

42nd Annual State Construction Conference

March 2, 2023



NC★**DOA**
Department of Administration
State Construction Office

Interscope and Bluebeam Update

Presenters

LeaAnne Hahnel
Interscope

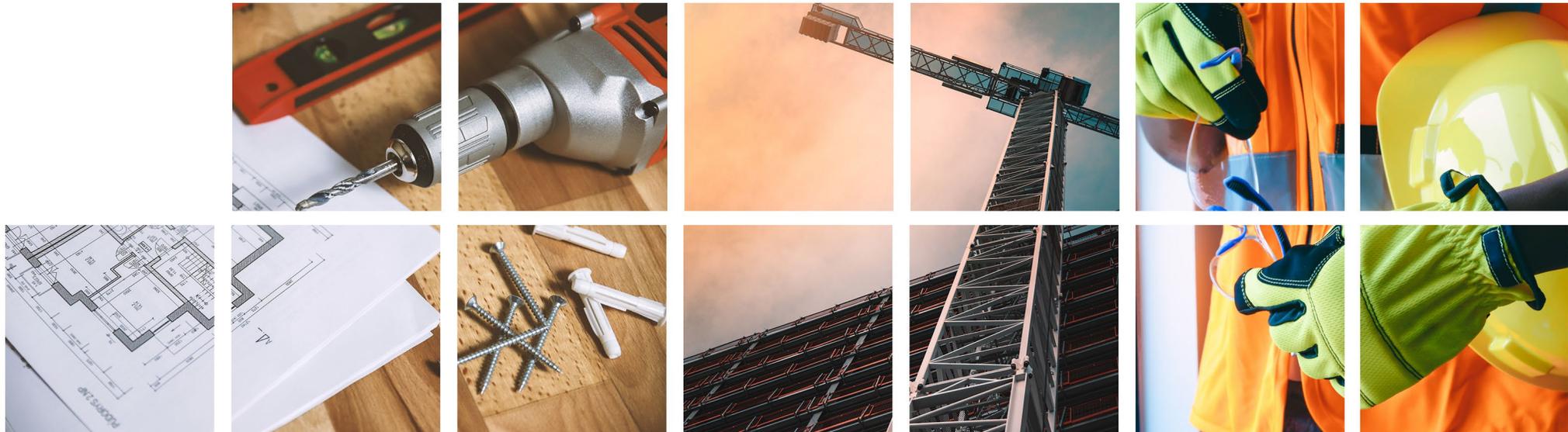
Isaac Loydpierson
Bluebeam



Interscope Update

LeaAnne Hahnel, BSA

Interscope System Administrator



Interscope Stats



Number of Active Users

University

388

Community
Colleges

211

Agencies

433

Designers

1153

Contractors

843



**Total
Active
Users**



3,028

Number of Problem Reports Submitted in 2022

392

Total Help Requests in 2022

13,347



Process Change

Agile Methodology

Azure

Sprints

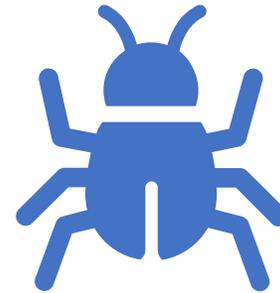
Testing Process

Release

Number of Major Changes in the System



17 Sprints



63 work tasks

- New Development
- Bug/System Issue
- System Maintenance



New Development

Senate Bill 105

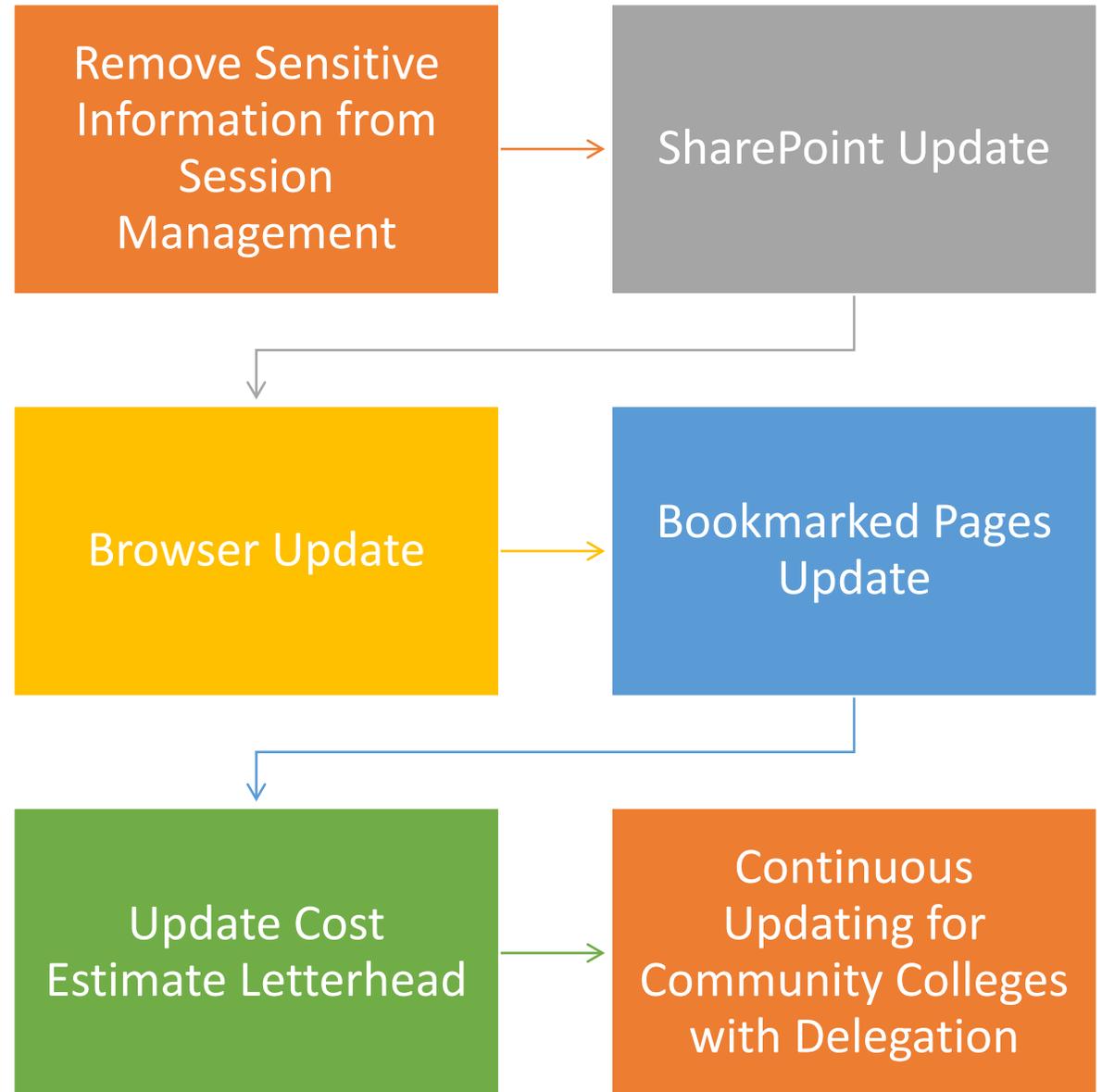
SCIF

Increase in NCAS field size

University System Increase in Delegated
Authority to \$4m

Sunsetting of EO 143

System Maintenance



Bugs System Issues

Inspections Page

FCAP Deficiencies

Design-Build Change
Order Workflow

Data Clean Up

1

Please take a moment to close out any projects

2

Record your HUB data

3

Update statuses to match the actual project

Interscope Training

[2023 Interscope Training Calendar.pdf \(nc.gov\)](#)



Interscope Contact Information

LeaAnne Hahnel, BSA

Interscope System Administrator

984-236-5429

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www.nc-sco.com



Bluebeam Update

Isaac Loydpierson, PE



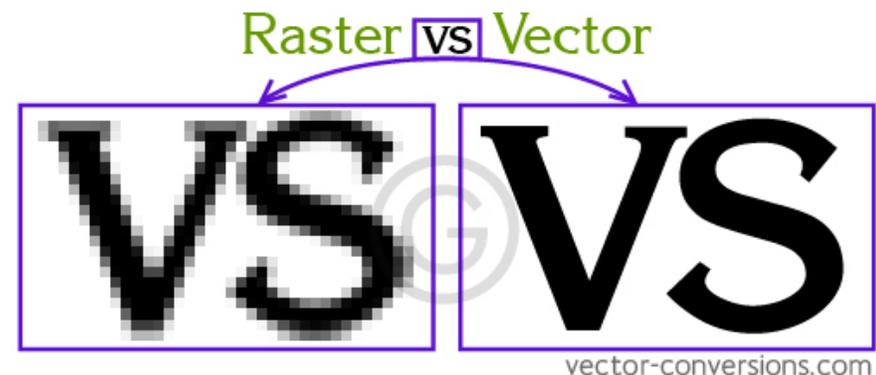


Bluebeam Transition

- Began transition to Bluebeam for Electronic Review in 2018.
 - Recognized the need for an electronic review process.
 - Decreased costs and review times.
 - Chose Bluebeam as the PDF software for its wide functionality.
 - Strong tool sets
 - Document management/Cloud integrations
 - Report functions
 - Committee formed to establish workflow
 - Attempted to create an easy transition for Reviewers and Designers.
 - State Construction Manual Section 512 created to establish guidelines.
- We are currently at 100% Electronic Review.

SCM Section 512

- Reference to the *Guidelines for Construction PDF Documents* as put forward by the Construction Progress Coalition.
 - Pay specific attention to Section 2 (PDF Document Quality) [This is referring to V2.0 of these guidelines which is not currently finalized] of this document as it helps improve the ease and quality of our reviews and will improve references to the documents throughout construction process.
 - Some of these Section 2 guidelines are required by our State Construction Manual Section 512 (B)(1)(b). This includes:
 - Truetype Fonts
 - Vector Drawings





SCM Section 512

➤ Additional SCM Requirements:

- Drawing set shall be submitted in ONE (1) PDF file (with some rare exceptions for very large projects, in which case files shall be split up by discipline).
- Electronically recognized page labels.
- Flattened markups (from Autocad conversions).
- Greyscale color scheme.
- DO NOT send us Locked documents that cannot be edited as this makes our commenting impossible.

Electronic Page Labels and Bookmarks

- Bookmarks make a big difference with document navigation.
 - Will work as well as Page Labels for Drawing Sets but is a very helpful to Specifications and Project Manuals.
- Page labels assist with navigation as well as more clear comment reports.

Isaac Loydpierson, PE (2)



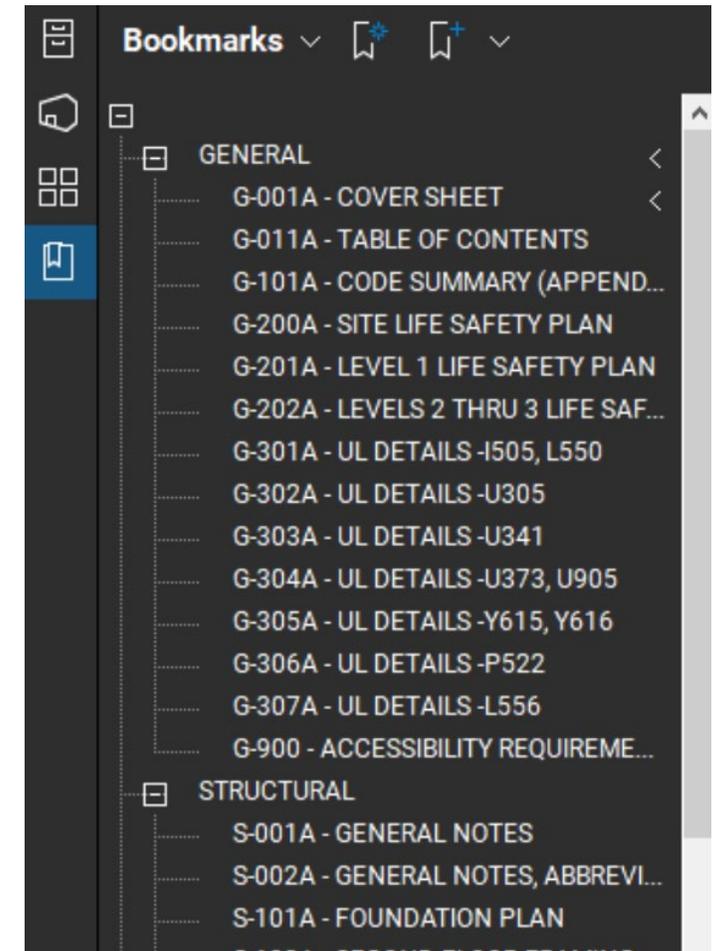
Subject: Electrical & Fire Alarm
Page Label: 1
Page Index: 1
Author: Isaac Loydpierson, PE
Date: 2/6/2023 10:58:25 AM

Comment without Page Label.



Subject: Electrical & Fire Alarm
Page Label: A101
Page Index: 2
Author: Isaac Loydpierson, PE
Date: 2/6/2023 10:58:54 AM

Comment with Page Labels.





Document Naming Convention

➤ File Naming:

➤ Files for submitting shall be labelled following the SCO convention. State ID
– Agency – Current submittal – phase – document

- Ex: XX-XXXXX-XX-UNC-CD-DWG [First submission]
- Ex: XX-XXXXX-XX-UNC-CD2-DWG [Second submission]
- Ex: XX-XXXXX-XX-UNC-CD-CE [Cost Estimate]

➤ For listing of all labelling convention, see State Construction Manual Appendix B.



Other Helpful Document Modifications

- Links (Batch link feature in Bluebeam)
 - Connects all references to pages or details to the actual page or detail.
- Electronic Page Labels for Specifications.
- More detailed Bookmarks on Drawings.
 - For example, bookmarks leading to specific details instead of full pages.



New Workflow

- Currently using Studio Sessions exclusively
 - Document Organization is more difficult with large projects.
 - Facilitates real-time collaboration allowing Reviewers to complete reviews simultaneously.
 - Designer (or users Outside of SCO) Access must be actively managed.
 - Studio Sessions must be managed to remain active for drawn-out projects.



New Workflow

- Will now use a combination of Studio Projects and Studio Sessions.
 - Full Projects will live in Studio Projects.
 - Individual review submittals will use Studio Sessions.
 - This will provide for better organization of documents and more Designer access.
- How this affects Designers and non-SCO parties
 - You will never have access to our studio sessions.
 - You may have view only access to the Studio Project full time, even when a review is ongoing.



Bluebeam Revu 21

- New software version transition in process.
- Will allow us more access to Bluebeam from more places.
- Will allow us to manage our users more efficiently.
- This upgrade along with our new workflow will allow easier access for our
Monitors and Inspectors.
 - Bluebeam Cloud has potential for field access to documents.
 - Workflow process for this is still under development.

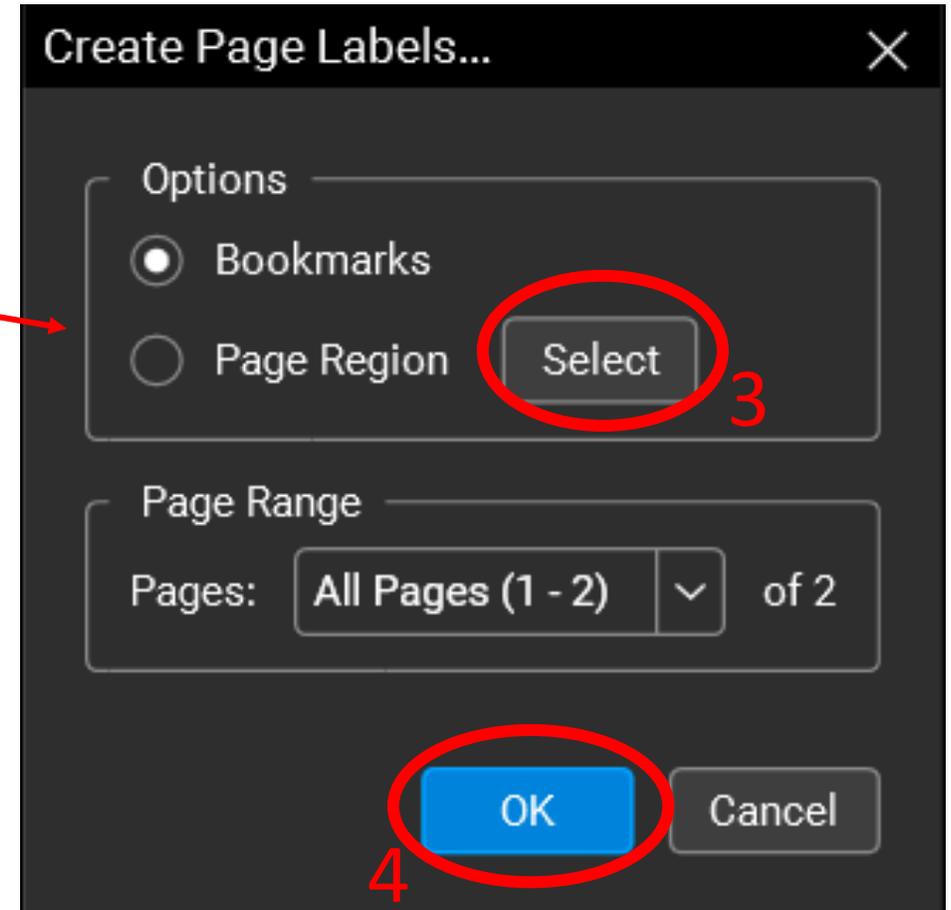
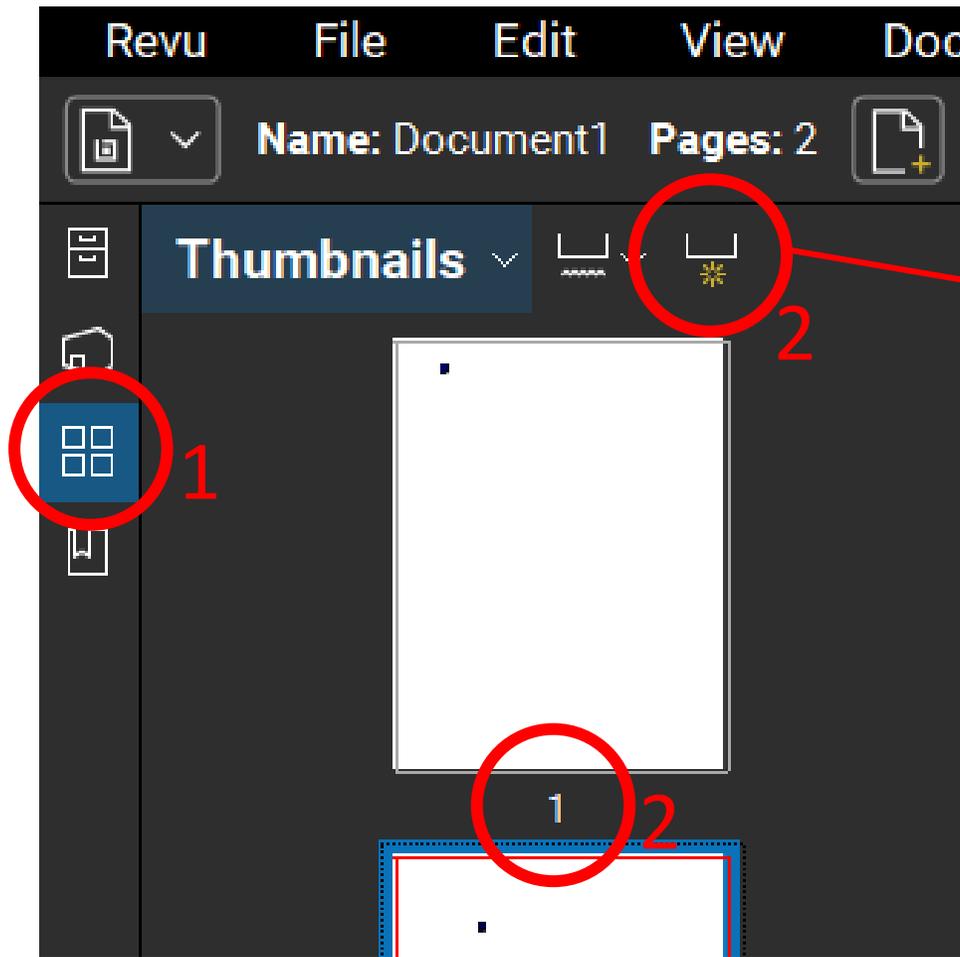
Contacts

LeaAnne Hahnel – Leanne.Hahnel@doa.nc.gov

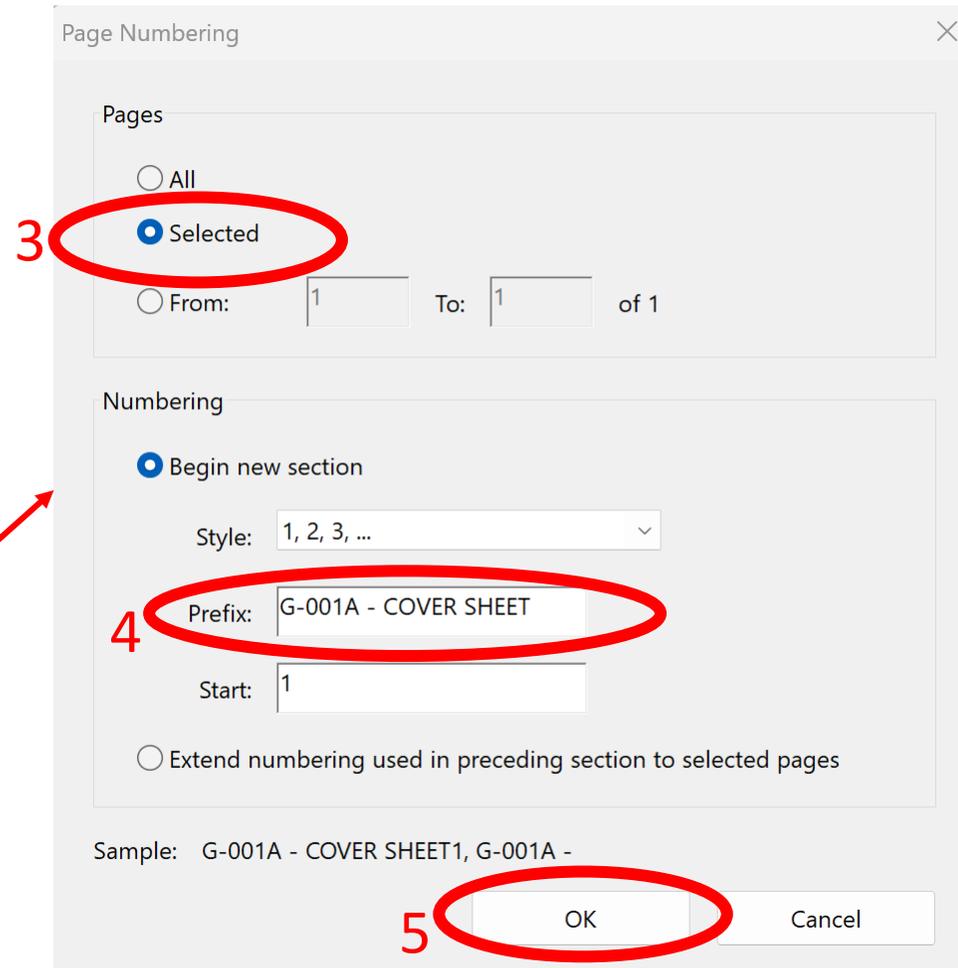
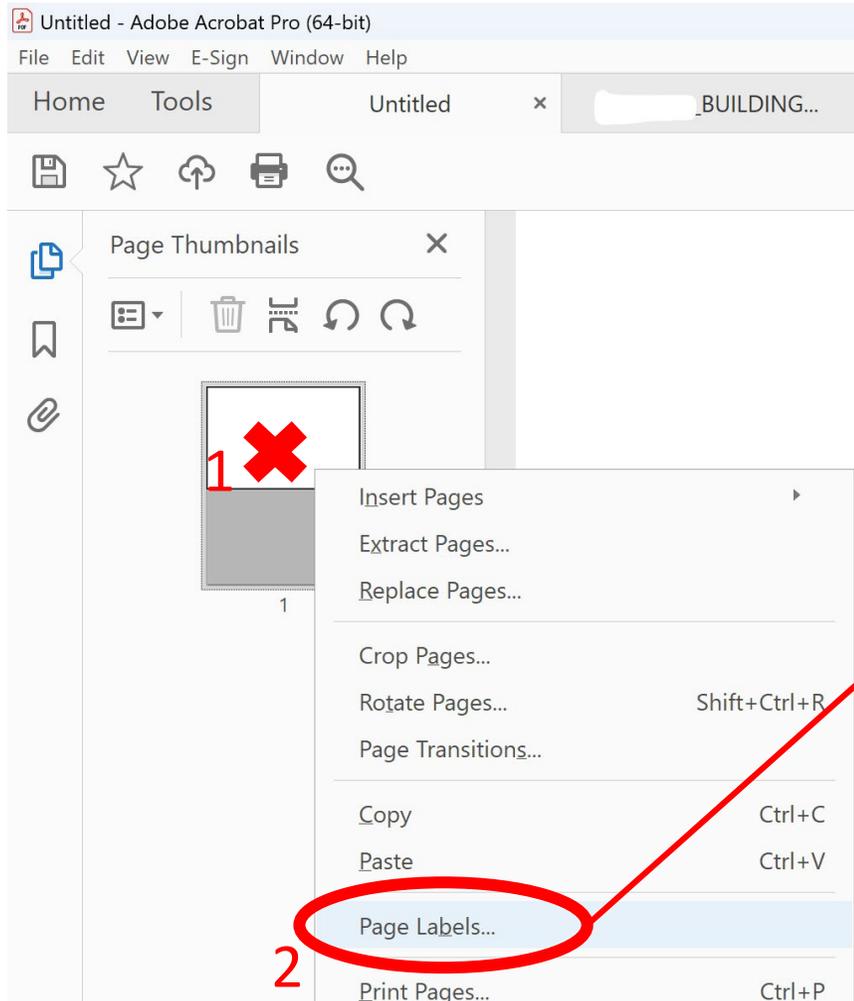
Isaac Loydpierson – Isaac.Loydpierson@doa.nc.gov



Creating Page Labels Using Bluebeam



Creating Page Labels Using Adobe



Creating Bookmarks Using Bluebeam

The image shows a screenshot of the Bluebeam software interface. The top menu bar includes Revu, File, Edit, View, and Document. Below the menu bar, the document name is "Document1" and the page count is "Pages: 2". The Bookmarks panel is visible on the left side, showing a list of bookmarks. A red circle labeled "1" highlights the "Add Bookmark" icon (a book with a plus sign) in the Bookmarks panel. A red circle labeled "2" highlights the "Add Bookmark" icon (a book with a plus sign) in the Bookmarks panel. A red circle labeled "2" highlights the "Edit Bookmark" icon (a book with a plus sign and a checkmark) in the Bookmarks panel. A red arrow points from the "Edit Bookmark" icon in the Bookmarks panel to the "Create Bookmarks" dialog box. The "Create Bookmarks" dialog box has a title bar with a close button (X). It contains the following options:

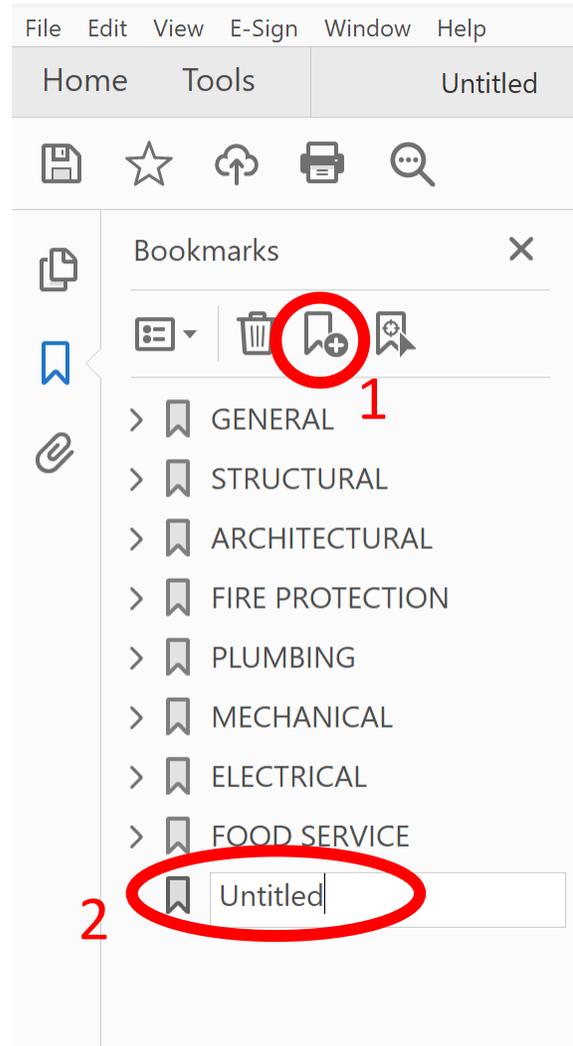
- Options
 - Page Labels
 - Page Region Select
 - Page Scale: Fit Page ▼
- Page Range
 - Pages: All Pages (1 - 2) ▼ of 2

At the bottom of the dialog box, there are two buttons: "OK" and "Cancel".

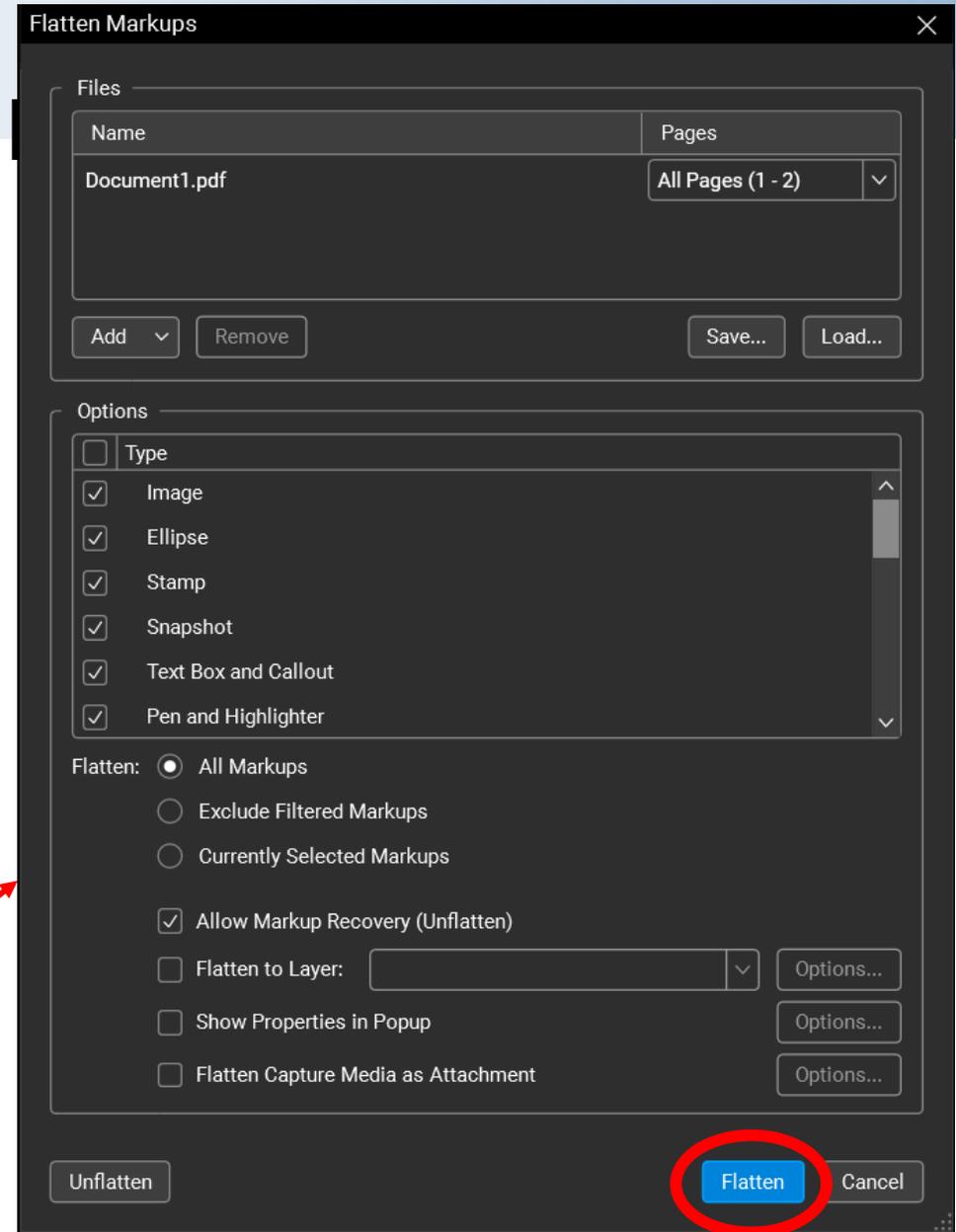
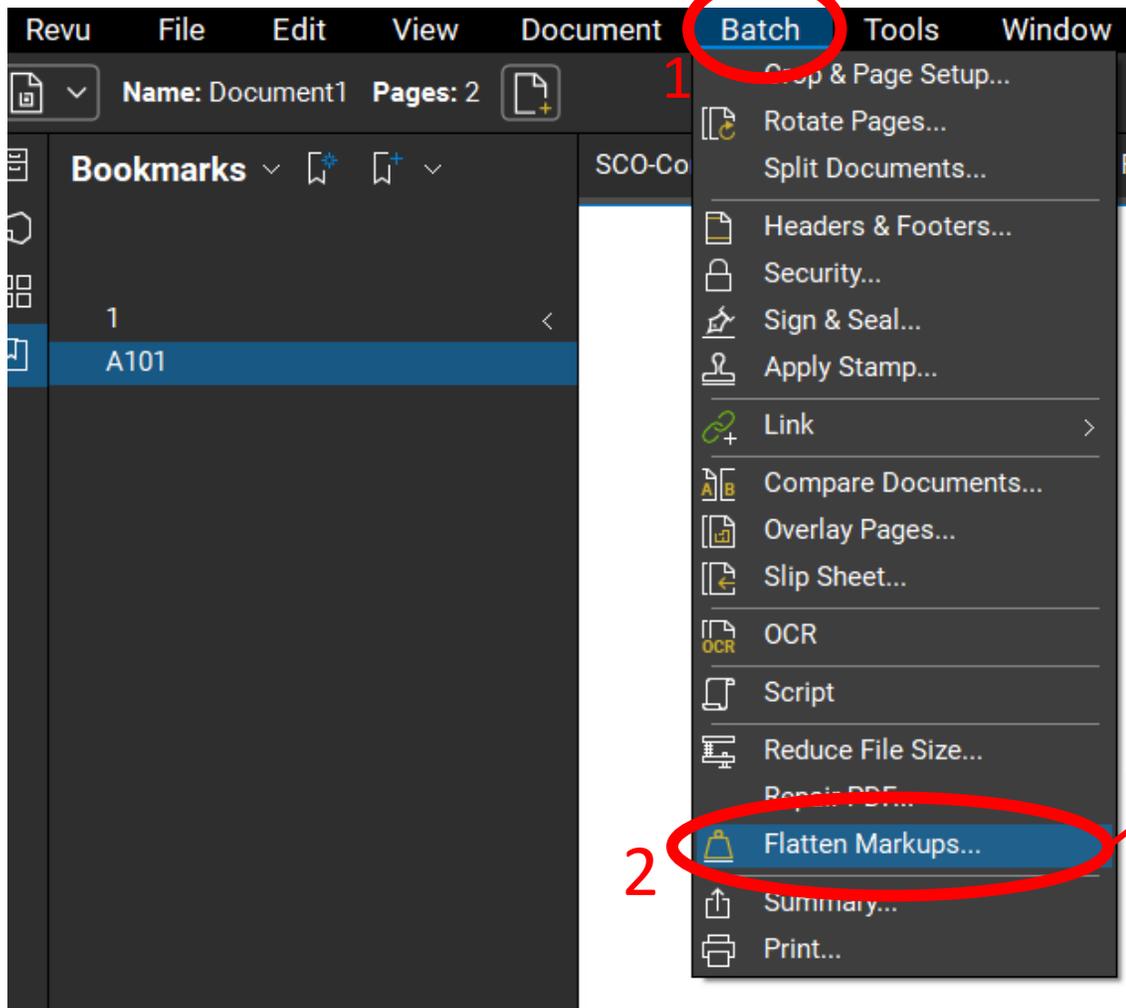
Right-click the bookmark to edit it.

Click drop down to add above or below, or as a "child" bookmark.

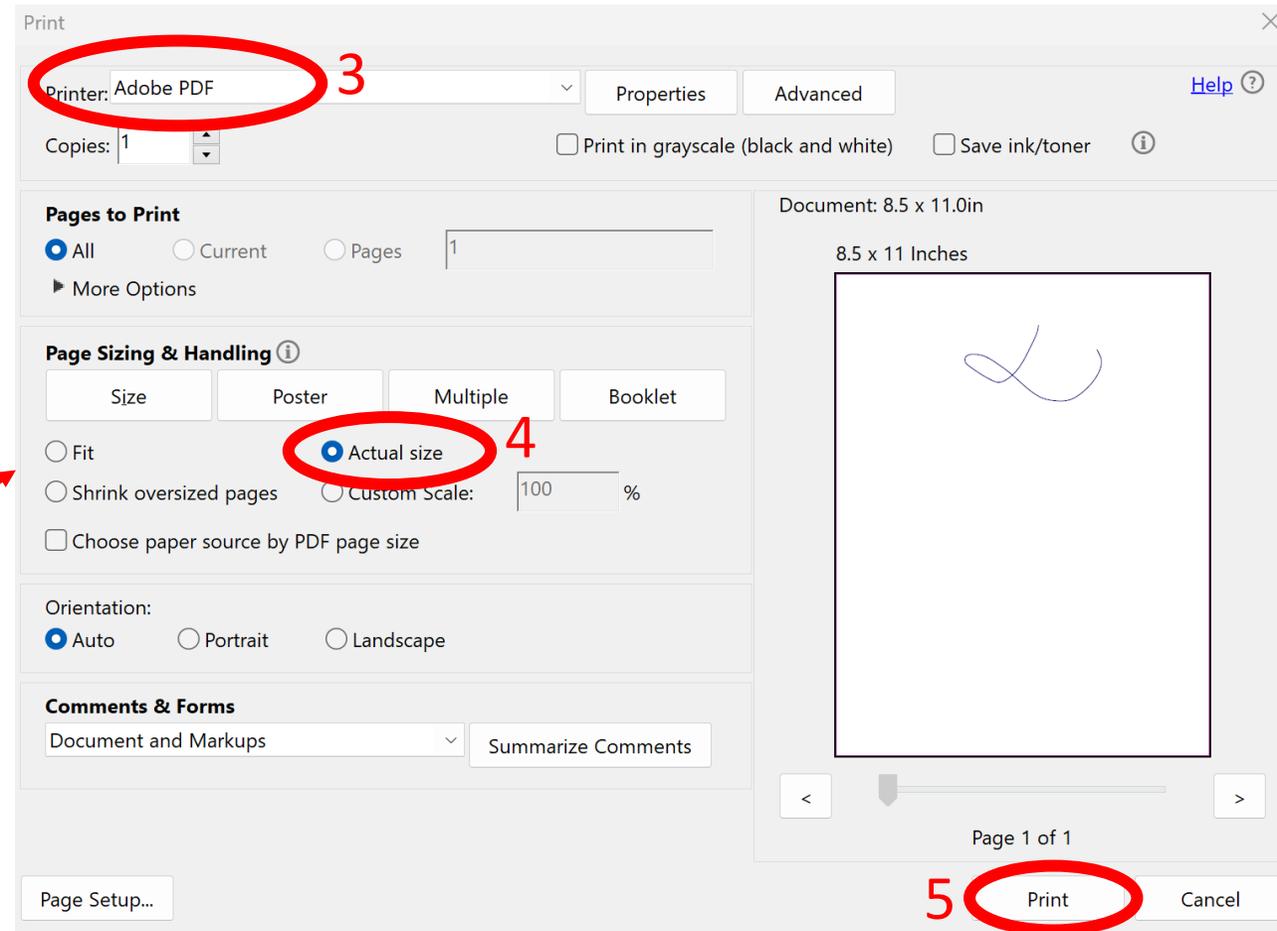
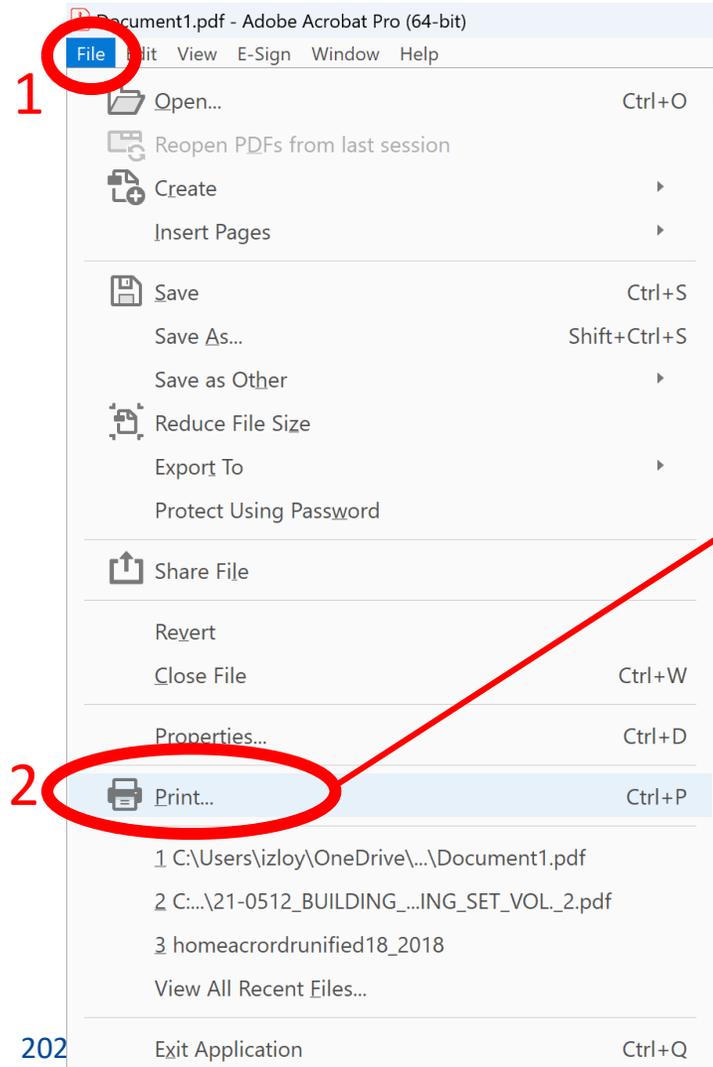
Creating Bookmarks Using Adobe



Flattening Markups in

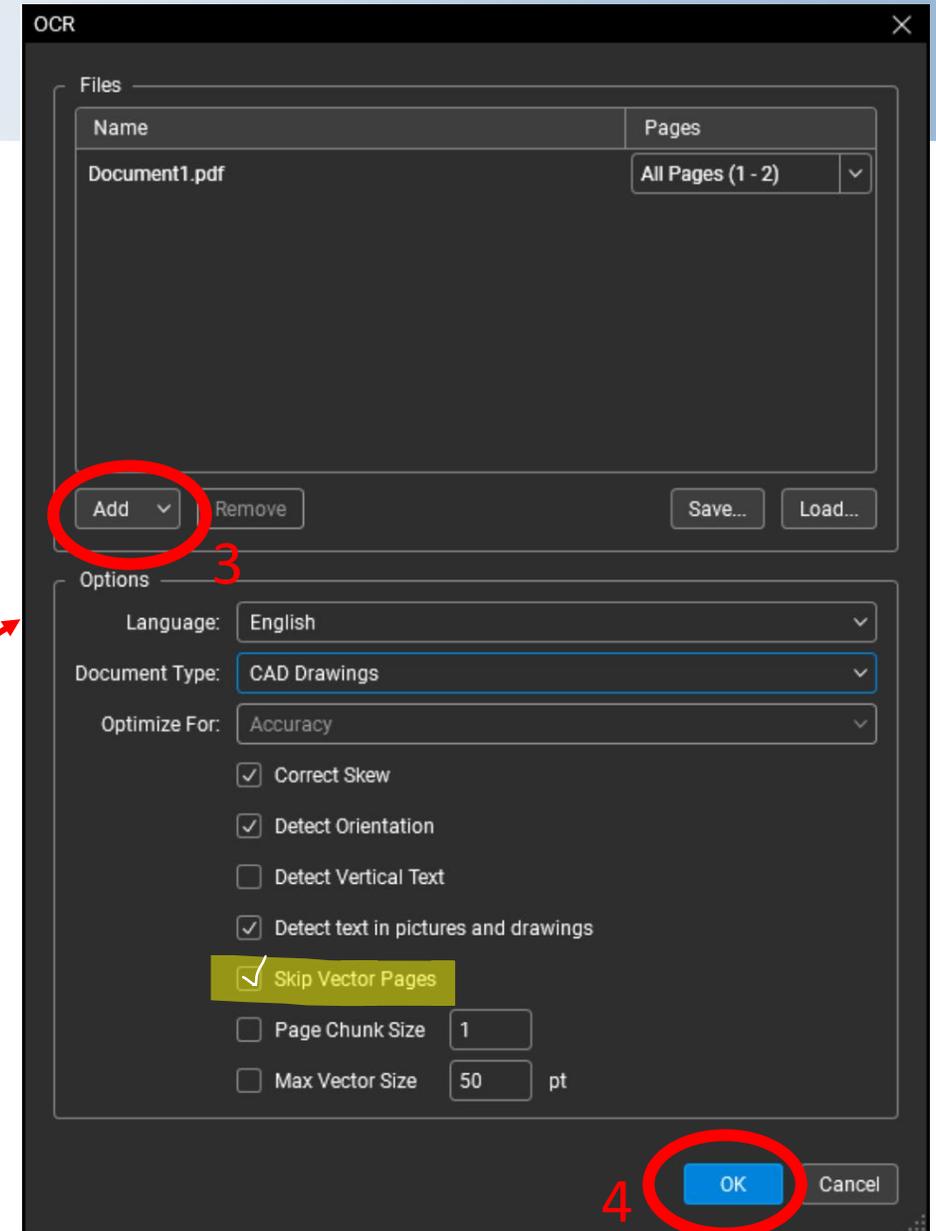
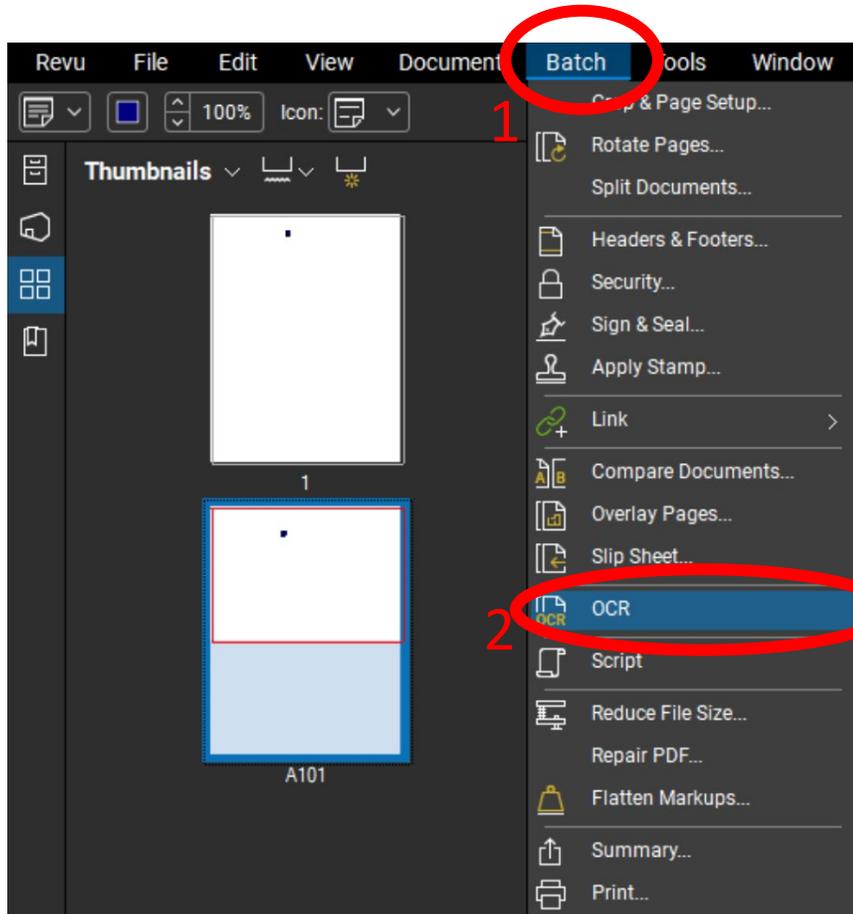


Flattening Markups in Adobe

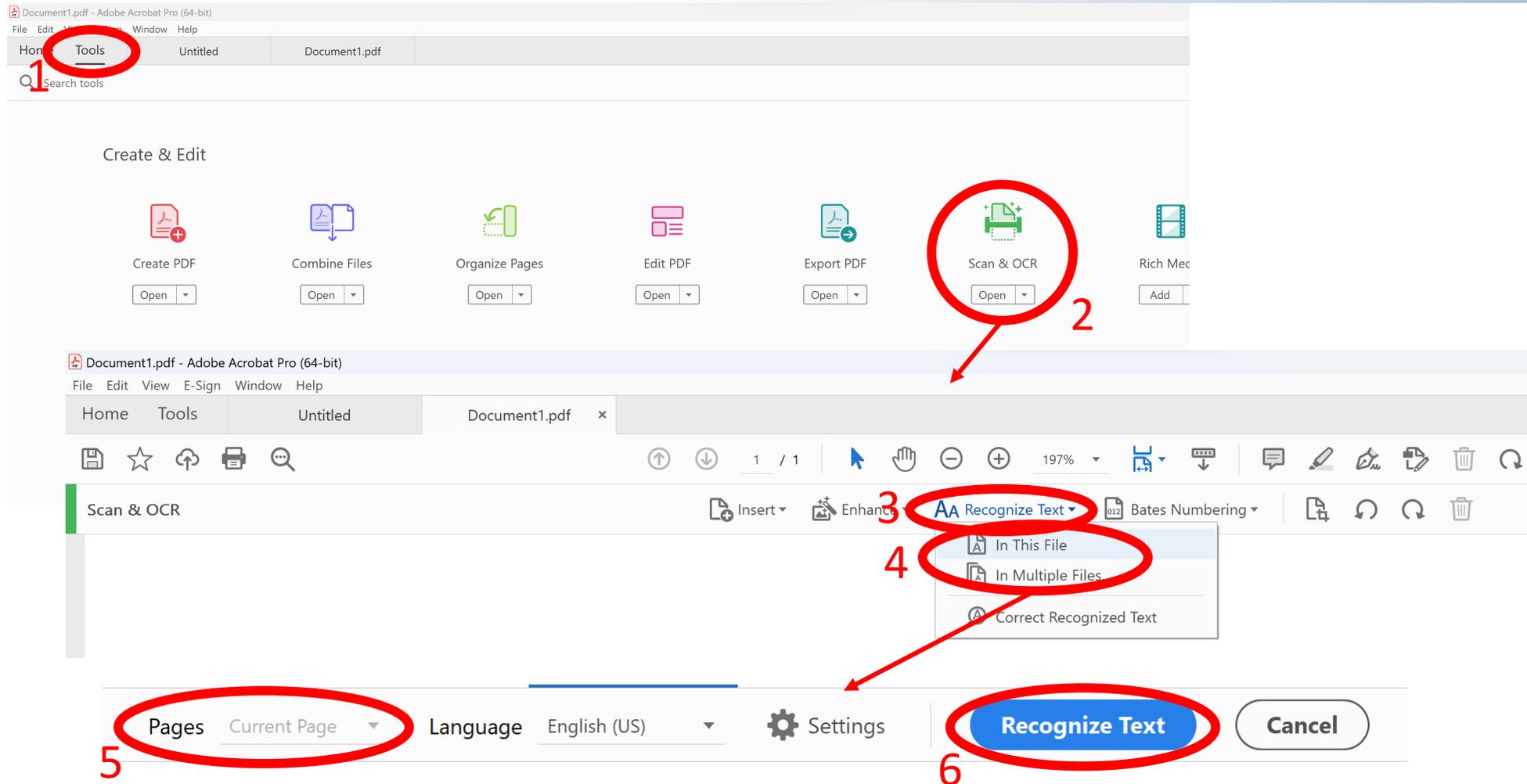


OCR in Bluebeam

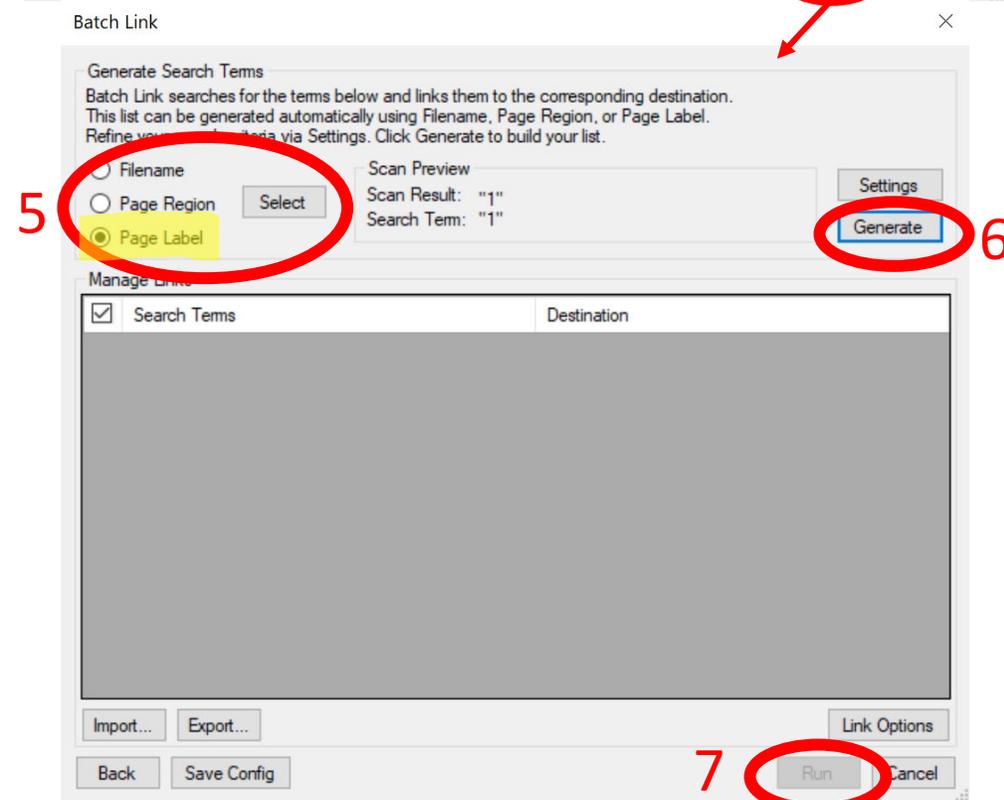
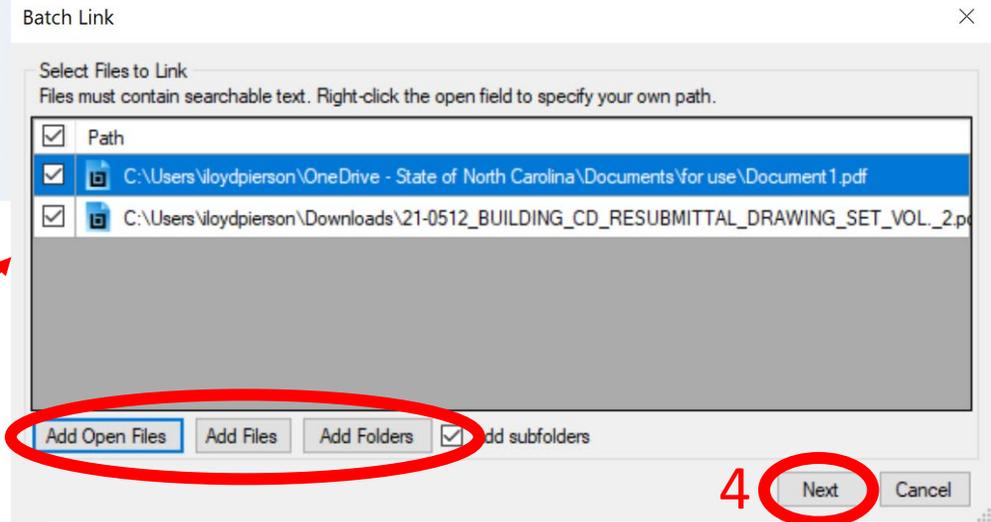
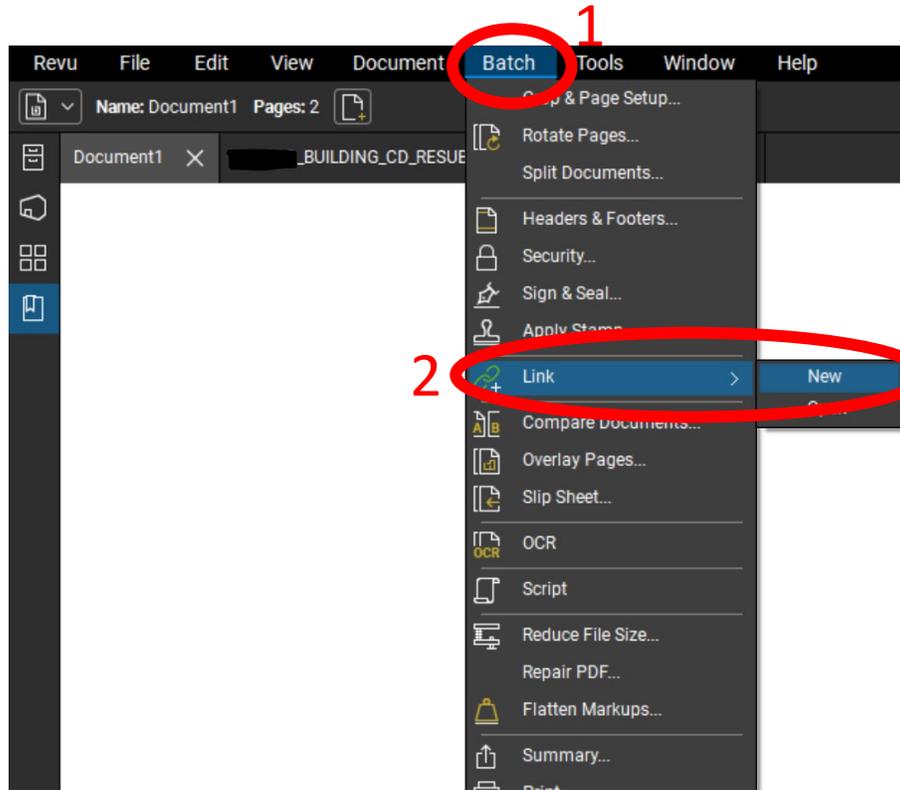
- Requires Extreme version if using Revu 20. Only Requires the Basics version if using Revu 21.
- This is a "last resort" for Raster PDFs.



OCR in Adobe



Batch Link Using Bluebeam



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