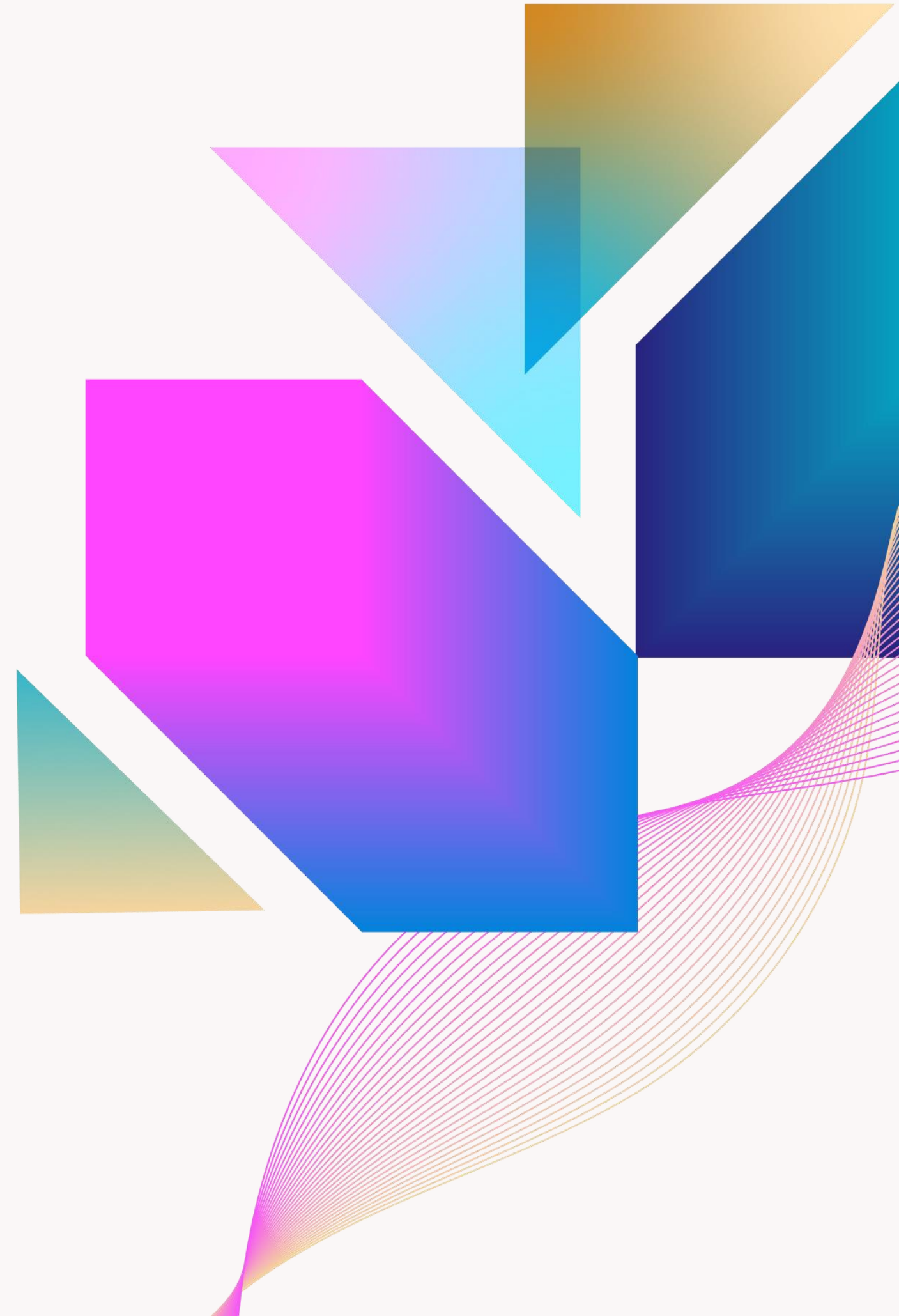




Customizations, Workflows & Best Practices: Streamlining Large-Agency Design Reviews & Permit Agency Reviews

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



San Bernardino Community College District

\$500K, 2018



Los Angeles Unified School District

\$7B bond 2017-2018



University of California San Diego

2021



Los Angeles Community College District

\$6B bond 2017



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

90,000 permits, 2021 - 2025



Department of General Services

2018



San Francisco Public Works

2025



Los Angeles World Airports

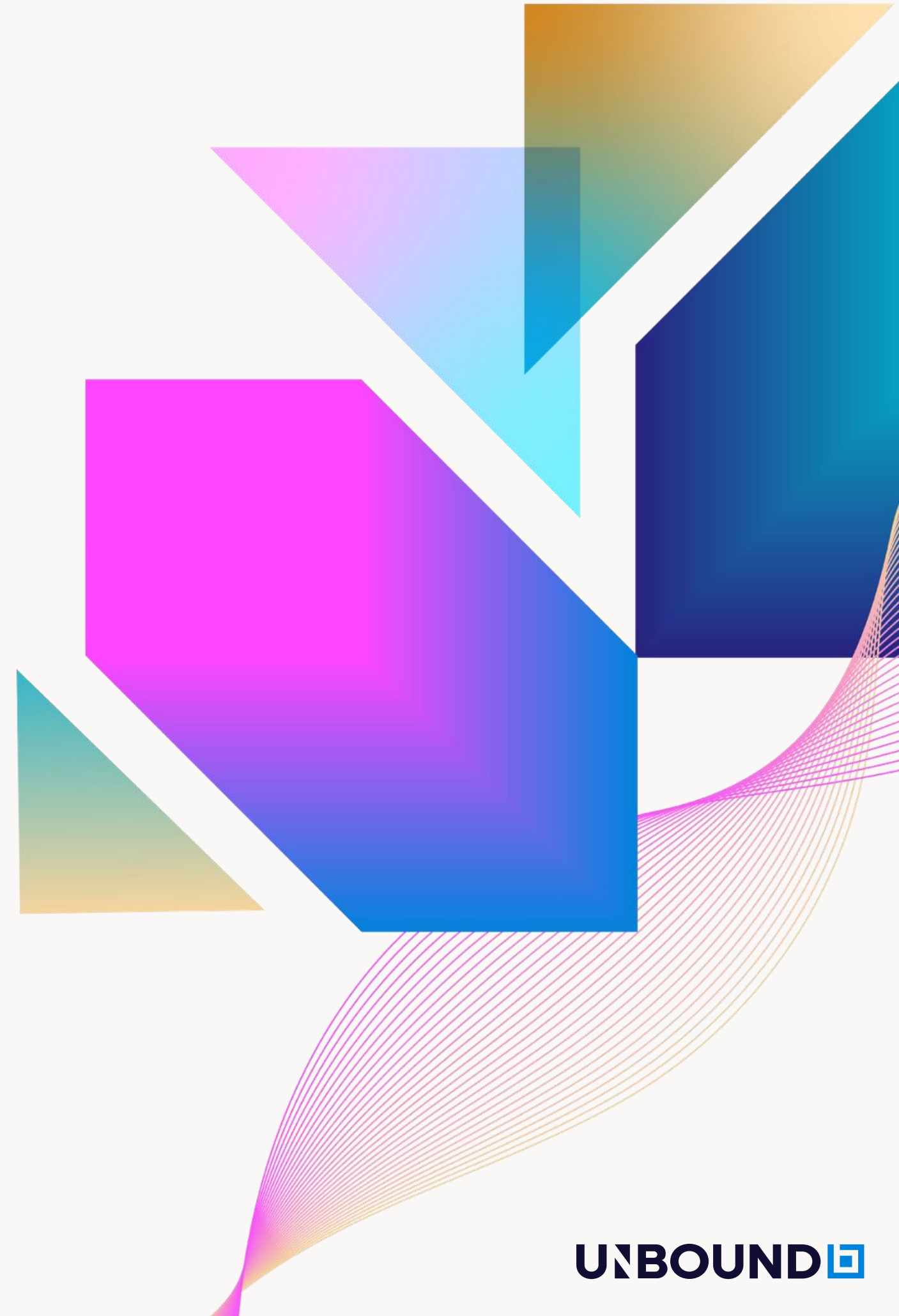
2022-2023



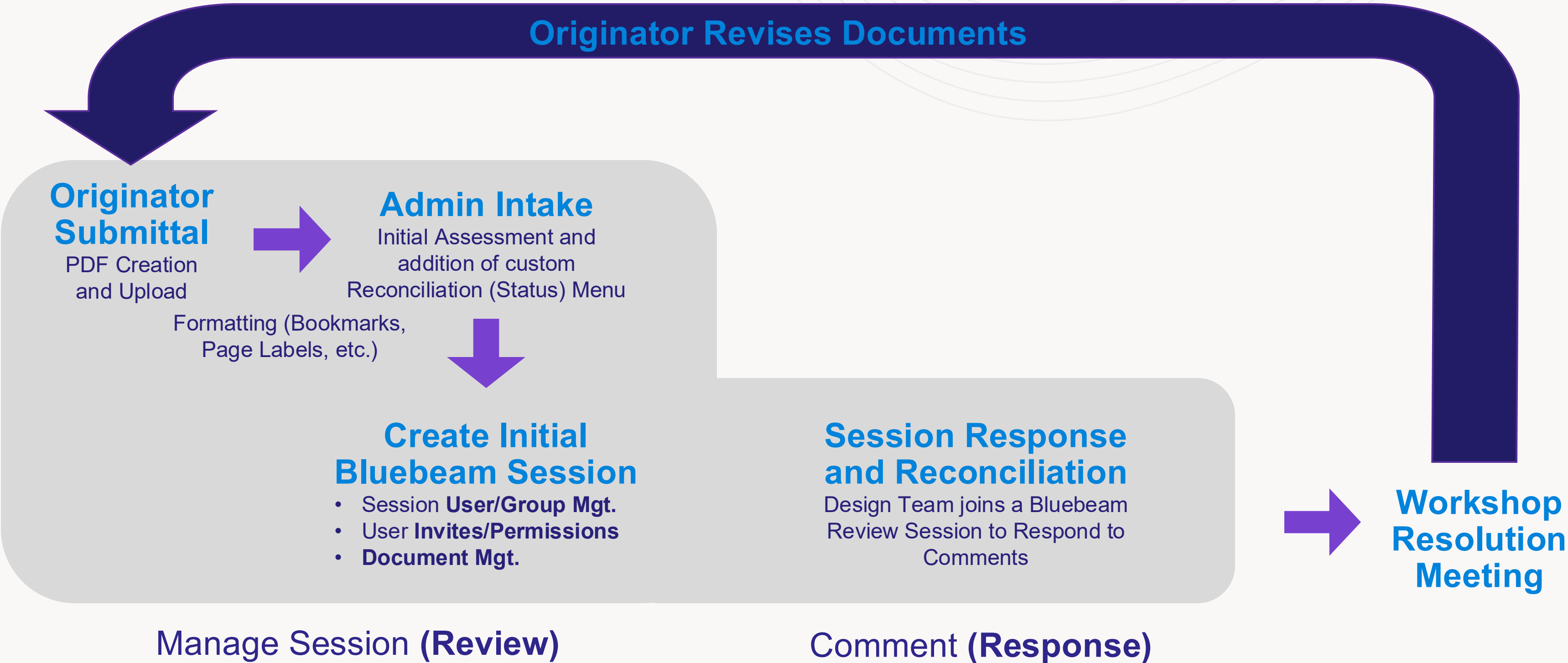
US Department of State

2022

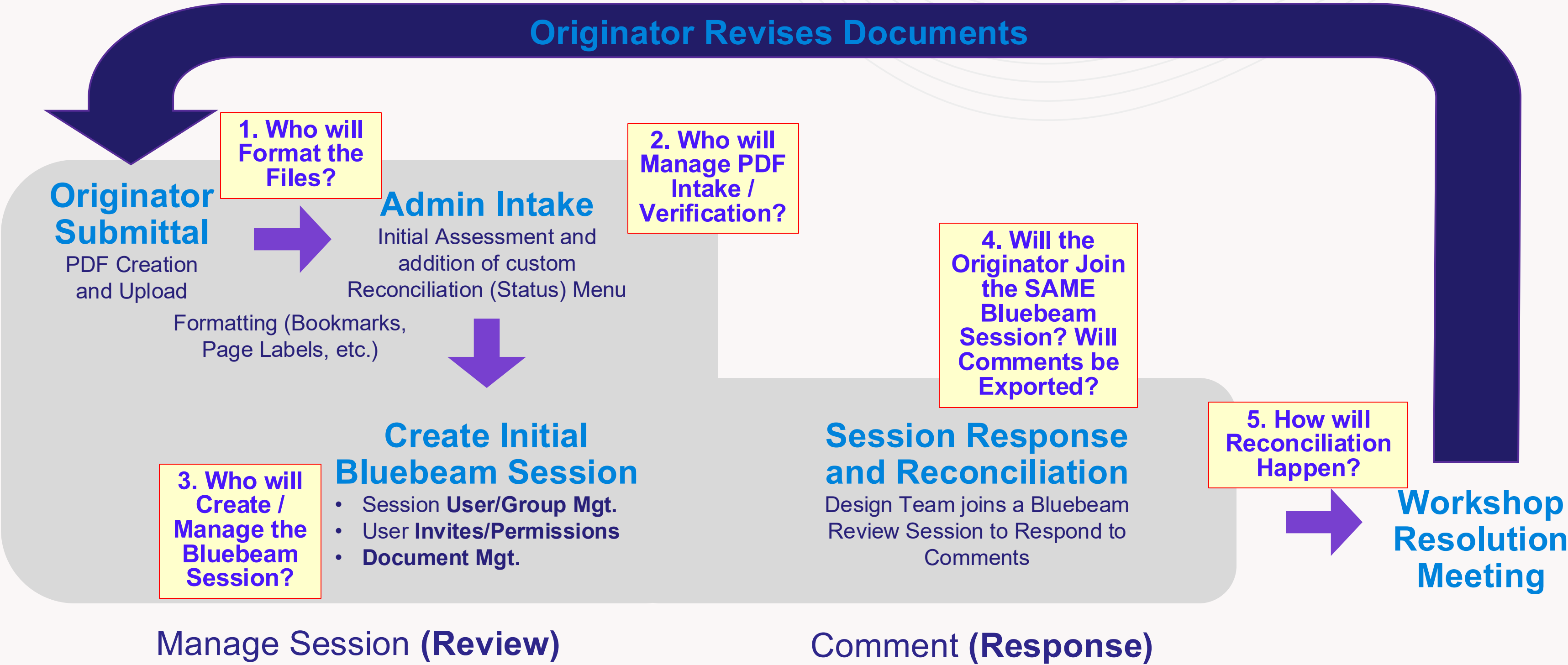
Best Practices and Workflows: Implementation



Bluebeam Review Workflow: Studio Session Setup



Bluebeam Review Workflow: Studio Session Setup



Bluebeam Implementation



Bluebeam Implementation



Exhibit A2 – Workflow for Design Build (DB)

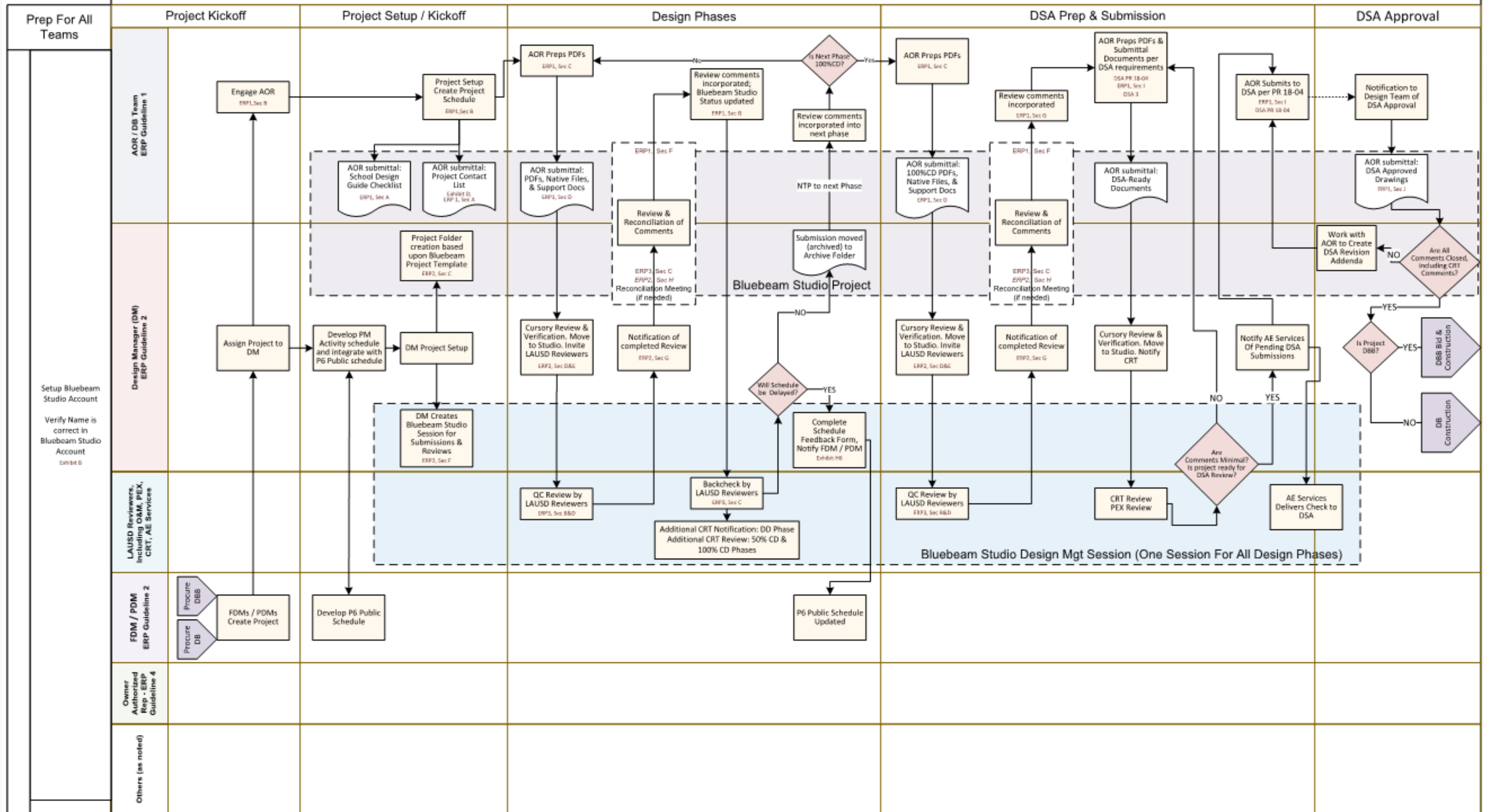
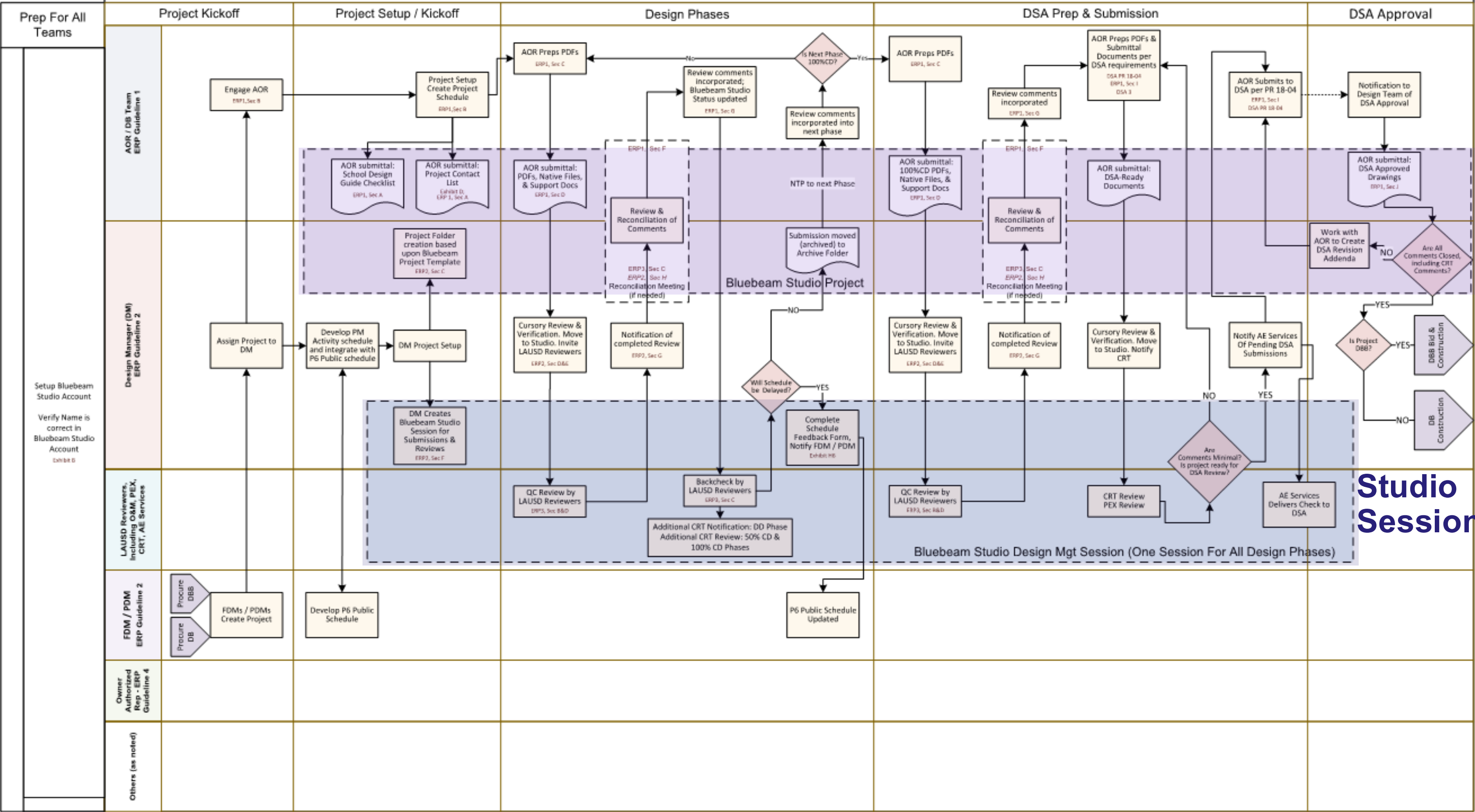


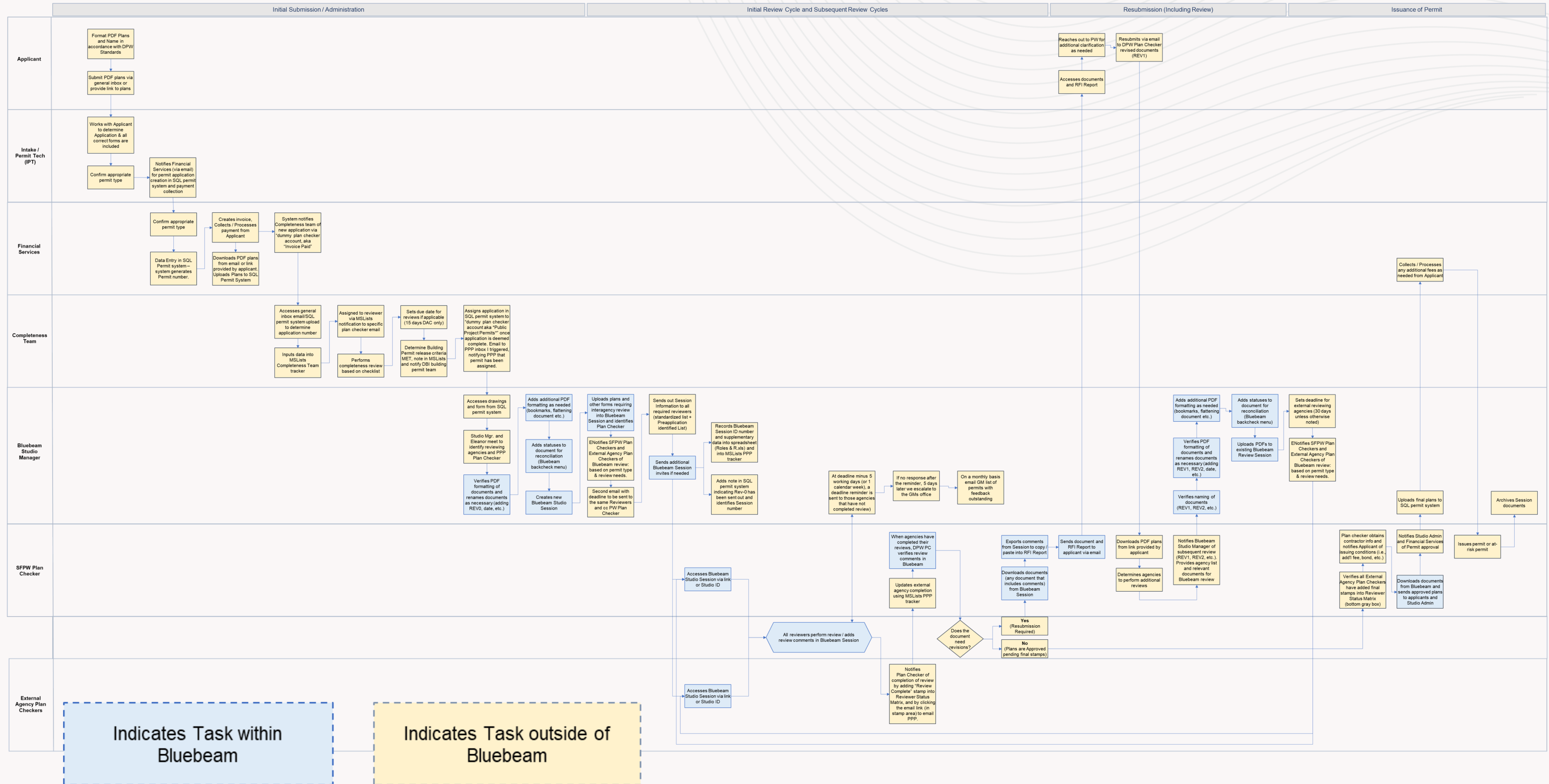
Exhibit A2 – Workflow for Design Build (DB)



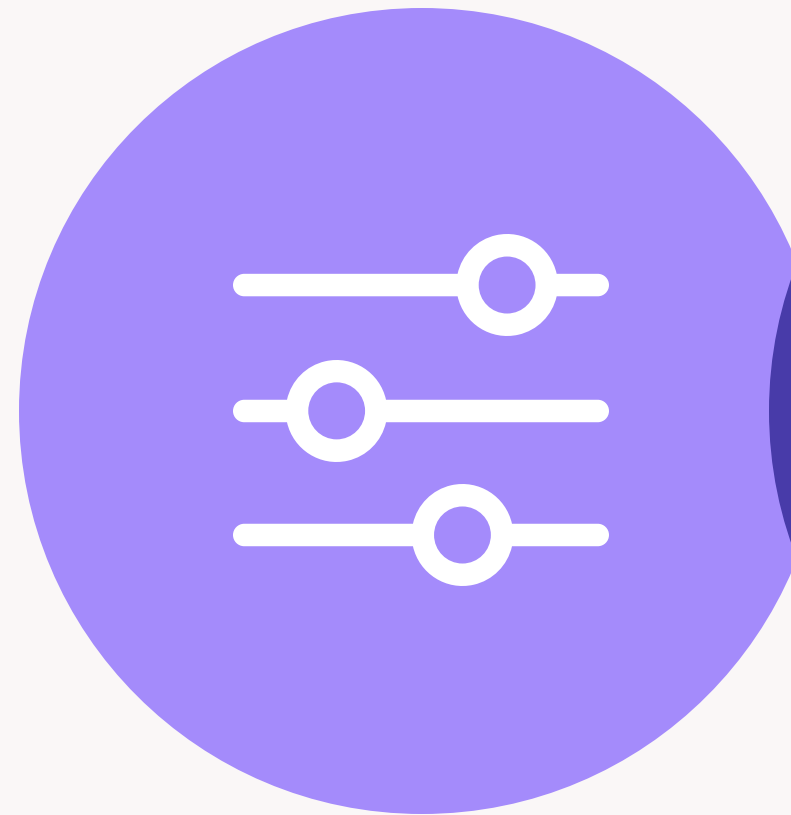
Studio Project

Studio Session(s)

Bluebeam Studio Workflow – SF Public Works

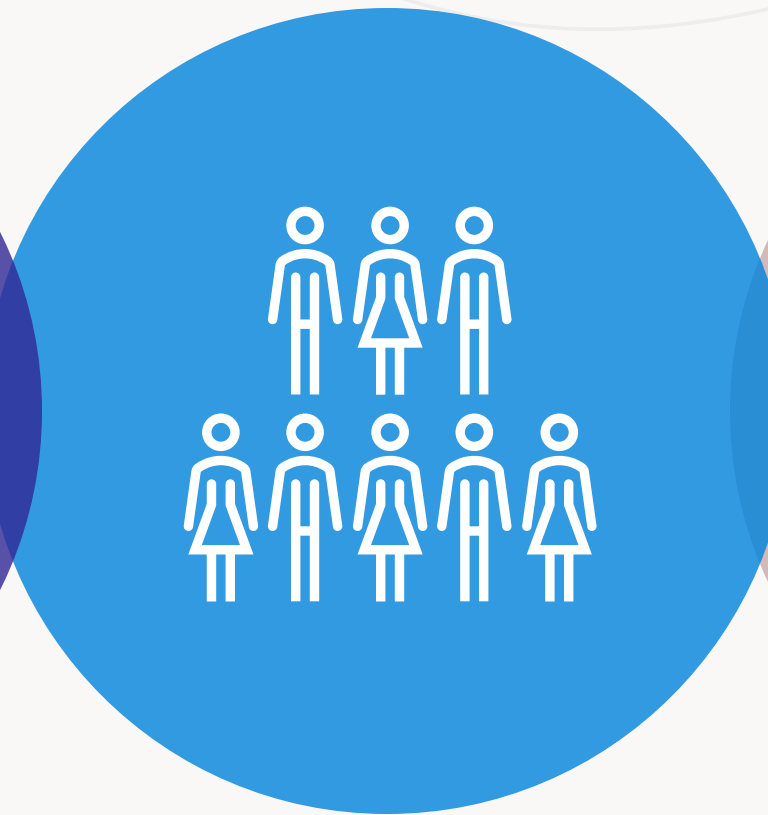
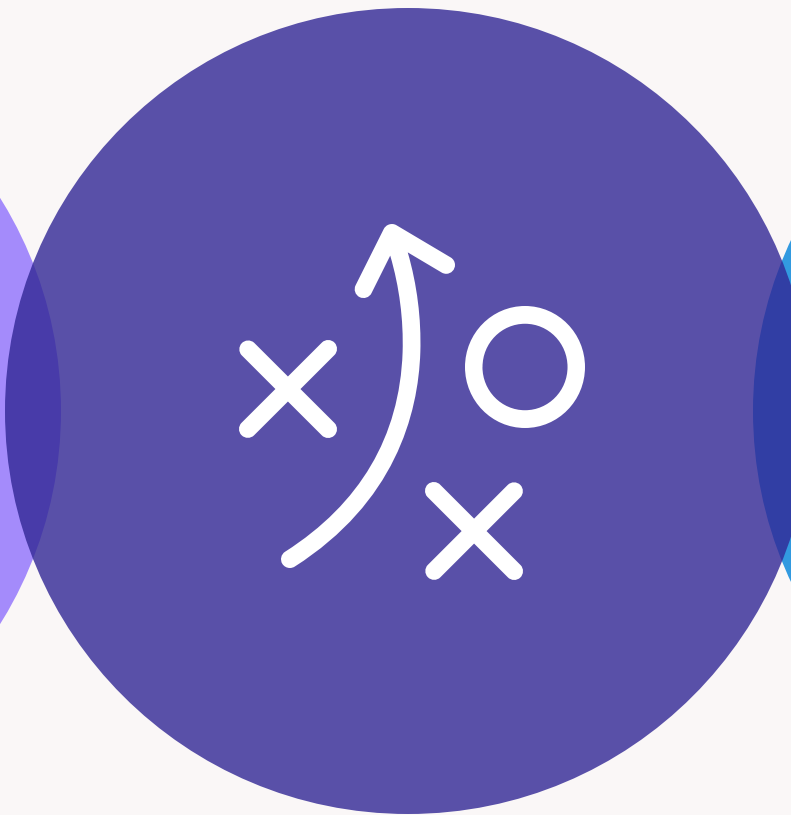


Why Workflow?



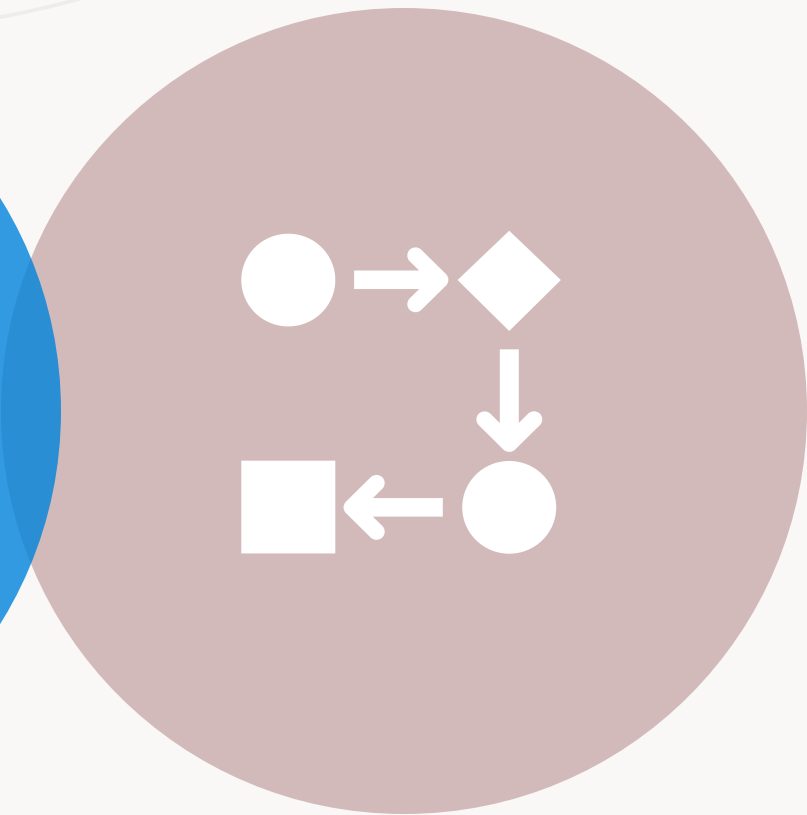
Workflow includes **all elements of the process**
(such as portals,
administration functions,
ball in court, approval, etc.)

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



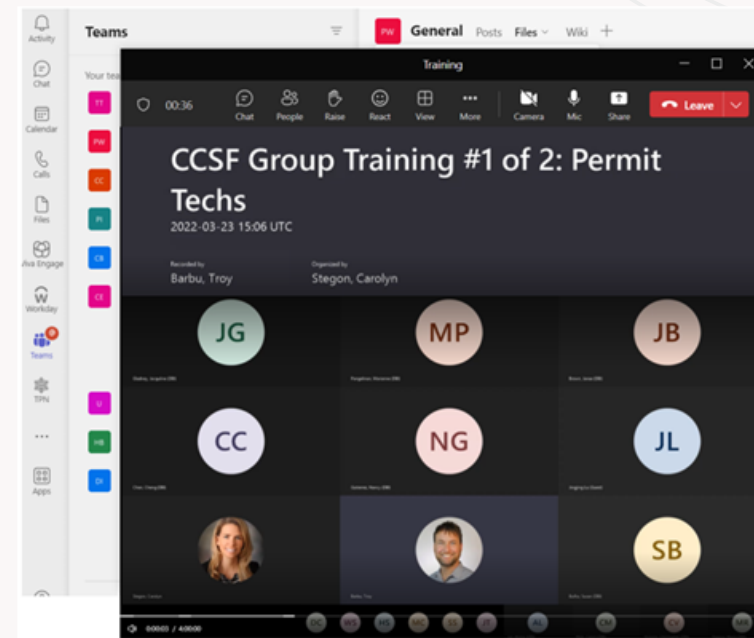
Training & Procedures

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

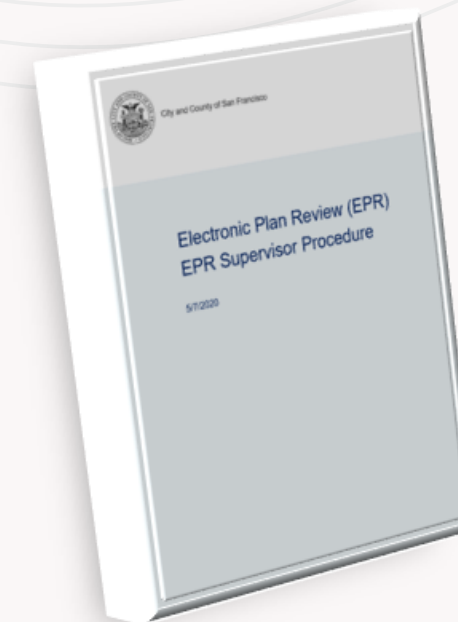
The Best Training is...

- **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

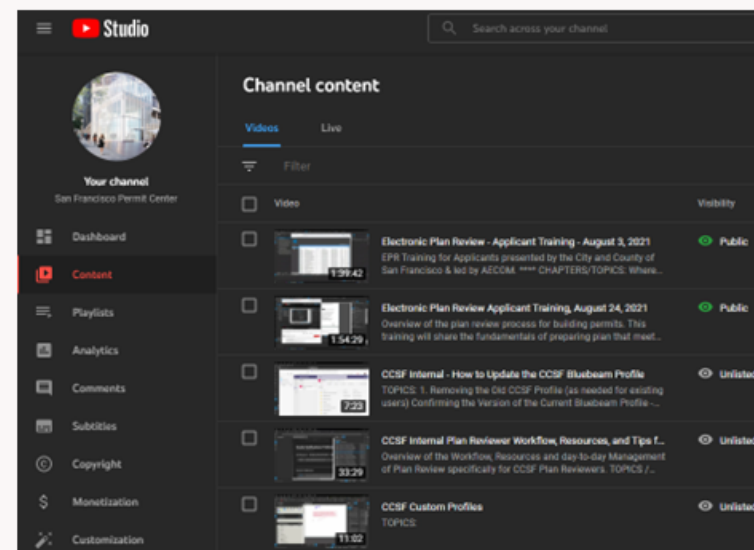
Synchronous



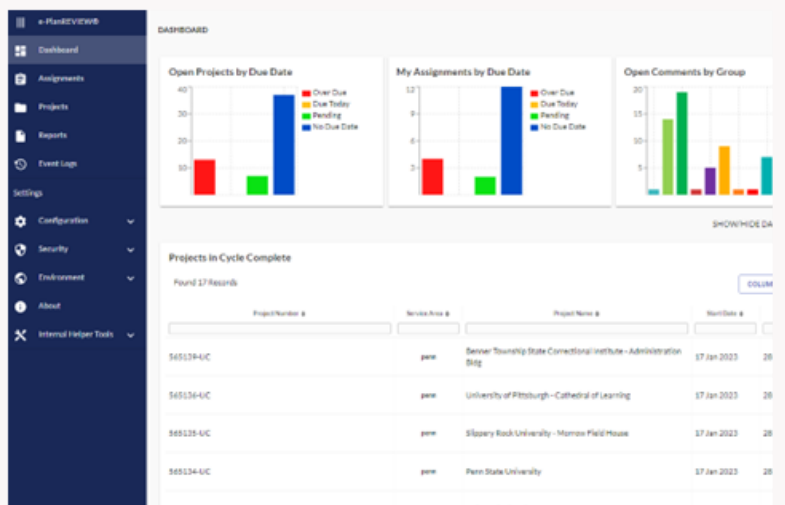
Manuals / SOPs



Asynchronous



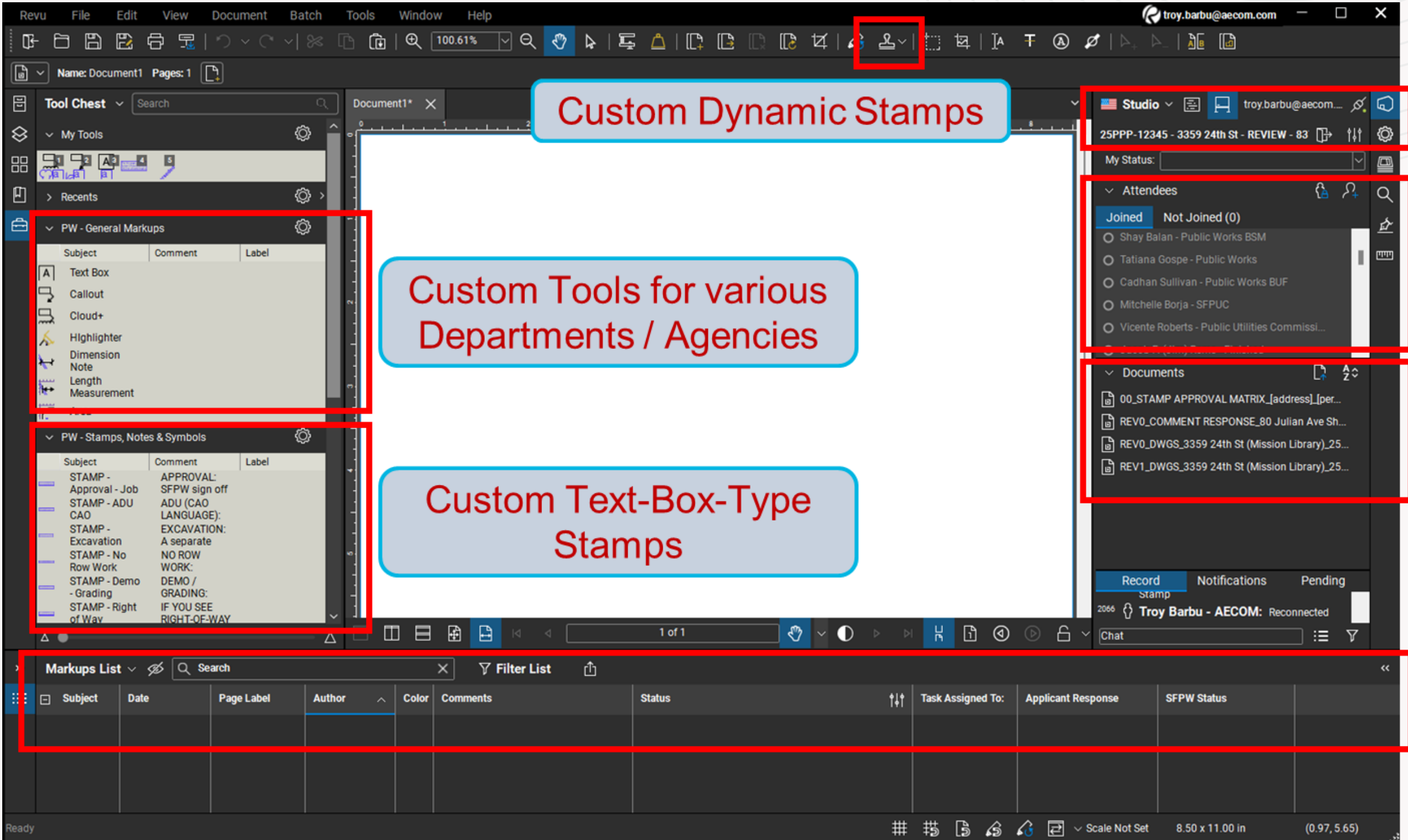
Pilot Projects / Sandboxes



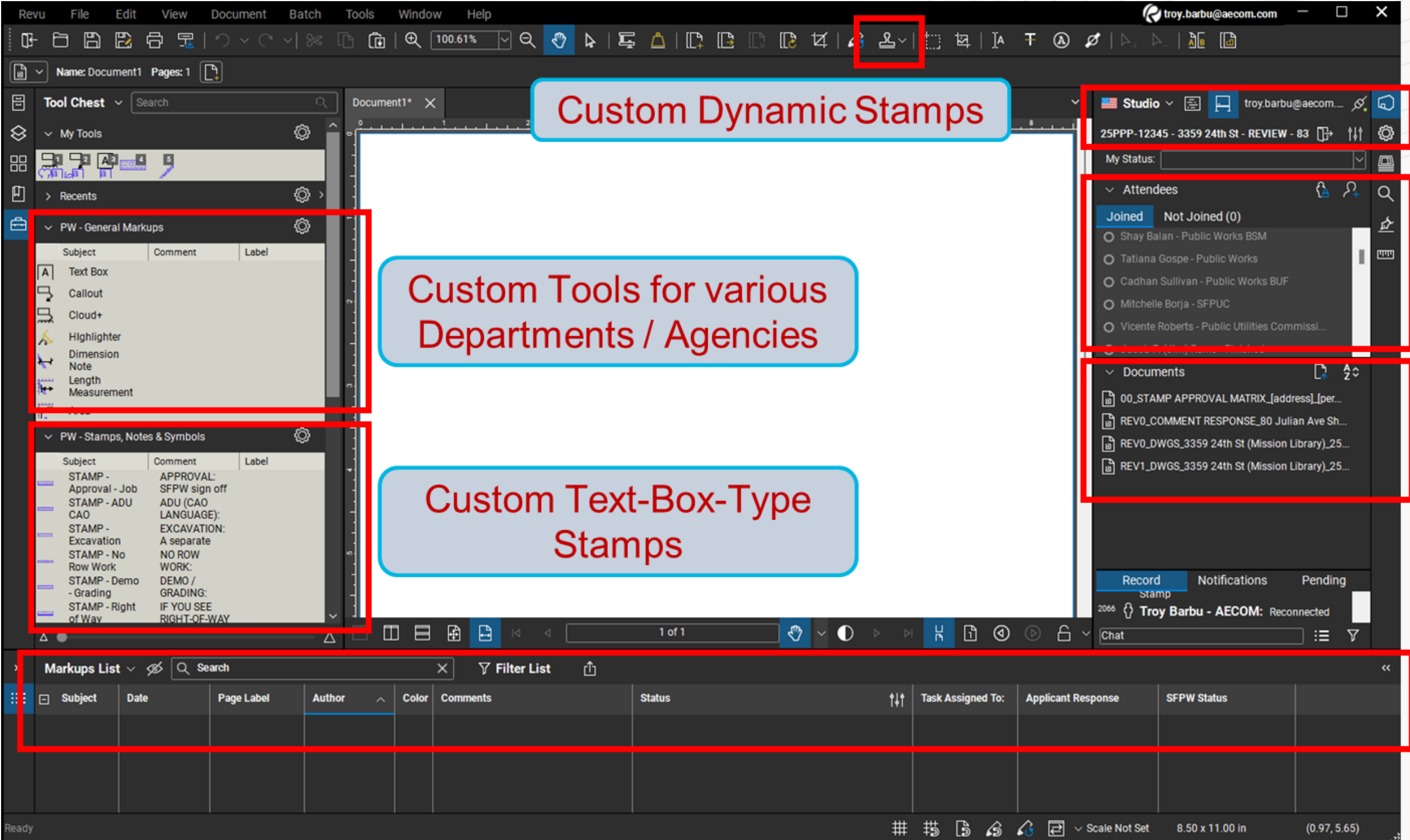
Starting Points for Bluebeam Customizations for Reviews



Goal: Create a Consistent Digital Platform



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

Bluebeam Review / Reconciliation Process (Statuses)

Metro Reviewer 		
	Subject	Comment
	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

Tool Chest

My Tools

Metro Reviewer

City of LA Reviewer

Subject	Comment
Metro Reviewer	Text Box
Metro Reviewer	Callout
Metro Reviewer	Cloud w Callout

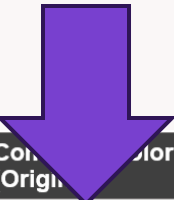
Subject	Comment
City of LA Reviewer	Text Box
City of LA Reviewer	Callout
City of LA Reviewer	Cloud w Callout

LA Metro 30pct Submission Example*

Markups List

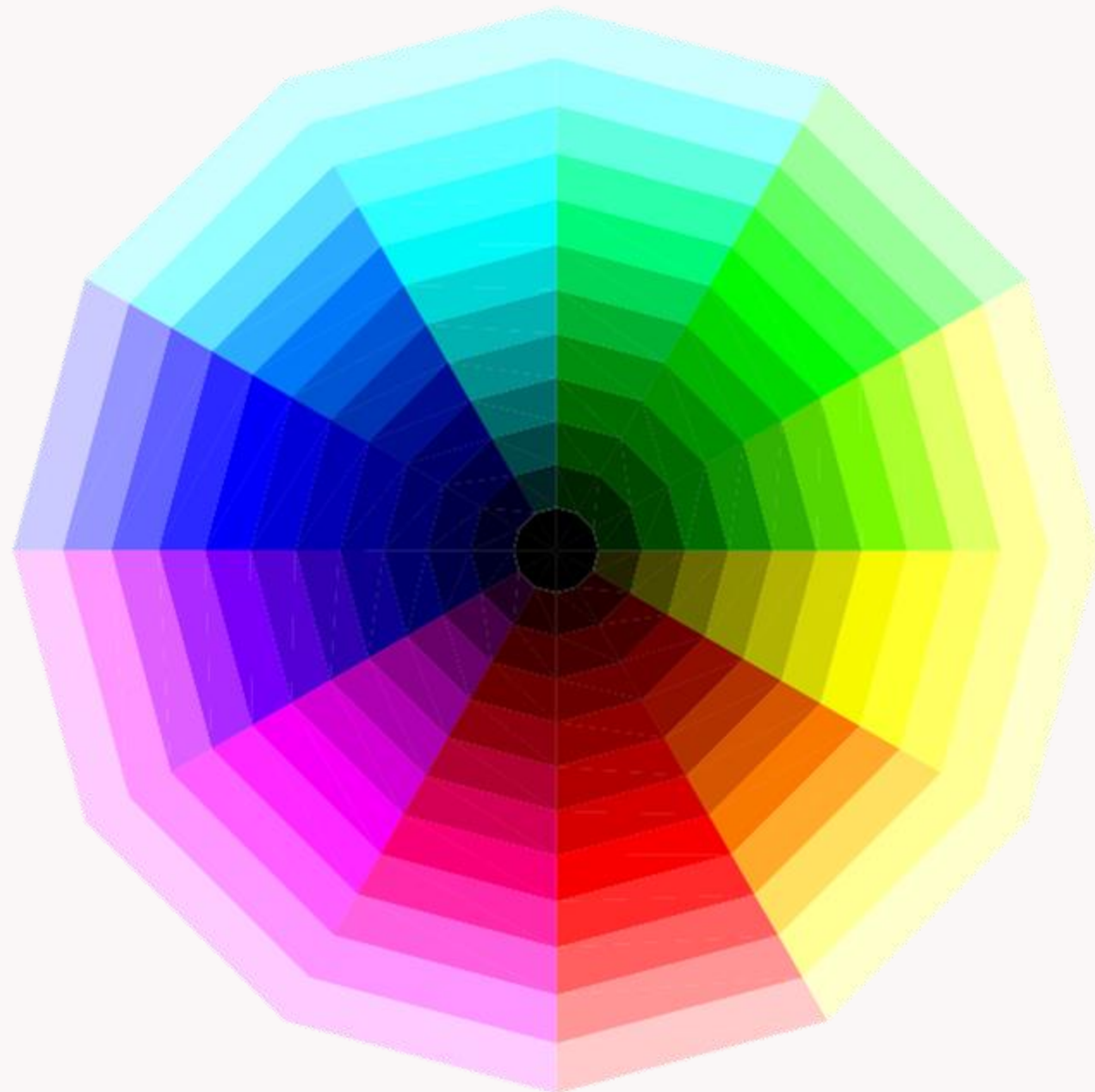
Subject	Review Discipline (As Applic...	Contract Document Reference	Author	Page Label	Comments	Date	Status	Color
Accessibility (1)								
Metro Reviewer	Accessibility	Section 24.22	John Welsh - ADA	A101	Original Reviewer Comments	3/4/2024 ...		
Civil (1)								
Metro Reviewer	Civil		Joe Smith - Civil	A101	Original Reviewer Comments	3/4/2024 ...		
Occupancy (1)								
Metro Reviewer	Occupancy		Mike Jones - Planning	A101	Original Reviewer Comments	3/4/2024 ...		

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

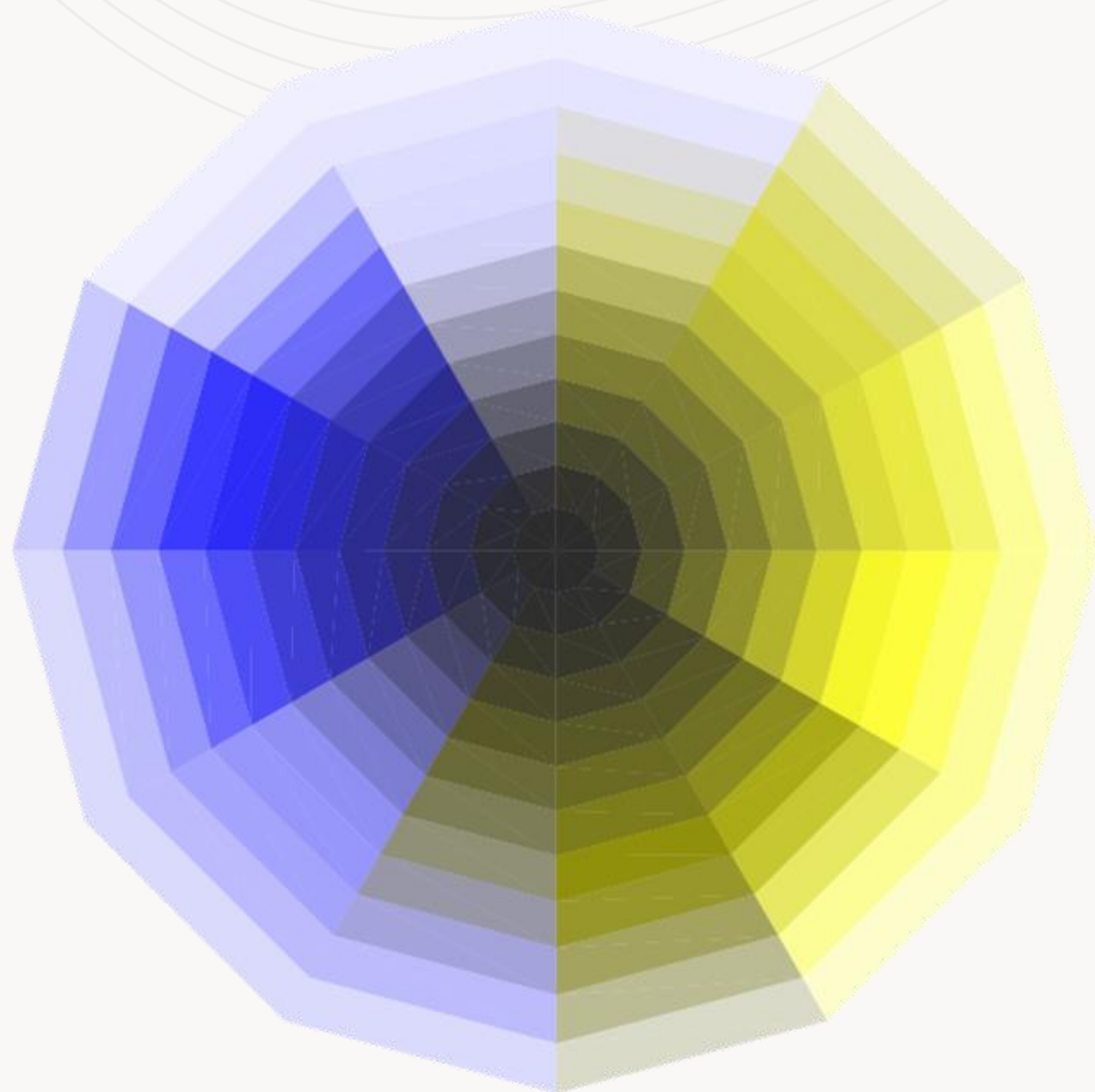


Bluebeam Review / Reconciliation Process (Statuses)

Normal Vision:



Common Color Blindness:



Bluebeam Review / Reconciliation Process (Statuses)

Step 2 - Digital Review Bluebeam Session: Design Team Responds

Tool Chest

My Tools

Metro Reviewer

City of LA Reviewer

Subject

Comment

Metro Reviewer

Metro Reviewer

Metro Reviewer

City of LA Reviewer

City of LA Reviewer

City of LA Reviewer

Text Box

Callout

Cloud w Callout

Text Box

Callout

Cloud w Callout

LA Metro 30pct Submission Example*

Original Reviewer Comments

Original Reviewer Comments

Original Reviewer Comments

5200

3

Troy Barbu - AECOM : Not in Scope

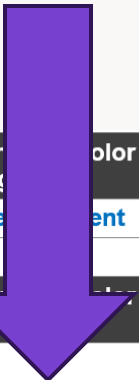
Markups List

Search

Filter List

Subject	Review Discipline (As Applic...	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 ...	1 - Agree: Incorporation Planned Next Submittal - set by Troy Barbu - AECOM on 3/4/2024 at 2:29...	Green
Civil (1)								
Metro Reviewer	Civil		Joe Smith - Civil	A101	Original Reviewer Comments	3/4/2024 ...	2 - Discussion / Clarification Required (see Reply) - set by Troy Barbu - AECOM on 3/4/2024 at 2:2...	Orange
	Re: Metro Revi...		Troy Barbu - AECOM	A101	Please Clarify	3/4/2024 ...		Yellow
Occupancy (1)								
Metro Reviewer	Occupancy		Mike Jones - Planning	A101	Original Reviewer Comments	3/4/2024 ...	3 - Not Applicable / No Action Required (see Reply) - set by Troy Barbu - AECOM on 3/4/2024 at 2:...	Red
	Re: Metro Revi...		Troy Barbu - AECOM	A101	Not in Scope	3/4/2024 ...		Yellow

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



Bluebeam Review / Reconciliation Process (Statuses)

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

The screenshot displays the Bluebeam Review interface. On the left is a 'File Access' sidebar with a 'Recents' list. The main workspace shows two drawing windows: 'LA Metro 30pct Submission Example*' and 'LA Metro 60pct Submission Example*'. Both windows show architectural floor plans with various rooms labeled, including 'MONITORING ROOM', 'EQUIPMENT ROOM', 'SUNKEN FLOOR', and 'ROOF ACCESS ROOM'. Markups are visible on the drawings, with callouts for 'Original Reviewer Comments'. At the bottom, a 'Markups List' table provides a detailed log of all review actions.

Subject	Review Discipline (As Applic... ^	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 ...	1 - Agree: Incorporation Planned Next Submittal - set by Troy Barbu - AECOM on 3/4/2024 at 2:29...	Green
Civil (1)								
Metro Reviewer	Civil		Joe Smith - Civil	A101	Original Reviewer Comments	3/4/2024 ...	2 - Discussion / Clarification Required (see Reply) - set by Troy Barbu - AECOM on 3/4/2024 at 2:2...	Orange
Re: Metro Revi...			Troy Barbu - AECOM	A101	Please Clarify	3/4/2024 ...		Yellow
Occupancy (1)								
Metro Reviewer	Occupancy		Mike Jones - Planning	A101	Original Reviewer Comments	3/4/2024 ...	3 - Not Applicable / No Action Required (see Reply) - set by Troy Barbu - AECOM on 3/4/2024 at 2:...	Red
Re: Metro Revi...			Troy Barbu - AECOM	A101	Not in Scope	3/4/2024 ...		Yellow

Bluebeam Review / Reconciliation Process (Statuses)

Step 4 - Digital Review Bluebeam Session: Reviewer Backcheck

Tool Chest

My Tools

Metro Reviewer

City of LA Reviewer

Subject	Comment
Metro Reviewer	Text Box
Metro Reviewer	Callout
Metro Reviewer	Cloud w Callout

Subject	Comment
City of LA Reviewer	Text Box
City of LA Reviewer	Callout
City of LA Reviewer	Cloud w Callout

LA Metro 30pct Submission Example*

Original Reviewer Comments

Original Reviewer Comments

Original Reviewer Comments

LA Metro 60pct Submission Example*

Original Reviewer Comments

Original Reviewer Comments

Original Reviewer Comments

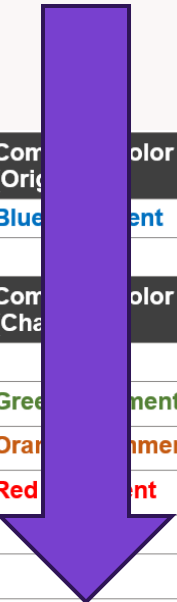
Markups List

Search

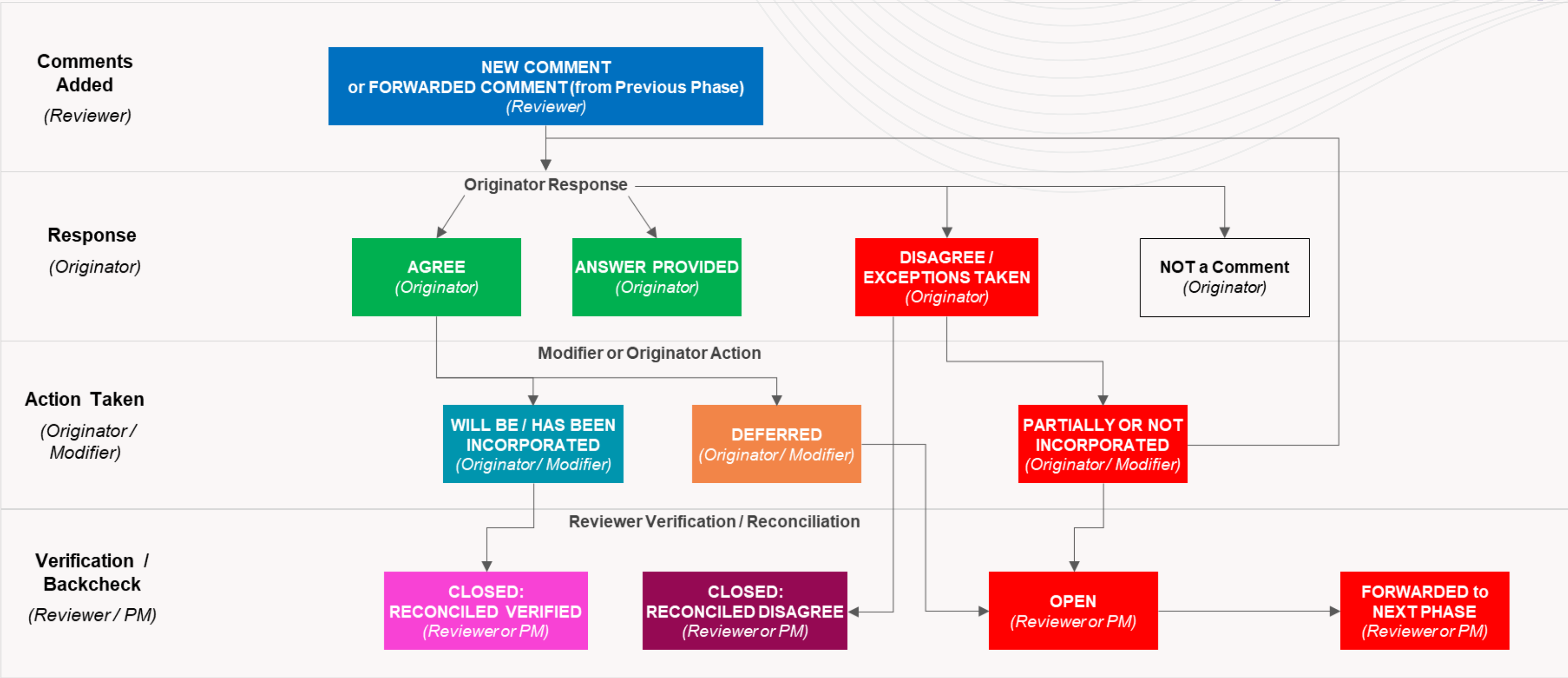
Filter List

Subject	Review Discipline (As Applic... ^	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	** RESPONSE to Reviewer Comment: 1 - Agree: Incorporation Planned Next Submittal - set by Troy Barbu - AECOM on 3/4/2024 at 2:29:28 ** BACKCHECK Final Disposition (Completed by Reviewer): RESOLVED - Review Comment Addressed / Complete - set by Troy Barbu - AECOM on 3/4/2024 at ...	Green Comment
Civil (1)								
Metro Reviewer	Civil		Joe Smith - Civil	A101	Original Reviewer Comments	3/4/2024	** RESPONSE to Reviewer Comment: 2 - Discussion / Clarification Required (see Reply) - set by Troy Barbu - AECOM on 3/4/2024 at 2:29:3 ** BACKCHECK Final Disposition (Completed by Reviewer): PENDING - Resolved Pending Confirmation (in next submittal) - set by Troy Barbu - AECOM on 3/...	Orange Comment
Re: Metro Revi...			Troy Barbu - AECOM	A101	Please Clarify	3/4/2024		Yellow Comment
Occupancy (1)								
Metro Reviewer	Occupancy		Mike Jones - Planning	A101	Original Reviewer Comments	3/4/2024	** RESPONSE to Reviewer Comment: 3 - Not Applicable / No Action Required (see Reply) - set by Troy Barbu - AECOM on 3/4/2024 at 2:29 ** BACKCHECK Final Disposition (Completed by Reviewer): UNRESOLVED - Review Comment NOT Addressed - set by Troy Barbu - AECOM on 3/4/2024 at 2:5...	Red Comment
Re: Metro Revi...			Troy Barbu - AECOM	A101	Not in Scope	3/4/2024		Yellow Comment

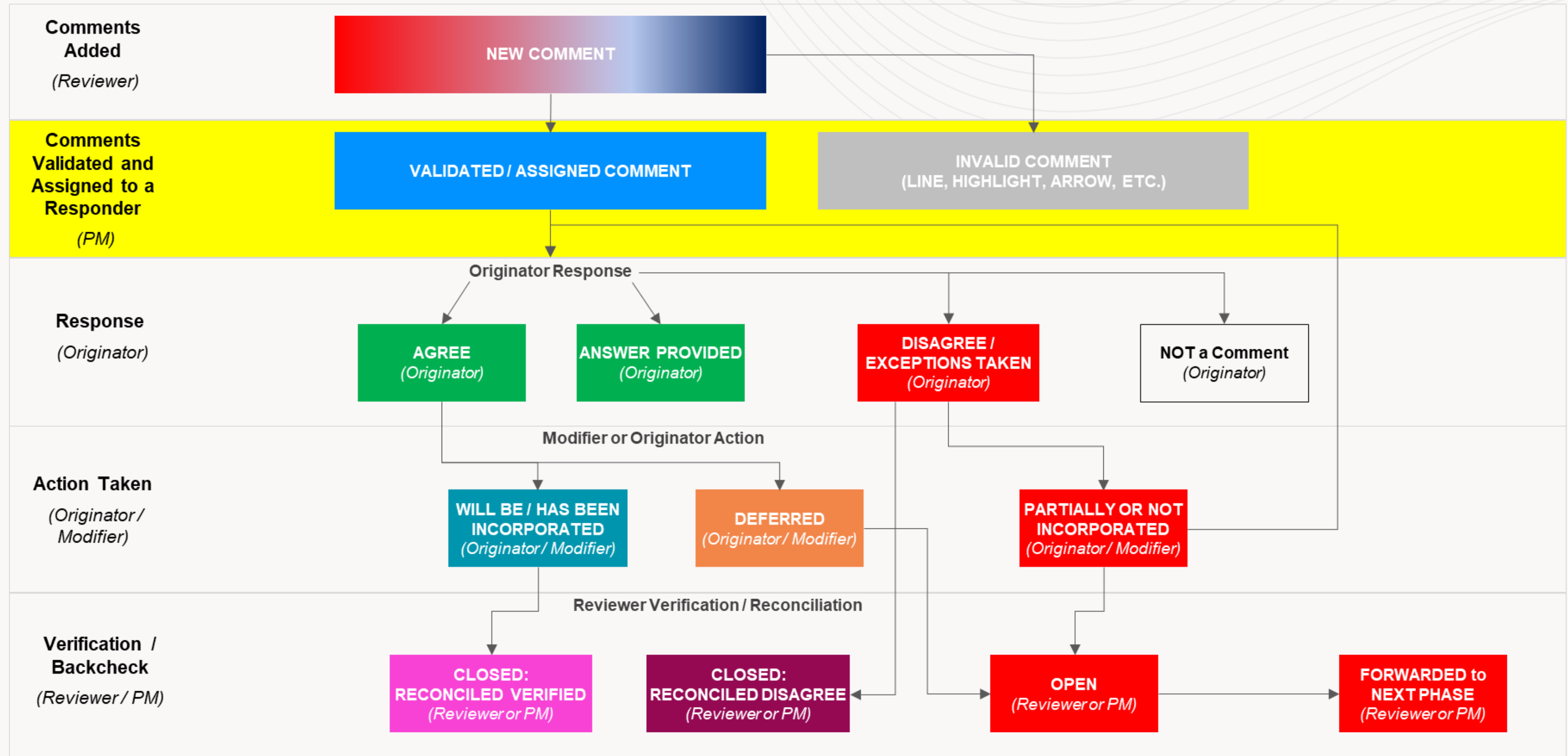
Comment	Comment (Original)	Color
Original Comment Added by Reviewer	Blue	Blue Comment
Status Selection by Design / Builder Team		
** RESPONSE to Reviewer Comment		
1 - Agree: Incorporation Planned Next Submittal -	Green	Green Comment
2 - Discussion / Clarification Required (see Reply) -	Orange	Orange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



Bluebeam Review / Reconciliation Process (Statuses)



Bluebeam Review / Reconciliation Process (Statuses)



Bluebeam Review / Reconciliation Process

Statuses in Action:

★★ PM: Set VALIDITY of Reviewer Comment ★★

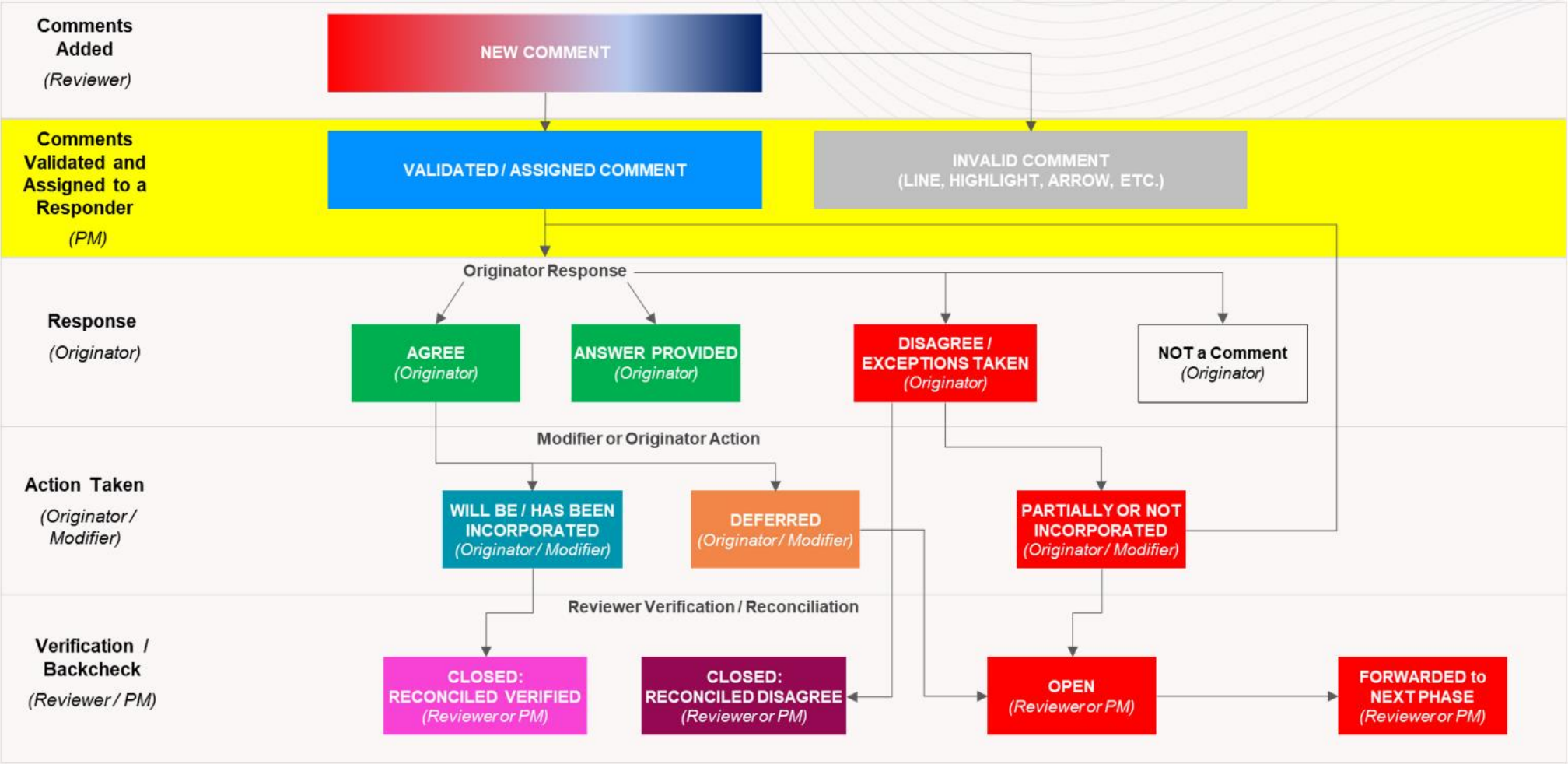
★★ DISCIPLINE Assignment for RESPONSE ★★

★★ Design Team: RESPONSE to Reviewer Comment ★★

★★ Design Team: ACTION to be Taken ★★

★★ Design Team: Additional VERIFICATION ★★

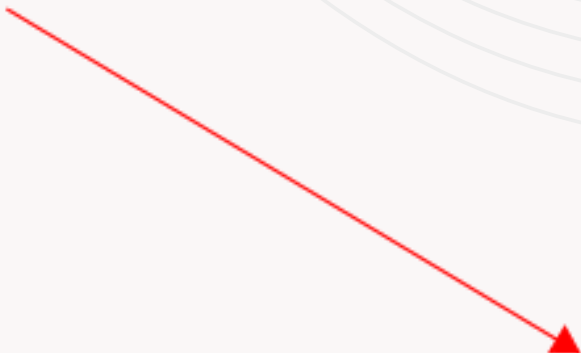
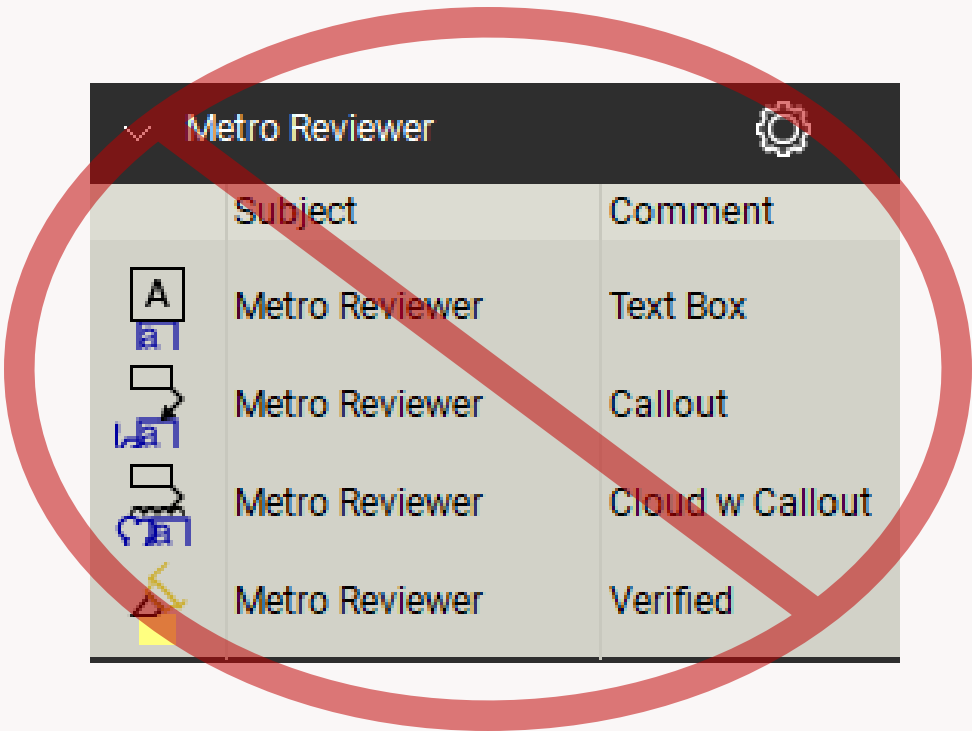
★★ Reviewer / PM: RESOLUTION of Comment ★★



Bluebeam Review / Reconciliation Process

Statuses in Action:

Reviewer
Comment



Markups List		Search	Filter List					
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/...	Blue		
↳ Re: Cal...	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.	
↳ Arrow	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		
↳ Re: Text	dan.tarasoff	C003 - GE...		5/7/2025 7:21:03 AM		Yellow	Andrew B	
↳ Re: Text	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:

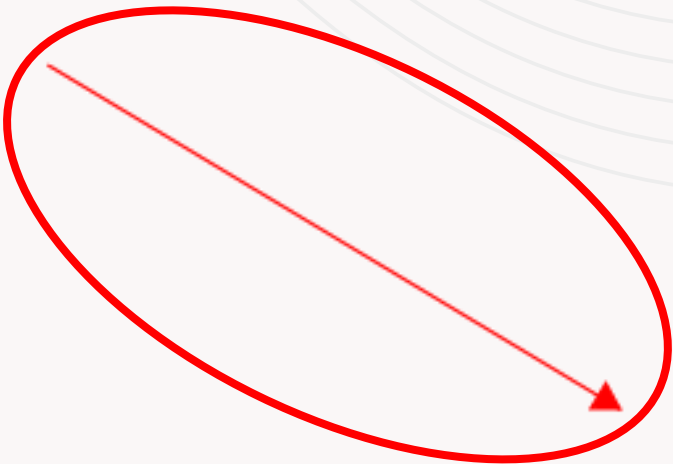


Markups List		Search		Filter List					
Subject	Author	Page ...	Comments	Date	Status		Color	Design Team: Additional Response (use Reply- Add in this Column)	
✓ C003 - GENERA...									
✓ Callout	Marshall Pac...	C003 - GE...	Flagging this infrastructure here will need to be removed ahead of the planned excavation activities in this area	3/28/2025 10:24:55...	VALID: Assigned to CT - set by Rebecca Halbach - DXB on 5/2/...		Blue		
↳ Re: Cal...	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.	
↳ Arrow	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		
↳ Re: Text	dan.tarasoff	C003 - GE...		5/7/2025 7:21:03 AM			Yellow	Andrew B	
↳ Re: Text	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

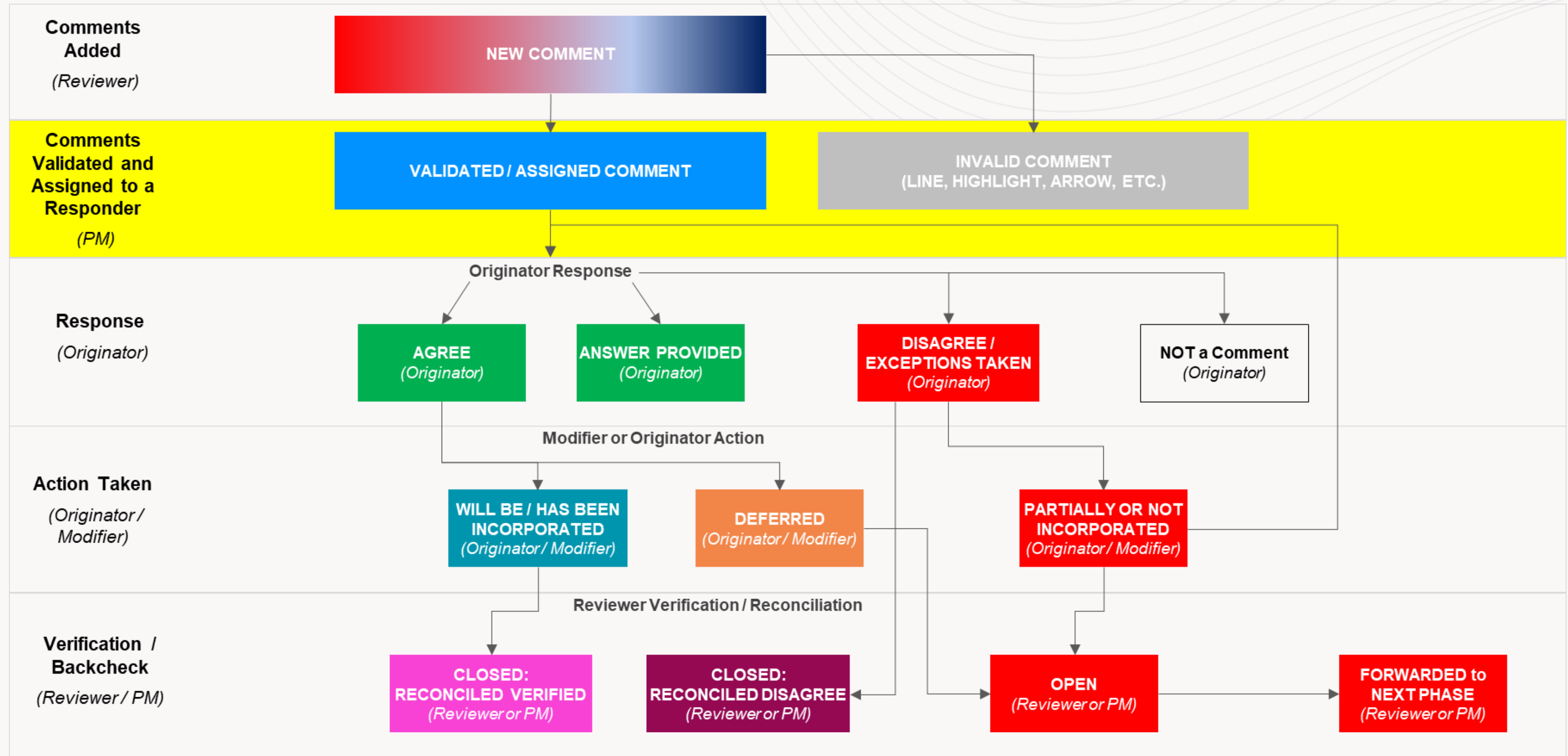
Statuses in Action:

Reviewer
Comment



Markups List		Search		Filter List			
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/...	Blue	
↳ Re: Cal...	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.
↗ Arrow	Marshall Pac...	C003 - GE...		3/28/2025 10:24:14...	INVALID: Comment is INVALID set by Rebecca Halbach - DXB o...	Grey	
✓ (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/...	Blue	
↳ Re: Text	dan.tarasoff	C003 - GE...		5/7/2025 7:21:03 AM		Yellow	Andrew B
↳ Re: Text	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)



Bluebeam Review / Reconciliation Process

Statuses in Action:

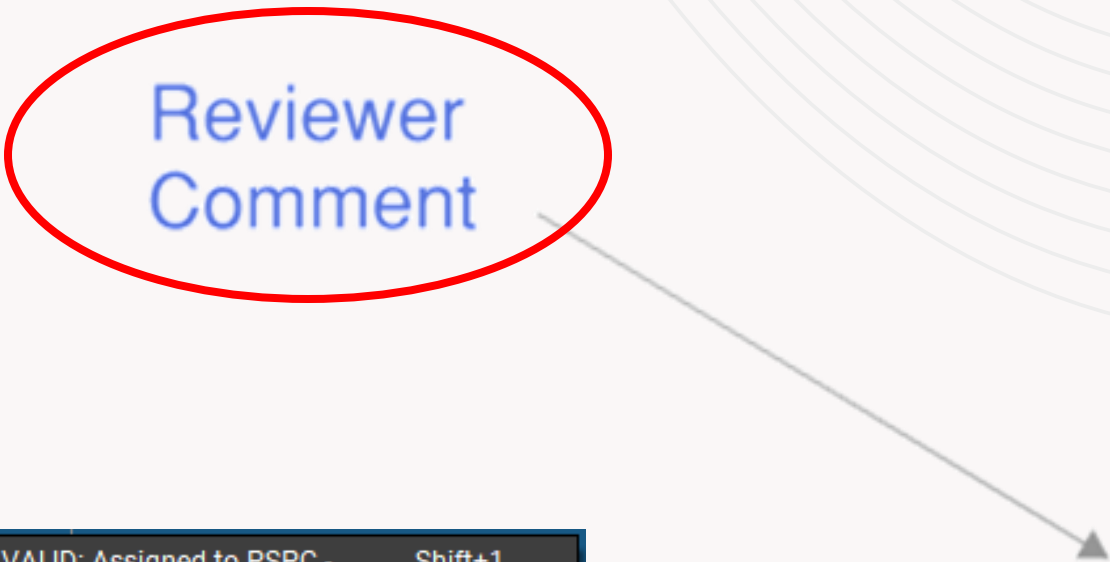
Reviewer
Comment



Markups List		Search		Filter List			
Subject	Author	Page ...	Comments	Date	Status	Color	Design Team: Additional Response (use Reply- Add in this Column)
C003 - GENERA...	Callout	Marshall Pac...	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		5/7/2025 7:26:01 AM			John M, Dan T to review scope and revise specs and drawings as appropriate.
	Arrow	Marshall Pac...		3/28/2025 10:24:14...	INVALID: Comment is INVALID set by Rebecca Halbach - DXB o...		
	Text	Joshua	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		5/7/2025 7:21:03 AM			Andrew B
	Re: Text	Pamela Gasc...		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:



Status

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 ** >

** Reviewer / PM: RESOLUTION of Comment ** >

VALID: Assigned to PSPC - Shift+1

VALID: Assigned to CIRNAC - Shift+2

VALID: Assigned to CT - Shift+3

✓ VALID: Assigned to MCM - Shift+4

INVALID: Comment is INVALID Shift+5

Markups List		Search	Filter List					
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/...	Blue		
↳ Re: Cal...	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.	
↳ Arrow	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		
↳ Re: Text	dan.tarasoff	C003 - GE...		5/7/2025 7:21:03 AM		Yellow	Andrew B	
↳ Re: Text	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:

Reviewer
Comment

Status

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 **

** Reviewer / PM: RESOLUTION of Comment **

VALID: Assigned to PSPC - Shift+1

VALID: Assigned to CIRNAC - Shift+2

VALID: Assigned to CT - Shift+3

VALID: Assigned to MCM - Shift+4

INVALID: Comment is INVALID Shift+5

Markups List							
Search							
Filter List							
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...		
	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:

Reviewer
Comment

Status

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 **

** Reviewer / PM: RESOLUTION of Comment **

VALID: Assigned to MCM - set by Rebecca Halbach - DXB on 5/2/...

ALL - Shift+6

EM - Shift+7

Pits - Shift+8

TCAs - Shift+9

Water -

CS Excavation -

CS Backfill -

AECOM -

Markups List		Search	Filter List					
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...		
	Text	Joshua	C003 - GE...	Why aren't we remediating these roads and pads?	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:

Reviewer
Comment

Status	
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 **	>
** Reviewer / PM: RESOLUTION of Comment **	>
VALID: Assigned to MCM - set by Rebecca Halbach - DXB on 5/2/...	

ALL - Shift+6

EM - Shift+7

Pits - Shift+8

TCAs - Shift+9

Water -

CS Excavation -





CS Backfill -







AECOM -

Markups List							
Search							
Filter List							
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...		
✓ 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.

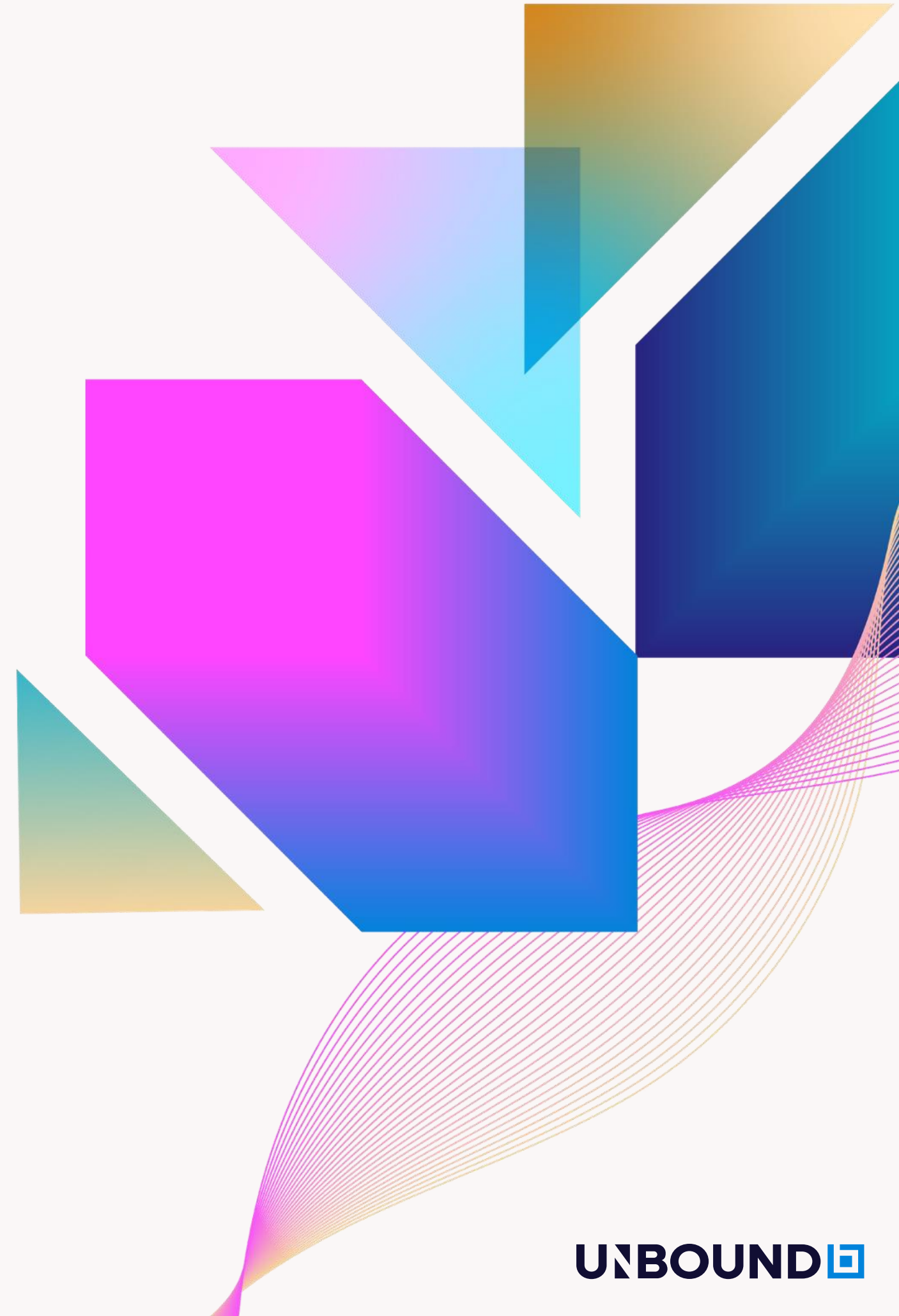
Bluebeam Review / Reconciliation Process

Statuses in Action:

Markups List    Filter List 

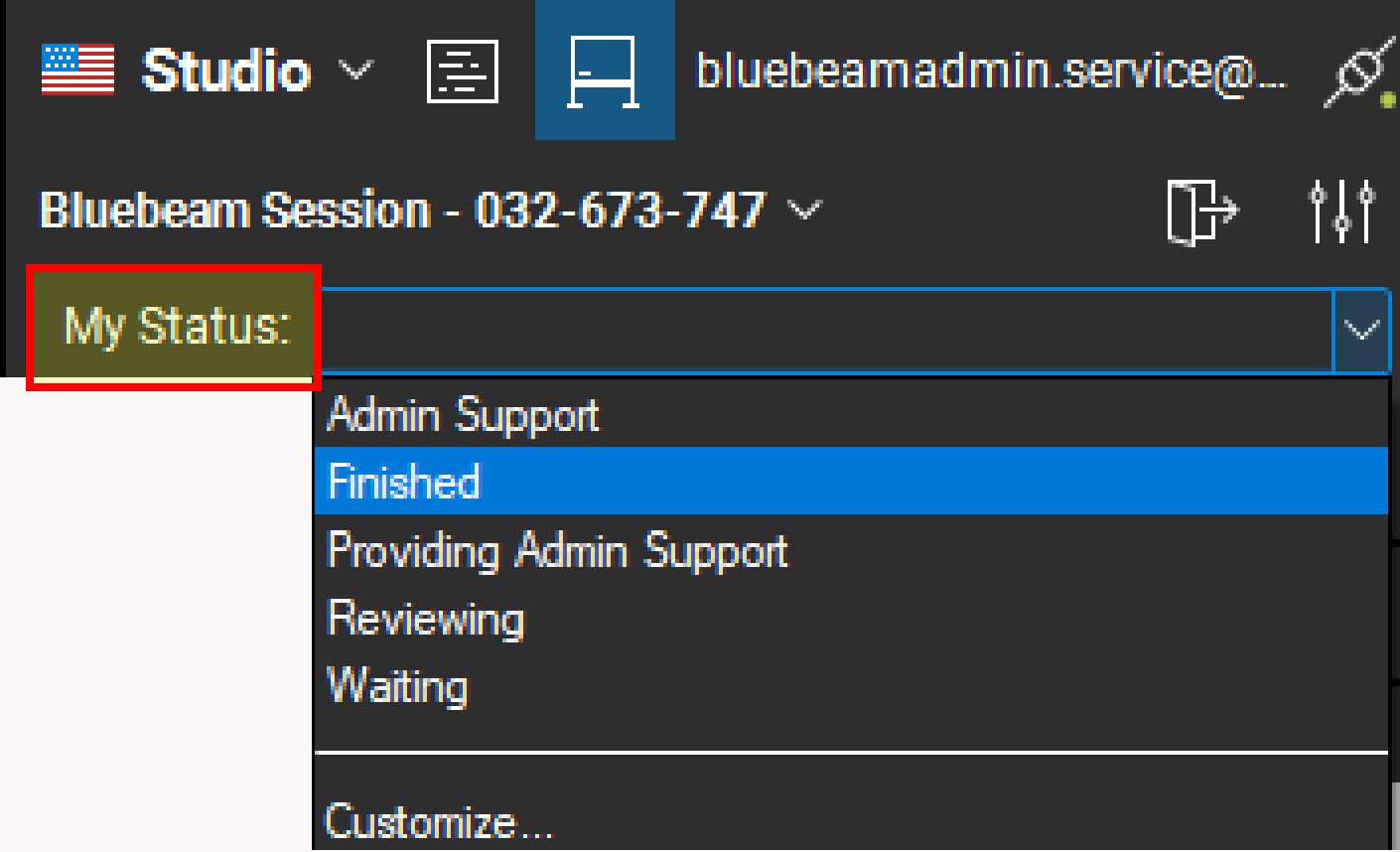
<input type="checkbox"/> Subject	Author 	Page...	Comments	Date	Status 	Color	
▼ Troy Barbu - ...							Design Team: Additional Response (use Reply- Add in this Column)
▼  Reviewer	Troy Barbu...	1	Reviewer Comment	9/2/2025 ...	CLARIFICATION NEEDED (see Reply) ...		
 Re: ...	Troy Barbu...	1		9/2/2025 ...			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

Tool Chest

Search

> My Tools

> Recents

> CPM Project Manager

> DDS Engineering

> DDS Inspector

> DDS Architect

> CPM Contracts

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

> IPRC

> Accessibility

> EH&S

> Fire Marshal

> Client-Department

Document1*

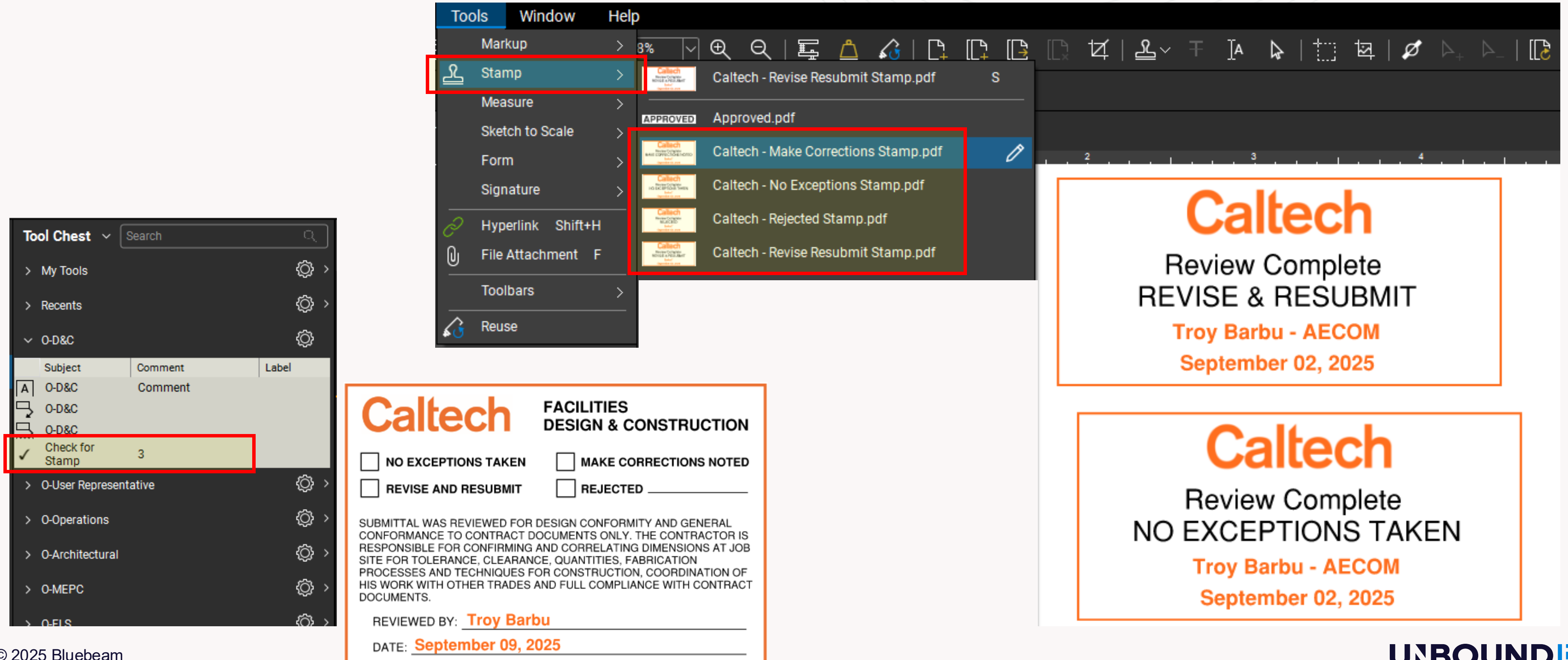
012

FINISHED WITH COMMENTS

FINISHED NO EXCEPTIONS TAKEN

Reviewer to Admin/PM Collaboration

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



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	
Check Stamp Text	12-12-2025
Check Mark	3
Shop Drawing Review Stamp	

Document1*

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)

Bulletin-035H - TRAVELER - Fire Alarm

UC San Diego
UNIVERSITY OF CALIFORNIA SAN DIEGO

PLAN REVIEW CHECKLIST
(For UCSD Building Permit)

*Campus Approval Signatures Required At All Times. *Healthcare Approval Signatures Required At All Times.

Project #:

5171 HCPH1

Project Name:

5171 HCPH1 Bulletin 035H Fire Alarm - TRAVELER

CPM Approvals:

Contact Information	Approval (signature)	Date
Science Post Review (PM): Mike Brand	mbrand@ucsd.edu	N/A
Independent Post Review (PM): WC-3	wc3@ucsd.edu Chris Kishall	11/20/2024
Accessibility (PM): WC-3	wc3@ucsd.edu	N/A

Other Approvals:

Contact Information	Approval (signature)	Date
Mechanical (Amy Hui)	ahui@ucsd.edu 858.534.1874	N/A
Electrical (Renee Pham)	rpham@ucsd.edu 858.534.5345	N/A
Plumbing (Amy Hui)	ahui@ucsd.edu 858.534.1874	N/A
Fire Protection (Dan Stone)	dstone@ucsd.edu 858.537.5994	<i>Daniel M Stone</i> 1/24/25

EH&S Approvals

Contact Information	Approval (signature)	Date
*Fire Life Safety (Chuck Brinkman)	cbrinkman@ucsd.edu 858.822.5796	N/A
*FLS Health Systems (Mike Hancock)	mhancock@ucsd.edu 858.543.5488	<i>[Signature]</i> 01/13/2025
Redwood and Potable Water (Jeff Eisen)	jeisen@ucsd.edu 858.534.5342	N/A
Food Service (Jeff Eisen)	jeisen@ucsd.edu 858.534.5342	N/A
Bulk Mgmt (Todd Ferguson)	tferguson@ucsd.edu 858.534.5746	N/A
SWPPP (Kimberly O'Connell)	kocconnell@ucsd.edu 858.534.6810	N/A
Fall Protection, Pressure Vessels, Lifts, Hoists (Kim Monto)	kmont@ucsd.edu 858.534.6827	N/A
Air permitting, wastewater discharge (Sam Petersen)	spetersen@ucsd.edu 858.534.5955	N/A
HazMat (Todd Ferguson)	tferguson@ucsd.edu 858.534.5746	N/A
Radioactive Material Use (Scott Langford)	slangford@ucsd.edu 858.534.1896	N/A
Lowers (Truong Le)	t1le@ucsd.edu 858.822.2850	N/A
RF (Judy Fain)	jfain@ucsd.edu 858.822.4137	N/A
Laboratories (Lance Scott)	lscott@ucsd.edu 858.534.7891	N/A
Asbestos (Kelvin Huang)	khuang@ucsd.edu 858.534.5721	N/A

FM Approvals

Contact Information	Approval (signature)	Date
Kevin Harris	kharris@ucsd.edu 858.534.0439	N/A
FM Student	fm-student10@ucsd.edu 858.534.0439	N/A

FE Approvals

Contact Information	Approval (signature)	Date
FE Health Systems (Shelley Scott)	BPSCOFF@ucsd.edu	N/A

Telecom/Other Approvals

Contact Information	Approval (signature)	Date
Campus: Photo/Data/Security (Joy Garcia)	jgarcia@ucsd.edu 858.534.2195	N/A
Healthcare: Photo/Data/Security (Royal Reed)	reed@ucsd.edu 858.240.5300	N/A

Studio

bluebeamadmin.service@aecom.c...

UCSD Bulletin 035 - Fire Alarm System Design Revisions - 81

My Status:

Attendees

Documents

Bulletin-035H - DWGS - Fire Alarm.pdf

Bulletin-035H - REFONLY DWGS - Fire Alarm.pdf

Bulletin-035H - TRAVELER - Fire Alarm.pdf

Bulletin-035H_R1 - FINAL DWGS - Fire Alarm Rev.pdf

Bulletin-035H_R2 - FINAL DWGS - Fire Alarm Rev.pdf

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

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UNBOUND

Reviewer to Admin/PM Collaboration

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



The screenshot displays the Bluebeam Studio application interface. The top bar shows the file name "1011 Turk St - 202201065473 REVIEW - 4c". The left sidebar lists several PDF documents, with "202201065473_FORM 3.pdf" highlighted in a red box. The main viewing area shows a PDF form with various sections, including "APPLICANT'S CERTIFICATION" and "DEPARTMENT OF BUILDING INSPECTION". The bottom panel shows a list of chat messages, including "EPR Support Staff: Set State as A - GEC agrees and will comply" and "Eddie Chan - DBI PPC: Joined".

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

© 2025 Bluebeam

Reviewer to Admin/PM Collaboration

Revu File Edit View Document Batch Tools Window Help

123.05%

Name: 00 SFPW STAMP APPROVAL MATRIX Pages: 1

PW Stamp.pdf

Tool Chest

- My Tools
- Recents
- PW - General Markups
- PW - Stamps, Notes & Symbols
- Stamp & Annotation
 - Subject
 - Comment
 - Check Mark 3
 - Standard Text Add Text on Document
 - BOLD Text Add BOLD Text on Document
 - Small Text Smaller Text
 - Small BOLD Text Small BOLD Text
 - Highlighter Highlighter
 - White-Out Box White-Out an Area

Document1* 00 SFPW STAMP APPROVAL MATRIX*

Rev 0

Rev 1

City Planning (CPC)

SF Port (Port)

San Francisco Fire Department (SFFD)

City Attorney (CAT)

Board of (B)

Plan Sheets Reviewed

Specifications Reviewed

FINAL DETERMINATION

A AN MCN R&R

No Comments

Comments Issued

REVIEWER STAMP

Please click EMAIL to confirm

San Francisco Public Works

September 02, 2025

Plan Sheets Reviewed

Specifications Reviewed

FINAL DETERMINATION

A AN MCN R&R

Comments Resolved and No Additional Comments

Additional Comments Issued

REVIEWER STAMP

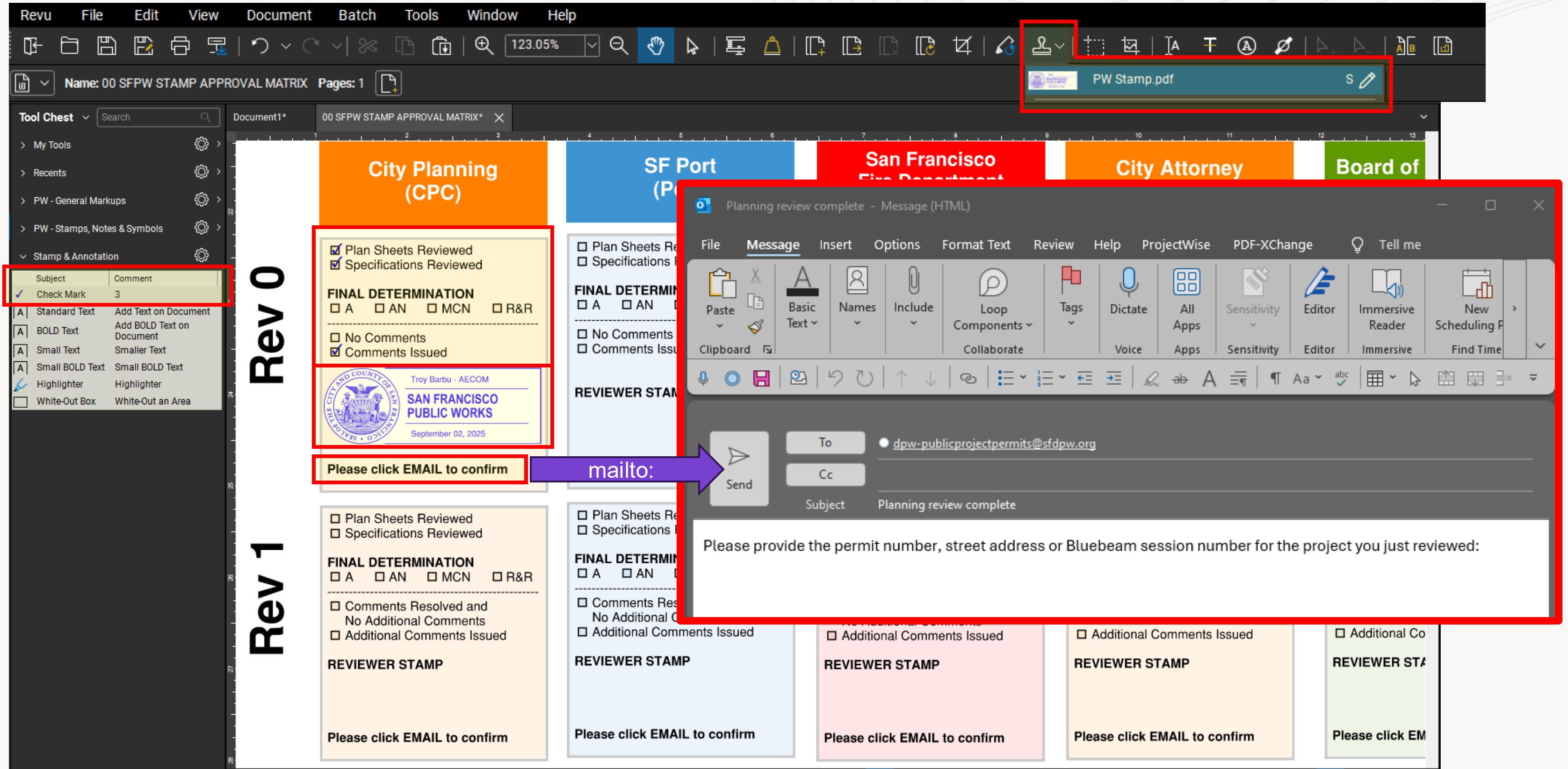
Please click EMAIL to confirm

The screenshot displays the Adobe Acrobat interface for editing a PDF form titled "00 SFPW STAMP APPROVAL MATRIX". The form is organized into columns for different reviewers: City Planning (CPC), SF Port (Po), San Francisco, City Attorney, and Board of (B). Each column contains two review sections, Rev 0 and Rev 1.

In the Rev 0 section of the City Planning (CPC) column, there are checkboxes for "Plan Sheets Reviewed", "Specifications Reviewed", "FINAL DETERMINATION" (with options A, AN, MCN, R&R), "No Comments", and "Comments Issued". Below this is a "REVIEWER STAMP" area. A red box highlights a message "Please click EMAIL to confirm" which is linked via a purple arrow to a "mailto:" email address in the "Hyperlink" field of a dialog box.

The dialog box also shows other actions like "Jump to", "Page", "Place", "Space", "Snapshot View", and "Open". The top toolbar and the left sidebar (Tool Chest) are visible at the top and left of the document.

Reviewer to Admin/PM Collaboration



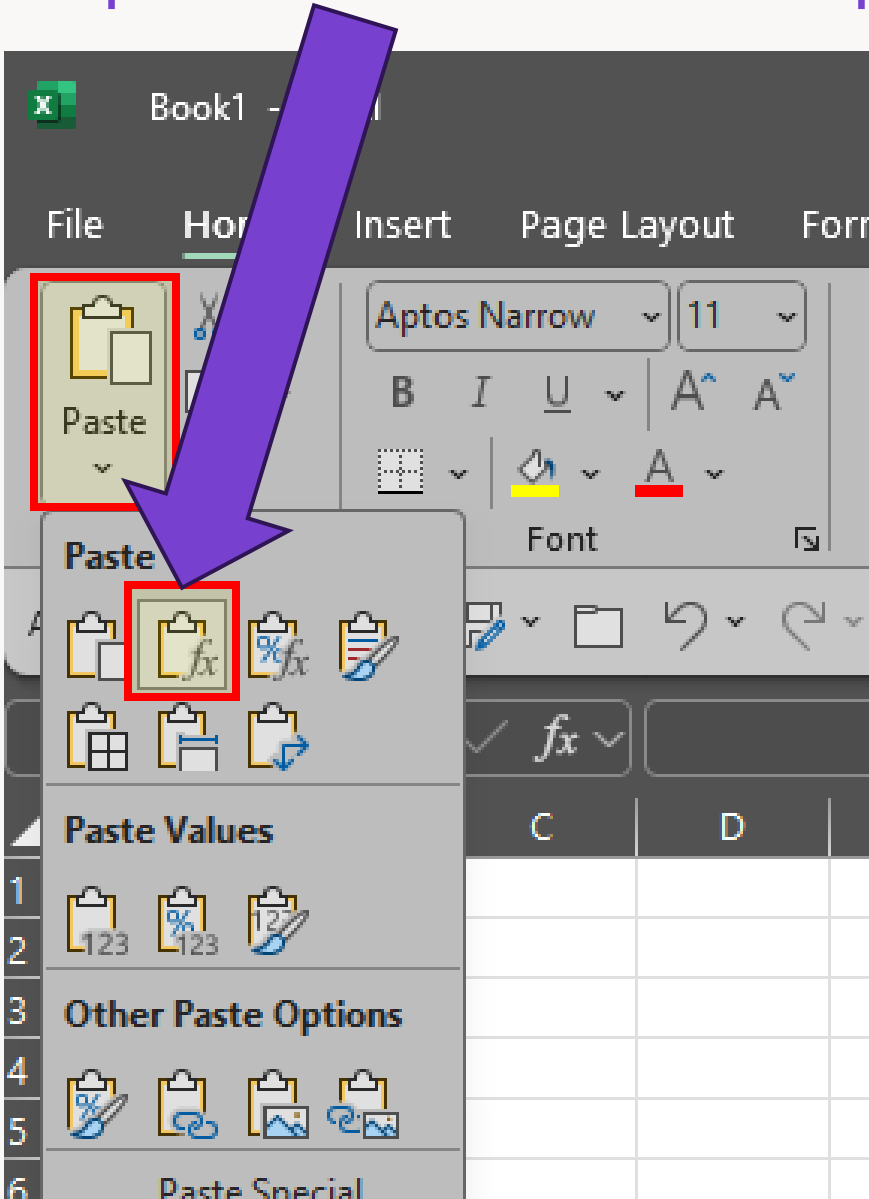
Bluebeam Review Comment Exporting

The Long-Established Legacy Process

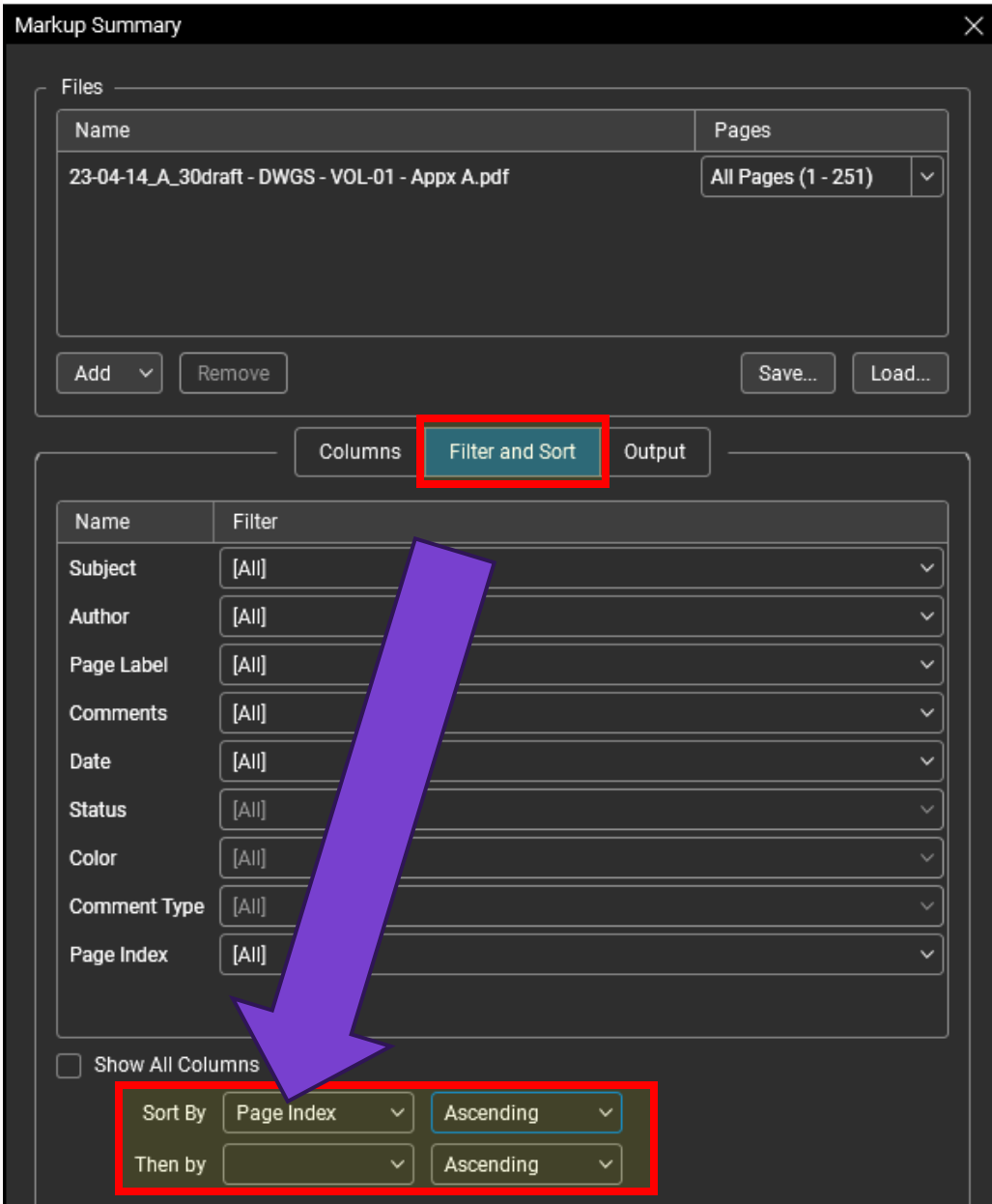
SUBMITTAL REVIEW											PROJECT: Regional Connector Transit Project			
Contact: Mary J											Date Received: May 24, 2022			
Agency: LABOE											Date Completed: May 27, 2022			
Submittal No. 9974											Response: Make Corrections/Proceed Conditionally			
Low Impact Development (LID) Ordinance Report														
1 - Incorporated; 2 - Discussion/Clarification Required; 3 - Not Applicable; 4 - Not due for this Submittal; 5 - MTA Direction Required.														
FILLED OUT BY REVIEWER				FILLED OUT BY RESPONDER				FILLED OUT AT RESOLUTION MEETING						
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						

Bluebeam Review Exporting

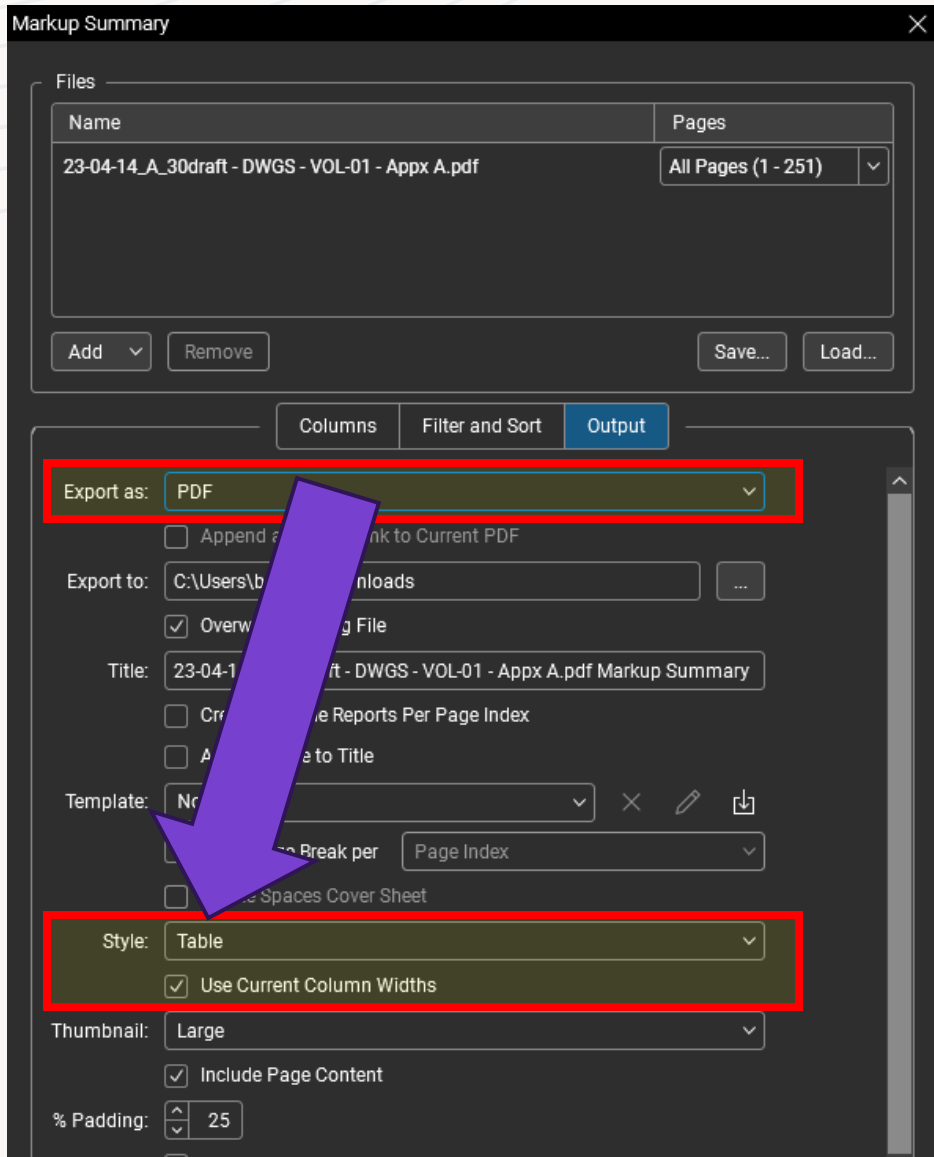
Top Three “Hacks” for Exporting Comments:



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



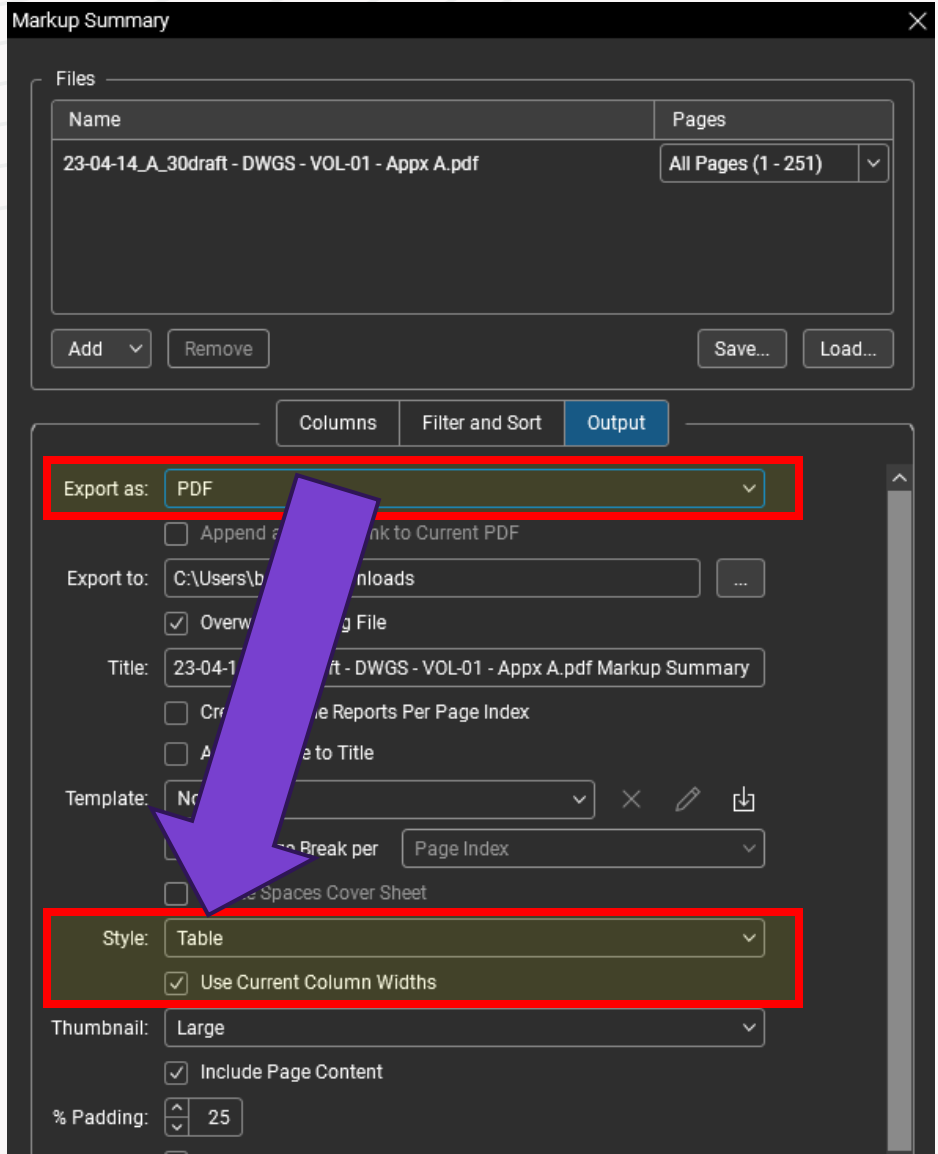
2. When Exporting Drawing Pages, Sort by **Page Index** First



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

Revu File Edit View Document Batch Tools Window Help

Name: REV0_DWGS_3359 24th St (Mission Library)_25PPP-12345_04-01-2025_Summary Pages: 20

REV0_DWGS_3359 24th St (Mission Library)_25PPP-12345_04-01-2025 REV0_DWGS_3359 24th St (Mission Library)_25PPP-12345_04-01-2025_Summary*

Subject	Date	Page Label	Author	Comments	Applicant Response	SFPW Status
Callout	4/17/2025 1:45:21 PM	L-5.0 - LANDSCAPE PAVING PLAN	Amnon Ben-Pazi - PLN (3)	consider changing the name of this library		
Text Box	4/17/2025 10:47:42 AM	L-5.0 - LANDSCAPE IRRIGATION PLAN	Amnon Ben-Pazi - PLN	this door swings into the ROW		
Callout	4/17/2025 10:52:55 AM	L-5.0 - LANDSCAPE IRRIGATION PLAN	Amnon Ben-Pazi - PLN	consider adding something here		
Cloud+	4/17/2025 10:52:45 AM	L-5.0 - LANDSCAPE IRRIGATION PLAN	Amnon Ben-Pazi - PLN			

2 of 20

Markups List Search Filter List

Subject	Date	Page Label	Author	C...	Comments	Status	Ta...	Applicant Response	SFPW Status
---------	------	------------	--------	------	----------	--------	-------	--------------------	-------------

Markup Summary

Files

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

Add Remove Save... Load...

Columns Filter and Sort 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

Revu File Edit View Document Batch Tools Window Help

Name: REV0_DWGS_3359 24th St (Mission Library)_25PPP-12345_04-01-2025_Summary Pages: 20

REV0_DWGS_3359 24th St (Mission Library)_25PPP-12345_04-01-2025 REV0_DWGS_3359 24th St (Mission Library)_25PPP-12345_04-01-2025_Summary*

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 sfpublishworks.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 sfpublishworks.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</i> 'Fastigata' <i>Koeleruteria bipinnata</i> <i>Koeleruteria elegans</i> ssp. <i>Formosana</i> <i>Koeleruteria paniculata</i> <i>Lyonothamnus floribundus asplenifolius</i> <i>Melaleuca ericifolia</i> <i>Melaleuca squamophloia</i> <i>Melaleuca stypheloides</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		

2 of 20

Markups List Search Filter List

Subject	Date	Page Label	Author	C...	Comments	Status	Ta...	Applicant Response	SFPW Status
---------	------	------------	--------	------	----------	--------	-------	--------------------	-------------

Markup Summary

Files

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

Add Remove Save... Load...

Columns Filter and Sort 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...

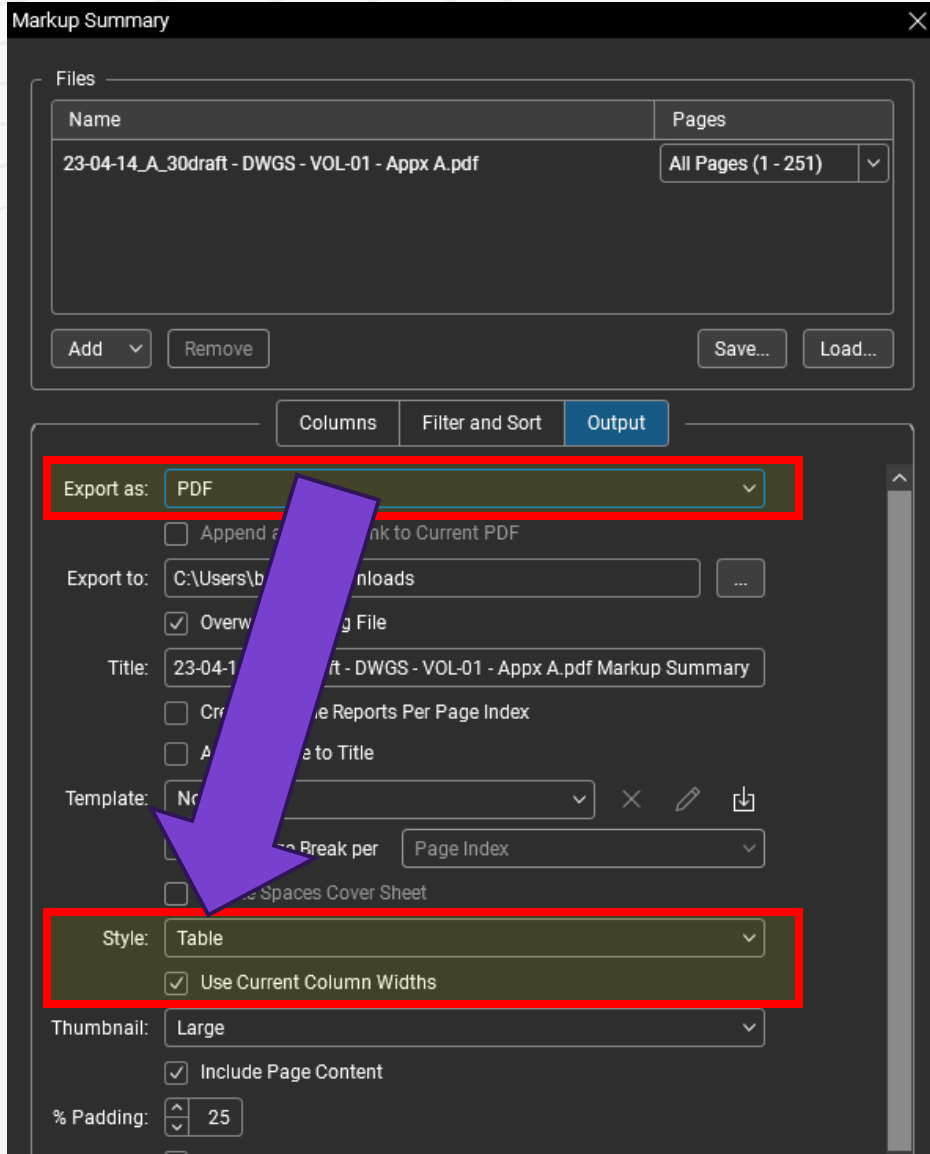
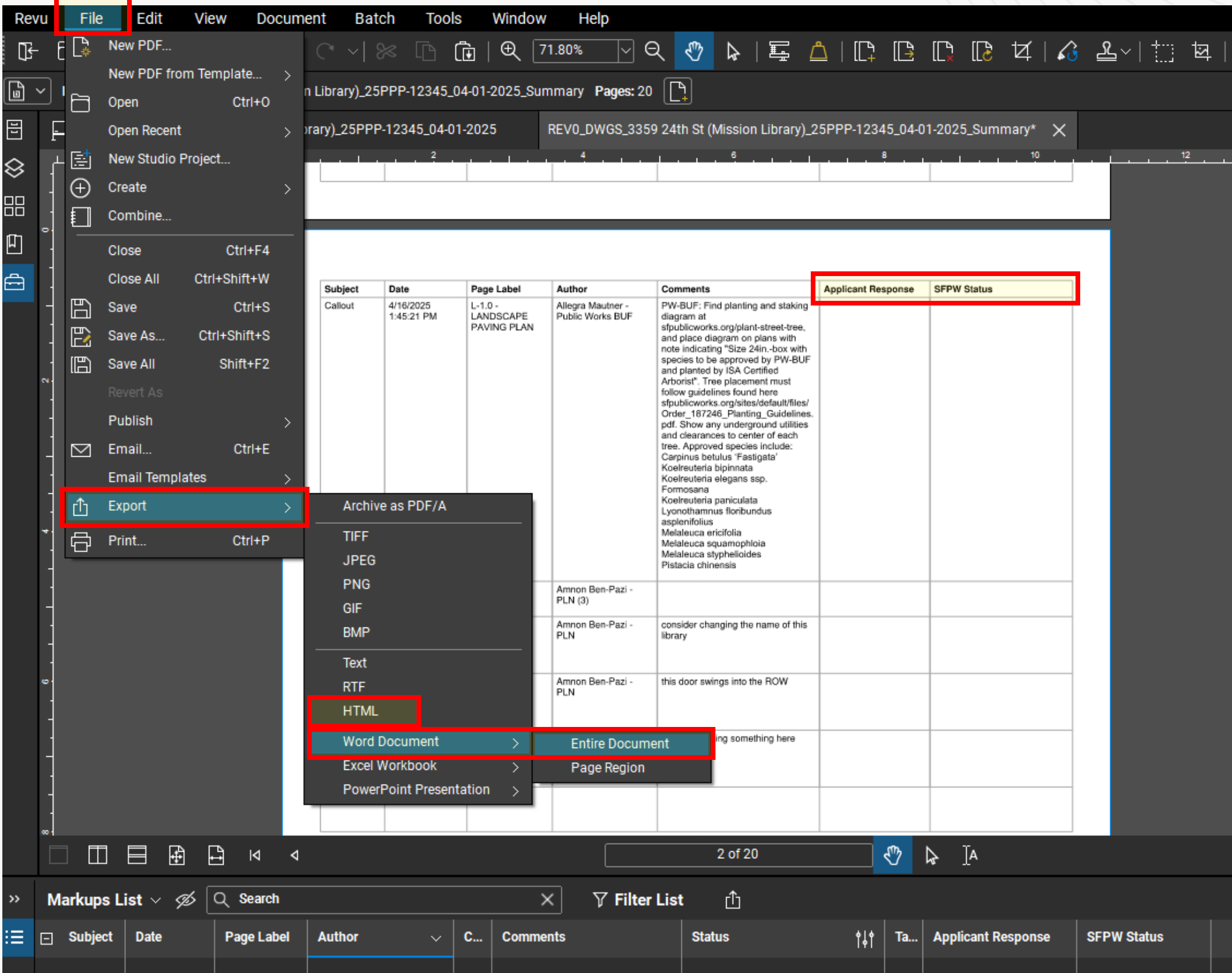
Style: Table

Thumbnail: Large

% Padding: 25

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

Bluebeam Review Exporting



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

Applicant Response:



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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