Autodesk Construction Cloud (ACC) Guide-Change Order Process Facilities Management
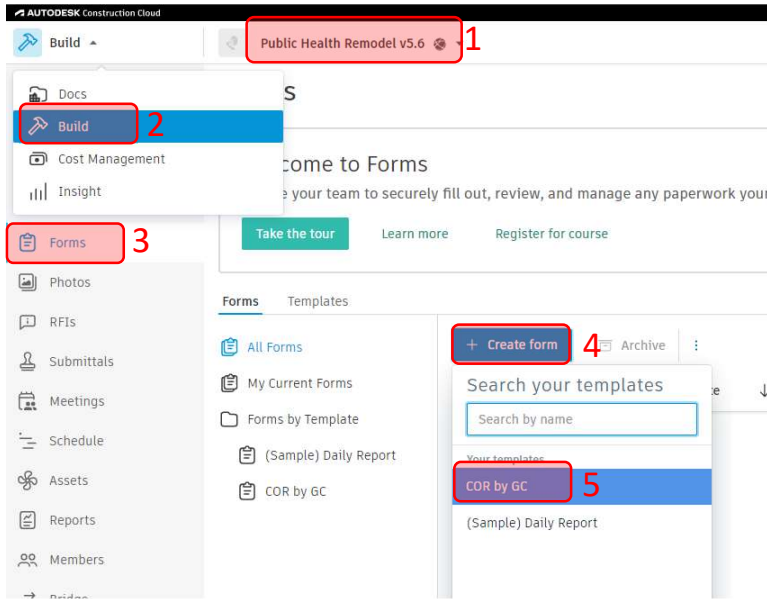
Table of Contents

For entire process, see https://youtu.be/hrmQRMjR_Ms

1. Build-Contractor Completes *GC by COR* form

Select the correct project from the drop down near the upper left. Go to *Build > Forms.* Click blue "+ Create form" button, select *COR by GC*


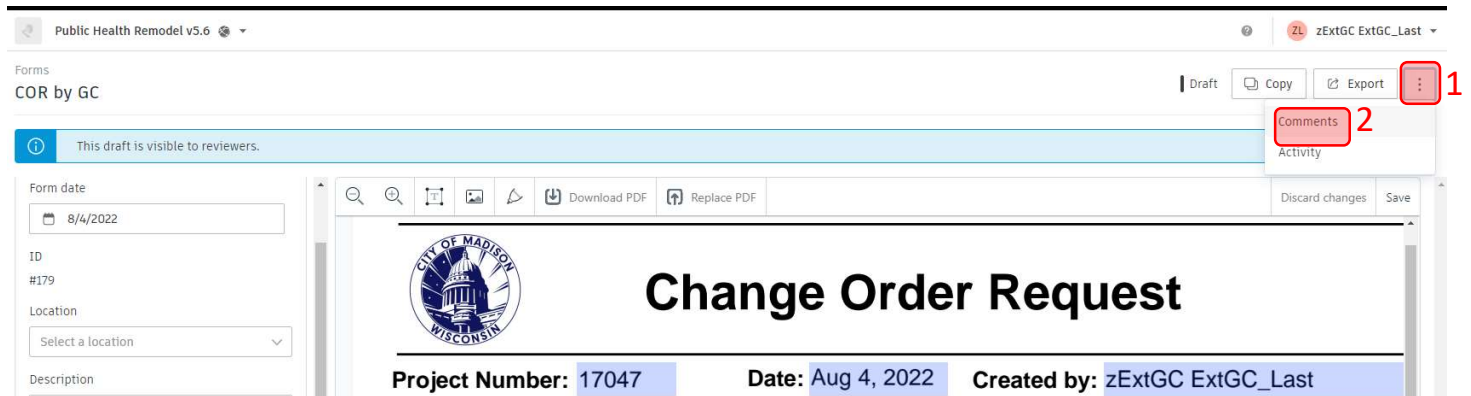Fill out form per instructions on form, copied below. **Steps 1-4 of Form**

NOTE: Not all file types can be referenced, but PDF, DOCX, XLSX, PNG, JPG are among supported file types. Other references (*Photos*, *Issues*, *Forms*, and *Assets*) are not supported at this time.

TIP: You can open the *Files* tab of *Build* in a new window or tab. This will allow you to drag and drop a file to the *0-FileRefUpload* folder without navigating away from the form. The file must be uploaded prior to open the *Add File Reference* dialog box. Files attached to forms are automatically renamed to keep any new uploads to *0-FileRefUpload* at the top of the list.
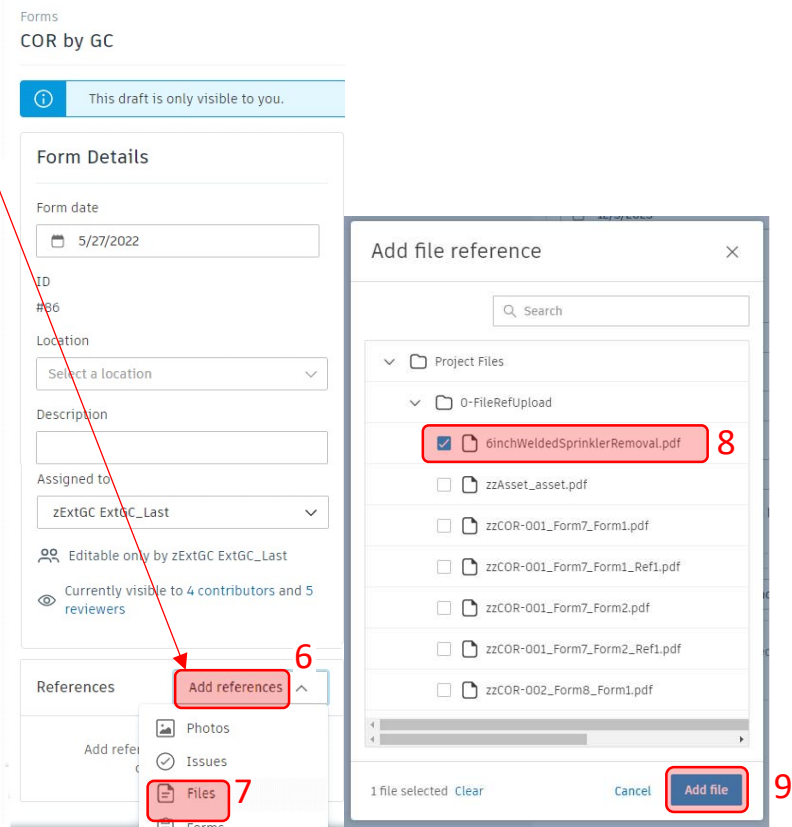
At any time (regardless of whether the form is editable to user) a contributor or reviewer can add comments on the form (indicated by 1 & 2). Use @ and autocomplete individual or role name to send them a direct email notification. All other contributors and reviewers are notified with each comment.

Once complete, hit submit in the lower right. This will submit the form to the Construction Manager for Review.

2. Build-Construction Manager Reviews *GC by COR* form

Construction Manager will receive an email that a form has been assigned to them for review. Follow link to get to the form. The Construction Manager can review the form and its referenced files. Use the comments feature shown on the previous page (indicated by 1 & 2) to interact with Contractor and other contributors or reviewers. Use @ and autocomplete individual or role name to send them a direct email notification. All other contributors and reviewers are notified with each comment.

Forms in the *Review* state can proceed one of two ways. *Send back to editors* if any changes are needed by the Contractor. Or, once everything has been reviewed and is ready to process as a Change Order, click the blue *Sign and submit* button.

NOTE: Submitted forms cannot be removed. The process to hide the form and undo the Change Order Request is involved and should be avoided.

3. Cost Management-Construction Manager processes Change Order Request

NOTE: Every 5 minutes, an automated Recipe (a program that runs on the ACC Connect platform through Workato) scans for submitted forms. Once a *COR by GC* is submitted within that time window, an email is automatically sent to the Construction Manager notifying them of the Change Order Request.

Click the link in the email from Workato.

Change to *Default View* if not already set. Click *Budget Code* column to assign either a specific Account or the main Contingency budget. Budgets must already be setup.

Enter data for: *N/B* (Negotiated/Bid), *CO Just. Comments-CPM/CCM* (Change Order Justification Comments by City Project Manager and City Construction Manager), and *Sched. Change Explan.* (Schedule Change Explanation)

Change Orders

	Number ^	Name		Cost Status	Budget Code	Committed	Processing…	Change Order	Type	N/B	CO Just. Comments-CPM/CCM	Sched. Change Explan.	⚙
						111,892.78							
☐	COR-027	COR-027-add outlet at data rack	⋮	● Executed		167.66	PCO-005	CO-005	No Cont Ext	B	Justification comments for COR-027....		
☐	COR-028	COR-028-Relocate existing pneumatic line	⋮	● Executed		1,955.94	PCO-005	CO-005	No Cont Ext	N	Justification comments for COR-028....		
☐	COR-029	COR-029-Change privacy rm countertops to 26" deep laminate	⋮	● Executed		811.44	PCO-005	CO-005	No Cont Ext	N	Justification comments for COR-029....		
☐	COR-030	COR-030-Relocate thermostats	⋮	● Executed		338.55	PCO-005	CO-005	No Cont Ext	B	Justification comments for COR-030....		
☐	COR-031	COR-031-All work to shift wall layout to expand office 501	⋮	● Executed		21,025.61	PCO-006	CO-006	No Cont Ext	N	Stakeholders determined a change is required in room layout.		
☐	COR-032	COR-032-Add power & data outlets in 3 conference rooms ✎	⋮	● Draft	⋮ ∧	926.52			Cont Ext Requi…	N	Unforseen stakeholder needs that were uncovered during constru…		

ADL_12348-45-151 - Paving

BID_11111-1414-11 - Chip Sealing East

BID_12345-67-890 - Base Construction Contract ✓

BID_12346-15-484-00012 - Solar

BID_12347-54-45 - Signage

BID_12348-15-154 - Landscaping

Create new budget

Group by budget code segment

Click the blue text for the *Name* of the Change Order Request to bring up the fly out.

COR-032-Add power & data outlets in 3 conference rooms ✕
Change Order Request

✕ Details

Number COR-032

Name COR-032-Add power & data outlets in 3 conference rooms

Description COR-032_Submit-20221201(1510+04)_FormID-389

Budget BID12345-67-890 - Base Construction Contract

Main Contract Main Contract

Contract With GC 8152 - Public Health Remodel

Supplier Ext-GC1

Cost Status Draft   Scope Assigned

Schedule Change 0 Days

Type Cont Ext Required

Location Select a location

✕ Documents

ⓘ Stored in Autodesk Docs

📁 Attachments
2 documents

📄 zzCOR-032_Form389_Costs.pdf ⋮

📄 zzCOR-032_Form389_Ref1_CBFloorBoxOutlets.pdf ⋮

Add document ⌄

NOTE: Many of the attributes visible in the flyout can also be turned on by clicking the gear icon and then inputted in the table view. However, there are some attributes that can only be edited or viewed via the flyout.

<*"Description"* has auto-populated text for tracking purposes. For example, this was COR-032, Submitted December 1st 2022 at 3:10:04 AM and Form ID #389

Open the attachments to confirm they are correct.

<PDF of form as submitted.

< File(s) attached to *COR by GC* by way of file reference

See next page

> Related Change Orders

> Cost Summary

> Markups

> Scope of Work

> Approval

> Dates

∨ Custom Attributes   ⋮

Continued…

<Previously entered

N/B   [N   ∨]

<Previously entered

CO Just. Comments- CPM/CCM   [Unforseen stakeholder needs that were uncovered during]

Actual vs Estimated Quantities differ   ☐

Missing Bid Item or Additional Bid Item needed   ☐

Field Decision (Expanded Scope)   ☐

Differing site conditions   ☐

Design did not adequately anticipate field conditions   ☐

Underground conflicts (utility revision)   ☐

Design Changes   ☐

Select checkboxes to indicate justification for the Change Order

Click the 3 vertical dots next to name of the COR. *Assign > Prelim Change Order*. Type a name for the Prelim Change Order, be sure to click *Create option...* or else nothing will be created or assigned.

Change Orders

Change Order Request   Processing Change Order   Change Order

[+ Add]

	Numb er ^	Name				cessi	Change Order	Type	N /B	CO Just.
			⊦ᵍ Define hierarchy							
			→ Assign **2**	>	Processing Change Order **3**					cati
☐	COR-030	COR-030-Relocate thermostats	⊞ Delete			-006	CO-006	No Cont Ext	N	Stakehold
☐	COR-031	COR-031-All work to shift wall layout to expand office 501								
☐	COR-032	COR-032-Add power & data outlets in 3 conference rooms ✎ ⋮ **1**		Draft	926.52			Cont Ext Requi...	N	Unforseen

Assign to Processing Change Order   ✕

Name *

[COR-032] **4**   ∧

Create option COR-032 **5**

Cancel   [Create and Assign] **6**

4. Cost Management - Construction Manager prepares Change Order for Contractor Signoff

Clicking the PCO number in the column Creating a PCO switches tabs to *PCO*. Click arrow next to *PCO* to see COR(s). Input *New End Date* if needed. This is the new contract end date as a result of this change order.
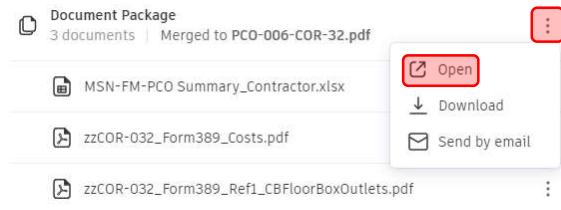
Click the name of the PCO to bring up the flyout. Under Documents, click *Add document* and then select *Generate from document template*. Select the only option.
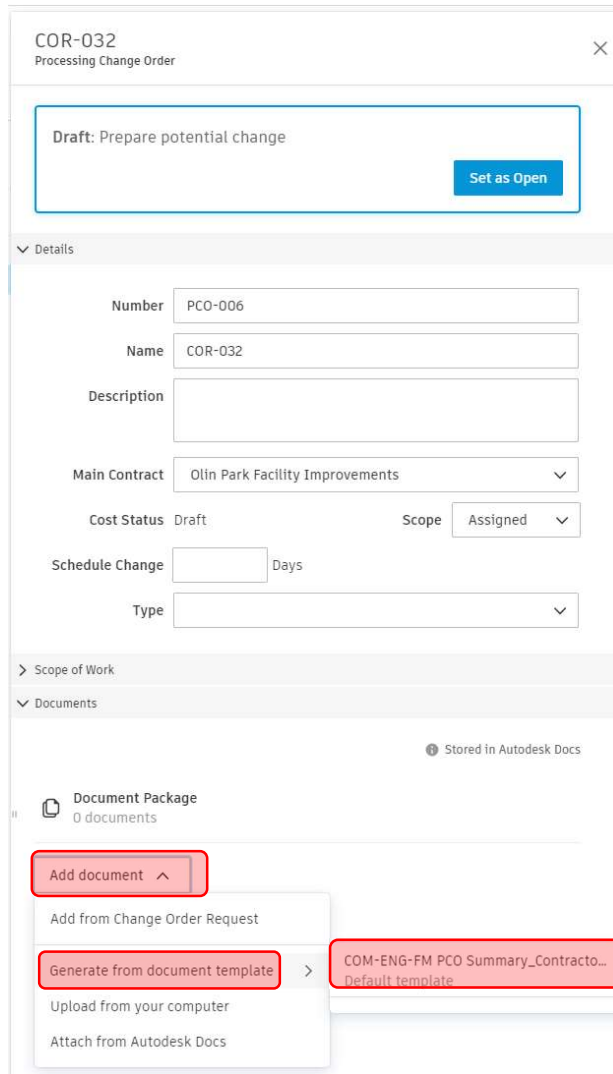
Click Add document again. This time, select *Add from Change Order Request*
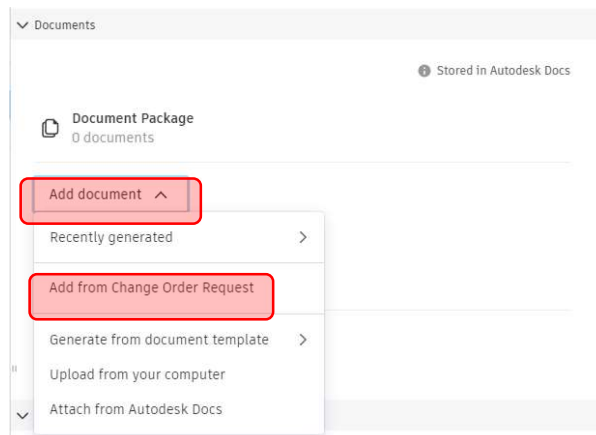
Open the document package to open the file that the contractor will review:

TIP: Documents can be reordered by clicking to left of file icon and dragging. Will need to reopen to merge into new document package and new file version.

Click the 3 vertical dots next to the PCO *Name*. Click *Set As Open*.
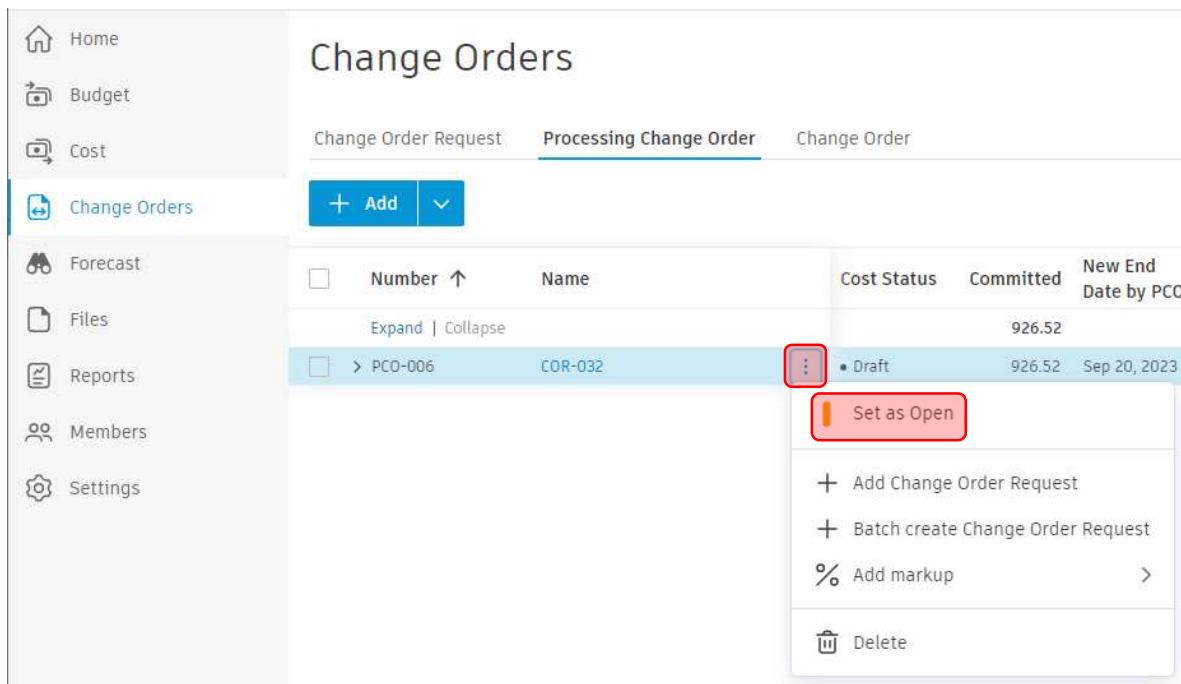
IMPORTANT: The action of setting a PCO to open and having an up-to-date merged document package will trigger an automation that performs several steps. An up-to-date merged document package means that the document package has been opened since the latest change to one of the documents composing it was changed.

The automation will create a *CO Signoff by GC* form, reference it to the PCO, reference the document package to the form, add a link to the PCO in the form notes, and finally send an email with further instructions once complete. If the email fails to send, the document package was not merged after its documents composing it were changed. In that case, you will have to Revise the PCO, remerge the files and then set to Open again.

Changes to data in the system aren't immediately populated—you must regenerate document template if anything is changed. Changes to data without remerging document would be visible on the Activity Log at bottom of flyout.

5. Build-Construction Manager reviews *CO Signoff by GC* Form and submits to Contractor

Check your email and follow one of the two sets of actions. This guide will proceed with 1st set of actions which assumes everything is correct. Follow link to Form.

Action Required: CO Signoff by GC Form ID #12 was successfully created on - 8182-Public Health Remodel v5.6 - 17047

Inbox ×   COM-ENG-CONST MGR ×

Workato Notification <mailer@workato.com>   3:18 PM (0 minutes ago)
to cadbimmgr+com.eng.const_mgr ▾

A CO Signoff by GC form was automatically generate and referenced to Processing Change Order **PCO-006: COR-032.**
. The PCO's document package was also referenced to **Form #12**

Please follow the link to the form and verify the attached PCO document package. Then take one of two sets of actions

1. If correct, follow link to Form #12 and submit form for the GC to review.

2. If incorrect,
2A. Discard Form #12.
2B. Reject PCO-006
2C. Delete document package.
2D. Make changes in cost management, generate doc package, and set to open as you would normally.

This email was generated by Workato on behalf of City of Madison Engineering

Review the file referenced to the form. Submit to the Contractor for their review.
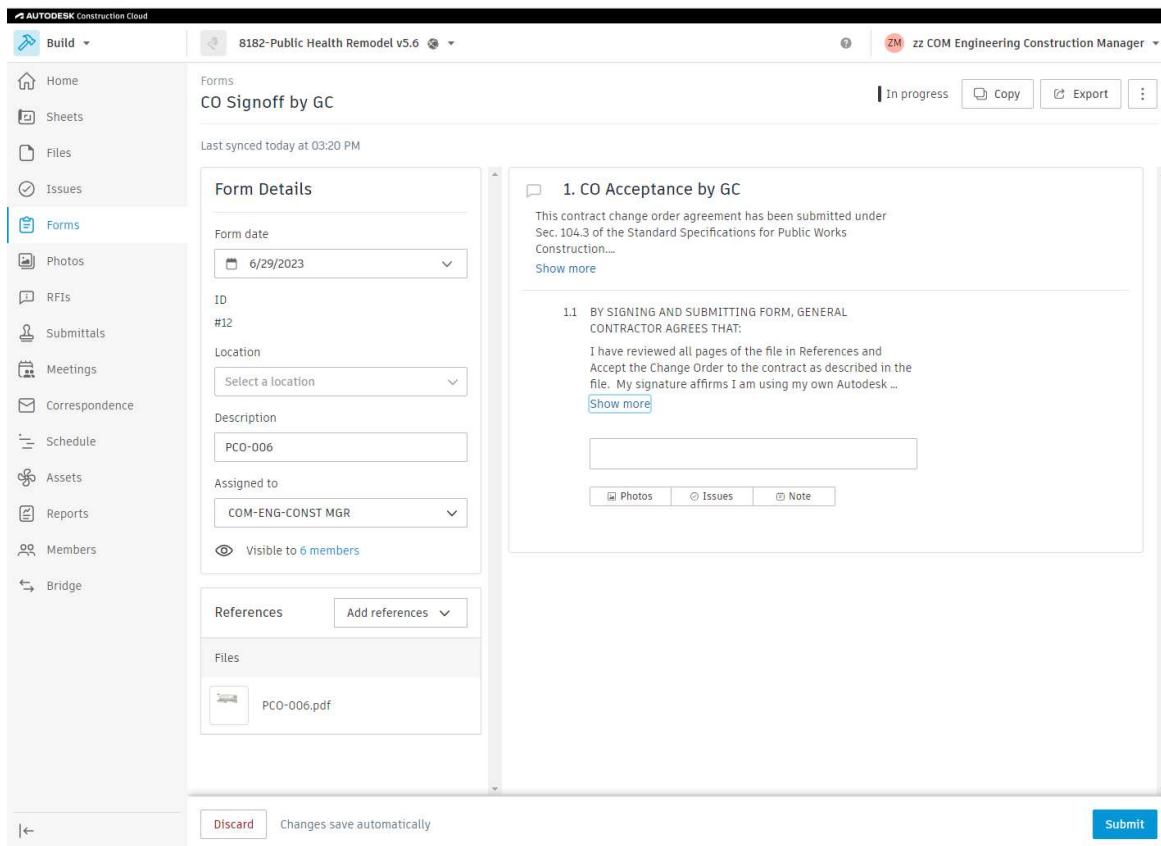
6. Build-Contractor approves *CO Signoff by GC* form

Contractor will receive an *Action Required…* email with a link to a form *CO Signoff by GC*. Follow the link. View the file reference. Click *Show More* to read entirety of statements.

If you approve, add select *Sign and Submit*. If you have any questions or are not ready to sign, use the comments. The methodology to add comments by clicking the dialog bubble icon as shown is the same as it was for the *COR by GC form*.

If through comments it is determined that the document needs changes, select *Send back to editors.*

Only Sign and Submit the form if you approve the Change Order and your signature looks good. The form cannot be edited after you submit.

7. Cost Management-Construction Manager prepares Change Order for staff review

After the contractor has signed the *CO Signoff by GC form,* the Construction Manager will receive an Autodesk email immediately. It contains a link to the Form. You will also receive a Workato email within 5 minutes that contains a link to the corresponding PCO and Form. Follow the Form link in the Workato email

You will see that the form is closed and the GC has signed off.

First, open link to the Form. Export to PDF as shown. Leave default settings with everything toggled on.
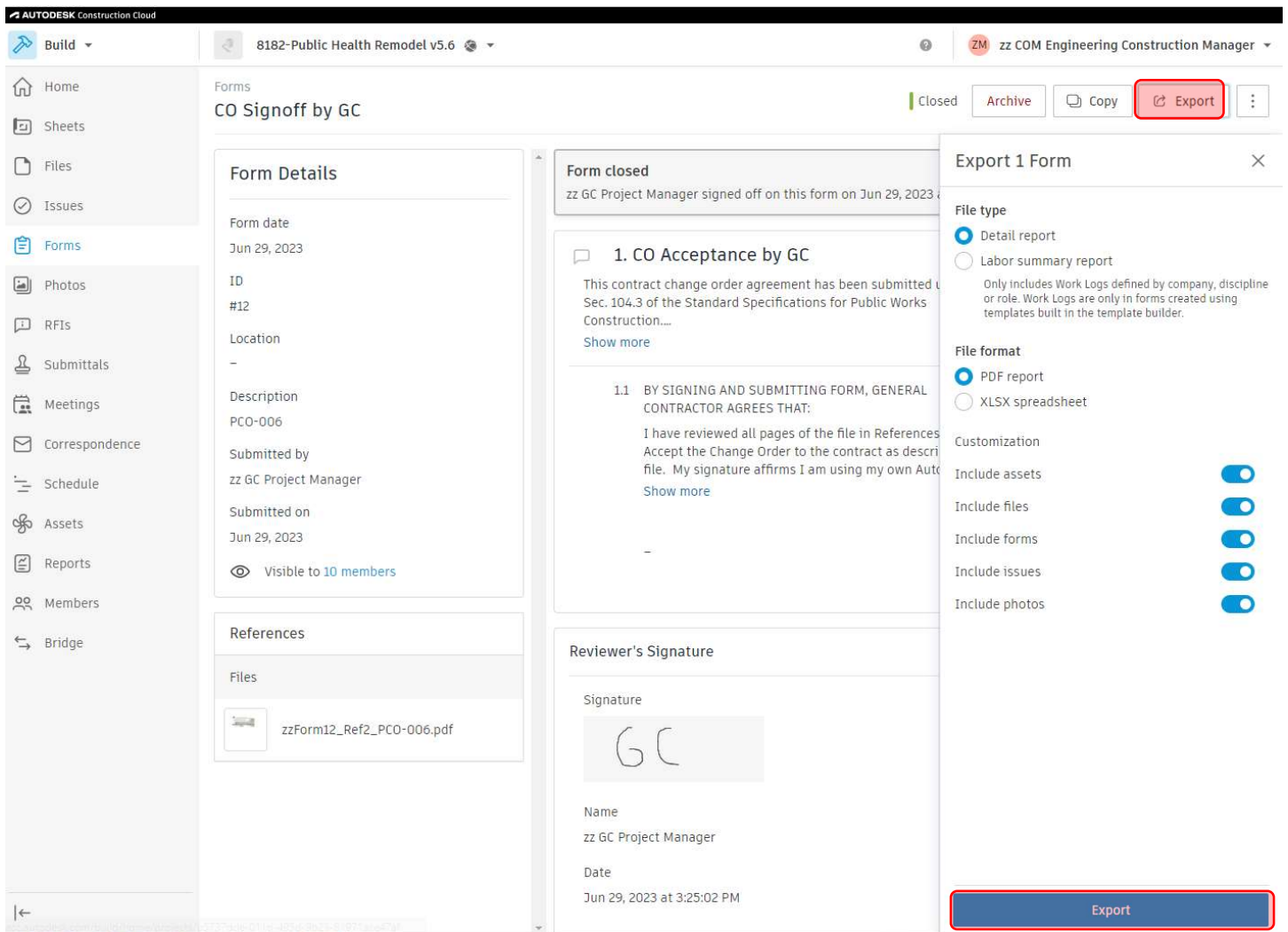
Click Download. Open folder containing downloaded PDF.

Going back to original email, open link to PCO. Sort by date modified so that it is the top result. Drag and drop the downloaded file to the attachments section of the PCO.
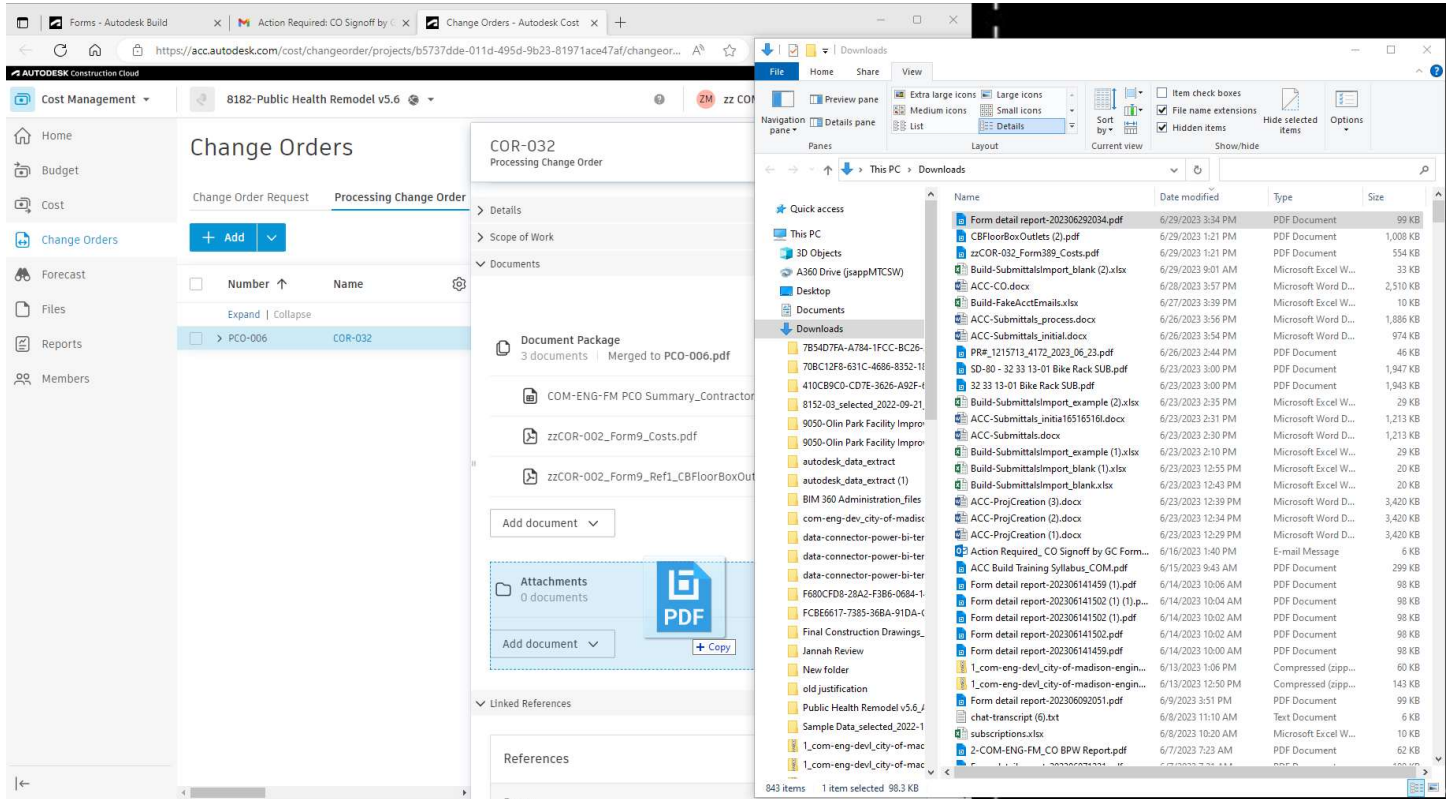
Important: wait for blue wheel next to filename to finish spinning before proceeding. It indicates successful upload of the attachment. Click the 3 vertical dots, select Cost change, and then Generate Change Order.
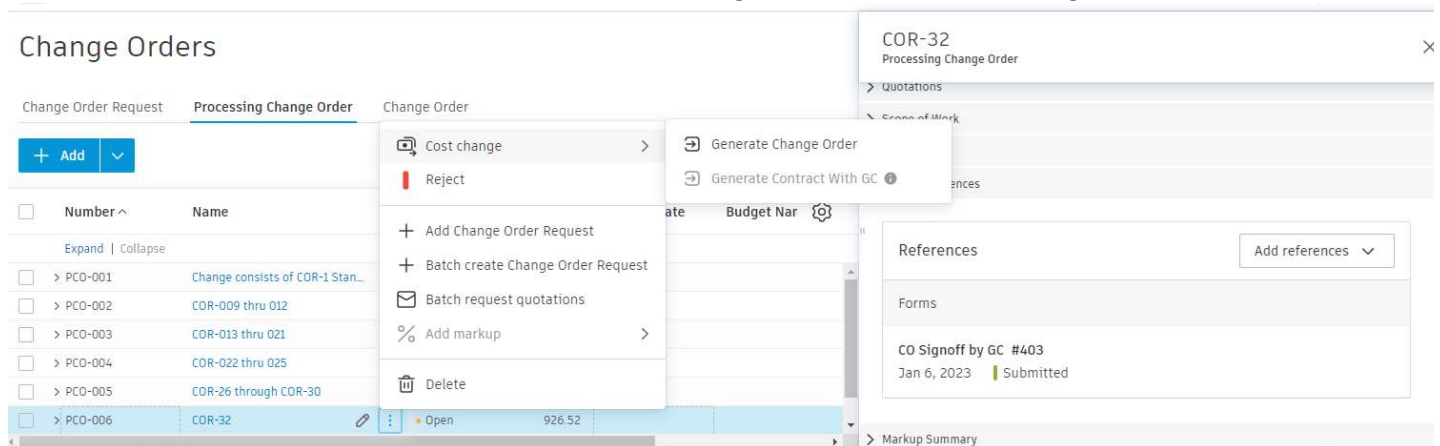
Failure to correctly attach the 1 exported file and only the 1 exported file will result in an error message. The error message is communicated by the name of the generated Change Order. Any erroneous Change Orders must be deleted and recreated, the next time following the instructions.

Upon Creation of the Change Order, ACC will switch to the Change Order Tab. Click *Set as Open*. A Workato Recipe will automatically analyze and then set all Open COs as BPW or non-BPW. **Never manually input data into the Type column.**

Before setting to Open	After setting to open and Workato setting the type

Change Orders

Change Order Request   Processing Change Order   **Change Order**

	Number ^	Name		Status	Committed	Type
	Expand | Collapse				89,778.17	
☐	> CO-004	COR-022 thru 025	⋮	▌Executed	25,001.29	BPW
☐	> CO-005	COR-26 through COR-30	⋮	▌Executed	4,223.09	Non-BPW
☐	> CO-006	COR-32	⋮	▌Draft	926.52	

Change Orders

Change Order Request   Processing Change Order   **Change Order**

	Number ^	Name		Status	Committed	Type
	Expand | Collapse				89,778.17	
☐	> CO-004	COR-022 thru 025	⋮	▌Executed	25,001.29	BPW
☐	> CO-005	COR-26 through COR-30	⋮	▌Executed	4,223.09	Non-BPW
☐	> CO-006	COR-32	⋮	▌Open	926.52	Non-BPW

Click blue text for name of CO to bring up flyout.

Scroll down in flyout to add data to Custom Attributes. Always select types. For BPW Change Orders like this one, select BPW Meeting date: https://www.cityofmadison.com/employeenet/engineering/board-of-public-works-common-council-calendar Provide a Schedule Change Explanation as needed. **Do not change *New End Date by CO*. It is automatically filled by an automation based off PCO value.**

After entering in Custom Attributes Data, scroll back up to Documents Package. Create Document package as shown below. Very similar to the process for the PCO. Note that the document package will not reflect any data modifications after its creation. Always create 1-COM-ENG-FM_CO Internal Summary.xlsx template. For BPW type COs, also create 2-COM-ENG-FM_CO BPW Report.
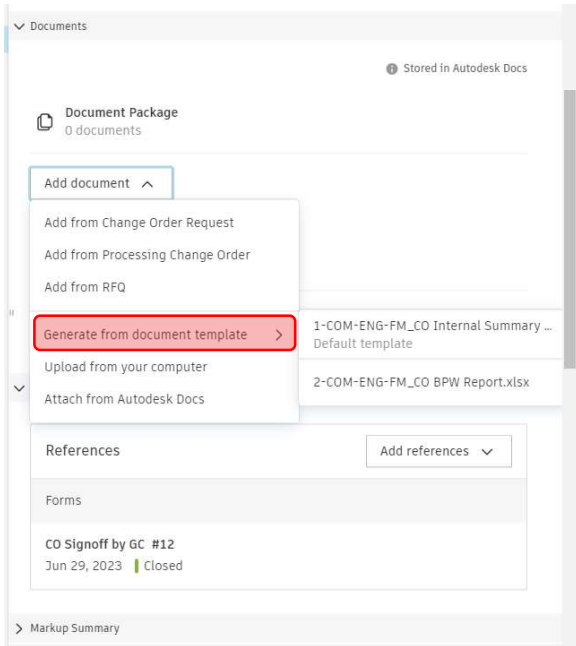
TIP: If you need to change custom attributes or COR justification data or anything else, need to also update the Document Package. Click the triple vertical dot icon next to the Justification file and select Regenerate. You will also need to reopen the Document Package for the changes to be reflected on the document reviewed by staff. A new version will also be created.

8. Cost Management-City Staff review Change Order

Click blue *Send* button in the upper right of the flyout. A pop up to *Send email to reviewers* will appear. Hit Send to start the review process.


Now the Change order will work through the Change Order Approval Workflow. It is a series of 3 (Non-BPW COs) or 5 (BPW COs) steps, some of which have multiple reviewers able to complete the review on a first come first serve basis. The Change Order will be listed as *Await Internal review:* **Step name** where **Step name** is the custom name given on the Change order approval workflow. The next reviewer in line is also listed.

The process is nearly identical for each step, so just one Approval step is shown in this guide.
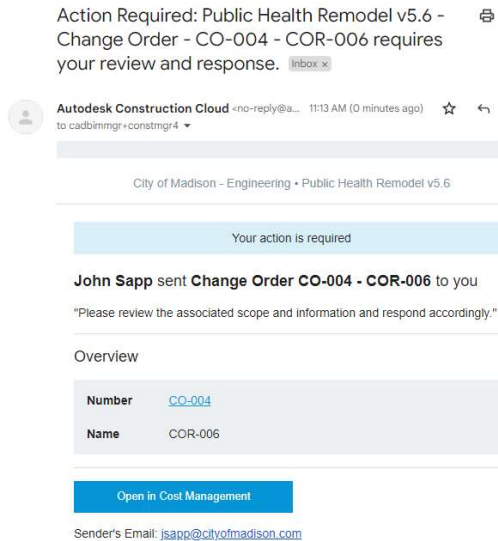
<Sample of Email. Review staff would follow link via blue *Open in Cost Management* button

Clicking review in ACC will bring up this window
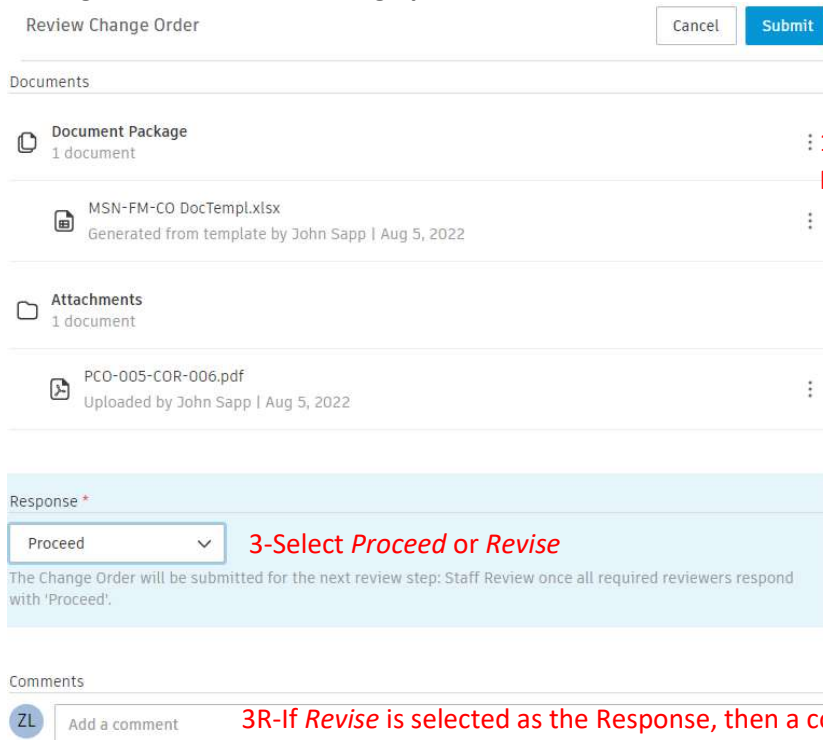
4- Submit after selecting *Response*

1- Select *Open* to view Document Package PDF in the system

2- Select *Open* to view Attachments PDF in the system

3-Select *Proceed* or *Revise*

3R-If *Revise* is selected as the Response, then a comment must be provided prior to *Submit*. **Note that this will reset entire review process. It is best to first use @functionality in the flyout similar to forms to resolve any issues**

After completion of staff review, an email is generated and sent to contractor with a link to the document package and the change order in ACC.

The final step is for Accountant to set the Change Order as Executed. It will be recorded as such throughout the system. NOTE: only users with Project Admin status can undo a CO once Executed and the process is involved.