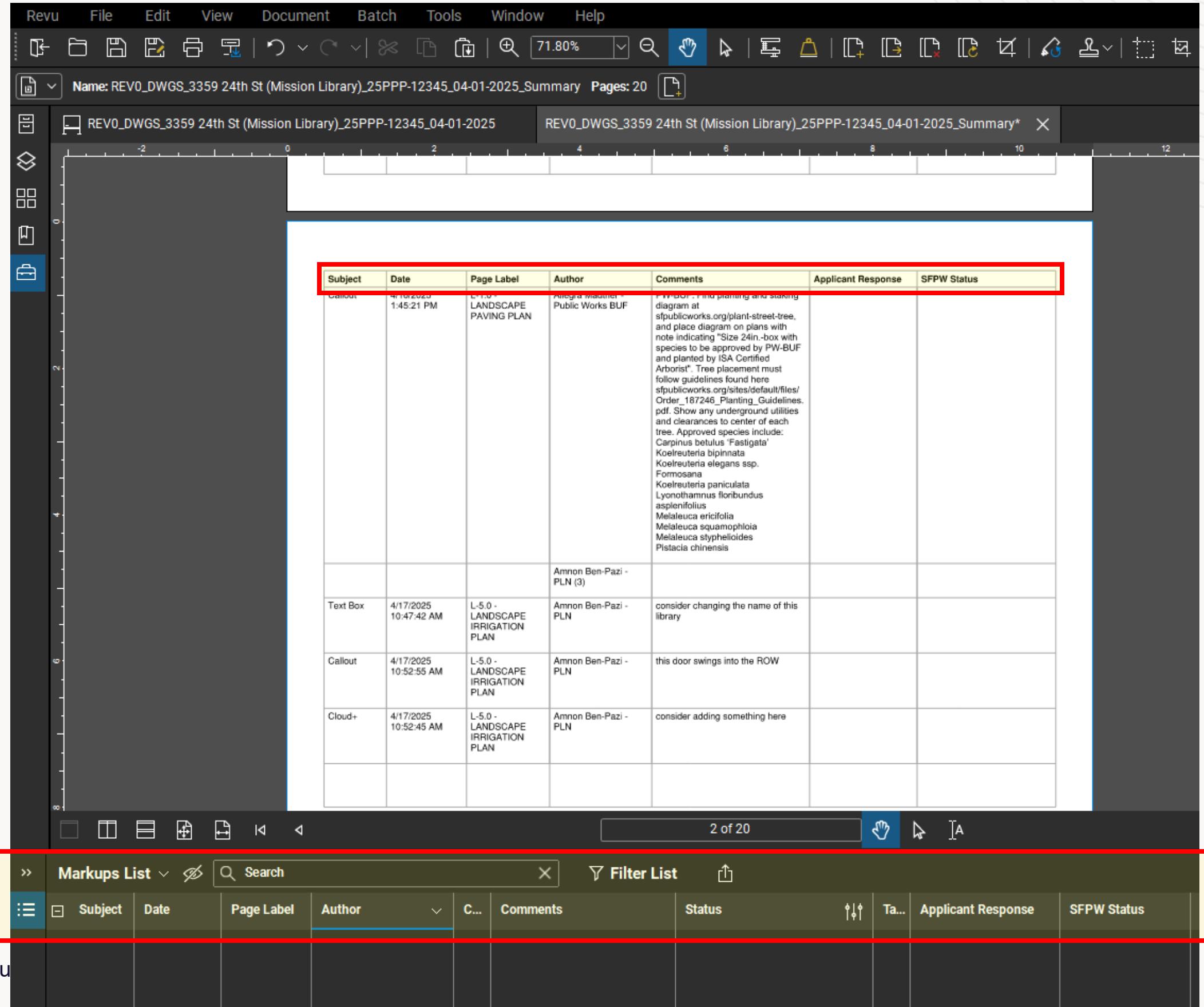
Bluebeam Review Exporting

Example for Applicant Response Worksheet:



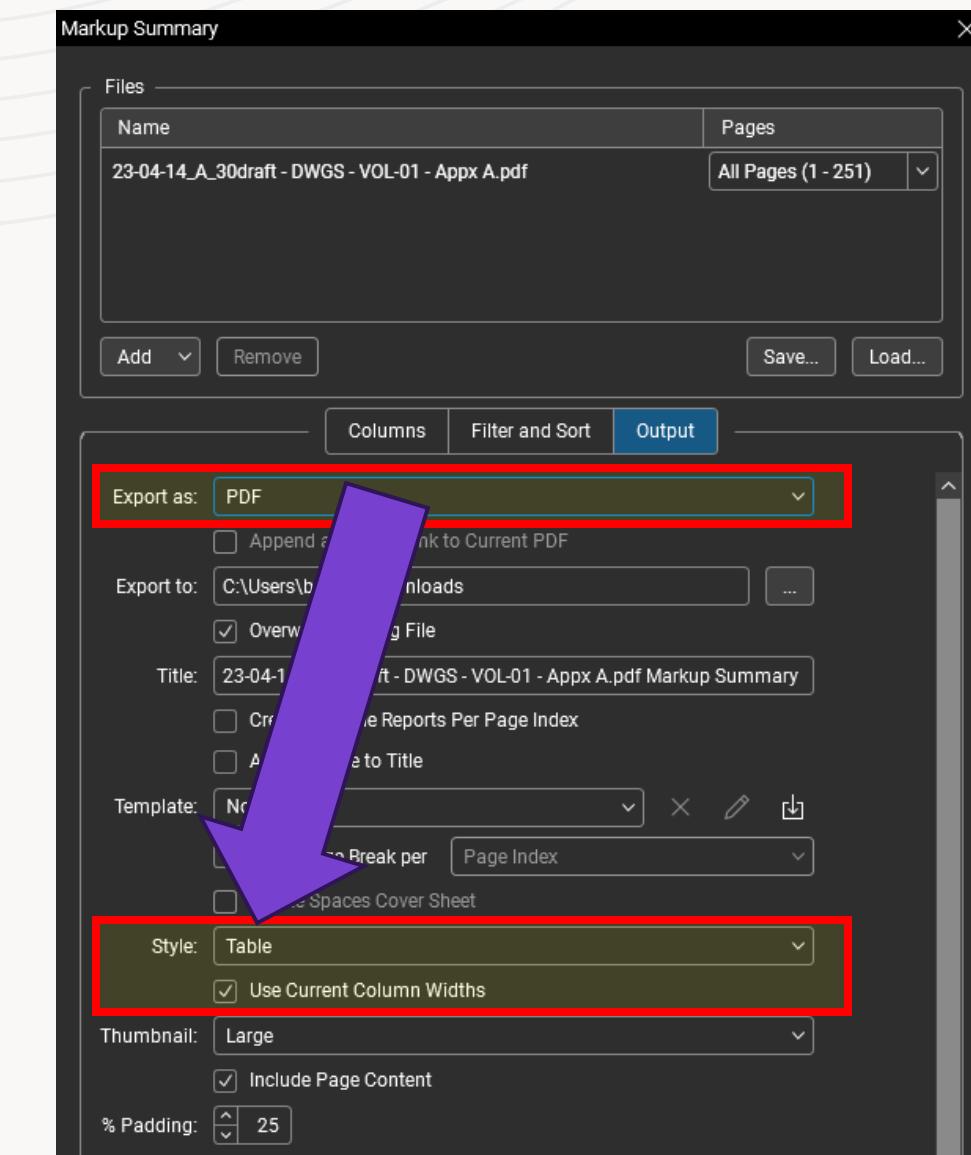
3. For PDF Exports, use the Table Style & Current Column Widths Options

Bluebeam Review Exporting



The screenshot shows the Bluebeam Review interface. On the left, a table of comments is displayed with columns for Subject, Date, Page Label, Author, Comments, Applicant Response, and SFPW Status. The 'Comments' column contains detailed notes about landscape planning and tree placement. On the right, a 'Markup Summary' window is open, showing a list of files and export options. A red box highlights the 'Markup Summary' window, and a purple arrow points from the 'Style' dropdown in the 'Output' tab to the 'Table' style option in the 'Style' dropdown in the 'Export as: PDF' tab.

Subject	Date	Page Label	Author	Comments	Applicant Response	SFPW Status
Callout	4/16/2025 1:45:21 PM	L-1.0 - LANDSCAPE PAVING PLAN	Amnon Ben-Pazi - Public Works BUF	Provide planting and staking diagram at stpublicworks.org/plant-street-tree , and place diagram on plans with note indicating "Size 24in-box with species to be approved by PW-BUF and planted by ISA Certified Arborist". Tree placement must follow guidelines found here stpublicworks.org/sites/default/files/Order_187246_Planting_Guidelines.pdf . Show any underground utilities and clearances to center of each tree. Approved species include: <i>Carpinus betulus 'Fastigata'</i> <i>Koelreuteria bipinnata</i> <i>Koelreuteria elegans</i> ssp. <i>Formosana</i> <i>Koelreuteria paniculata</i> <i>Lyonothamnus floribundus asplenifolius</i> <i>Melaleuca ericifolia</i> <i>Melaleuca squamophloia</i> <i>Melaleuca styphelioides</i> <i>Pistacia chinensis</i>		
Text Box	4/17/2025 10:47:42 AM	L-5.0 - LANDSCAPE IRRIGATION PLAN	Amnon Ben-Pazi - PLN (3)	consider changing the name of this library		
Callout	4/17/2025 10:52:55 AM	L-5.0 - LANDSCAPE IRRIGATION PLAN	Amnon Ben-Pazi - PLN	this door swings into the ROW		
Cloud+	4/17/2025 10:52:45 AM	L-5.0 - LANDSCAPE IRRIGATION PLAN	Amnon Ben-Pazi - PLN	consider adding something here		



The screenshot shows the 'Markup Summary' window with export settings. A red box highlights the 'Export as: PDF' tab, and a purple arrow points from the 'Style' dropdown in the 'Output' tab to the 'Table' style option in the 'Style' dropdown in the 'Export as: PDF' tab. The 'Style' dropdown is set to 'Table' and has the 'Use Current Column Widths' option checked.

Markup Summary

Files

Name	Pages
23-04-14_A_30draft - DWGS - VOL-01 - Appx A.pdf	All Pages (1 - 251)

Add Remove Save... Load...

Output

Export as: PDF

Export to: C:\Users\b... Downloads

Title: 23-04-14_A_30draft - DWGS - VOL-01 - Appx A.pdf Markup Summary

Template: No

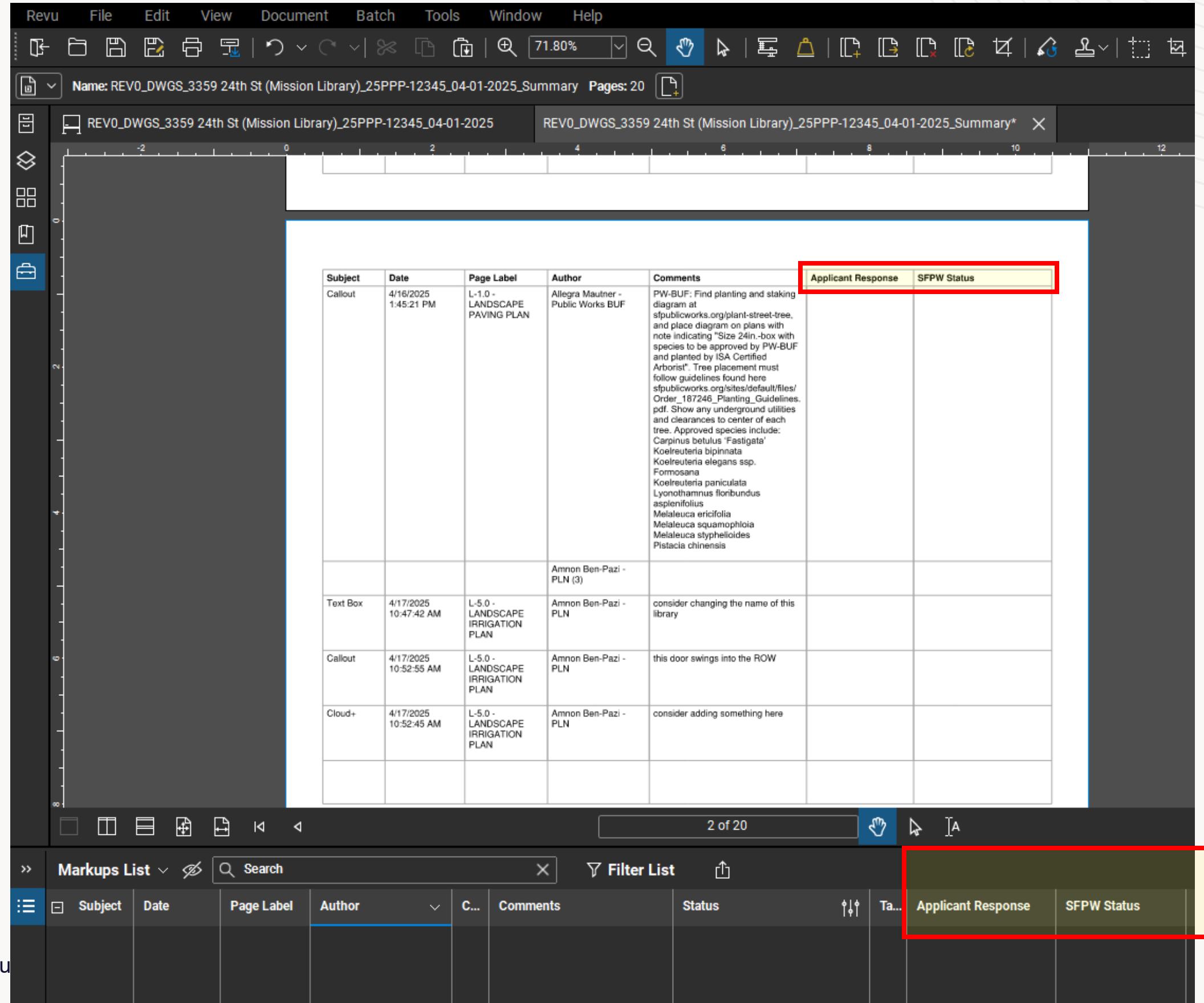
Style: Table

Thumbnail: Large

% Padding: 25

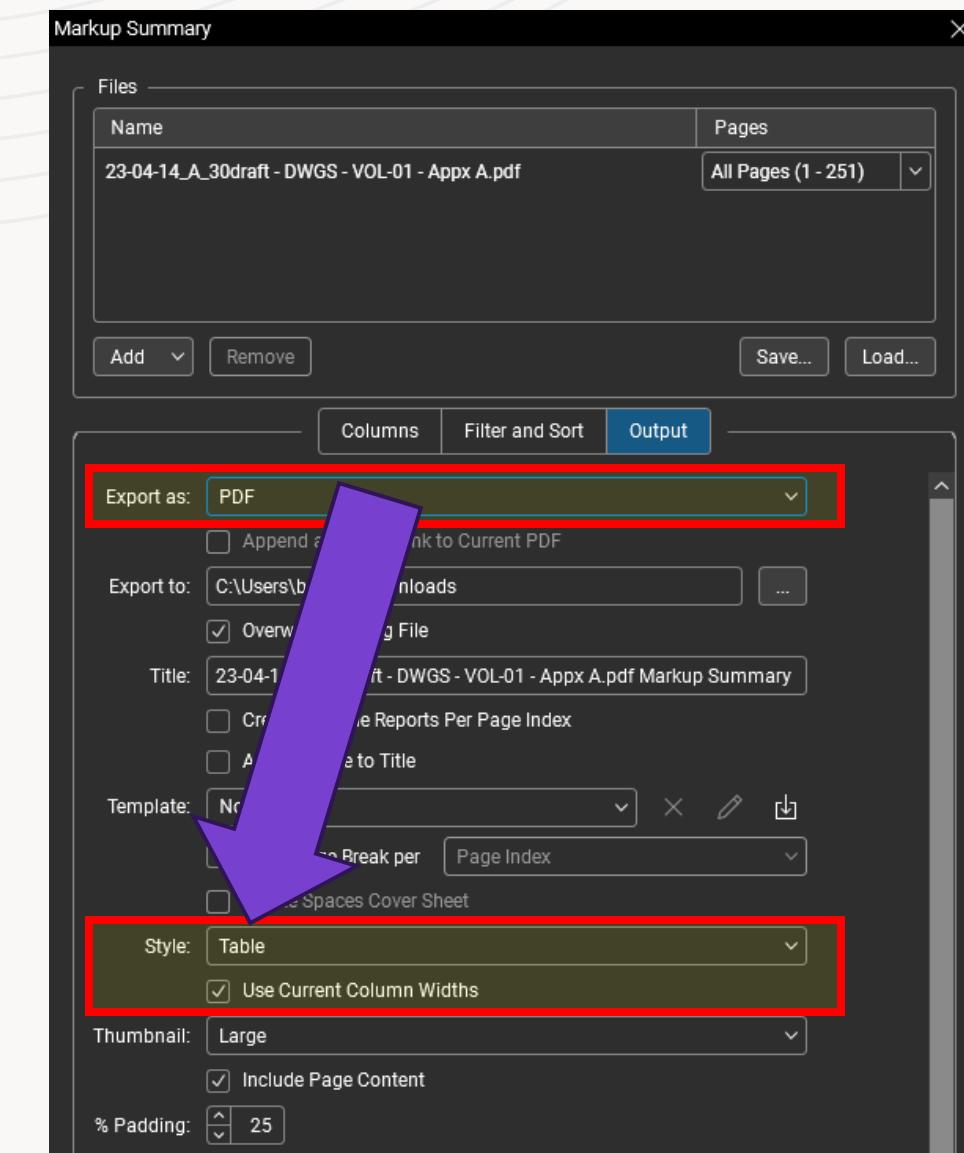
3. For PDF Exports, use the Table Style & Current Column Widths Options

Bluebeam Review Exporting



The screenshot shows the Bluebeam Review interface with a table of comments. The 'Applicant Response' and 'SFPW Status' columns are highlighted with a red box. The table has the following data:

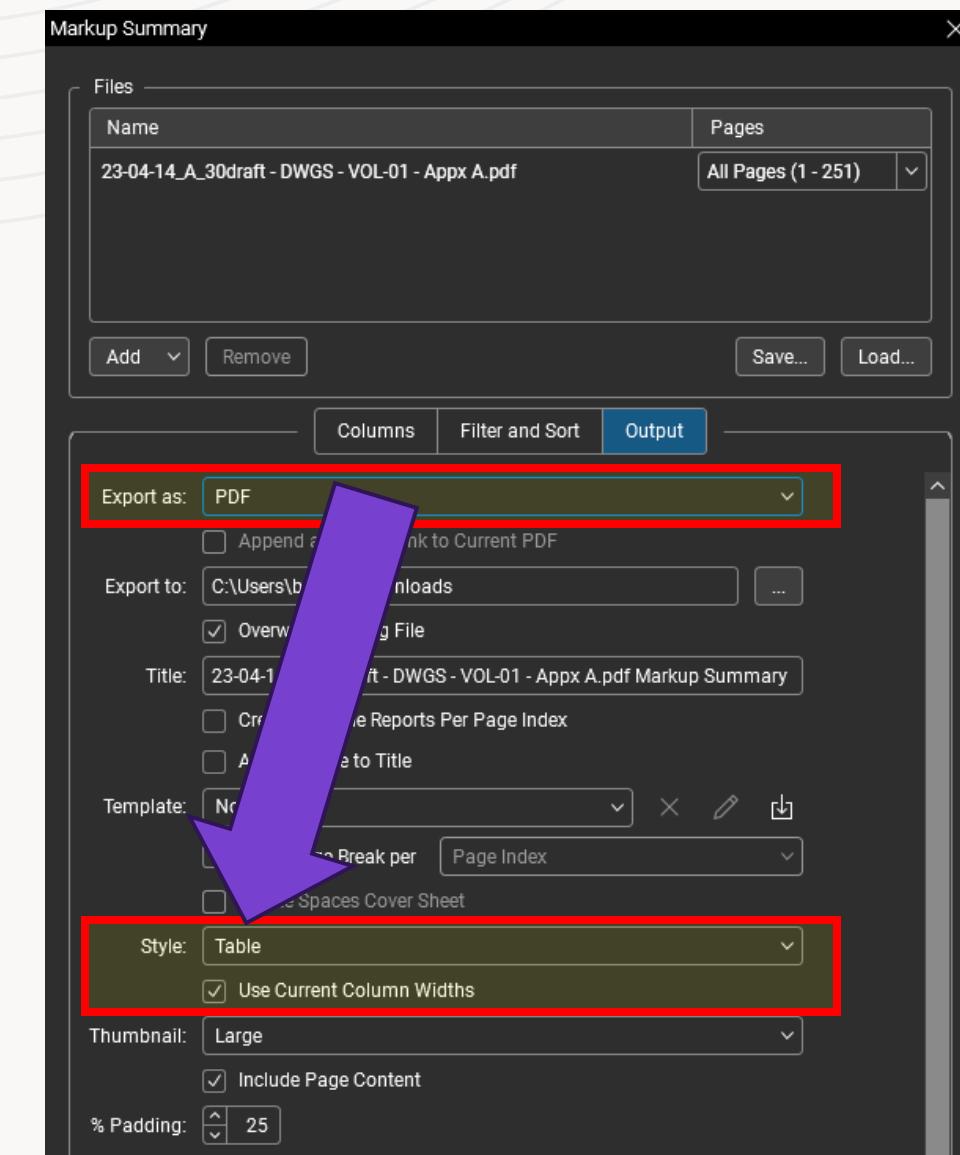
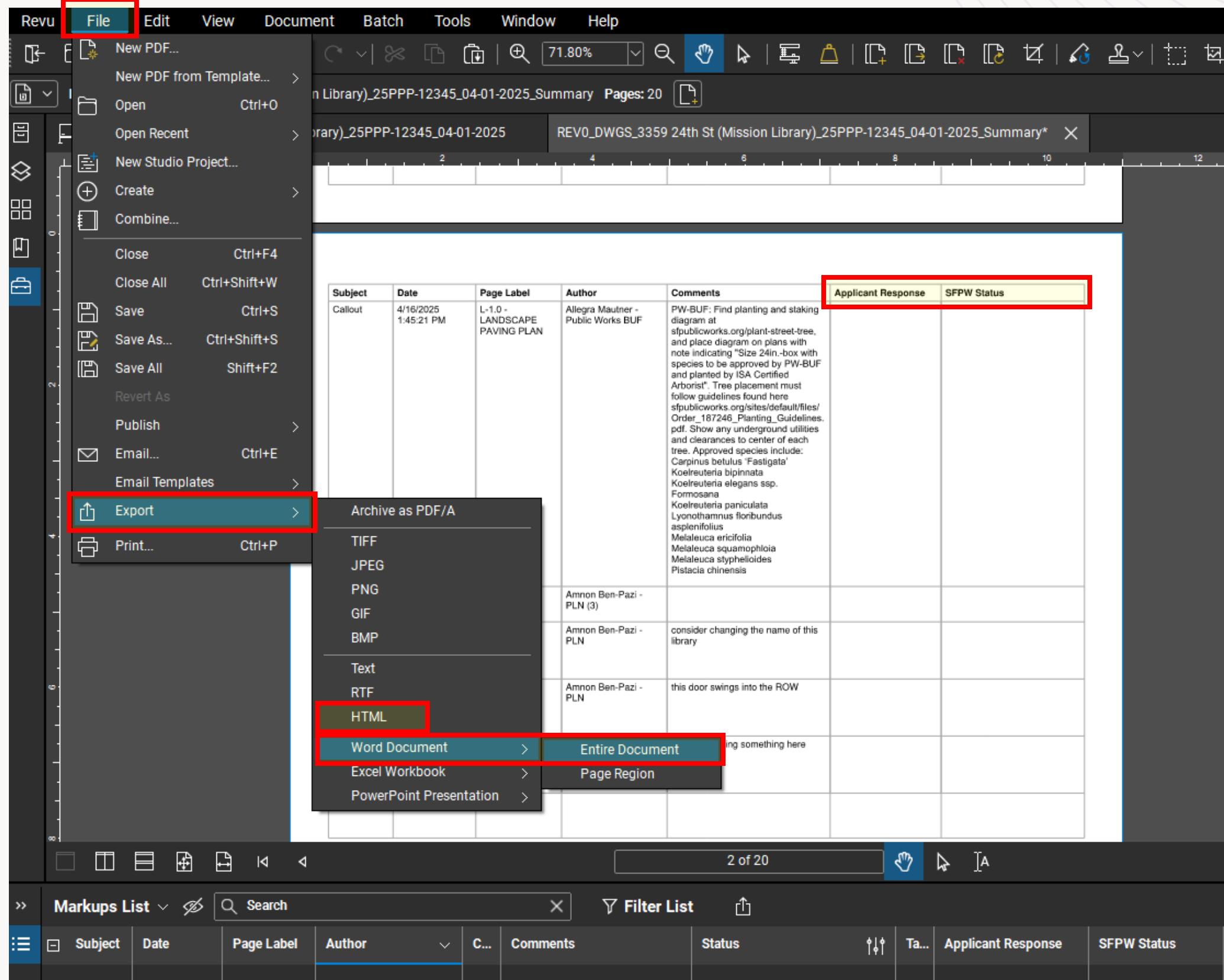
Subject	Date	Page Label	Author	Comments	Applicant Response	SFPW Status
Callout	4/16/2025 1:45:21 PM	L-1.0 - LANDSCAPE PAVING PLAN	Allegra Mautner - Public Works BUF	PW-BUF: Find planting and staking diagram at stpublicworks.org/plant-street-tree , and place diagram on plans with note indicating "Size 24in-box with species to be approved by PW-BUF and planted by ISA Certified Arborist". Tree placement must follow guidelines found here stpublicworks.org/sites/default/files/Order_187246_Planting_Guidelines.pdf . Show any underground utilities and clearances to center of each tree. Approved species include: <i>Carpinus betulus 'Fastigata'</i> <i>Koelreuteria bipinnata</i> <i>Koelreuteria elegans</i> ssp. <i>Formosana</i> <i>Koelreuteria paniculata</i> <i>Lyonothamnus floribundus asplenifolius</i> <i>Melaleuca ericifolia</i> <i>Melaleuca squamophloia</i> <i>Melaleuca styphelioides</i> <i>Pistacia chinensis</i>		
			Amnon Ben-Pazi - PLN (3)			
Text Box	4/17/2025 10:47:42 AM	L-5.0 - LANDSCAPE IRRIGATION PLAN	Amnon Ben-Pazi - PLN	consider changing the name of this library		
Callout	4/17/2025 10:52:55 AM	L-5.0 - LANDSCAPE IRRIGATION PLAN	Amnon Ben-Pazi - PLN	this door swings into the ROW		
Cloud+	4/17/2025 10:52:45 AM	L-5.0 - LANDSCAPE IRRIGATION PLAN	Amnon Ben-Pazi - PLN	consider adding something here		



The screenshot shows the Bluebeam Markup Summary dialog box. The 'Export as: PDF' dropdown and the 'Style: Table' dropdown are highlighted with red boxes. A purple arrow points from the 'Style: Table' box down to the 'Use Current Column Widths' checkbox. The dialog box also shows other export options like 'Append a Link to Current PDF' and 'Overwrite Existing File'.

3. For PDF Exports, use the Table Style & Current Column Widths Options

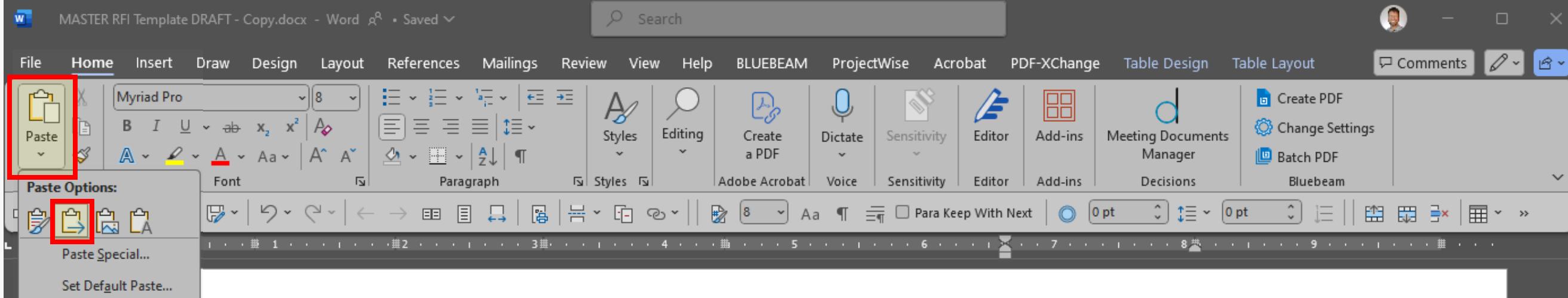
Bluebeam Review Exporting



3. For PDF Exports, use the **Table Style & Current Column Widths Options**

Bluebeam Review Exporting

Applicant Response:



Below is a summary of comments regarding the submitted application. Please address each issue and **include a response below. Submit the responses, as well as one PDF copy of the full size stamped and signed revised plans to continue processing this permit.** If you have any questions, feel free to contact me.

Subject	Date	Page Label	Author	Comments	Applicant Response	SFPW Status
Callout	4/16/2025 1:45:17 PM	L-1.0 - LANDSCAPE PAVING PLAN	Allegra Mautner - Public Works BUF	PW-BUF: Visit sfppublicworks.org/treeprotection to find our "Tree Protection Site Plan and Cover Sheet" and submit to urbanforestrypermits@sfdpw.org . Place the "Street Tree Protection" diagram found on same site on plans with dimensions for protection of existing <u>tree</u> . The Tree Protection Plan invoice fee must be paid by final sign-off.		
Cloud+	4/16/2025 1:44:53 PM	L-1.0 - LANDSCAPE PAVING PLAN	Allegra Mautner - Public Works BUF	PW-BUF: Remove proposed landscaping from plans OR apply for proposed Sidewalk Landscaping at sfppublicworks.org/services/permits/sidewalk-landscaping . Find requirements for design and installation on same page and ensure that existing landscaping is up to code. Specifically, show required 4' accessible path at center of parking stall and ensure <u>"permeable landscape"</u> meets		

Top 10 Things you are doing **WRONG** in Bluebeam!

Not in any order...

Overarching Setup (Before you get started)

1. **Not planning for the administration-side** of Sessions & Projects
2. **Not creating/customizing a Profile** - at least custom statuses, and a custom toolbar (vs. using markups from the pulldown)
3. **Not Prescribing consistent Drawing Title Blocks** (location, page numbering, etc.) as well as overall PDF Formatting (Bookmarks, Page Labels, etc.)

Creating the Documents

4. **Not creating Bookmarks / Page Labels** in drawings and Not creating Bookmarks in Documents

Setting up the Documents for Review

5. **Not Creating ONE Bluebeam Session for ALL Phases** (i.e. Creating Single Sessions at each phase)
6. **Not linking Sessions to Projects**
7. **Not using Status Menus** in Markups for Communication and Back Check

Reviewing the Documents

8. **Using Red** as your markup color
9. **Not using MyTools Toolbox** (for keyboard shortcuts)
10. **Not using Markups List Filters** (with Statuses, Colors, Exports etc.)

Thank You!

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