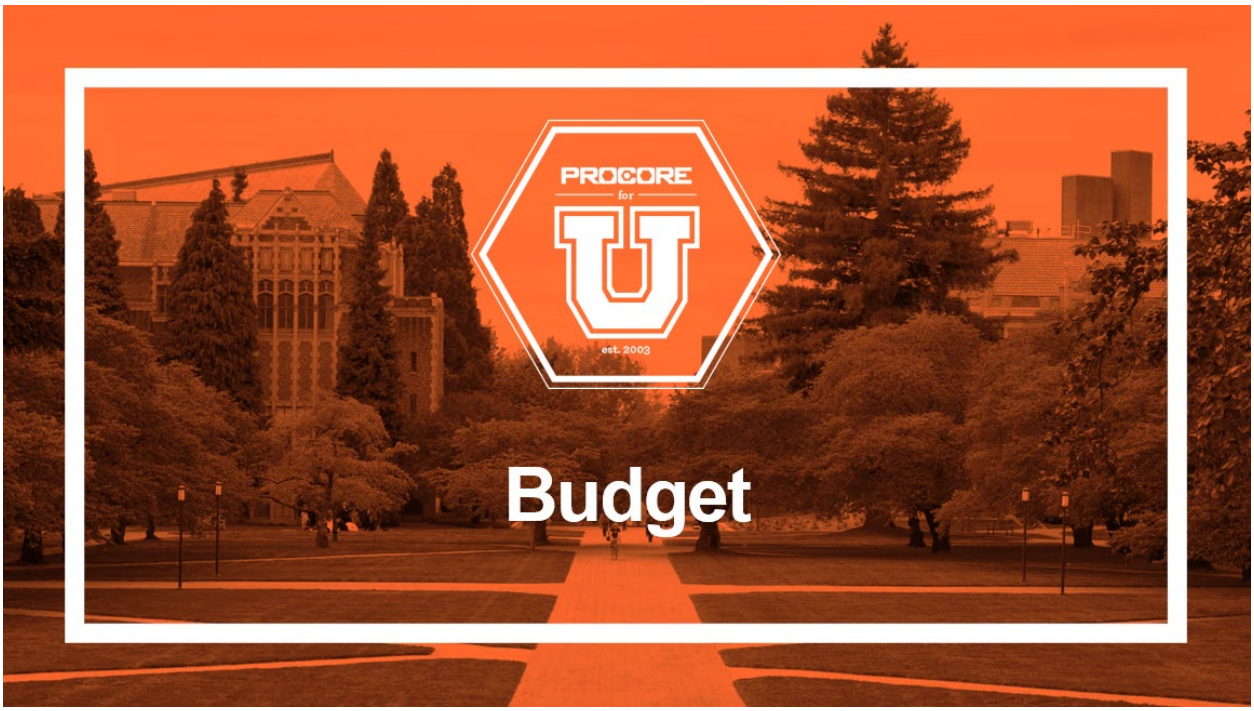


Budget

Procore - Budget Module
Solutions

The following exercises will provide you an opportunity to use construction management software to set up a project budget, edit a budget, create subcontracts (commitments), create a change event, perform budget modifications, and run reports.

Read the scenarios provided and develop the items as required.

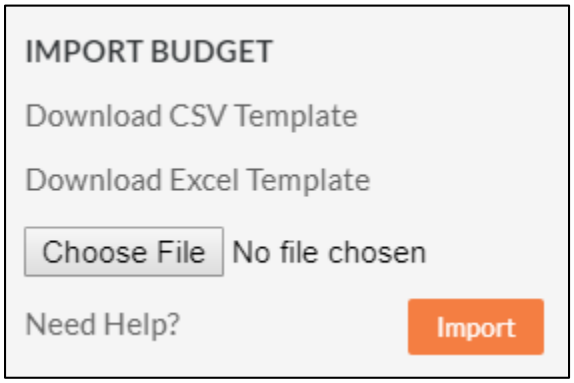
Sinagua Development has accepted the bid from your company for the construction of The Vortex Business Center, and you have entered into a lump sum contract with Sinagua Development. Now, you will take the bid numbers used for each work component to create a budget for your project, including numbers received from subcontractors (bids), numbers calculated based off of historic data, and plug numbers. Since some of these final costs will not be known until work is complete (T&M work), and since some numbers could not be obtained in time for the bid to the owner, you also have built in contingency of 1% of your bid to help cover unexpected costs, overruns, and trade damage.

EXERCISE #1 - UPLOADING AND REVIEWING A BUDGET

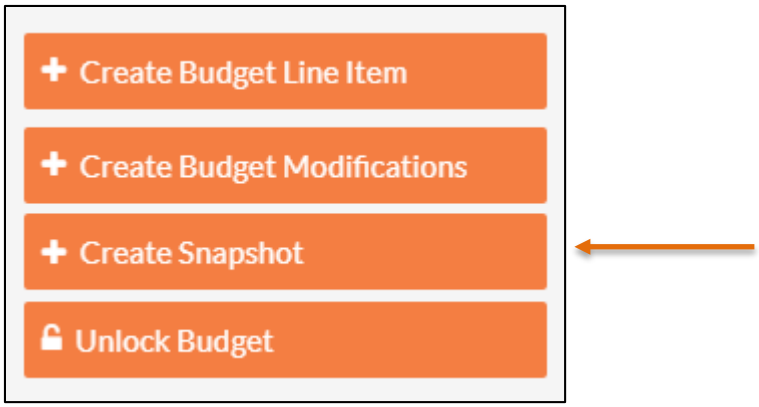
Before you begin this exercise, download the *Budget for Import to Procore.csv* file from the project's Documents tool.

A project budget can be created in Procore in two ways: inputting the budget line by line, or importing a budget using a CSV file. For this exercise, a project budget CSV file has been created for The Vortex Business Center and is included with the instructor and student files. The budget has been separated out by CSI MasterFormat divisions.

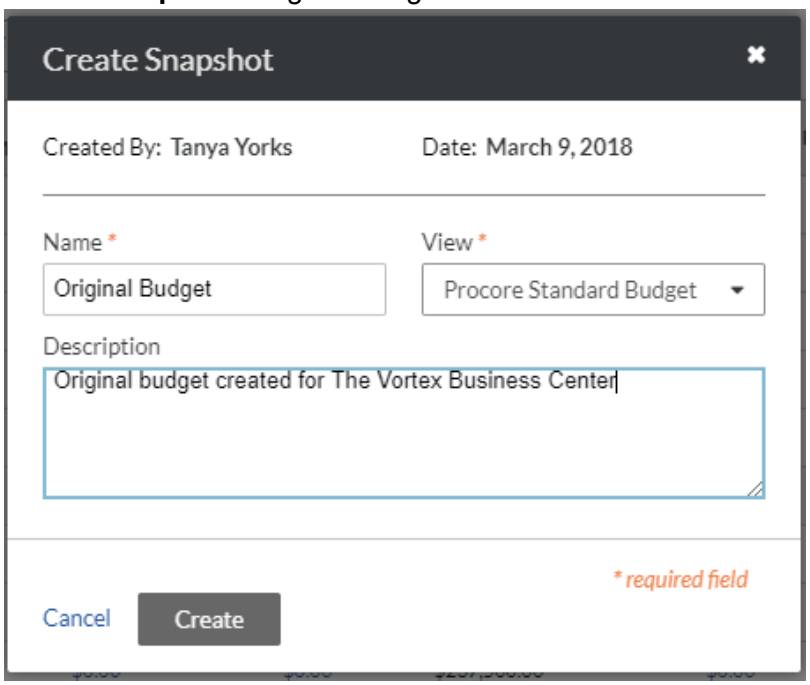
1. Upload Project Budget
    1. Navigate to the project's **Budget** tool
    2. In the **Import Budget** area in the right pane, click **Choose File**
    3. In the window that appears, select your CSV file *Budget for Import to Procore.csv* from its saved location on your computer and click 'Open'
    4. When the file name appears next to the 'Choose File' button, click **Import**



    5. In the Confirm Import screen that appears, click **Confirm Import**
    6. Review the budget and verify that all items of your budget were properly imported. *The final budget should total $20,300,000.00*
    7. Once you are satisfied with your budget, click the **Lock Budget** button to prevent any further edits to your original budget.
2. Create a Budget Snapshot:
    1. Navigate to the project's **Budget** tool
    2. Click the **+ Create Snapshot** button in the right pane



3. Enter in the following information:
    - **Name:** Original Budget
    - **View:** Procore Standard Budget
    - **Description:** Original budget created for The Vortex Business Center



4. Click **Create**
    - You will see a banner informing you that the snapshot has been created. Click **View Snapshot Data** to view the snapshot that you just created. You will also be able to view the snapshot by selecting it under the Snapshots drop-down menu.

EXERCISE #2 - COMMITMENTS

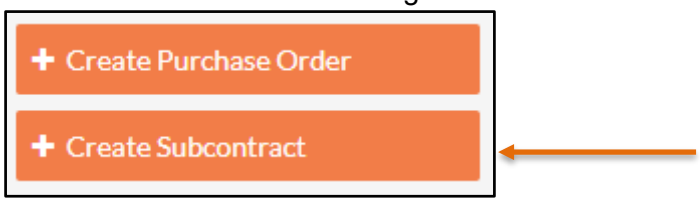
Before you begin this exercise, locate the *Instructor-Budget-Commitments_SOVs.pdf* document within the project's Documents tool. Download the file, or keep it open in the Documents tool in a separate tab in your browser.

With your Prime Contract already in place, you may now enter subcontractor commitments.

For the Vortex Business Center, you will be subcontracting out work to the subcontractors listed below. Create subcontracts (commitments) for each subcontractor using the information provided. For this exercise, *we will NOT be detailing any inclusions and exclusions*, nor attaching any documents to the contract.

Follow the steps below for each commitment.

1. Creating Subcontracts
    1. Navigate to the project's **Commitments** tool
    2. Click the **Create Subcontract** button in the right sidebar



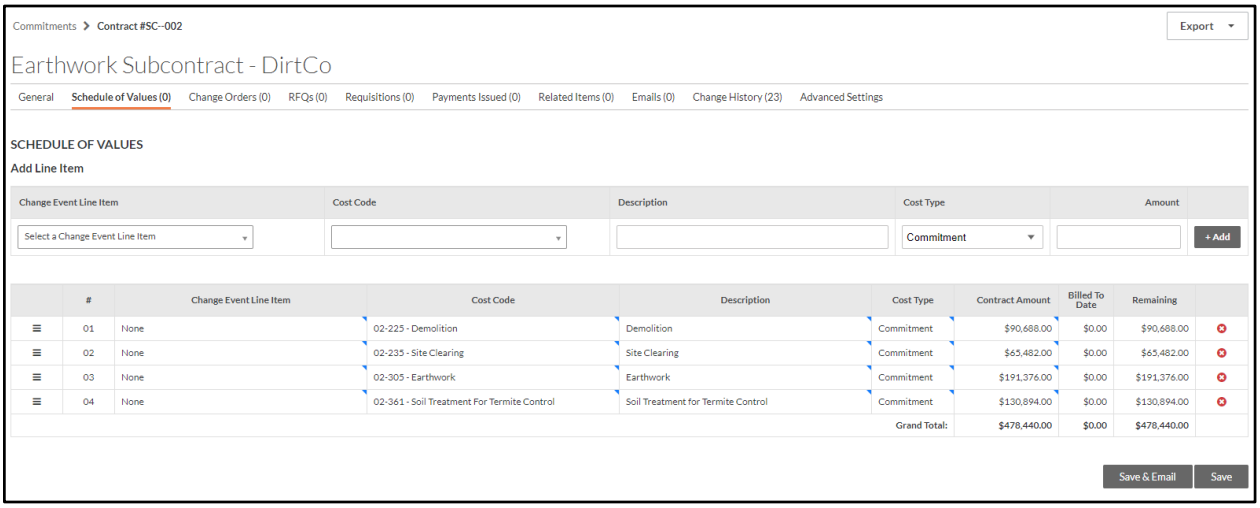
    3. Enter general information about the commitment
        - **#:** This will automatically populate with the next chronological number
        - **Title:** Provide a name for the commitment, per the information provided for each subcontract below.
        - **Contract Company:** Select the vendor/company responsible for each subcontract per the information below:

Contract Company	Title	Status	Default Retainage	Start Date	Finish Date
DirtCo	Earthwork Subcontract	Draft	5%	As determined by the instructor.	
PipeCo	Utilities Subcontract	Draft	5%		
PaveCo	Paving Subcontract	Draft	5%		
ConCo	Concrete Subcontract	Draft	5%		

        - **Status:** Draft
        - **Private:** Checked (optional)

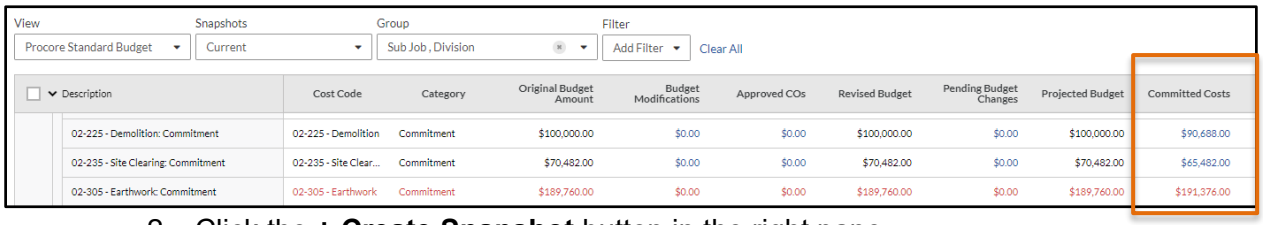
- **Default Retainage:** Per the table above
- **Description:** Per instructor
- **Start Date:** Per Instructor
- **Estimated Completion Date:** Per Instructor

4. Click **Create**
5. Click the **Schedule of Values** subtab
   - Click **Edit**
   - Use the **+ Add** button to add each of the contract's line items, per the *Instructor-Budget-Commitments_SOVs_Handout.pdf* in the Documents tool
     - Cost Code
     - Description
     - Type
     - Amount
   - Once all SOV line items have been inputted for the subcontract, **Save** your changes



6. Navigate back to the **General** subtab within each commitment and set the subcontract to 'Approved' status.

2. Budget and Commitment Review
   1. Navigate to the project's **Budget** tool
      - Within the *Committed Cost* column, you should see all commitments inputted in the previous step.



   2. Click the **+ Create Snapshot** button in the right pane
   3. Enter in the following information:
      - **Name:** First Commitments
      - **View:** Procore Standard Budget

    - **Description:** PaveCo, PipeCo, DirtCo, and ConCo commitments
4. Click **Create**
    - You will see a banner informing you that the snapshot has been created. Click **View Snapshot Data** to view the snapshot that you just created. You will also be able to view the snapshot by selecting it under the Snapshots drop-down menu.

EXERCISE #3 - BUDGET MODIFICATIONS AND CONTINGENCY DISTRIBUTION

The four above contracts have been entered in the previous exercise, and the contract amounts show up in the committed costs budget column. Some line items are now over your original budget (shown in red), and under budget on others (shown in the Forecast to Complete column, which is automatically calculated). For each of these contracts, we will create a budget modification to make the budgeted amount match the contracted amount. For line items that are over budget, we will move money from contingency to the over-budget line item; for line items that are under budget, we will move money from the under-budget line item to the contingency. All contingency should first come from the division/subcontract contingency line item (the Subcontract line item with the Category Other for each cost code), rather than the overall 00-010 contingency line item for the project.

1. Review Line Items for the Earthwork Subcontract
    1. Review each of the line items under the Earthwork Subcontract to identify the items under budget, over budget, at budget, and the contingency line item.

View: Procore Standard Budget | Snapshots: First Commitments | Group: Sub Job , Division | Filter: Add Filter | Clear All | Export

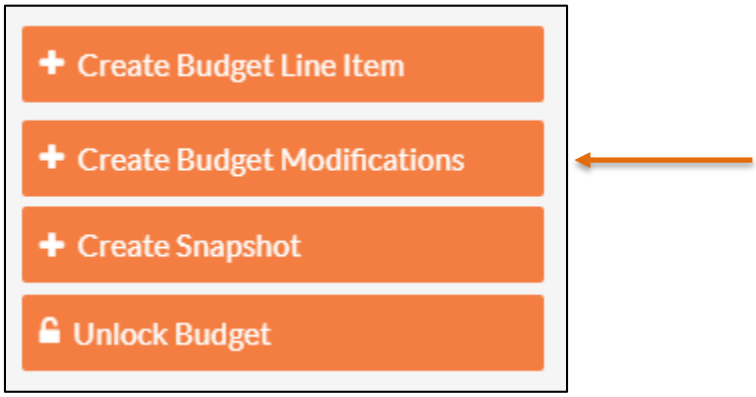
Description	...get	Pending Budget Changes	Projected Budget	Committed Costs	Direct Costs	Job to Date Costs	Pending Cost Changes	Projected Costs	Forecast To Complete	Estimated Cost at Completion	Projected over Under
02-225 - Demolition: Commitment	...00	$0.00	$100,000.00	$90,688.00	$0.00	$0.00	$0.00	$90,688.00	$9,312.00	$100,000.00	$0.00
02-235 - Site Clearing: Commitment	...00	$0.00	$70,482.00	$65,482.00	$0.00	$0.00	$0.00	$65,482.00	$5,000.00	$70,482.00	$0.00
02-305 - Earthwork: Commitment	...00	$0.00	$189,760.00	$191,376.00	$0.00	$0.00	$0.00	$191,376.00	$0.00	$191,376.00	$(1,616.00)

- Under Budget: Budget Surplus
    - Under budget line items have a balance in the Forecast to Complete column
        - 02-225 – Demolition: Commitment (under budget $9,312.00)
        - 02-235 - Site Clearing: Commitment (under budget $5,000.00)
- Over Budget: Budget Deficit
    - Over budget line items appear in red, with the Projected Over Under column listing the amount over budget.
        - 02-305 – Earthwork: Commitment (over budget $1,616.00)
- At Budget
    - Committed costs and budget are the same amount, meaning the contract amount matched the original estimated bid price for that line item.
        - 02-361 - Soil Treatment for Termite Control: Commitment
- Contingency Line Item
    - For the contingency line item, there will be a balance in the Forecast to Complete column, but there will be no Commitment associated with that line item. This is a contingency we set aside for the work in this subcontract, since some work will be done as a unit/price contract, and the final cost for this subcontract may change. For the Earthwork Subcontract, the line item with

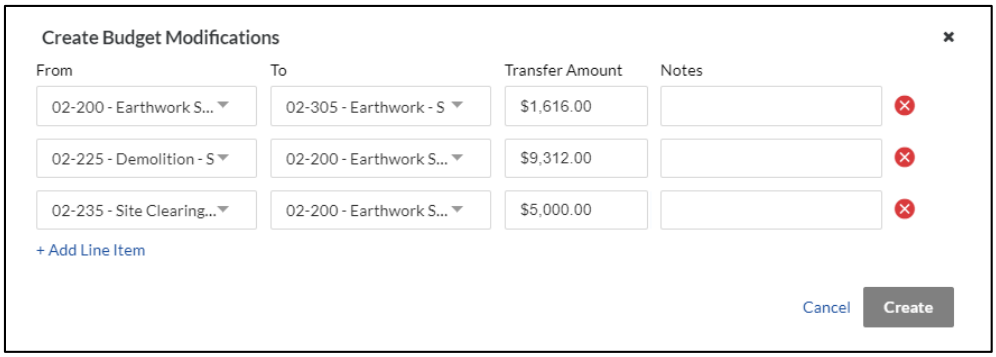
Category ‘Commitment’ is the Commitment line item, while the line item with Category ‘Other’ is the Contingency line item.

- 02-200 - Earthwork Subcontract: Other

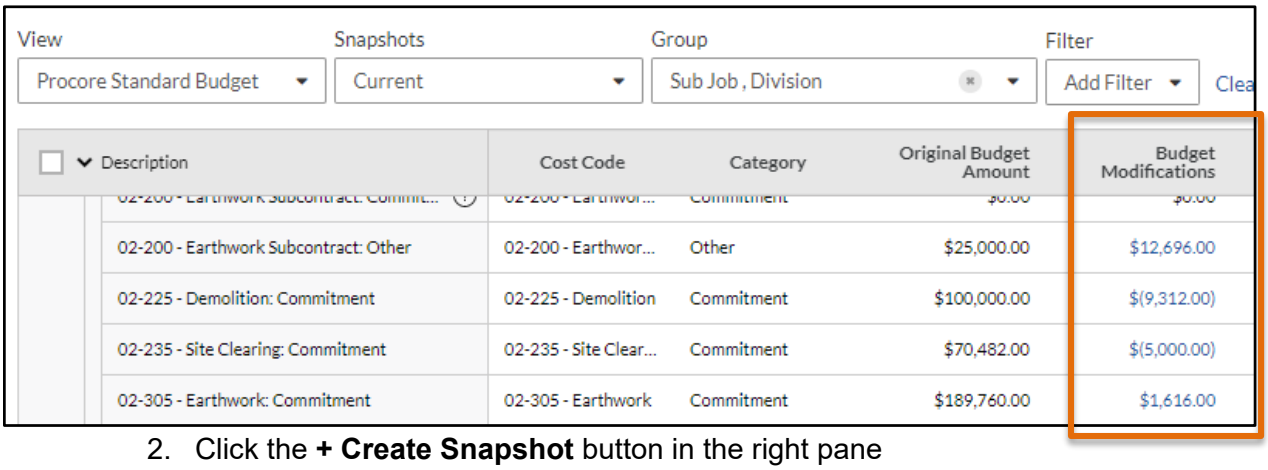
2. Create Budget Modifications
    1. Navigate to the project’s **Budget** tool
    2. Determine where you’re going to make your budget modification. Be sure to take notice of the specific Cost Codes and Categories of the affected line items.
    3. Click the **Create Budget Modifications** button.
        - Note: Your budget must be locked in order for this button to appear. You will no longer be able to Unlock your budget once you’ve created a Budget Modification.



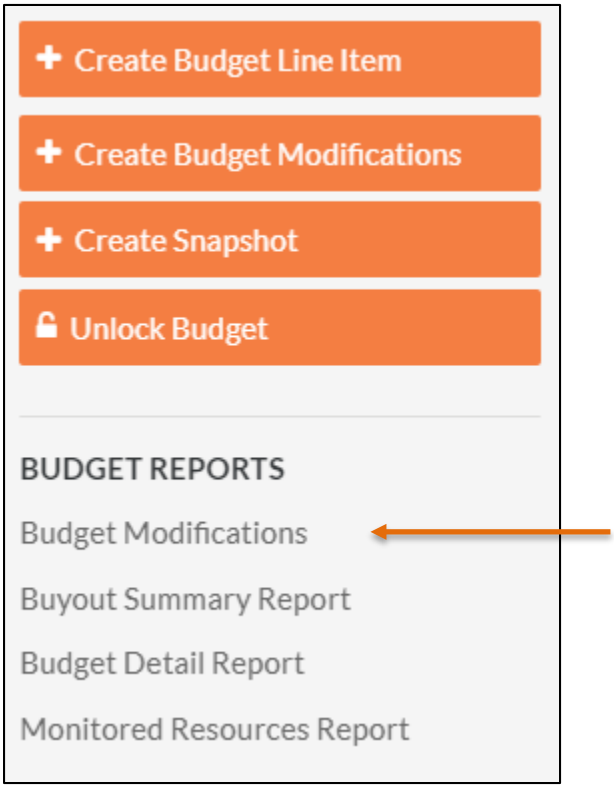
    4. Specify how you’re going to reallocate/transfer the amounts. Note that you can create more than one Budget Modification at a time by clicking + Add Line Item within the Create Budget Modifications screen. Click **Create** once you’re done adding line items.
        - For Earthwork item over budget:
            - From: 02-200 - Earthwork Subcontract - O
            - To: 02-305 - Earthwork - S
            - Transfer Amount: $1616.00
        - For Demolition item under budget:
            - From: 02-225 - Demolition - S
            - To: 02-200 - Earthwork Subcontract - O
            - Transfer Amount: $9312.00
        - For Site Clearing item under budget
            - From: 02-235 - Site Clearing - S
            - To: 02-200 - Earthwork Subcontract - O
            - Transfer Amount: $5000.00



3. Review Other Commitment Line Items
    1. Review each line item under the Utilities, Paving, and Concrete commitments.
    2. Follow the steps in the exercises above to move money to cover budget deficits and surpluses.
        - Note the contingency line items for each contract:
            - 02-500 - Utilities Subcontract - O
            - 02-700 - Paving Subcontract - O
            - 03-100 - Concrete Subcontract - O
4. Budget & Commitment Review
    1. Navigate to the project's **Budget** tool
        - Within the *Budget Modifications* column, you should see all changes made in the previous step for each of the affected line items



    2. Click the **+ Create Snapshot** button in the right pane
    3. Enter in the following information:
        - **Name:** First Budget Modifications
        - **View:** Procore Standard Budget
        - **Description:** PaveCo, PipeCo, DirtCo, and ConCo budget modifications
    4. Click **Create**
        - You will see a banner informing you that the snapshot has been created. Click **View Snapshot Data** to view the snapshot that you just created. You will also be able to view the snapshot by selecting it under the Snapshots drop-down menu.
5. Budget Modifications Report
    1. From the project's Budget tool, you can view the **Budget Modifications report**. A link to the report can be found in the right pane under the Budget tool.


Create Budget Line Item
Create Budget Modifications
Create Snapshot
Unlock Budget
BUDGET REPORTS
Budget Modifications
Buyout Summary Report
Budget Detail Report
Monitored Resources Report

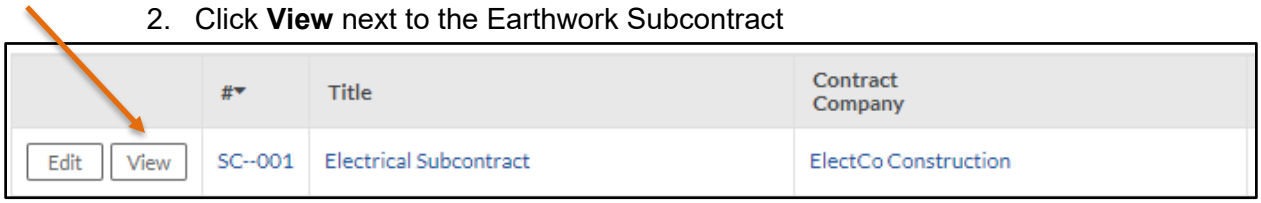
EXERCISE #4 - CHANGES TO THE CONTRACT

While performing earthwork operations, your crews uncovered buried debris and an abandoned tank, which were not noted in the soils report or in the existing conditions of the project plans. You contact Sinagua Development and ask how to proceed, since this will have an impact on the cost of the project and is an unforeseen condition. Sinagua asks you to proceed with removal, but asks for a rough idea of the cost.

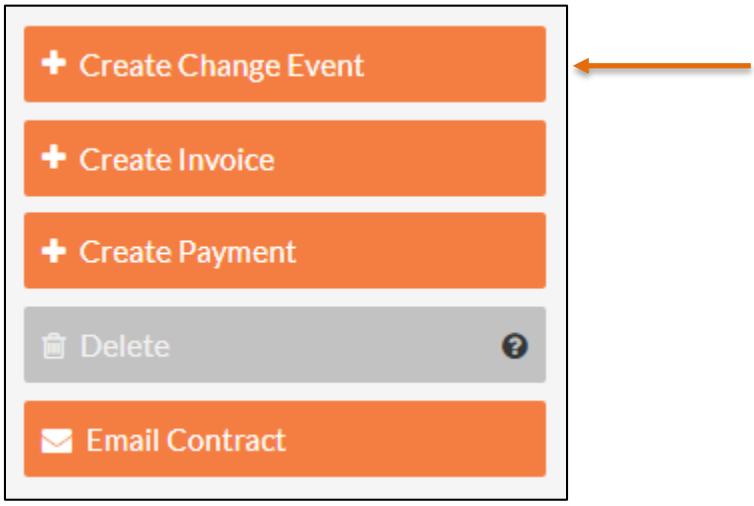
DirtCo has agreed to remove the debris and the abandoned tank for a unit cost of $55/hour for debris removal, and a lump sum cost of $8,000 for the tank removal. It is estimated that the debris will take 2 days to remove. The total cost will be approximately $8,880.00.

You will mark up all costs by 5% and submit a cost of $9,324 for two days' worth of work for debris removal, with a unit price of $57.75/hour for each additional hour of work above and beyond the anticipated two days. The owner agrees to this cost, and you submit a change order for the work.

1. Create a Change Event - DirtCo
    1. Navigate to the project's **Commitments** tool
    2. Click **View** next to the Earthwork Subcontract



    3. Click the **+ Create Change Event** button in the right pane

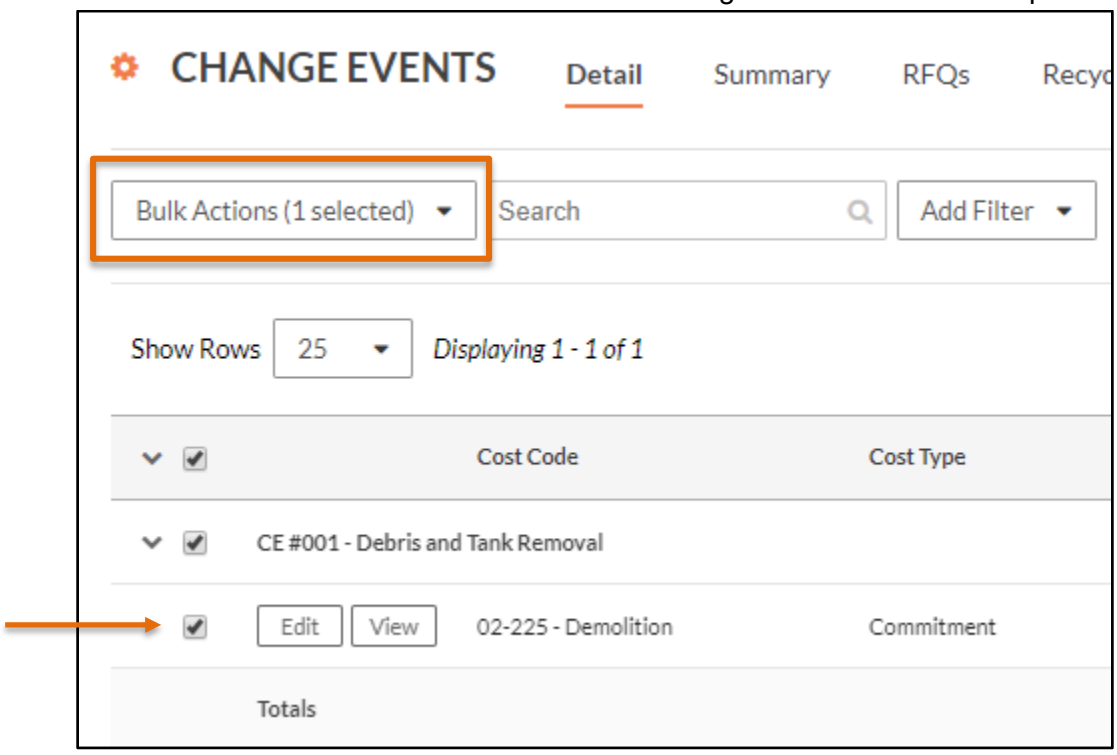


    4. Fill out the following fields:
        - **Change Event #:** This will automatically populate with the next chronological number
        - **Title:** Debris and Tank Removal
        - **Status:** Open
        - **Scope:** Out of Scope

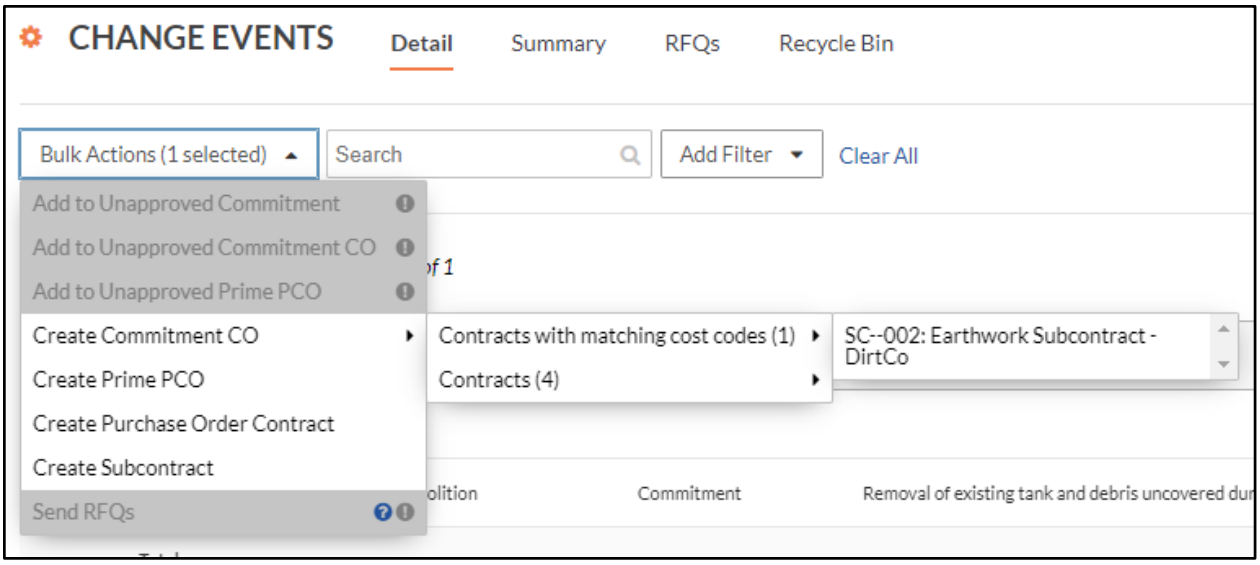
- **Type:** TBD
- **Change Reason:** Existing Condition
- **Description:** Removal of existing tank and debris uncovered during earthwork operations.
- **Cost Code:** 02-225 - Demolition
- **Type:** Commitment
- **Description:** Removal of existing tank and debris uncovered during earthwork operations
- **Vendor:** DirtCo
- **Contract:** [Earthwork Subcontract]
- **ROM:** $8880

5. Click **Create**

2. Create a Commitment Contract Change Order
    1. Navigate to the project's **Change Events** tool
    2. Select the *Debris and Tank Removal* Change Event created in the previous step

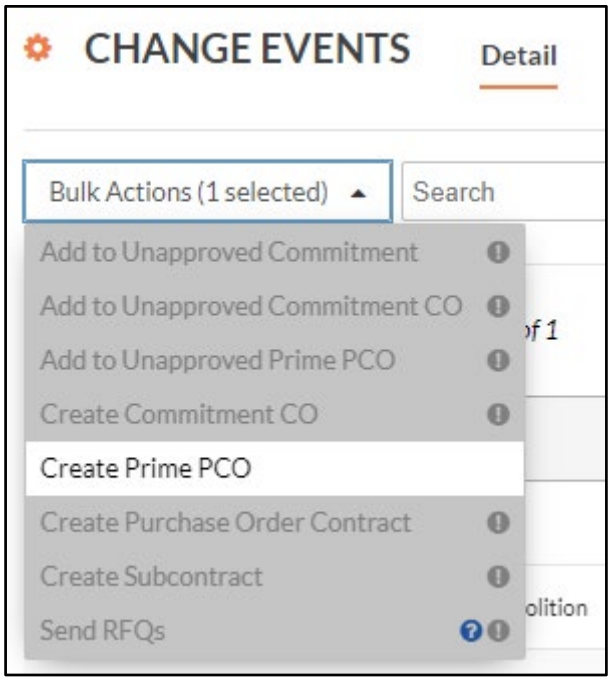


    3. From the **Bulk Actions** drop-down menu, click **Create a Commitment CO**
        - Note: The Schedule of Values will be created from the change event line items
    4. From the menu that expands, select the **Contracts with matching cost codes** followed by the **Earthwork Subcontract**

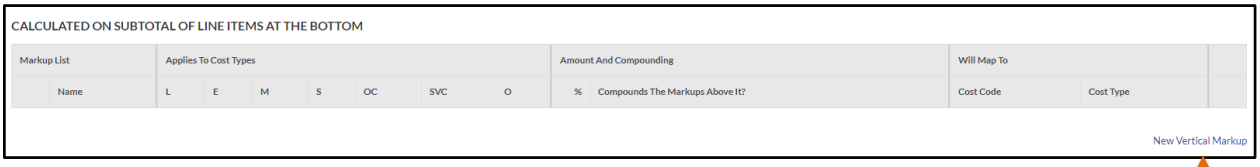


5. Fill out the following information *(note: some of this information will automatically populate)*:
    - **#:** This will automatically populate with the next chronological number
    - **Revision:** 0
    - **Title:** CE *[#]* - Debris and Tank Removal
    - **Status:** Pending - In review
    - **Private:** Checked (optional)
    - **Change Reason:** Existing Condition
    - **Due Date:** As determined by the instructor
    - **Designated Reviewer:** As determined by the instructor (optional)
    - **Description:** CE *[#]* - Debris and Tank Removal. Removal of existing tank and debris uncovered during earthwork operations.
    - **Schedule Impact:** 0
6. Click **Create**

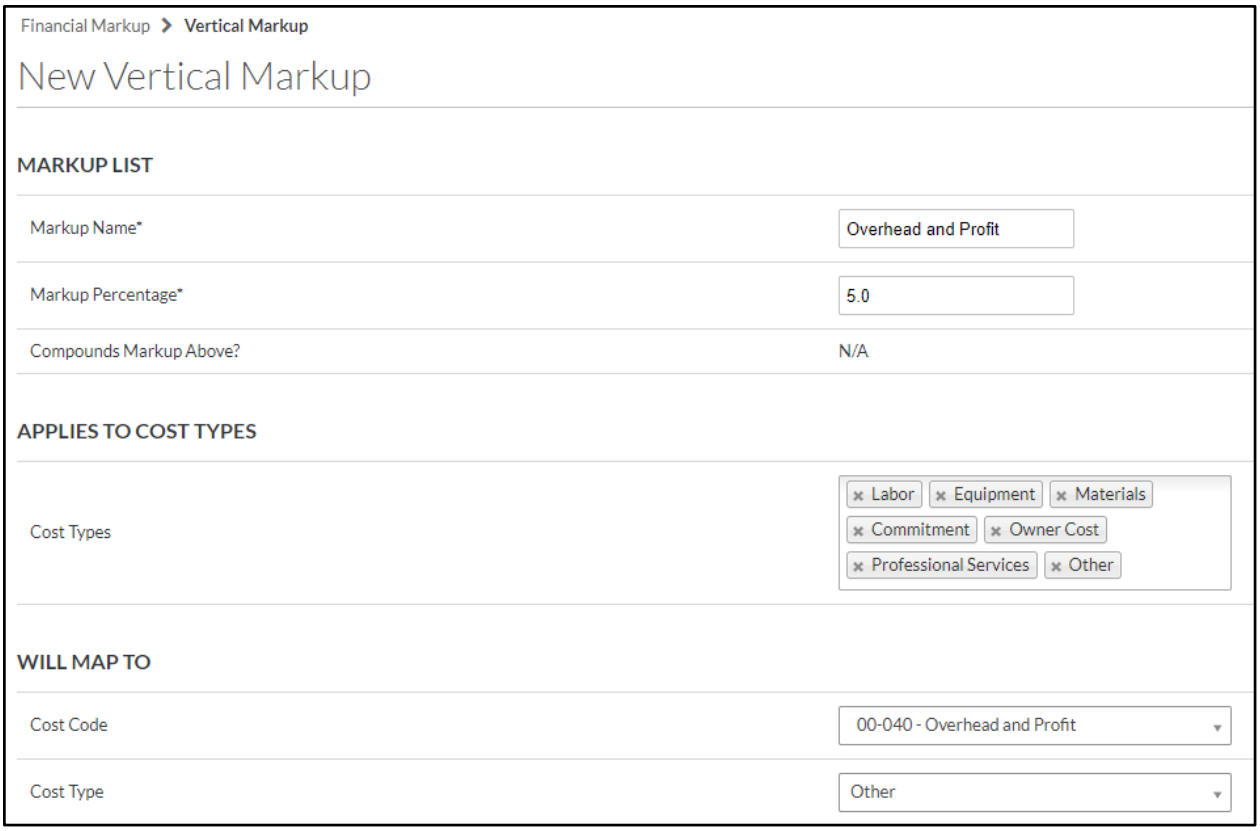
3. Create a Prime Potential Change Order
    1. Navigate to the project's **Change Events** tool
    2. Select the *Debris and Tank Removal* Change Event
    3. From the **Bulk Actions** drop-down menu, click **Create Prime PCO**
        - Note: The Schedule of Values will be created from the change event line items



4. Fill out the following information *(note: some of this information will automatically populate)*:
    - **#:** This will automatically populate with the next chronological number
    - **Revision:** 0
    - **Title:** CE *[#]* - Debris and Tank Removal
    - **Status:** Pending - In Review
    - **Prime Contract Change Order:** None
    - **Change Reason:** Existing Condition
    - **Private:** Checked (optional)
    - **Description:** CE *[#]* - Debris and Tank Removal. Removal of existing tank and debris uncovered during earthwork operations.
    - **Schedule Impact:** 0
5. Click **Create**
6. Navigate to the **Financial Markup** subtab
    - Click **New Vertical Markup**

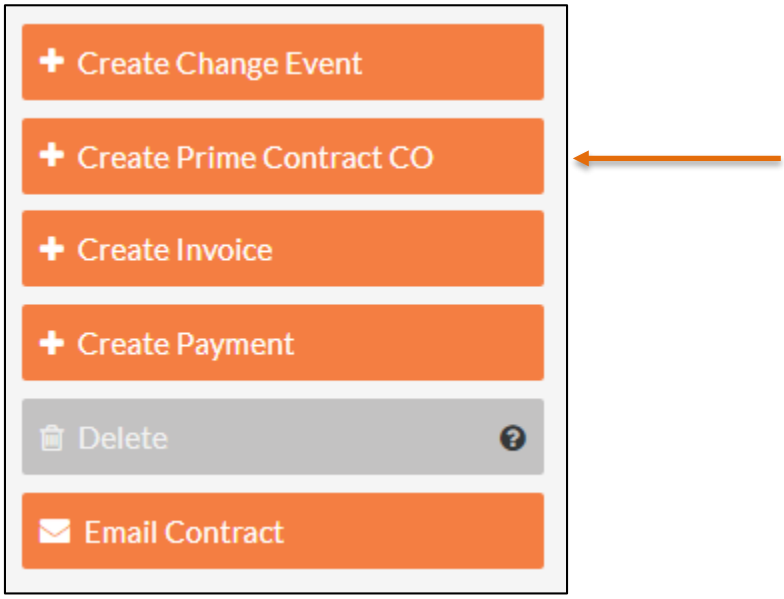


    - Enter the following information:
        1. **Markup Name:** Overhead and Profit
        2. **Markup Percentage:** 5.0
        3. **Will Map to**
            a. **Cost Code:** 00-040 - Overhead and Profit
            b. **Cost Type:** Other



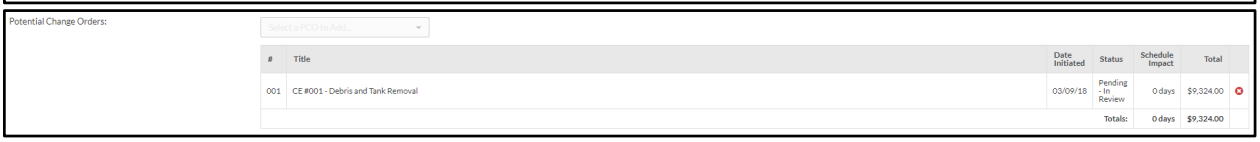
- Click **Save**

4. Create a Prime Contract Change Order
    1. Navigate to the project's **Prime Contract** tool
    2. Click **View** next to the Sinagua Development Prime Contract
    3. Click **Create Prime Contract CO**



    4. Fill out the following information:
        - **#:** This will automatically populate with the next chronological number

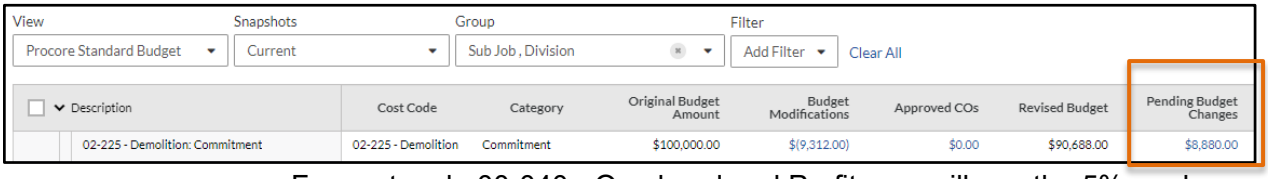
- **Revision:** 0
- **Title:** Tank and Debris Removal
- **Status:** Pending - In Review
- **Private:** Checked (optional)
- **Due Date:** As determined by the instructor
- **Designated Reviewer:** As determined by the instructor (optional)
- **Description:** Removal of existing tank and debris uncovered during earthwork operations.
- **Potential Change Orders:** Select the Debris and Tank removal PCO from the drop-down menu



- **Schedule Impact:** 0

5. Click **Create**

5. Pending Budget Change Review
   1. Navigate to the project's **Budget** tool
      - For cost code 02-225 - Demolition, you will see the $8,880 cost of the work within the *Pending Budget Changes* column, as the change order is not yet in Approved status.

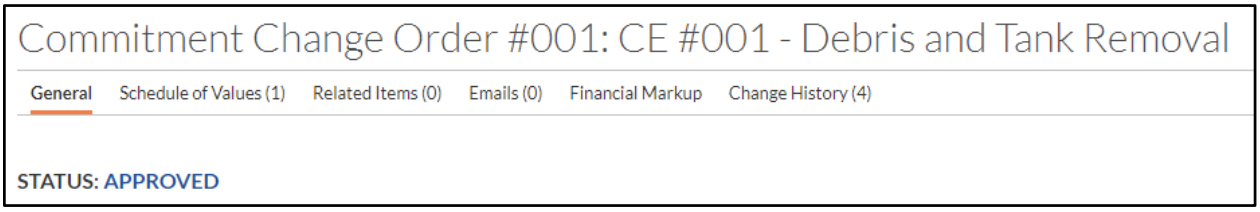


      - For cost code 00-040 - Overhead and Profit, you will see the 5% markup cost of $444 in the *Pending Budget Changes* column, as the change order is not yet in Approved status.

6. Change Order Approval
   1. Navigate to the project's **Change Orders** tool
   2. Click on the **Prime Contract** subtab
      - Click **View** next to the Tank and Debris Removal Change Order

- Click **Edit**
- Change the status to Approved and click **Save**

3. Navigate back to the project's **Change Orders** tool
4. Click on the **Commitments** subtab
    - Click **View** next to the Debris and Tank Removal Change Order
    - Click **Edit**
    - Change the status to Approved and click **Save**



7. Final Budget Review
    1. Navigate to the project's **Budget** tool
        - For cost code 02-225 - Demolition, you will now see the approved $8,880 cost of the work within the *Approved COs* column.
        - For cost code 00-040 - Overhead and Profit, you will now see the approved 5% markup cost of $444 in the *Approved COs* column.
    2. Click the **+ Create Snapshot** button in the right pane
        - Enter in the following information:
            1. **Name:** Change Order No. 1
            2. **View:** Procore Standard Budget
            3. **Description:** Change Order #001 - Tank and Debris Removal
        - Click **Create**
            1. You will see a banner informing you that the snapshot has been created. Click **View Snapshot Data** to view the snapshot that you just created. You will also be able to view the snapshot by selecting it under the Snapshots drop-down menu.