

Application Modifications and Enhancements

HiCAMS Version 6.0 and Vendor 3.7 were released 6/18/2005.

HiCAMS Version 6.0

HiCAMS - Logging in and Passwords

- To improve system security and to be consistent with State standards, the following changes have been made to the password functionality for the HiCAMS and Vendor applications:
 - Passwords expire every 90 days (the first expiration will be 09/16/05, which is 90 days after the 06/18/05 release date).
 - Each time a user logs on within 15 days of the password expiring, the message "Your password will expire in 'n' days. Do you want to change it now?" will appear. Note: 'n' is the number of days left until the password expires
 - When there are 3 days (or less) left before the password expires, the message "Your password will expire soon. You must change your password now to continue." will appear.
 - HiCAMS passwords cannot be alpha-characters only. They must be at least 6 characters long and now require at least one number or special symbol. The only special symbols accepted in the password are '@', '#', and '\$'.

HICAMS – General

- The Calendar feature has been modified to allow a date selection with a single click rather than a double click of the date.
- The County Code field definition and values have been modified to match SAP/BSIP values.
- All error message text instances of the lower case "wbs" have been modified to "WBS".
- Copy/Paste functionality has been added across the system where applicable.

CONTRACT MAINTENANCE – Activate Contracts

- Expanded the edits and messages to ensure only positive values are entered for Fuel Factors, Fuel Base Price and AC Base Price.
- Expanded the edits and messages in Set Warranties to ensure Start Date precedes the Stop Date, that the Start Date is greater than the Contract Work Start Date, and that the number of days is positive.

CONTRACT MAINTENANCE – Review Contract Details

- A new AC Threshold % field has been added to the Financials Tab of the Review Contract Details window. The system will now allow AC price adjustment determination to include a threshold assigned at the contract level, rather than the previous department-wide value of 5%. The values will be automatically assigned to contracts by letting date. The Construction Unit will be able to change the value at any time and subsequent estimate generation will recalculate all AC on that contract using the updated threshold.

CONTRACT MAINTENANCE – Review Contract BOM

- The Quantity column has been added back to the General Tab of the Maintain Contract BOM window. It was inadvertently removed as part of the 5.9 window redesign.
- The warning message displayed when a substitutable material is deleted, leaving only one other material in that group, has been changed to read "The Substitution Group will be removed from the one remaining Material. Do you wish to continue?".

CONTRACT MAINTENANCE – Review Work Items

New for Version 6.0

- Review Work Items has been added to the Contract Maintenance menu. This new window will be used to create and maintain non-payable work items associated with Lump Sum Pay Items on a contract. Two new User Guides - Contract Maintenance – Review Work Items and Contract Tracking – Review Work Accomplished, will be available for download on the Main HiCAMS homepage <http://www.ncdot.org/it/projects/hicams/default.html>

CONTRACT MAINTENANCE – Review Subcontracts

- The Subcontract and Second Tier Subcontract windows have been enhanced to automatically pop-up the Contractor Selection window when creating a new record.
- The window was modified to correct a conditional internal calculation and evaluation problem that caused occasional subcontract approval errors under the wrong circumstances.

CONTRACT ADJUSTMENTS – Review Supplemental Agreements

- The 90 Day Rule has been removed.
- The Contract Times Tab has been revised to return the cursor to the appropriate Contract Time after navigation to the Contract Times window is complete. Previously, when the Contract Times window was closed, the cursor defaulted back to Contract Time 00 on the Supplemental Agreement instead of the Contract Time that was being modified or created.
- The window has been modified to correct internal calculations used in determining Line Item amounts and other business rules. Previously, there were conditions that prevented the Activation of a Supplemental Agreement although the action should have been permitted.

CONTRACT TRACKING – General

- The Material Receipts, Pay Records, and Tickets windows have been enhanced to display the Line Item Bid Quantity and Unit Price on the General Tab. This information enables the system and the users to differentiate between Line Items with the same description. Typically this happens when Supplemental Agreement Line Items are created to back out the original Line Item and then to adjust the unit price.

CONTRACT TRACKING - Review Material Receipts

- The Material Receipt window has been modified for materials with a Pretest (Match) acceptance method, to recalculate the accepted quantity on linked Alternate IDs when the MRR Received Quantity is increased. If it is possible to increment the Alternate ID accepted quantity, the system will automatically do so.
- The window has been modified to display the correct Alternate IDs assigned to an individual Material Receipt in all cases. Previously, a filter problem prevented this from happening under certain conditions, which resulted in inappropriate error messages.
- The window was modified to require the Alt ID received quantity to be positive.
- The window has been enhanced to prevent the transfer of a material from a contract that would cause the remaining received quantity of that material to be less than the paid quantity of that material.
- The window has been modified prevent a Material Transfer transaction from occurring if any edits fail within the Material Receipt window.
- The window was modified to prevent application termination if an empty row in the grid was clicked after clicking the Plant ID field.

CONTRACT TRACKING - Review Pay Records

- The window was corrected to allow an RE or ARE to enter pay records against an Eliminated Contract Item contract line item.
- The window was modified to make the length of the Offset Distance six alphanumeric characters and the length of the Map Number field five characters.

CONTRACT TRACKING - Review Tickets

- The window has been modified to always protect the Approved Producer field when a "Save As" is performed on Tickets pertaining to Asphalt Materials. The Approved Producer is inferred from the JMF on these Tickets.
- The window has been modified to remove inferred AC information when the material on an existing asphalt ticket is changed to a non-asphalt material.

CONTRACT TRACKING - Review Work Accomplished

New for Version 6.0

- Review Work Accomplished, has been added to the Contract Tracking menu. This new window will be used to create and maintain work periods and quantities for work items associated with Lump Sum Pay Items on a contract. Two new User Guides - Contract Maintenance – Review Work Items and Contract Tracking – Review Work Accomplished, will be available for download on the Main HiCAMS homepage <http://www.ncdot.org/it/projects/hicams/default.html>

CONTRACT TRACKING - Review Material Prepayments

- The window has been modified to produce an error if an expired State is selected on the Acceptance Tab.
- The window has been enhanced to expand the display widths of the Address information fields and to verify Zip Code entry formats.
- The "Prepayment" label in the General tab has been changed to "MPP" to match the "MPP" column header label.

CONTRACT TRACKING – Review Pay Adjustments

- The window was modified to allow a Pay Factor to be Voided regardless of the quantity of work accomplished on that item.
- The window was enhanced to prevent entry of an Inspection Date that is greater than the current date.
- The window has been corrected to no longer send out a "Closed" notification when the user decides to cancel out of the closing process.
- The right-click functionality on the header of the Review Pay Adjustments Details window is now available.
- The window was modified to produce a single error message if an invalid contract number is entered into the contract selection criteria field.

CONTRACT TRACKING – Audit Materials

- See Notes under Project Certification – Review Project Certification

CONTRACT ESTIMATES - Review Estimates

- The re-design effort for 5.9 caused the logic that re-calculated the completion date after winter weather or pro rata days were entered to happen only upon save. Prior to Version 5.9, it was re-calculated after tabbing out of the fields or hitting the enter key. The date re-calculation has been adjusted to work after entering days and hitting enter, tabbing out of the field, or clicking on save.
- The ability to clear accidental entry of Winter Weather Days and Pro Rata days was restored. That functionality was inadvertently deleted during the 5.9 re-design effort.
- The Percent Complete By Progress and Overrun/Underrun To Datep fields now default to blank rather than 0. They require a value (0 is valid) prior to forwarding the estimate to CCU. A warning message is produced by the system if the Percent Complete By Progress is less than 1%.
- The window has been corrected to display the appropriate History Tab information when navigating from the Final Estimate through previous estimates.

DENSITY

- A correction has been made to the Technician Selection window that is called from the Density, IA, Sampling and Report Functions to locate Technicians with Active/Provisional certifications. Users will be able to either enter a Technician ID or select a Technician from the staff selection window with proper validation edits.
- The Contract number is now defaulted on the appropriate Density modules when navigating from Contract Tracking windows.
- The window has been modified to prevent unnecessary messages when Voiding an Asphalt Core QC lot.
- The labels in core densities that read "Station From" have been changed to "Station" since core data represents a location rather than a lot.

FIELD INSPECTION REPORTS – General

- The Field Inspection Report windows have been enhanced to prevent further changes once a record has been marked as 'Complete'. To revise a completed record, the user may change the Report Status to 'Unauthorized', which will unprotect the record and make it available for further updates.
- A correction has been made to various reports to ensure that Report headers are displayed accurately on multi-page reports within the window. The Remarks and 'cc:' information has also been moved to the footer section of the Reports to ensure that all information is accurately displayed.
- The Filter criteria on the Review Field Inspection Reports window has been expanded to include Test Category.
- The Review Field Inspection Reports window will now default the Report Status to 'Complete' and the Section Number to the appropriate Section when the Section Materials Specialist (SMS) opens the window.
- The window was modified to correctly word wrap the History Comment field.
- The Find and Sort functionality has been corrected to no longer display internal field names for Section and Report Status.
- The window was modified to ensure cursor focus and tab navigation is correct on all of the reports, even when errors occur.

FIELD INSPECTION REPORTS - Review Concrete Pavement

- CONCRETE PAVEMENT: The window was modified to require a numeric value for the Lot Number field.
- CONCRETE PAVEMENT: The Sort and Find functionality is now working correctly where applicable.
- CONCRETE PIPE: The window was modified to correct a problem where the value in the Laying Length field was being moved to the Accepted column in the Results tab in certain instances.
- PRECAST CONCRETE: The window was enhanced to default the inspection results to "In Process" when A 'Save As' or 'New' action is performed.
- REVIEW NOTICE OF REJECTION: The window was corrected to allow 'click-sort' functionality on the Material Type and Material column headers and the word-wrap option was added to the 'right-mouseclick' function.

INDEPENDENT ASSURANCE

- 'None' has been added as an option to the County dropdown, since the field is not required.

QA/QC

- The window has been modified to prevent application termination if 'click-sort' on column headers is performed on an empty grid.

SAMPLING – Enter Sample Details

- For inquiry only users, the sampling menu option 'Enter Sample Details' has been disabled (grayed out).
- The window was modified to prevent invalid contract line item combinations to be associated to the Sample when the 'Save As' functionality is used.
- The warning message "Represented Quantity exceeds the Sample Frequency for this material and test category. The sample frequency is defined in Minimum Sampling Guide as one sample per XXXX.XXX material unit(s) of measure." was changed to a hard-error message and to read "Represented Quantity exceeds the Sample Frequency for this material.". The Represented Quantity must be adjusted to less than or equal to the Sample Frequency in order to save the Sample.
- The warning message "You may not delete an existing row." was changed to read "A saved Alternate ID(s) cannot be deleted."
- The warning message "Each sample can only have one type of Alternate ID which is either Available or In use. Please correct the Alternate Type and ID data." was changed to read "Invalid Alternate Type selected. In Use or Available Alternate ID's must all be of the same Type."
- The warning message "A sample/part forwarding action must specify a forwarding location. Please provide a forwarding location." was changed to an error message that reads "Please provide the following required information - Forwarding Location."
- The warning message "Sample is already In Transit. Submitted date must be on or after sample date and on or before today's date." was changed to "The Submitted Date cannot be less than the Sampled Date and cannot be set in the future."
- The warning message "Field ID must end in a digit to be able to auto generate samples" was changed to read "To Auto Generate, Field ID must end with a numeric value."

SAMPLING – Review Sample Details

- The window was modified to remove the traditional edit format mask for sample numbers to allow easier entry and correction of sample ids in retrievals throughout the application. Users may type in any sample number and will no longer experience problems with cursor placement when an invalid number is entered.

SAMPLING – Authorize Samples

- The Staff Filter List selection window has been enhanced to allow selection of expired staff.
- The window has been corrected to display the appropriate columns by which the data can be sorted in the Sort Criteria functionality.

SAMPLING – View Pending Lab Samples

- The window has been corrected to display the appropriate columns by which the data can be sorted in the Sort Criteria functionality.

PROJECT CERTIFICATION – Review Project Certification

- The Project Certification information is now automatically regenerated each evening for those Contracts that had Source Data such as Material Receipts, Tickets, Pay Records, etc inserted or modified that day.
- The following enhancements were made to the Project Certification Display Options window:
 - ‘Source Date From’ and ‘To’ columns have been added to allow data from a specific data range to be retrieved. The default values select all data, regardless of date.
 - The Material Type dropdown has been enhanced to only display those Material Types that are eligible for the selected contract (Metric & Both material types on Metric contracts, English & Both material types on English contracts).
 - A message will appear when more than 3,000 rows of data will be retrieved based on the current display options criteria. Users will have the option of either proceeding with that request or canceling to make further adjustments to the criteria to limit the results.
 - It is now possible to deselect the Sample – Contract Line Items option.
 - The appropriate Header and Total columns are now being checked when a sort order different than ‘Other’ is selected and then ‘Other’ is reselected as the sort order.
- The Detail Tab has been enhanced to automatically open the Display Options window when the Tab is first selected instead of performing an automatic retrieval of data. This enables the user to focus on specific display criteria and improves performance. The Page information is also displayed in the format of ‘x’ of ‘y’ Pages (e.g. , 1 of 135 Pages) at the bottom of the Tab to improve navigation/orientation.
- The report was modified to correct a problem when grouping/totaling by Line Item having filtered by Line Item ‘Unknown’.
- The main window was modified to only display the data generation preferences when "Read From Saved Data" has been selected. The system has been tuned to allow re-generation on demand and to automatically re-generate in the evenings when data has changed, so it isn't necessary to continue to display the data generation preferences.

- The quantity columns on the windows and reports were expanded to support values up to 100 million.
- The 'Paid' label on the window and reports has been changed to 'Paid/Used' to cover Design Build contracts as well as conventional contracts.

QUERY TOOL – General

- The Query Tool has been corrected to prevent additional pages from being printed due to incorrect display widths processed by certain printers.

QUERY TOOL – AMD

- JMFs that were converted from the mainframe have no associated AMD data in HiCAMS and are no longer displayed in the AMD query tool selection criteria.

QUERY TOOL – Concrete Mix Design

- The Work Order Number and WBS number are now available for selection.

QUERY TOOL – Contract Line Items

- The 'Line Item Quantity To Date' column, which pulls the total Line Item quantity through the current estimate, regardless of that estimate's status, has been added to the Query Tool. The 'Line Item Paid To Date' column remains available to display the quantity through the most recently paid estimate.

QUERY TOOL – CONTRACT TIMES

- It is now possible to navigate to the Review Contract Times window by double-clicking on a resulting query record.

STANDARD REPORTS

- **CONTRACT BILL OF MATERIAL REPORT:** The report was modified to correct a problem with parameter validation when the designated 'Thru' Line Item was less than the 'From' Line Item.
- **CONTRACT MATERIALS DISCREPANCY REPORT:** The report parameter edits were adjusted to require at least one of the MSG criticality values to be selected when the 'Select Material Type Criticality' checkbox is checked.
- **CONTRACT MATERIALS DISCREPANCY REPORT:** Click-sort is now available on the material description when using the material selection window to set report parameters.
- **CONTRACT PROGRESS REPORT:** The report has been modified to prevent periodic application termination when scrolling through the Contract Progress Report.
- **CONTRACT MATERIALS WITH LINE ITEMS REPORT:** When using the material selection window to set report parameters, click-sort is now available on the material description.
- **CONTRACT QUANTITIES STATISTICS REPORT:** When using the material selection window to set report parameters, click-sort is now available on the material description.

- IA TYPE COUNTS BY CONTRACT REPORT: The report has been corrected to retrieve the appropriate Conventional Density type date when Overall Ratings of 'Excellent' is selected.
- MATERIAL QUANTITIES ACROSS DIVISION, RE, CONTRACT REPORT: The Paid Quantity for each selected material is now displayed on the report.
- MATERIAL QUANTITIES ACROSS DIVISION, RE, CONTRACT REPORT: Contract Status and Material Type Criticality have been added as report parameters.
- MATERIAL QUANTITIES ACROSS DIVISION, RE, CONTRACT REPORT: A Reset button has been added to allow the user to quickly set the report parameters back to their defaults.
- MATERIAL QUANTITIES ACROSS DIVISION, RE, CONTRACT REPORT: The Subtotal labels were renamed to be more descriptive.
- MULTIPLE SAMPLE REPORT: The report has been removed from the Standard Report list until the requirements for the report are defined.
- SAMPLE STATISTICS REPORT: When using the material selection window to set report parameters, click-sort is now available on the material description.
- SECURITY STAFF REPORT: The Staff List Selection window has been enhanced to default the Office Category and Office Location fields to '(All)'.
- SUBCONTRACT LINE ITEM REPORT: A correction has been made to ensure that the Subcontract Amount total appears at the bottom of each page for those reports that span multiple pages.

REFERENCES – Asphalt Mix Designs

- A print feature was added to the Selection and Details windows.
- The window has been corrected to only allow selection of materials that are not expired as of the create date of the AMD.

REFERENCES – Concrete Mix Design – Assign Contracts

- The Date has been removed from the Statement of Concrete Mix Design and Source Materials Report.
- 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.
- An Assign Button has been added to allow easy access to the Select a Concrete Mix Design window.

REFERENCES – Concrete Mix Design – Review Mixes

- The window has been modified to perform the same required edits on existing records as on newly created records.
- The window has been corrected to allow the insertion of a new Concrete Mix Design after reviewing an Expired Concrete Mix Design. Conditional problems with edits and field protection on the Additives Tab have also been corrected.
- When a new Concrete Mix Design is created, the Measurements field will default to English and remain protected.
- The window has been corrected to remove the data from the Fine Aggregate and/or Coarse

Aggregate fields when 'None' is selected for the associated Approved Producer/Supplier.

- A periodic arithmetic overflow condition on Mortar Content when printing certain Concrete Mix Designs has been corrected.

REFERENCES – Job Mix Formulas

- Performing a 'Save As' on JMF records that were converted from the mainframe in version 5.0 without an associated AMD in HiCAMS is now possible.
- The material selection list is now limited to those materials that have not been expired as of the JMF create date.
- The window has been modified to prevent negative values from being entered in the mix temperature and other required fields.

REFERENCES – Minimum Sampling Guide

- The window was modified to correct the name of the Metric/English sort column displayed in the Sort Criteria accessed from the menu Sort icon.

ADMIN – Function Code Assignments

- The window column sizes have been adjusted to allow full drop-down displays.
- 'None' was added as an option in the function code dropdown.
- The dropdown window size was expanded to allow all current values to be displayed without scrolling.

TOOLS - Notifications

- Notifications for the HiCAMS and Vendor applications must be viewed within the application from which they originated. To view all HiCAMS notifications, it is necessary to log on to HiCAMS and access notifications by either clicking the toolbar icon of a mail slot or via Tools>Notifications. Likewise, to view all Vendor notifications, the same process can be followed after logging on to the Vendor application. The Notification Checker icon, which appears as a mail slot in the lower right-hand corner of the PC screen, shows the combined number of notifications for both applications.
- The window has been modified so that when it is opened, the focus is on the Send button. This allows the return/enter key to execute the send in addition to clicking on the send button.
- The Send Notifications window was enhanced to prevent closure without sending a notification.
- The window has been modified to disable the GOTO button for Staff Re-link notification and whenever there is no navigation destination available.
- The window has been modified to prevent application termination caused by clicking a column header when there were no notifications listed.
- It is no longer possible to select expired job titles when setting up notifications.

CLAIMS

- The Claims Standard Report was modified to generate correctly even if the contract does not have a TIP number.
- The window was modified to correct several display/formatting issues with quantity and amount fields.
- The error message that was displayed when trying to link claims and a link was not possible was changed to read ""The current Contract contains one Claim. Two or more valid Claims must exist before a relationship can be performed.""
- The window was modified to retain the Claims menu when running the standard report in the Claims module. It had previously switched the menu bar to the HiCAMS menu bar.

DOH Vendor Version 3.7

CONTRACTOR DIRECTORY - Review Contractors

Changes for the SAP Interface

- The SAP system is now the point of entry for Contractor Directory data. Data that currently resides in the Vendor Contractor Directory Subsystem will be converted to the SAP system. Security for the Vendor Contractor Directory module has been changed so that it is read-only for all users. SAP will send a nightly extract to the Vendor application to refresh the Vendor Contractor Directory information.
 - The window has been enhanced to include an Employer ID Number and the Social Security Number on the General Tab. The Federal ID/SSN column has been renamed to Old Federal ID/SSN. Only users that have inquiry rights to these fields via a security tag can see those values.
 - In order to be consistent with the SAP application, County, Officer, Address Type, Firm Type and the Canadian State values have been modified to match the SAP values.
 - Removed the old Contractor Directory address types and replaced them with the SAP address types. The SAP address types are PO Box and Street Address. The contractor data have been fixed accordingly. The SPECS interface has been modified to handle this change.
 - Standard Reports have been modified to default Address Type to the PO Box address.
 - The fiscal vendor number for firms that will not be converted to SAP has been set to "9999999999".
 - The firm names for all contractors have been changed to mixed case.

Other Changes

- All erroneous duplicate address history records that were previously created have been removed from the system.
- The 'Find...' and 'Sort...' functionality on the Contractor Selection window has been corrected to display the field label names consistent with the column

header labels. This functionality is accessed by right-mouse-clicking in the lower grid area of the window.

TECHNICIANS - Review Class Enrollment

- A correction was made to the 'Find...' and 'Sort...' functionality that is available by performing a right-mouse-click on the Enrollment grid. The 'Word Wrap' feature was also added for the Office Location column.

TECHNICIANS - Review Class Maintenance

- A correction was made to the error message that appears when the user selects an inactive class.

TECHNICIANS - Review Course Maintenance

- A correction was made to the misspelling of the word "synchronize" in an error message header title.

TECHNICIANS - Technician Certifications

- The window has been corrected to display and print the Technician ID rather than Staff ID.

PRODUCTS - Review Product Maintenance

- The window has been corrected to prevent the selection of a duplicate Evaluator on the Evaluation Tab.
- The window logic has been enhanced to conform to business requirements and to improve the visual display. When the Approval Responsibility is modified, information in the Group and Category fields is removed. The width of the Unit of Measure field on the General tab has been expanded and it is no longer possible to enter a negative Unit Price value.
- Two new sub-menu options are available under the Products menu called Memorandum and Agenda. These new items allow users to create, update and print committee meeting agendas and memoranda.
- The New Product Memorandum feature enables users to create a memo for a Product that is currently under evaluation and has been assigned a committee meeting date. The information will include all evaluators assigned to a Product, information about the product, and the date that it will be submitted to the committee.
- The Agenda feature is for upcoming committee meetings. This will include the meeting date, time & location information, a distribution list, the list of products to review, information about the product, and the agenda for the meeting.

PRODUCER/SUPPLIER - Review Producer/Supplier, Facility Types

- Improvements were made to the Review Producer/Supplier window to prevent periodic inappropriate pop-up messages from appearing when expiring producer/suppliers or transferring their facilities. The window also will now protect the appropriate fields, disable some buttons/functions, and remove certain icons from the visible display once a producer/supplier is expired.
- The Facility Types window has been corrected to prevent the Certification Date on the General Tab and the Inspection Date on the Inspection Results Tab from being set to a future date and to ensure that the entered dates are valid.

QUERY TOOLS - Contractor Directory

- The Prequalification Status description rather than the code is now displayed when this information is included in a query.

QUERY TOOLS - Technician Class Information

- The double-click navigation feature that enables the Technician Class window to be opened from the Query Tool has been corrected.

QUERY TOOLS - Technician Class Registration/Enrollment

- The 'Producer/Supplier Name' and 'Other Company Name' fields are now available for selection.

TOOLS - Notifications

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- The notification process for Technician Enrollment has been enhanced so that each person who registered one or more students will receive a notification when that student is enrolled. If this list of enrolled students is larger than what the message can handle, the message will state they should review the enrollment window.