

Kinsmen Group

Revit Integration User Guide - PowerUser

KIN-BOR-P20007-TRG-003

Revision: 6

Date: January 19, 2021



KINSMEN
GROUP



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Document Control				
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4	Francis Timpone	December 23 rd , 2020	Issued	Issued
5	Francis Timpone	January 7 th , 2021	Issued	Issued
6	Jason Hiles	January 19 th , 2021	Update	Replaced Importing with revised method(s) and replaced Creating Local Copy with revised method(s).



Introduction

This document is provided as a Test Script to verify and test the Revit Models integration with eDRAWS (Meridian). This script provides the necessary steps on how to create and manage Revit Models within the system and is based on the use of the Meridian Power User interface.

Pre-Requisites

Note: the KINECT Drawing Integration for Revit is currently **ONLY compatible with the Meridian PowerUser client. Additionally, the Meridian Application Integration component should be set to operate in Online mode.**

- Ensure the KINECT Drawing Integration component has been installed on the client workstation. Refer to the KINECT Installation Guide (KIN-BOR-P20007-PRO-003) for further details.



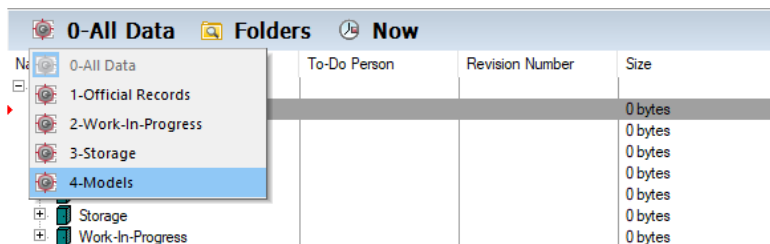
Part 1. Managing Shared Workspaces

This section describes how to create a Shared Workspace Project folder to manage Revit Models.

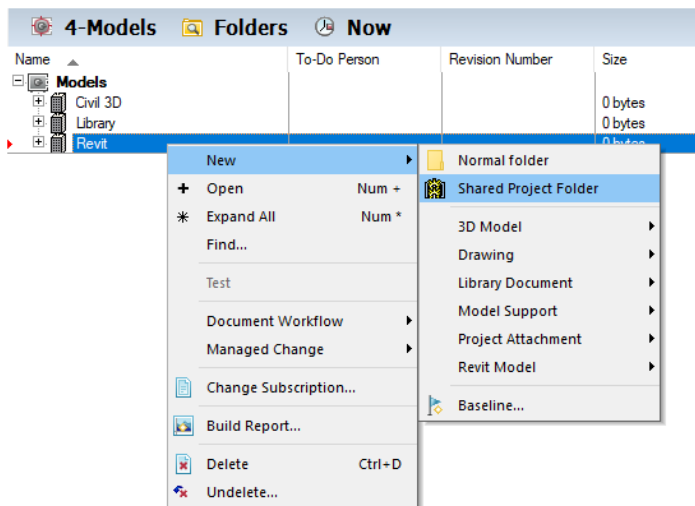
1.1. Creating a Shared Workspace Project Folder

Note: The location used for the Shared Project MUST NOT reference a local drive. E.g. C:\. The Shared Project Folder must reference a mapped network drive or active share. For example: X:\<ProjectNumber>\ or \\BOR\DO\<ProjectNumber>.

1. Open the **Meridian Power User** application. Note, these steps require **Editor** privileges.
2. Ensure the **4-Models** scope is selected in the middle pane to open the eDRAWS model structure.



3. Select the top-level **Revit** folder, right-click and select **New > Shared Project Folder**.





- At the **Create New Project Folder** wizard page, select a **Name** from the drop-down list and then click **Finish**.

Create 'New Folder' - Project

Name: 987, Central Utah Project, UT

Number: 987

Description: Central Utah Project

Finish Cancel

Note: Values in the dropdown list for the **Project Name** are pre-populated from a table. If additional values are required, contact your system administrator.

- After the project has been created, the related **Shared Workspace Location** must be defined. Select the newly created **Project** folder in the folder navigation view.
- On the **Properties** page, click **Edit** on the **Folder** tab.

Properties

Folder Thumbnails Project

X

Folder details

Location: TSCDOMER:\Models\Revit

Type: Field-Path controlled folder of type 'Shared Project Folder'

Created: 12/23/2020 4:12:17 PM

Created by: svc_meridian

Contains:

Sharing details

Workspace location:

☐ Synchronize automatically

☐ Allow automatic creation of new documents

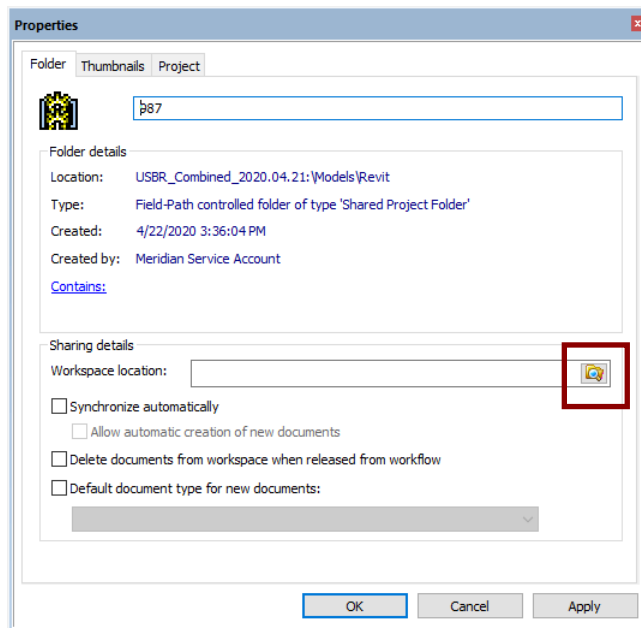
☐ Delete documents from workspace when released from workflow

☐ Default document type for new documents:

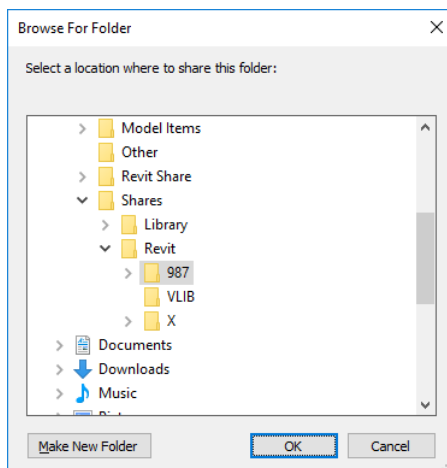
Edit



7. Click the **Browse** icon under the **Sharing Details** section to select the **Workspace Location**.



8. The **Browse For Folder** wizard page will be displayed. There are no restrictions with the folder location selection however, it is recommended that all workspaces are grouped within a single area for ease of searching and, in an accessible location for all users intending to contribute to the Revit Design Project.

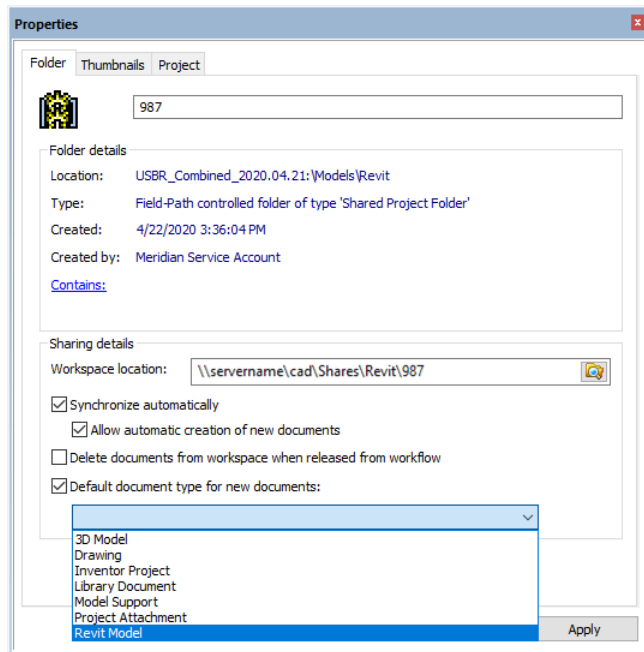


9. At the **Browse For Folder** wizard page, navigate to the desired folder location for the **Shared Workspace**.
10. Select the desired folder, if required, select the **Make New Folder** button in the bottom left-hand corner naming the new folder the same as the project created in eDRAWS. Note, ensure that the **Shared Workspace** does not already exist in eDRAWS in another location as this can then cause conflicts in the system.
11. Click **OK** to finish setting the appropriate **Shared Workspace** location for the project.



12. Returning to the **Project Folder** wizard page, make sure the following properties are set accordingly and then click **OK** to save changes:

- ☒ Synchronize Automatically – checked.
 - ☒ Allow automatic creation of new documents – checked.
- ☐ Delete documents from workspace when released from workflow – unchecked.
- ☒ Default document type for new documents – set to Revit Model.





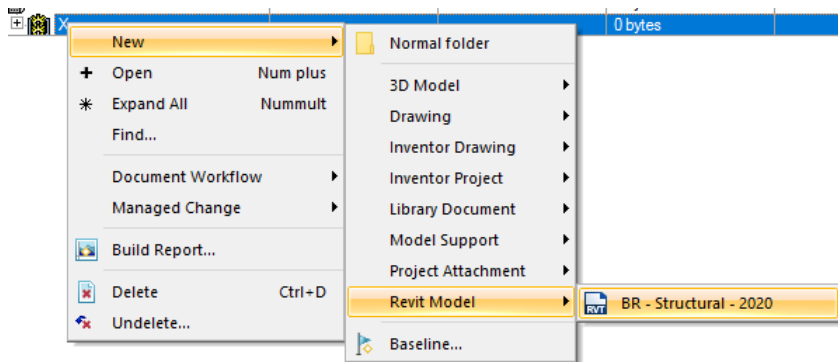
Part 2. Creating a Central Revit Model

This section describes how to create and import a central Revit Model file in eDRAWS (Meridian).

2.1. Creating a Revit Model

For the purposes of this test script, the **MEP** Revit template will be used to create a new central Revit Model file within eDRAWS.

1. Open the **Meridian Power User** application. Note, these steps require **Editor** privileges.
2. Ensure the **4-Models** scope is selected in the middle pane to open the eDRAWS model structure.
3. Navigate to the newly created **Project** folder, select and right-click > **New** > **Revit Model** > **BR – Structural - 2020**.



4. On the **Create Model** wizard page, populate all the mandatory fields (indicated by a red triangle) and then click **OK** to create the Revit Model file.

Create 'Revit Model.rvt' - Model

Station: D, Denver Office, Denver, CO

Project: X, Miscellaneous, All

Division: None

Feature: None

Sub-Feature: None

Content: Model

Details: Central Model

Project No.: X Station No.: D Seq No.: T3

Discipline: None

Doc. Type: MX Model Doc. Class: Electronic

Model Type: Revit

Finish Cancel

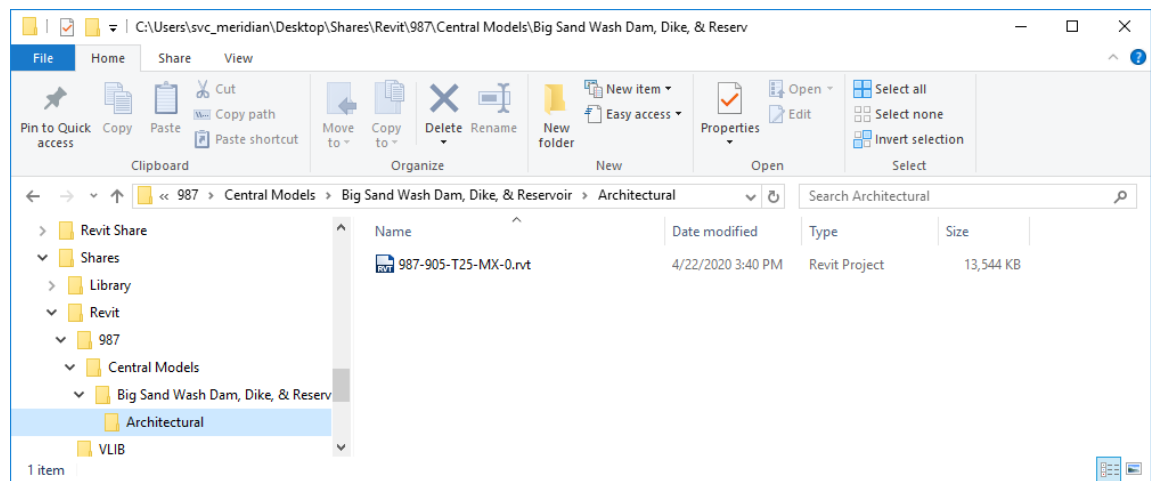


5. Verify that the Revit Model file has been created in the following location within eDRAWS:

...\\Revit\\<Project Number>\\Central Models\\<Feature>\\<Discipline>

4-Models Folders Now				
Name	To-Do Person	Revision Number	Size	Sub
Models				
Civil 3D			0 bytes	
Inventor			0 bytes	
Library			0 bytes	
Revit			0 bytes	
987			0 bytes	
Central Models			0 bytes	
Big Sand Wash Dam, Dike, & Reservoir			0 bytes	
Architectural			0 bytes	
987-905-T25-MX-0.rvt	Meridian Service Ac...		13.2 MB	
VLIB			0 bytes	
X			0 bytes	

6. Verify that the Revit Model file is available within the desired **Shared Workspace** location, defined at the project level.





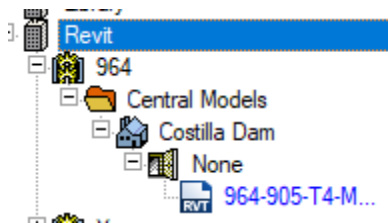
2.2. Importing a Revit Model

This section describes how to import a pre-existing central Revit Model file into eDRAWS (Meridian). It is assumed that the user has a pre-existing central Revit Model file ready to import. There are two methods available for importing a Revit Model. The user can either use a Shared Workspace Sync or use the command Save As. Both methods are described below.

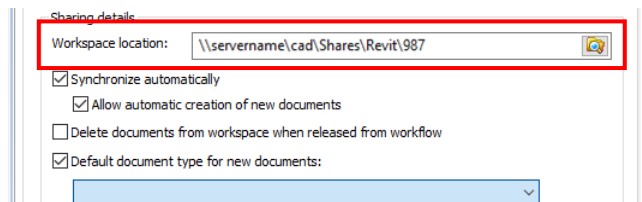
2.2.1. Shared Workspace Sync

For this method, it is assumed the required Project and Shared Workspace locations have already been created and configured for use in eDRAWS (Meridian).

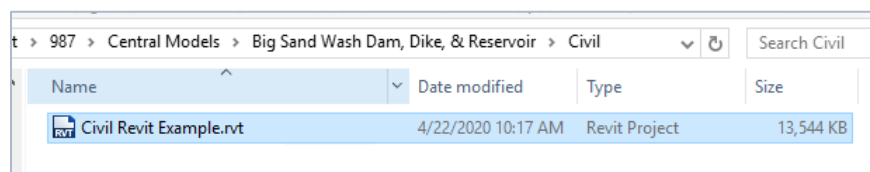
1. Open the **Meridian Power User** application. Review and take note from the folder structure for the Revit Model File.



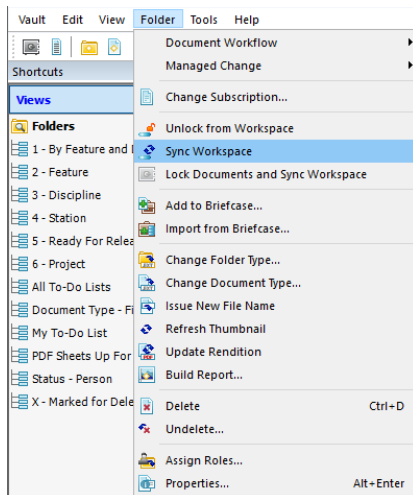
2. Navigate to the **Shared Workspace** location in Windows Explorer for the desired Project. This can be found from eDRAWS, labelled **Workspace location**.



3. Recreate the folder structure for the Revit Model. (reviewed in step 1).
4. Copy the existing Revit Model file to this **Shared Workspace** location on the file system for your project.



5. Open the **Meridian Power User** application. Note, these steps require **Editor** privileges.
6. Ensure the **4-Models** scope is selected in the middle pane to open the eDRAWS model structure.
7. Navigate to the relevant **Project** folder, select it and then from the **Folder** toolbar menu at the top, select **Sync Workspace**.



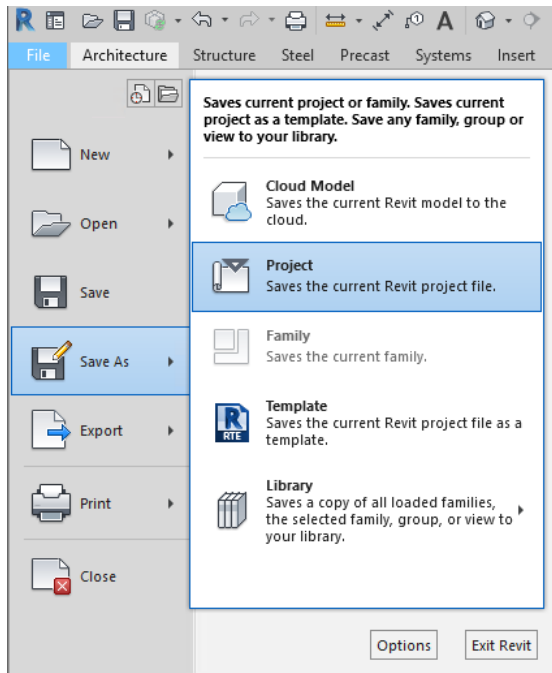
8. On the **Import Model** wizard page, populate all the mandatory fields (indicated by a red triangle) and then click OK to create the Revit Model file.

9. Refresh the project folder structure (F5) and verify that new Revit Model has been imported.

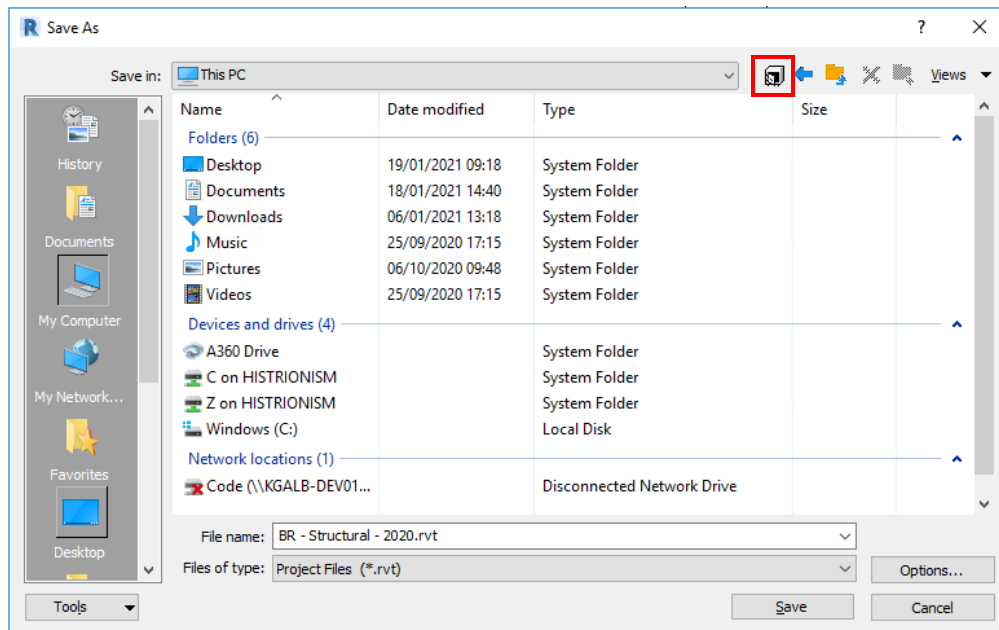


2.2.2. Using Save As

1. Locate a **Revit Model** requiring import and open.
2. From within Revit select **File > Save As > Project**.

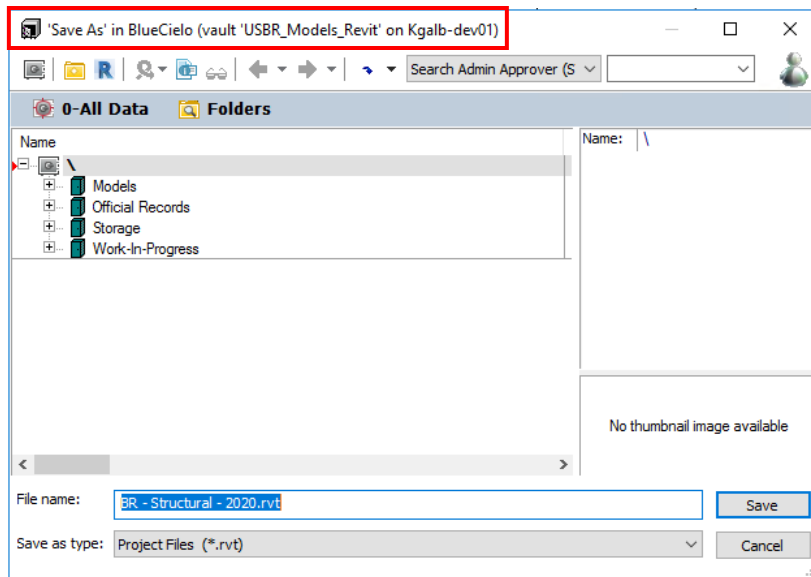


3. In the **Save As** dialog, select the **Vault** icon from the top right.

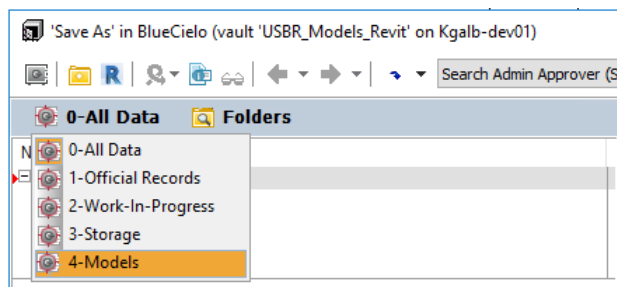




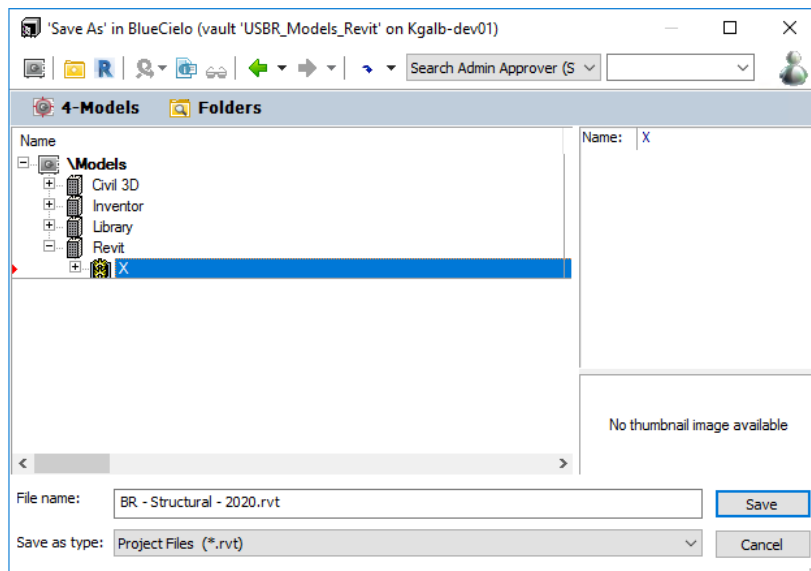
4. Ensure the correct Vault has been opened by checking the banner of the **BlueCielo Save As** dialog.



5. Ensure the **4-Models** scope is selected in the middle pane to open the eDRAWS model structure.



6. Navigate to desired **Project** using the **4-Models** scope and select **Save**.





7. On the **Import Model** wizard page, populate all the mandatory fields (indicated by a red triangle) and then click **OK** to create the Revit Model file.

Import 'Import Example.rvt' - Model

Station: 905, Reclamation Service Center Accounting Branch, Denver, CO

Project: X, Miscellaneous, All

Division: None

Feature: None

Sub-Feature: None

Content: Model

Details: Central Model

Project No.: X Station No.: 905 Seq No.: T4

Discipline: None

Doc. Type: MX Model Doc. Class: Electronic

Model Type: Revit

☐ Apply for all other documents of this type

Finish Cancel

8. Open the **Meridian Power User** application and ensure the **4-Models** scope is selected.

0-All Data		Folders		Now	
		To-Do Person	Revision Number		Size
0-All Data					
1-Official Records					0 bytes
2-Work-In-Progress					0 bytes
3-Storage					0 bytes
4-Models					0 bytes
Storage					0 bytes
Work-In-Progress					0 bytes

9. Navigate to the project folder structure (F5) and verify that new Revit Model has been imported.

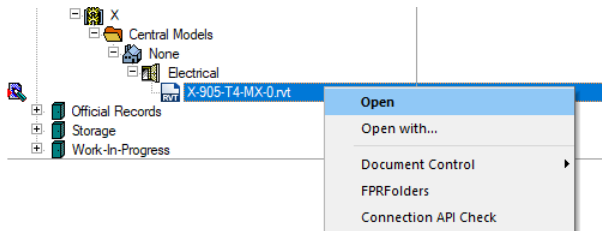


Part 3. Working in Revit

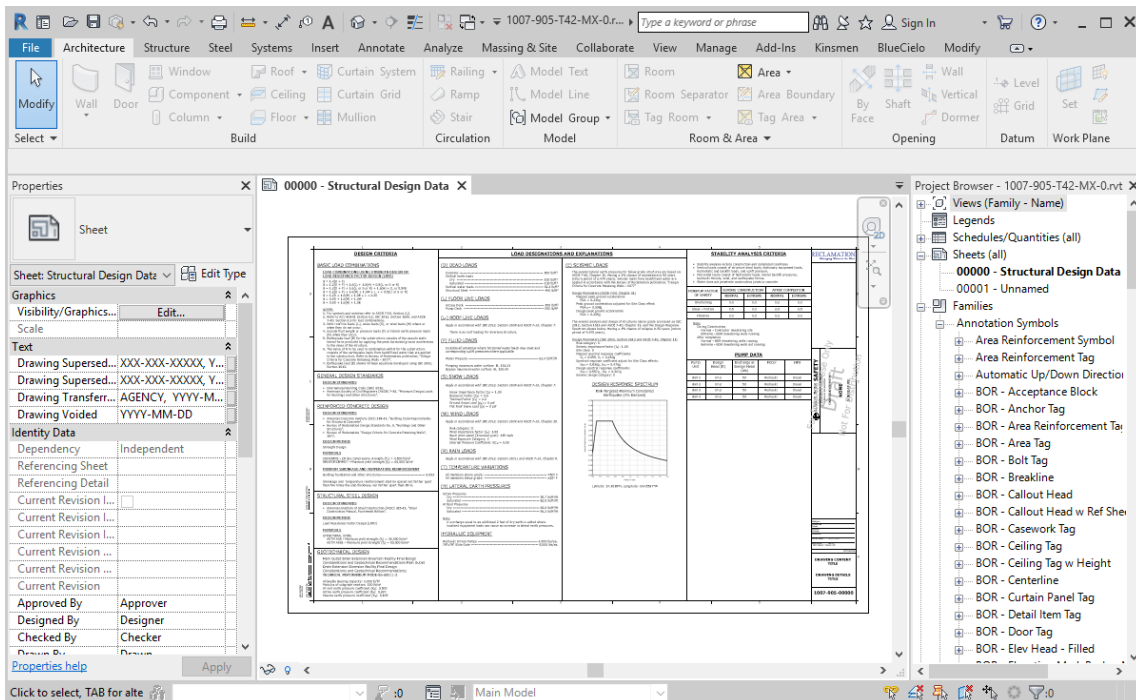
3.1. Opening the Model File in Revit

This section describes how to open a central Revit Model file from within eDRAWS and navigate through the sheets. For the purposes of this test, the Revit Model file created from the template in the previous section will be used.

1. Open the **Meridian Power User** application. Note, these steps require **Editor** privileges.
2. Ensure the **4-Models** scope is selected in the middle pane to open the eDRAWS model structure.
3. Navigate to the central Revit Model file under the **Project**, select and right-click > **Open**.



4. Revit will launch on the client workstation and open the model file, if the template was used to create the Revit file then it will open on the **00000 - Structural Design Data** sheet, if it is an imported file then it will open on the last saved page.

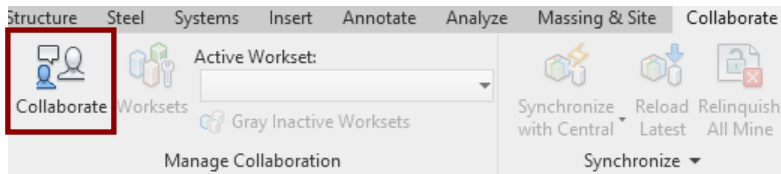




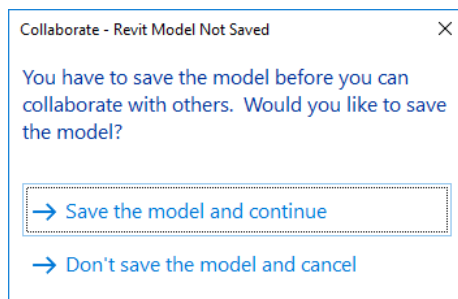
3.2. Enabling Collaboration in Revit

Enabling the collaboration feature in Revit allows drafters to work on a local copy of a Revit Model file and then merge the changes into the centralized file once complete. This section describes how to enable this collaboration feature within Revit. Note, this feature must be enabled on a per-model basis.

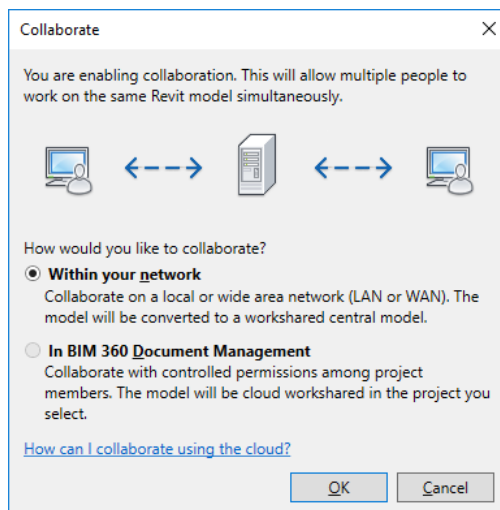
1. With the centralized Revit Model file open (from the previous section), navigate to the **Collaborate** ribbon and click the **Collaborate** button.



2. At the message prompt, click **Save the model and continue**.

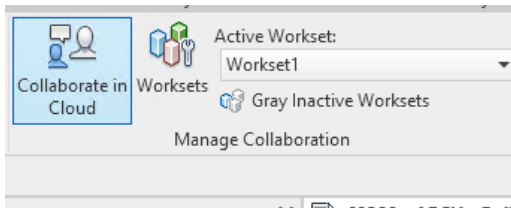


3. At the next message prompt, select **Within your network** and click **OK**. This will ensure that only users within the LAN or WAN network can access the centralized Revit Model file and collaborate.

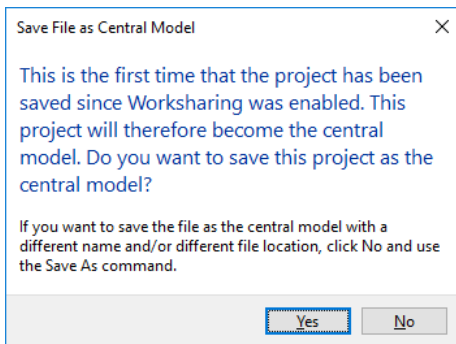




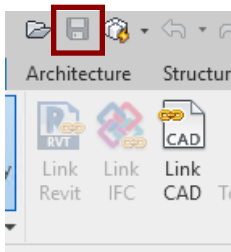
4. Verify that the **Collaboration** feature is activated by ensuring the **Worksets** button is enabled and the existing **Collaborate** button is renamed to **Collaborate in Cloud**.



5. Save the Revit Model by clicking the **Save** button in the **Quick Access Toolbar**.
6. A message prompt will be presented indicating that this is the first time the model has been saved since enabling the collaboration feature. At this prompt, click **Yes** to continue.



7. Once the Revit Model has been saved, it will be converted to a central model and thus can no longer be modified. Note, the save option will now be greyed out in the **Quick Access Toolbar**.



8. Close the central Model file in Revit.



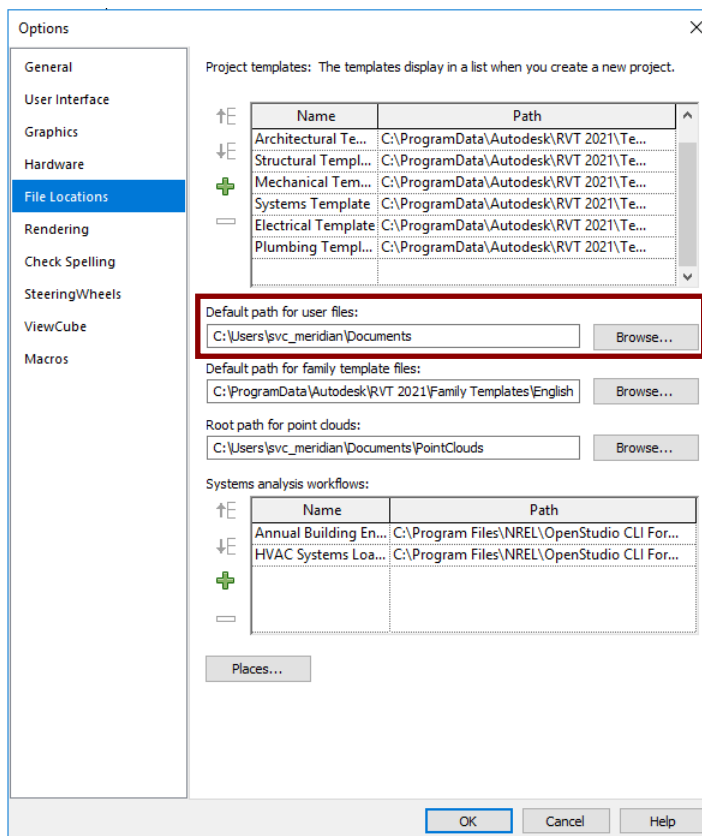
3.3. Creating a Local Copy

This section describes a few methods in which to create a local copy of a central Revit Model file. This is to allow a collaborative working environment allowing drafters to isolate their modifications prior to merging into the centralized file.

3.3.1. Autodesk Advised

The preferred and advised method to create a **Local Copy** is to use the inbuilt functionality. After creating a Central Model, the **Home Dashboard** will list it in **Recent Files**. By attempting to open this **Central Model** from **Recent Files** a **Local Copy** is, instead, automatically created then opened for collaborative use.

1. From the **Home Dashboard**, select the **Central Model** created earlier within **Meridian (eDRAWS)**.
2. A **Local Copy** will now be created appending the Autodesk Login Name to the Model's File Name and save it to the **Documents** location.
 - a. The location where Revit saves the Local Copy can be changed from Options > File Locations.

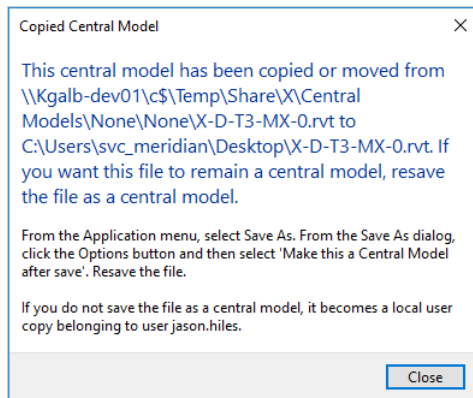




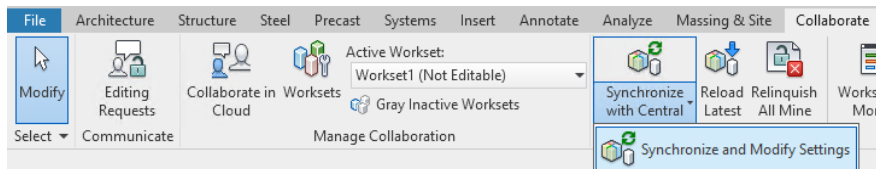
3.3.2. Copy to Desktop

Another method to create a Local Copy is to copy it from the **Shared Workspace** to the **Desktop**, or alternatively, **Documents**.

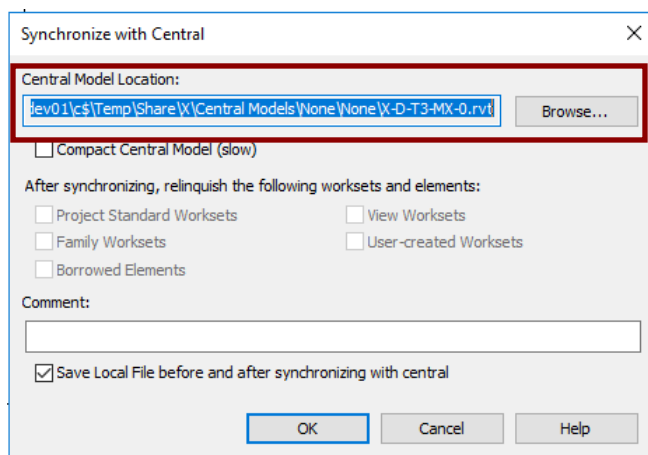
1. Open Windows Explorer and Navigate to the **Shared Workspace** where the **Central Model** is located.
2. Copy & Paste the **Model** from the **Shared Workspace** to the **Desktop**.
3. Open the copied **Model** from the **Desktop**.
 - a. As the Model has been copied outside of Revit, a warning will appear as Revit assumes the Central Model has been moved.



4. Navigate to the **Collaborate** ribbon and select **Synchronise and Modify Settings**.



5. Verify the path of the Central Model is still set as the Shared Workspace.



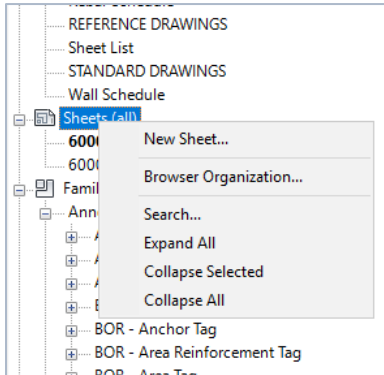
6. Select **OK** then Save **Model**.



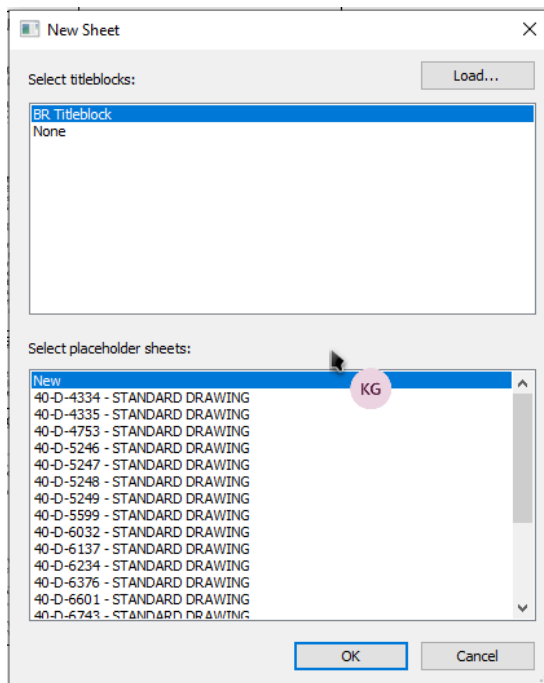
3.4. Creating a New Sheet

This section describes how to create and manage a new sheet within a local copy of a Revit Model file.

1. With the local copy of the Revit Model file open (from the previous section), select the **Sheets (all)** group in the **Project Browser**, right-click and select > **New Sheet**.

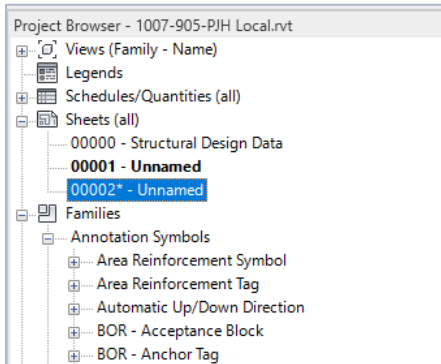


2. At the **Select Titleblocks** prompt, select the **BOR – Titleblock** option in the top pane and click **OK**.

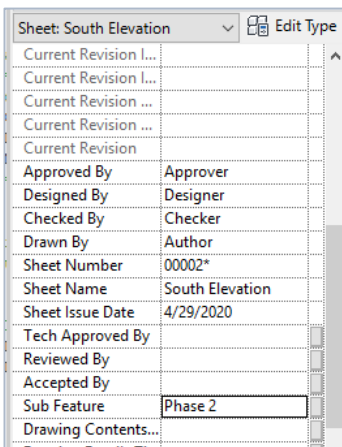




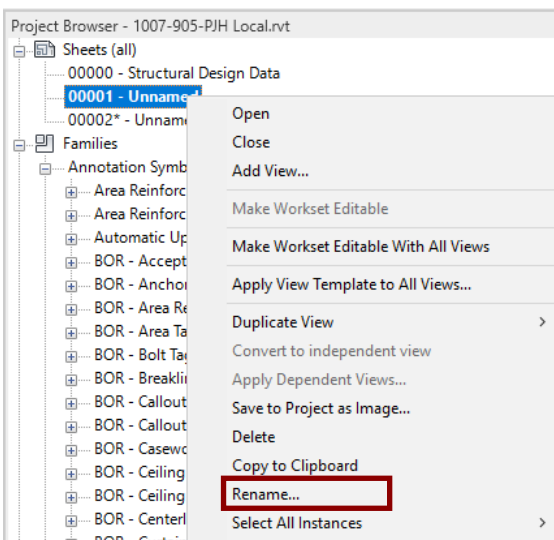
- A new sheet will be created within the **Sheets (all)** branch. An incremented sequence number will be applied to the new sheet based on the sheet sequence within that specific Revit Model file. Note, an asterisk is appended to the sheet number to indicate that the sheet number has NOT been verified or retrieved from eDRAWS (Meridian).



- Update the sheet with all relevant modifications such as the **Sub Feature** and save the changes.



- The sheet label can be updated to describe the sheet purpose. In the **Project Browser**, right-click > **Rename...**





- In the **Sheet Title** dialog, enter the appropriate value in the **Name** field. Click **OK**.

Sheet Title

00001 Number

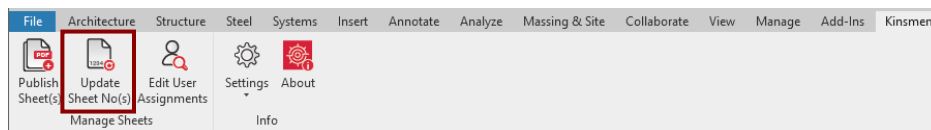
North Elevation Name

OK Cancel

3.5. Assigning a Sequence Number to the Sheet

This section describes how eDRAWS (Meridian) sequence numbers can be applied to sheets within a Revit Model file.

- With the local copy of the Revit Model file open and a new sheet created (from the previous section), navigate to the **Kinsmen** ribbon and click the **Update Sheet No(s)** button.



- On the **Update Sequence Numbers** dialog, check the sheet(s) that require a **new sequence number** from eDRAWS (Meridian).

Kinsmen : Update Sequence Numbers

<input type="checkbox"/>	Sheet Nur	Sheet Number Description
<input type="checkbox"/>	00000	Sheet: 00000 - Structural Design Data
<input type="checkbox"/>	00001	Sheet: 00001 - Unnamed
<input type="checkbox"/>	60000	Sheet: 60000 - Unnamed
<input type="checkbox"/>	60001	Sheet: 60001 - Unnamed
<input type="checkbox"/>	60002	Sheet: 60002 - Unnamed

Update Sequence Number(s) Close

- Once all the required sheets are selected, click the **Update Sequence Number(s)** button.
- At the **Confirmation** prompt, click **Yes** to continue.

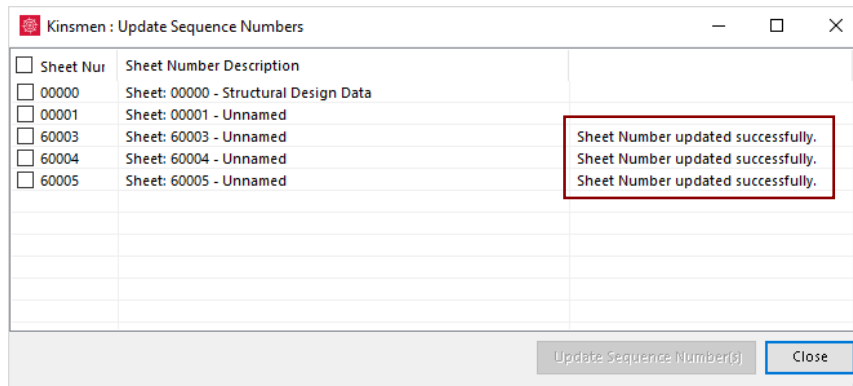
Kinsmen Group

The Sheet Number(s) will be updated with the next sequence number from eDRAWS (Meridian). Are you sure you want to continue?

Yes No



- Once complete, a success message will be presented indicating that an eDRAWS (Meridian) sequence number has been applied to the sheet. Note, any asterisk will now be removed from the sheet number. Select **Close** to return to the drawing.

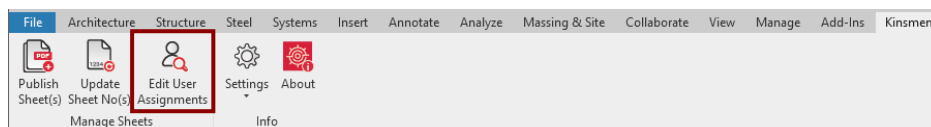


3.6. Editing User Assignments

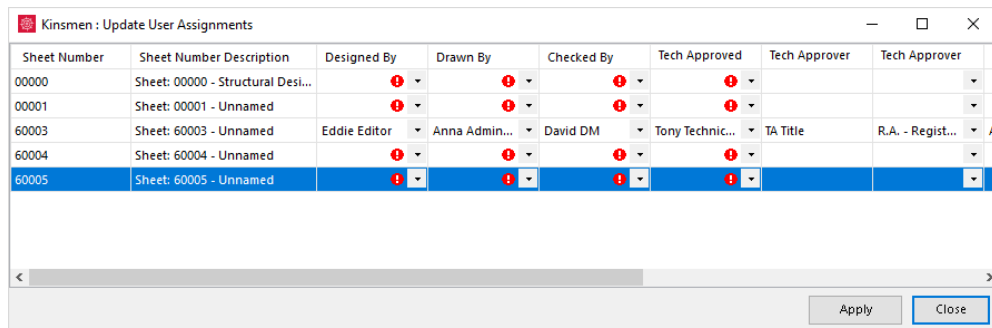
This section describes how user assignment fields listed in the title block of a sheet can be populated using values directly from eDRAWS (Meridian) to ensure alignment. The following user fields can be populated from within Revit using the **Edit User Assignments** feature; Designed By, Drawn By, Checked By, Tech Approved By, Tech Approver Title, Tech Approver PR, Admin Approved By, Admin Approver Title, Admin Approver PR, Rev Approved By, Rev Approver PR.

The Publish to PDF feature will also validate that these fields are populated correctly prior to performing the operation as these user entries are utilized by the electronic signature workflow within eDRAWS (Meridian).

- With the local copy of the Revit Model file open, along with the working sheet, navigate to the **Kinsmen** ribbon and click the **Edit User Assignments** button.



- The **Update User Assignments** dialog will be presented providing a matrix of user assignments along with the corresponding sheet. Note, the red exclamation symbol indicates the following:
 - A mandatory field has not been populated. A user entry is required in this instance.
 - A field has been populated but the value is deemed invalid.





- To update these values, click the **drop-down** menu button in the cells where an assignment is missing or incorrect, and select from the list of users provided. Note: it is not necessary to populate all cells for all sheets at the same time. User values can be assigned on a per sheet basis.

Kinsmen : Update User Assignments

Sheet Number	Sheet Number Description	Designed By	Drawn By	Checked By	Tech Approved	Tech Approver	Tech Approver	
00000	Sheet: 00000 - Structural Desi...							
00001	Sheet: 00001 - Unnamed	Anna Administrator						
60003	Sheet: 60003 - Unnamed	Eddie Editor	Anna Admin...	David DM	Tony Technic...	TA Title	R.A. - Regist...	
60004	Sheet: 60004 - Unnamed							
60005	Sheet: 60005 - Unnamed							

Apply Close

- To copy the same value to all fields in a column, select a value from the **drop-down** menu, right click on the value just added, and then select **Apply value to entire column**.

Tech Approved By	Tech Approver Title	Admin Approver
Dawson, ...		John
	60006 - Tech Title	

Apply value to entire column

- After all values have been updated, click the **Apply** button.
- Click **OK** at the **Success** message prompt.

Kinsmen Group

Parameters updated on 3 sheet(s)

OK

- Click **Close** button on the **Update User Assignments** dialog and then save the file.

Kinsmen : Update User Assignments

Sheet Number	Sheet Number Description	Designed By	Drawn By	Checked By	Tech Approved	Tech Approver	Tech Approver	Admin Approved	Admin Approver	Admin Approver
00000	Sheet: 00000 - Structural Desi...	Eddie Editor	Eddie Editor	David DM	Tania Techni...	TA Title	P.E. - Profes...	Alex Admin ...	Approver Title	R.A. - Regist...
00001	Sheet: 00001 - Unnamed	Eddie Editor	Eddie Editor	David DM	Tania Techni...	TA Title	P.E. - Profes...	Alex Admin ...	Approver Title	R.A. - Regist...
60003	Sheet: 60003 - Unnamed	Eddie Editor	Eddie Editor	David DM	Tania Techni...	TA Title	P.E. - Profes...	Alex Admin ...	Approver Title	R.A. - Regist...
60004	Sheet: 60004 - Unnamed	Eddie Editor	Eddie Editor	David DM	Tania Techni...	TA Title	P.E. - Profes...	Alex Admin ...	Approver Title	R.A. - Regist...
60005	Sheet: 60005 - Unnamed	Eddie Editor	Eddie Editor	David DM	Tania Techni...	TA Title	P.E. - Profes...	Alex Admin ...	Approver Title	R.A. - Regist...

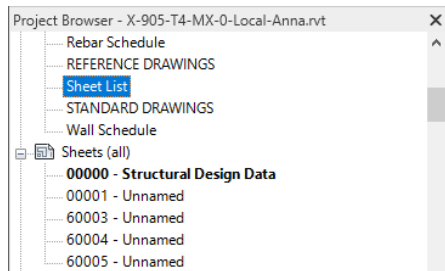
Apply Close



3.7. Edit Sheet Title-block Information

The title-block information for a given sheet can be updated using the eDRAWS Application Integration and then synchronized back to the content ready for publishing. This feature allows for specific metadata to be assigned to each sheet.

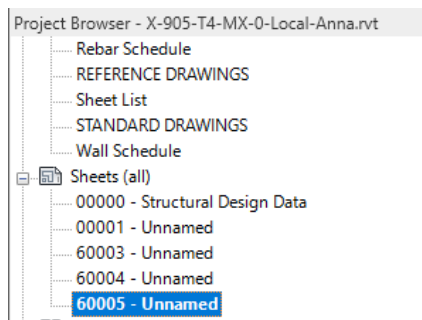
1. With the local copy of the Revit Model file open, along with the working sheet, double-click on the **Sheet List** item from within the **Project Browser**.



2. Update the **Sub Feature**, **Drawing Contents Title** and **Drawing Details Title** properties for the relevant sheet in the table.

<Sheet List>								
A	B	C	D	E	F	G	H	I
Sheet Discipline	Sheet Number	Sheet Name	Sub Feature	Drawing Contents Title	Drawing Details Title	Sheet Issue	Designed By	Drawn By
	00000	Structural Design Data	SUB FEATURE	DRAWING CONTENT TITLE	DRAWING DETAILS TITLE	2020-10-27	Eddie Editor	Eddie Editor
	00001	Unnamed	TEST123			2020-10-27	Eddie Editor	Eddie Editor
	60003	Unnamed	TEST 123			2020-10-27	Eddie Editor	Eddie Editor
	60004	Unnamed				2020-10-27	Eddie Editor	Eddie Editor
	60005	Unnamed	TEST123			2020-10-27	Eddie Editor	Eddie Editor

3. Double-click on the relevant updated sheet from within the **Project Browser** and verify that the properties have been synchronized with the title-block.



Eddie Editor	
DESIGNED	
Eddie Editor	
DRAWN	
David DM	
CHECKED	
TECH. APPR.	Tonia Technical Approver P.E.
APPROVED	Alex Admin Approver M.A.
	Admin Approver - Approver Title
DENVER, CO	2020-10-27
Drawing Border, Sample Titleblock	
General Notes for Concrete Outline and Reinforcement	
X-905-60005	

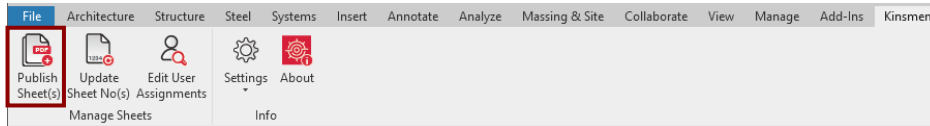
4. **Save** the Model file.



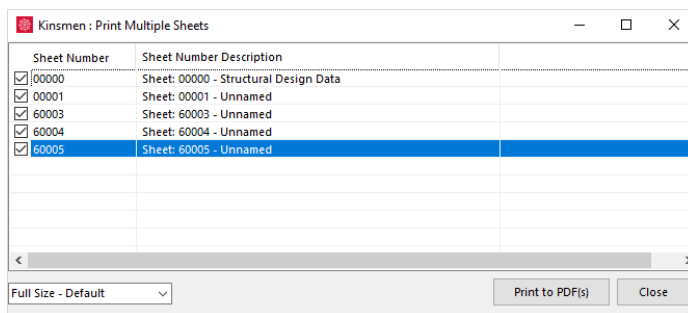
3.8. Publish Sheet(s) to Meridian

Once the sequence numbers and users have been assigned, the Model sheets can then be published to PDF and imported into eDRAWS (Meridian) ready for review and approval. This section describes how the **Publish Sheet(s)** feature is used for this purpose.

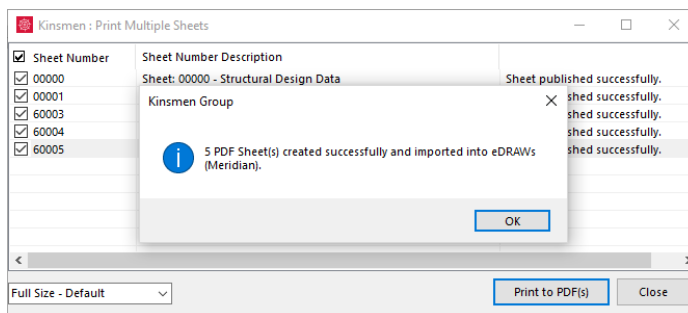
1. Navigate to the **Kinsmen** tab in Revit and click the **Publish Sheet(s)** button.



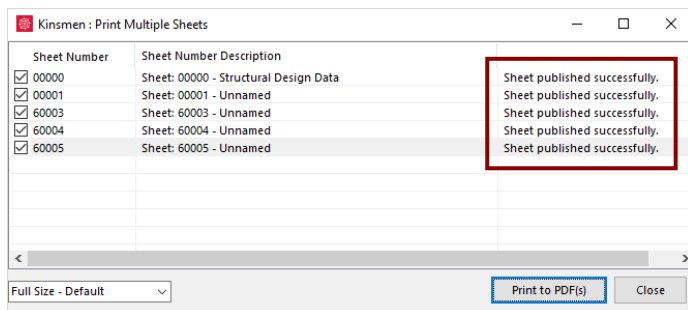
2. Select the sheets to be published, make sure **Full Size - Default** is selected in the drop-down and then click the **Print to PDF(s)** button.



3. After publishing of documents has been completed, click **OK** at the confirmation message.



4. In the **Print Multiple Sheets** dialog, a **Success** message will be displayed for each sheet, indicating that it has been published successfully. Click the **Close** button to exit the dialog.



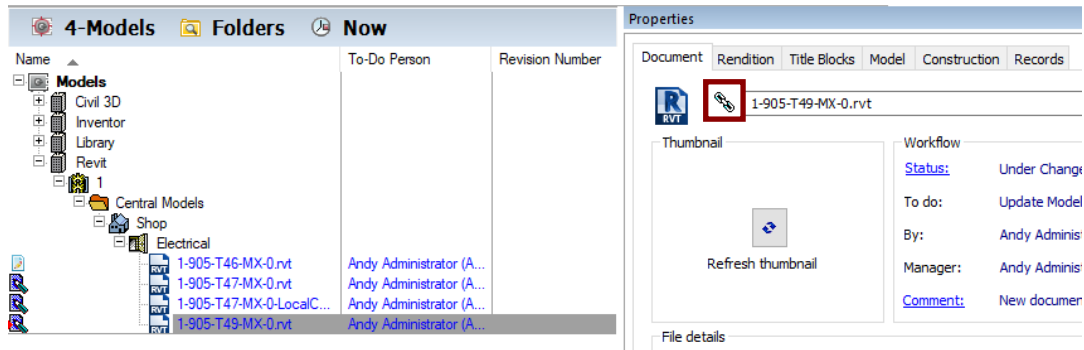
5. Save the **Model file**.



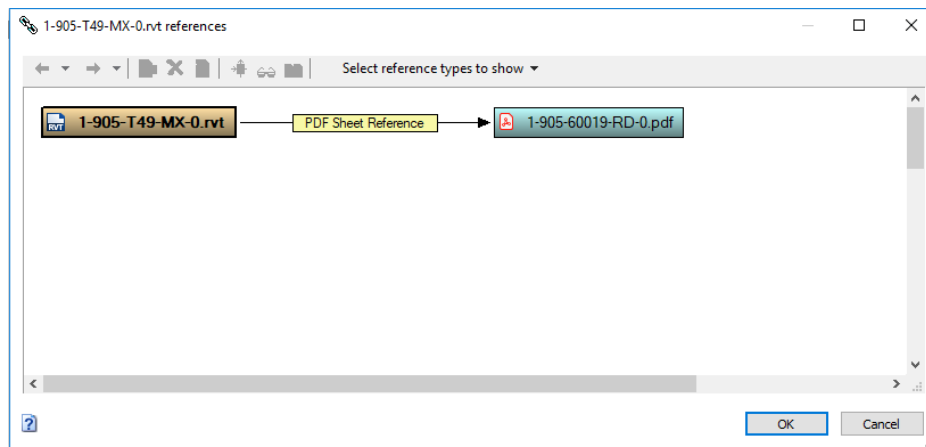
Part 4. Sheet Approval Process

4.1. Verify Published PDF Sheet in Meridian

1. Open the **Meridian Power User** application. Note, these steps require **Editor** privileges.
2. Select the **4-Models** scope in the middle pane to open the **eDRAWS** model structure.
3. Navigate to the location where the Revit model resides.
4. Select the Revit model and then click the **link** symbol on the Document tab in the Properties Pane.



5. A **Reference** diagram illustrating the relationships between the Revit model file and published PDF sheets are shown. A **PDF Sheet Reference** is created between these two files.

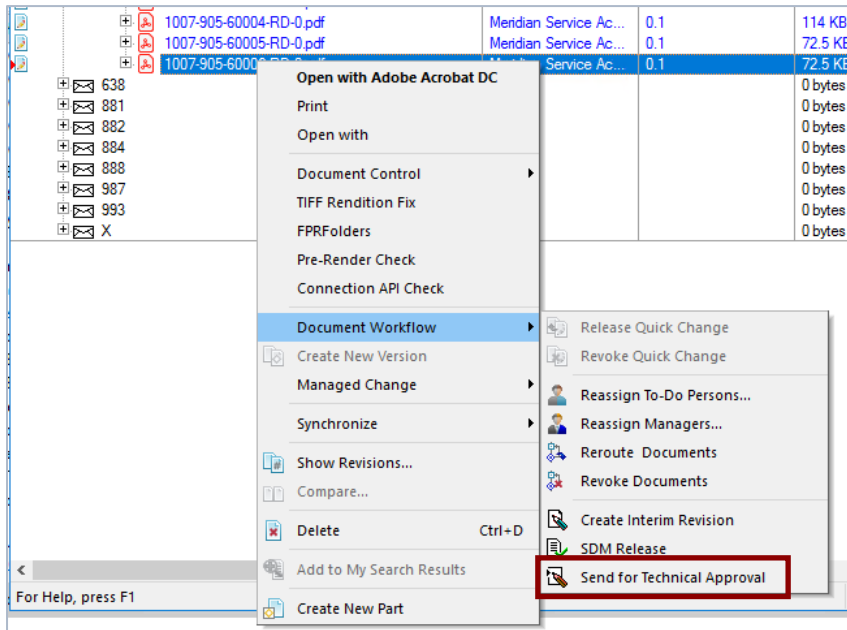


6. Select **OK** to close the **Reference Viewer**.

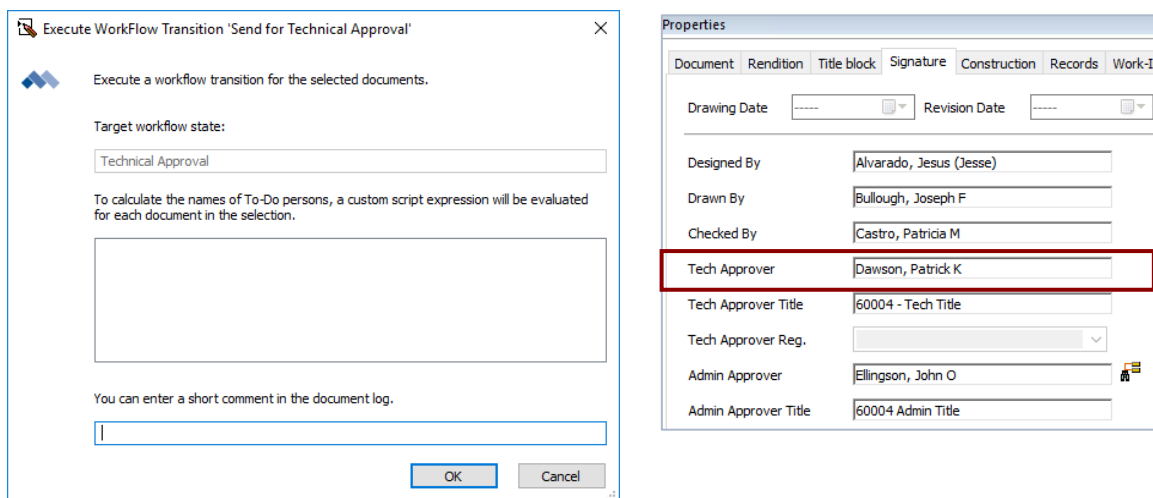


4.2. Send Published PDF Sheet for Technical Approval

1. Open the **Meridian Power User** application. Note, these steps require **Editor** privileges.
2. Select the **2-Work-In-Progress** scope in the middle pane to open the **eDRAWS** Work-In-Progress structure.
3. Locate the **PDF Sheet** by searching for the PDF Sheet Number(s).
4. Right click on the **PDF Sheet**, select option **Document Workflow > Send for Technical Approval**.



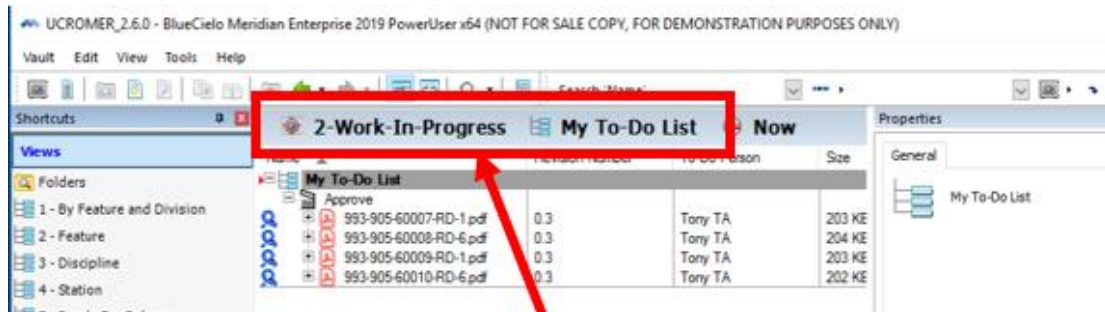
5. At the **Workflow Transition** dialog, optionally enter a comment and then click **OK**. The PDF Sheet will be sent for approval to the **Technical Approver** specified in the **Tech Approved By** property. This property is populated by the **Edit User Assignments** feature in **Revit**.





4.3. Perform Technical Approval

1. Open the **Meridian Power User** application and login as the nominated **Technical Approver**.
2. Select the **2-Work-In-Progress** scope and open the **My To-Do List** view.



3. Locate the **PDF sheet** for Technical Approval.
4. Review the **PDF sheet**.
5. Select the **PDF sheet**, right-click and select **Document Workflow > Tech Approval**.
6. On the **Workflow Transition** dialog, optionally enter a **comment** and then click **OK**.
7. At the **Tech Approval Sign Off** prompt, select a **Reason**, verify the pre-populated **Approver Title** and **Professional Registration**.
8. Tick the **I Agree** checkbox, and then click **Finish**.

Execute transition 'Tech Approval' (Sendforapproval) - Sign Off

By checking 'I agree' and selecting the 'Finish' option you acknowledge that you understand and accept the responsibilities within Redamation Policies for Tech Approval and are signing this drawing

Reason: Design Approval

Approver Title: 60004 - Tech Title

Professional Registration: None

I agree ☒

Finish Cancel

9. The **PDF sheet** will be removed from your **My To-Do List** view and automatically routed to the **Admin Approver** as specified in the **Admin Approved By** property, previously populated using the **Edit User Assignments** feature in **Revit**.



4.4. Perform Admin Approval

1. Open the **Meridian Power User** application and login as the nominated **Admin Approver**.
2. Select the **2-Work-In-Progress** scope and **My To-Do List** view.
3. Locate the **PDF sheet** and review it.
4. Select the **PDF sheet**, right-click and select **Document Workflow > Admin Approval**. Optionally enter a **comment** and then click **OK**.
5. At the **Admin Approval Sign Off** prompt, select a **Reason**, verify the pre-populated **Approver Title** and **Professional Registration**.
6. Tick the **I Agree** checkbox, and then click **Finish**.

Execute transition 'Admin Approval' (Approve) - Sign Off

By checking 'I agree' and selecting the 'Finish' option you acknowledge that you understand and accept the responsibilities within Reclamation Policies for Admin Approval and are signing this drawing

Reason: Admin Approval

Approver Title: 60004 Admin Title

Professional Registration: None

I agree ☒

Finish Cancel

7. The **PDF sheet** will be removed from the Admin Approver's **My To-Do List** view and the status will be updated to **Ready for Release**.

File Name	Version	Owner
1007-905-60004-RD-0.pdf	0.1	Meridian Service Ac...
1007-905-60005-RD-0.pdf	0.1	Meridian Service Ac...
1007-905-60006-RD-0.pdf	0.1	Meridian Service Ac...

File details for 1007-905-60004-RD-0.pdf

Thumbnail: [Refresh thumbnail]

Workflow Status: **Ready for Release**

To do:

By:

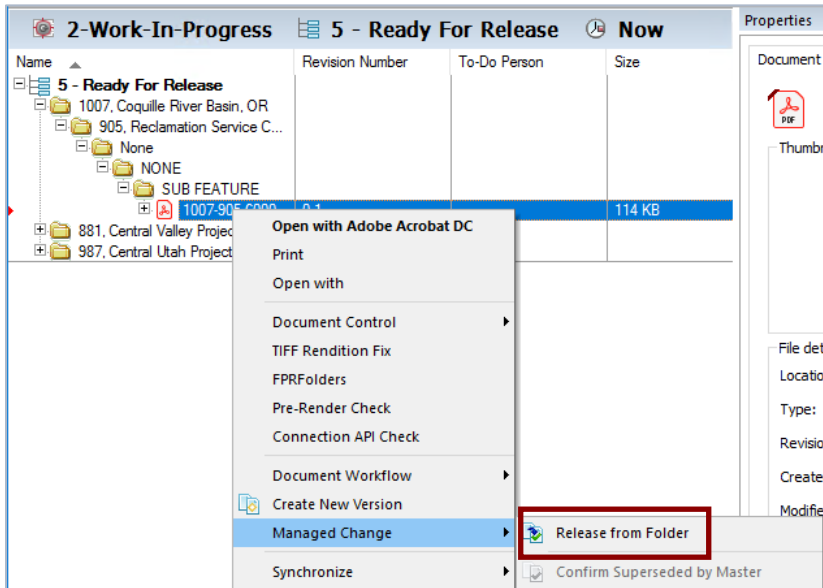
Manager:

[Comment:](#)

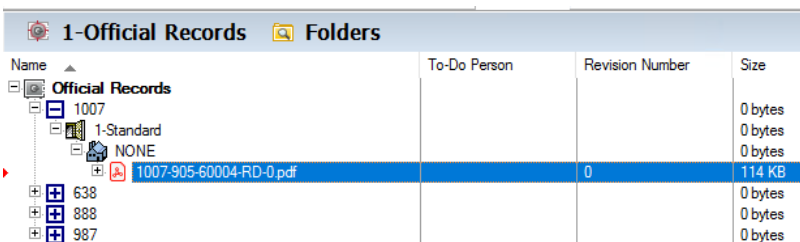


4.5. Release to Official Records

1. Open the **Meridian Power User** application. Note, these steps require **Drawing Manager** privileges.
2. Select the **2-Work-In-Progress** scope and then select the **5 - Ready For Release** view.
3. Right-click on the **PDF sheet** and select **Managed Change > Release from Folder**.



4. The **PDF Sheet** is released to **Official Records** area. Select the **1 – Official Records** scope and locate this document.





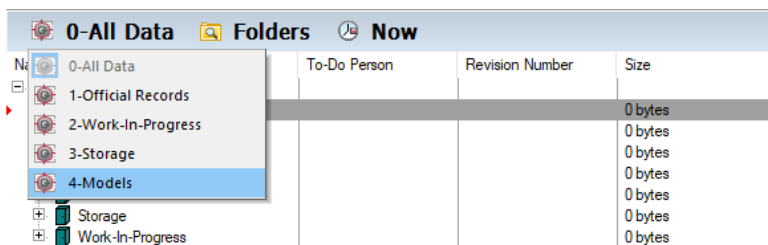
Part 5. Model Release Process

This section describes how a model can be approved and released once all the changes are complete and associated PDF Sheets are released as Official Records. Once a model has been released, it will become locked and no further changes can be made. If further modifications are required, then the model must be set back to Under Change in the workflow process.

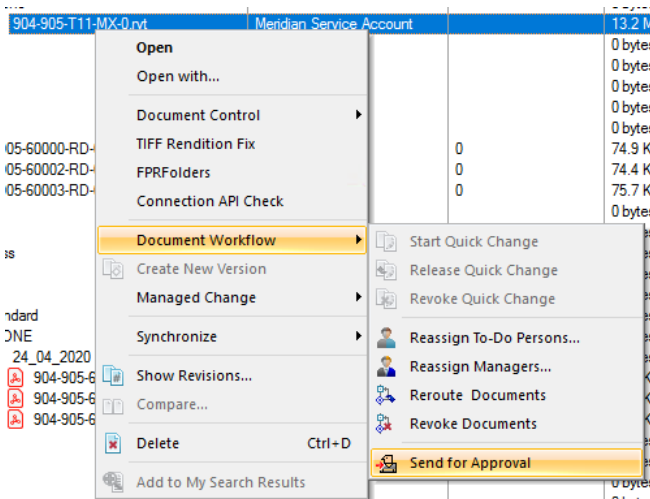
5.1. Send for Approval

For a model to be released (and therefore closed), all corresponding PDF sheets must be Released to Official Records.

1. Open the **Meridian Power User** application. Note, these steps require **Editor** privileges.
2. Ensure the **4-Models** scope is selected in the middle pane to open the **eDRAWS** model structure.



3. Locate the **Model** requiring approval.
4. Right-click on the **Model** and select **Document Workflow > Send for Approval**.





- On the **Workflow Transition** dialog, select the desired **Approver**, optionally enter a **comment**, and then click **OK**.

Execute Workflow Transition: Send for Approval

Execute a workflow transition for the selected documents.

Target workflow state:

In Approval

Select users to work on the documents:

- ☐ Mejia, Julio C
- ☐ Melavic, Steven B
- ☐ Mena, Jose L
- ☐ Mendlin, Eric T
- ☐ Mercado, John L
- ☐ Meredith, Craig A
- ☒ Meridian Service Account
- ☐ Merkel, Paul K
- ☐ Merten, Bobbi Jo E
- ☐ Mesarchik, Carol L
- ☐ Meskis, Matthew T
- ☐ michael
- ☐ Michel, Andrew L
- ☐ Michelen, Regis J
- ☐ Mickle, Derek J
- ☐ Millan-Aguilar, Victor A
- ☐ Millard, Sara M

You can enter a short comment in the document log.

OK Cancel

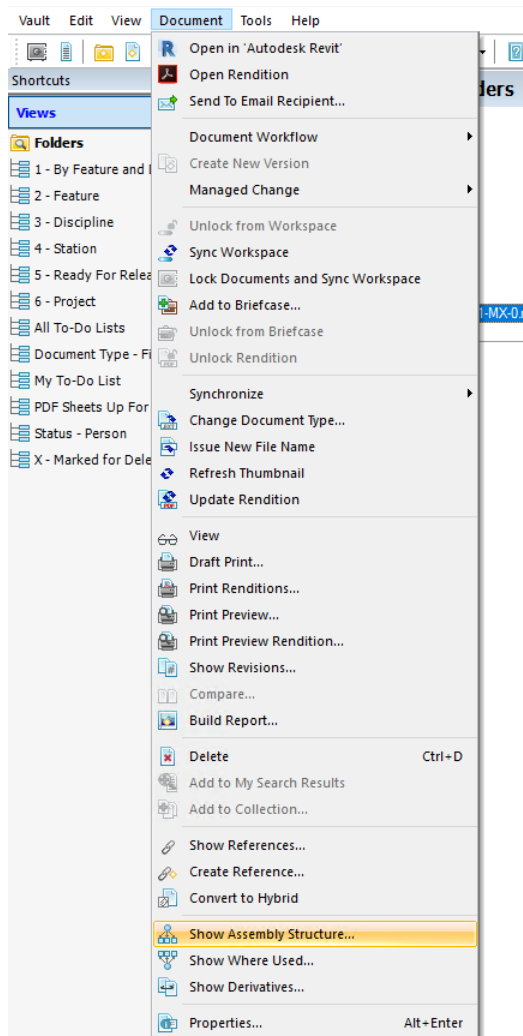
5.2. Perform Approval & Release

- Open the **Meridian Power User** application and login as the nominated **Approver**.
- Ensure the **4-Models** scope is selected in the middle pane to open the **eDRAWS** model structure.

0-All Data Folders Now			
	To-Do Person	Revision Number	Size
0-All Data			
1-Official Records			0 bytes
2-Work-In-Progress			0 bytes
3-Storage			0 bytes
4-Models			0 bytes
Storage			0 bytes
Work-In-Progress			0 bytes



3. Select the **Model** and open the **Assembly View** by selecting **Document > Show Assembly Structure**.



4. Any **PDF Sheets** that do not have a **Status** of **Released** will reside in the **Work-In-Progress** area. It should be noted that these sheets will prevent the **Approval/Release** of the **Model**, as all corresponding PDF sheets must be Released to Official Records.

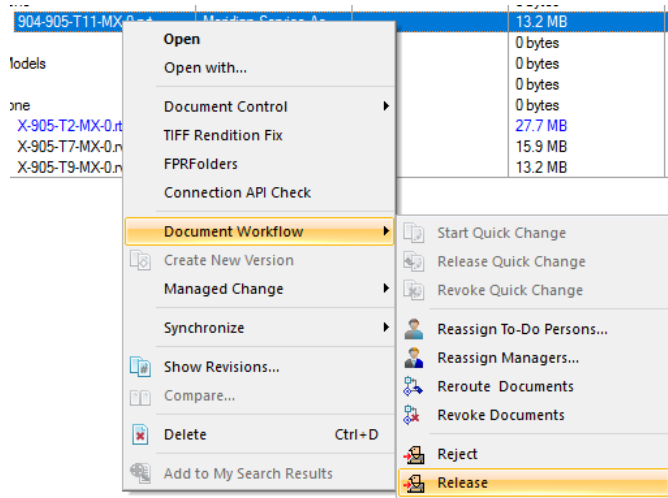
Assembly Structure for '904-905-T11-MX-0.rvt'

Name	Reference	Status
904-905-T11-MX-0.rvt		Under Change
904-905-60000-RD-0.pdf	PDF Sheet Reference	Draft
904-905-60001-RD-0.pdf	PDF Sheet Reference	Released
904-905-60002-RD-0.pdf	PDF Sheet Reference	Ready for Release
904-905-60003-RD-0.pdf	PDF Sheet Reference	Released
904-905-60004-RD-0.pdf	PDF Sheet Reference	Draft
904-905-60005-RD-0.pdf	PDF Sheet Reference	Ready for Release

Note: If there are PDF Sheets within eDRAWS (Meridian) that are linked to the Model but no longer required and need to be removed, the standard Mark/Approve for Deletion process must be followed. The user must also remove the layout from the Model file manually.



5. Once all **PDF Sheets** have been released to **Official Records**, right-click on the **Model** and select **Document Workflow > Release**.



6. At the **Workflow Transition** dialog, optionally enter a comment and then click **OK**.
7. The **Model** will be removed from the Approver's **My To-Do List** view and updated with a status of **Released**.

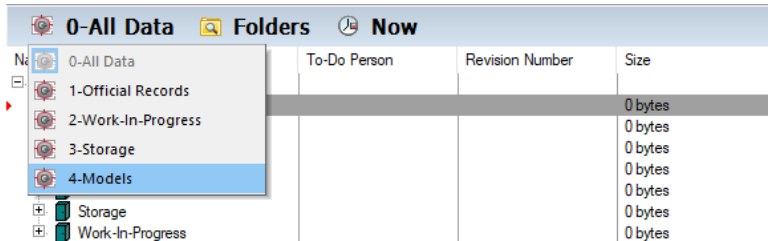


Part 6. Management of Change

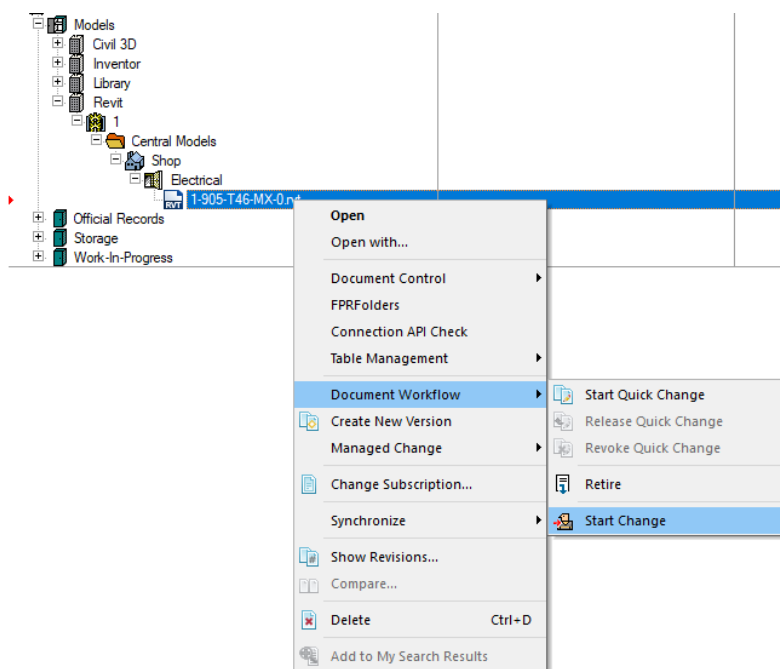
This section describes how further changes can be made to a Released model file and how PDF Sheet revisions are managed as part of the Management of Change process within eDRAWS (Meridian).

6.1. Set Model to Under Change

1. Open the **Meridian Power User** application. Note, these steps require **Editor** privileges.
2. Ensure the **4-Models** scope is selected in the middle pane to open the **eDRAWS** model structure.



3. Locate the Released **Model** requiring further change.
4. Right-click on the **Model** and select **Document Workflow > Start Change**.

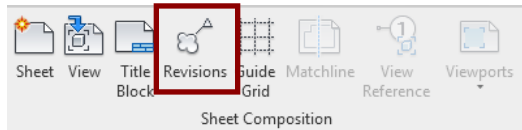


5. At the **Workflow Transition** dialog, select a user to work on the model, optionally enter a comment and then click **OK**.
6. The model will be updated with a status of **Under Change** and assigned to the relevant **To-Do** person.



6.2. Inserting a Revision Block

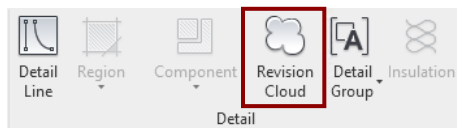
1. Open the **Revit** application on the client workstation.
2. Open the **Meridian Power User** application. Note, these steps require **Editor** privileges.
3. Ensure the **4-Models** scope is selected in the middle pane to open the **eDRAWS** model structure.
4. Navigate to the model file that was set to **Under Change** in the previous section.
5. Select the model file and right-click > **Open**. The model file will open in **Revit** on the client workstation.
6. Select a sheet from within the model file where the PDF Sheet has previously been released in **eDRAWS**.
7. Navigate to the **View** ribbon and select **Revisions** in the **Sheet Composition** group.



8. On the **Sheet Issues/Revisions** page, update **Description** and **Issued to**.

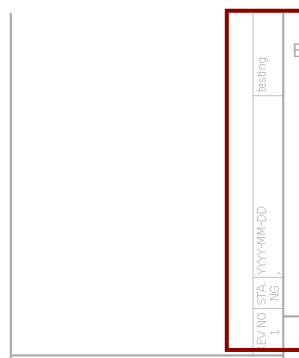
Sheet Issues/Revisions							
Sequence	Numbering	Date	Description	Issued	Issued to	Issued by	Show
1	Numeric	YYYY-MM-	Revised to show rev	<input type="checkbox"/>	D	First, Last N	Cloud and Tag

9. Click **OK**.
10. Navigate to the **Annotate** ribbon, select **Revision Cloud** and highlight the change made.



11. From the **Properties** panel, ensure the correct revision has been applied and verify that the title-block has been updated.

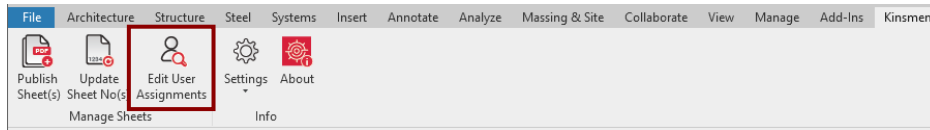
Revision Clouds		Edit Type
Identity Data		
Workset	View "Sheet: 60005 - Unnamed"	
Edited by	brian.salladeZ3RCR	
Revision	Seq. 1 - testing	
Revision Number	1	
Revision Date	YYYY-MM-DD	
Issued to	NG	
Issued by		
Mark		
Comments		
Properties help		Apply



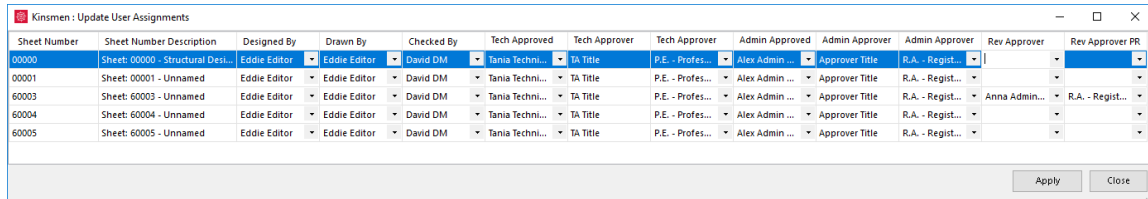


6.3. Preparing and Publishing Layout

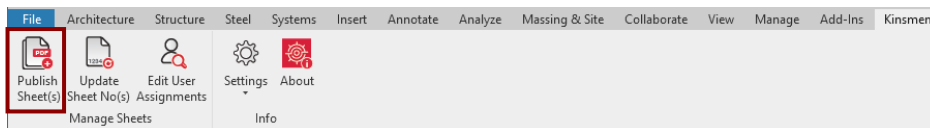
1. With the Revit Model file open and a sheet updated with the new revision block (from the previous section), navigate to the **Kinsmen** ribbon and click **Edit User Assignments**.



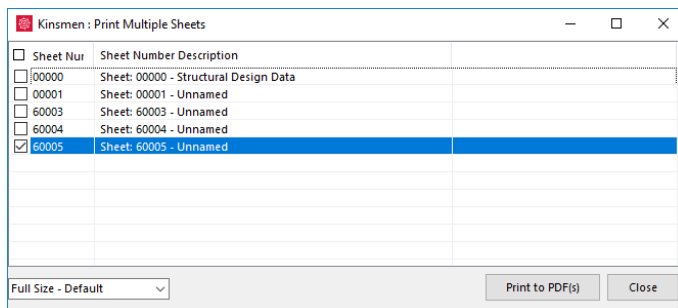
2. Add values for **Revision Approver By** and **Revision Approver PR**.



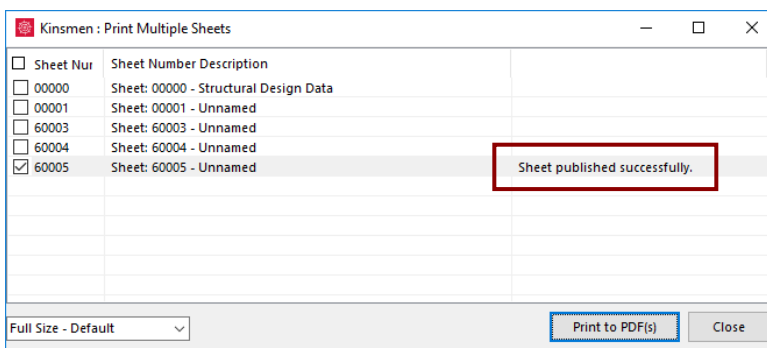
3. Click **Apply**, then **Close**.
4. From the **Kinsmen** ribbon, click the **Publish Sheet(s)** button.



5. Select the sheets to be published and ensure **Full Size - Default** is selected in the drop-down, and then click the **Print to PDF(s)** button.



6. After publishing has been completed, a **Success** message will be displayed for each sheet selected. Click the **Close** button to exit the dialog.





- Once complete, close **Revit** and locate the PDF sheet in the **2 – Work-In-Progress** scope.

2-Work-In-Progress Folders Now				
Name	To-Do Person	Revision Number	Size	Submit
Work-In-Progress				
Design			0 bytes	
1004			0 bytes	
1007			0 bytes	
638			0 bytes	
881			0 bytes	
882			0 bytes	
884			0 bytes	
888			0 bytes	
1-Standard			0 bytes	
Distribution System			0 bytes	
West Stone Flats Canal			0 bytes	
888-905-60003-RD-1.pdf	Meridian Service Ac...	1.1	367 KB	
987			0 bytes	
993			0 bytes	
X			0 bytes	

6.4. Send for Revision Approval

- Select the model file located in the previous section.
- On the property page, locate and select the workflow **Man-at-work** icon.

Properties

Document

Rendition Title block Signature Construction Records Work-In-Progress

888-905-60003-RD-1.pdf

Thumbnail

Refresh thumbnail

Workflow

Status: Draft

To do: Modify document

By: Meridian Service Account

Manager: Meridian Service Account

Comment:

File details

Location: USBR_Combined_2020.04.21:\Work-In-Progress\Design\888\1-Standard\West Stone Flats Canal

Type: Drawing, Adobe Acrobat Document

Revision: 1.1 Size: 367 KB (376,250 bytes)

Created: 5/4/2020 5:32:27 PM Created by: Meridian Service Account

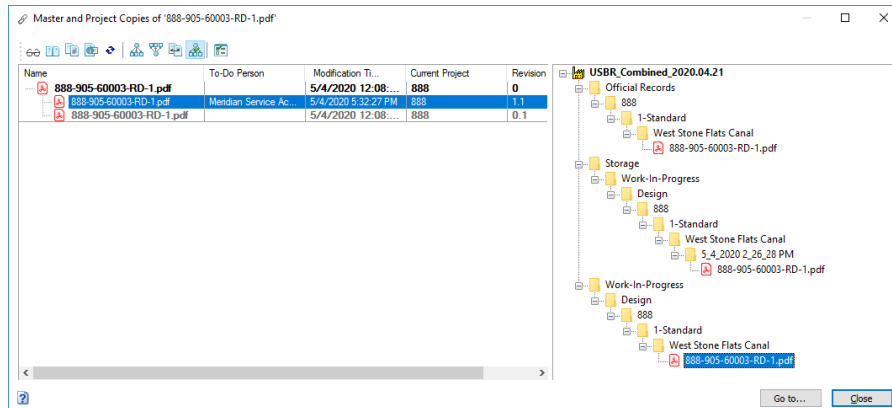
Modified: 5/4/2020 5:32:27 PM Modified by: Meridian Service Account

Local copy: <No value> Locked: No

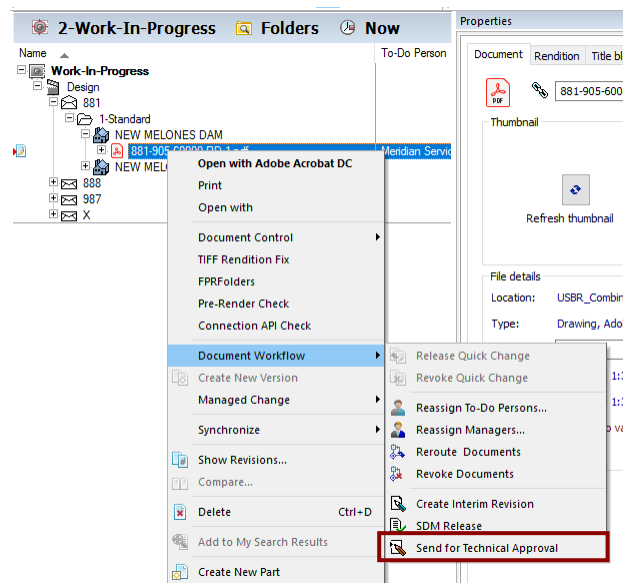
Rendition updated: <No value>



3. The **Master and Project Copies** dialog will be displayed and selecting each of the documents on the left will display the location on the right. Note that the version numbers of the documents increase based on the area.
 - a. Rev 0 = Official Record
 - b. Rev 0.1 = Archived Record
 - c. Rev 1.1 = Current work in progress Record

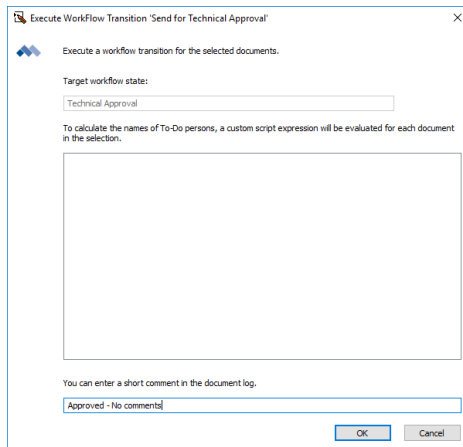


4. Right click on the **PDF Sheet**, select **Document Workflow > Send for Technical Approval**.

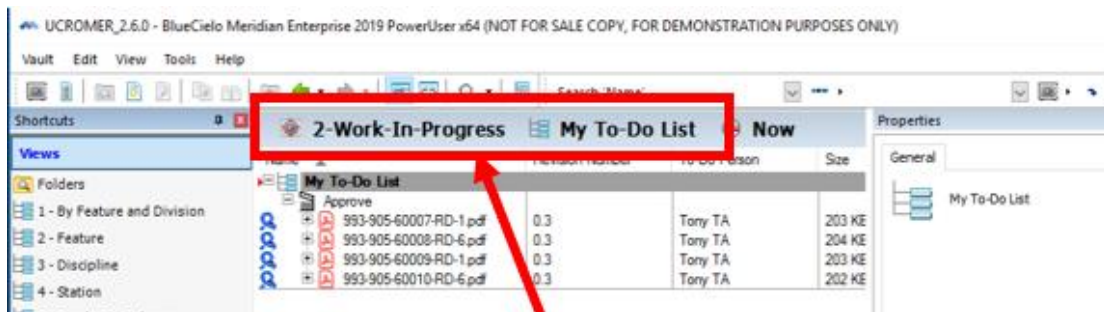




- At the **Workflow Transition** dialog, optionally enter a comment and then click **OK**. The PDF Sheet will be sent for approval to the **Technical Approver** specified in the **Rev Approved By** property. This property is populated by the **Edit User Assignments** feature in **Revit**.



- Open the **Meridian Power User** application and login as the nominated **Technical Approver**.
- Select the **2-Work-In-Progress** scope and **My To-Do List** view.



- Locate the **PDF sheet** for Technical Approval.
- Review the **PDF sheet**.
- Select the **PDF sheet**, right-click and select **Document Workflow > Tech Approval**.
- On the **Workflow Transition** dialog, optionally enter a **comment** and then click **OK**.
- At the **Tech Approval Sign Off** prompt, select a **Reason**, enter an **Approver Title** and verify the pre-populated **Professional Registration**.



13. Tick the **I Agree** checkbox, and then click **Finish**.

Execute transition 'Tech Approval' (Sendforapproval) - Sign Off

By checking 'I agree' and selecting the 'Finish' option you acknowledge that you understand and accept the responsibilities within Reclamation Policies for Tech Approval and are signing this drawing

Reason: Design Approval

Approver Title: Plant Structures Manager

Professional Registration: None

I agree ☒

Finish Cancel

14. The **PDF sheet** will be removed from the Technical Approver's **My To-Do List** view and updated with a status of **Ready for Release**.

2-Work-In-Progress Folders Now

Name	To-Do Person	Revision Number	Size	Submit Release
Design			0 bytes	
638			0 bytes	
1-Standard			0 bytes	
NONE			0 bytes	
638-905-60000-RD-1.pdf	Anderson, Kurt A	0.1	219 KB	
638-905-60001-RD-1.pdf	Meridian Service Ac...	0.1	214 KB	
638-905-60002-RD-1.pdf	Adams, Lucas	0.1	213 KB	
638-905-60003-RD-1.pdf	Adams, Lucas	0.1	219 KB	
638-905-60004-RD-1.pdf		0.1	219 KB	4/22/2020 3:15
881			0 bytes	
882			0 bytes	
884			0 bytes	

Properties

Document Rendition Title block Signature Construction Records Work-In-Progress

638-905-60004-RD-1.pdf

Thumbnail

Refresh thumbnail

Workflow

Status: **Ready for Release**

To do:

By:

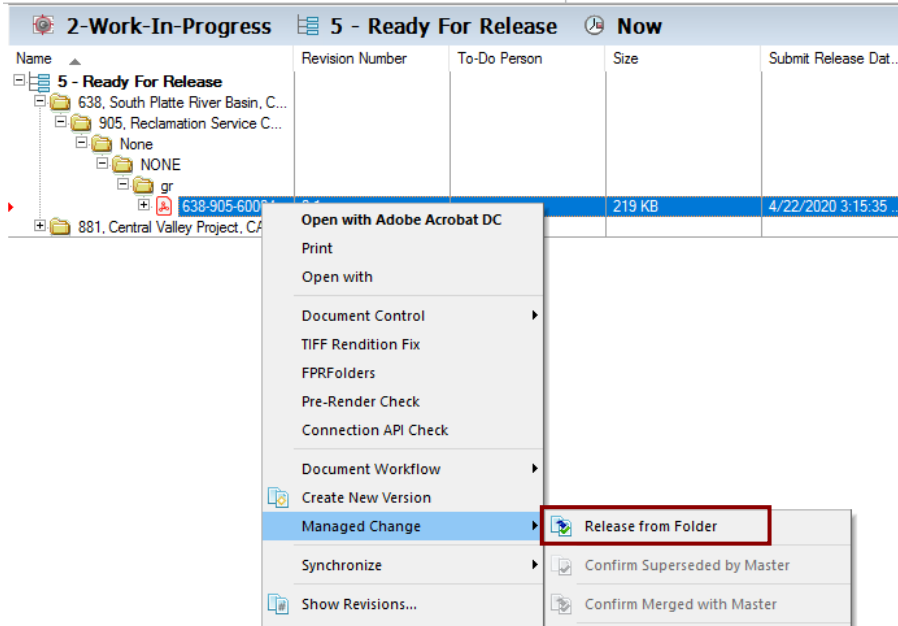
Manager:

Comment:



6.5. Release to Official Records

1. Open the **Meridian Power User** application. Note, these steps require **Drawing Manager** privileges.
2. Select the **2-Work-In-Progress** scope and then select the **5 - Ready For Release** view.
3. Right-click on the **PDF sheet** and select **Managed Change > Release from Folder**.



4. The **PDF Sheet** is released to the **Official Records** area. Select the **1 – Official Records** scope and locate this document. The revision number of the PDF Sheet will be set to **1**.



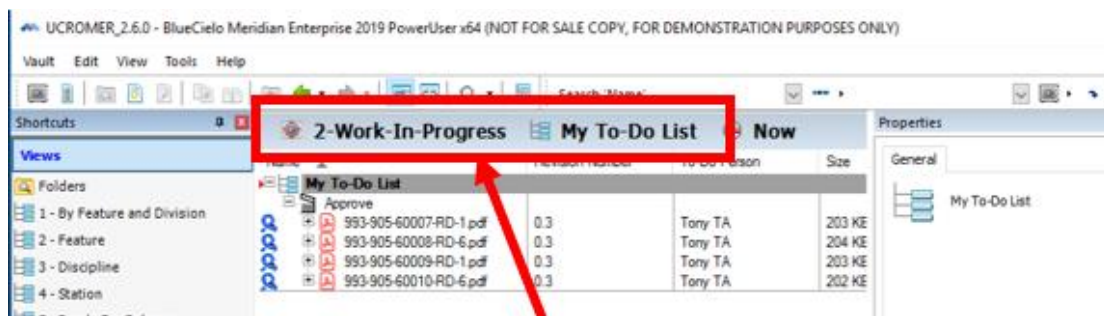
Part 7. Sheet Rejection Process

This section describes how PDF Sheets can be rejected as part of the workflow and thus re-submitted once revised. The steps below describe how to reject a PDF Sheet as part of the Revision Approval process; however, the same process applies for both Technical Approval and Admin Approval.

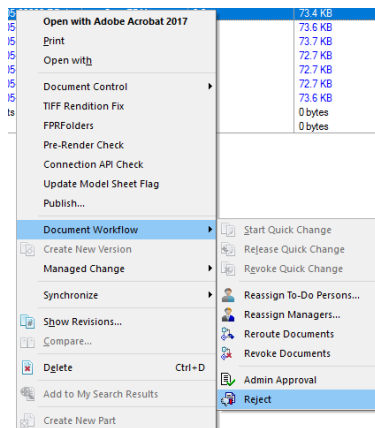
This section assumes that the Revision Approver has already received a Technical (Revision) Approval task with the intention to reject the PDF Sheet.

7.1. Reject Technical (Revision) Approval

1. Open the **Meridian Power User** application and login as the **Technical Approver**.
2. Select the **2-Work-In-Progress** scope and **My To-Do List** view.

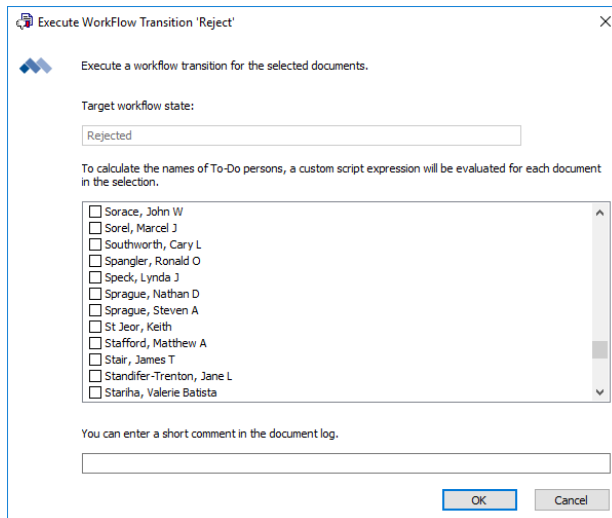


3. Locate the **PDF sheet** for Technical Approval.
4. Review the **PDF sheet**.
5. Select the **PDF sheet**, right-click and select **Document Workflow > Reject**.



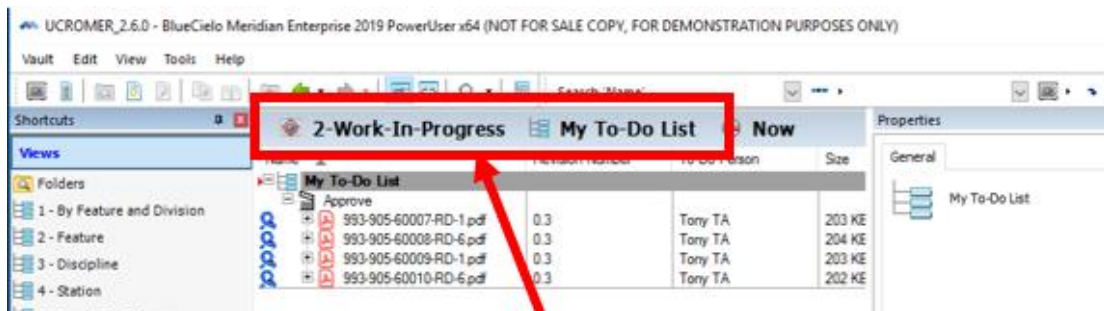


6. Select the user that will be managing the rejected PDF Sheet, optionally enter a **comment** and then click **OK**.
Note, a user can be selected from the **Editors** group **OR** the user specified in the **Drawn By** property on the document.



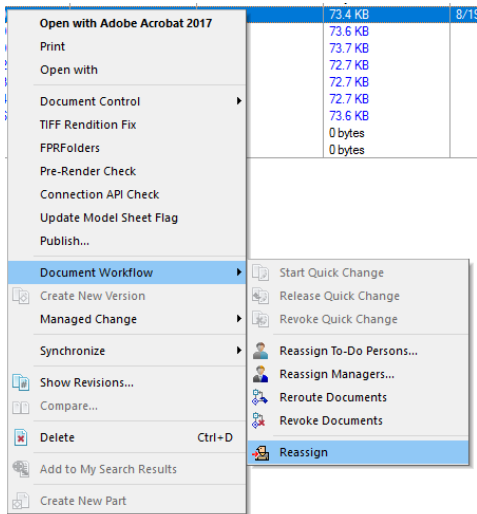
7.2. Reassign PDF Sheet

1. Open the **Meridian Power User** application and login as the user selected to manage the rejected PDF Sheet in the previous section.
2. Select the **2-Work-In-Progress** scope and open the **My To-Do List** view.



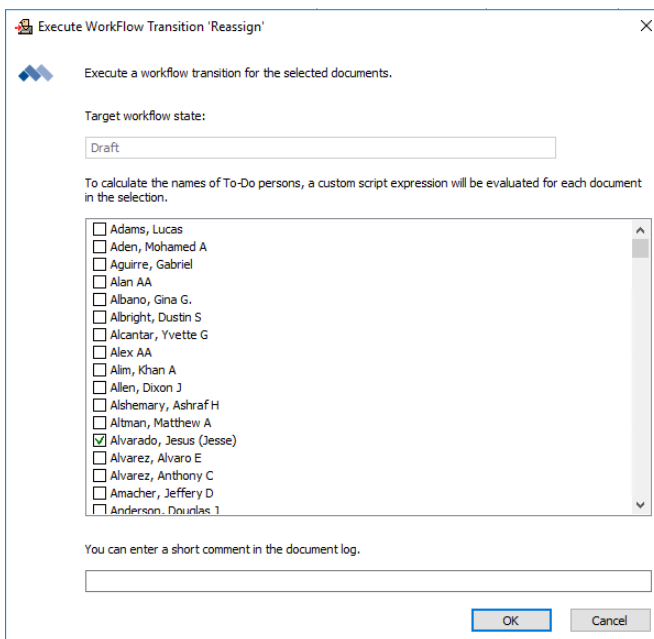


3. Locate the **PDF sheet** that has been rejected.
4. Select the **PDF sheet**, right-click and select **Workflow > Reassign**.



5. At the **Workflow Transition** dialog, select a user to work on the model, optionally enter a comment and then click **OK**.

Note: The user that originally edited the model will be pre-selected by default. This is specified in the **Drawn By** property of the document.

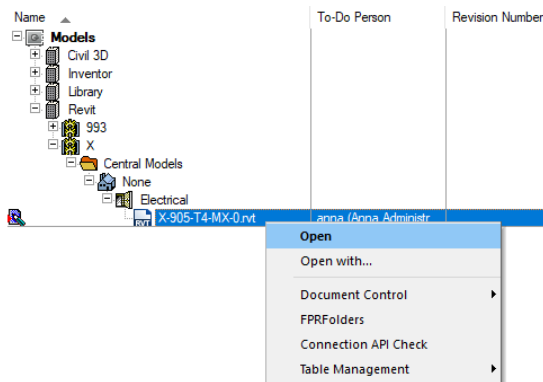




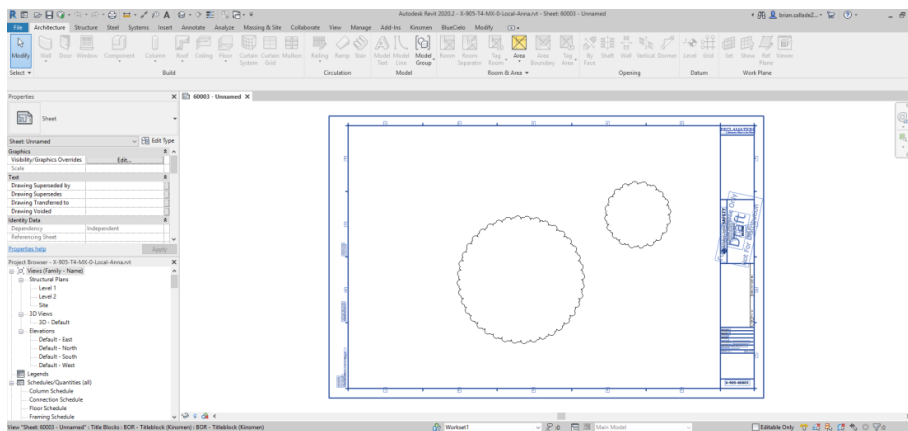
7.3. Correct the Rejected PDF Sheet

Note: This section assumes that the user performing this operation is the originating editor and therefore has a local copy of the Model file on their client workstation. If a local copy does not exist, refer to section 3.3. Creating a Local Copy.

1. Locate and open the local copy of the **Revit** Model file associated with the rejected PDF Sheet.



2. The model file will open in **Revit** on the client workstation.



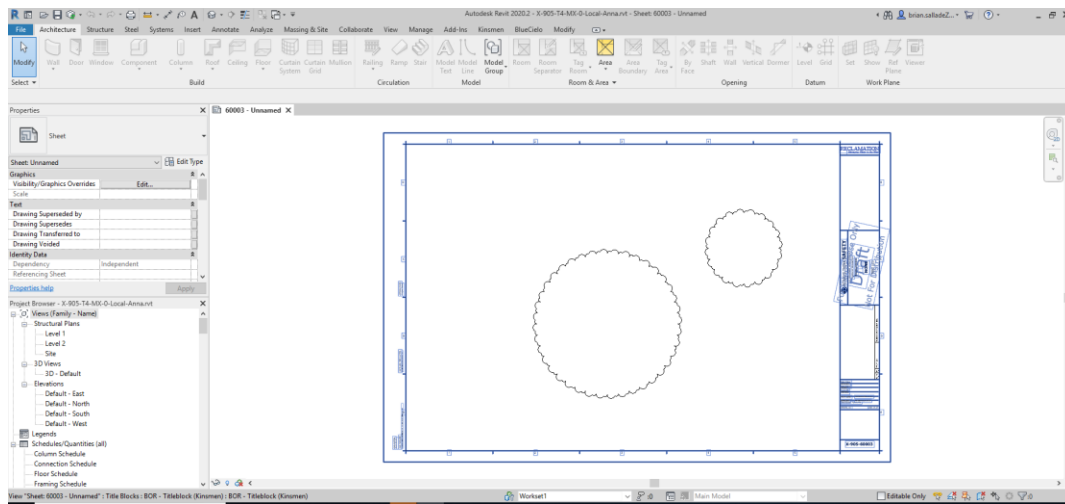
3. Locate the associated sheet, update the content as necessary and then click **Save**.
4. Update the **User Assignments**, if required. Refer to section [Editing User Assignments](#) for more information.
5. Republish the sheet. Refer to section [Publish Sheet\(s\) to Meridian](#) for more information.
6. **Save** the Model file and close the **Revit** application.
7. In **Meridian Power User**, locate the republished PDF Sheet and resubmit for **Revision Approval**. Refer to section [Send for Revision Approval](#) for more information.



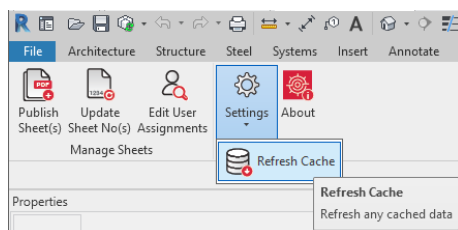
Part 8. Refreshing the Cache (Optional)

This section describes how to refresh the User and Lookup List cache from eDRAWS (Meridian) to the local client. The cache is utilized by the Edit User Assignment feature within Revit on the client workstation. This operation only needs to be performed if new users or lookup list items have been added to eDRAWS (Meridian) and they do not appear in the list of values within the Edit User Assignments dialog. Note, the Edit User Assignments function will also download the cache automatically if it does not already exist on the client workstation.

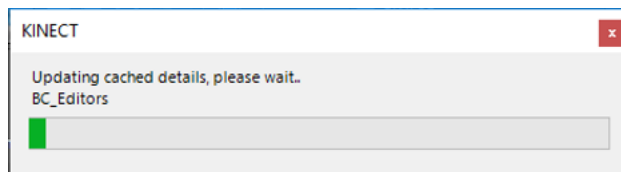
1. Open a model file in **Revit** on the client workstation.



2. Navigate to the **Kinsmen** ribbon and click the **Settings > Refresh Cache** button.



3. A progress bar will appear indicating that the cache information is being updated.



4. Close the **Revit** application.