



U.S. Department of Transportation
**Federal Highway
Administration**

Construction Part B Participant Guide



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1. Disclaimer

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2. Introduction to Using the Participant Guide

The Participant Guide helps you get started with the process of creating a contract modification and quickly navigate through the various key processes of contract modifications.

The options selected for use in this guide are for instructional purposes to showcase the entire lifecycle of Contract Modification. Field selections, other than the ones used in this guide, could possibly lead to a varied workflow and may not be covered in this guide. For additional information on the application, refer to the User Guide or Masterworks Online Help available with the application.

Note: You may notice screenshots containing information added throughout the document, even in places where a new empty screen would typically be displayed. This practice eliminates the need for multiple images, allowing a single screenshot to convey the essential details required to proceed with the work effectively.

3. Contract Modifications

Contract Modifications (CM) is an instrument of agreement between FHWA and the contractor for modifications to the contract. FHWA and the contractor mutually agree to the changes in quantities of existing items, additions of new items, changes in funding obligations, and modifications to the contract duration.

You create a contract modification for the following purposes:

- Revision in item quantities
- Item over-runs and under-runs
- Addition of newly identified items
- Change in funding obligations
- Change in contract duration

Additionally, at the end of the contract, you can create balance contract modifications to adjust any remaining quantities for all contract items. For more information on balance contract modifications, refer to **Construction Contracts – Part C Participant Guide**.

The functional flow for the **Contract Modifications** module is as follows:

1. [3.1. Create a contract modification record.](#)
2. [3.2. Manage contract modification items.](#)
3. [3.3. Approve a contract modification record.](#)

Contract Modifications Permission Matrix

This section provides information on the roles and corresponding permissions for the **Contract Modifications** form.

Role	Create	Edit	View	Delete	Audit Log
Administrator	Yes	Yes	Yes	Yes	Yes
Construction Component Lead	Yes	Yes	Yes	Yes	Yes
Construction Admin Staff	Yes	Yes	Yes	Yes	Yes
Construction Engineer	Yes	Yes	Yes	–	–
Highway Construction Manager/QAQC	–	–	Yes	–	–
Construction Operations Engineer	Yes	Yes	Yes	Yes	–
Inspector	–	–	Yes	–	–

Role	Create	Edit	View	Delete	Audit Log
Assistant Project Engineer	Yes	Yes	Yes	–	–
Project Engineer	Yes	Yes	Yes	Yes	–
Regional Engineer	Yes	Yes	Yes	Yes	–
Construction Inspection A&E Manager	–	–	Yes	–	–
Inspector A&E	–	–	Yes	–	–
Assistant Project Engineer A&E	Yes	Yes	Yes	–	–
Project Engineer A&E	Yes	Yes	Yes	–	–

3.1. Creating a Contract Modification

Prerequisites

- Contract items are locked.
- Approved fund sources must be available.
- An approved **Final Pay Estimate** record is not available for the contract.
- The role of the logged-in user must be one of the following:
 - Administrator
 - Construction Component Lead
 - Construction Admin Staff
 - Construction Engineer
 - Construction Operations Engineer
 - Assistant Project Engineer
 - Project Engineer
 - Regional Engineer
 - Assistant Project Engineer A&E
 - Project Engineer A&E

For more information on role-specific permissions, refer to [Contract Modifications Permission Matrix](#).

Overview

Based on the types defined in the **Contract Modification Type** catalog of the library, the **Contract Modifications** form enables you to modify the scope of the contract.

While creating a contract modification, in the **Contract Modification** form, you have the following options:

- **New Contract Modification:** This is used to make changes in quantities of existing items, additions of new items, changes in funding obligations, and modifications to the contract duration.
- **New Balance Modification:** This is used to update item quantities at the end of the contract to adjust any remaining quantities for all contract items.

Steps

1. In the module menu, click **Projects**.

The **PROJECTS** list page is displayed.

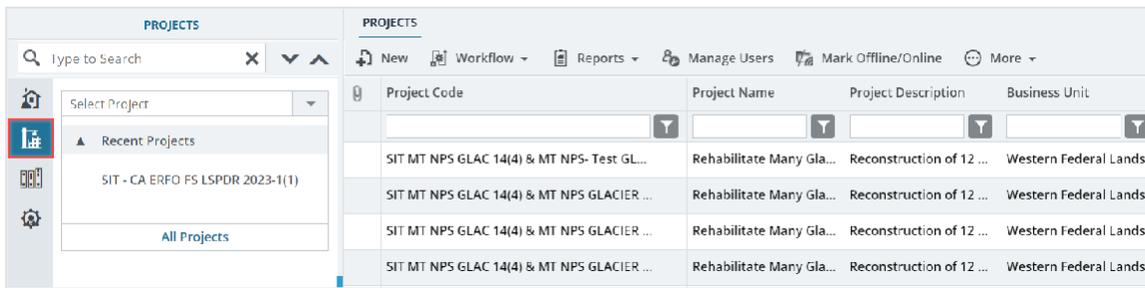


Figure 1: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

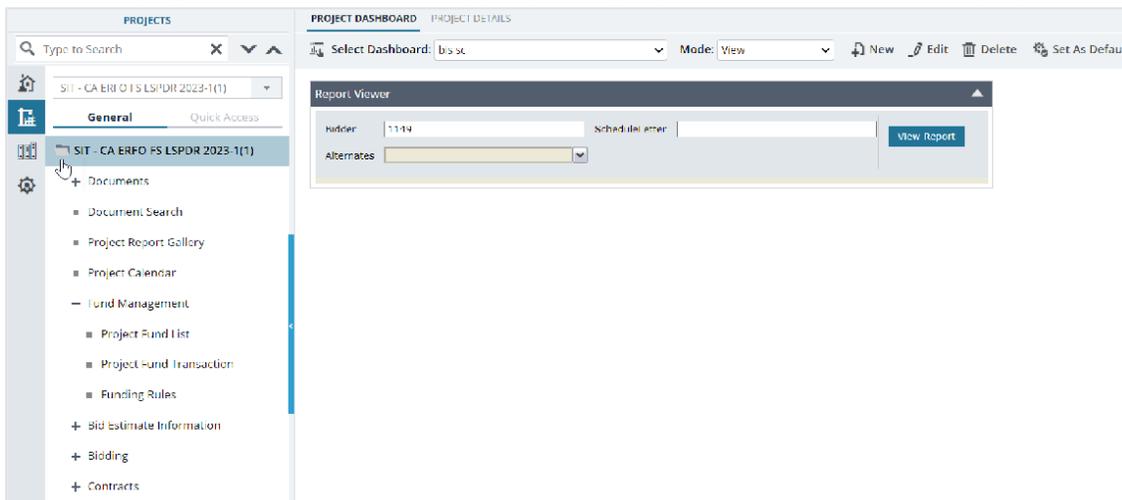


Figure 2: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

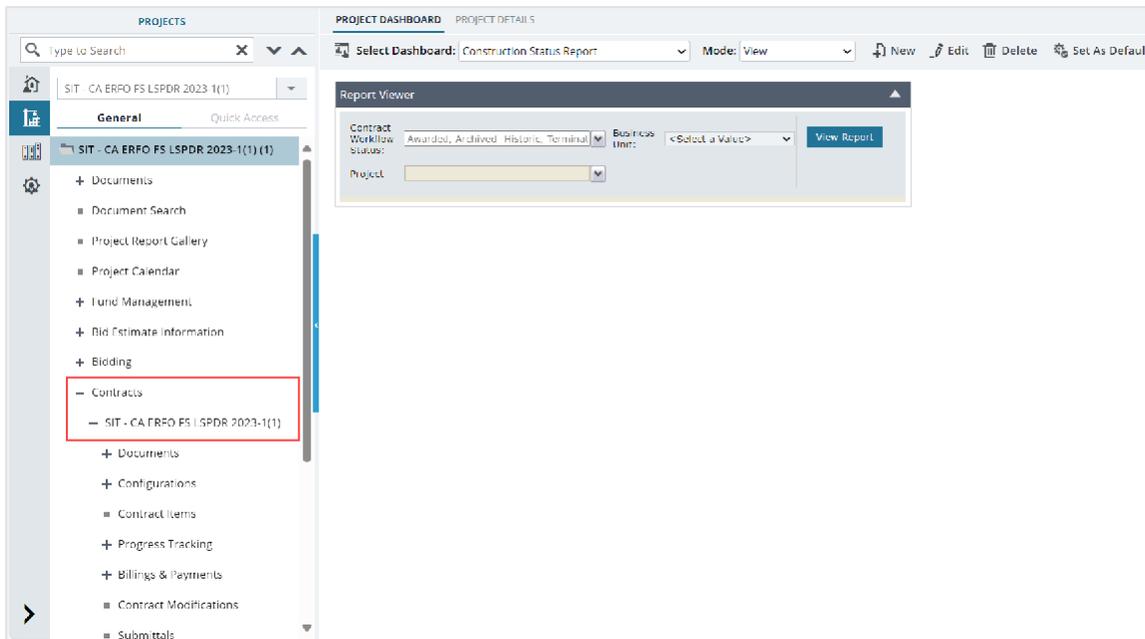


Figure 3: Navigation to Contracts

4. Click **Contract Modifications**.

The **CONTRACT MODIFICATIONS** list page is displayed.

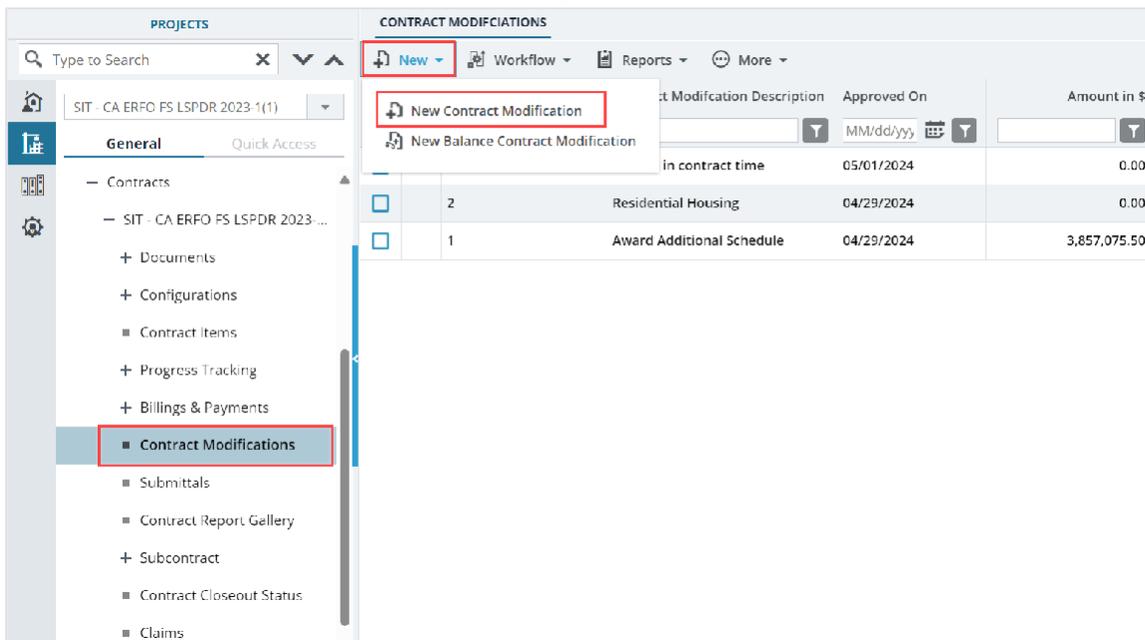


Figure 4: List Page of Contract Modifications Form

- Click **New**, and then click **New Contract Modification**.
The **CONTRACT MODIFICATION DETAILS** page is displayed.

Figure 5: Contract Modification Details Page

In the **GENERAL** section, the following information is displayed:

Field Name	Description
Original Contract Amount	The contract amount when the Contract Items list was locked.
Original Contract Duration (Days)	The initial contract duration when the Contract Items list was locked.
Current Contract Amount	The current contract amount includes the amount added to or deducted from the original contract amount by approved contract modifications. That is, the sum of the Original Contract Amount and the sum of amounts of all the approved contract modifications.
Original Calendar (Version)	The calendar selected and the calendar version associated to the contract when Contract Items list was locked. Displays None if a calendar was not associated with the locked contract.
Total Overrun	Upon adding the details in the CONTRACT MODIFICATION ITEMS tab, it displays the sum of all positive changes in amount from the CONTRACT MODIFICATION ITEMS tab.
Date	The current date.
Total Underrun	Upon adding the details in the CONTRACT MODIFICATION ITEMS tab, it displays the sum of all negative changes in amount from the CONTRACT MODIFICATION ITEMS tab.

Field Name	Description
Approval Date	On approval of the contract modification, the date of approval.
Net Change this CM	Upon adding the details in the CONTRACT MODIFICATION ITEMS tab, it displays the sum of contract modification amount.
Contract Amount after Change	Contract amount including the current contract modification amount. That is, the sum of the Current Contract Amount and Net Change this CM .

In the **CONTRACT TIME** section, the following information is displayed:

The screenshot displays the 'CONTRACT TIME' section of a software interface. At the top, there are tabs for 'CONTRACT MODIFICATION DETAILS' and 'CONTRACT MODIFICATION ITEMS'. Below the tabs is a toolbar with icons for 'Save & Exit', 'Save & Continue', 'Cancel', 'Workflow', and 'Select Actions'. The main content area is titled 'CONTRACT TIME' and contains the following fields:

- Time Type** : Calendar Days
- Start Date** : 10/01/2023
- Current Calendar Days** : 472
- Current Completion Date** : 01/14/2025
- Current Calendar (Version)** : None
- Completion Date after Change** : 12/15/2024
- Change in Calendar Days** : -30
- Description** : (empty text box)

Figure 6: Contract Time Section

Field Name	Description
Time Type	<ul style="list-style-type: none"> If a calendar is selected for the contract, Working Days is displayed. If no calendar is selected for the contract, Calendar Days is displayed.
Start Date	The date the contract begins as specified during contract creation.
Current Working Days / Current Calendar Days	<ul style="list-style-type: none"> If a calendar is selected for the contract, then based on the latest version of the calendar selected, the Current Working Days box displays the number of days calculated from the selected Start Date to the selected Current Completion Date of the contract. If no calendar is selected for the contract, the Current Calendar Days box displays the number of days calculated from the selected Start Date to the selected Current Completion Date of the contract.
Current Completion Date	The current completion date is current contract end date as defined in the CONTRACT DETAILS page.
Current Calendar (Version)	The calendar and calendar version currently associated with the contract.

Field Name	Description
Completion Date after Change	It is calculated as: Current Completion Date + (Change in Calendar Days) or (Change in Working Days)

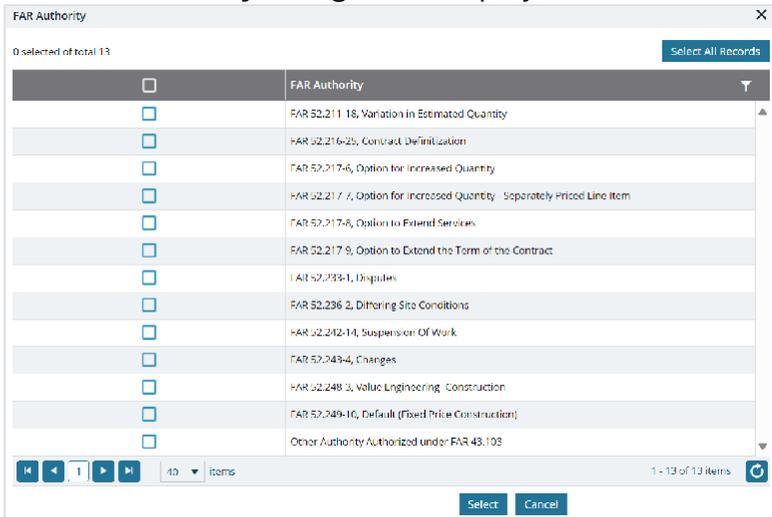
The **FUNDING-SUMMARY** section displays the funding details of all the approved **Project Fund List** records for the **CON** type fund sources.

The following information is displayed:

Column Name	Description
Fund Source	The name of the approved project fund source with the CON type fund.
Fund Category	The category of the project fund source.
Account Number	The account number of the project fund source.
Authorized Amount	The amount authorized for the project fund source.
Remaining Amount	The remaining funds available in the fund source.

6. In the **GENERAL** section, provide the appropriate information in the fields, as described in the following table:

Field Name	Description
CM #	Enter a unique number to identify the Contract Modifications record.
CM Initiated By	From the drop-down list, select the appropriate contract modification initiators. Available options are FHWA/Other, Contractor, Cooperating Agency, FHWA/Construction, etc. The drop-down list displays the active initiators defined in the CM Initiated By catalog of the library.
Reason for Change	From the multi-select drop-down list, select the appropriate reasons for the contract modification. Available options are Administrative / Pen & Ink Changes, Award Option, Final Contract Closeout, Other, etc. The drop-down list displays the active reasons defined in the CM Issue Reasons catalog of the library.
CM Type	Note: Once the record is saved, you cannot modify the selected option. From the drop-down list, select the appropriate type of contract modification. Available options are Change Order, Supplemental Agreement, etc. The drop-down list displays the active types defined in the Change Modifications Type catalog of the library.

Field Name	Description
	Note: If the selected type is Administrative Change , the CONTRACT MODIFICATION ITEMS tab is not available. It means you cannot make any modifications to the contract items. You can change only the funding information and contract time.
Affected Work Area	From the multi-select drop-down list, select the appropriate work areas affected by the modification. Available options are active work areas defined in the Area of Work Affected catalog of the library.
FAR Authority	To select the Federal Acquisition Regulation (FAR) authorities associated with the contract modification, perform the following steps: <ol style="list-style-type: none"> Click . The FAR Authority dialog box is displayed.  <p style="text-align: center;"><i>Figure 7: FAR Authority Dialog Box</i></p> <ol style="list-style-type: none"> Select the appropriate authorities, and then click Select. <p>Available options are active authorities defined in the FAR Authority catalog of the library.</p>
Other FAR Authority	Note: This field is editable if the selected FAR Authority is Other Authority Authorized under FAR 43.103 . Enter the name of the FAR authority associated with the contract modification.
Contract Modification Description	Enter a brief description of the contract modification.
Description and Location of Work	Enter a description of the modification requested and the location of work.

7. In the **CONTRACT TIME** section, provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Change in Working Days / Change in Calendar Days	To extend the duration of the contract, enter the number of extra days required for the contract.

Field Name	Description
	Alternatively, to decrease the contract duration, press the Minus Sign (-), and then enter the number of days to be decreased from the contract duration.
Description	Enter the purpose for the requested change in duration.

8. In the **KEY DATES** section, provide the appropriate information in the fields, as described in the following table:

Figure 8: Key Dates Section

Field Name	Description
Date RFP Sent to Contractor	Select the date on which the Request for Proposal (RFP) was sent to the contractor.
Date PR Signed	Select the date on which the PR was signed.
Date SF30 Signed by Contractor	Select the date on which the SF30 was signed by the contractor.
Date CM Work Started	Select the date on which the contract modification work was started.
Date Negotiations Completed	Select the date on which the negotiations were completed.
Date SF30 Sent to Contractor for Signature	Select the date on which the SF30 was sent to the contractor for signature.
Date SF30 Signed by CO	Select the date on which the SF30 was signed by the Contracting Officer (CO).

9. To add the details of an issue due to which the contract modification is being created, in the **ISSUES** section, perform the following steps:

a. Click **Add**.

Figure 9: Issues Section

The **New ISSUES** dialog box is displayed.

Figure 10: New Issues Dialog Box

The **Issue Number** field displays the identification number for the issue record.

b. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Issue Description	Enter the details of the issue that occurred.
Change in time due to Issue	Enter the time impact of the identified issue on the contract.
Reason for Issue	From the multi-select drop-down list, select the appropriate reasons for the issue. Available options are Award Option, Final Contract Closeout, Other, Partnering, etc. The drop-down list displays the active reasons defined in the CM Issue Reasons catalog of the library.
Areas of Work Affected	From the multi-select drop-down list, select the appropriate work areas affected by the issue. Available

Field Name	Description
	options are Aggregate - Base / Subbase, Aggregate - Minor, Aggregate - Surface Course, Asphalt - Pavement, etc. The drop-down list displays the active work areas defined in the Area of Work Affected catalog of the library.
Issue Initiated By	From the drop-down list, select the appropriate initiator for the issue. Available options are FHWA/Construction, FHWA/Other, Owning Agency, Cooperating Agency, etc. The drop-down list displays the active initiators defined in the CM Initiated By catalog of the library.
Contractual Effects of Issue	From the multi-select drop-down list, select the effects of issue on the contract. Available options are Added Work (Negotiated), Added Work (Overtime), Administrative Change, Deleted Work, etc. The drop-down list displays the active effects of issue defined in the Contractual Effects of Change catalog of the library.

Once the pay items are added or modified in the **CONTRACT MODIFICATION ITEMS** tab, the following fields are automatically updated:

Field Name	Description
Contract Amount Change due to Issue	Displays the sum of the pay items amount to which this issue record is associated.
Pay Items Affected	Displays the pay items' number to which this issue record is associated.

c. Click **Save**.

The details of the issue are added to the **ISSUES** section. Additionally, the editable cells are highlighted.

d. Optionally, perform the following steps, as applicable:

- To edit any issue, click the appropriate column of the respective cell and make the necessary changes.
- To delete any issue, select the appropriate row, click **Delete**, and then click **OK**.

10. Once the pay items are added or modified in the **CONTRACT MODIFICATION ITEMS** tab, based on the funding rules assigned to the pay items, in the **FUNDING SUMMARY** section, the **Amount Change in this CM** column is automatically updated with the sum value of the respective items.

CONTRACT MODIFICATION DETAILS		CONTRACT MODIFICATION ITEMS				
Save & Exit Save & Continue Cancel Workflow Select Actions						
FUNDING SUMMARY						
Fund Source	Fund Category	Account Number	Authorized Amount	Remaining Amount	Amount Change in this CM	
CON01	FLTP	15B6062301103.A40.CN .15F1.06.1606000000	560,458.72	289,721.87	0.00	
CON02	ERFO	15B6062301103.A40.CN .15F1.06.1606000000	2,203,414.61	998,351.63	0.00	
CON03	ERFO	8465189465165	3,857,075.50	3,529,566.05	0.00	
CON04	ERFO	15B6062301103.A40.CN .15F1.06.1606000000	0.00	0.00	0.00	
ATTACHMENTS						
<input type="checkbox"/> File View Status Document Name Uri/Link Title Uploaded By Uploaded Date File Size GPS Latitude GPS L						
<input type="button" value="Link Document"/> <input type="button" value="Upload Document"/>						

Figure 11: Funding Summary Section

Optionally, to modify the amount in the **Amount Change in this CM** column of the appropriate fund source, click and enter the amount.

Alternatively, to enter a negative amount, press the Minus Sign (-), and then enter the amount. Ensure the negative value is not less than the **Remaining Amount** in the fund source.

Note:

- You can enter negative values to represent a reduction of the amount from the account, and positive values to represent an addition of the amount to the account.
- Suppose a new project fund source is created when the **Contract Modifications** record is in the **Draft** or **Submitted** workflow status; the new fund source is automatically displayed in the **Funding Summary** tab.
- If the **CM Type** is except **Administrative Change**, the sum of all the **Amount Change in this CM** must not be less than the amount required for the contract modification items.
- After the amount is updated in the **Amount Change in this CM** field and then if any modifications are made to the items in the **Contract Modification Items** tab, the **Amount Change in this CM** field in the **Funding Summary** section is automatically updated.

- Optionally, in the **ATTACHMENTS** section, upload or link related files. For information on attachments, refer to [Section 4.1. Attachments](#).
- Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page..

The **CONTRACT MODIFICATIONS** list page is displayed.

You can now add items and modify existing items. For more information, refer to [Section 3.2. Managing Contract Modification Items](#).

3.2. Managing Contract Modification Items

The **Contract Modifications** form enables you to make the following modifications in a locked Contract Items list:

- [3.2.1. Create a container](#)
- [3.2.2. Add items to a contract modification](#)
- [3.2.3. Add multiple items to a contract modification](#)
- [3.2.5. Import schedules from Acquisitions](#)
- [3.2.6. Change the quantity of an existing item](#)

3.2.1. Creating a Container

Prerequisites

- The **CM Type** is not a **Balance Contract Modifications**.
- The role of the logged-in user must be one of the following:
 - Administrator
 - Construction Component Lead
 - Construction Admin Staff
 - Construction Engineer
 - Construction Operations Engineer
 - Assistant Project Engineer
 - Project Engineer
 - Regional Engineer
 - Assistant Project Engineer A&E
 - Project Engineer A&E

For more information on role-specific permissions, refer to [Contract Modifications Permission Matrix](#).

Overview

You can create containers at the root level to create new schedules. Additionally, you can create sub-containers inside new or existing schedules, if required.

Steps

1. In the module menu, click **Projects**.
The **PROJECTS** list page is displayed.

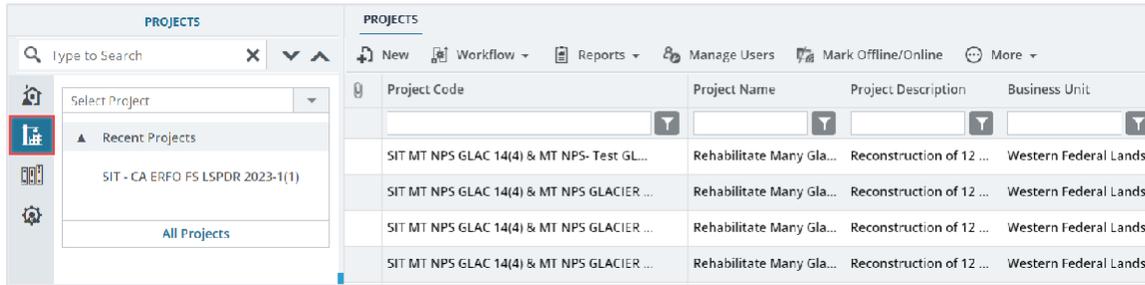


Figure 12: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

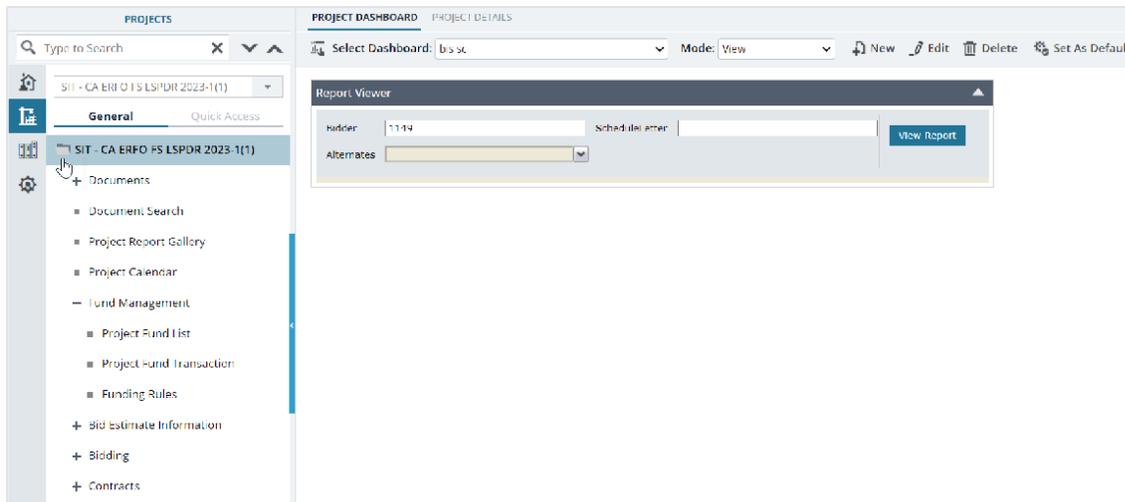


Figure 13: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

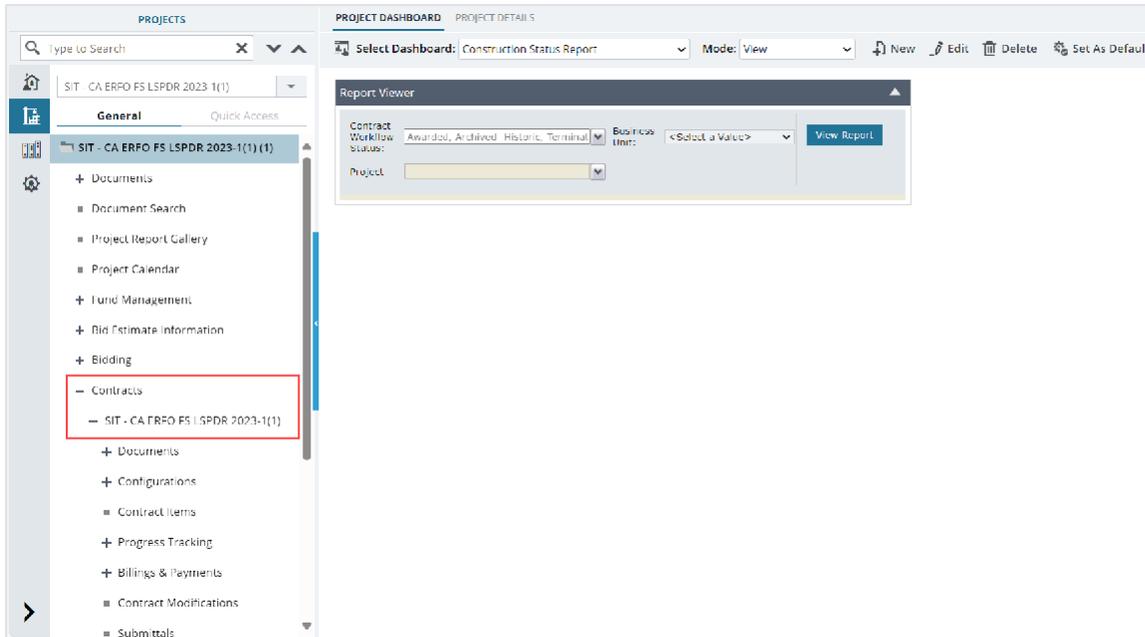


Figure 14: Navigation to Contracts

4. Click **Contract Modifications**.

The **CONTRACT MODIFICATIONS** list page is displayed.

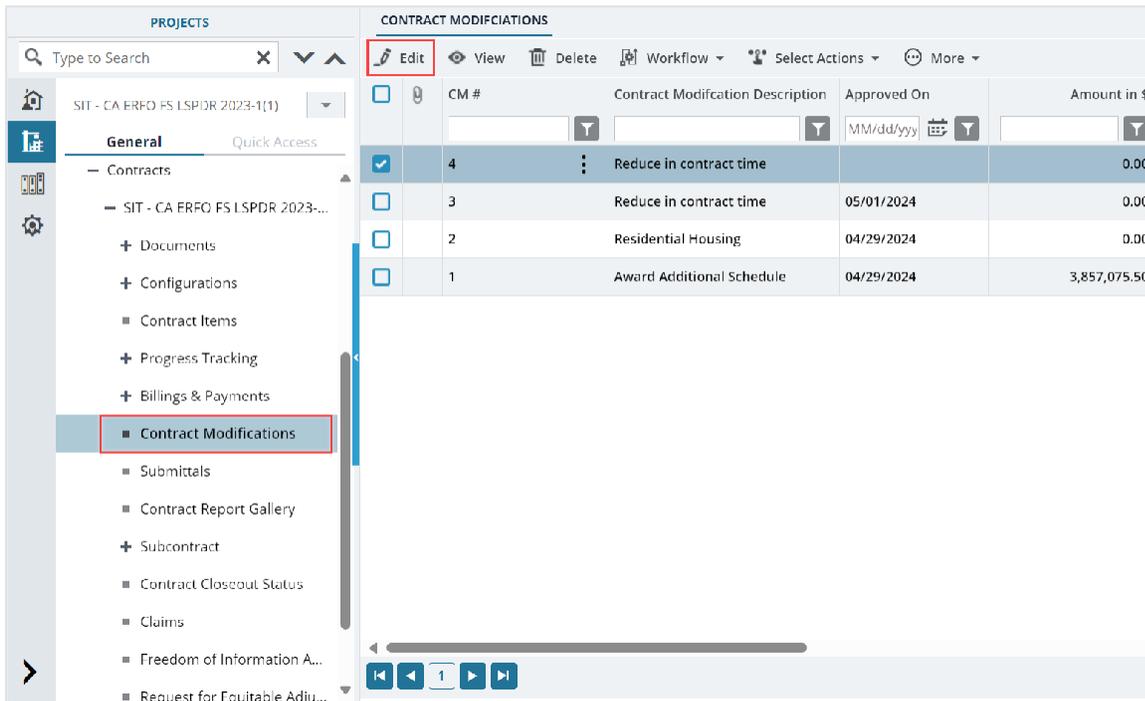


Figure 15: List Page of Contract Modifications Form

5. In the list page, select the appropriate record, and then click **Edit**.

The **CONTRACT MODIFICATION DETAILS** page is displayed.

6. Click the **CONTRACT MODIFICATION ITEMS** tab.

By default, the containers from the Contract Items form are displayed.

Name	Line Number	Description	Supplemental Description	Unit	Quantity	Unit Price in \$	Fund Rule
Schedule A		ERFO repairs on Black Mountain Road for MSE Walls, Gabion Walls and Drainage Flumes.					
OGR		Additional Erfo work					

Total Amount (\$): 0.00

Figure 16: Contract Modifications Items Tab

7. Click **New**, and then click **New Container**.

Name	Line Number	Description	Supplemental Description	Unit	Quantity	Unit Price in \$	Fund Rule
Schedule A		ERFO repairs on Black Mountain Road for MSE Walls, Gabion Walls and Drainage Flumes.					
OGR		Additional Erfo work					

Figure 17: New Container Option

The **CONTAINER** page is displayed.

Figure 18: Container Page

8. Provide the appropriate information in the fields, as described in the following table.

Field Name	Description
Name	Enter a name of the container.
Description	Enter a description of the container.
Schedule Letter	From the drop-down list, select a unique letter. Available options are letters from A to Z. Note: You cannot use the schedule letters that are already assigned for the containers of the following: <ul style="list-style-type: none"> Contract Items Award for Later in Bid Opening and Review form Current Contract Modifications
Schedule Construction Type	From the drop-down list, select the appropriate schedule construction type. Available options are 20101 Clearing, 20102 Clearing and grubbing, 20301 Removal of bridge, 20401 Grading work only, etc. The drop-down list displays the active schedule construction types defined in the Schedule Construction Type catalog of the library.
Option/Base/New	Select the appropriate option.

9. In the **MILES** section, provide the appropriate information in the fields, as described in the following table.

Field Name	Description
Miles or Km	Enter a positive number with up to two decimal places.

Field Name	Description
Lane Miles or Lane Km	Enter a positive number with up to two decimal places.
Trail Miles or Trail Km	Enter a positive number with up to two decimal places.

10. To add the location details of the container, in the **GIS DETAILS** section, perform the following steps:

- a. Click **Add**.

A row is added.

The screenshot shows a table titled "GIS DETAILS" with the following columns: Route ID, Latitude, Longitude, and Remarks. Each column has a dropdown arrow. Below the table, there is an "Add" button (highlighted with a red box) and a "Delete" button. A new row is visible below the header, with a checkbox in the first column.

Figure 19: GIS Details Section

- b. In the **Route ID** column, enter the route identification number of the location.

- c. In the **Latitude** column, enter the latitude coordinates.

Note: You can enter any value within the range of -90 to 90.

- d. In the **Longitude** column, enter the longitude coordinates.

Note: You can enter any value within the range of -180 to 180.

- e. In the **Remarks** column, enter any remarks, if applicable.

11. To add bridge information, in the **BRIDGE DATA** section, perform the following steps:

- a. Click **Add**.

A row is added.

The screenshot shows a table titled "BRIDGE DATA" with the following columns: Bridge Name, Bridge Number, Bridge Length, Bridge Square Feet, and Bridge Construction Type. Each column has a dropdown arrow. Below the table, there is an "Add" button (highlighted with a red box) and a "Delete" button. A new row is visible below the header, with a checkbox in the first column.

Figure 20: Bridge Data Section

- b. In the **Bridge Name** column, enter the name of the bridge.

- c. In the **Bridge Number** column, enter the number of the bridge.

- d. In the **Bridge Length** column, enter the length of the bridge.

Note: You must enter any positive number with up to two decimal places.

- e. In the **Bridge Area** column, enter the square feet of the bridge.

Note: You must enter any positive number with up to two decimal places.

- f. In the **Bridge Construction Type** column, select the appropriate bridge construction type. Available options are active bridge construction types defined in the **Bridge Construction Type** catalog of the library.

12. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.

The container is created.

3.2.2. Adding Items to a Contract Modification

Prerequisites

- The **Solicitation Procedure** in the published advertisement is defined as **Design-Build** or **Letter Contract**.
- The **CM Type** is not a **Balance Contract Modifications**.
- The role of the logged-in user must be one of the following:
 - Administrator
 - Construction Component Lead
 - Construction Admin Staff
 - Construction Engineer
 - Construction Operations Engineer
 - Assistant Project Engineer
 - Project Engineer
 - Regional Engineer
 - Assistant Project Engineer A&E
 - Project Engineer A&E

For more information on role-specific permissions, refer to [Contract Modifications Permission Matrix](#).

Overview

The **Contract Modifications** form enables you to add new items to the locked Contract Items list of a contract.

When a **Contract Modifications** record is approved with new items added to it, the contract cost increases.

Steps

1. In the module menu, click **Projects**.
The **PROJECTS** list page is displayed.

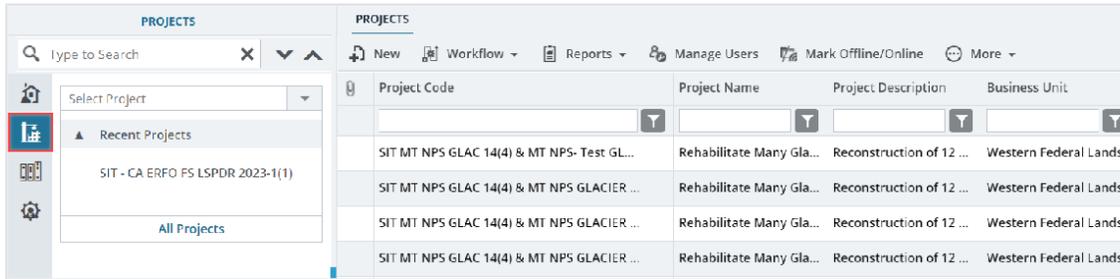


Figure 21: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

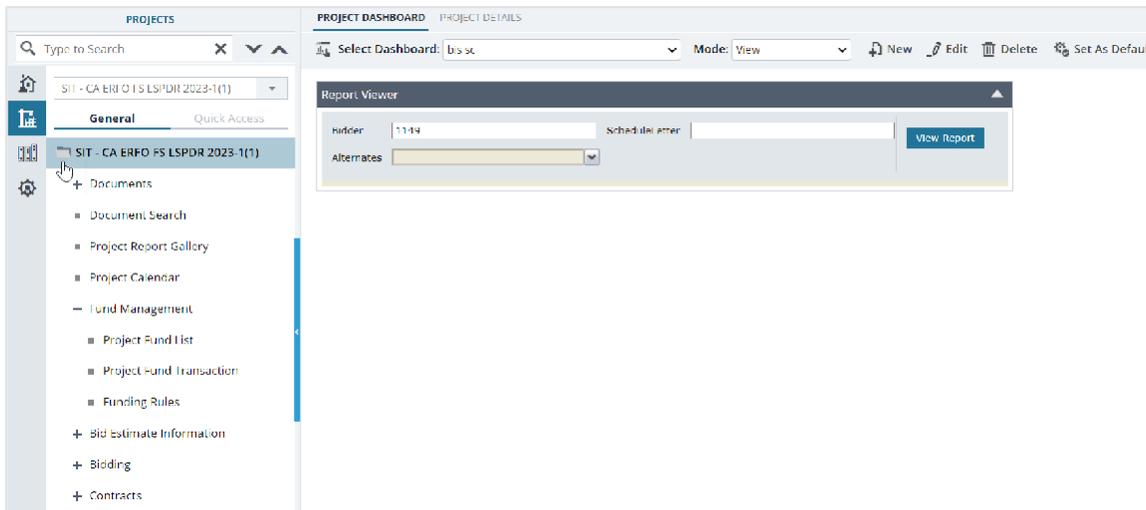


Figure 22: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

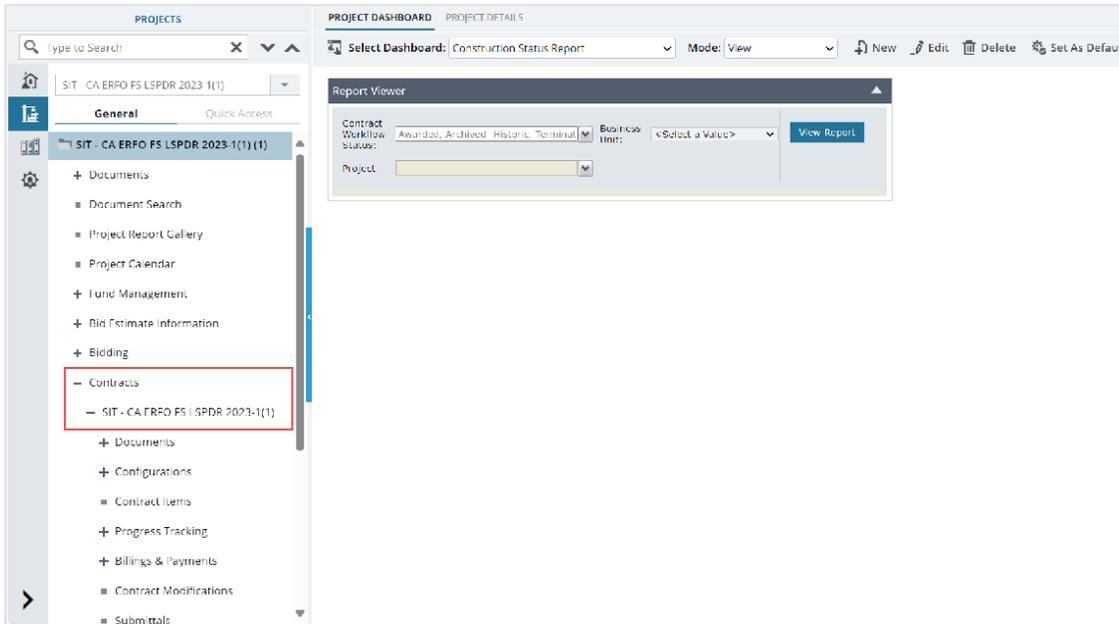


Figure 23: Navigation to Contracts

4. Click **Contract Modifications**.

The **CONTRACT MODIFICATIONS** list page is displayed.

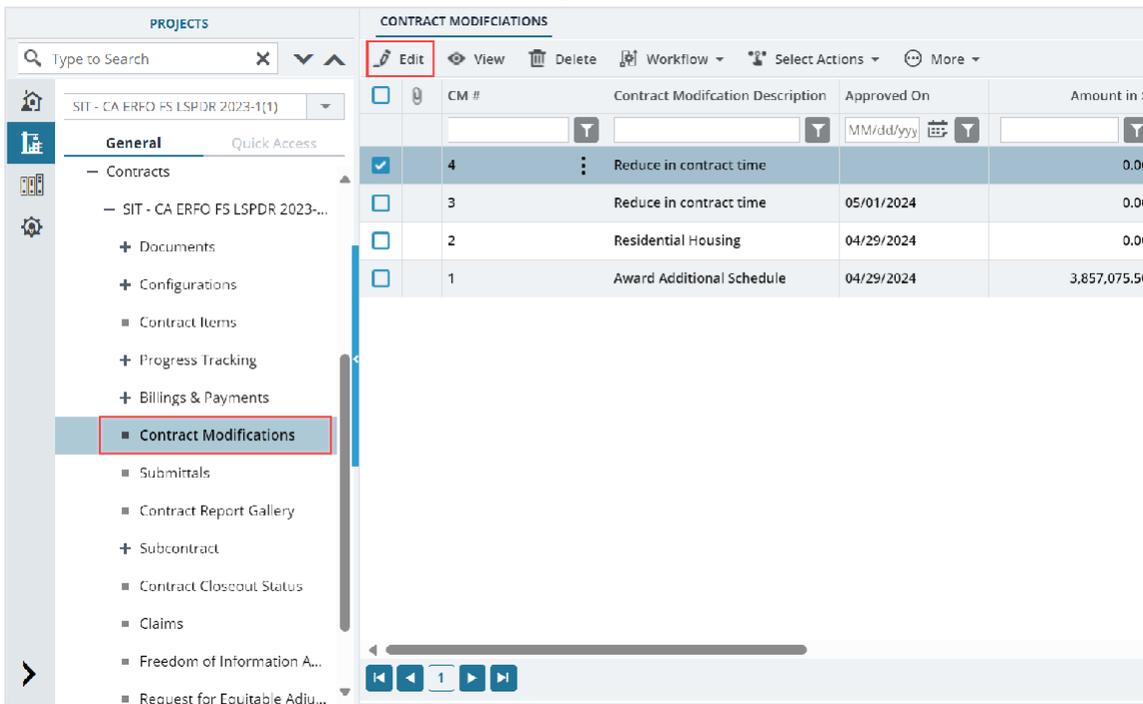


Figure 24: List Page of Contract Modification

5. In the list page, select the appropriate record, and then click **Edit**.

The **CONTRACT MODIFICATION DETAILS** page is displayed.

6. Click the **CONTRACT MODIFICATION ITEMS** tab.



Figure 25: Contract Modification Items Tab

7. Select the appropriate container, and then click **New**, and then click **Add CM Item**.

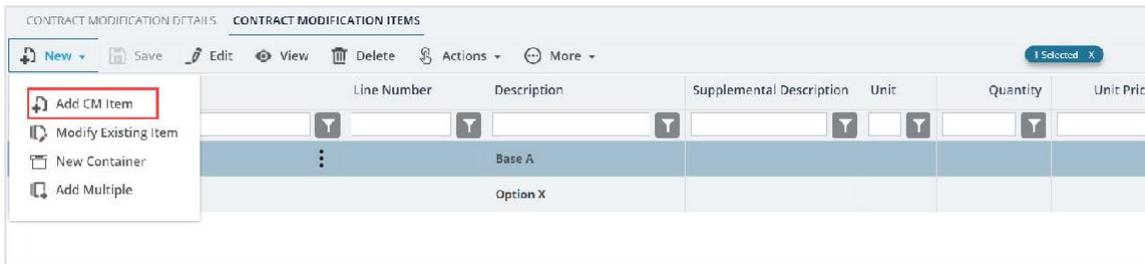


Figure 26: Add CM Item

The **NEW CONTRACT MODIFICATION ITEM** page is displayed.

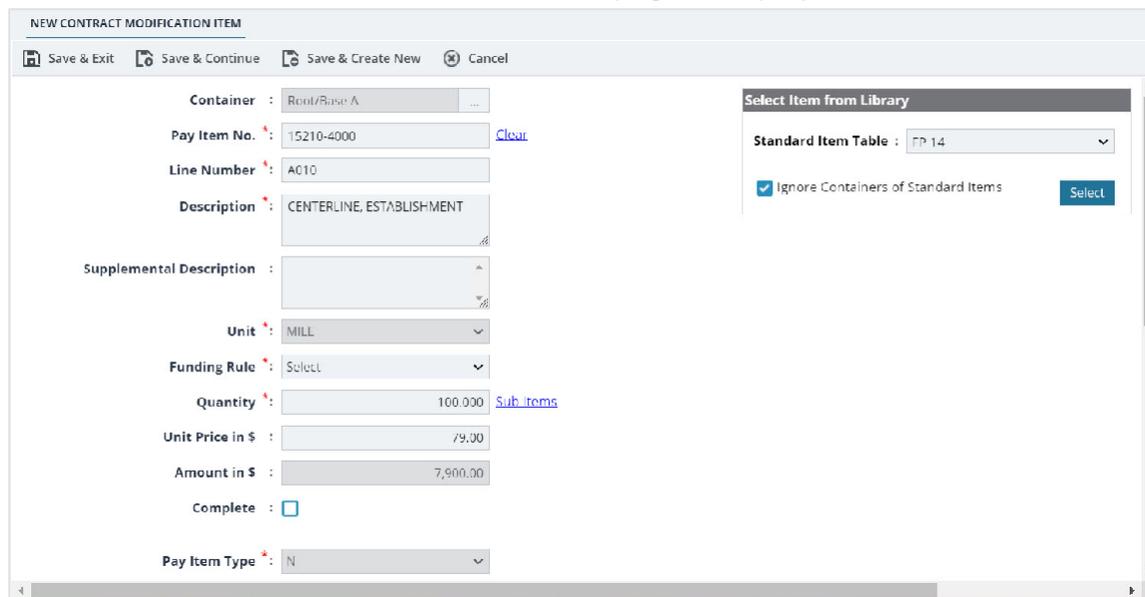


Figure 27: New Contract Modification Item Page

8. Provide the required information in the fields, as described in the table.

Field Name	Description
Container	By default, the name of the selected container is displayed. To select a different container to categorize the item, perform the following steps:

Field Name	Description							
	<p>a. Click .</p> <p>The SELECT CONTAINER page is displayed.</p> <div data-bbox="565 241 1279 762" style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p style="text-align: center;">SELECT CONTAINER</p> <hr style="width: 30%; margin: auto;"/> <div style="margin-top: 20px;">  Root <div style="margin-left: 20px;">  Schedule A </div> </div> </div> <p style="text-align: center; color: #4F81BD; font-size: small;">Figure 28: Select Container Page</p> <p>b. Click the appropriate container.</p>							
Pay Item No.	<p>Enter the item number.</p> <p>Alternatively, to select an item from the library, perform the following steps:</p> <p>Note: By default, the Standard Items Table selected for the project is displayed and you cannot change the standard table.</p> <p>a. Click Select to select an item from the selected standard items table.</p> <p>The Please select an item dialog box is displayed.</p> <p>Items are displayed in the ascending order of the pay item number and based on the Measurement System defined in the project details page.</p> <p>Available options are items defined in the selected standard items table that is defined in the Standard Items Table catalog of the library.</p> <p>b. Click an item, and then click Select.</p> <p>The Pay Item No., Description, Unit, Pay Item Type, and Material Incentive of the selected item are displayed. If an item added from library has the Material Incentive field selected as Yes, an item is automatically added with the following information:</p> <table border="1" data-bbox="618 1650 1317 1881" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Field Name</th> <th style="width: 50%;">Description</th> </tr> </thead> <tbody> <tr> <td>Container</td> <td rowspan="2">The value as specified for the parent item.</td> </tr> <tr> <td>Pay Item No.</td> </tr> <tr> <td>Description</td> <td>The same description as the parent item appended with (Quality).</td> </tr> </tbody> </table>	Field Name	Description	Container	The value as specified for the parent item.	Pay Item No.	Description	The same description as the parent item appended with (Quality) .
Field Name	Description							
Container	The value as specified for the parent item.							
Pay Item No.								
Description	The same description as the parent item appended with (Quality) .							

Field Name	Description	
	Unit	The value as specified for the parent item.
	Funding Rule	If a default funding rule is assigned to the project, then the same funding rule is displayed. Otherwise, the field is blank.
	Quantity	If the Unit field is LPSM or CTSM , then 1 is displayed. Otherwise, the field is blank. It is always LPSM for for Material Incentive
	Line Number	The fields are blank.
	Supplemental Description	
	Unit Price in \$	
	Complete	
	Probable Quantity	
	Notes	
	Pay Item Type	
	Material Incentive	It is selected as No .
To update the necessary fields for the item, refer to the appropriate rows in this table, as applicable.		
Line Number	Enter a unique line number for the item.	
Description	Enter the description of the item. Item description is displayed automatically if you have selected the item from the library.	
Supplemental Description	Enter the supplement description of the item.	
Unit	From the drop-down list, select the unit of measure for the item. Available options are LPSM, MILE, EACH, SQYD, etc. The drop-down list displays measurement units defined in the Measurement Systems catalog of the library. For more information on measurement systems, refer to the Measurement Systems section in the A01 Library Management PG . Item unit is displayed automatically if you have selected the item from the library.	
Funding Rule	Select the appropriate funding rule for the item. Available options are approved funding rules defined for the project. For more information on funding rules, refer to the Funding Rules section in the M03 Fund Management PG . If sub-items are added for the item, then this field is not available. For more information, refer to Section 3.2.4. Adding Sub Items .	

Field Name	Description
Quantity	Enter the required quantity of the item. You can add sub-items to an item, and the quantity of the item is calculated as the sum of all the sub-items added. For more information, refer to Section 3.2.4. Adding Sub Items .
Unit Price in \$	Enter the cost per unit. If the Unit is LPSM or CTSM , then unit price is defaulted to 1\$ and Quantity field remains editable. Note: Suppose you are trying to balance out an extra amount already paid to the contractor, you can enter negative values as the item unit price and approve the CM. Once the CM is approved, you can post the item with negative value through an Item Posting and the Pay Estimates will consider the values accordingly. The deduction in amount through the CM is also displayed in the CI. Upon entering the values in the Quantity and Unit Price in \$ fields, the Amount in \$ field displays the total amount of the item. It is calculated as: Quantity x Unit Price in \$
Complete	Select the check box to mark the item as complete. On marking an item as complete, the item will not be available for item postings to be processed in a pay estimate. For more information on item postings, refer to the Item Postings section in the M06 Construction Part A PG .
Pay Item Type	From the drop-down list, select the appropriate type of pay item. Available options are N, NM, NR, NS, QM, etc. The drop-down list displays the active pay item types defined in the Pay Item Type catalog of the library. Item type is displayed automatically if you have selected the item from the library.
Material Incentive	Click Yes if the item involves any incentives for the contractor based on the quality of the material. Otherwise, click No . The value is displayed automatically if you have selected the item from the library.
Notes	Enter any additional information relevant to the item.
Probable Quantity	Enter the probable quantity for the item. Probable quantity defines the estimated quantity for a contract item to keep a track on the suggested quantity of a contract item and its actual usage during the construction. Upon entering the values in the Probable Quantity and Unit Price in \$ fields, the Probable Amount field displays the total amount for the item. It is calculated as: Probable Quantity x Unit Price in \$ If sub-items are added for the item, the Probable Quantity and Probable Amount of the item is calculated as the sum of all the sub-items added. For more information, refer to 3.2.4. Adding Sub Items .

9. To associate an issue record with the item, in the **ISSUES GRID** section, perform the following steps:

- a. Click **Add**.

A row is added.

The screenshot shows a table titled "ISSUES GRID". The table has two columns: "Issue" and "Issue Quantity". The "Issue" column has a dropdown arrow, and the "Issue Quantity" column has a dropdown arrow. Below the table, there are two buttons: "Add" and "Delete". The "Add" button is highlighted with a red box.

Issue	Issue Quantity
□	1.000

Figure 29: Issue Grid Section

- b. Double-click the Issue column and select the appropriate issue record.
Available options are issues defined in the **ISSUES** section in the **CONTRACT MODIFICATION DETAILS** page.
- c. In the Issue Quantity column, by default, the quantity defined for the item is displayed for the first entry.
Optionally, double-click and enter the item quantity required for the respective issue.
For the subsequent entry, by default, the column displays the difference quantity from the first entry and the item's Quantity. For example, the item's Quantity is 15 and the Issue Quantity of the first entry is 5, then the Issue Quantity of the next entry is 10.

Note: To save the record, ensure the sum of Issue Quantity should be equal to item's Quantity.

10. Optionally, in the **ATTACHMENTS** section, upload or link related files. For information on attachments, refer to [Section 4.1. Attachments](#).
11. To save the item, perform any of the following steps, as applicable:
 - Click **Save & Exit** to return to the item list page.
 - Click **Save & Continue** to save the item and continue on the same page.
 - Click **Save & Create New** to save the current item and continue creating new items.

Click **Cancel** to discard the added information and exit the page.

3.2.3. Adding Multiple Items to a Contract Modification

Prerequisites

- The **CM Type** is not a **Balance Contract Modifications**.
- The role of the logged-in user must be one of the following:
 - Administrator
 - Construction Component Lead
 - Construction Admin Staff
 - Construction Engineer
 - Construction Operations Engineer
 - Assistant Project Engineer

- Project Engineer
- Regional Engineer
- Assistant Project Engineer A&E
- Project Engineer A&E

For more information on role-specific permissions, refer to [Contract Modifications Matrix](#).

Overview

Instead of adding items one by one, you can add multiple items from the library to the contract modification at once. This saves time and efforts.

Steps

1. In the module menu, click **Projects**.
The **PROJECTS** list page is displayed.

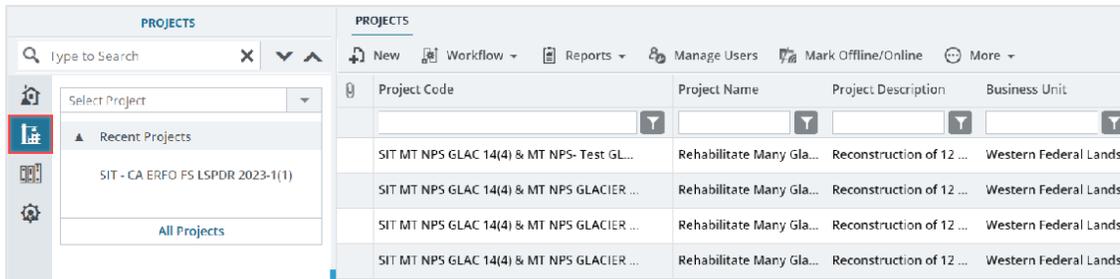


Figure 30: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

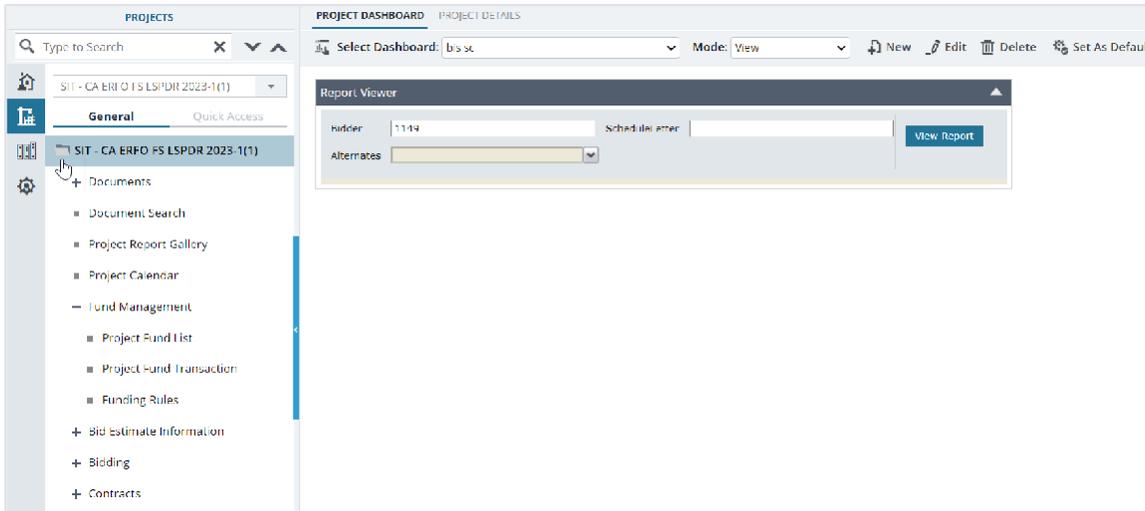


Figure 31: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

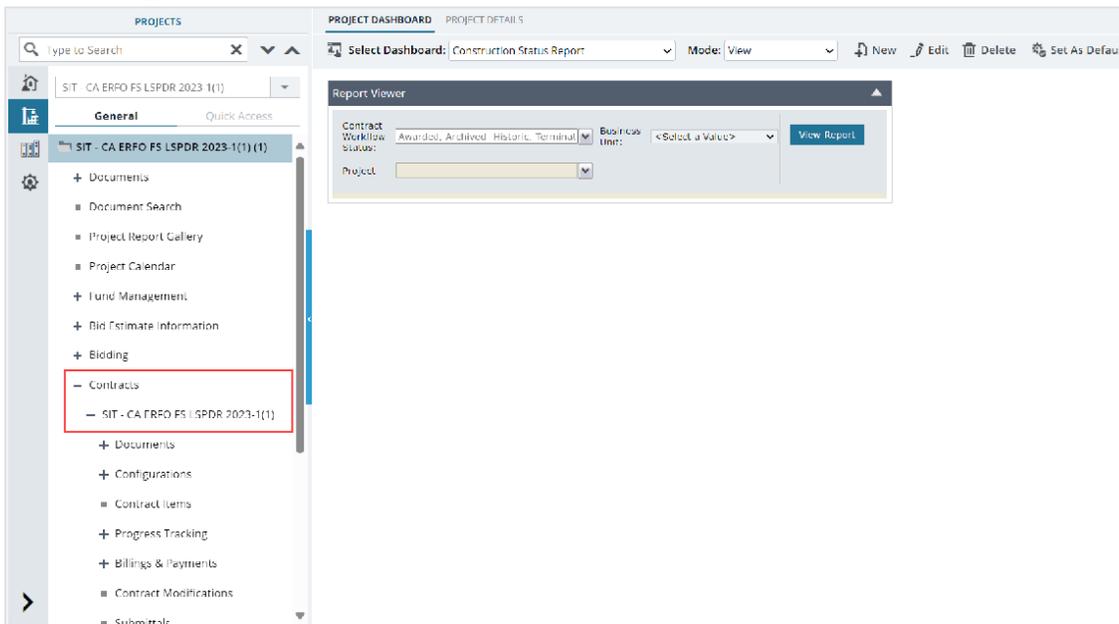


Figure 32: Navigation to Contracts

4. Click **Contract Modifications**.

The **CONTRACT MODIFICATIONS** list page is displayed.

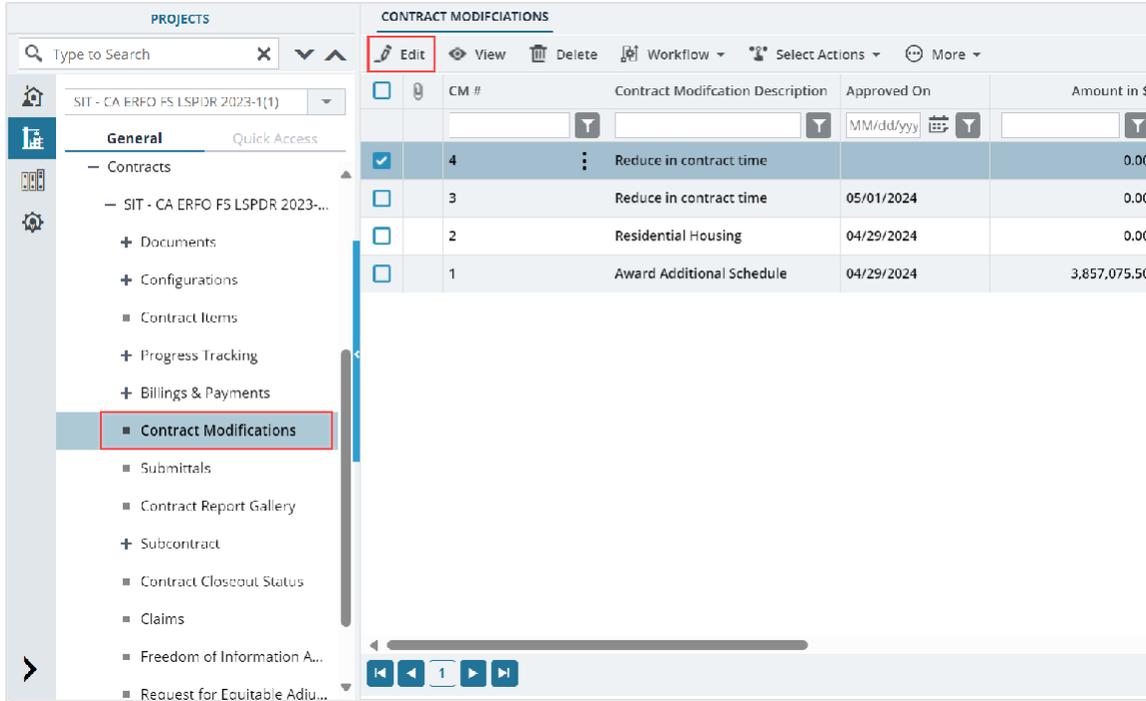


Figure 33: List Page of Contract Modifications Form

5. In the list page, select the appropriate record, and then click **Edit**. The **CONTRACT MODIFICATION DETAILS** page is displayed.

6. Click the **CONTRACT MODIFICATION ITEMS** tab.

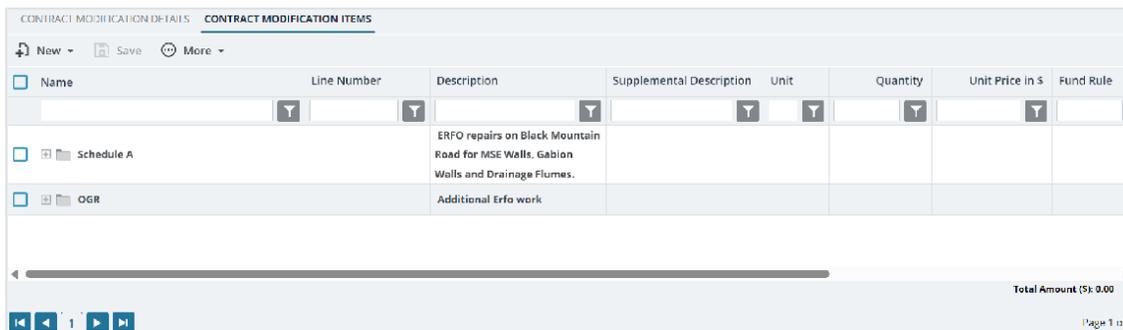


Figure 34: Contract Modification Items Tab

7. Select the appropriate container, and then click **New**, and then click **Add Multiple**.

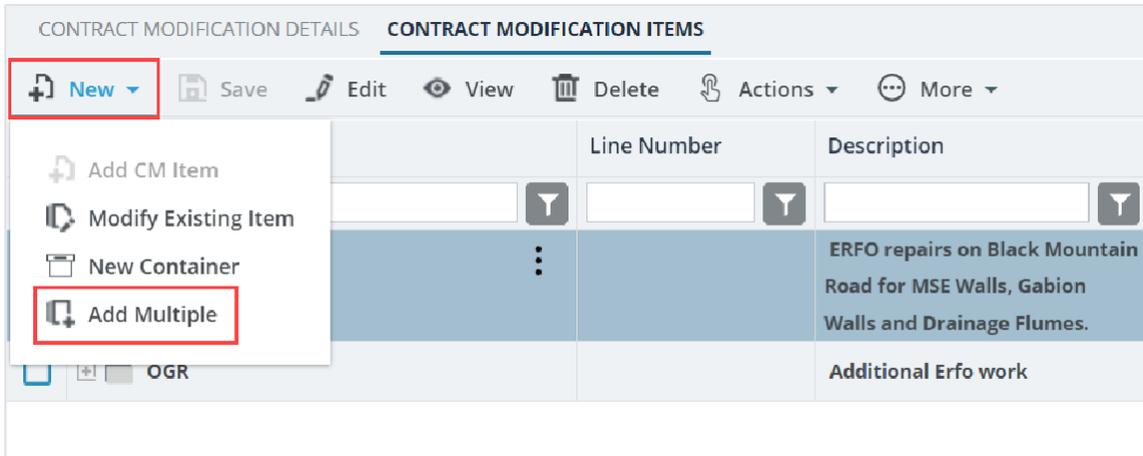


Figure 35: Add Multiple Option

The **ADD STANDARD ITEMS** page is displayed.



Figure 36: Add Standard Items

By default, the **Standard Items Table** selected for the project and **Ignore Containers of Standard Items** is selected and you cannot change it.

8. Click **Add**.

The Standard Items dialog box is displayed.

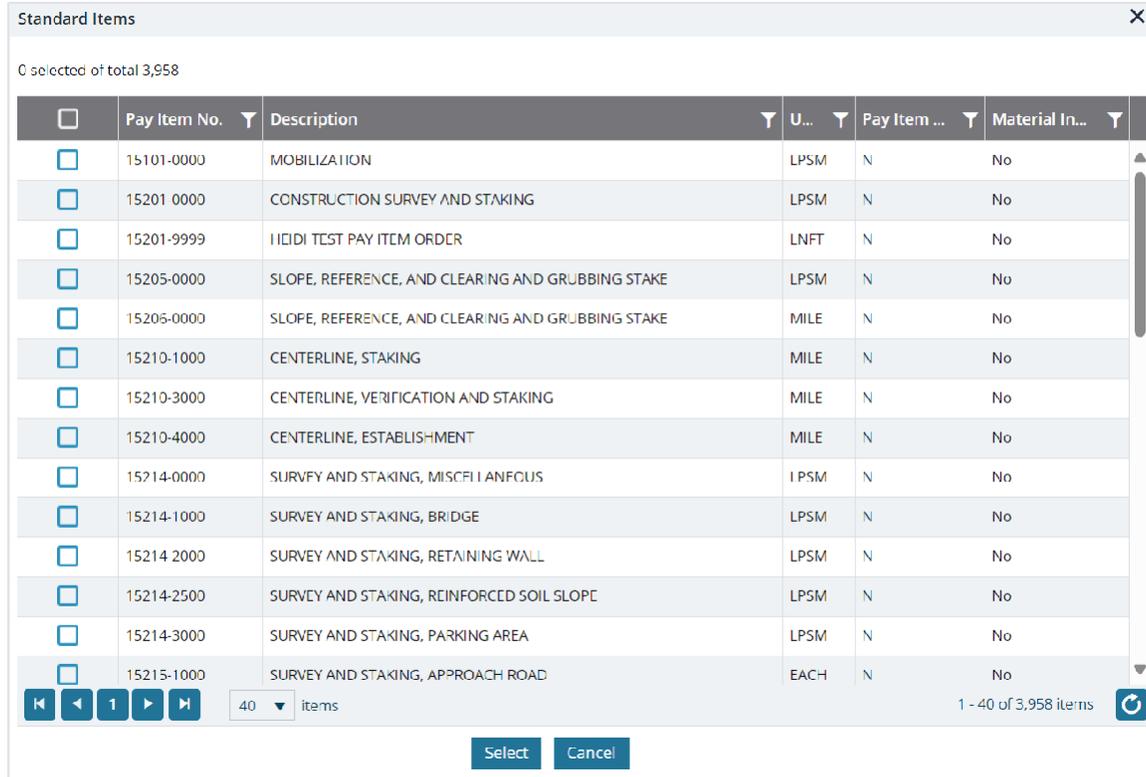


Figure 37: Standard Items Dialog Box

9. Select the required items, and then click **Select**.

10. Optionally, to remove an item, select the appropriate item, and then click **Remove**.

11. Click **Save**.

The items are added to the container selected.

12. To edit the details of an item, select the appropriate item, and then click **Edit**.

Except **Pay Item No.**, **Description**, **Pay Item Type**, **Unit** and **Material Incentive**, you can edit all other details of the item. For more information on editing the item details, refer to [Section 3.2.2. Adding Items to a Contract Modification](#) from Step 8 to 11.

3.2.4. Adding Sub Items

Overview

You can divide an item into sub items to distribute the amount from different fund sources. If sub items are defined for an item, the quantity of the item is calculated as the sum of the quantities of the sub items.

Steps

1. Adjacent to the **Quantity** field, click **Sub Items**.

The screenshot shows a form with a label 'Quantity *' followed by a text input field containing '1.000'. To the right of the input field is a button labeled 'Sub Items' with a blue underline and a red rectangular border around it.

Figure 38: Sub Items

The **SUB ITEMS** page is displayed.

The screenshot shows the 'SUB ITEMS' page. At the top, there are navigation buttons: '+ New', 'Delete', 'Save', and 'Back'. Below these are two form fields: 'Pay Item No.' with the value '15201-0000' and 'Item Description' with the value 'CONSTRUCTION SURVEY AND STAKING'. Below the form fields is a table with the following columns: Description, Quantity, Unit Price in \$, Unit, Notes, Fund Rule, and Amount. The table currently has one empty row.

Figure 39: Sub Items Page

The **SUB ITEMS** page displays the following information:

Field Name	Description
Pay Item No	The pay item number of the item.
Item Description	The description of the item.

2. Click **New**.

A row is added to the table. The table displays the following information:

Field Name	Description
Unit Price in \$	The unit price of the item.
Unit	The unit of measure selected for the item.
Funding Rule	The funding rule selected for the item.

Field Name	Description
	On saving the sub item, the Description of the item is updated based on the funding rule selected. Note: You can modify the value as necessary.

3. Provide the appropriate information in the columns, as described in the following table.

Column Name	Description
Quantity	Double-click and enter the quantity for the sub item.
Notes	Double-click and enter any notes for the sub item.
Fund Rule	Double-click and select the appropriate funding rule for the sub item. Options available are approved funding rules defined for the project. For more information on funding rules, refer to the Funding Rules section in the M03 Fund Management PG .
Probable Qty	Enter the probable quantity for the sub item. It defines the estimated quantity (or amount) that may be needed for the completion of the contract.

4. Click **Save**.

Upon saving the sub item details, the **Amount in \$** and **Probable Amount** columns display the amount of the sub item based on the **Quantity** and **Probable Qty** specified for the sub item and the **Unit Price in \$** value specified for the item.

On saving, the **Description** of the item is updated based on the **Funding Rule** associated with the item.

5. Optionally, to delete an item, perform the following steps:

- a. In the table, select the appropriate item.
- b. Click **Delete**, and then click **OK**.

6. Click **Back** to return to the item page.

Note: Once sub items are added to an item, you can modify the quantity of the item by editing the quantities of the sub items only.

3.2.5. Importing Schedule from Acquisitions

Prerequisites

- The **CM Type** is not a **Balance Contract Modifications**.
- In the awarded **Bid Opening And Review** record, a schedules are added in the **Available for Later Award** field.
- The role of the logged-in user must be one of the following:
 - Administrator
 - Construction Component Lead
 - Construction Admin Staff

- Construction Engineer
- Construction Operations Engineer
- Assistant Project Engineer
- Project Engineer
- Regional Engineer
- Assistant Project Engineer A&E
- Project Engineer A&E

For more information on role-specific permissions, refer to [Contract Modifications Matrix](#).

Overview

In the **Bid Opening And Review** record, you can select a few schedules for awarding and add the remaining schedules for awarding later.

The **Contract Modification** form enables you to associate those schedules that were saved for awarding later with the contract.

Steps

1. In the module menu, click **Projects**.
The **PROJECTS** list page is displayed.

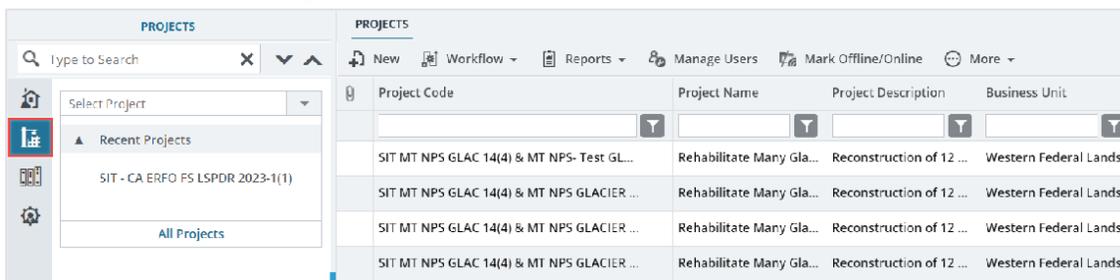


Figure 40: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

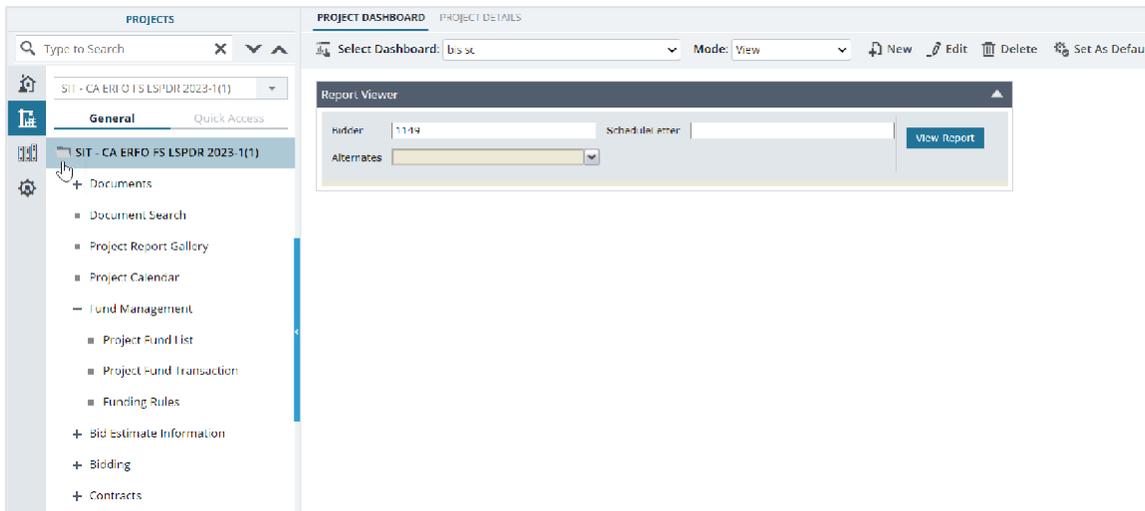


Figure 41: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

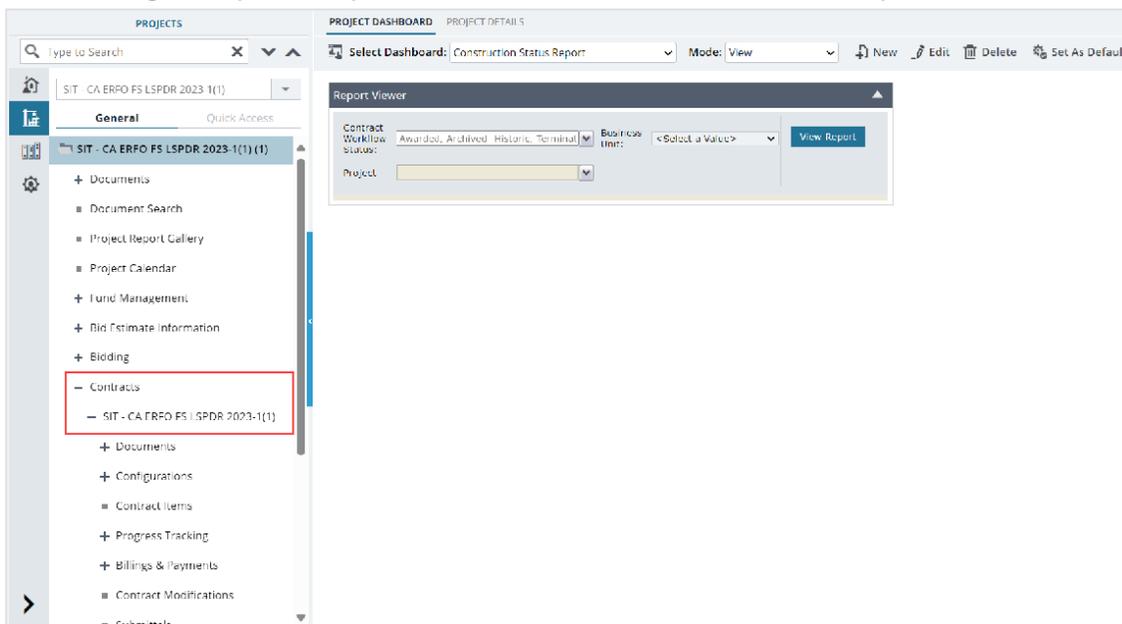


Figure 42: Navigation to Contracts

4. Click **Contract Modifications**.

The **CONTRACT MODIFICATIONS** list page is displayed.

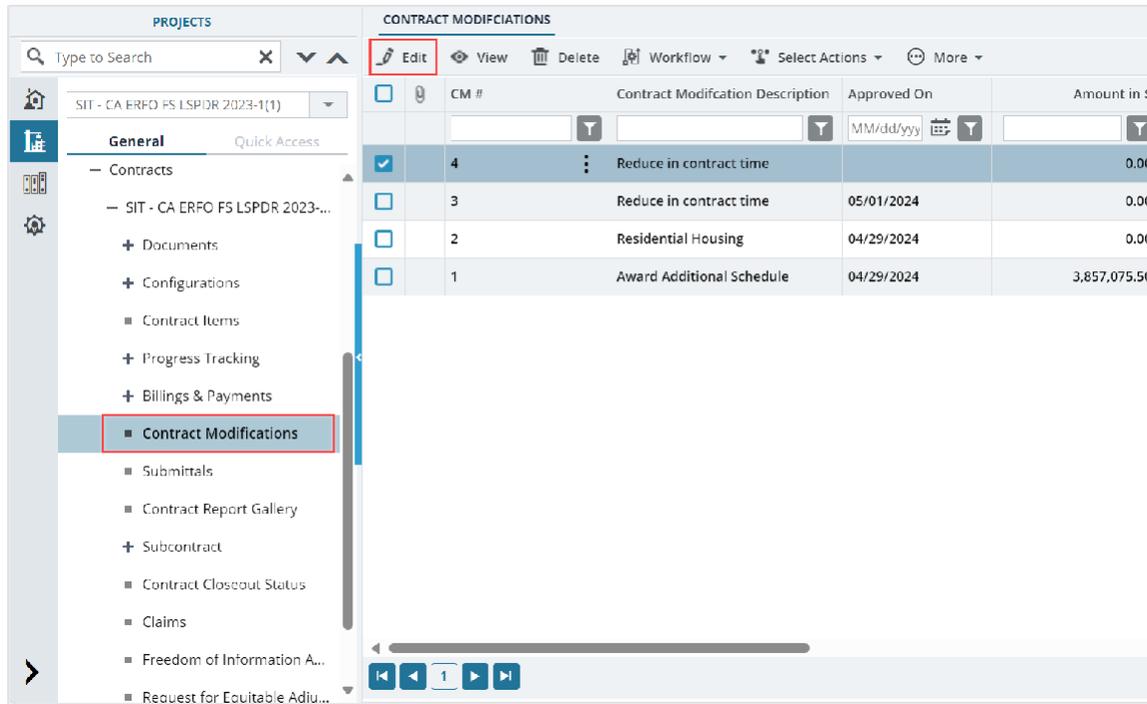


Figure 43: List Page of Contract Modifications Form

5. In the list page, select the appropriate record, and then click **Edit**.

The **CONTRACT MODIFICATION DETAILS** page is displayed.

6. Click the **CONTRACT MODIFICATION ITEMS** tab.

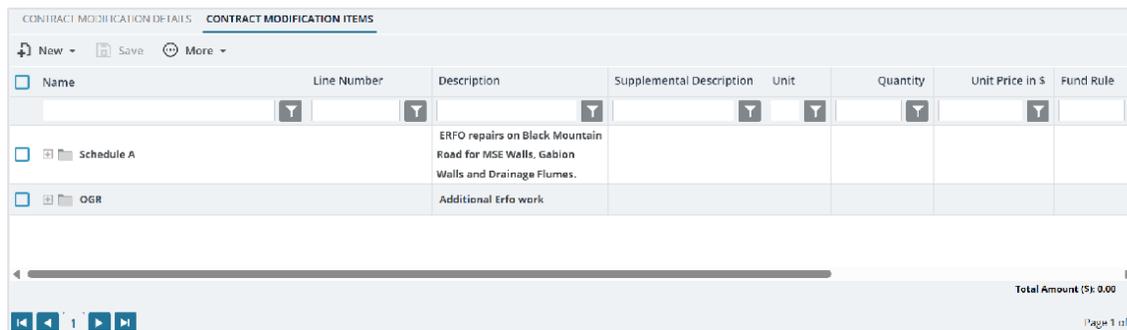


Figure 44: Contract Modification Items Tab

7. Click **New**, and then click **Import Schedule from Acquisitions**.

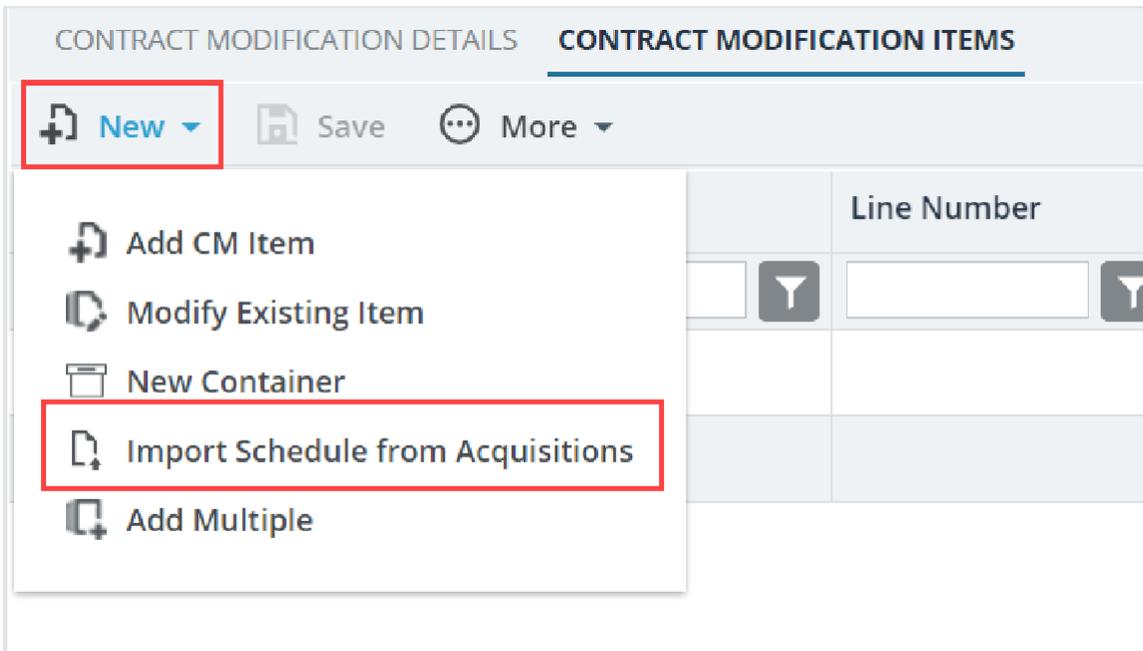


Figure 45: Import Schedule from Acquisitions Option

The **Select Schedule Letter** dialog box is displayed.

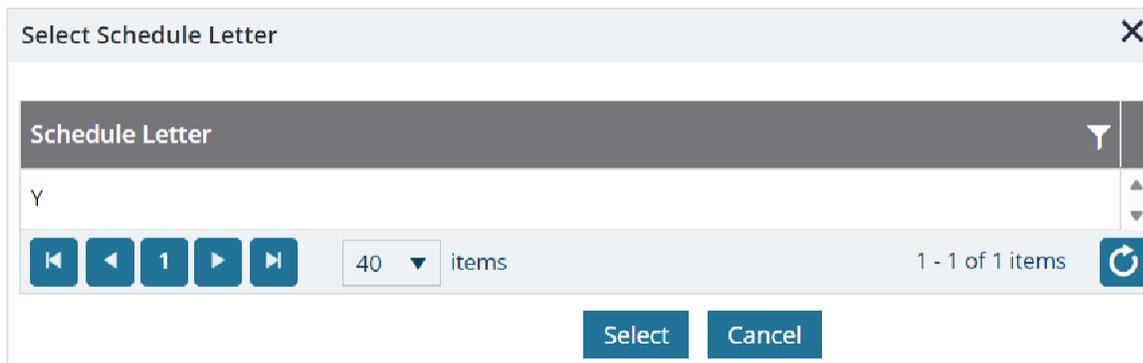


Figure 46: Select Schedule Letter Dialog Box

Available options are schedules that are added in the **Available for Later Award** field in the awarded **Bid Opening And Review** record and not associated with any other contract modification.

8. Click the appropriate schedule, and then click **Select**.
The selected schedule is added to the items page.

9. To edit the details of an item, select the appropriate item, and then click **Edit**.

<input type="checkbox"/>	Name	Line Number	Description	Supplemental Description	Unit
<input type="checkbox"/>	Base A		Base A		
<input type="checkbox"/>	Option X		Option X		
<input type="checkbox"/>	Option Y		Option Y		
<input checked="" type="checkbox"/>	15101-0000	Y0015	MOBILIZATION		LPSM
<input type="checkbox"/>	15201-0000	Y0023	CONSTRUCTION SURVEY AND STAKING	15201-0000 Supplemental Description	LPSM
<input type="checkbox"/>	15214-1000	Y0031	SURVEY AND STAKING, BRIDGE	15214-1000 Supplemental Description	LPSM

Figure 47: Edit Item

You can edit only the following details of the item:

- Supplemental Description
- Funding Rule
- Quantity
- Unit Price in \$
- Complete
- Notes
- Probable Quantity
- **ISSUES GRID** section

For more information on editing the item details, refer to [Section 3.2.2. Adding Items to a Contract Modification](#) from **Step 8 to 11**.

3.2.6. Modifying Existing Item Quantity

Prerequisites

The role of the logged-in user must be one of the following:

- Administrator
- Construction Component Lead
- Construction Admin Staff
- Construction Engineer
- Construction Operations Engineer
- Assistant Project Engineer
- Project Engineer
- Regional Engineer

- Assistant Project Engineer A&E
- Project Engineer A&E

For more information on role-specific permissions, refer to [Contract Modifications Permission Matrix](#).

Overview

You can modify the quantity and probable quantity of an existing contract item to either increase the quantity or decrease it. You can define the modification (increase or decrease) in quantity by entering the value of change.

To remove an item completely, the **Change in Quantity** should be decreased by the same value as the remaining quantity of the item. By doing so, the quantity of the contract item becomes zero once the contract modification is approved. Also, if there is a change in unit price, you can update the remaining quantity of the item as zero and create a new item with the new unit price.

In addition to the quantity, you can also modify the item details, such as **Supplemental Description, Funding Rule, Unit Price in \$, Complete, Material Incentive, and Notes**.

Steps

1. In the module menu, click **Projects**.
The **PROJECTS** list page is displayed.

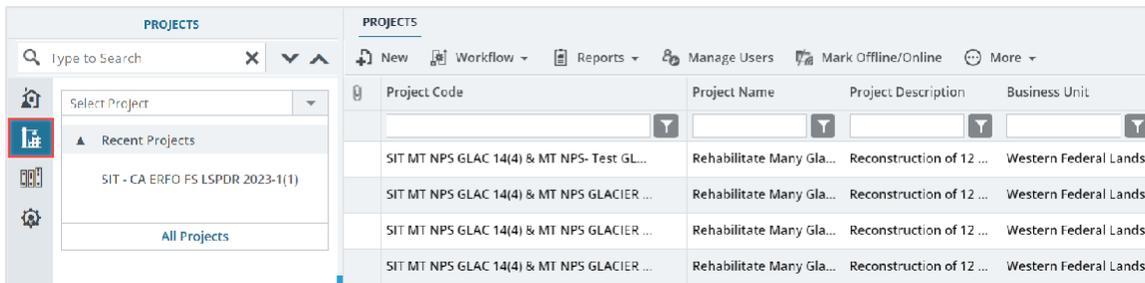


Figure 48: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

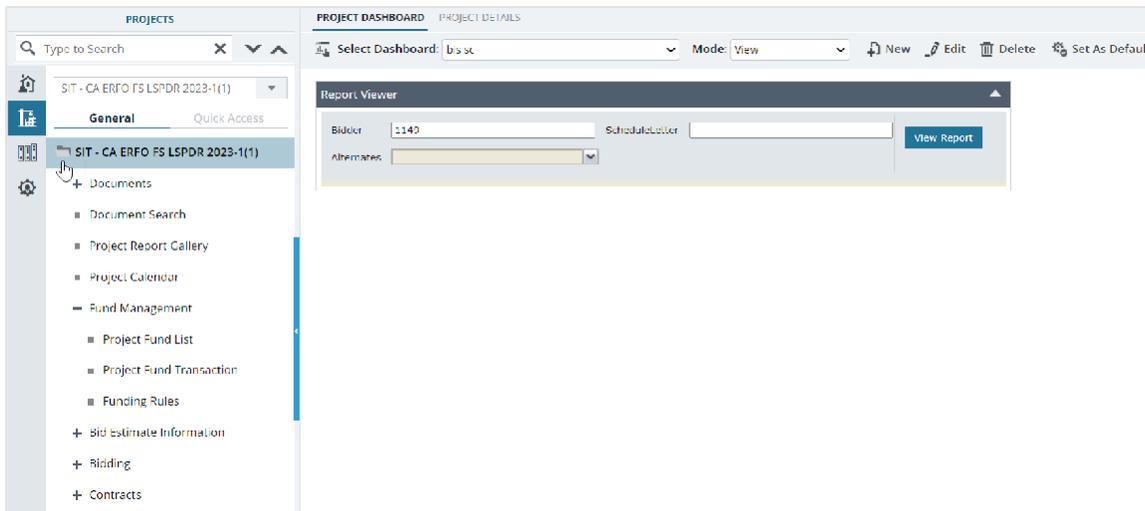


Figure 49: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

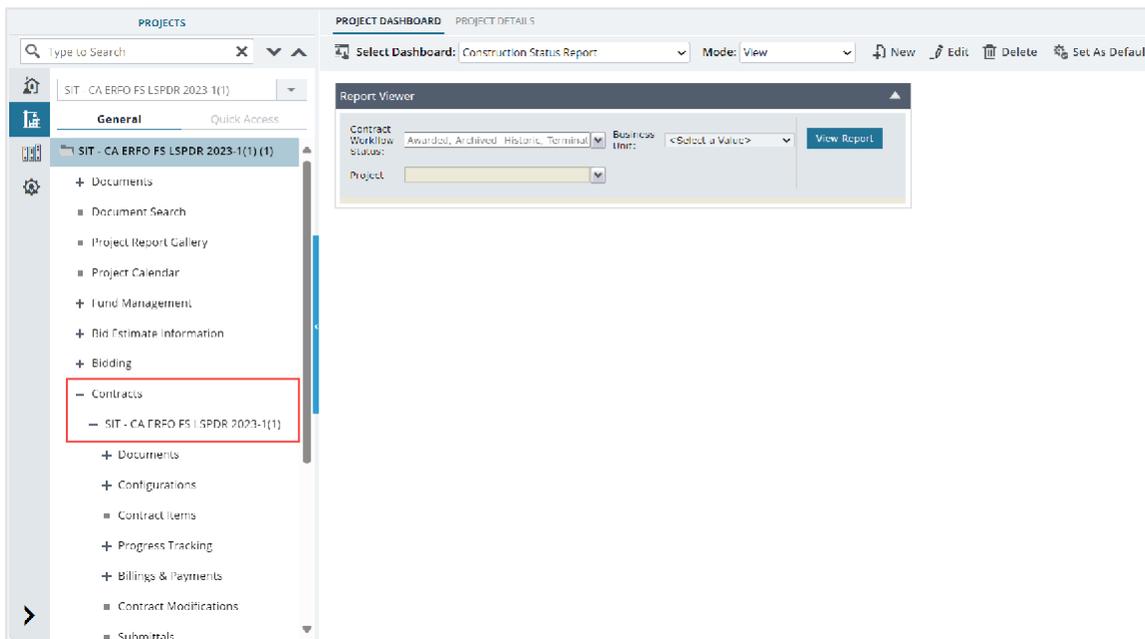


Figure 50: Navigation to Contracts

4. Click **Contract Modifications**.

The **CONTRACT MODIFICATIONS** list page is displayed.

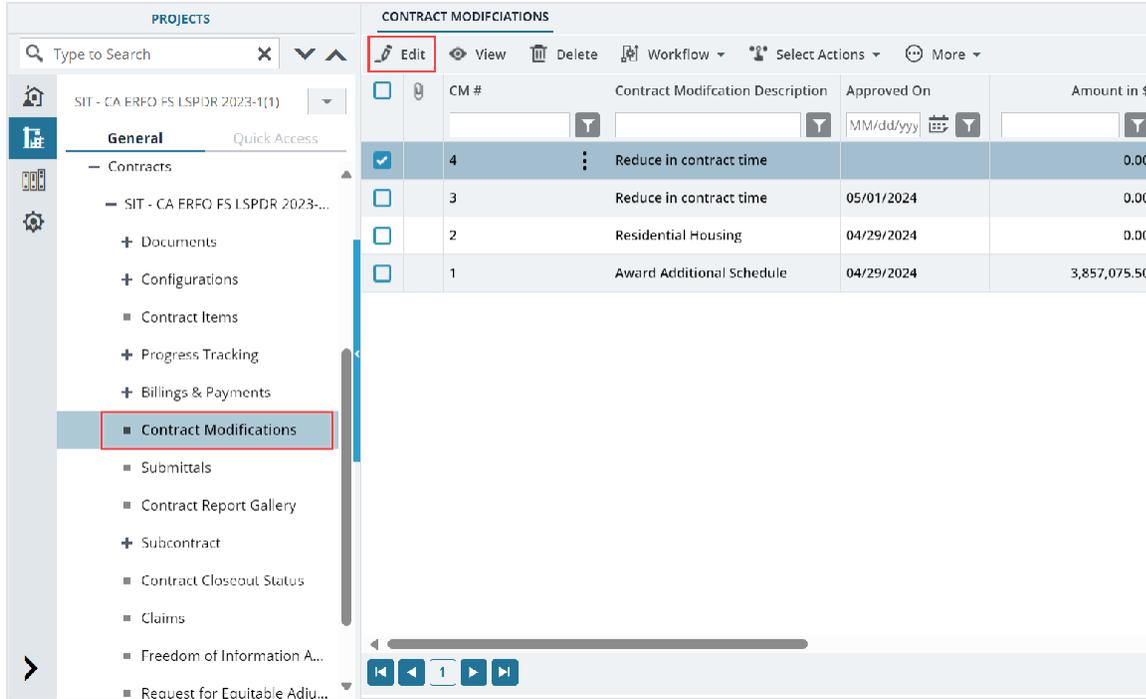


Figure 51: List Page of Contract Modifications Form

5. In the list page, select the appropriate record, and then click **Edit**.
6. Click the **CONTRACT MODIFICATION ITEMS** or **BALANCE CONTRACT MOD ITEMS** tab, as applicable.
7. Perform either of the following, as applicable:
 - For a Contract Modification, click **New**, and then click **Modify Existing Item**.

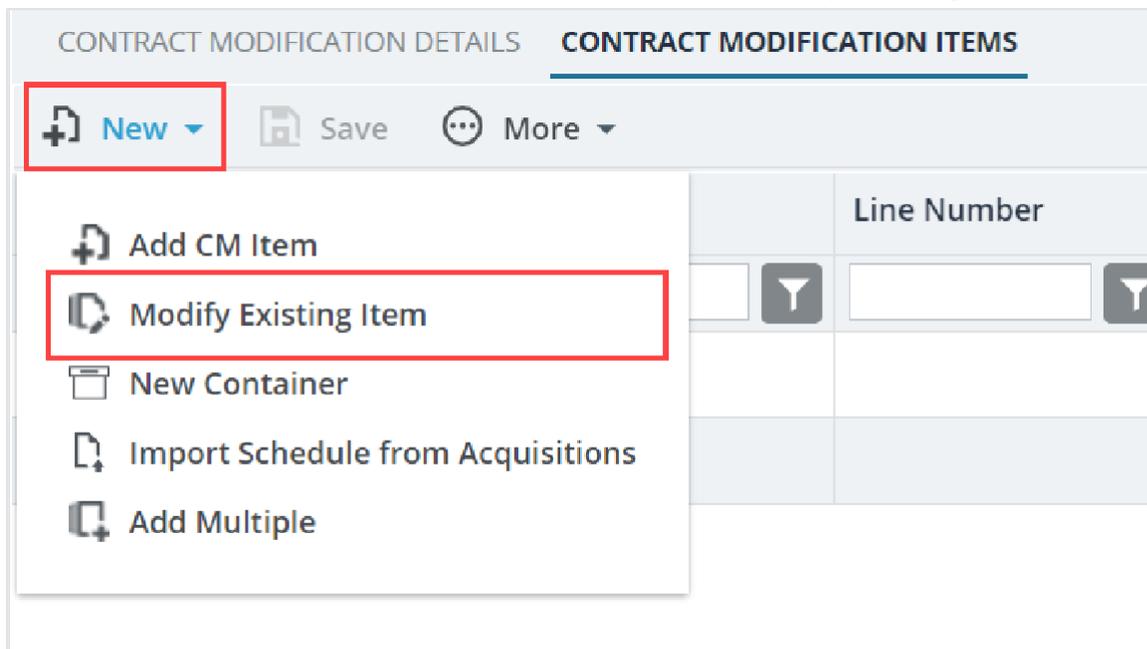


Figure 52: Modify Existing Item Option

- For a Balance Contract Modification, select the appropriate item, and then click **Edit**.

BALANCE CONTRACT MODIFICATION DETAILS		BALANCE CONTRACT MODIFICATION ITEMS		
New Save Edit View Delete Actions More				
<input type="checkbox"/>	Name	Line Number	Description	Supplemental Description
<input type="checkbox"/>	Schedule A		ERFO repairs on Black Mountain Road for MSE Walls, Gabion Walls and Drainage Flumes.	
<input checked="" type="checkbox"/>	+ 15101-0000	A0020	MOBILIZATION	
<input type="checkbox"/>	+ 15201-0000	A0040	CONSTRUCTION SURVEY AND STAKING	

Figure 53: Edit Item

The **MODIFY EXISTING ITEM** page is displayed.

MODIFY EXISTING ITEM

Save & Exit Save & Continue Cancel

Container : Root/Base A

Pay Item No. * : 15214-1000 Clear

Line Number * : A0505

Description * : SURVEY AND STAKING, BRIDGE

Supplemental Description :

Unit * : LPSM

Funding Rule * : 100% CON01

Change in Quantity : 0.000

Unit Price in \$: 1.00

Amount in \$: 0.00

Complete :

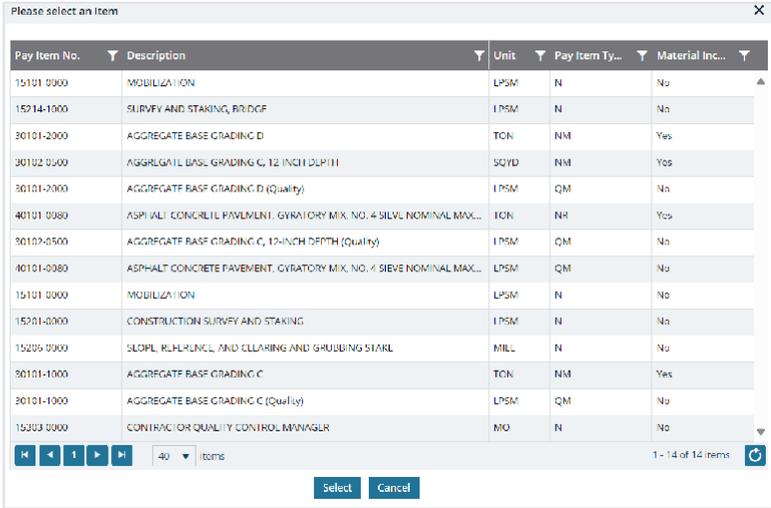
Pay Item Type * : N

Material Incentive : Yes No

Notes :

Figure 54: Modify Existing Item Page

8. Provide the required information in the fields, as described in the following table.

Field Name	Description
Pay Item No.	<p>Note: This field is applicable only for Contract Modification. To select the item to modify its quantity, perform the following steps:</p> <p>a. Click <input type="button" value="..."/>.</p> <p>The list of all items is displayed.</p>  <p style="text-align: center;"><i>Figure 55: Please select an item dialog box</i></p> <p>b. Click the required item, and then click Select. The Container, Line Number, Description, Supplemental Description, Unit, Funding Rule, Unit Price in \$, Pay Item Type, and Material Incentive of the selected item are displayed.</p>
Supplemental Description	<p>By default, the supplemental description of the item from the Contract Items page is displayed. Optionally, you can enter the appropriate description for the item.</p>
Funding Rule	<p>By default, the funding rule associated with the item in the Contract Items is displayed. Optionally, from the drop-down list, select the appropriate funding rule. Available options are approved funding rules defined for the project. For more information on funding rules, refer to the Funding Rules section in the M03 Fund Management PG. If sub-items are added for the item, then this field is not available. For more information, refer to Adding Sub Items in M06 Construction Part A – PG.</p>
Change in Quantity	<p>Note: In case of Balance Contract Modification, the Change in Quantity field displays the quantify as defined in the approved Item Posting for the item. To increase the quantity of the selected item, enter the quantity that is additionally required.</p>

Field Name	Description
	<p>Note: If the quantity is increased through Balance Contract Modification and the record is saved the Complete check box gets unchecked.</p> <p>To decrease the quantity of the selected item, press the Minus sign (-), and then enter the quantity to be decreased from the current locked quantity of the item in the contract. The value must be within the range of the remaining quantities of the items being posted.</p> <p>To remove the item from the contract item list, press the prefix the value with a sign (-), and then enter the item quantity remaining in the contract after approved item postings.</p> <p>If sub items are associated with the item, you can modify the quantity of the item by editing the quantities of the sub items. For more information, refer to Modifying Sub Items in M06 Construction Part A - PG.</p>
Complete	<p>Select the check box to mark the item as complete.</p> <p>Note: On approving a Balance Contract Modification, all the items in the Contract Items page are automatically marked as Complete.</p>
Notes	<p>Enter any notes for the change in quantity of the item.</p>
Probable Quantity	<p>By default, the probable quantity as defined in the contract items is displayed.</p> <p>Optionally, enter the appropriate probable quantity. Once the record is approved, the same quantity is updated in the Contract Items form.</p>

9. Optionally, in the **ATTACHMENTS** section, upload or link related files. For information on attachments, refer to [Section 4.1. Attachments](#).
10. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.

3.2.7. Modifying Sub Items

Overview

You can modify the details of a sub-item, such as quantity, probable quantity, description, fund rule, and notes.

Steps

1. Perform either of the following as applicable:
 - If you are on the **CONTRACT MODIFICATION ITEMS** page, select the appropriate item, click **Actions**, and the click **Sub Items**.

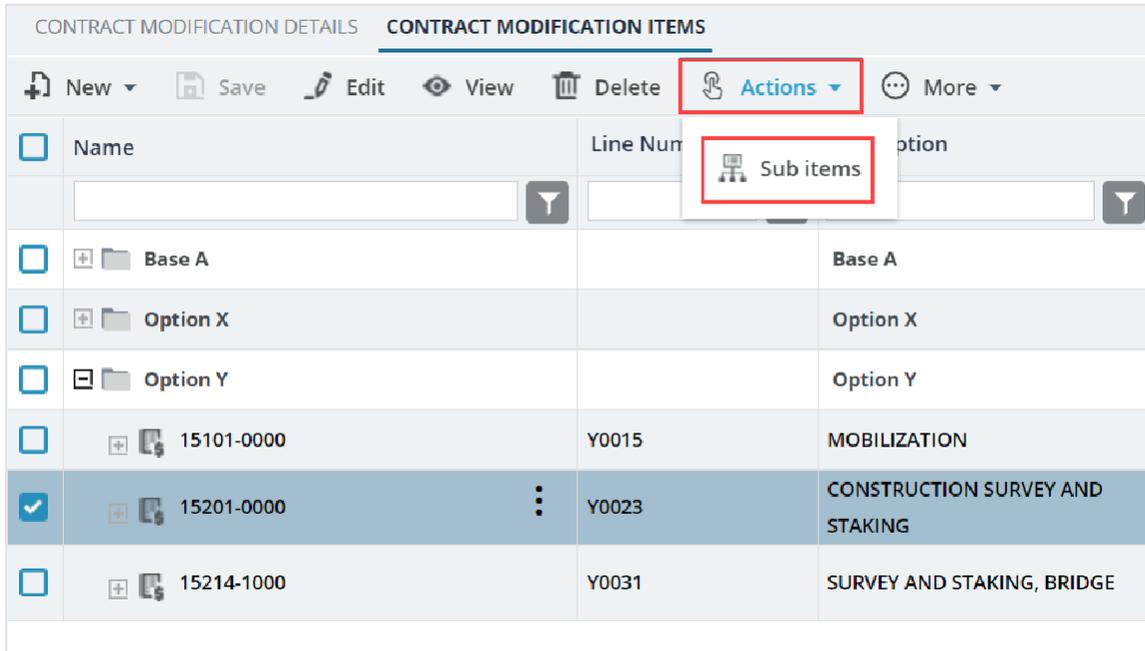


Figure 56: Sub Items Option

- If you are on the item's details page, corresponding to the **Quantity** field, click **Sub Items**.

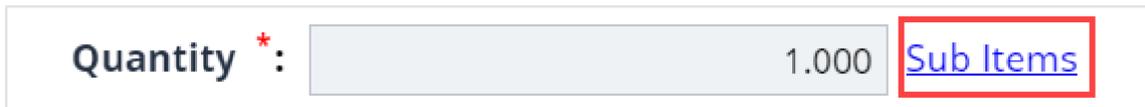


Figure 57: Sub Items Options

The **SUB ITEMS** page is displayed.

The screenshot shows the 'SUB ITEMS' page interface. At the top, there are navigation buttons: 'New', 'Delete', 'Save', and 'Back'. Below these are two input fields: 'Pay Item No.' with the value '15201-0000' and 'Item Description' with the value 'CONSTRUCTION SURVEY AND STAKING'. At the bottom, there is a table with the following columns: Description, Quantity, Unit Price in \$, Unit, Notes, Fund Rule, and Amount. The table currently contains no data rows.

Figure 58: Sub Items Page

The **SUB ITEMS** page displays the following information:

Field Name	Description
Pay Item No	The pay item number of the item.
Item Description	The description of the item.

The table displays the following information:

Field Name	Description
Unit Price in \$	The unit price of the item.
Unit	The unit of measure selected for the item.
Funding Rule	The funding rule selected for the item. On saving the sub item, the Description of the item is updated based on the funding rule selected. Note: You can modify the value as necessary.

2. Provide the appropriate information in the columns, as described in the following table.

Column Name	Description
Quantity	To increase the quantity of the sub-item, enter the quantity that is additionally required. To decrease the quantity of the sub-item, press the Minus sign (-), and then enter the quantity to be decreased from the current locked quantity of the item in the contract. The value must be within the range of the remaining quantities of the items being posted.
Notes	Double-click and update the notes.
Fund Rule	Double-click and select the appropriate funding rule for the sub- item. Options available are approved funding rules defined for the project.

Column Name	Description
	For more information on funding rules, refer to the Funding Rules section in the M03 Fund Management PG .
Probable Qty	To increase the probable quantity of the sub-item, enter the quantity that is additionally required. To decrease the probable quantity of the sub-item, press the Minus sign (-), and then enter the quantity to be decreased from the original locked quantity of the item in the contract .

3. Click **Save**.

Upon saving the sub-item details, the **Amount in \$** and **Probable Amount** columns display the amount of the sub-item based on the **Quantity** and **Probable Qty** specified for the sub-item and the **Unit Price in \$** value specified for the item.

On saving, the **Description** of the item is updated based on the **Funding Rule** associated with the item.

4. Click **Back** to return to the item page.

Note: Once sub-items are added to an item, you can modify the quantity of the item by editing the quantities of the sub-items only.

3.3. Approving a Contract Modification Record

Prerequisites

Based on the workflow status of the record, the user must be assigned any of the following roles:

- Administrator
- Construction Admin Staff
- Construction Component Lead
- Construction Engineer
- Construction Operations Engineer
- Assistant Project Engineer
- Assistant Project Engineer A&E
- Project Engineer
- Project Engineer A&E
- Regional Engineer

Overview

This section explains the positive and forward workflow actions to reach the **Approved** workflow status. To move a **Contract Modifications** or **Balance Contract Modifications** record through the defined workflow, perform the following steps:

Steps

1. In the module menu, click **Projects**.
The **PROJECTS** list page is displayed.

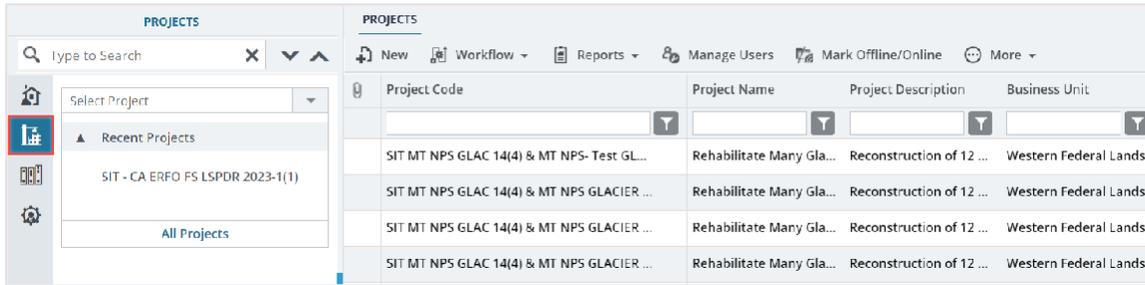


Figure 59: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

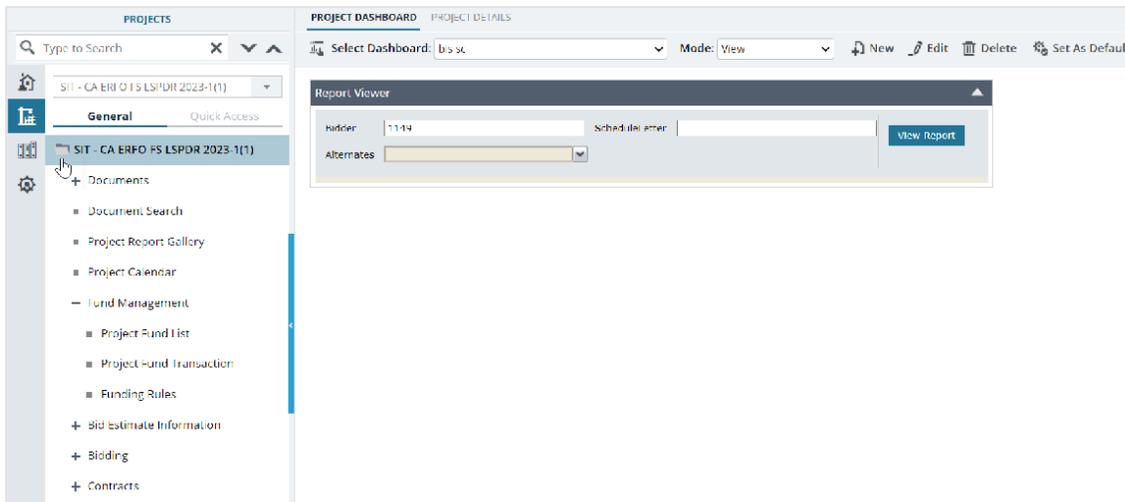


Figure 60: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

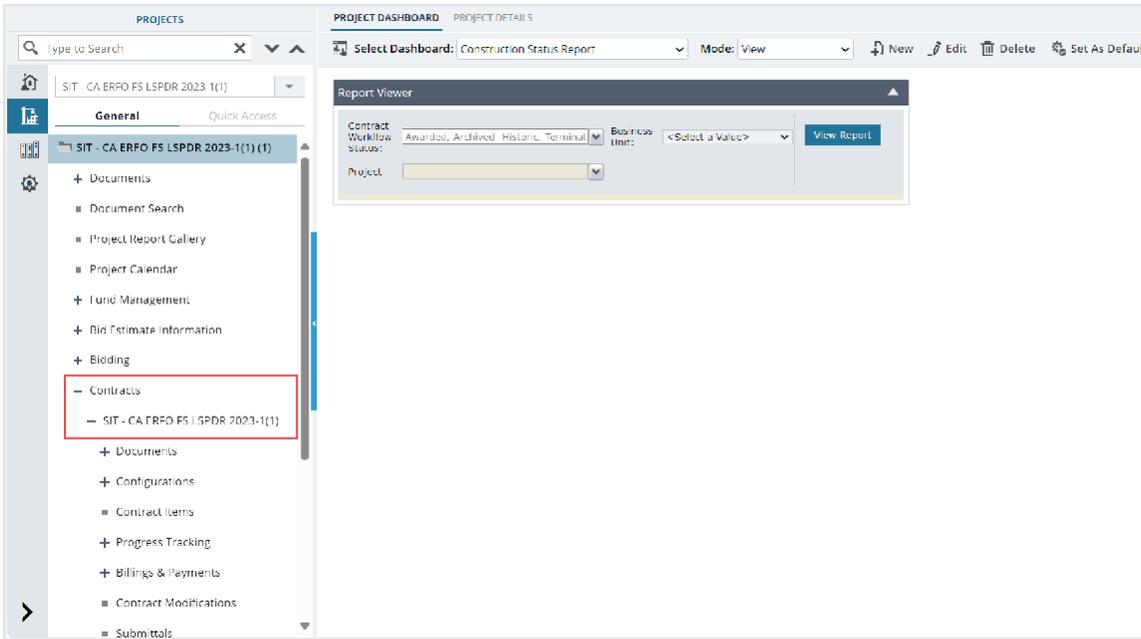


Figure 61: Navigation to Contracts

4. Click **Contract Modifications**.

The **CONTRACT MODIFICATIONS** list page is displayed.

5. To approve the record, perform the following steps:

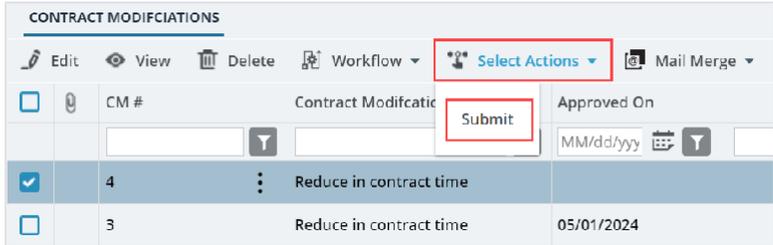
Phase	Role	Workflow Steps
1	<ul style="list-style-type: none"> Administrator Construction Admin Staff Construction Component Lead Construction Engineer Construction Operations Engineer Assistant Project Engineer Assistant Project Engineer A&E 	<p>a. In the list page, select the appropriate record that is in the Draft workflow status, and then click Select Actions.</p>  <p>b. Click Submit, and in the Masterworks dialog box, click OK. The workflow status of the record is set to Submitted.</p>
2	<ul style="list-style-type: none"> Administrator Construction Admin Staff Construction Component Lead Construction Operations Engineer 	<p>Note: To move the Balance Change Modification record to the Approved workflow status, ensure the following conditions are met:</p> <ul style="list-style-type: none"> The Date SF30 Signed by CO field is updated. However, this condition is not mandatory if the CM type is Administrative Change.

Figure 62: Workflow Action – Submit

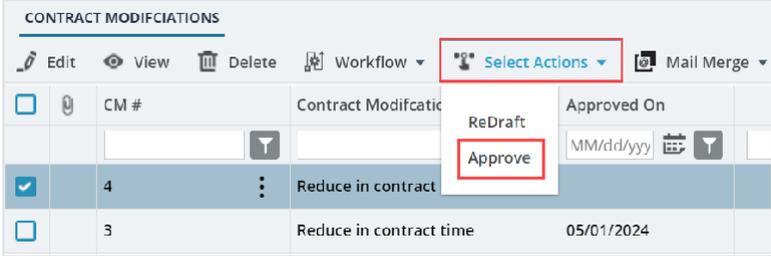
Phase	Role	Workflow Steps
		<ul style="list-style-type: none"> • The Miles and Lane Miles fields are updated for all the schedules. a. In the list page, select the appropriate record that is in the Submitted workflow status, and then click Select Actions. <div data-bbox="740 359 1511 615" style="border: 1px solid #ccc; padding: 5px; margin: 10px 0;">  </div> b. Click Approve, and in the Masterworks dialog box, click OK. The workflow status of the record is set to Approved.

Figure 63: Workflow Action – Approve

3.4. Contract Modifications Workflow Status

The following table provides the workflow status (current and subsequent status) of the **Contract Modification** and **Balance Contract Modification** records.

For information on setting a workflow status to the next status, refer to [Section 4.3. Workflow Status Transitions](#).

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
1	Draft	<ul style="list-style-type: none"> • Administrator • Assistant Project Engineer • Assistant Project Engineer A&E • Construction Admin Staff • Construction Component Lead • Construction Engineer 	Submit	Submitted	After the record is moved to the Submitted workflow status, only action stakeholders corresponding to this workflow status can edit the record. Note: The following fields must be filled, else, Masterworks throws an error: <ul style="list-style-type: none"> • Quantity • Unit Price • Funding Rule

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
		<ul style="list-style-type: none"> • Construction Operations Engineer • Project Engineer • Project Engineer A&E • Regional Engineer 			<ul style="list-style-type: none"> • Line Number
2	Submitted	<ul style="list-style-type: none"> • Administrator • Construction Admin Staff • Construction Component Lead • Construction Operations Engineer 	ReDraft Approve	Draft Approved	- To perform this workflow action, ensure the following conditions are met: <ul style="list-style-type: none"> • The Date SF30 Signed by CO field is updated. However, this condition is not mandatory if the CM type is Administrative Change. • The Miles and Lane Miles fields are updated for all the schedules. On approval of a Contract Modifications record, the following changes occur: <ul style="list-style-type: none"> • Associated contract modification items are added or modified in the Contract Items list and the value of the

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
					<p>contract amount is adjusted accordingly.</p> <ul style="list-style-type: none"> Approved Project Fund Transaction record are automatically created for the values updated in the Amount Change in this CM column in the FUNDING SUMMARY section. <p>On approval of a Balance Contract Modifications record, the following changes occur:</p> <ul style="list-style-type: none"> Associated contract modification items are modified in the Contract Items list and the value of the contract is adjusted accordingly. The Is Complete column in the Contract Items page is automatically selected for all items. Approved Project Fund

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
					<p>Transaction record are automatically created for the values updated in the Amount Change in this CM column in the FUNDING SUMMARY section.</p>

3.5. Generating Contract Modification Reports

Prerequisites

The role of the logged-in user must be one of the following roles:

- Administrator
- Construction Component Lead
- Construction Admin Staff
- Construction Engineer
- Highway Construction Manager/QAQC
- Construction Operations Engineer
- Inspector
- Assistant Project Engineer
- Project Engineer
- Regional Engineer
- Construction Inspection A&E Manager
- Inspector A&E
- Assistant Project Engineer A&E
- Project Engineer A&E

Overview

You can generate various Contract Modification reports that illustrate various information views. These reports enable various project and contract stakeholders to stay up-to-date on the status of the contract modification.

Steps

1. In the module menu, click **Projects**.
The **PROJECTS** list page is displayed.

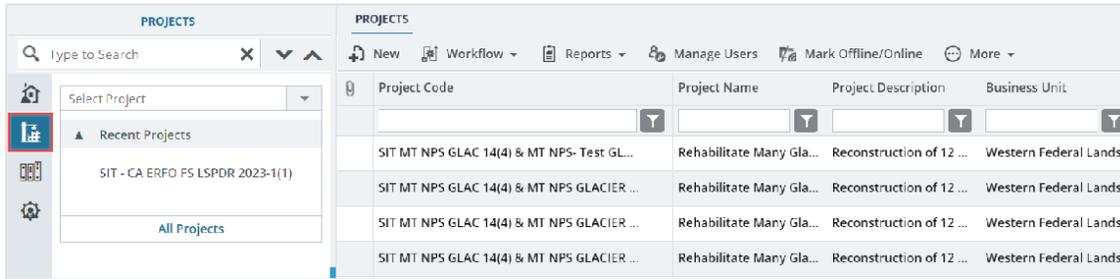


Figure 64: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

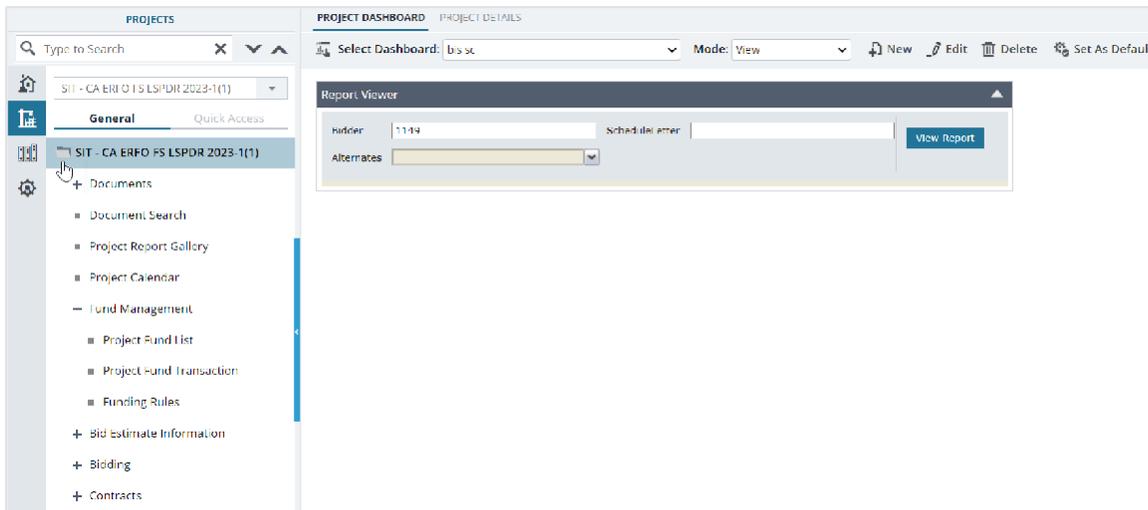


Figure 65: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

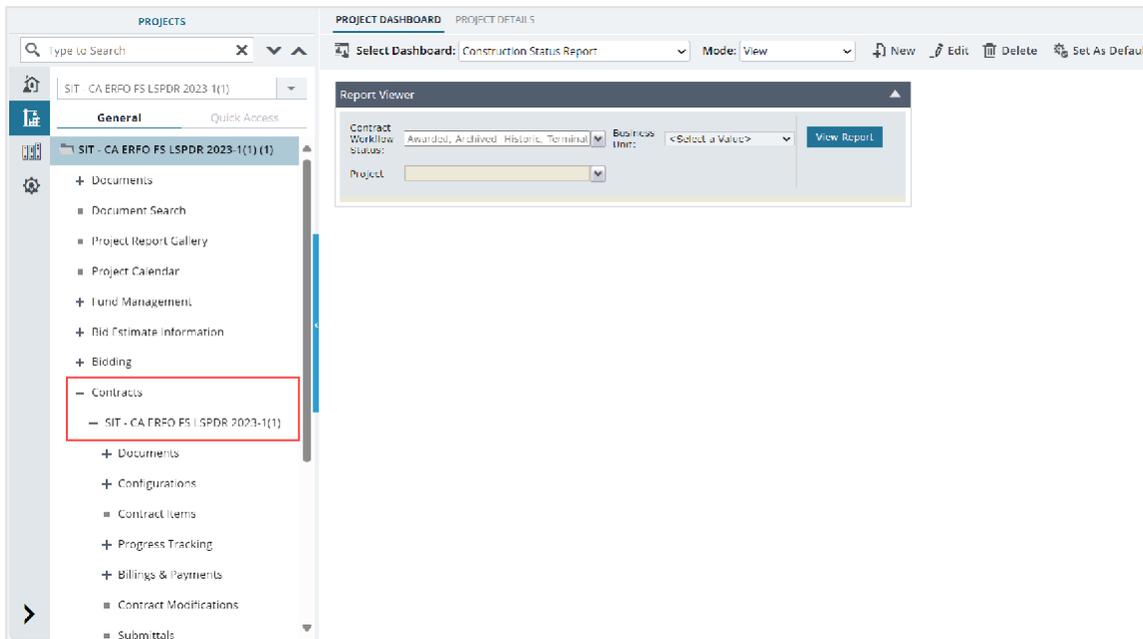


Figure 66: Navigation to Contracts

4. Click **Contract Modifications**.

The **CONTRACT MODIFICATIONS** list page is displayed.

5. In the toolbar, click **Reports**, and then click the appropriate report.

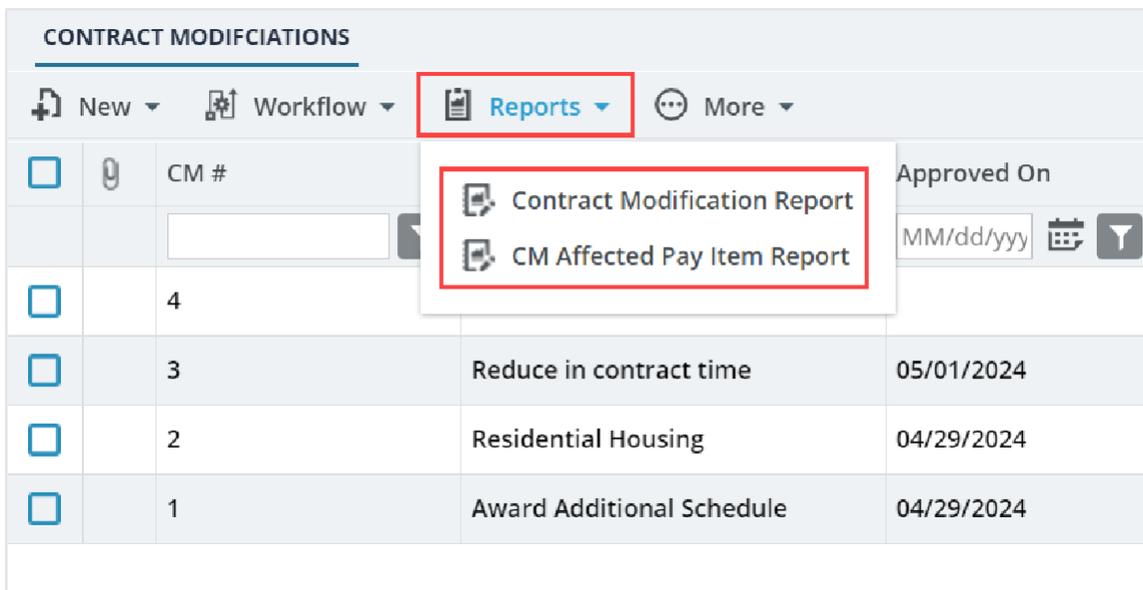


Figure 67: Contract Modifications Report

The report is generated and displayed.

You can generate the following reports:

- CM Affected Pay Item Report
- Contract Modification Report

4. Appendix

4.1. Attachments

You can upload or link files in the Documents folders to every record. You can also upload any number of attachments, regardless of size, to a record or while performing workflow actions for a record.

The following sections explain how to upload or link, access, and download attachments in a form or workflow:

[4.1.1. Attaching a File to a Form](#)

[4.1.2. Attaching a File to a Workflow](#)

[4.1.3. Accessing and Downloading Attached Files](#)

[4.1.4. Deleting Attached Files](#)

You can annotate and delete attachments.

4.1.1. Attaching a File to a Form

You can upload files to a form and link a file in the Documents folders of a form.

Note: The **Upload and Link New Document** option is the most preferred and used method to link files to a form by the FLH team.

The Project Fund List form is used for illustration purposes.

Uploading Files to a Form

To upload files, perform the following steps in the **Attachments** section:

1. Click **Upload Document**.

The screenshot shows a web form titled "PROJECT FUND LIST". At the top, there is a toolbar with buttons for "Save & Exit", "Save & Continue", "Cancel", "Workflow", and "Select Actions". Below the toolbar, the form contains several fields: "ACCOUNT NUMBER" (with a value of 1319043027201340.CN.V/00.04.1), "Account Priority" (set to CON03-CON04), "Authorized Amount (\$)", "Expended Amount (\$)", "Probable Expenditure (\$)", and "Remaining Amount (\$)", all with a value of 0.00. There is also a "Notes" field. Below these fields is a section titled "ATTACHMENTS" which contains a table with columns for "File View Status", "Document Na...", "Ur/L/Link", "Title", "Uploaded By", "Uploaded Date", and "File Size". The table currently shows "No Attachments available". At the bottom of the attachments section, there are two buttons: "Link Document" and "Upload Document", with the "Upload Document" button highlighted by a red box.

Figure 68: Using Upload Document Option

The **Open** dialog box is displayed.

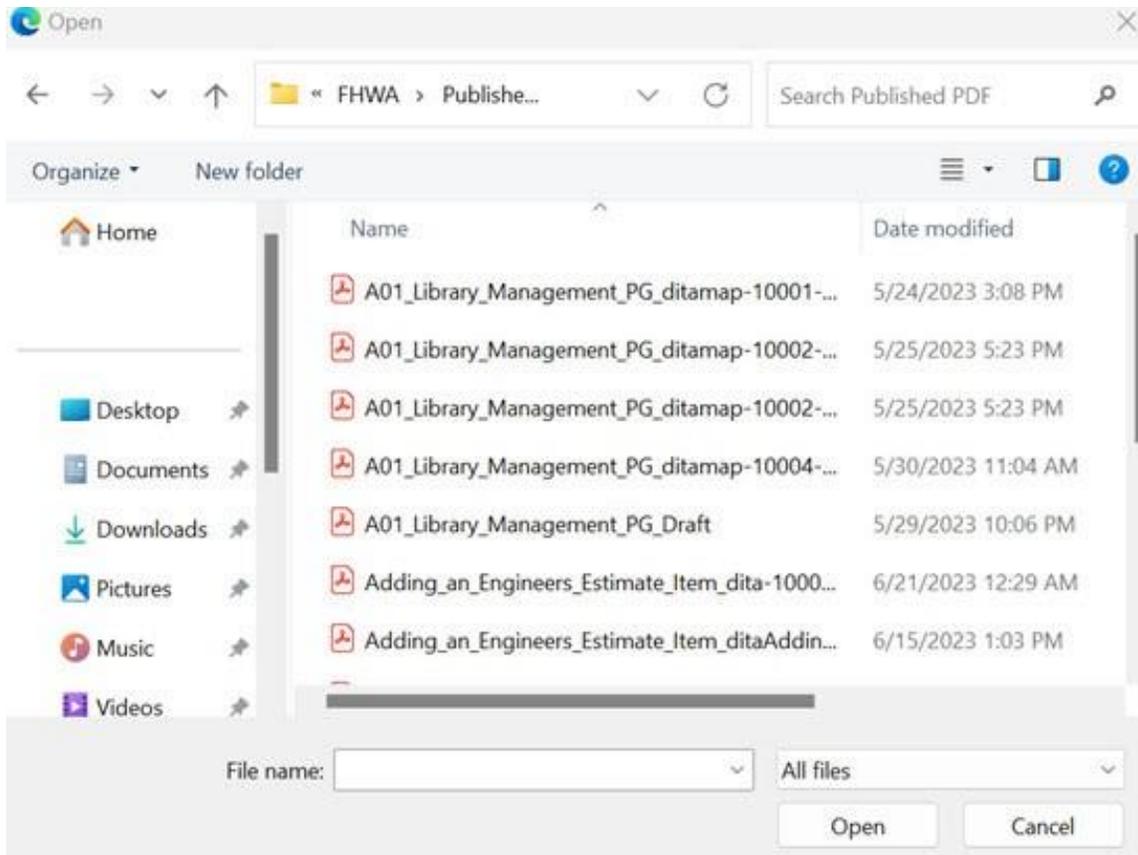


Figure 69: Open Dialog Box

2. To upload a single file, click the appropriate file. Optionally, to upload multiple files, press and hold **CTRL**, and then click the appropriate files.
3. Click **Open**.

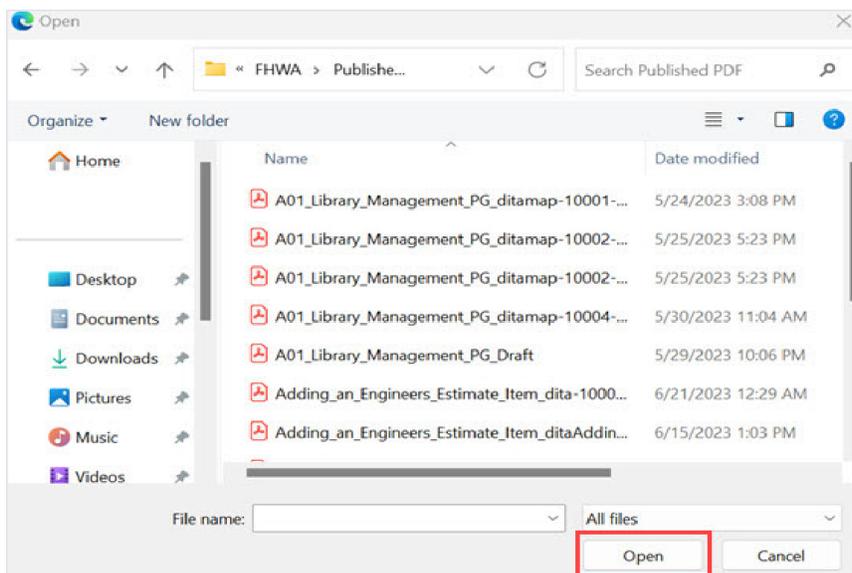


Figure 70: Open Option

The files are uploaded to the form and displayed in the **Attachments** section.

- The name of the file is updated in the **Title** column. Optionally, in the **Title** column, enter the titles for the files attached.

The screenshot shows a web form titled "PROJECT FUND LIST". The form includes fields for "Account Number", "Account Priority", "Authorized Amount (\$)", "Expended Amount (\$)", "Probable Expenditure (\$)", and "Remaining Amount (\$)", all with values of 0.00. Below these is a "Notes" field. A red box highlights the "ATTACHMENTS" section, which contains a table with the following data:

File View Status	Document Name	Url/Link	Title	Uploaded By	Uploaded Date	File Size
<input checked="" type="checkbox"/>	Fund Management in FHWA.docx		Document - FM	Mike Ross	07-27-2023 3:05 AM	13 KB

Below the table are two buttons: "Link Document" and "Upload Document".

Figure 71: Uploaded File

Linking a File to a Form

You can link a file to a form using any of the following options:

- Masterworks Document:** This option enables you to link files available in the document folders of a project or contract. The document folders are available based on the selected document folder structure in the **Project Details** page.

Note: This option helps users avoid uploading the same files multiple times in a project.

- Upload and Link New Document:** This option enables you to upload new files to the document folders of a project or contract and link them to the respective form. The document folders are available based on the selected document folder structure in the **Project Details** page.

Note: This option helps users upload new files into the document folder structure from the respective form without navigating to the document folder.

Note: The **Upload and Link New Document** option is the most preferred and used method to link files to a form by the FLH team.

- External Document:** This option enables you to link files from an external location.

Linking a File to a Form – Masterworks Document Option

To link a file available in the Documents folders, perform the following steps:

1. In the **Attachments** section, click **Link Document**.

The screenshot shows a web form titled "PROJECT FUND LIST". The form includes several input fields: "Account Number" (text), "Account Priority" (dropdown menu showing "CON03-CON04"), "Authorized Amount (\$)", "Expended Amount (\$)", "Probable Expenditure (\$)", and "Remaining Amount (\$)" (all text inputs with "0.00" entered). There is also a "Notes" text area. Below these fields is a section titled "ATTACHMENTS" which contains a table with columns: "File View Status", "Document Na...", "Url/Link", "Title", "Uploaded By", "Uploaded Date", and "File Size". The table is currently empty, displaying "No Attachments available". At the bottom of the attachments section, there are two buttons: "Link Document" (highlighted with a red box) and "Upload Document".

Figure 72: Using Link Document Option

The **Link Document** dialog box is displayed.

The screenshot shows a "Link Document" dialog box. It has three radio button options: "MasterWorks Document" (selected), "Upload and Link New Document", and "External Document". Below the options is a "Folder" dropdown menu showing "Rn-FHWA-2607, RESTORATION OF NORTHERN RAILS". There are "Search" and "Clear Search" buttons. Below this is a table with columns: "Document Name", "Title", "Created By", and "Created Date". The table is empty, displaying "No Link available". At the bottom of the dialog box are "OK" and "Cancel" buttons.

Figure 73: Link Document Dialog Box

2. Click **Masterworks Document**.

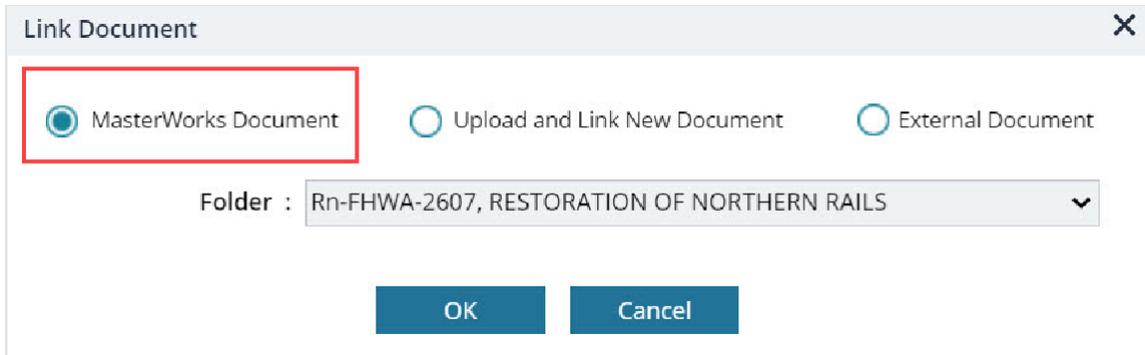


Figure 74: Using Masterworks Document Option

3. In the **Folder** drop-down list, select the appropriate document folder where the files exist. The list of files in that folder is displayed.

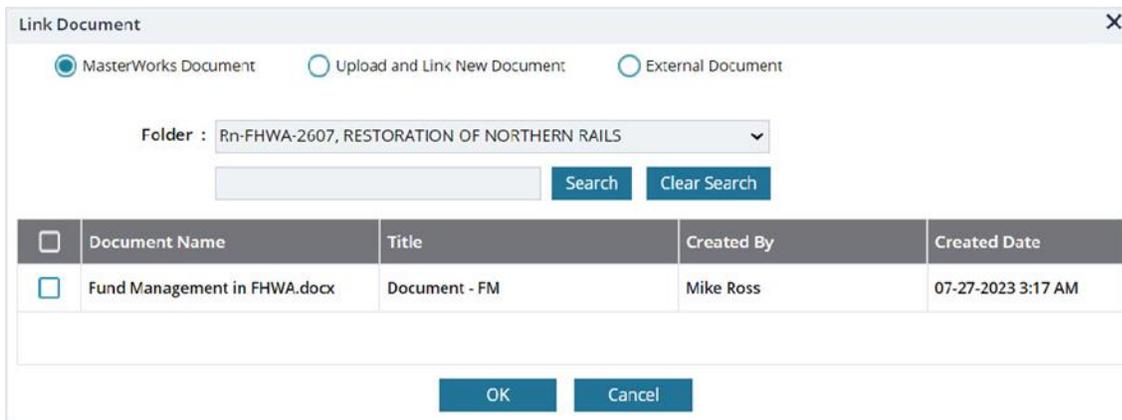


Figure 75: List of Documents

4. Perform any of the following steps, as applicable:

- From the list of files, select the appropriate files.
- To search for a file, in the box, enter any search criteria for the file, click Search, and then select the appropriate files.

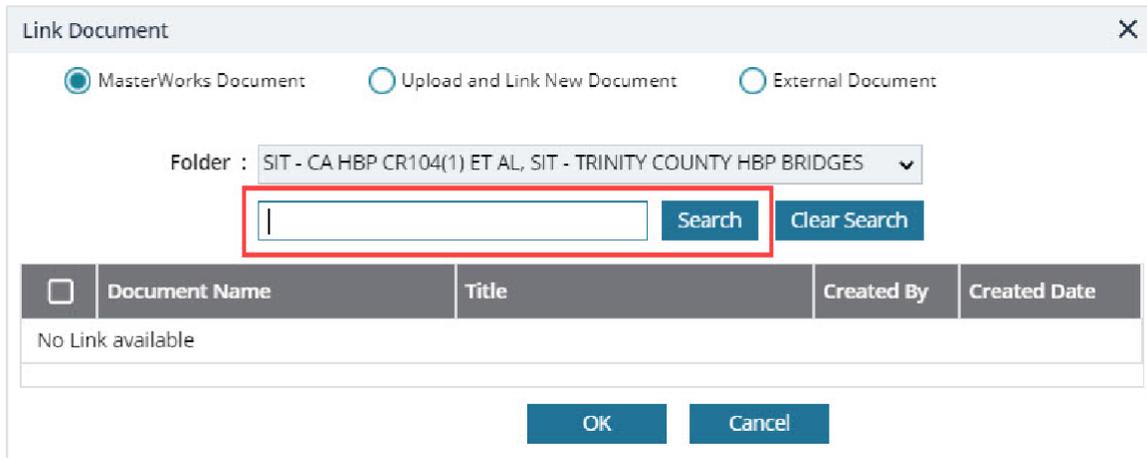


Figure 76: Using Search Option

You can specify search criteria such as the extension of the file type, the date or time the file was uploaded, the name or title of the file, or the username of the user who uploaded the file.

- Optionally, to view all the files in the selected folder, click **Clear Search**.
- Click **OK**. The files are linked to the form and are displayed in the **Attachments** section.

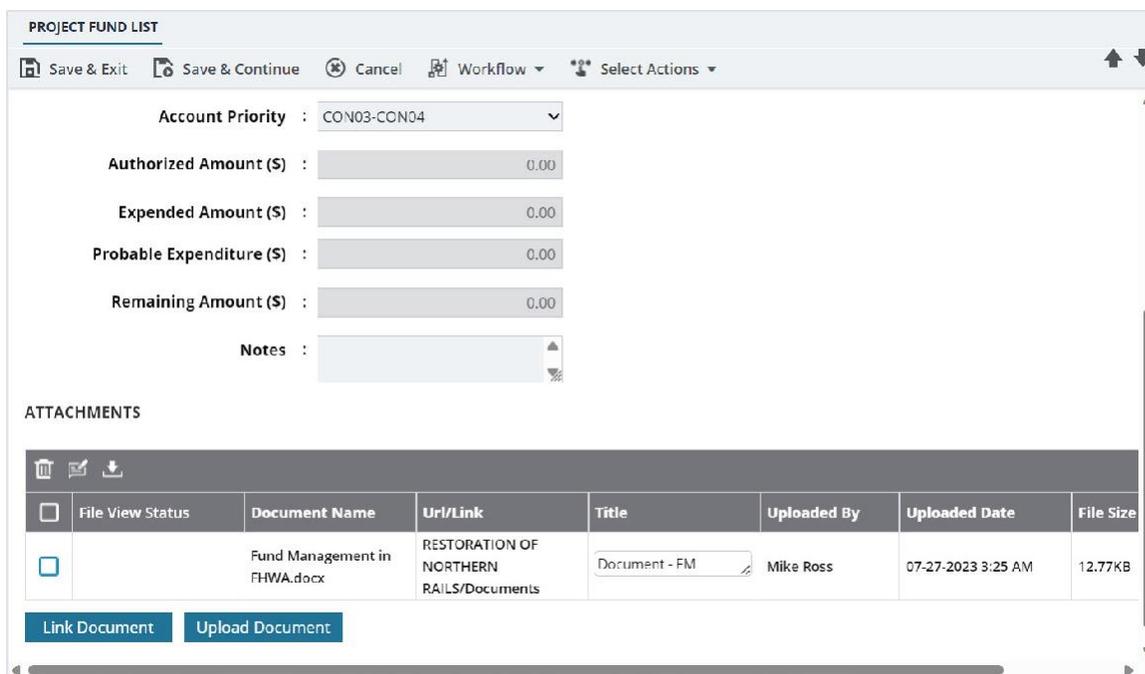


Figure 77: Linked Document

Note: The Url/Link column displays the path to the folder where the document is available. You can click the folder path to open the folder.

- In the **Title** column, enter the titles for the linked files.

Linking a File to a Form – Upload and Link New Document Option

To upload a file to a folder in the Documents folder structure and link the file to the respective form, perform the following steps:

Note: The Upload and Link New Document option is the most preferred and used method to link files to a form by the FLH team.

1. In the **Attachments** section, click **Link Document**.

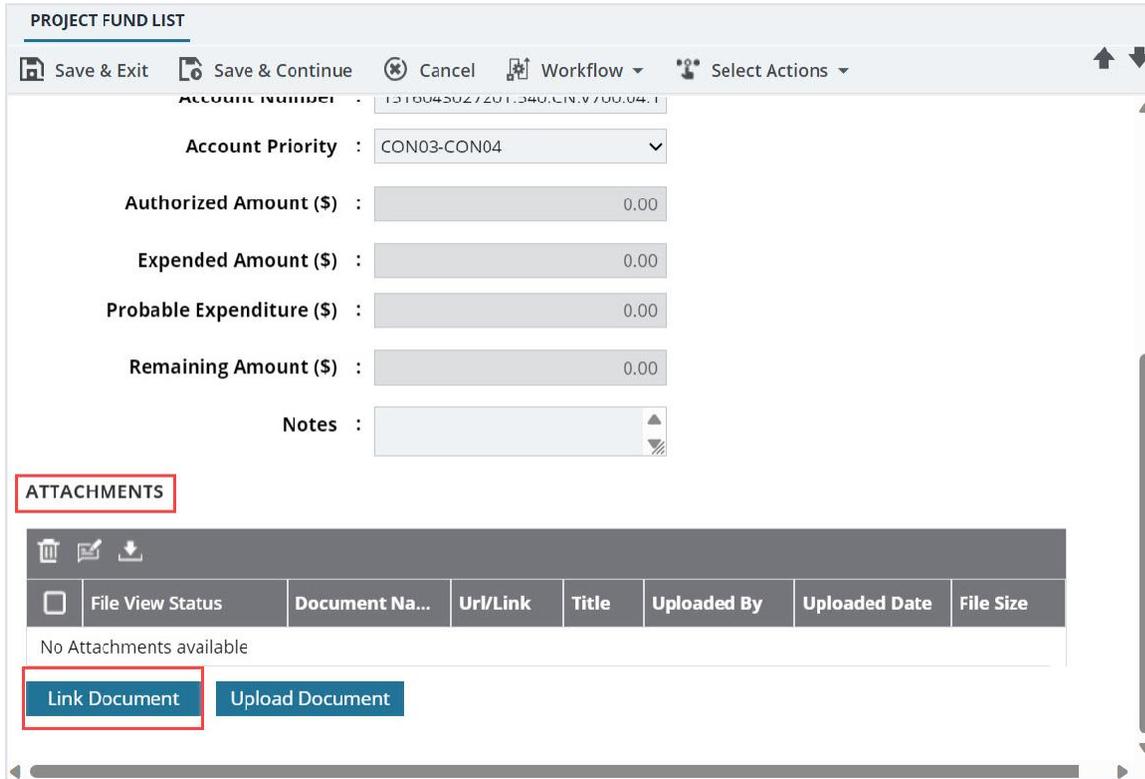


Figure 78: Using Link Document Option

The **Link Document** dialog box is displayed.

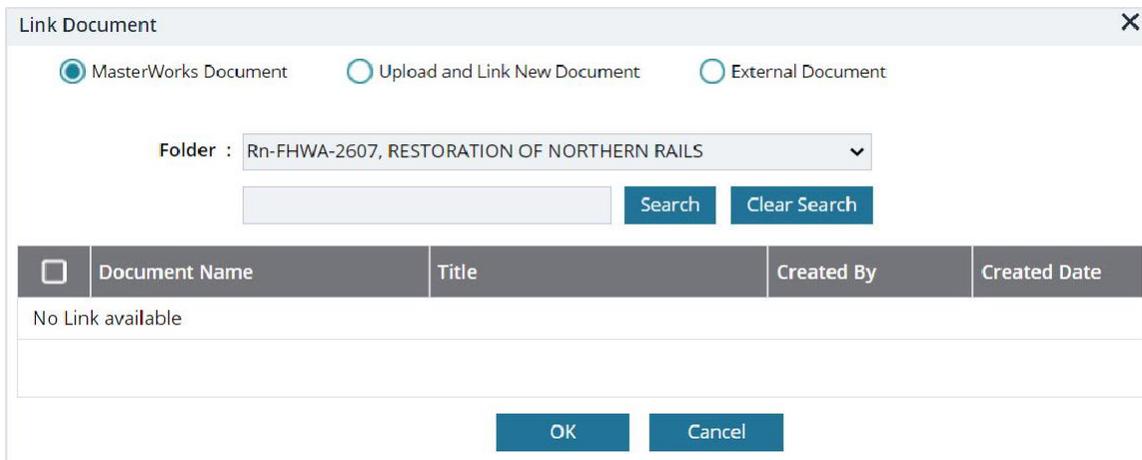


Figure 79: Link Document Dialog Box

2. Click **Upload and Link New Document**.

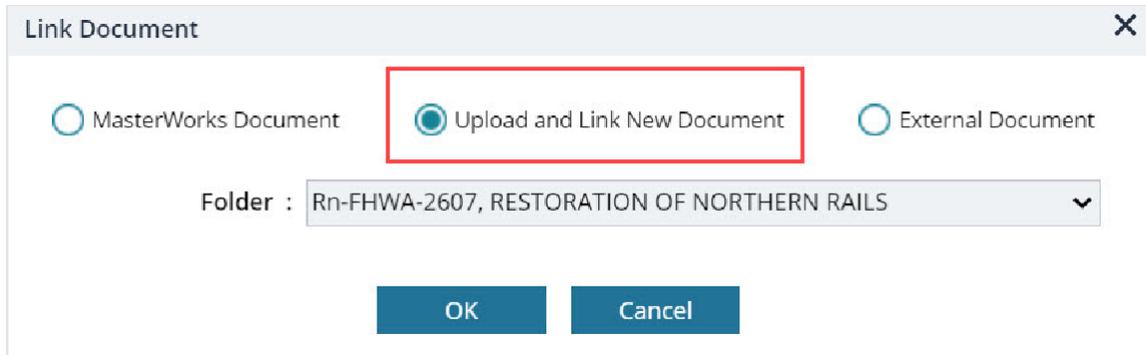


Figure 80: Using Upload and Link New Document Option

3. In the Folder drop-down list, select the appropriate folder to upload files.
4. Click OK. A confirmation dialog box is displayed.
5. Click OK. The **New Document** page is displayed.

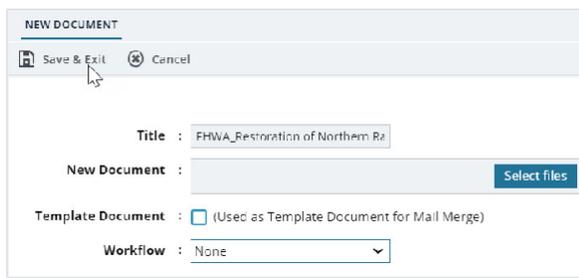


Figure 81: New Document Page

6. To upload files, in **the New Document** section, drag and drop the appropriate files. On uploading and saving the files, the files are uploaded to the selected folder in the **Folder** drop-down list and linked to the respective form.
7. In the **Title** column, enter the titles for the linked files.

Linking a File to a Form – External Document Option

To link a file to an external storage system, perform the following steps:

To link a file available in the Documents folders, perform the following steps:

1. In the **Attachments** section, click **Link Document**.

The screenshot shows a web form titled "PROJECT FUND LIST". The form includes fields for "Account Number", "Account Priority", "Authorized Amount (\$)", "Expended Amount (\$)", "Probable Expenditure (\$)", and "Remaining Amount (\$)", each with a corresponding input field. Below these fields is a "Notes" section. The "ATTACHMENTS" section is highlighted with a red box and contains a table with columns: "File View Status", "Document Na...", "Url/Link", "Title", "Uploaded By", "Uploaded Date", and "File Size". Below the table, it says "No Attachments available". At the bottom of the attachments section, there are two buttons: "Link Document" (highlighted with a red box) and "Upload Document".

Figure 82: Using Link Document Option

2. Click **External Document**.

The screenshot shows a dialog box titled "Link Document". It has three radio button options: "MasterWorks Document", "Upload and Link New Document", and "External Document". The "External Document" option is selected and highlighted with a red box. Below the options are two input fields: "Url/Link" with the text "https://" and "Title". At the bottom of the dialog box are "OK" and "Cancel" buttons.

Figure 83: Using External Document Option

3. In the **URL/Link** box, enter the URL to the file in the external storage system.
4. In the **Title** box, enter the title for the linked file.
5. Click **OK**.
6. The file is linked to the form and is displayed in the **Attachments** section.

4.1.2. Attaching a File to a Workflow

Overview

You can upload files to the specific records of a form while performing a workflow action. The **Project Fund List** form is used for illustration purposes.

Steps

1. In the list page of a form, select the appropriate record.

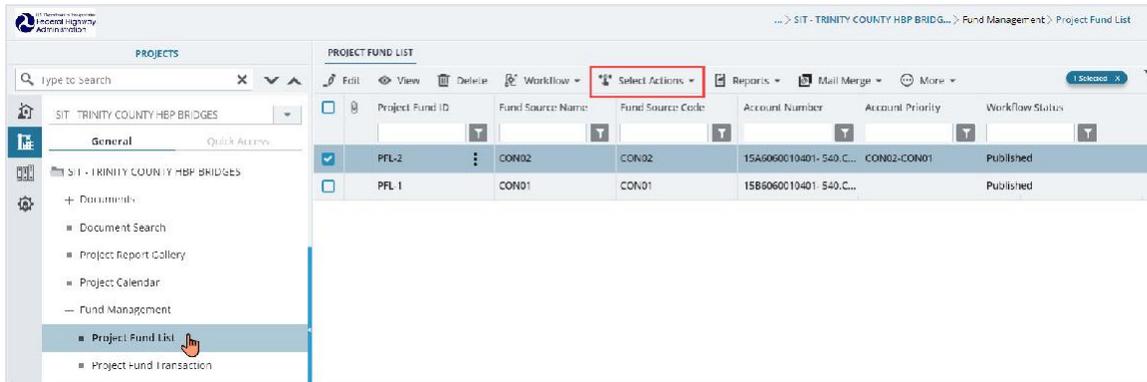


Figure 84: Using Select Actions Option

2. Click **Select Actions** and then click the appropriate workflow action. The Masterworks dialog box is displayed.

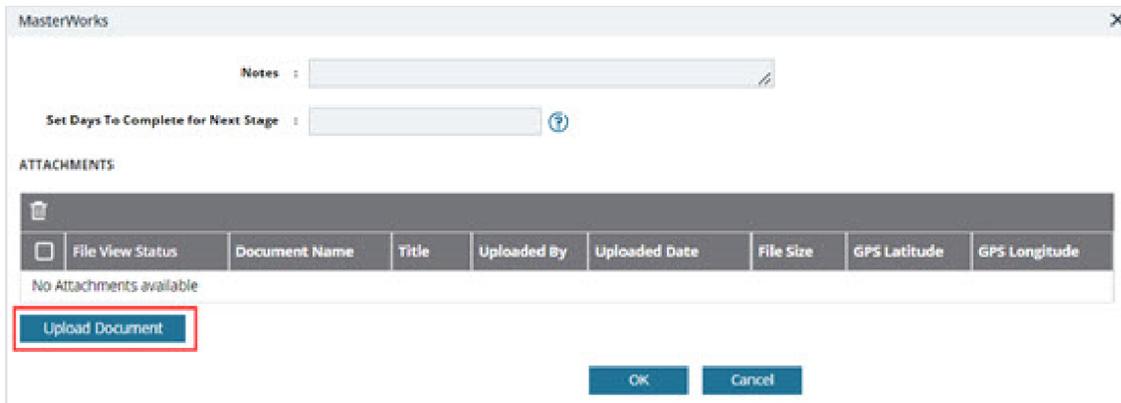


Figure 85: Masterworks Dialog Box

3. In the **Attachments** section, click **Upload Document**.
The **Open** dialog box is displayed.

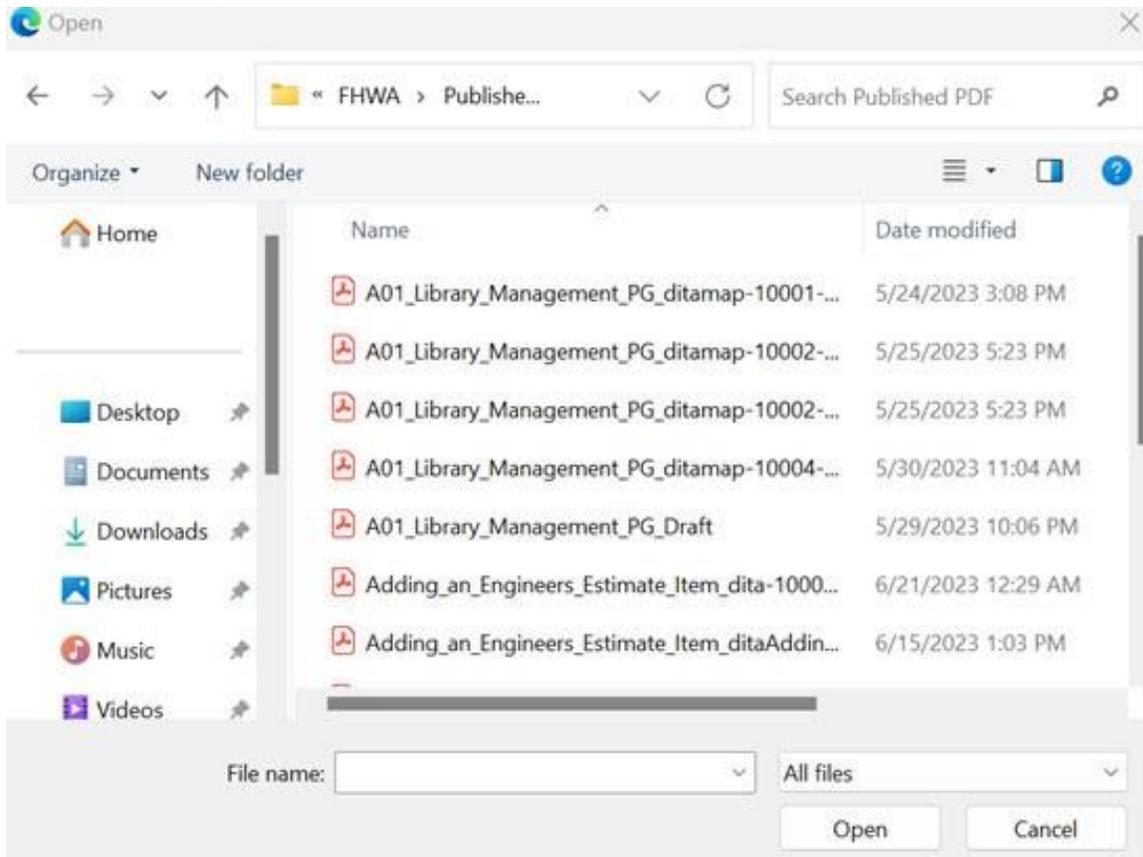


Figure 86: Open Dialog Box

4. To upload a single file, click the required file. Optionally, to upload multiple files, press and hold **CTRL**, and then click the required files.

5. Click **Open**.

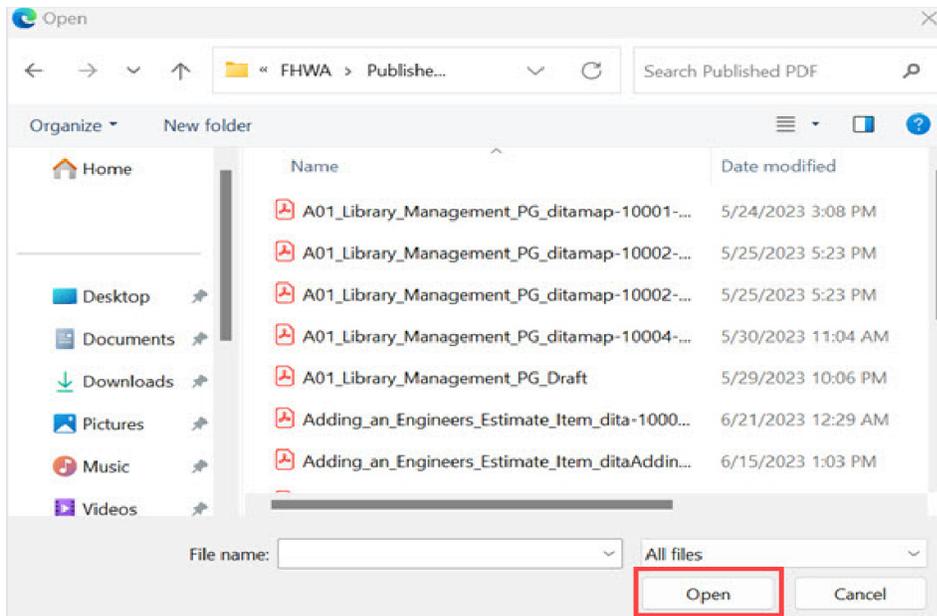


Figure 87: Using Open Option

The name of the file is automatically updated in the **Document Name** column.

6. Optionally, in the **Title** column, enter the title for the attached file.

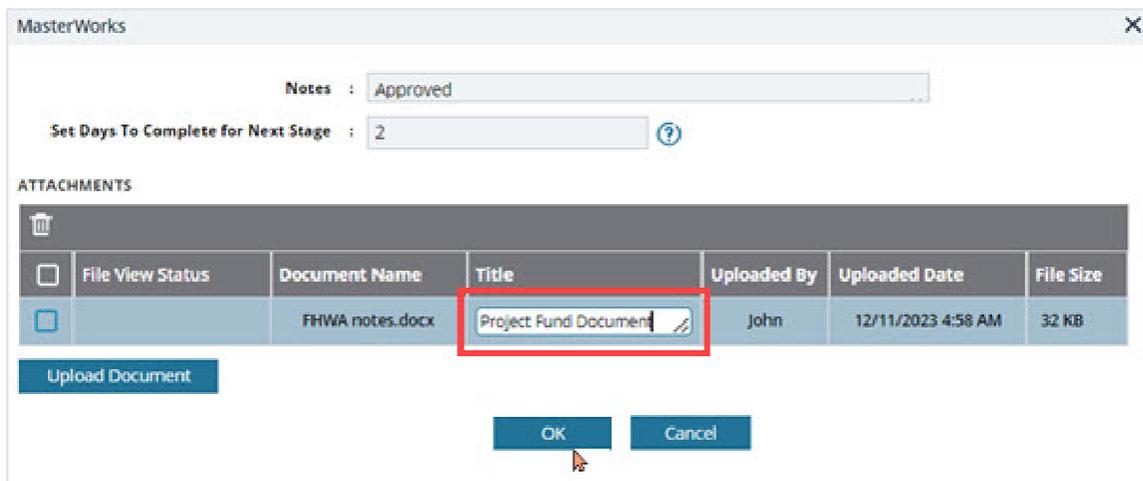


Figure 88: Updating Title for the Attached File

7. Click **OK**. You can access the attached file from the Workflow Status and History dialog box. For more information, refer to [Section 4.3.2. Viewing the Workflow History](#).

4.1.3. Accessing and Downloading Attached Files

You can access files that are attached to forms and workflows. The Project Fund List form is used for illustration purposes.

- To access files attached to a form (from the list page):
 - In the navigation pane, click the required form.

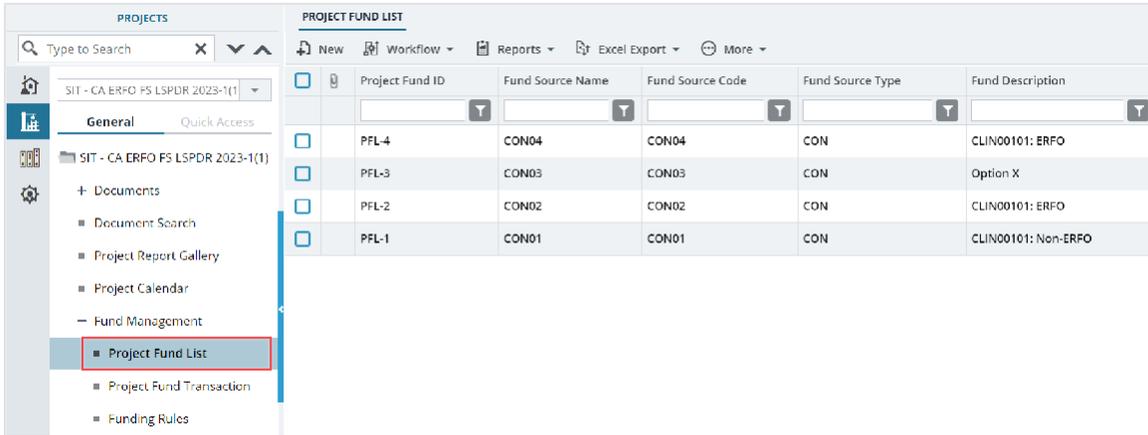


Figure 89: Project Fund List Page

The form list page is displayed.

- Click **More**, and then click **Attachments**.

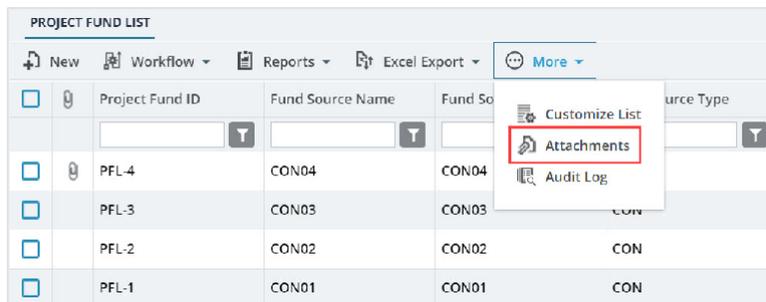


Figure 90: Using Attachments Option

The attachments of all the records are listed.

The screenshot shows the 'PROJECT FUND LIST DOCUMENTS' page. It displays a table with columns: Record Identifier, Document Name, Version, Url/Link, Title, Type, Size, and Created On. One attachment is listed for the record PFL-2 / CON02.

Record Identifier	Document Name	Version	Url/Link	Title	Type	Size	Created On
PFL-2 / CON02	Project_Fund_List_Attachments_FHWA	1		Angela	PDF	7574.29 KB	12/14/2023 6:32 AM

Figure 91: List of Attachments

Optionally, to view files attached to a record, select the appropriate record and then click **Attachments**.

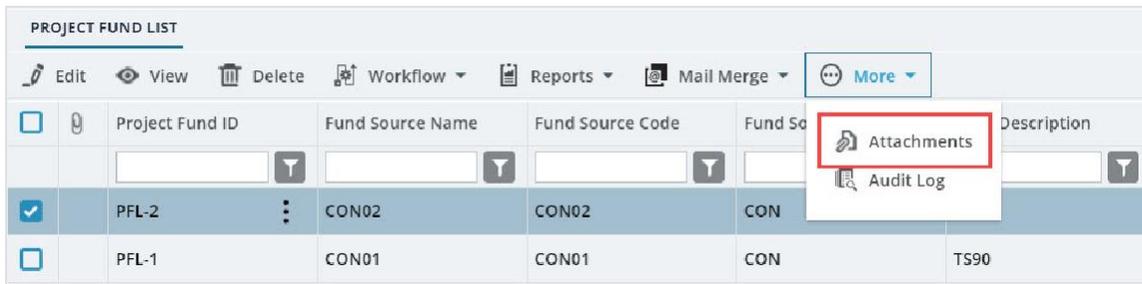


Figure 92: Viewing Files Attached to a Record

- To access and download files attached to a record (from the details page):

1. In the navigation pane, click the appropriate form. The form list page is displayed.

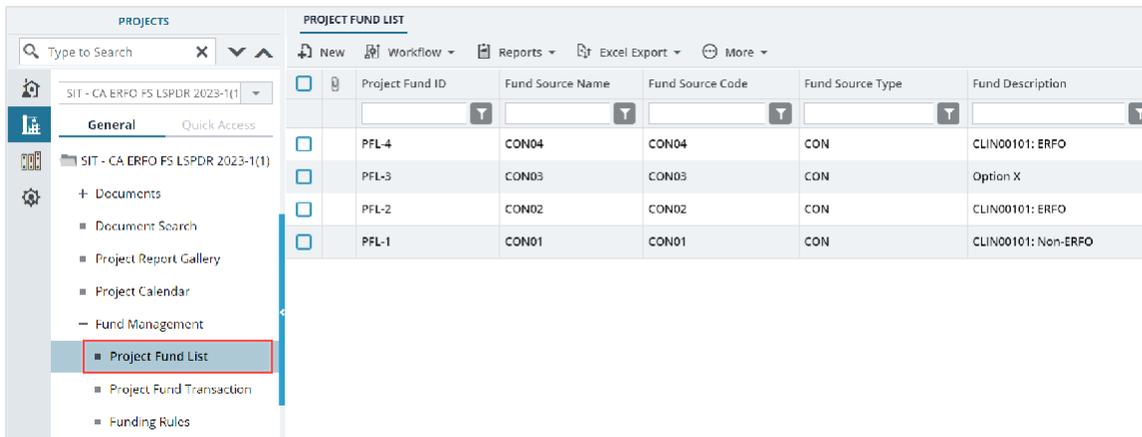


Figure 93: Project Fund List Page

2. In the list page, select the appropriate record, and then click **View**.

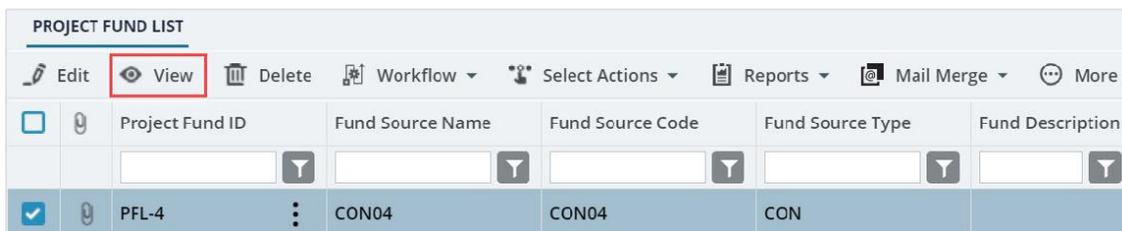


Figure 94: Using View Option

The form details page is displayed.

PROJECT FUND LIST

Edit
 Cancel
 Workflow ▾

Project Fund ID : PFL-3

Fund Source Name * : CON03

Fund Source Code : CON03

Fund Source Type : CON

Fund Source Category : FLAP

Fund Description :

Account Number : 1516043027201.540.CN.V700.04.
1604000000.25255

Account Priority : CON03-CON04

Authorized Amount (\$) :

Expended Amount (\$) :

Probable Expenditure (\$) :

Remaining Amount (\$) :

Notes :

ATTACHMENTS

<input type="checkbox"/>	File View Status	Document Name	Uri/Link	Title	Uploaded By	Uploaded Date	File Size
<input type="checkbox"/>	● Ready	Fund Management in FHWA.docx	NA		Mike Ross	07-27-2023 4:31 AM	12.77KB
<input type="checkbox"/>	● Ready	PFL with data.jpg	NA		Mike Ross	07-27-2023 4:30 AM	92.13KB

Figure 95: Project Fund List Page in View Mode

3. In the **Attachments** section, select the appropriate files, and then click .

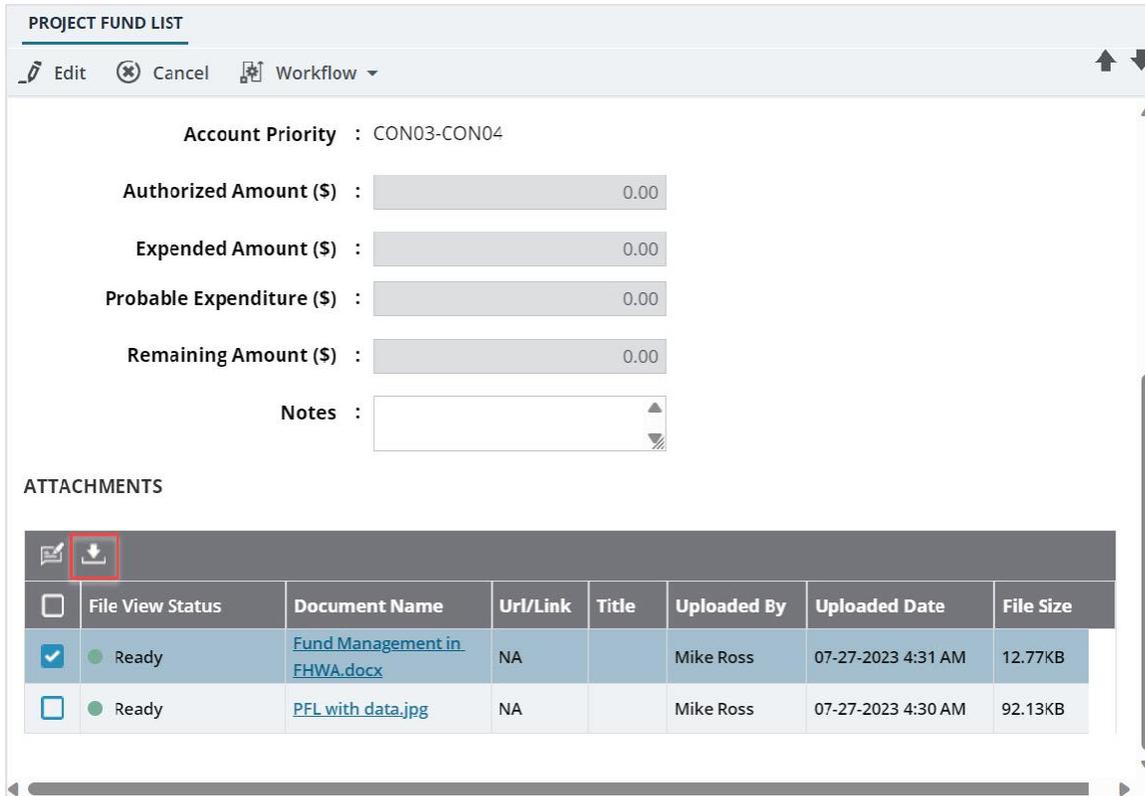


Figure 96: Using Download Option

- To access and download files attached to a workflow:
 - In the navigation pane, click the appropriate form.

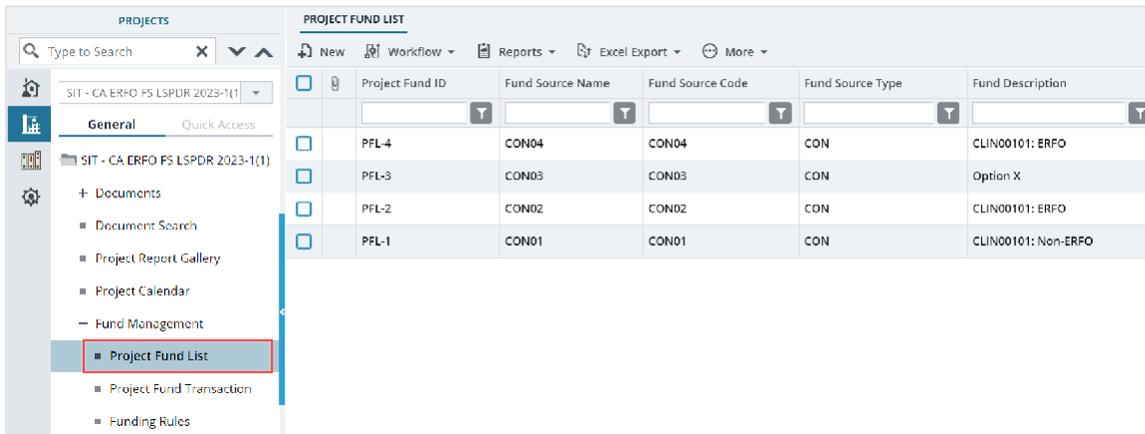


Figure 97: Project Fund List Page

The form list page is displayed.

- In the list page, select the appropriate record.

3. In the **Workflow** group, click **History**.

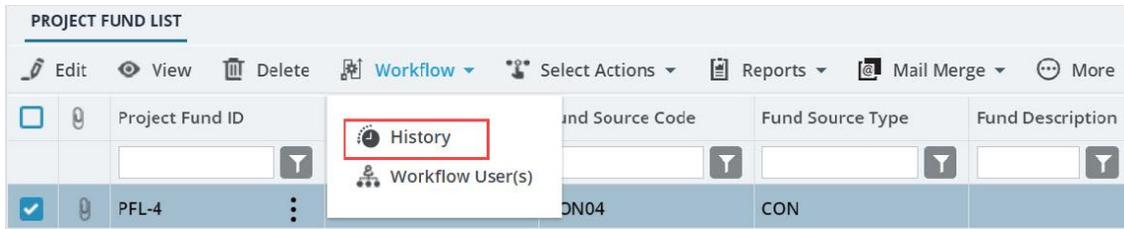


Figure 98: Using History Option

The **Workflow Status & History** dialog box is displayed.

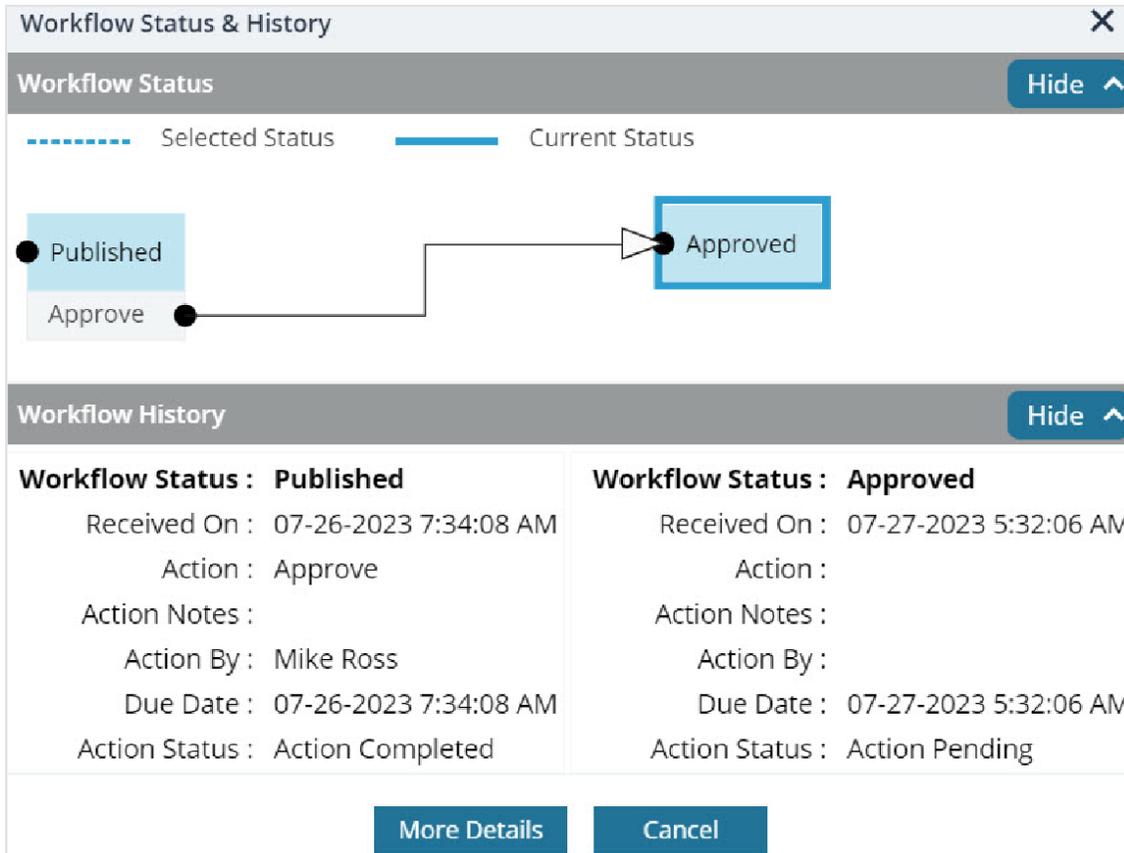


Figure 99: Workflow Status & History Dialog Box

- To view all the attachments and complete workflow history, click **More Details**.

Workflow Status & History

Workflow Status Hide ^

----- Selected Status ——— Current Status

● Published → Approve → ● Approved

Workflow History Hide ^

Workflow Status : Published	Workflow Status : Approved
Received On : 07-26-2023 7:34:08 AM	Received On : 07-27-2023 5:32:06 AM
Action : Approve	Action :
Action Notes :	Action Notes :
Action By : Mike Ross	Action By :
Due Date : 07-26-2023 7:34:08 AM	Due Date : 07-27-2023 5:32:06 AM
Action Status : Action Completed	Action Status : Action Pending

More Details **Cancel**

Figure 100: Using More Details Option

The **History** page is displayed.

HISTORY Close

Record Identifier : PFL-4/CON04

Workflow Status Hide ^

----- Selected Status ——— Current Status

● Draft → Publish → ● Published → Approve → ● Approved

● Inactive ● End Stage

Workflow History Hide ^

■ Action Pending ■ Action Completed ■ Action Failed ■ Workflow Completed

Status	Received On	Action	Action Notes	Action On	Action By
Draft	07-26-2023 7:34 AM	Publish		07-26-2023 7:34 AM	User10

Figure 101: History Page

5. In the **Attachments** section, select the appropriate documents, and then click .

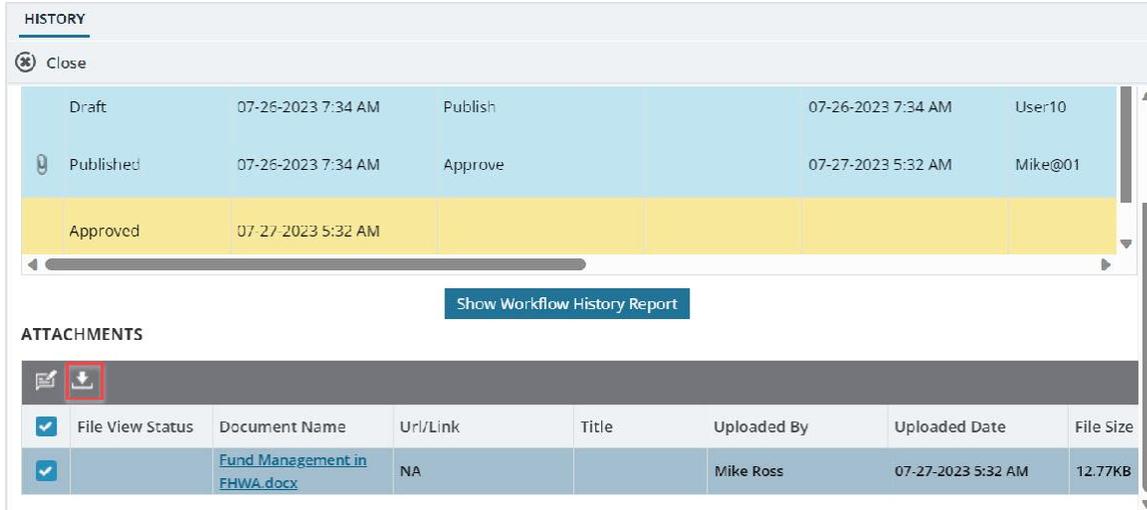


Figure 102: Using Download Option

4.1.4. Deleting Attached Files

Prerequisites

You can delete a file only if you have attached it.

Overview

You can delete files that are attached to forms. You cannot delete files that are attached while performing a workflow action.

The **Project Fund List** form is used for illustration purposes.

Steps

1. To access the appropriate file attached to a form to be deleted, perform the following steps:
 - a. In the navigation pane, click the appropriate form.

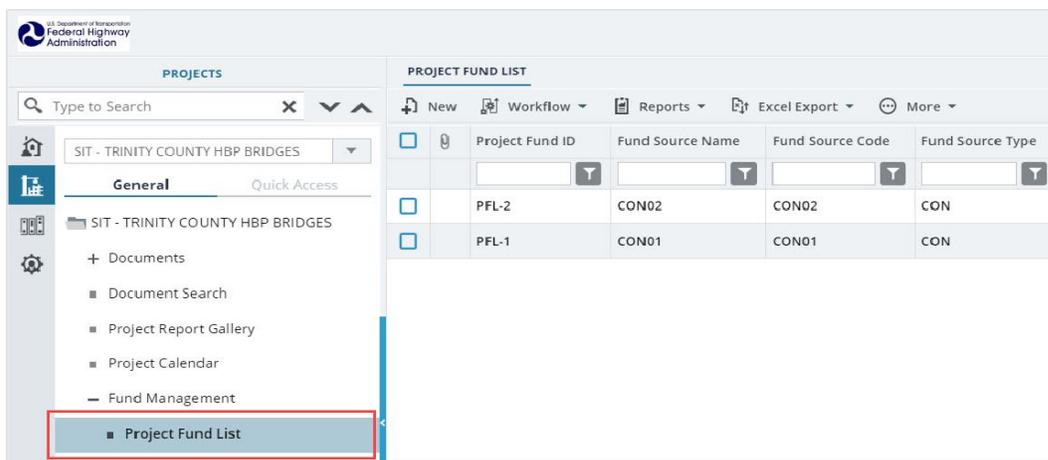


Figure 103: Project Fund List Page

The form list page is displayed.

- b. Click **More**, and then click **Attachments**.

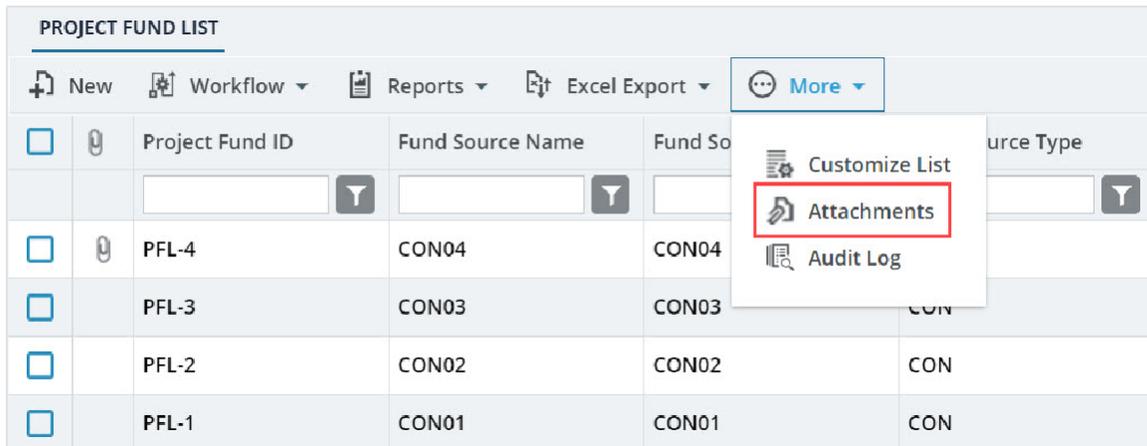


Figure 104: Using Attachments Option

The attachments of all the records are listed.



Figure 105: List of Attachments

Various document management features are available for attachments.

2. To delete an attachment, select the appropriate file, and then click .

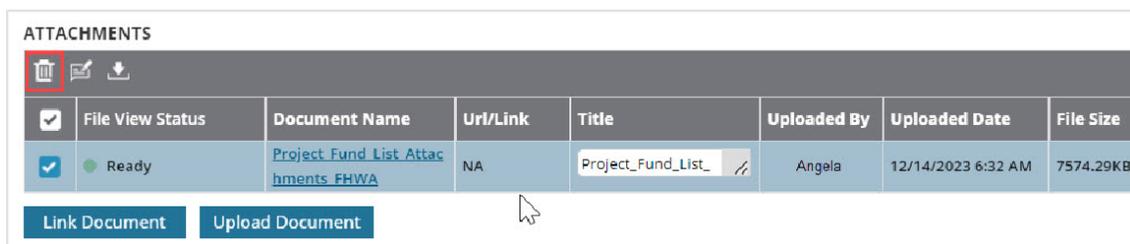


Figure 106: Using Delete Option

4.2. Standard Report Functions

Performing all report-related activities is similar in procedure throughout the application. All tasks that you can perform are based on the roles assigned to you in a project and the permissions granted to the roles.

For information on roles, refer to **Security Roles** in the **A02 Administrator Guide**. The standard report functions include the following:

- [4.2.1. Generating and Viewing Reports](#)
 - [4.2.1.1. Generating a report](#)
 - [4.2.1.2. Printing a report](#)
 - [4.2.1.3. Saving a report in various formats](#)
 - [4.2.1.4. Updating report to view the latest information](#)
- [4.2.2. Subscribing to a report](#)

4.2.1. Generating and Viewing Reports

You can generate reports for different information views for all the forms in the application. Masterworks enables you to use report filters to generate reports with specific information. You can perform the following report functions:

- [4.2.1.1. Generate a report](#)
- [4.2.1.2. Print a report](#)
- [4.2.1.3. Save a report in various formats](#)
- [4.2.1.4. Update report to view the latest information](#)

4.2.1.1. Generating a Report

Overview

You can generate various reports that comprise information based on the roles assigned to you and the various projects to which you are invited.

For a few reports, you can use the filter criteria to provide information for the relevant fields and generate the reports.

The **Project Fund List** form is used for illustration purposes.

Steps

1. Perform any of the following steps, as applicable:
 - In the form list page, click **Reports**, and then click the appropriate report.

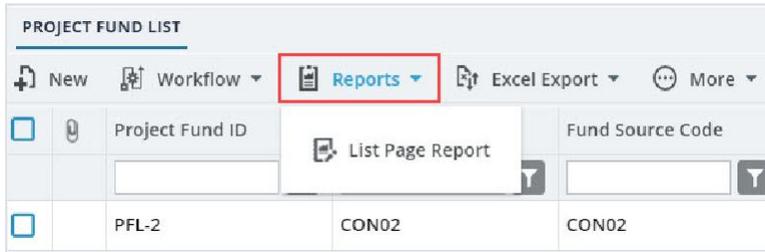


Figure 107: Using Reports Option

- In the project navigation pane, click **Project Report Gallery**, and then double-click the appropriate report.

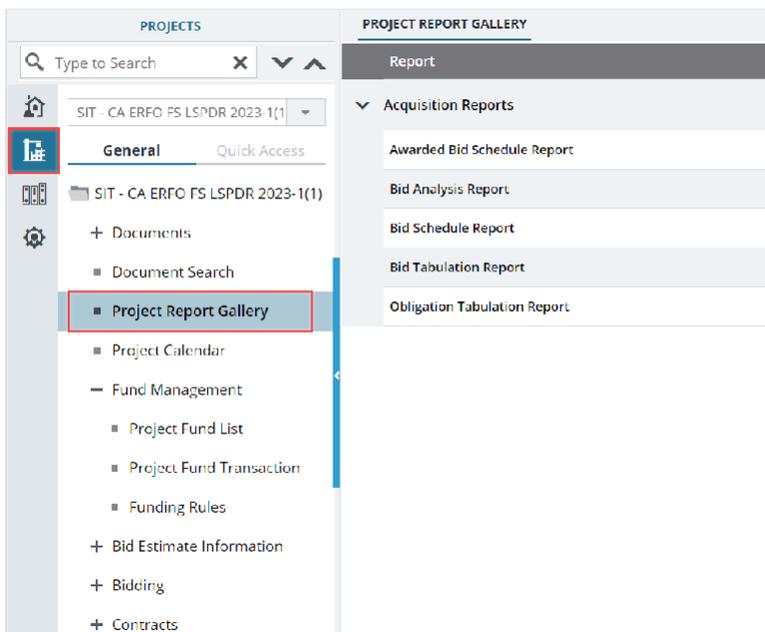


Figure 108: Project Report Gallery Navigation Page

- In the project navigation pane, expand the contract folder, click **Contract Report Gallery**, and then double-click the appropriate report.

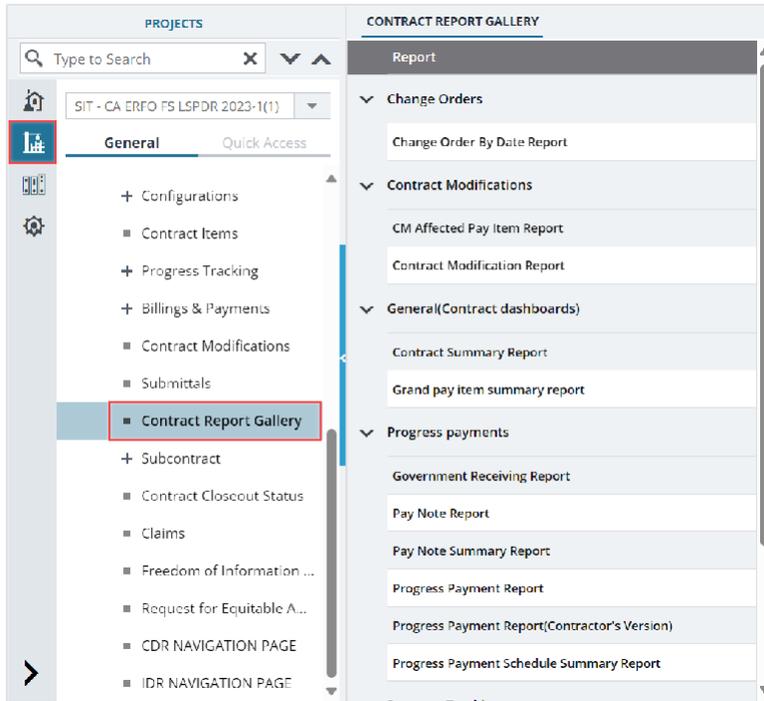


Figure 109: Contract Report Gallery Navigation Page

2. If filtering options are necessary, select the appropriate information in the relevant fields, and then click **View Report**.

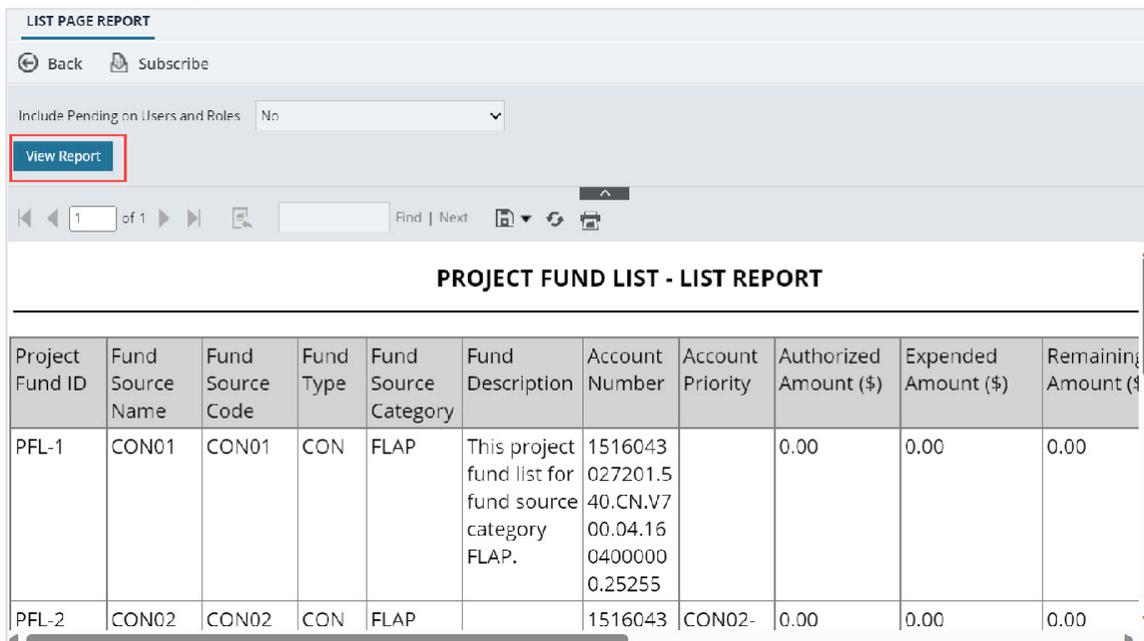


Figure 110: Using View Report Option

The report is generated and displayed.

4.2.1.2. Printing a Report

Steps

1. Generate the required report.

For more information, refer to [Section 4.2.1.1. Generating a Report.](#)

2. In the report toolbar, click **Print Report.**

The screenshot shows a web application interface for generating a report. At the top, there is a 'LIST PAGE REPORT' header. Below it are navigation links for 'Back' and 'Subscribe'. A dropdown menu for 'Include Pending on Users and Roles' is set to 'No'. A 'View Report' button is visible. The main toolbar contains several icons, with the 'Print Report' icon (a printer) highlighted in a red box. Below the toolbar is a table titled 'PROJECT FUND LIST - LIST REPORT'.

Project Fund ID	Fund Source Name	Fund Source Code	Fund Type	Fund Source Category	Fund Description	Account Number	Account Priority	Authorized Amount (\$)	Expended Amount (\$)	Remaining Amount (\$)
PFL-1	CON01	CON01	CON	FLAP	This project fund list for fund source category FLAP.	1516043 027201.5 40.CN.V7 00.04.16 0400000 0.25255		0.00	0.00	0.00
PFL-2	CON02	CON02	CON	FLAP		1516043	CON02-	0.00	0.00	0.00

Figure 111: Using Print Report Option

4.2.1.3. Saving a Report

Steps

1. Generate the required report.

For more information, refer to [Section 4.2.1.1. Generating a Report](#).

2. In the report toolbar, click **Export**, and then click the required option.

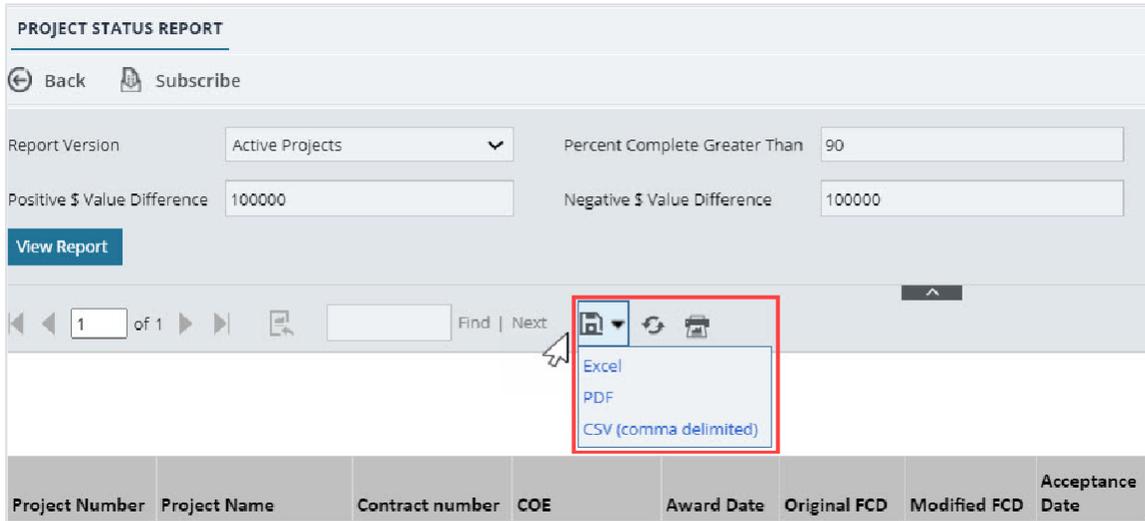


Figure 112: Exporting a Report

4.2.1.4. Viewing Latest Information in a Report

Steps

1. Generate the required report. For more information, refer to [Section 4.2.1.1. Generating a Report.](#)
2. In the report toolbar, click **Refresh** .

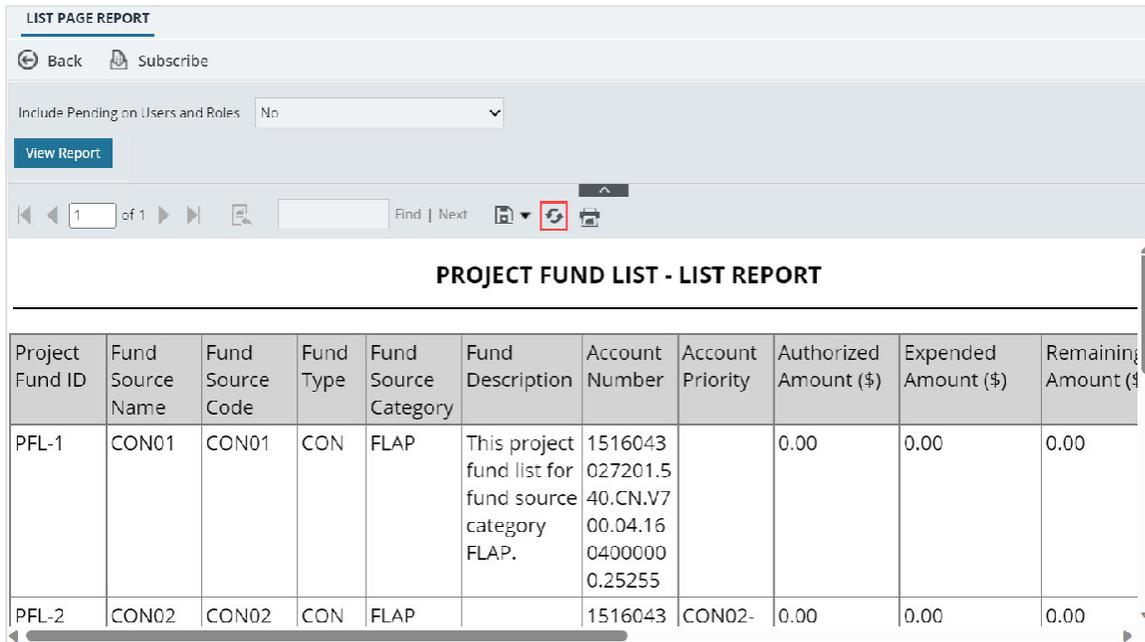


Figure 113: Using Refresh Option

4.2.2. Subscribing to Reports

Prerequisites

- You must have access to the report.
- The logged-in user is assigned with the permission to generate the report.

Overview

You can subscribe to reports, and subscribed reports are delivered to the specified email addresses or saved in the specified file location. You can configure subscriptions so that the reports are delivered periodically in the specified format.

Additionally, you can create multiple subscriptions for a single report with varied subscription options.

You can subscribe to a report using any of the following methods:

- **Email:** The report is delivered through email to the specified email addresses in the specified formats.
Note: Only Masterworks registered email address is allowed to receive the subscribed reports.
- **File Share:** The reports are saved to the specified location in the specified formats.
Note: Users with the appropriate permission can subscribe themselves or others to a report. Only users with the Administrator role can remove or end an active subscription once it is created.

Steps

1. Open a report, and then click  **Subscribe**.

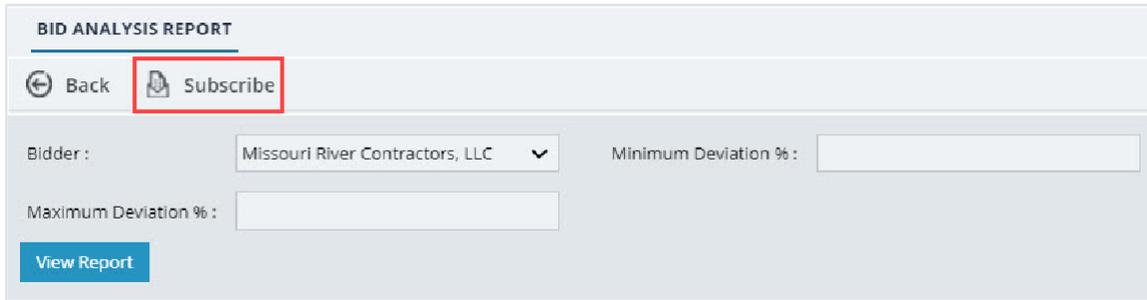


Figure 114: Subscribing a Report

The subscription dialog box is displayed.

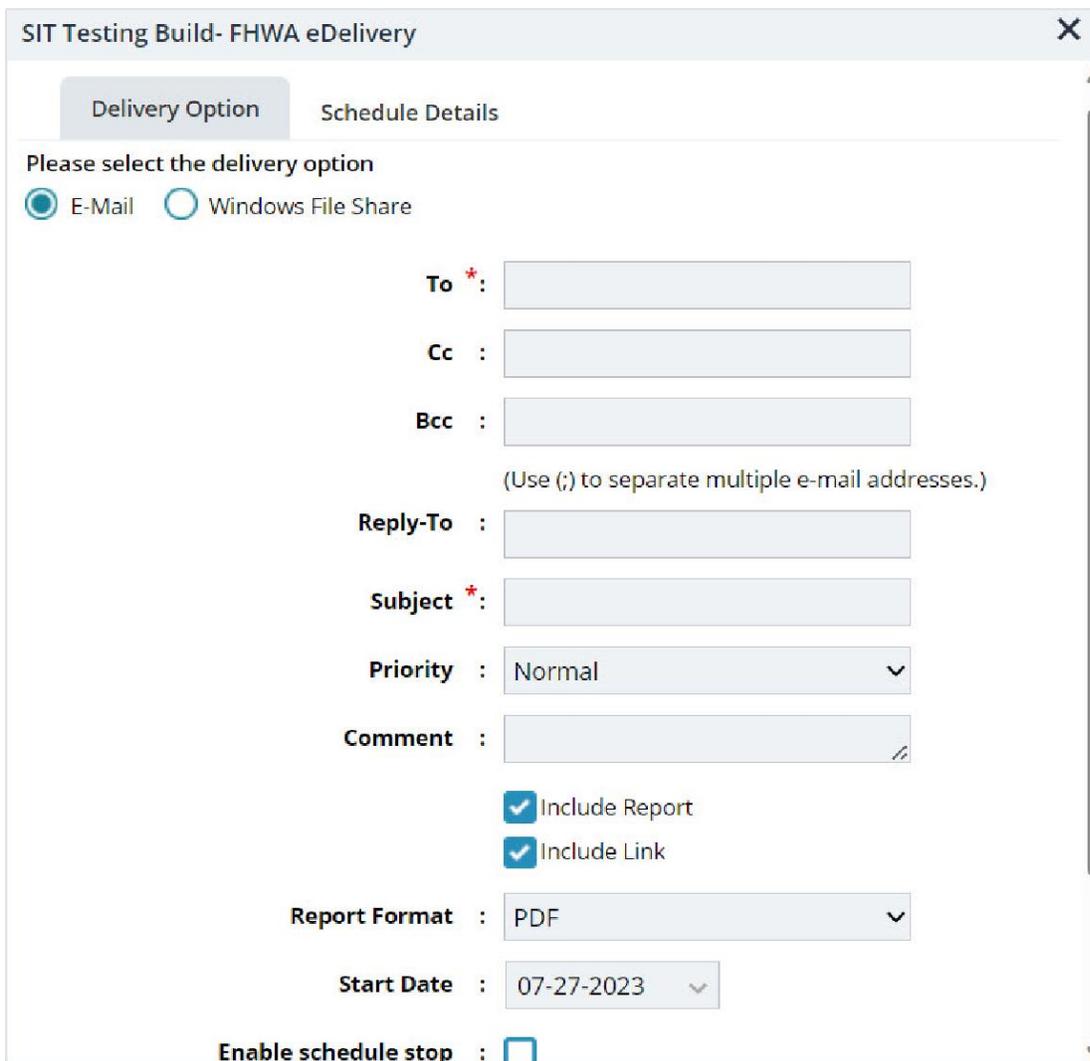


Figure 115: Subscription Dialog Box

Note: To subscribe to a report, you must fill the fields with red asterisks.

2. In the **Please select the delivery option** section, perform either of the following steps, as applicable:
 - Click **E-Mail** to receive the report through email.
 - Click **Windows File Share** to save the report to the specified location.
3. Based on the delivery option selected, perform the following steps:

Email	Windows File Share
<ol style="list-style-type: none"> a. In the To box, enter the email addresses of the recipients of the report. b. In the Reply-To box, enter the email addresses of the recipients to whom the reply email must be delivered. c. In the Subject box, enter the name of the report or any other appropriate subject for the email. d. From the Priority drop-down list, select the priority of the email. If the selected priority is High, the email will be sent as a High Priority notification. e. In the Comment box, enter any comment for the email. Comments are included in the body of the email. f. Select the Include Report check box to deliver the report in the selected format as an email attachment. g. Select the Include Link check box to deliver the link to the report in the report delivery email. The recipient can view the report on the application only if the recipient has the required permissions on the report. h. From the Report Format drop-down list, select the format in which the report must be generated and delivered to the specified email addresses. 	<ol style="list-style-type: none"> a. In the File Name box, enter the file name for the report. b. Select the Add a file extension when the file is created check box to save the report file name with the extension of the file format as required for the report. c. In the Path box, enter the path of the shared file location where the report must be saved. Note: To configure the shared file location in the application, you must provide the file path location to the Administrator. d. From the Report Format drop-down list, select the format in which the report must be generated and saved. e. In the Credentials used to access the file share section, enter the credentials to access the shared location and save the report. f. From the Overwrite options section, click any of the following options: <ul style="list-style-type: none"> • Overwrite an existing file with a newer version- When saving the report at the file location at the scheduled time, if a file with the same name exists, then the existing file is overwritten by the latest report. • Do not overwrite the file if a previous version exists- When saving the report at the file location at the scheduled time, if a file with the same name exists, then the report is not overwritten by the latest report, and the report is not saved at the file location. • Increment file names as newer versions are added- When saving the report at the file location at the scheduled time, if a file with the same name exists, then the latest report is saved with the same name appended with a sequential number. g. From the Start Date list, click the date from when the report must be saved.

Email	Windows File Share
<p>i. From the Start Date list, click the date from when the report must be delivered.</p> <p>j. Select the Stop this schedule on check box, and then select the date until when the report must be delivered.</p>	<p>h. Select the Stop this schedule on check box, and then select the date up to when the report must be saved at the file location.</p>

4. To set the frequency of report delivery, click the **Schedule Details** tab.

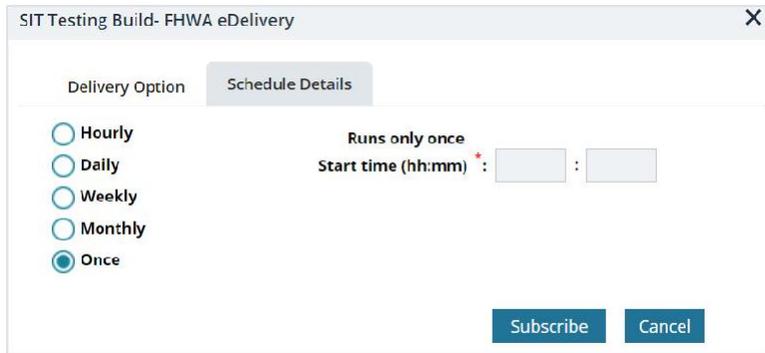


Figure 116: Schedule Details Tab

5. From the delivery frequency options, click the appropriate option:

Option	Description	Steps
Hourly	The report is delivered every preset number of hours.	<p>a. Click Hourly in the delivery options list.</p> <p>b. In the Run the schedule every section, enter the frequency of report delivery:</p> <ol style="list-style-type: none"> In the hours and minutes boxes, enter the time period in hours and minutes the report must be periodically delivered. In the Start time (hh:mm) box, enter the time (in 24-hour format) the report delivery must begin.
Daily	The report is delivered once on preset days, or periodically as defined.	<p>a. Click Daily in the delivery options list.</p> <p>b. In the schedule definition section, enter the frequency of report delivery:</p> <ul style="list-style-type: none"> Click Every Weekday to get the report delivered on all weekdays, from Monday to Friday.

Option	Description	Steps
		<ul style="list-style-type: none"> • Click Repeat after this number of days, and then, then in the box, enter the number of days to get the report delivered periodically once every specified number of days. • In the Start time (hh:mm) box, enter the time (in 24-hour format) the report must be delivered.
Weekly	The report is delivered every preset number of weeks on preset days of the week.	<ol style="list-style-type: none"> a. Click Weekly in the delivery options list. b. Click Repeat after this number of weeks, and then in the box, enter the number of weeks to get the report delivered periodically once every specified number of weeks. c. In the On day(s) section, select the days on which the report must be delivered. d. In the Start time (hh:mm) box, enter the time (in 24-hour format) the report must be delivered.
Monthly	The report is delivered monthly on preset days of a selected week.	<ol style="list-style-type: none"> a. Click Monthly in the delivery options list. b. Select the months when the report must be delivered. c. Click one of the following options to schedule the delivery of the report: <ul style="list-style-type: none"> • On week of the month <ol style="list-style-type: none"> i. From the list of weeks, select the week the report must be delivered. ii. In the On day(s) section, select the days the report must be delivered in the week previously selected. • On Calendar day(s) <ul style="list-style-type: none"> ■ In the box, enter the number of days of the month the report must be delivered, starting from the current day. For example, if the current day is

Option	Description	Steps
		<p>the 12th of a month, and the calendar days set is 10, then the report is sent for 10 days from the 12th of every selected month.</p> <p>d. In the Start time (hh:mm) box, enter the time (in 24-hour format) by when the report must be delivered.</p>

4.2.3. Unsubscribing to Reports

For information on unsubscribing to reports, refer to **Unsubscribing to a Report** in the **Administration Guide**.

4.3. Workflow Status Transitions

A workflow automates a business process for stakeholders to evaluate a form, make decisions, and then take an appropriate action. Workflows comprise various status, and each status is transitioned to the next workflow status through actions taken by stakeholders of the current workflow status. Transitioning a workflow status to the subsequent workflow status is performed in the way of a workflow action.

The following topics describe the various workflow related tasks:

- [4.3.1. Performing Workflow Status Transitions](#)
- [4.3.2. Viewing the Workflow History](#)
- [4.3.3. Selecting Workflow Users](#)
- [4.3.4. Associating a Workflow](#)

4.3.1. Performing a Workflow Action

Prerequisites

- A workflow is associated with the record.
- You are an action stakeholder for a particular status in the workflow.
- You are invited to the project.
- You have editing permission for the form or document.
- A workflow action is pending for you.

Overview

When a workflow action is performed on a record, the record is moved from the current workflow status to the subsequent workflow status. A workflow status is transitioned to the subsequent workflow status based on the workflow action conditions defined .

Steps

1. Open a form list page or document list page.

Note: You can view the workflow status of a record in the **Workflow Status** column of the list page.

2. Perform any of the following steps, as applicable:

- Select the appropriate record.

The screenshot shows a table titled 'PROJECT FUND LIST' with columns: Project Fund ID, Fund Source Name, Fund Source Code, Fund Source Type, Fund Description, Account Number, Account Priority, and Workflow Status. The row for PFL-3 is highlighted in blue and has a red checkmark in the selection column.

<input type="checkbox"/>	Project Fund ID	Fund Source Name	Fund Source Code	Fund Source Type	Fund Description	Account Number	Account Priority	Workflow Status
<input type="checkbox"/>	PFL-4	CON04	CON04	CON	15FOA 14(4) Funding	15A7302601404 R40.C...		Approved
<input checked="" type="checkbox"/>	PFL-3	CON03	CON03	CON	FLAP Funding MT NPS GLACIER...	1517303700141 540.C...		Approved
<input type="checkbox"/>	PFL-2	CON02	CON02	CON	FLAP Funding MT NPS GLAC 14...	1517302601404 540.C...	CON02-CON04	Approved

Figure 117: Selecting a Record

- Select multiple records that are in the same workflow status and have the same workflow associated with them.

The screenshot shows the same 'PROJECT FUND LIST' table. The rows for PFL-4, PFL-3, PFL-2, and PFL-1 are all selected, indicated by blue checkmarks in the selection column. The 'Workflow Status' column for all these records is 'Approved'.

<input type="checkbox"/>	Project Fund ID	Fund Source Name	Fund Source Code	Fund Source Type	Fund Description	Account Number	Account Priority	Workflow Status
<input checked="" type="checkbox"/>	PFL-4	CON04	CON04	CON	15FOA 14(4) Funding	15A7302601404 R40.C...		Approved
<input checked="" type="checkbox"/>	PFL-3	CON03	CON03	CON	FLAP Funding MT NPS GLACIER...	1517303700141 540.C...		Approved
<input checked="" type="checkbox"/>	PFL-2	CON02	CON02	CON	FLAP Funding MT NPS GLAC 14...	1517302601404 540.C...	CON02-CON04	Approved
<input checked="" type="checkbox"/>	PFL-1	CON01	CON01	CON	FLTP Funding MT NPS GLAC 14...	1517302601404 540.C...	CON01-CON02-CCN04	Approved

Figure 118: Selecting Multiple Records with the same Workflow Status

- Select the appropriate record, and then click **Edit**.

The screenshot shows the 'PROJECT FUND LIST' table with the PFL-3 record selected. The 'Edit' button in the top toolbar is highlighted with a red box.

<input type="checkbox"/>	Project Fund ID	Fund Source Name	Fund Source Code	Fund Source Type	Fund Description	Account Number	Account Priority	Workflow Status
<input type="checkbox"/>	PFL-4	CON04	CON04	CON	15FOA 14(4) Funding	15A7302601404 R40.C...		Approved
<input checked="" type="checkbox"/>	PFL-3	CON03	CON03	CON	FLAP Funding MT NPS GLACIER...	1517303700141 540.C...		Approved
<input type="checkbox"/>	PFL-2	CON02	CON02	CON	FLAP Funding MT NPS GLAC 14...	1517302601404 540.C...	CON02-CON04	Approved

Figure 119: Editing a Record

The Project Fund List page is displayed.

PROJECT FUND LIST

Cancel Workflow Select Actions

Project Fund ID : PFL-4

Fund Source Name * : CON04

Fund Source Code : CON04

Fund Source Type : CON

Fund Source Category : GAOA

Fund Description : 15F0A 14(4) Funding

Account Number : 15A7302601404 R40.CN.15F0.30
1730001426 25255

Account Priority :

Authorized Amount (\$) : 0.01

Original Authorized Amount (\$) : 0.01

Expended Amount (\$) : 0.00

Probable Expenditure (\$) : 0.00

Remaining Amount (\$) : 0.01

Notes :

Figure 120: Project Fund List Page

3. Click **Select Actions** , and then click the appropriate workflow action.

PROJECT FUND LIST

Edit View Delete Workflow Select Actions Reports Mail Merge More 1 Selected X

<input type="checkbox"/>	Project Fund ID	Fund Source Name	Fund Source Type	Fund Description	Account Number	Account Priority	Workflow Status
<input type="checkbox"/>	PFL-4	CON04	CON	15F0A 14(4) Funding	15A7302601404 R40.C...		Approved
<input checked="" type="checkbox"/>	PFL-3	CON03	CON	FLAP Funding MT NPS GLACIER...	1517303700141 540.C...		Approved
<input type="checkbox"/>	PFL-2	CON02	CON	FLAP Funding MT NPS GLAC 14...	1517302601404 540.C...	CON02-CON04	Approved

Figure 121: Using Select Actions Option – List Page

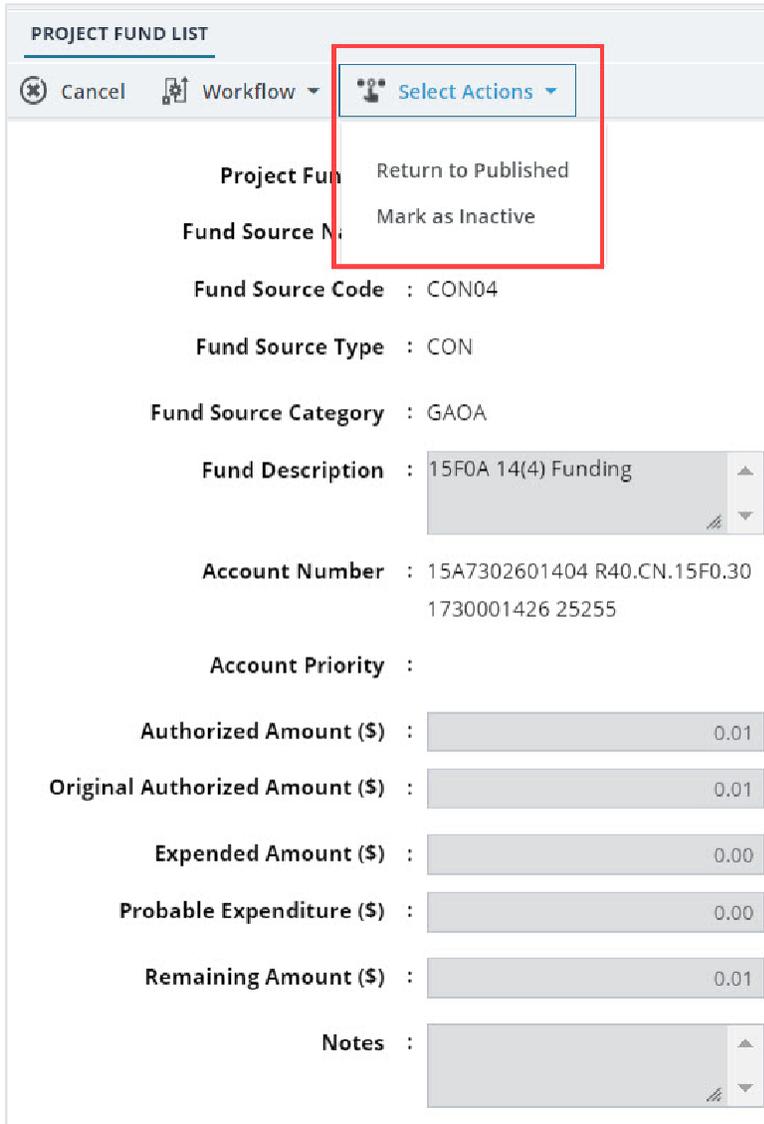


Figure 122: Using Select Actions Option – Details Page

Available actions are based on the definition of the associated workflow. The **Masterworks** dialog box is displayed.

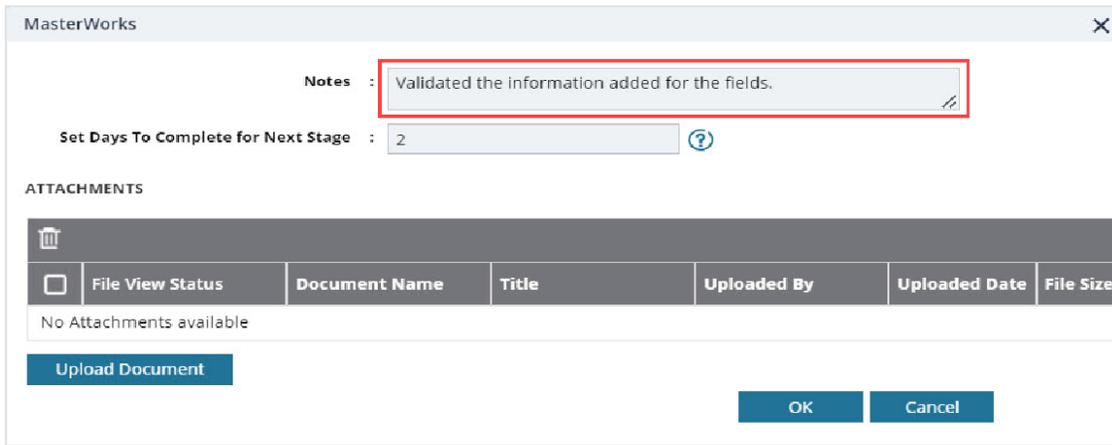


Figure 123: Masterworks Dialog Box

4. Optionally, in the **Notes** field, enter the notes for the workflow transition. You can access these notes from the **Workflow History** dialog box.
5. In the **Set Days To Complete for Next Stage** field, enter the number of days by when the workflow action of the next workflow status must be completed.

Note

- The number mentioned in this field determines the due date to complete the workflow action for the next workflow status.
- If the field is empty, the application applies the default number of days set for the respective workflow.
- If you want to override the default days set for the respective workflow, you need to enter the appropriate number in this field.

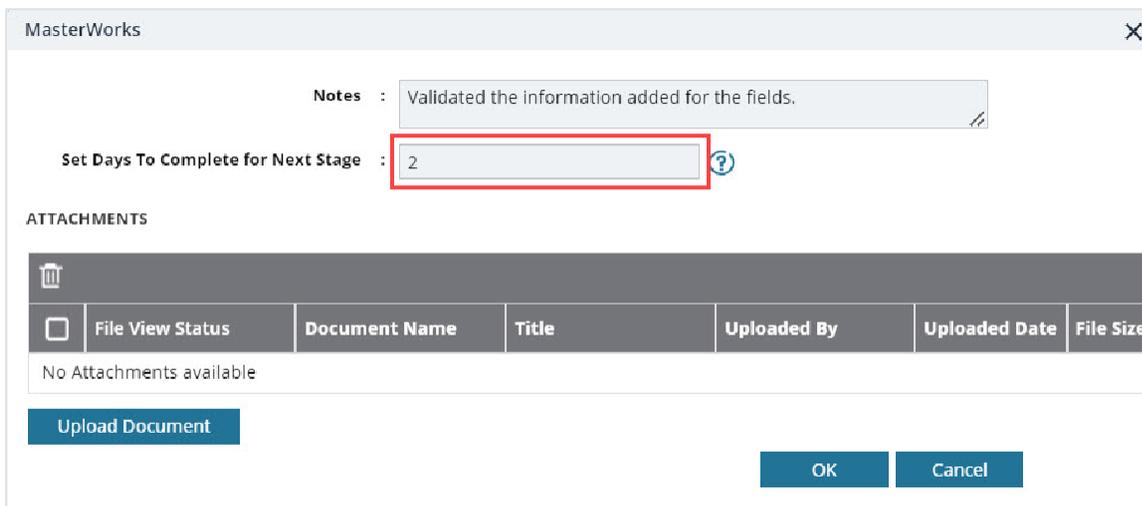


Figure 124: Set Days To Complete for Next Stage

- Optionally, in the **Attachments** section, you can upload or link related files. For information on attachments, refer to [Section 4.7. Attachments](#).

You can access these documents from the **Workflow History** dialog box. For more information, refer to [Section 6.2. Viewing the Workflow History](#).

- Click **OK**.

4.3.2. Viewing the Workflow History

Prerequisites

A workflow is associated with the record.

Overview

You can view the business process progression of a record in the workflow history of the record. The following details are available in the workflow history of every record:

- Action taken at every workflow status
- Date the workflow action was performed
- Notes entered when the workflow action was performed
- User name and user ID of the users who performed a workflow action
- Documents attached during workflow transitions

The **Project Fund List** form is used for illustration purposes.

Steps

- In the list page of a form, select the appropriate record.

The screenshot shows a web application interface for a 'PROJECT FUND LIST'. At the top, there is a toolbar with icons for Edit, View, Delete, Workflow, Select Actions, Reports, Mail Merge, and More. Below the toolbar is a table with the following columns: Project Fund ID, Fund Source Name, Fund Source Code, Fund Source Type, and Fund Description. The first row of the table is highlighted with a red border and has a blue checkmark in the selection column. The second and third rows are not selected.

	Project Fund ID	Fund Source Name	Fund Source Code	Fund Source Type	Fund Description
<input checked="" type="checkbox"/>	PFL-4	CON04	CON04	CON	15FOA 14(4) Funding
<input type="checkbox"/>	PFL-3	CON03	CON03	CON	FLAP Funding MT NPS GLACIER...
<input type="checkbox"/>	PFL-2	CON02	CON02	CON	FLAP Funding MT NPS GLAC 14...

Figure 125: Selecting a Record

2. Click **Workflow**, and then click **History**.

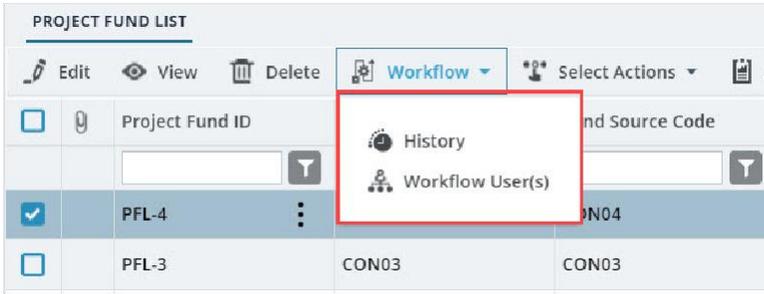


Figure 126: Using History Option

The **Workflow Status & History** dialog box is displayed.

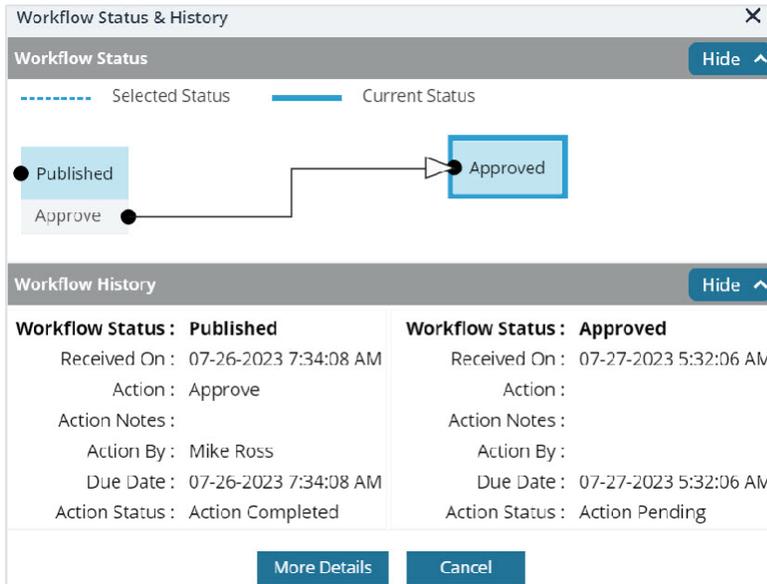


Figure 127: Workflow Status & History Dialog Box

The **Workflow Status** section displays the current and the previous workflow statuses.

The **Workflow History** section displays the details of the workflow statuses.

3. To view the complete workflow history, click **More Details**.

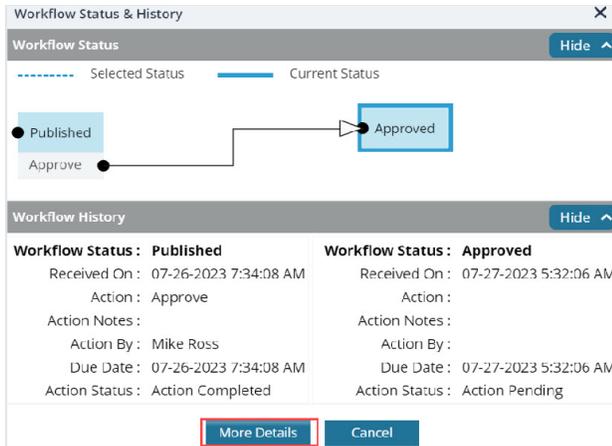


Figure 128: More Details option

The **History** page is displayed.

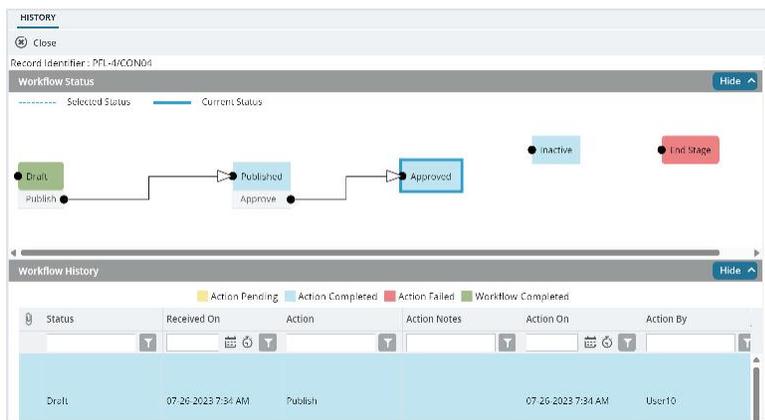


Figure 129: History Page

The **Workflow Status** section displays the progression of the workflow through the various statuses.

The **Workflow History** section displays the details associated with each of the workflow statuses.

The **Attachments** section displays the list of documents attached when users performed workflow actions on the selected record.

- To view details associated with any of these workflow statuses, click the appropriate workflow transition record in the **Workflow Status** section.

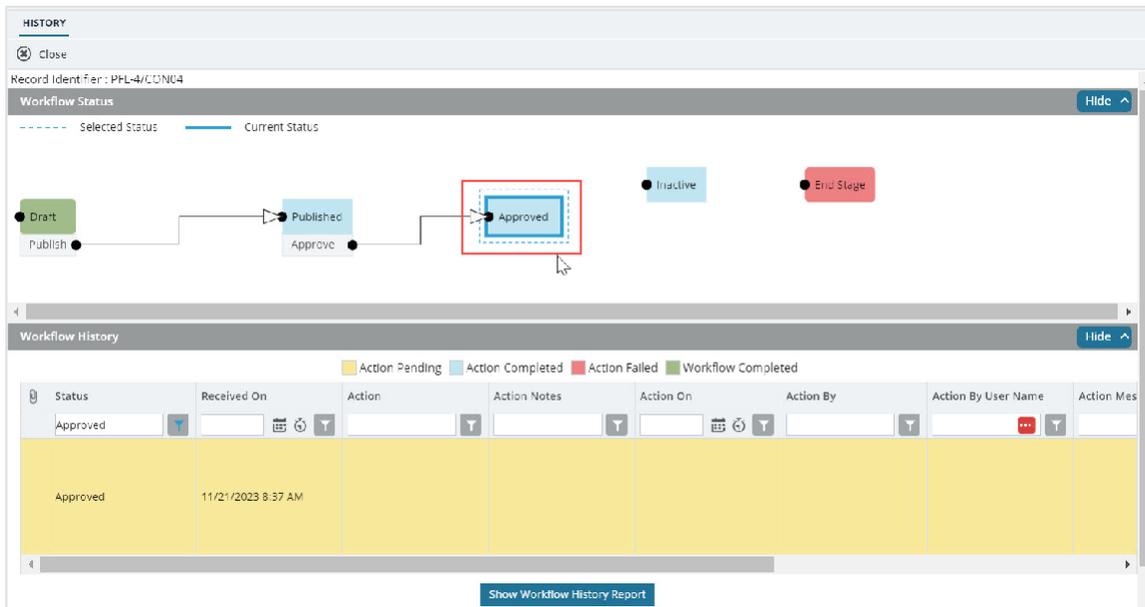


Figure 130: Workflow Status Section

The **Workflow History** section displays the details associated with the selected workflow statuses.

The **Attachments** section displays the files uploaded during the workflow transition of the selected workflow statuses.

- To open an attachment, in the **Attachments** section, in the **Document Name** column, click the required file name.

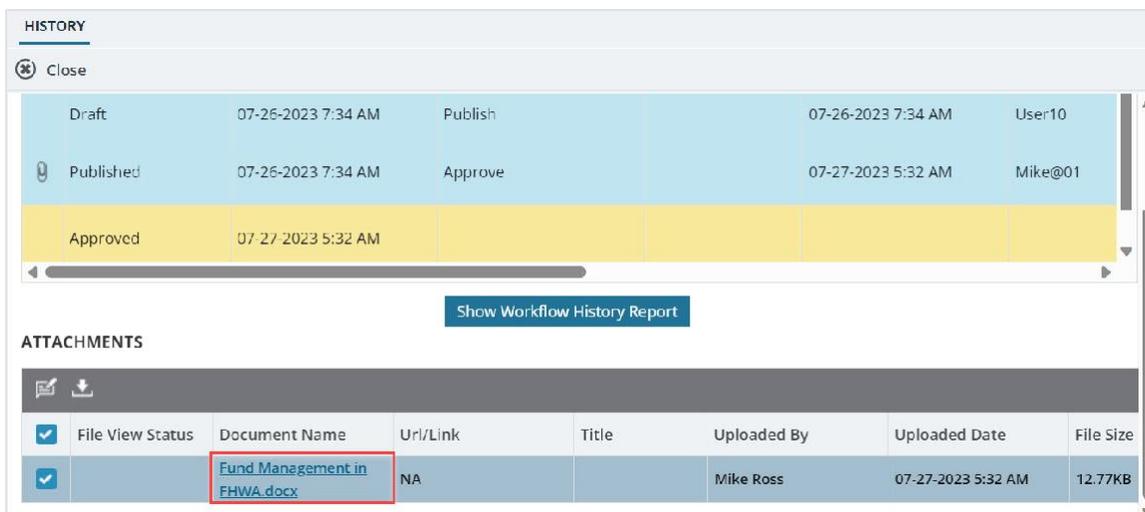


Figure 131: Clicking Document Name

The document is opened in the application viewer.

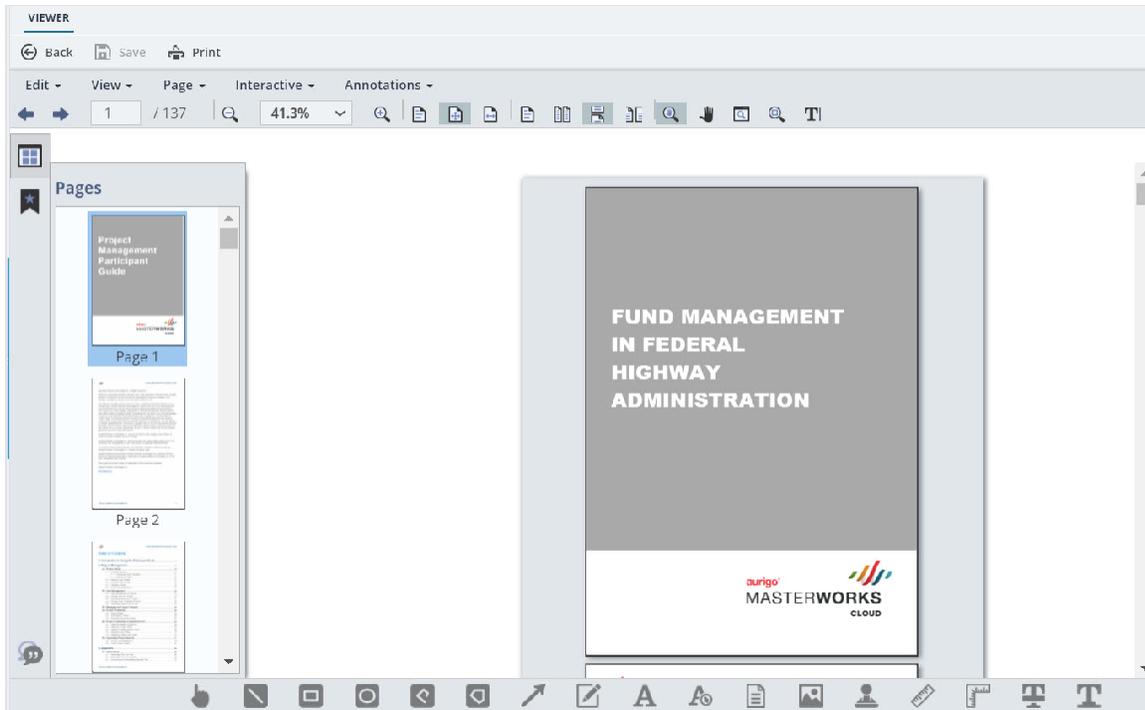


Figure 132: Viewing a Document in the Application Viewer

6. To view the workflow history as a report, click **Show Workflow History Report**.

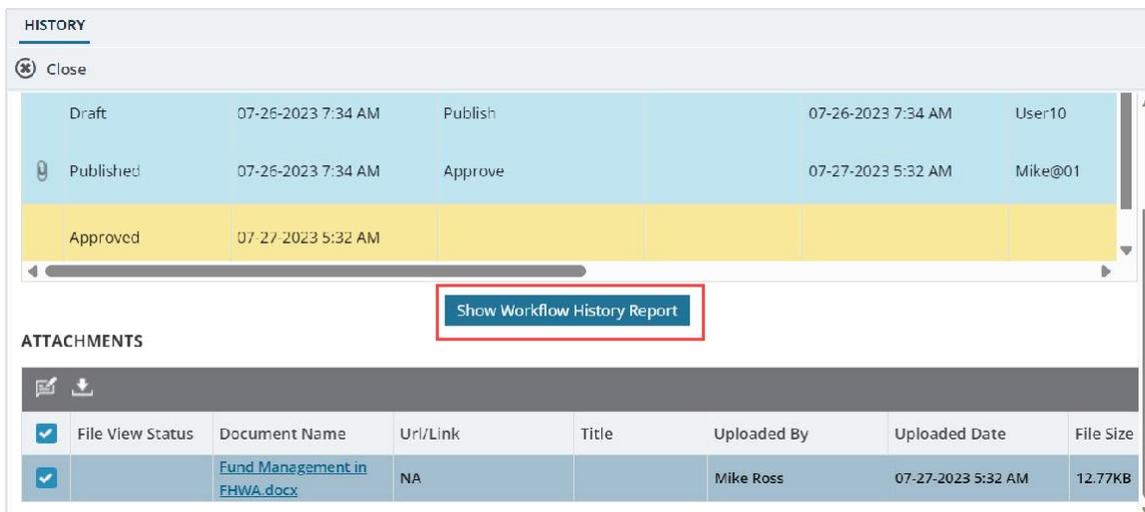


Figure 133: Using Show Workflow History Report Option

The **Workflow History Report** is displayed.

Workflow History Report						
Record Name:	Project Fund List		Record Details:	Fund Source Name		
Project Code:	Aurigo SIT MT NPS GLAC 14(4) & MT NPS GLACIER 14(1) - RKR		Project Name:	Aurigo - Test Rehabilitate Many Glacier Road & Many Glacier Road		
Status	Pending On Role(s)	Received On	Action	Action User Name	Action On	Due Date Override
Draft	A/E Designer,A/E Lead Designer,A/E Manager,Acquisitions,Administrator,Construction Admin Staff,Construction Component Lead,Design Component Lead,Designer,Project Manager	12/11/2023 2:28 AM	Publish	Administrator	12/11/2023 2:28 AM	12/11/2023 2:28 AM

Figure 134: Workflow History Report Page

4.3.3. Selecting Workflow Users

Prerequisites

Workflows are published for the form.

Overview

At any workflow stage, you can select specific users to mandatorily take an action at the defined workflow stage. These selected users must perform an action at the defined workflow stage to move the workflow to the subsequent workflow stage. Only selected workflow users can perform the workflow action.

For document folders in the Document Management module, users selected at a folder level are applicable to all sub-folders and document records within them. Additionally, you can select users at a sub-folder level and at a document record level.

The **Project Fund List** form is used for illustration purposes.

Steps

1. To select users in the workflow of a module or document folder, perform the following steps:
 - a. In the list page of a form or the list page of a document folder, click **Workflow**, and then click **Workflow User(s)**.

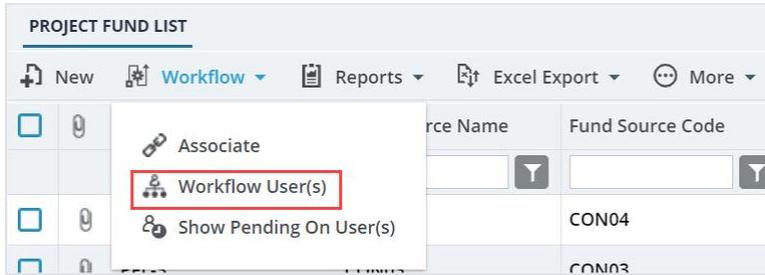


Figure 135: Using Workflow User(s) Option

- b. From the **Available Workflows** drop-down list, select a workflow. The published workflows associated with the form are displayed.



Figure 136: Published Workflows

The **Workflow User(s)** table is displayed. The list of stakeholders for each stage and role is displayed.

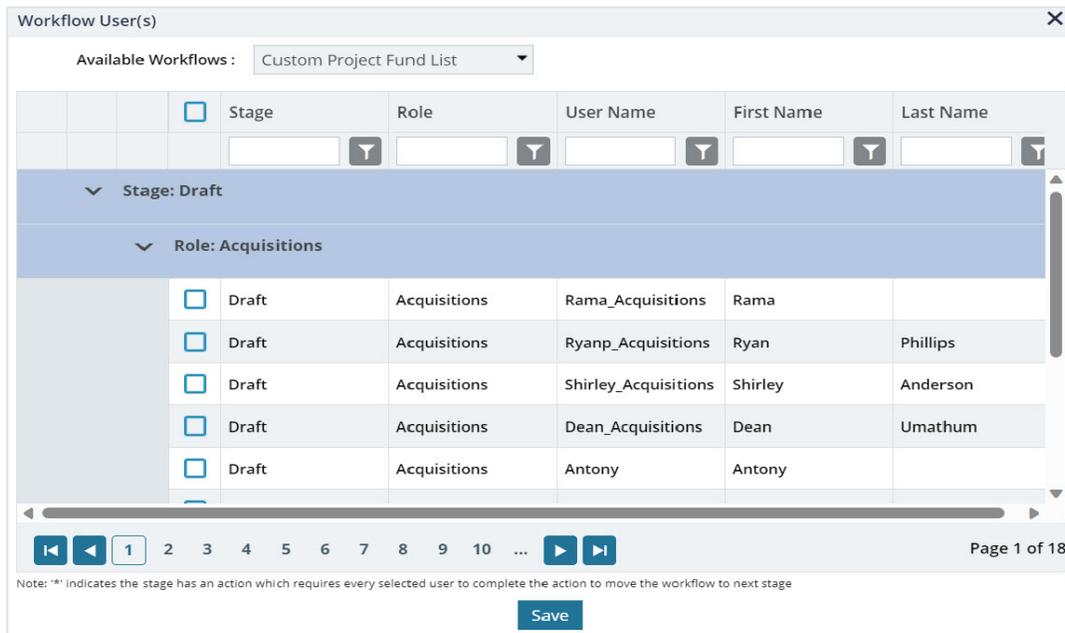


Figure 137: List of Stakeholders

2. Alternatively, to select users in a workflow for a record of a form or a document, perform the following steps:
 - Select a record, click **Workflow**, and then click **Workflow User(s)**.

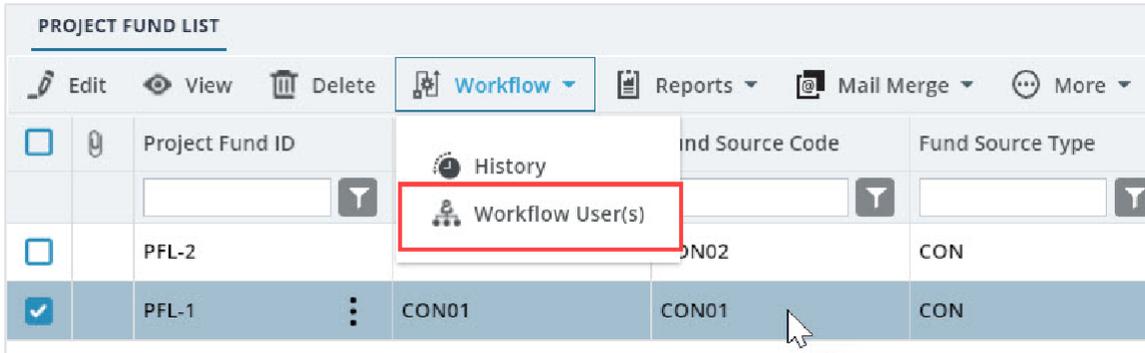


Figure 138: Using Workflow User(s) Option

The **Workflow User(s)** page with the associated workflow of the record is displayed.

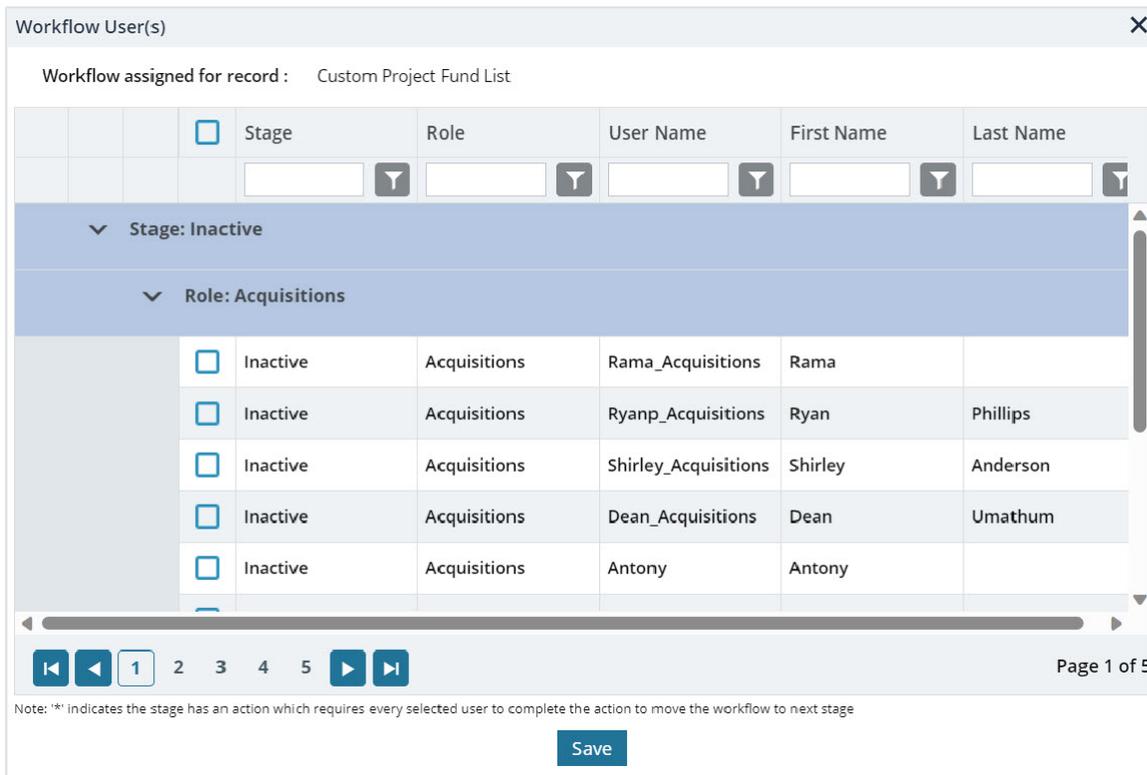


Figure 139: Workflow User(s) Page

Only workflow stages following the current workflow stage are displayed, and the list of stakeholders for each stage is displayed.

3. Select the users for each stage to add to the workflow.

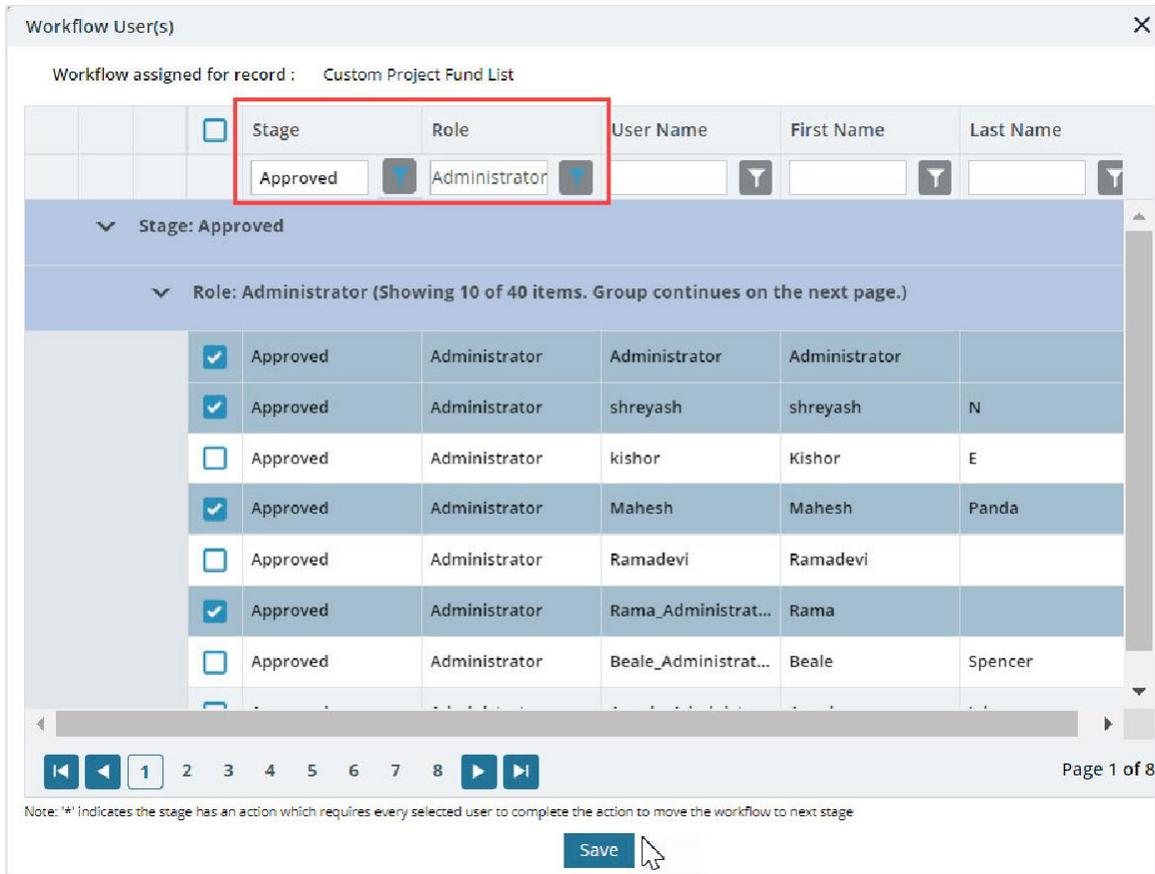


Figure 140: Using Filter Option

Optionally, you can filter the users using the following filters:

- Stage
- Role
- User Name
- First Name
- Last Name

4. Click **Save**.

Based on the defined workflow, any or all selected users must perform the workflow action on the selected record.

The **Workflow History** page displays the workflow actions performed by all users across all stages of the workflow.

4.3.4. Associating a Workflow

Prerequisites

- Workflows are published for the form.
- The logged-in user is assigned Administrator role.

Overview

Once a workflow is published as the default workflow for a form, every record of the form that is created in every project is associated with its default workflow. You can change the default workflow of a form. The newly associated workflow is effective for this form only in this project. New records created for this form in this project are associated with the newly selected workflow.

The **Project Fund List** form is used for illustration purposes.

Steps

1. In the navigation pane, click a form to open.

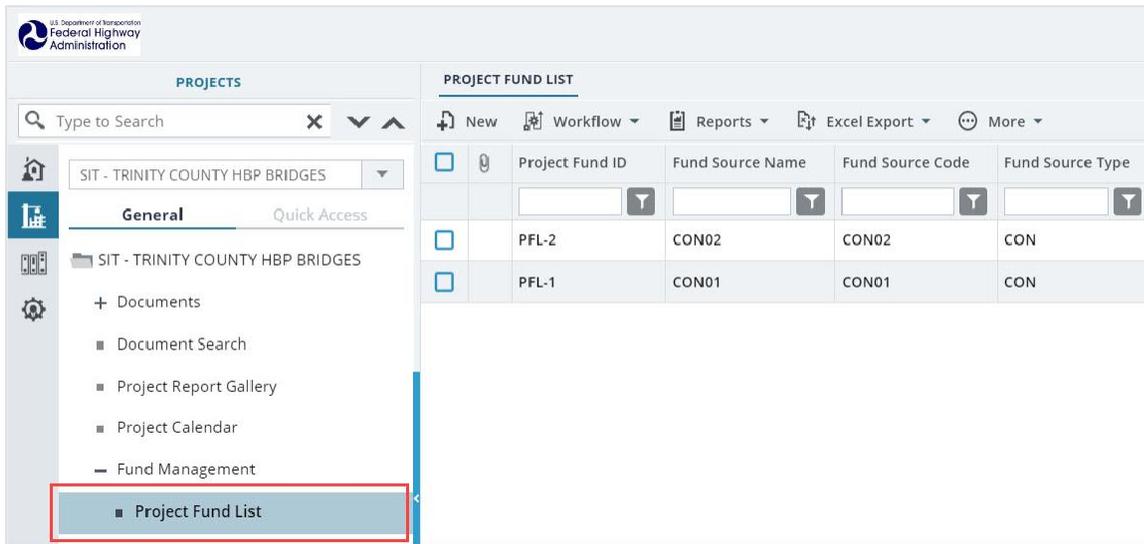


Figure 141: Selecting a Form

2. Click **Workflow**, and then click **Associate**.

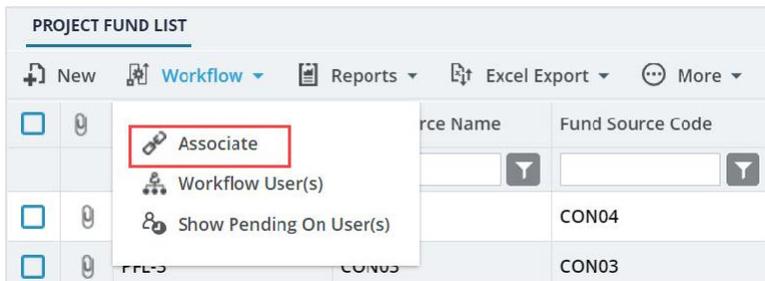


Figure 142: Using Associate Option

The **Workflow Association** dialog box is displayed.

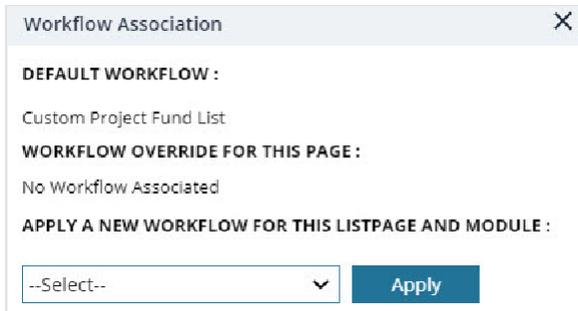


Figure 143: Workflow Association Dialog Box

The **Default Workflow** section displays the workflow name of the form that is marked as default for the form in the application.

3. To associate a different workflow to the form in the project, from the **APPLY A NEW WORKFLOW FOR THIS LISTPAGE AND MODULE** drop-down box, select the workflow to associate with the form for the project.

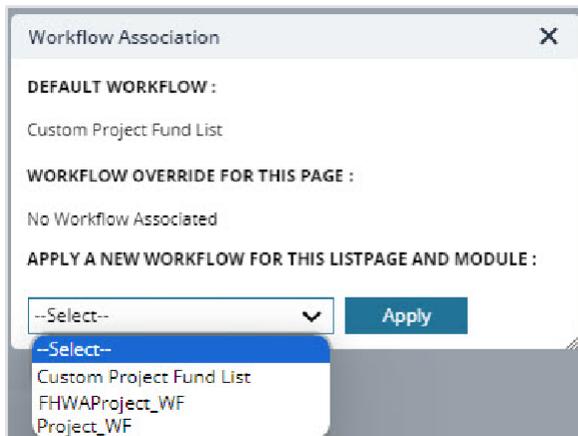


Figure 144: Using Applying a new Workflow for this List Page and Module Option

Available options are the published workflows for the respective form.

Upon selecting the workflow, the **WORKFLOW OVERRIDE FOR THIS PAGE** field displays the current workflow that is associated with the form for the project.

The screenshot shows a dialog box titled "Workflow Association" with a close button (X) in the top right corner. It contains the following sections:

- DEFAULT WORKFLOW :** Custom Project Fund List
- WORKFLOW OVERRIDE FOR THIS PAGE :** FHWAProject_WF (highlighted with a red box) and a blue "Remove" button.
- APPLY A NEW WORKFLOW FOR THIS LISTPAGE AND MODULE :** --Select-- (dropdown menu) and a blue "Apply" button.

Figure 145: Updated Workflow Override for this Page Field

If no selection is done in the **APPLY A NEW WORKFLOW FOR THIS LISTPAGE AND MODULE** field, then the **WORKFLOW OVERRIDE FOR THIS PAGE** field displays No Workflow Associated.

- Optionally, to reset the workflow of the form for the project to the default workflow as defined for the form in the application, click **Remove** adjacent to the **WORKFLOW OVERRIDE FOR THIS PAGE** field.

This screenshot is identical to Figure 145, but the blue "Remove" button next to the "FHWAProject_WF" workflow override is highlighted with a red box.

Figure 146: Resetting to Default Workflow

- Click **Apply** to save the changes. The workflow properties are associated with the form. The selected workflow is associated with the newly created records of this form within the project.