

InterScope Release 6.5
Electronic Cost Estimate Processing

Abstract

This manual describes the process of electronic Cost Estimate processing in InterScope Release 6.5

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Overview

InterScope Release 6.5 contains new features for the processing of electronic project documents.

These features include the ability to enter, edit, submit, accept and store *Cost Estimates (OC-25)*, *Designer and Contractor evaluations*, *Cost Estimates (OC-24)* and all supporting documentation electronically.

This manual deals only with the processing of electronic Cost Estimates. Comparable documents are available for Change Orders and Evaluations.

Audience

This manual is intended for use by Owner agencies and State Construction Office staff.

Workflow Automation

The business of processing electronic forms within InterScope is handled through the use of workflow automation.

This involves a sequence of steps which are executed by the various project participants.

In InterScope project roles are defined as: Designer, Contractor, Owner Agency and State Construction staff.

Workflow steps include such activities as creation, submission and approval of documents. As each step is completed, the workflow advances to the next step alerting the project participant responsible for the next step.

An audit trail is also kept identifying the user and completion time of each step. If at anytime, a step involves a rejection, the workflow is designed to return to a prior "restart" step for continued processing.

Email Alerts

A key element of workflow automation is the ability to communicate with workflow participants during workflow execution. InterScope uses email alert notifications defined for each workflow step.

Alert notifications can be based on workflow participation (or Role), User group, or specific UserId. They are sent to the email address registered to the user account of each project participant.

Cost Estimate Workflow

The Workflow for the Cost Estimate processing appears in the following diagram. The remainder of this document covers the details of the workflow processing and interactions with InterScope release 6.5.

State Construction Office - Interscope Cost Estimate Processing

WORKFLOW STEP	AGENCY	SCO/FCAP	INTERSCOPE
1 Agency creates OC-25	(1a) - Creates OC-25	(1c) Receives Alert	(1b) Sends Email Alert to: SCO/FCAP
2 Agency submits OC-25 for review	(2a) - Submits OC-25	(2c) Receives Alert	(2b) Sends Email Alert to: SCO/FCAP
3 SCO FCAP Reviews and Approves	(3c) Receives Alert		(3b) Sends Email Alert to: Agency

Figure 1

Getting Started

Each project participant must establish an active user account in InterScope.

This can be accomplished by accessing the following URL and completing the Request Logon sequence (Figure 8 on page 9)

<http://interscope2.doa.state.nc.us:8080/interscope/logon.action?>

New Account Instructions for Owner Agencies

Follow these steps for creating a new Agency user account:

- 1 – Select **State Employee** in the **User Type** field. This will display the entry form in Figure 7.
- 2 – Select your Department and Agency from the drop down lists and complete the remaining fields as indicated.
- 3 – Click **Submit**. A request will be sent to the InterScope Administrator who will review your request, verify the information against the data in InterScope, activate your account and send an email notifying you that the account has been activated.

The screenshot shows a web browser window titled "InterSCOPE :: State Construction Office - Project Environment". The main heading is "New User Logon". The form contains the following fields and options:

- User Type:** Radio buttons for "State Employee" (selected), "Designer", and "Contractor".
- Department / Agency:** Two dropdown menus. The first is set to "Administration" and the second to "St. Construction".
- Username:** Text input field containing "newuser".
- Full Name:** Text input field containing "SCO General Account".
- Email:** Text input field containing "sco@doa.nc.gov".
- Phone:** Text input field containing "(919) 807-4100". An example "(919) 807-4100" is shown to the right.
- Password:** Text input field with masked characters "••••••••".
- Confirm Password:** Text input field with masked characters "••••••••".

At the bottom of the form are three buttons: "Submit", "Cancel", and "Help". To the right of the "Help" button is the text "First Time Users Please see Help". Below the form, there is a "Contact Administrator" link, the release information "Release: 6.5.1-20100226 Copyright © 2009, 2010", and the footer "State of North Carolina :: State Construction Office".

Figure 2

Accessing InterScope

Once your account has been established, you may access InterScope to work on Cost Estimates.

Access the following URL to logon to InterScope Release 6.5 –

<http://interscope2.doa.state.nc.us:8080/interscope/logon.action?>

The following screen will appear.



Figure 3

Enter the username and password that has been established for your account.

The following screen will appear depending on the Role that has been established for your user account.

InterScope Roles are: **Designer**, **Contractor**, **Owner** (Agency) and **Monitor** (State Construction).

The Menu options shown on the page header are dependant on the type of logon, so different options will appear for each role.

InterScope always displays the **Home Page** immediately after logon. To view your Alerts, click on **Alerts!** on the Menu Bar.

Each Alert is intended as a shortcut to actions that required your attention. These may be, but are not limited to: Cost Estimates that need your approval, Notice of final Cost Estimate Acceptance by State Construction, Notice of Cost Estimate submission. Alerts are also provided for Evaluations and Cost Estimates.

The following is a typical screen display after a **Owner** logon.

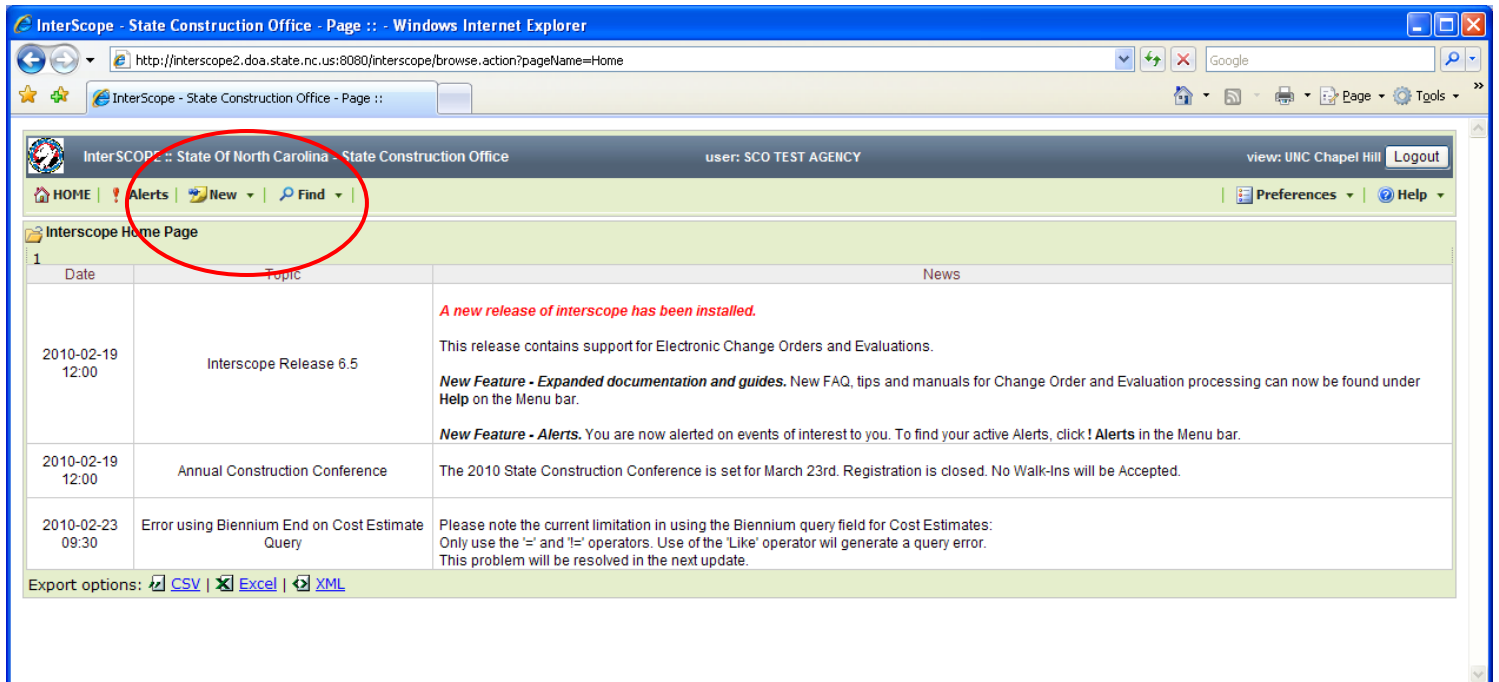


Figure 4

Entering Cost Estimates

Only Designers (or any InterScope user given the appropriate permission) are allowed to create and submit Cost Estimates for review, processing and approval.

Step 1 – Entering the Cost Estimate information

To create a new OC-25, select **Cost Estimate** from the **New** Menu (See Figure 4). The following screen is displayed.

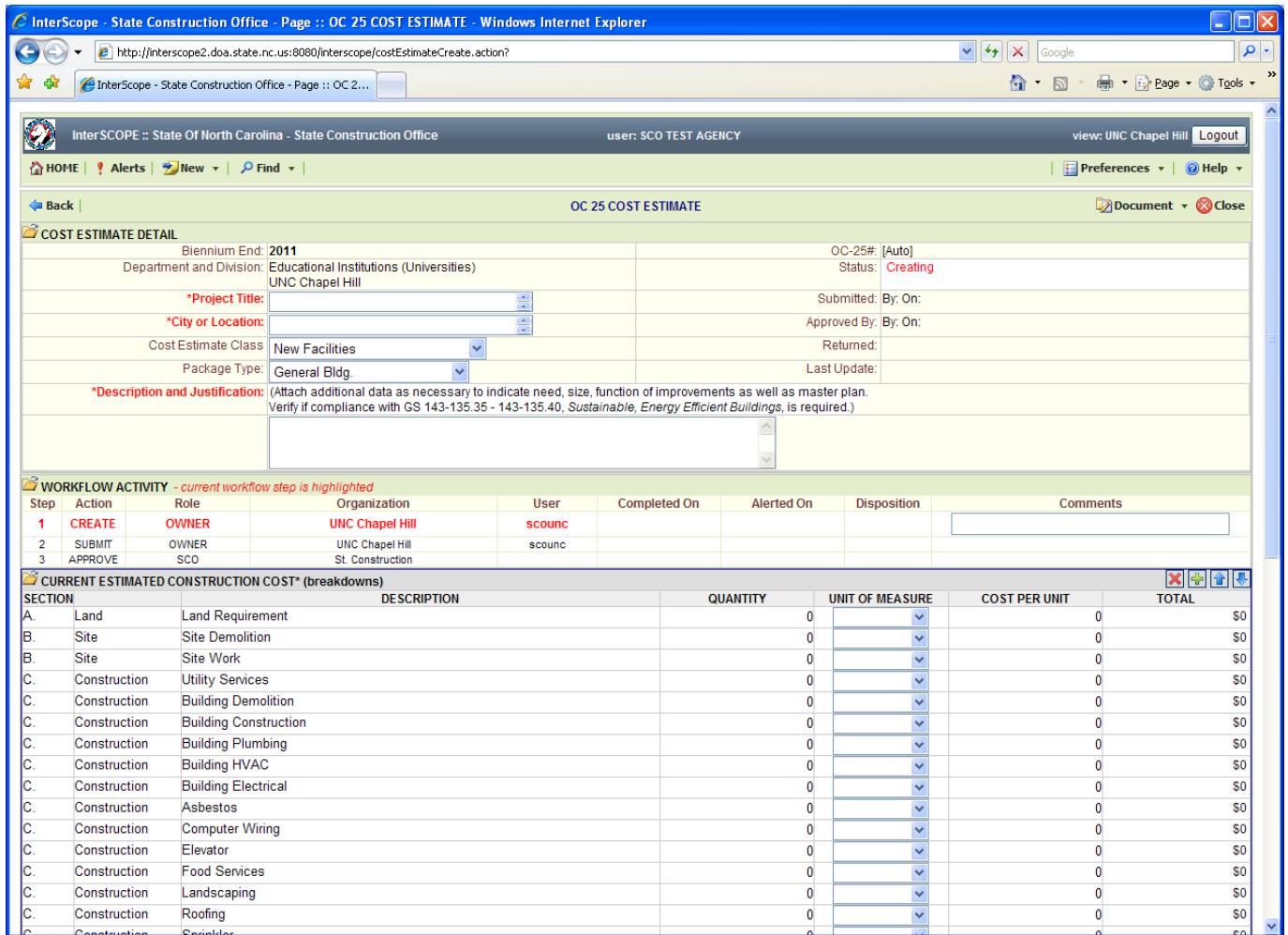


Figure 5

Enter data in the required data entry fields appearing in red (**Project Title, City/Location, Description/Justification**). Notice that the current **Biennium End** and **Department and Division** are pre-filled.

Select the desired **Cost Estimate Class, Package Type** from the drop down lists.

In the **WORKFLOW ACTIVITY** section, the first **Workflow Step** is highlighted and a **Comments** field is provided for entering workflow notes.

Step 2 – Entering Standard Cost Estimate Breakdowns

To begin entering Cost Estimate amounts, go to the **CURRENT ESTIMATED CONSTRUCTION COSTS(breakdowns)** section of the page.

A standard set of breakdowns is presented in this section.

Select the appropriate **Section** and **Description** for the breakdown to be entered and complete the following fields: **Quantity**, **Unit of Measure**, **Cost Per Unit**. The **Total** column is calculated automatically as data is entered

As this information is provided, the figures in the **ESTIMATED CONSTRUCTION COSTS** section will be updated.

Repeat the preceding steps for each breakdown.

Workflow Activity

Step	Action	Role	Organization	User	Completed On	Alerted On	Disposition	Comments
1	CREATE	OWNER	UNC Chapel Hill	scounc				
2	SUBMIT	OWNER	UNC Chapel Hill	scounc				
3	APPROVE	SCO	St. Construction					

SECTION	DESCRIPTION	QUANTITY	UNIT OF MEASURE	COST PER UNIT	TOTAL
A.	Land Requirement	100	Acres	1000	\$100,000
B.	Site Demolition	0		0	\$0
B.	Site Work	0		0	\$0
C.	Utility Services	0		0	\$0
C.	Building Demolition	0		0	\$0
C.	Building Construction	1	Lump Sum	23000	\$23,000
C.	Building Plumbing	0		0	\$0
C.	Building HVAC	0		0	\$0
C.	Building Electrical	0		0	\$0
C.	Asbestos	0		0	\$0
C.	Computer Wiring	0		0	\$0
C.	Elevator	0		0	\$0
C.	Food Services	0		0	\$0
C.	Landscaping	0		0	\$0
C.	Roofing	0		0	\$0
C.	Sprinkler	0		0	\$0
C.	Special	0		0	\$0
C.	Telecommunications	0		0	\$0
C.	Other	0		0	\$0
D.	Fixed Equipment	0		0	\$0
D.	Movable Equipment	0		0	\$0

ESTIMATED CONSTRUCTION COSTS: [Calculate using: Percentage Total] \$123,000

CONTINGENCIES:	<input type="text" value="0"/>	0% (Percentage of Estimated Construction Costs [3% New of 5% R&R])	\$0
DESIGN FEE:	<input type="text" value="0"/>	0% (Percentage of Estimated Construction Costs + Contingencies)	\$0
COMMISSIONING FEE:	<input type="text" value="0"/>	0% (0.5% simple; 1.0% moderate; 1.5% complex)	\$0
ADVANCE PLANNING:	<input type="text" value="0"/>	0% (Includes programming, feasibility, analysis)	\$0
FIXED OWNER COST:			\$0

Figure 6

Step 3 – Entering Custom Cost Estimate Breakdowns

Additional breakdown items can be added to the standard set available.

To add a custom breakdown:

1 – Move the mouse over the breakdown sheet and click to select the insert position. The selected line will be highlighted in grey.

2 – Select the **+** button in the upper right corner of the breakdown sheet.

3 – A new line will be inserted below the highlighted line.

4 – Select the appropriate **Section** from the drop down list (ie. Land, Site, Construction, Equipment, Other)

Project Details:

- Biennium End: 2011
- Department and Division: Educational Institutions (Universities)
- OC-25#: 201160500212
- Project Title: Test OC-25 for new User Manual
- City or Location: Raleigh, NC
- Cost Estimate Class: New Facilities
- Package Type: General Bldg.
- Description and Justification: Test OC-25 for new User Manual

Workflow Activity:

Step	Action	Role	Organization	User	Completed On	Alerted On	Disposition	Comments
1	CREATE	OWNER	UNC Chapel Hill	scount	2010-03-18 16:58		Pending	
2	SUBMIT	OWNER	UNC Chapel Hill					
3	APPROVE	SCO	St. Construction					

Current Estimated Construction Cost* (breakdowns)

SECTION	DESCRIPTION	QUANTITY	UNIT OF MEASURE	COST PER UNIT	TOTAL
A.	Land Land Requirement	100.0	Acres	1000.0	\$100,000
B.	Site Site Demolition	0		0	\$0
B.	Site Site Work	0		0	\$0
C.	Construction Utility Services	0		0	\$0
C.	Construction Building Demolition	0		0	\$0
C.	Construction Building Construction	1.0	Lump Sum	23000.0	\$23,000
C.	Construction Building Plumbing	0		0	\$0
C.	Other Additional Consulting Services NEC	1	Lump Sum	5000	\$5,000
C.	Construction Building HVAC	0		0	\$0
C.	Construction Building Electrical	0		0	\$0
C.	Construction Asbestos	0		0	\$0
C.	Construction Computer Wiring	0		0	\$0
C.	Construction Elevator	0		0	\$0
C.	Construction Food Services	0		0	\$0
C.	Construction Landscaping	0		0	\$0
C.	Construction Roofing	0		0	\$0
C.	Construction Sprinkler	0		0	\$0
C.	Construction Special	0		0	\$0
C.	Construction Telecommunications	0		0	\$0
C.	Construction Other	0		0	\$0
D.	Equipment Fixed Equipment	0		0	\$0
D.	Equipment Movable Equipment	0		0	\$0

ESTIMATED CONSTRUCTION COSTS: [Calculate using: Percentage Total] \$128,000

CONTINGENCIES: % (Percentage of Estimated Construction Costs [3% New of 5% R&R]) \$0

Figure 7

Step 4 – Completing the Estimated Construction Costs Sections

For **ESTIMATED CONSTRUCTION COSTS**, there are five options:

1. Contingencies
2. Design Fee
3. Commissioning Fee
4. Advance Planning
5. Fixed Owner Cost

A percentage or exact amount can be entered for each estimated costs. Select either **Percentage** or **Total** for before the value is entered. The system will calculate the corresponding percentage (if total is selected) or total (if percentage is selected).

A mix of percentages and totals may be entered toggling back and forth between the percentage and total options before each line is entered. For example, a percentage may be entered for Contingencies, but then a total for the Design Fee.

Completing the **ESTIMATED CONSTRUCTION COSTS** section yields a figure for **ESTIMATED COSTS**.

The final option is to enter an **Escalation % as a percentage of the Estimated Costs**.

Enter the number of months to the mid-point of construction, then elect the correct percentage that corresponds with the number of months used.

D.	Equipment	Fixed Equipment		0			0	\$0
D.	Equipment	Movable Equipment		0			0	\$0
ESTIMATED CONSTRUCTION COSTS:								\$128,000
[Calculate using: <input type="radio"/> Percentage <input checked="" type="radio"/> Total]								
CONTINGENCIES:			4%	(Percentage of Estimated Construction Costs [3% New of 5% R&R])				5120
DESIGN FEE:			3%	(Percentage of Estimated Construction Costs + Contingencies)				4000
COMMISSIONING FEE:			0.5%	(0.5% simple; 1.0% moderate, 1.5% complex)				665
ADVANCE PLANNING:			0%	(Includes programming, feasibility, analysis)				0
FIXED OWNER COST:								\$0
ESTIMATED COSTS: (Estimated Construction Costs + Contingencies + Design Fee + Commissioning Fee + Advance Planning)								\$137,785
(From Est. Date to mid-point of construction) = 12 months [General: 12-18 months > 0.00 %]								
ESCALATION COST INCREASE (Total of Estimated Construction Costs X Escalation %)								\$0
TOTAL ESTIMATED PROJECT COSTS: (Estimated Costs + Escalation Cost Increase)								\$138,000

* Attach basis and justification for estimate, include description, quantities, units, special features, similar cost on recent projects, etc.
 ** Include items such as grading, roads, walks, parking, etc.
 *** Attach explanation of any special building, mechanical, or electrical service requirements with appropriate distance to existing buildings, water, gas, electrical or other utility service.

Figure 8

Step 4 – Attaching supporting documentation

Supporting document can be uploaded using the Attachments Section. To attach a document, enter a **Description** and select the upload file by pressing the **Browse** button. A window will be displayed for selecting a local file on your computer to upload. Selecting the file with return to the input page.

To complete the upload, press the **yellow Attach** button. Once the file is successfully uploaded, it will appear in the list. Attach as many files are necessary to complete the supporting documentation for the OC-25. Each file provided will be accessible online by reviewers.

Step 5 – Saving the new Cost Estimate

To save the new Cost Estimate information, select **Save** from the **Document** menu.

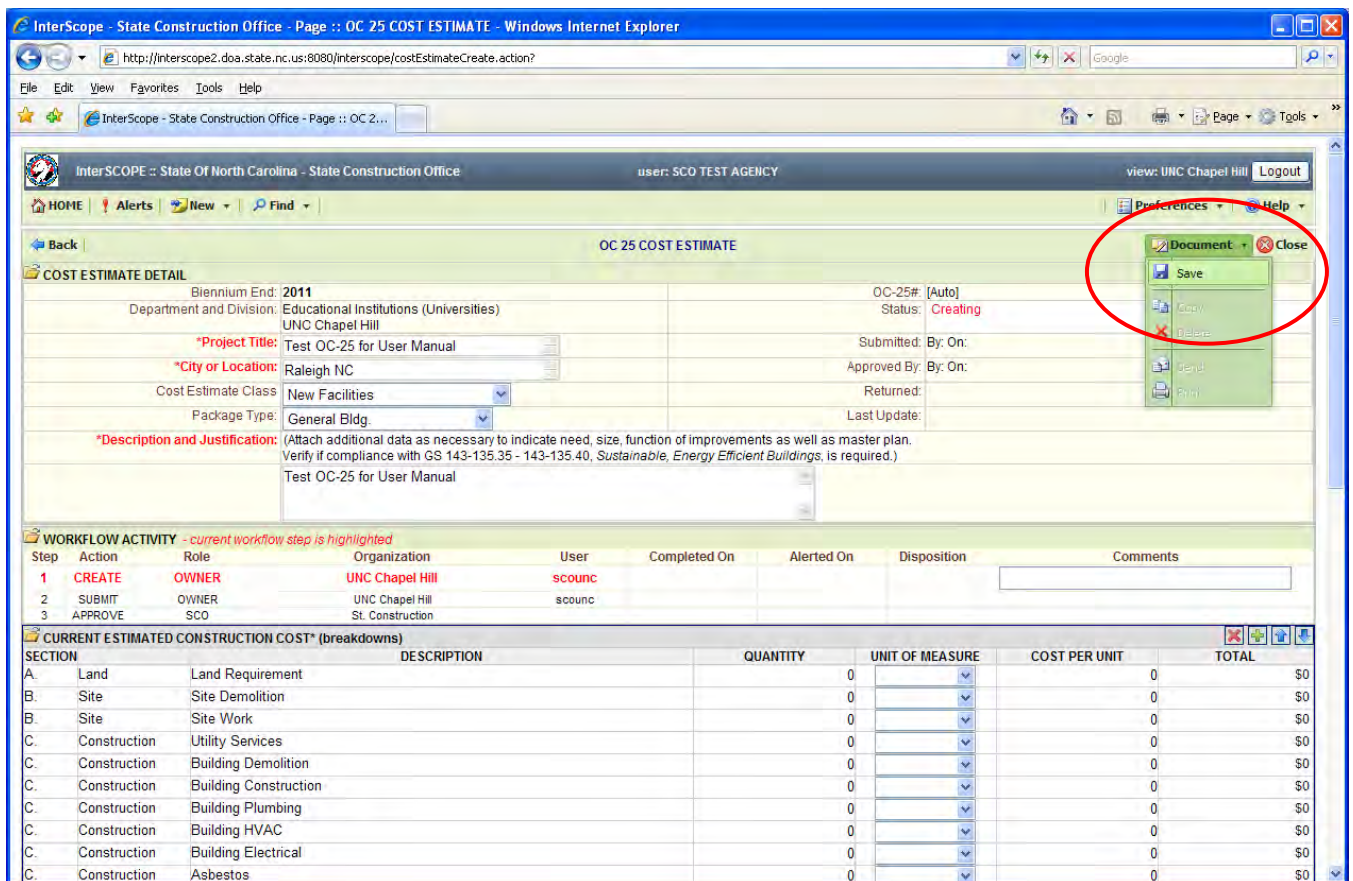


Figure 9

InterSCOPE will display **Submitting Update. Please wait..** as it creates the Cost Estimate.

Step 6 – Editing the Cost Estimate

Once the Cost Estimate is created, the following page is displayed. Notice that the Workflow has advanced to the next step (2) and information for the preceding step has been created.

A **Workflow** menu now appears on the page next to the **Document** menu.

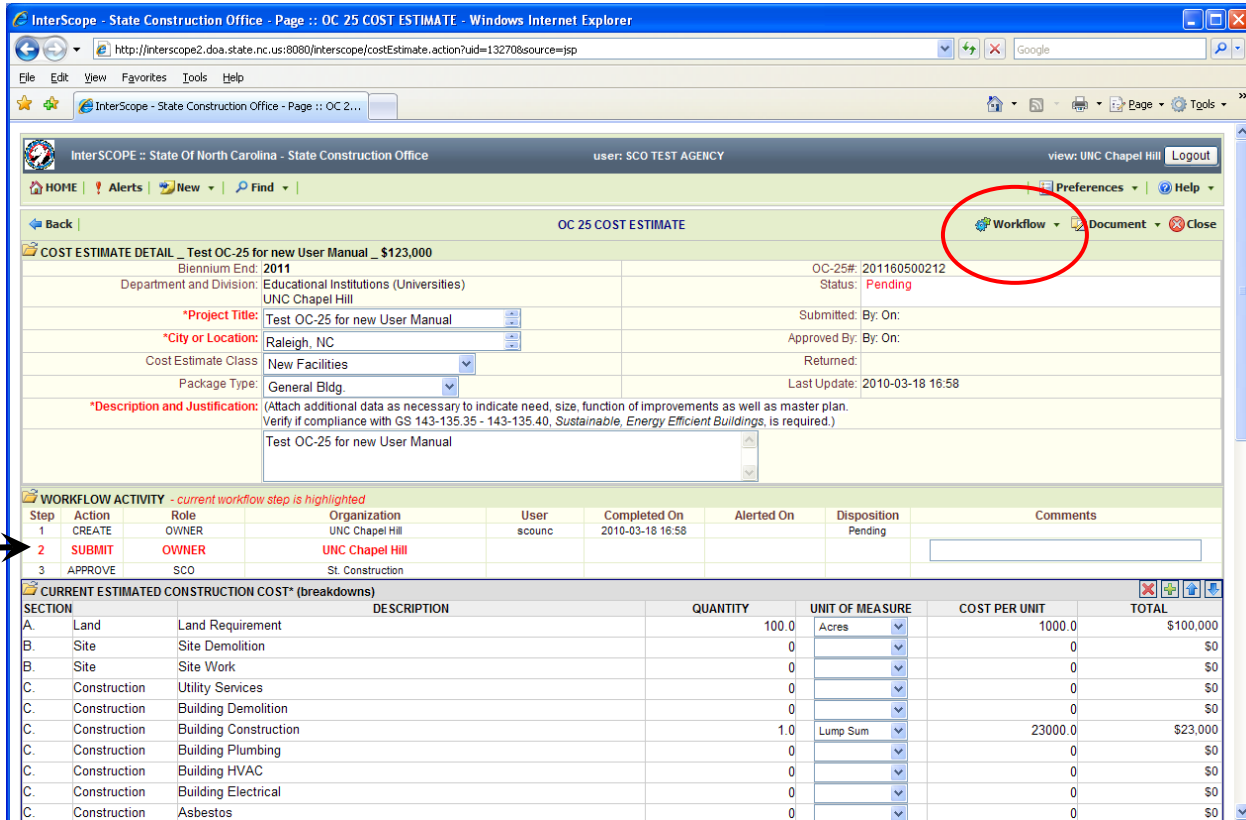


Figure 10

The User may continue to make changes to the Cost Estimate using the **Save** option on the **Document** menu up until the time that the Cost Estimate is submitted.

The User may choose to abandon or delete the Cost Estimate using the **Delete** option from the **Document** menu. However, once it is submitted, no changes or deletions are allowed

Step 8 – Submitting the Submitting the Cost Estimate for review

To complete this workflow step, the User must submit the Cost Estimate to initiate it's review and approval by the SCO FCAP Section.

Submit the Cost Estimate by selecting the **Submit** option from the **Workflow** menu. A Confirmation window will appear to confirm this action. Select **Yes** to continue or **No** to return.

Figure 11

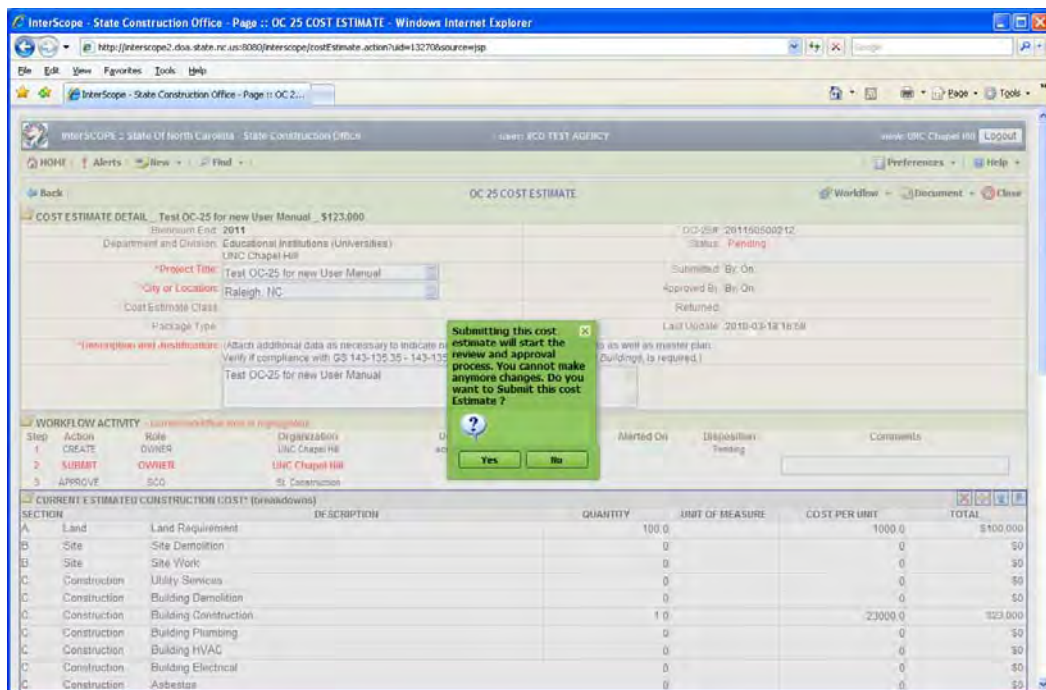
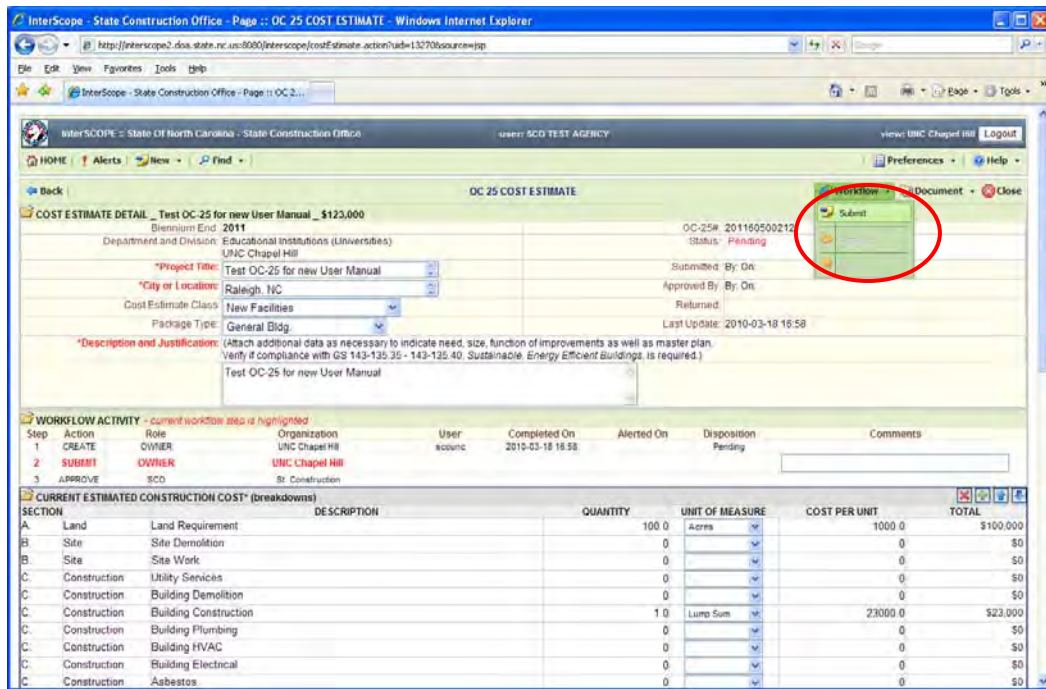


Figure 12

InterScope updates the Cost Estimate workflow and processes any Alerts that are defined for this step.

The system is configured to send Alerts to the SCO FCAP Section.

InterScope then displays the Cost Estimate screen and alert information. The Submit step has been updated with workflow information and the Workflow advances to the next step – SCO Approval.

COST ESTIMATE DETAIL - Test OC-25 for new User Manual - \$123,000

Biennium End: 2011
 Department and Division: Educational Institutions (Universities)
 UNC Chapel Hill
 OC-25#: 201160500212
 Status: Submitted
 Submitted By: scounc On: 03/18/2010
 Approved By: [Dropdown]
 Returned: [Dropdown]
 Last Update: 2010-03-18 17:47
 Package Type: General Bldg.
 *Description and Justification: (Attach additional data as necessary to indicate need, size, function of improvements as well as master plan. Verify if compliance with GS 143-135.35 - 143-135.40, Sustainable, Energy Efficient Buildings, is required.)
 Test OC-25 for new User Manual

WORKFLOW ACTIVITY - current workflow step is highlighted

Step	Action	Role	Organization	User	Completed On	Alerted On	Disposition	Comments
1	CREATE	OWNER	UNC Chapel Hill	scounc	2010-03-18 16:58		Pending	
2	SUBMIT	OWNER	UNC Chapel Hill	scounc	2010-03-18 17:47		Submitted	
3	APPROVE	SCO	St. Construction					

CURRENT ESTIMATED CONSTRUCTION COST* (breakdowns)

SECTION	DESCRIPTION	QUANTITY	UNIT OF MEASURE	COST PER UNIT	TOTAL
A.	Land Land Requirement	100.0	Acres	1000.0	\$100,000
B.	Site Site Demolition	0		0	\$0
B.	Site Site Work	0		0	\$0
C.	Construction Utility Services	0		0	\$0
C.	Construction Building Demolition	0		0	\$0
C.	Construction Building Construction	1.0	Lump Sum	23000.0	\$23,000
C.	Construction Building Plumbing	0		0	\$0
C.	Construction Building HVAC	0		0	\$0
C.	Construction Building Electrical	0		0	\$0

Figure 13

Reviewing and Approving Cost Estimates

The following steps are completed for the SCO FCAP Section in reviewing and approving a submitted Cost Estimate.

Step 1 – Receiving and responding to the Alert

The FCAP Administrator will receive an alert via email concerning actions for each Cost Estimate.

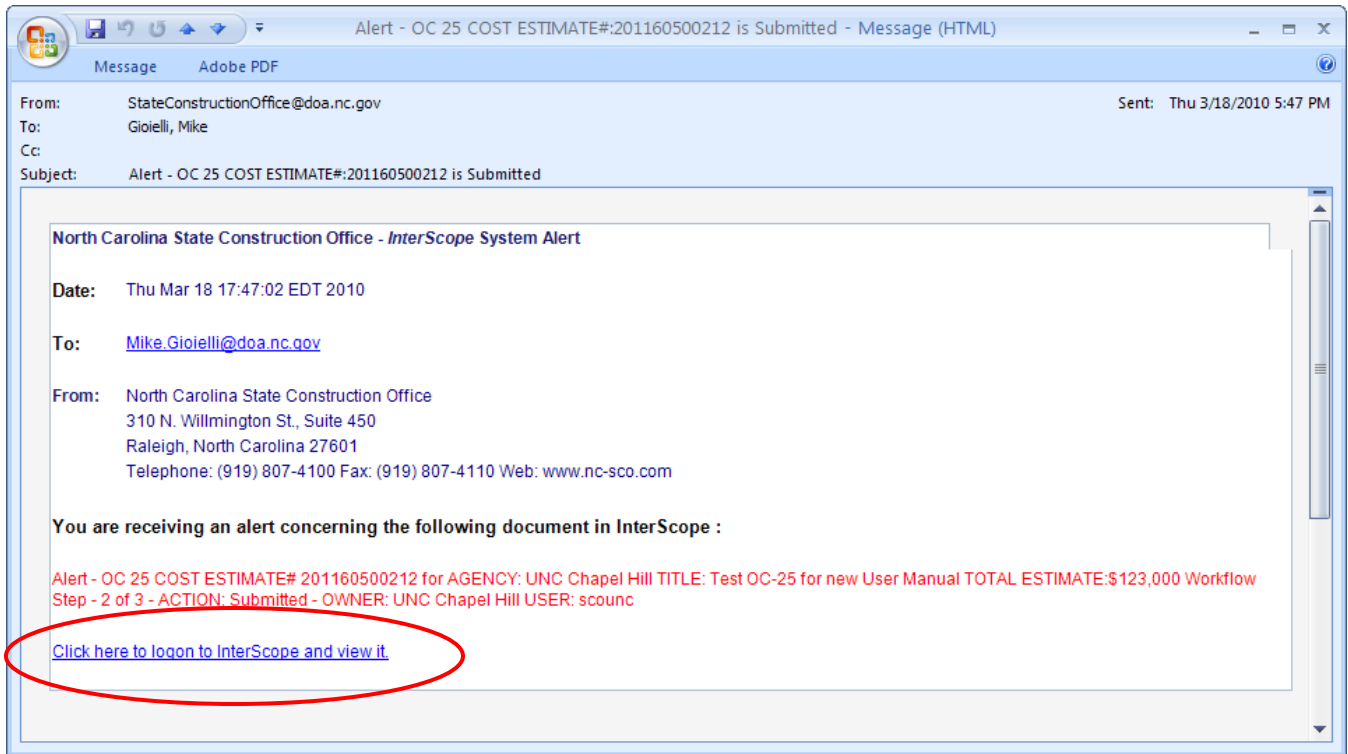


Figure 14

To access the Cost Estimate, simply click on the link at the bottom of the Alert Email.

You will be prompted to Logon and are then directed immediately to the Cost Estimate page.

Step 2 – Approving or Rejecting the Cost Estimate

At this workflow step there are only 2 options that can be performed – **Approve** or **Reject**. They are available from the **Workflow** menu.

Approving the Cost completes the Workflow.

Rejecting the Cost Estimate at any step in the Workflow causes the Cost Estimate to be returned to Step 2 where the originator (Agency) can change and resubmit. The workflow is then reset and the audit trail (found at the bottom of the page) maintains a record of the prior workflow events.

Alerts are sent to the originating user (See **Submitted by**) as a notification that the Cost Estimate has been officially approved.

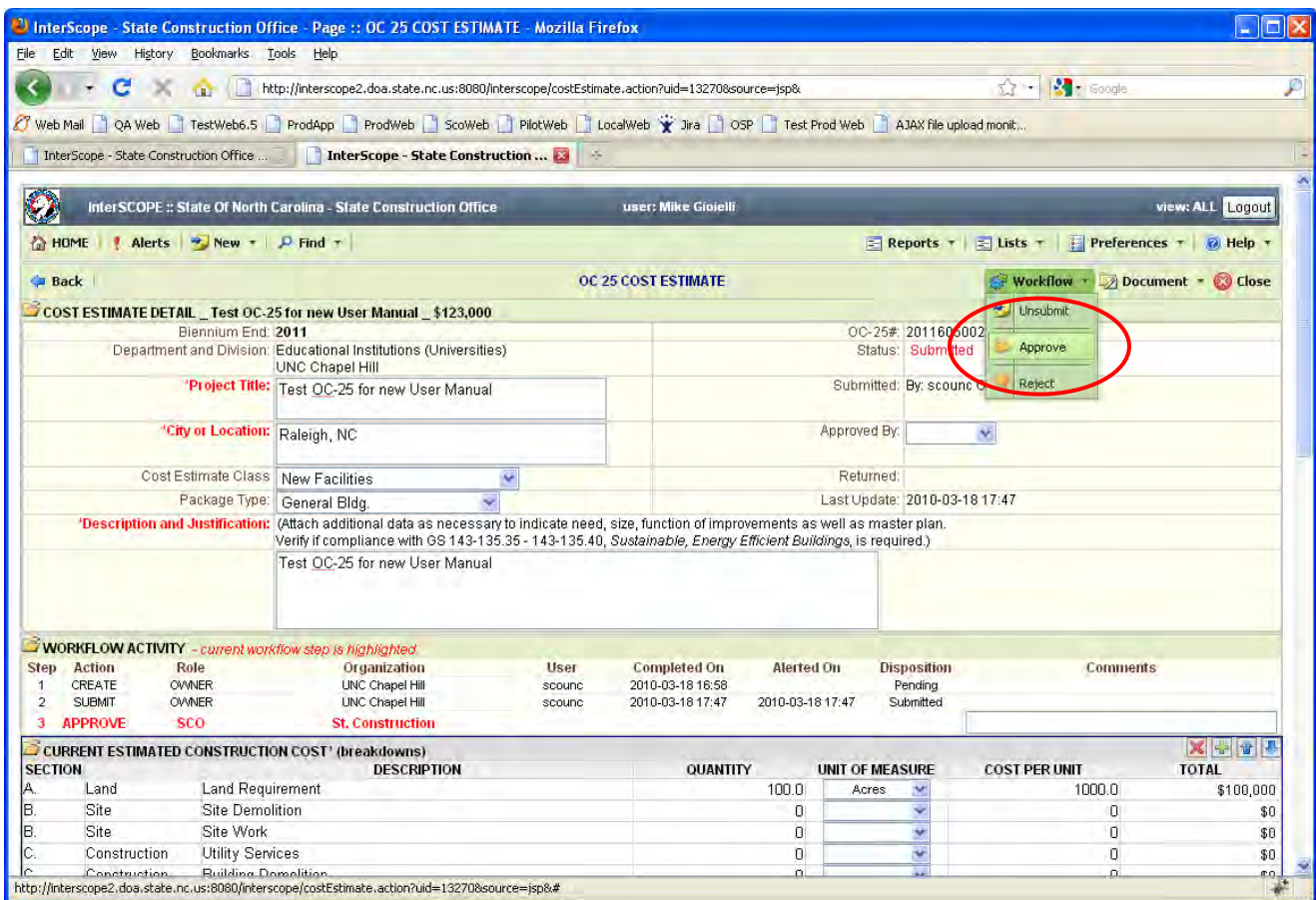


Figure 15