

# Application Modifications and Enhancements

*HiCAMS Version 5.9 & DOH Vendor Version 3.6 were released Friday, 12/18/2004.*

## **HiCAMS Version 5.9**

### **HiCAMS - General**

- Two new menu items have been added that both direct the user to the same new window containing Contract Material Quantity information. The first menu item is located under Functions->Contract Tracking->Audit Materials and is primarily for Construction users. The second menu item is located under Functions->Project Certification->Review Project Certification and is primarily for Materials and Test users. The new window can be used to obtain receipt, acceptance and payment Material Quantities. Detail information is provided as well as the ability to change the display options. Please reference the Project Certification section for more information.
- All references to Work Order have been replaced with WBS to comply with BSIP terminology.

### **CONTRACT MAINTENANCE - Review Contract BOM**

- An enhancement has been made to the Maintain Contract BOM window so that it is now possible to delete materials that are associated only to voided records (e.g., Tickets, Material Receipts, and Densities, etc.) This will help prevent additional uses of the incorrect material.

### **CONTRACT MAINTENANCE - Review Contract Times**

- A new field "Substantial Completion Date" has been added to the Dates & Damages tab to allow users to mark the date at which work associated with a contract time is considered substantially complete. This field only applies to Contract Times defined with Substantial Completion Rates.

### **CONTRACT ADJUSTMENTS - Review Supplemental Agreements**

- The Supplemental Agreement Documentation report has been enhanced to include the Contract and Supplemental Agreement Number on each page of the report. The WBS number is now displayed on the WBS page of the report rather than on the first page of the report.

### **CONTRACT TRACKING - Redesign Overview**

- The Review Material Receipts, Review Pay Records, and Review Tickets windows have all been redesigned to facilitate easier data entry. The previous selection and detail windows have been combined for each functional area so that it is no longer necessary to open a separate window to perform data entry.
- Multiple rows may be inserted or updated at one time. When an update is successful, a checkmark will appear in the last display column of each row that was successfully updated. An X will appear in all rows that were not saved

successfully. This column can be sorted using the click-sort functionality so that rows can be grouped together based on their update status.

- Save As functionality is provided on all three windows via the Save As menu item. Whatever row is currently highlighted will be used as the base for the newly inserted row, which will appear at the top of the display grid. Key fields from the originating row will be brought forward.
- A new Row column is available on all three windows. The row number will appear in warning and error messages to indicate which row or rows need to be corrected.

### **CONTRACT TRACKING - Review Material Receipts**

- For materials that include an acceptance method of Pretest (Match), a new Alternate ID Selection window is available. This can be accessed from the Alternate ID tab by highlighting an existing row and clicking the binoculars ( ) that appear in the last column of that row. The Selection window requires that the Alternate Type and Alternate ID be entered prior to retrieval. Both the Material and Approved Producer/Supplier fields can be modified or removed to change the selection criteria. All Samples or Precast Concrete Field Inspection Reports meeting the selection criteria will be displayed.

### **CONTRACT TRACKING - Review Pay Records**

- Materials are no longer received via the Pay Record window. The Materials Tab has been removed and records that previously appeared on this Tab have been converted to the appropriate entity based upon the current "How Received" information on the Minimum Sampling Guide. This means users will see many new Material Receipts and a few Do Not Pay Tickets that the system created by converting old Pay Record data for materials previously received by Pay Record.
- The Adjust Button has been removed. It is no longer necessary to open up an Adjustment window to reduce existing quantities. It is now possible to enter a negative amount in the Quantity field for Pay Records that have not been processed on an Estimate. To reduce an amount that has been processed on an Estimate, the Save As feature can be used to bring forward all of the key information from the originating record to create the adjustment. System edits are in place to ensure that the sum of all of the Pay Record for a Line Item, Book, and Page and Pay Record Source Type are greater than zero.
- On the General tab of the Review Pay Records window, a new Substitutable Materials grid has been added. On line items involving materials that are substitutable for each other, users are encouraged to designate which of the substitutable materials were used for the pay record quantity. This will improve the precision of reporting in Audit Materials and Review Project Certification. Material quantities for pay records where the substitutable materials used aren't identified or can't be identified discretely can be split out from the discrete quantities in Audit Materials and Project Certification reporting.
- An edit has been added to require conversion factors be set on CBOM for all critical materials in order to save a Pay Record entry.

## **CONTRACT TRACKING - Review Tickets**

- The Adjust Button has been removed. It is no longer necessary to open up an Adjustment window to reduce existing quantities. It is now possible to enter a negative amount in the Quantity field for Tickets that have not been Estimated. To reduce an amount that has been Estimated, the Save As feature can be used to bring forward all of the key information from the originating record to create the adjustment. System edits are in place to ensure that the sum of all of the Tickets is greater than zero for a Line Item, Book, and Material.

## **CONTRACT TRACKING - Review Pay Adjustments**

- PARs can now be created for Contract Line Items which have been modified by a Supplemental Agreement to have different unit prices from the original line item. Previously, only the negative (backing out) line item could be selected. Since payments were not made against that Line Item, PARs could not be created.

## **CONTRACT TRACKING - Audit Materials**

- The new Audit Materials - Project Certification module incorporates the Contract Materials Discrepancy, Contract Materials w/ Line Items, and Contract Quantity Statistics reports into a single Report with dynamic access to source documents. Users are also provided with a Notes field for each material where explanations for the system identified Discrepancies can be noted.
- A users guide for Resident Engineer Office Users explaining how to use this functionality will be available by the end of January, 2005.
- This function retrieves all source records: MRRs, Tickets, Pay Records, FIRs, and Samples associated with a contract and computes aggregate material quantity received, accepted and paid, and marks material quantity discrepancies (Paid vs Accepted vs Received). This function:
  - Reads the database to accumulate all MRRs, Tickets, Pay Records, FIRs, and Samples associated with a contract each time the window is used to generate project certification information for a contract or a project certification standard report is generated. This process will take several seconds to a few minutes, in contrast to reports that have existed in previous HiCAMS releases which used to read from a pre-computed set of contract material quantities data.
  - Displays material quantities in an order to set focus to the critical materials with quantity discrepancies first.
  - Provides status columns to allow both Construction and M&T staff to independently mark the materials that they have reviewed and also a notes column to document their research/findings.
  - Allows a material drill-down to source detail.
  - Provides several filters, sort and group options, and header and total choices to set a view of the detail, while allowing simultaneous print previews of the same.
  - Retrieves and displays source records even if they are not in a state/status to contribute to material quantities.

- Accumulates and displays additional/more information pertaining to calculation of contract material quantities about a source record and its material.
- Displays the algorithm/logic used to derive the material quantity accepted off a source record.
- The original project certification reports have been retained in HiCAMS with inclusion of additional fields for criteria and display.
- *Note: The same module/function is launched from the new menu option Functions -> Project Certification -> Review Project Certification.*

### **CONTRACT ESTIMATES - Generate Estimate**

- A HiCAMS notification will be sent to the appropriate RE office personnel when an estimate status is changed back to Pending Generate due to the assignment of a Function Code on a contract's line item.
- If the status of a Final Estimate is Pending CCU Approval or Pending RE Approval when a Claim is Approved, the Final Estimate status will be reset to Pending Generate.

### **CONTRACT ESTIMATES - Review Estimates**

- A warning message is now displayed when a Final Estimate is forwarded (either from RE to Division or from Division to Central Construction) and there is a claim pending for that contract. Note: There is a related change that if the claim is approved, the Final Estimate status will be reset to Pending Generate (if the estimate hasn't already been processed) in order to pick up the effect of the newly approved claim.
- A notification will be sent to RE office personnel on a contract upon an estimate being processed/paid through the BSIP system rather than at the time the estimate is processed within HiCAMS.
- In Review Estimates, the Damages tab has been altered to display as much of the pertinent contract time dates, rates and damages information as possible.

### **FIELD INSPECTION REPORTS - General**

- A new Report Status of 'Complete' has been added to the list of available report statuses for all Field Inspection Reports. The purpose of this new status is to allow the Inspector to indicate that all of the information pertaining to a report has been completely entered and is available for Authorization by the appropriate personnel. When the 'Complete' status is selected, a notification will be sent to the SMS identified by the Section code (Field Inspection Report X: Complete Status Alert). The Metals Engineer will be notified for all Structural Steel reports (Field Inspection Report X: Structural Steel Complete Status Alert).
- The Inspection Result is no longer required for Field Inspection Reports that have a Report Status of 'In Process'. Once the status is changed to anything else, the Inspection Result will be required.
- The Material Unit of Measure now appears as part of the Material description on Report tab of the Concrete Pipe, Corrugated Metal Pipe, Guardrail, Precast Concrete, and Notice of Rejection Field Inspection Reports.

## **FIELD INSPECTION REPORTS - Review Concrete Pavement**

- A correction has been made to default the Test Result to 'Does Not Meet Specs - Pay Adjustment' when the Average Beam Strength is greater than or equal to 500 and less than 600.

## **SAMPLING - Review Sample Details**

- Samples that contain one or more Alternate Ids that have been linked to a non-Voided Material Receipt may not be Unauthorized. The Links must be removed from the Material Receipt record before the Sample may be Unauthorized.
- The window has been enhanced to allow Asphalt Material Samples that are marked with a Testing Category of 'Informational' to be entered without identifying an Asphalt Mix Design. This is due to a new AASHTO Test Type and an Asphalt Pre-Approval process.

## **SAMPLING - View Pending Contract Samples**

- The window has been enhanced to display additional Sample information. Three new columns have been added as follows: Sample Status, Sample Owner, and Testing Category. The Work Order Number (WBS) has been removed. The Resident Engineer should take note of all Project Acceptance Samples with a Sample Status of Does Not Meet Specs (Accepted, Rejected, or PAR). The Detail button can be used to navigate to the Review Sample Details window so that required Sample Disposition information, including comments, can be entered.

## **PROJECT CERTIFICATION - Review Project Certification**

- A new 'Project Certification' function has been added to the HiCAMS program. This function retrieves all source records: MRRs, Tickets, Pay Records, FIRs, and Samples associated with a contract and computes aggregate material quantity received, accepted and paid, and marks material quantity discrepancies (Paid vs Accepted vs Received). This function:
  - Reads the database to accumulate all MRRs, Tickets, Pay Records, FIRs, and Samples associated with a contract each time the window is used to generate project certification information for a contract or a project certification standard report is generated. This process will take several seconds to a few minutes, in contrast to reports that have existed in previous HiCAMS releases which used to read from a pre-computed set of contract material quantities data.
  - Displays material quantities in an order to set focus to the critical materials with quantity discrepancies first.
  - Provides status columns to allow both Construction and M&T staff to independently mark the materials that they have reviewed and also a notes column to document their research/findings.
  - Allows a material drill-down to source detail.

- Provides several filters, sort and group options, and header and total choices to set a view of the detail, while allowing simultaneous print previews of the same.
- Retrieves and displays source records even if they are not in a state/status to contribute to material quantities.
- Accumulates and displays additional/more information pertaining to calculation of contract material quantities about a source record and its material.
- Displays the algorithm/logic used to derive the material quantity accepted off a source record.
- The original project certification reports have been retained in HiCAMS with inclusion of additional fields for criteria and display.
- *Note: The same module/function is launched from the new menu option Functions -> Contract Tracking -> Audit Materials.*

## QUERY TOOL

- **GENERAL:** A correction has been made to allow the greater than or equal to ( $\geq$ ) sign and the less than or equal to sign ( $\leq$ ) to be used when querying on date ranges for all queries.
- **CONTRACT LINE ITEMS:** The Contract Line Items query has been revised to filter out WBS's that have been merged.
- **MATERIAL RECEIPTS / PAY RECORDS / TICKETS:** Double-click navigation is now available on these three queries. The appropriate window will be opened based upon the selected Contract.

## STANDARD REPORTS

- **CONTRACT MATERIALS DISCREPANCY REPORT:** The filtering criteria has been enhanced to include Line Item, Discrepancy (e.g., Positives, Negatives, All), Discrepancy Type (e.g., Accepted-Paid, Received-Paid, All etc.).
- **CONTRACT MATERIALS DISCREPANCY REPORT:** The report criteria window has also been enhanced to include sorting and grouping options by Material and Contract Line Item.

### ***New for Version 5.9***

- **CONTRACT PROGRESS REPORT:** This new report provides information regarding the actual progression of work for a given Contract versus the Contractor's planned progress submitted on the Progress Schedule.

## **REFERENCES - Job Mix Formulas**

- A Print button is now available from the Select Job Mix Formula window. This provides the ability to print the Job Mix Formula during the selection process of a JMF from the Ticket window without having to navigate to the main Job Mix Formula window.
- A correction has been made to the Job Mix Formula Detail window to prevent deletion of required fields (e.g., Virgin AC%, AC from RAP%) on existing records that have been set to Provisionally Approved or Approved.
- Existing comments on the Asphalt Mix Design used to create a Job Mix Formula are now carried forward to the JMF. Likewise, comments on an existing JMF are carried forward to a new JMF when it is created using the Save As feature.
- A correction has been made to allow other modules such as Tickets and Density to select a Voided JMF as long as it was in an Approved state on the date of the Ticket or Density record.
- A new edit has also been added that prevents the Effective Date of a Void to be earlier than the current date.

## **REFERENCES - Concrete Mix Design - Assign Contracts**

- A Comment field has been added to the Concrete Mix Contract Assignment window to provide the ability to add notes regarding the correlation between Mix and the Project. There may be limitations and/or conditions placed on the use of the Mix that are specific to the Contract it has been assigned to.

## **REFERENCES - Concrete Mix Design - Review Mixes**

- The Concrete Mix Design Selection window has been updated to require the entry of the following information when a new Mix is created:
- Cement Tab: The Approved Producer and Approved Supplier fields are required.
- Pozzolan Tab: When the Pozzolan Type on the General Tab has been set to something other than 'No Pozzolan', the Pozzolan Amount and Approved Producer are required.
- Aggregates Tab: When the Fine Aggregate Amount is specified, the Specific Gravity, Absorption Percent, Approved Producer and Fineness Mod fields are required. Likewise, when the Coarse Aggregate Amount is specified, the Specific Gravity, Absorption Percent, Approved Producer, Material, and Unit Mass are required.
- The Accepted By signature and Date have been removed from the Form 312 report. These no longer appear when previewing the report or when printing the report.
- Save As is no longer permitted on metric Mix Designs.

## ***DOH Vendor Version 3.6***

### **CONTRACTOR DIRECTORY - Review Contractors**

- A correction has been made to the Federal ID/SSN field where leading zeros were not being saved. All characters entered into this field will now be saved to the database.
- Certification history (now being displayed on the Certification tab) has been modified so that certification periods can be easily identified. Users as well as interfacing applications will now be able to tell whether or not a contractor held a particular certification on a given day.
- Certifications that used to be granted automatically by the application based on each contractor's ownership information must now be manually granted by the appropriate UCP personnel.
- Users will be prevented from granting certifications to contractors that do not have the appropriate supporting ownership data.
- The Contractor Directory has been modified to allow users with the appropriate security to assign Small Business Enterprise (SBE) certifications to qualifying contractors.
- The Contractor Directory has been enhanced to allow for the calculation and tracking of ethnicity at the Firm level.
- The Contractor Directory has been enhanced to allow for the calculation and tracking of gender at the Firm level.
- The Contractor Directory has been enhanced to allow for granting and tracking certifications under both the State and Federal guidelines.
- To date, only contractors who had been pre-qualified and/or approved for participation in one or more DBE programs could be entered into the application. The application has been enhanced to allow users with the appropriate security to create a contractor record for each firm submitting an application, regardless of whether the application is ultimately approved or denied. This allows for the electronic tracking of all UCP applications submitted for consideration and will provide quick and easy access to denial information and reasons for denial.
- Contractor Directory users with the appropriate security have been provided with a method of tracking each contractor's UCP certification cycle. First Renewal, Second Renewal and Recertification dates and actions will be tracked for historical reference.
- Contractor Directory users with the appropriate security have been provided with a method of tracking workflow actions, action dates, and comments. Workflow actions can include items such as phone conversations with each contractor, receipt of applications, written correspondence, site visits, application denials, contractor appeals, etc.
- Changes to general contractor information such as Firm Name, Federal ID/SSN, Address, Work Codes and NAICS codes will now be tracked via the general History tab.
- The Highway Contractor Standard Report has been corrected to prevent the truncation of Firm Name and City information.
- The "Vendor Number" field has been dropped from both the Contractor Directory windows and the corresponding database files. Contractors will now be tracked by "Vendor ID" and/or "Fiscal Vendor Number".

## **TECHNICIANS - General**

- The Class Selection window has been enhanced to display the number of seats available in the class. This information will be displayed no matter which window was used to access Class Selection information.

## **TECHNICIANS - Review Class Enrollment**

- A correction has been made to the Review Class Enrollment window that prevents users from altering the Enrolled and Attended checkboxes once a student has been granted a certification from the class.
- A new Confirmation letter option has been added to the popup window accessed by the "Letter" button in the Review Class Enrollment window. Confirmation letters can now be printed for each student who is assigned a seat in the class via the Enrolled checkboxes.

## **PRODUCTS - Review Product Maintenance**

- A history record will now be created each time the Approval Responsibility of a product is changed.
- Approval Responsibility information has been added to the Group dropdown list and the list has been alphabetized for improved searching.
- Approval Responsibility and Group information has been added to the Category dropdown list and the list has been alphabetized for improved searching.

## **PRODUCER/SUPPLIER - Review Producer/Supplier, Facility Types**

- A Staff Selection icon has been added to the Inspection Results tab so that users can readily select and assign an inspector to each inspection result.
- The Facility Types window has been enhanced to include fields for GIS coordinate information. Fields include Latitude, Longitude, Elevation, and Unit of Measure.

## **PRODUCER/SUPPLIER - Review Producer/Supplier, Transfer Facilities**

- A correction has been made to prevent users from clicking the "Transfer" button until at least one facility has been selected for transfer.

## **QUERY TOOLS**

- **TECHNICIAN COURSE INFORMATION:** The Technician Course Information query tool has been corrected to prevent the truncation of phone number information.
- **PRODUCER / SUPPLIER:** The Producer/Supplier Coarse and Fine Aggregate query tools have been corrected to prevent the truncation of phone number information.
- **PRODUCTS:** The Product query tool has been enhanced to include the product comment field in the list of display and criteria columns available for selection.

## **STANDARD REPORTS - Contractor Directory**

- CONTRACTOR DIRECTORY: All applicable Contractor Directory Standard Reports have been modified to include SBE information on both the search criteria window and the corresponding printed report.
- CONTRACTOR DIRECTORY: All applicable Contractor Directory Standard Reports have been modified to include First Renewal, Second Renewal, and Recertification information.

### ***NEW for Version 3.6***

- REGISTRATION BY OFFICE LOCATION: A new Registration by Office Location Standard Report has been created that will allow for the search and display of students registered in each class from each office location.

## **TOOLS - Notifications**

- The notification icon in the system tray has been updated to properly distinguish Vendor notifications from HiCAMS notifications.