

HiCAMS User Guide

Chapter 4: Contract Tracking

Section 2: Review Pay Records

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Revision History

Comments or concerns with this document should be directed to the NCDOT Construction Unit at 919-707-2400.

Date	Version	Description	Author
December 1999	1.0	Initial Version	HiCAMS Team Documentation Specialist
November 2002	2.0	Updated document	Deirdre Warner
September 2009	3.0	Updated content to match V5.9 functionality and added business information	Marie Novello
September 2009	3.1	Corrected User Guide Name in subsection "About Pay Records"	Marie Novello
April 2012	3.2	Updated Phone Numbers	Marie Novello
October 2013	3.3	Added Substitution Group information	Marie Novello

About Pay Records

The Contract Administrator office staff is responsible for documenting payments for the work that the Contractor satisfactorily performs on a Construction Project. Payments for work performed are recorded by Line Item in either a Pay Record or Ticket Book (See the User Guide [Review Tickets](#) for information on how they should be entered in HiCAMS).

Payments are used by the Project Certification function to determine how much of each material is needed. The Material Quantity Paid should not exceed the Material Quantity Accepted.

Information about specific types of Pay Record book entries is available in the Records and Reports section of the NCDOT Construction Manual.

Unless otherwise directed by the Specifications, the quantities entered for a Pay Record payment can have decimal precision of 0, 1, 2, or 3 characters. Entries made for each line item should be consistent in accuracy. If the first entry is made with decimal precision of 2 characters, all other entries for that line item should also be made to 2 characters.

Payments for Design Build projects are made on a single line item similar to "Design and Construction". Quantities of work are recorded using the Work Accomplished function. See the HiCAMS User Guide [Review Work Accomplished](#) for additional information on that function.

For additional information on Pay Records handling, please consult the current version of the NCDOT Construction Manual or contact the Construction Unit.

Entering A Pay Record

Pay Records can be entered two ways, either by Inserting a new record, or by performing a Save As to an existing record.

To work with the Review Pay Records window, go to **Functions > Contract Tracking > Review Pay Records**.

Inserting a New Pay Record

Step 1: Enter the Contract Number whose Pay Records you wish to enter in the Contract field.

Note: For information on ways to enter your contract number, see the User Guide "Getting Started" in the User Guides section of the HiCAMS home page.

Possible Error:

If the Work Start Date has not been entered for the Contract, you will receive the following message:



If the Work Start Date is known, enter it on the Dates tab of Review Contract Details. If the work has not started, payments to the contractor should not be occurring. Requests for Material Prepayments may be entered before work has started by using the Review Material Prepayments function.

Step 2: Select the WBS element to which the payment will be charged by clicking the arrow to the right of the WBS (element) field and highlighting it.

Note: The WBS element will default when the Contract has only one WBS element.

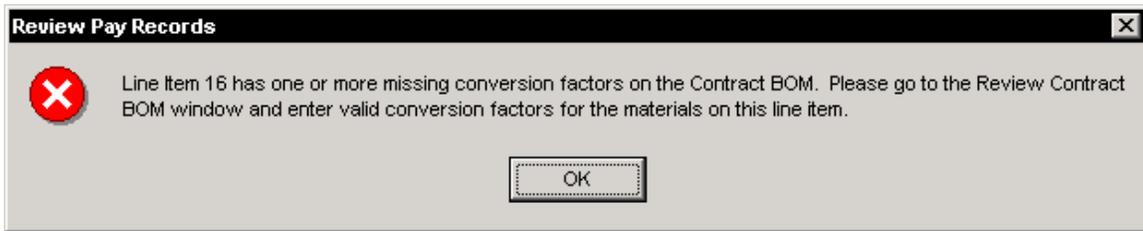


Step 3: Select the Line Item for which you are entering the Pay Record either by typing in the Line Item number in the small field to the right of the words "Line Item" or by selecting it from the drop down list. Any existing Pay Records for that Line Item will display in the grid, with the most recent date at the top of the list.

Note: All line items will be displayed in the drop down list, even those that are paid by Ticket.

Possible Error:

If the line item you have selected has a Critical material assigned to it, and that Critical material does not have a Conversion Factor designated, you will receive the following message:



Click OK and go to Review Contract BOM for this contract. Assign a conversion factor to the Critical Material -OR- delete the Material, and Save the record. You will now be able to insert your Pay Record.

Step 4: Click the Insert button  (or Insert key) and a new row will be entered. The new row is inserted at the top of the existing rows and becomes Row 1. The Line Item defaults based on the Line Item originally selected, and the Inspector defaults to the name of whomever is logged in.

Row	Line Item	Source	Book	Page	Date	Quantity	Inspector	Pay Record Status
1	489				00/00/0000		Allred, Houston	Not Estimated
2	489	Monthly Estimate Book	1	17	11/30/2008	59,885.000	Rhodes, James R	Processed
3	489	Monthly Estimate Book	1	19	10/30/2008	62,322.000	Rhodes, James R	Processed
4	489	Monthly Estimate Book	1	14	09/30/2008	28,800.000	Rhodes, James R	Processed
5	489	Monthly Estimate Book	1	14	08/29/2008	38,643.000	Rhodes, James R	Processed
6	489	Monthly Estimate Book	1	15	07/31/2008	7,466.000	Rhodes, James R	Processed
7	489	Monthly Estimate Book	1	13	06/30/2008	79,794.000	Rhodes, James R	Processed
8	489	Monthly Estimate Book	1	13	05/31/2008	110,907.000	Rhodes, James R	Processed
9	489	Monthly Estimate Book	1	15	04/30/2008	25,837.000	Rhodes, James R	Processed

Step 5: Select the Source Document from the drop down list for the entry you are making. The most frequently used Source type is **Pay Record**, a permanent source document type.

Step 6: Enter the Book and Page numbers. The book and page number combination can be repeated. All entries with the same book and page number will be summed in the Verify Final Quantities window for a Page Total.

Note: For information about Source Document types and their uses as well as how to calculate Page Totals, see the Appendix.

Step 7: Enter the date that matches the Estimate End Date for the estimate that will include the pay record payment or any date prior to that date. Only Pay Records that fall before or on the Estimate End Date are included when a Partial Estimate is generated.

Possible Error:

If the Pay Record Date is before the Work Start Date for the Contract, you will get the following error message:



Payments to the contractor should not be occurring prior to the Work Start Date. Requests for Material Prepayments may be entered before work has started by using the Review Material Prepayments function.

The Pay Record date must also be no later than today's date; i.e. future dates are not allowed.

Step 8: Enter the Quantity to be paid on this estimate. If the person who did the actual pay record book entry is not the same as the person doing the data entry, update the Inspector name to be the person who entered the Pay Record in the Pay Record Book. Use the Staff List button to select a different name.

Step 9: If it is possible to use different materials for the work on the Line item for which the Pay Record is being entered, set the Substitution Group information on the General Tab.

For example, the line item 15" Drainage Pipe may have multiple Materials used. On the Contract Bill of Materials, set up the related Materials as a substitution group. Below is an example of how the CBOM window looks when a Substitution Group has been created.

Row	Material	Master Conv Unknown	Incidental Material	Conversion Factor	Substitution Group	Quantity	Unit of Measure
1	Corrugated Polyethylene Pipe Culvert, Double Wall, 15 in	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.000	1	24.000	LF
2	Reinforced Concrete Pipe Culvert, Class III, 15 in	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.000	1	24.000	LF
3	Reinforced Concrete Pipe Culvert, Class IV, 15 in	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.000	1	24.000	LF

When a Pay Record is entered for the Line Item, the Material used for the work being paid can be specified. By doing this, the Project Certification module only requires as much of each Material as was paid. If multiple Materials are used in the same Estimate period, it may be necessary to create more than one Pay Record for that month's work so that the Materials are accounted for correctly.

An example of the Substitution Group dropdown is shown below.

The screenshot shows a software window with the following details:

- General** | Location | History
- Line Item: 6 - 15" DRAINAGE PIPE
- Plan Quantity: 24.000
- Do Not Pay
- UOM: Linear Feet
- Substitutable Materials:
 - Group: 1
- Material Selection List:
 - Corrugated Polyethylene Pipe Culvert, Double Wall, 15 in - LF (Selected)
 - Reinforced Concrete Pipe Culvert, Class III, 15 in - LF
 - Reinforced Concrete Pipe Culvert, Class IV, 15 in - LF
- Adjustment: (empty field)

Description of the material associated with the material for the line item.

Step 10: Save the Pay Record Entry. A green check mark  should appear in the far right column. If any of the required information is not entered, an error message will appear that references the row number and the missing information, and a red X  will appear on the unsaved row. Entering the requested information should allow the record to be saved.

Entering a Pay Record using the Save As Button

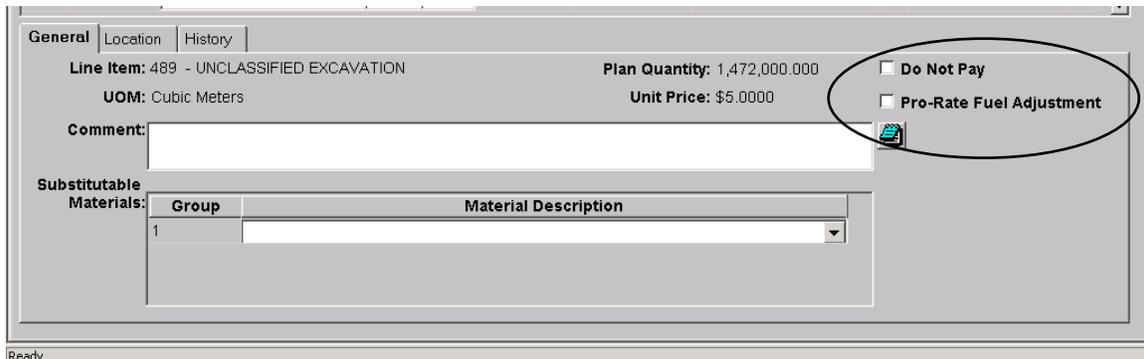
The **Insert** button  creates a single row in the grid. It can be used repeatedly, and then the data filled into multiple rows before a Save. Tabbing is an effective way to navigate in the rows.

The **Save As** button  makes a copy of the selected row minus the quantity, including the date and Received By Inspector. Processed, Not Estimated, and Void Records can be **Save As**'d.

Save As can also be used to create multiple rows before the data entry is done. You may want to do an Insert first, and update the date and Inspector, then create your additional rows from that record as it will then carry the new date forward with it. This allows the Tab key to be used to navigate through the data entry fields.

Using the Do Not Pay and Pro-Rate Fuel Adjustment Check boxes

The General Tab contains two special checkboxes, one labeled Do Not Pay and the other labeled Pro-Rate Fuel Adjustment.



The screenshot shows a software interface with a 'General' tab selected. The 'Line Item' is '489 - UNCLASSIFIED EXCAVATION' with a 'Plan Quantity' of '1,472,000.000' and a 'Unit Price' of '\$5.0000'. The 'UOM' is 'Cubic Meters'. There are two checkboxes on the right: 'Do Not Pay' and 'Pro-Rate Fuel Adjustment', both of which are circled in black. Below these is a 'Substitutable Materials' table with columns for 'Group' and 'Material Description'. The 'Group' column has a value of '1'. The status bar at the bottom left says 'Ready'.

The **Do Not Pay** checkbox is used to indicate that the Pay Record quantity should not be included in the current estimate. It also excludes any pay record materials quantities from being counted towards Project Certification totals.

For example, the Inspector may have recorded a payment for 15" RC Pipe in the pay record book, but the Contractor has not supplied the information needed to complete the Material Receipt (MRR) for the Material required. The payment can be withheld until the required documentation is received by checking the Do Not Pay indicator. Once the documentation for the Material used is received, the payment can be included.

To include the Pay Record quantity on an estimate, uncheck the check box and re-generate the estimate.

The **Pro-Rate Fuel Adjustment** checkbox is only active for Line Items that are subject to the Fuel Price Adjustment provision as indicated by a check in the Fuel Price Adjustment indicator in the View Line Item Details window. The Pro-Rate Fuel Adjustment checkbox should be checked only when the associated Pay Record is the adjusting positive or negative entry made when the work for that Line Item is completed and the actual measurement is made.

It is possible to make a **single negative balancing entry** as long as the summed quantity by book and page number is greater than zero.

The Pro-Rate Fuel Adjustment indicator cannot be set for a Pay Record with a Temporary Source Document Type.

The prorated fuel price adjustment for the contract line item will be determined by multiplying [the cumulative fuel price adjustment made for that contract line item for the previous estimate periods] by [the adjusted quantity for the contract item] and then dividing that number by [the total quantity of work paid for the previous estimates for the contract item].

Changing Existing Records

Changing a Pay Record

As long as a Pay Record entry is not Processed or Void, any of the previously entered data can be changed. The Pay Record Status is set by the system and cannot be updated. To make a correction, click in the field that needs to be changed, and enter the correct data.

If the Line Item, Date, or Quantity are changed and the Pay Record quantity has already been included on a Pending Estimate, the Estimate Status will be set back to Pending Generate so that the changes will be included. **You will not get a notification that this has happened!** You must Generate your estimate again to set it to Pending RE Review.

If the Pay Record status is Processed, only the Source, Book, and Page number can be changed. Changing these fields does not affect the Estimate, but does cause the Pay Record entry to be re-verified in the Verify Final Quantities window.

If the Pay Record status is Void, nothing can be changed. It is still possible to perform a Save As of the record.

To reduce a quantity on a Processed Pay Record, select the row whose entry needs to be corrected, and perform a Save As to copy the original data to the adjusting record. Enter the positive or negative quantity that will cause the sum to be the correct amount. Save the record.

HiCAMS checks to be sure that the absolute value of the adjustment quantity does not exceed the sum of the existing pay record quantities for the same Pay Record Book Number, Page Number, Pay Record Source Document, and Work Order Line Item combination. The only time this does not happen is when the negative entry has the Pro-Rate Fuel Adjustment indicator checked.

Deleting Or Voiding an Existing Pay Record

If the Pay Record was entered in error, and it has not been Saved, hit the **Delete** button (in the toolbar) and it will be removed. Once the record has been Saved, use the **Void** button (in the toolbar) to remove the effect of the entered record.

Step 1: Select the record entered in error.

Step 2: Click the Delete button . If the delete button is not available, go to Step 5.

Step 3: When the "Are you sure you want to Delete?" Message opens, click Yes if you want to delete the record.



Step 4: If the record has already been Saved, the Delete button will not appear. The Void button will appear instead.

Step 5: Click on the Void button .

Step 6: The Void Comment box opens.

A dialog box titled "Void Comment" with a close button (X) in the top right corner. It contains the text "You are about to Void a record. A record once voided cannot be updated. All changes will be saved after Void." Below this text are two fields: "Password:" followed by a text input box, and "Comment:" followed by a large text area. At the bottom are two buttons: "OK" and "Cancel".

Step 7: Enter your HiCAMS password in the Password field and type a comment in the Comment field. The comment should provide enough information that the reason the record was voided is self explanatory. A comment such as "Entered on the wrong Contract" is better than simply stating "Error"

Click OK. The Pay Record status will be changed to Void. If the Pay Record quantity was included on the Pending Estimate, the Estimate Status will be set back to Pending Generate. **You will not get a notification that this has happened!** You must Generate your estimate again to set it to Pending RE Review.

Appendix: Reports

Summary of Pay Record Quantities

This report summarizes the page quantity for permanent pay records per Contract, Work Order and Line Item. It is useful for checking page totals before Verifying Final Quantities.

Temporary Source Document Report

This report displays information for temporary pay records per Contract, Work Order and Line Item. It should be checked before Generating the Final Estimate to be sure all Pay Records with Temporary Source Document types have been updated to Permanent Source Document types.

Computing Page Totals

As work is performed on a Project, payment for the various line items is recorded in Pay Record Books either as the work is performed or shortly thereafter. The entries are reviewed and checked monthly, and an entry for the corresponding line item is created in HiCAMS in order to pay the Contractor. Generally, a line is drawn across the page, and an estimate total, date, and the initials of the person making the entry are entered.

Some Line items have many pages of entries per month (e.g., Seeding and Mulching or Borrow by Truck count) and some have only one or two entries during the entire project (e.g., Mobilization or Fine Grading). In the case of multiple pages per estimate period, it is helpful to think of the Page Total as an "Estimate Total" instead.

It is not necessary to enter a page total for every page of the multi page entries unless directed to by the Resident Engineer. HiCAMS does not allow a range of page numbers to be entered in the page number field but an entry such as "Estimate 5, PRB 5, pages 5 - 10" can be made in the comments field. In this case, there would be a single HiCAMS entry for Book 5, Page 10 and no HiCAMS entries for pages 5, 6, 7, 8, and 9. As long as someone else can follow the page totals entered in HiCAMS and they can be verified, it is not necessary to calculate a page total for each page.

Before HiCAMS, every page in each pay record book would have a Page Total regardless of when the quantities on that page had been included on an Estimate. Subsequently, each page for Line Items spanning several pages was summarized by page at the end of the project to calculate a Line Item Total. The HiCAMS Estimate totals take the place of Page Totals. No summary page is necessary.

For additional information about this topic, please contact the Construction Unit at 919-707-2400.

Pay Record Source Document Types

The Source Documents available and when they are used are as follows:

Source Document Type	Used when
Pay Record (Permanent)	Entries are from red Pay Record Books
Comp Sheet, Permanent	Entries are from calculation sheets that will be submitted with the Final Estimate. Examples of this source document type are Proof Rolling Sheets or Force Account sheets.
Comp Sheet, Temporary	Entries are from calculation sheets that will NOT be submitted with the Final Estimate.
Cross Sections, Permanent	Entries are from Cross Section sheets that will be submitted with the Final Estimate.
Cross Sections, Temporary	Entries are from Cross Section sheets that will NOT be submitted with the Final Estimate.
Electronic Pay Record	Entries are made only on portable electronic devices such as an iPad and not entered in a Pay Record book
Letter (Permanent)	Entry is for the line item created by the Claim Approval process.
Monthly Estimate Book (Temporary)	Entries are maintained in a Work Book and will be re-entered after transfer to a red Pay Record Book.
Note Book (Temporary)	Entries are maintained in a Note Book and will be re-entered after transfer to a red Pay Record Book.
Print Out, Permanent	Entries are from reports that will be submitted with the Final Estimate.
Print Out, Temporary	Entries are from reports that will NOT be submitted with the Final Estimate.
Ticket Books (Pay Record)	Material arrives on the project by truck and is paid for in Tons, but is not received by Ticket Book in HiCAMS. An example of this would Rock Embankment or Disposal of Contaminated Soil.

Users are warned that if Temporary Source Documents are used for Pay Record entries, these entries must be updated to use a Permanent Source document type before the Final Estimate is Generated.

As part of the Final Estimate process, all Pay Records with a Temporary Source Document type WILL BE ADJUSTED TO ZERO and not included on the Final Estimate. This is consistent with the requirements detailed in the Construction Manual about Estimate Work Books and their quantities being transferred to a Pay Record Book.

It is possible to update the Temporary Source Document type on a Pay Record to a permanent one even after the payment is Processed. Highlight the row with the Temporary Document type and update it to the Permanent type. Change the Book and Page numbers to match those of the Permanent record, and re-Save.

Window Definitions - Review Pay Records

To work with the Review Pay Records window, go to **Functions > Contract Tracking > Review Pay Records**. Enter the Contract Number whose Pay Records you wish to review in the Contract field.

Note: For information on ways to enter your contract number, see the User Guide "Getting Started" in the User Guides section of the HiCAMS home page.

Below is an example of the Review Pay Records window for contract C201776 after selecting Line Item 242.

The screenshot shows the HiCAMS software interface. The main window is titled "Review Pay Records (C201776)". It displays the following information:

- Contract:** C201776
- Contractor:** HUDSON PAVING, INC.
- Status:** Active
- Description (nickname):** Seagrove Rest Area
- WBS:** 37331.3.1
- Line Item:** 242
- Material:** 15" RC PIPE CULV III

Row	Line Item	Source	Book	Page	Date	Quantity	Inspector	Pay Record Status
1	242	Pay Record	4	7	02/28/2009	594.900	Garner, Kenneth L	Not Estimated
2	242	Pay Record	4	7	01/31/2009	55.300	Dunn, Jr., Larry E	Processed
3	242	Pay Record	4	7	12/31/2008	160.300	Dunn, Jr., Larry E	Processed
4	242	Pay Record	4	6	11/30/2008	17.000	Garner, Kenneth L	Processed
5	242	Pay Record	4	6	10/31/2008	807.700	Garner, Kenneth L	Processed
6	242	Pay Record	4	6	09/30/2008	137.700	Garner, Kenneth L	Processed
7	242	Pay Record	4	6	06/30/2008	170.400	Garner, Kenneth L	Processed

Below the table, there are tabs for "General", "Location", and "History". The "General" tab is active and shows the following details for Line Item 242:

- Line Item:** 242 - 15" RC PIPE CULV III
- UOM:** Linear Feet
- Comment:** (Empty text box)
- Substitutable Materials:** (Table with columns for Group and Material Description)
- Plan Quantity:** 3,640.000
- Unit Price:** \$28.0000
- Do Not Pay
- Pro-Rate Fuel Adjustment

Note: The default Sort Order is Line Item number first, then the Date with the newest first. The default Sort Order can be changed by clicking on the Sort icon or by selecting **Edit > Sort**. See the User Guide "Getting Started" for more details on working with the Sort function.

Column Definitions for the Review Pay Records Window

Row: A number assigned by HiCAMS. Used to identify those rows which cannot be saved.

Line Item: The Contract Line Item associated with the Pay Record payment.

Source: The Source Document type associated with the Pay Record payment. The available types are described in the subsection "Pay Record Source Document Types" above.

Book: The number assigned to the red Pay Record Book where the original payment entry was created. For Source documents other than Pay Record Book, the Book and Page number combination should uniquely identify the source document.

Page: The page number of the red Pay Record Book on which the original payment entry was written. The number 0 is allowed and can be used when the Source Document type is Letter.

Date: The date on the Pay Record book entry unless it is after the Estimate End Date. A payment's date must be before the Estimate End Date in order for it to be included on the Estimate. Since the date controls inclusion, it is possible to exclude payments by dating the entry after the current Estimate's End Date.

Quantity: The amount of work being paid for with this Pay Record Book entry.

Inspector: The name of the individual who created the original Pay Record entry.

Pay Record Status: There are five Pay Record statuses.

Not Estimated: Indicates that the Pay Record has been created but is not included as part of an Estimate.

In Process: Indicates that the Pay Record has been included as part of an Estimate but that the Estimate has not been forwarded for approval yet.

Pending: Indicates that the Pay Record has been included on an Estimate that is Pending Approval Construction Unit Approval. If the Estimate Type is Final, the Pay Record is also in this status when the Estimate is Pending Division Engineer Approval.

Processed: Indicates that the Pay Record has been included as part of an Estimate that has been sent to Fiscal for payment.

Void: Indicates that the Pay Record is no longer active for payment. It can be used as the base for a Save As action.

Field Definitions for the Review Pay Records Tabs

General Tab:

Group	Material Description
-------	----------------------

Line Item: The Contract Line Item number and Description. May include contract adjustment information.

Plan Quantity: The Bid Quantity

Do Not Pay: When checked, excludes payment quantity from estimate process

UOM: The Bid Item's Unit of Measure

Unit Price: The Bid Item's Bid Price

Pro-Rate Fuel Adjustment: When checked, adjusts the fuel adjustment paid for the payment quantity proportionately based on all previous payments. Available only for those Line Items that have the Fuel Price Adjustment indicator checked.

Comment: Provides a space to enter comments about the Pay Record entry

Substitutable Materials: If the Contract Bill of Material has Materials that can be used in place of each other, i.e. they are Substitutes for each other, the Materials that are Substitutable will show in a drop down list. Selecting a Material from the drop down works to count Materials quantities more accurately for Project Certification.

Location Tab

Provides location information for work done in the associated Pay Record entry. These are not required fields.

General | **Location** | History

Station From: +

Station To: +

Offset Distance:

Map Number:

Location:

Ready

Station From and To: Project's Station Location where work was performed

Offset Distance: Perpendicular distance left or right of a Survey line

Map Number: a way of identifying non-contiguous work areas

Location: additional information describing where the work was performed

History Tab:

Provides tracking information for who did what and when it was done

General | Location | **History**

Action	Action Date	Status	Who	Comment
Approve	02/12/2009 8:30:34 AM	Processed	Deans, Norita L	
Forward	02/11/2009 4:10:57 PM	Pending	Williamson, Gary Franklin	
Generate	02/11/2009 3:51:31 PM	In Process	Wilson, Kathy H	
Generate	02/11/2009 3:34:31 PM	In Process	Wilson, Kathy H	
Generate	02/03/2009 5:04:17 PM	In Process	Wilson, Kathy H	
Generate	02/03/2009 4:22:23 PM	In Process	Wilson, Kathy H	
Create	02/03/2009 3:56:00 PM	Not Estimated	Wilson, Kathy H	

Ready

Action: Shows what was done to the Pay Record. Actions include Create, Generate, Forward, Approve, Reject, Interrupt, Comment, and Void.

Action Date: The date that the action was set in HiCAMS. This date and time are system generated.

Status: Describes how far along in the estimate process the Pay Record is. Possible Statuses are Not Estimated, In Process, Pending, Processed, and Void.

Who: The display name of the person who took the action.

Comment: Displays the comment associated with the action.

Navigation Button Definitions

The following buttons appear in the toolbar of the Review Pay Records window.

Please note: Buttons will display in the window based on the status of the highlighted row in the window.



Insert button. Used to create a New Row.



Delete button. Used to remove an UNSAVED row.



Save As button. Used to create a copy of an existing row.



Void button. Used to nullify a SAVED row.



Transfer button. Used to move the electronic record for a material from one project to another.