



User Reference Manual

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Credit

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1. Introduction

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1.1 Document Structure

The SiteManager User Reference Manual is a reference document for users of the AASHTO SiteManager application. The user should refer to this manual only when a question cannot be answered by referring to the SiteManager on-line help system. This manual describes all of the SiteManager components, including their purpose, functions, and how to use them.

The SiteManager application is organized into the following eight major functional areas, which are represented by icons on the main panel:

- Contract Administration
- Daily Work Reports
- Pipeline
- Contractor Payments
- Change Orders
- Civil Rights
- Materials Management

This manual is organized into the same eight functional areas plus introductory and supplemental information. The topics Key Dates, Checklist Scheduled Events, and Checklist Event Dates are covered in a separate section of the manual due to their importance throughout the life of the Contract. The manual's main sections are described below:

Section 1 Introduction

The Introduction describes the structure and objective of this manual. Refer to this section for an overview of the manual's topics, or to find out how this manual is intended to be used.

Section 2 Getting Started

The Getting Started section includes information to help the user get started using SiteManager. This includes information about starting and exiting SiteManager, changing your password, and In-Box message functions. This section also includes descriptions of SiteManager's graphical components and how to use them to navigate within the application and to accomplish tasks.

Section 3 General Concepts

The General Concepts function describes the menus, toolbars, and the components that are common throughout the application. It includes common procedures for using on-line help, security, and reporting.

Section 4, 5, & 6 Contract Administration

The Contract Administration section describes the reference tables that store standard Contract data, such as default date types, Contract Item descriptions, and Vendor information. It provides an overview of how to add Contracts to the system, and describes each panel that is used to view, modify, or delete Contract data. It also describes the panels that are used to maintain data related to Contracts, such as Contractor (Vendor) information, conference records, force accounts, dispute records, evaluations, correspondence records,

required documents, and Contract reports. This section also describes how the system validates Contract status and how the Project Manager finalizes a Contract.

Section 7 Key Dates, Checklist Scheduled Events, Checklist Event Dates

This section describes how the user views and maintains Key Date and Checklist Scheduled Event data. This data is used to administer the Contract and to monitor compliance with Civil Rights provisions.

Section 8 Daily Work Reports

The Daily Work Reports section explains the concept of reporting, transferring, and storing daily Contract activity data. This section defines the data that is collected by the Daily Work Report function, and describes how to record the data on SiteManager panels. It also describes how Daily Work Reports are approved, combined to make Diaries, and maintained in the database.

Section 9 Pipeline

The Pipeline section describes the SiteManager components that are used to upload and download data to and from the Server database, and to transfer data from one workstation to another in the field. These components are provided specifically for the Project Manager and Inspector who must transfer Contract data, Materials data, and Sample and Test data. This section explains how Pipeline is used in conjunction with the Daily Work Report function and Materials Management.

Section 10 Contractor Payments

The Contractor Payments section describes the estimate generation process and the reference tables that store data related to Contractor Payments. This section defines the estimate types and generation parameters, and gives an overview of calculations performed by the system. It explains how the system identifies Contract discrepancies and how the user can adjust Contracts and Contract Items. It also explains the estimate approval cycle and the Contractor Payment reporting options. The reference tables described in this section define the price adjustment indices, Autopay Items, discrepancy options, and Contractor payment approval levels.

Section 11 Change Orders

The Change Orders section describes the Change Order reference tables, types of Change Orders, the approval process, and Change Order reporting options. It explains how the user creates and tracks Change Orders.

Section 12 Civil Rights

The Civil Rights section describes the reference tables and panels used to add and monitor data related to Civil Rights. These components let the user define programs, maintain trainee records, monitor compliance with DBE commitments, record wage decisions, and run reports on these records.

Section 13 Materials Management

The Materials Management section stores Materials information, including inventory, specifications, testing requirements, mix designs, and lists of approved suppliers, personnel, labs, equipment, and fees. It explains how to build and maintain a Contract Materials List, how to enter sample data and track test results, and how to run reports. It also provides on-line access to sampling and testing procedures.

Appendix A Glossary

The Glossary defines terms used in the SiteManager application.

Appendix B SiteManager Navigation

This appendix includes an overview map of the SiteManager application and detailed maps for each functional area of the application.

Appendix C Estimate Generation Calculation

This appendix describes the components of the estimate generation process and explains how the system calculates the values reported on an estimate.

Appendix D Retainage Calculation

This appendix describes one component of estimate generation, retainage calculation, which involves relatively complex calculations. Examples show the calculation results.

Appendix E SiteManager Database

This appendix gives an overview of the database structure.

1.2 Objectives

This document serves as a supplement to the SiteManager on-line help system. The user can refer to this manual for information that is not covered in depth in the on-line help. This includes field descriptions, expanded topic discussions, calculations performed by the system, error message definitions, and system administration functions. Some of this information is presented as separate appendices in this manual.

This manual assumes that the user is authorized to use every function provided by the application. In actual usage, some SiteManager functions can only be used by the System Administrator, Project Manager, or central office personnel with global Contract authority. Some users will have view only rights to certain panels. In most cases, this manual does not identify the transportation agency personnel who will have the authority to use each function; this is done by the transportation agency.

The transportation agency should keep at least one copy of this manual in every office for occasional reference. The local technical support personnel should have a copy of this manual as part of a basic reference set.

1.3 Procedures

SiteManager Procedures, the steps the user follows to access a component of SiteManager, vary depending on whether the user has just entered the system or has been in some other component and has already selected a common variable.

For instance, if the user enters the application and navigates directly to the Contractor Payments component, the Estimate Summary window requires the selection of the desired Contract and Estimate.

However, if the user has been working in the Contract Records component, already has a Contact selected, and then navigates to the Contractor Payments component, the Estimate Summary window displays for selection the Estimates for the Contract previously selected in Contract Records.

The procedures in this manual describe how to access components of SiteManager as if the user just entered the application.

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2. Getting Started

August 2005

2.1 Starting and Exiting SiteManager

2.1.1 Starting SiteManager

The AASHTO Trns•port SiteManager Construction Management System is a Windows application, which will run on several different windows graphical user interfaces — Microsoft Windows 95, Microsoft Windows 98, Microsoft Windows NT, and Microsoft Windows 2000. For your operating system, you will start SiteManager the same way you would any program on your computer.



The SiteManager Icon

Figure 2-1

In Microsoft Windows, the main SiteManager program will be located with its own icon displayed on the main desktop, as illustrated in Figure 2-1.

FOR MICROSOFT WINDOWS 95/98/2000, & WINDOWS NT

To start on the AASHTO SiteManager system:

1. Double-click the SiteManager desktop icon.
2. Type your logon identification name.
3. Press the **Tab** key.
4. Type your password.
5. If appropriate in the **Connect to** drop-down list, click the expand arrow to the right of the current selection and click the desired database choice.
6. Press **Enter**.
7. If appropriate in the **Available Group for ...** dialog box, click the group ID.
8. Press **Enter**.



Figure 2-2 The SiteManager Logon Dialog

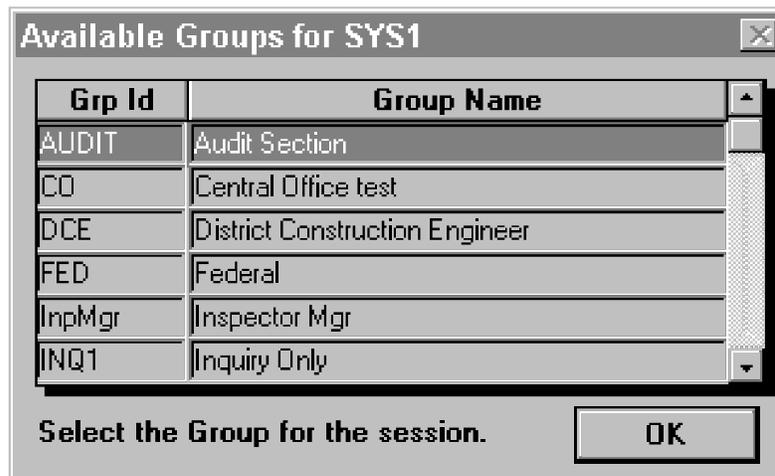


Figure 2-3 The Group Dialog Box

2.1.2 End-User Security — Changing Your Password

In addition to your network logon identity, SiteManager also has password protection. Your SiteManager ID determines what information you have access to and whether you can update the data or not. If you have any questions regarding your SiteManager security access, contact your SiteManager system administrator.



Figure 2-4 The Change Password Dialog Box

When a user fails to logon to SiteManager successfully after 3 attempts, a message appears advising the user to contact the System Administrator. The System Administrator resets the users password. The password is always reset to PASSWORD and is case sensitive. When any User logs on using the default password 'PASSWORD', the only option visible (besides 'cancel') is the 'Change Password' option. Users are forced to change their password before they can access the application.

There is an exception to the rule that 3 failed logon attempts lock the users out of the system. An Inspector using SiteManager in standalone mode may have an infinite number of failed logon attempts without being locked out of the system.

To change your password:

1. Start SiteManager.
2. On the logon screen, type your old password.
3. Click the **Change Password** button.
4. Type your old password.
5. Press the **Tab** key.
6. Type your new password.
7. Press the **Tab** key.
8. Type your new password, again.
9. Click **Ok**.

2.1.3 Exiting SiteManager

As with all Windows applications, the File menu's Exit choice allows you to end your SiteManager work session and exit the application. Additionally, SiteManager has an Exit button on the Toolbar that is even more convenient. If you have been performing work and have changed your data (or even if SiteManager is not sure) a warning message will allow the data to be save before the application is closed or to cancel the exit process.



The Exit Button
Figure 2-5

To exit SiteManager:

1. Click the **Exit** button.

Or

2. Click the **File** menu and click the **Exit** choice.
3. If appropriate, click the **Yes** or **No** button.

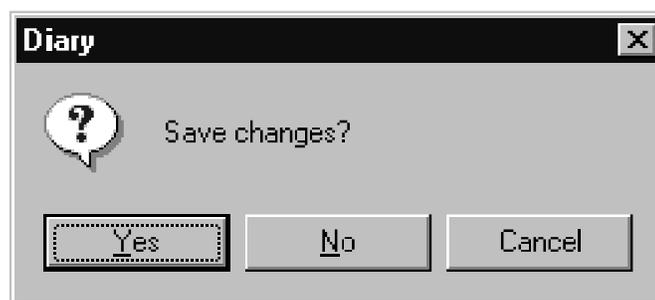


Figure 2-6 The Exit Warning Message

2.2 Main SiteManager Panel

After starting the SiteManager application, the Main SiteManager Panel will display the components of the system as icons. The central functionality of SiteManager is divided into ten icons: Contract Administration, Daily Work Report, Pipeline, Contractor Payments, Change Order, Civil Rights, Materials Management, Accessories, System Administration, and Manuals.

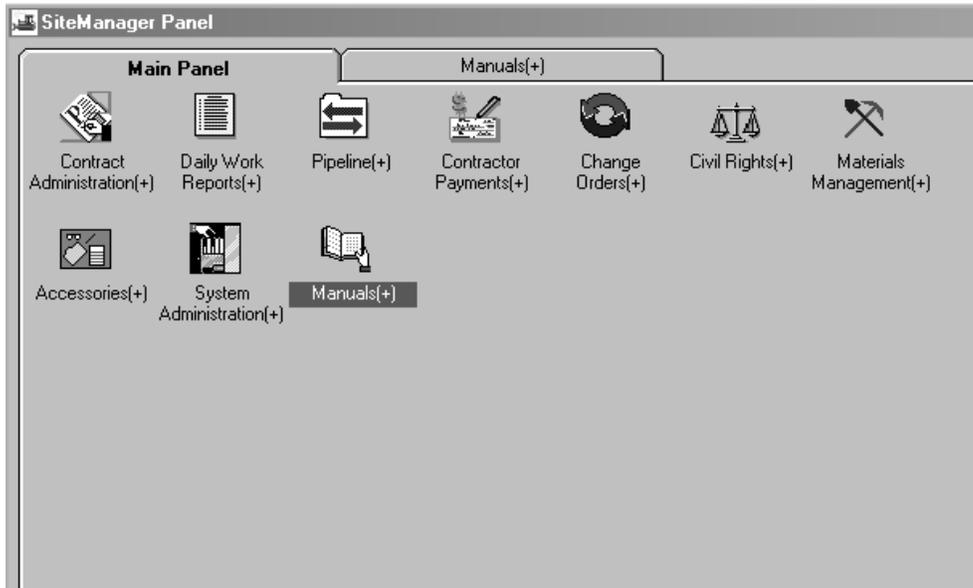


Figure 2-7 The Main SiteManager Panel

2.2.1 Security and the SiteManager Components

The panels and icons to which an end-user has access is defined by the transportation agency. The panel above and all following documentation will describe and illustrated the content of the all components of SiteManager. A given end-user’s panels may not conform to the illustrations (figures) unless they have security access to all components of SiteManager.

2.2.2 The SiteManager Status Bar

The SiteManager Status Bar at the bottom of the SiteManager window indicates your mode, connection, database region, logon group and individual ID.

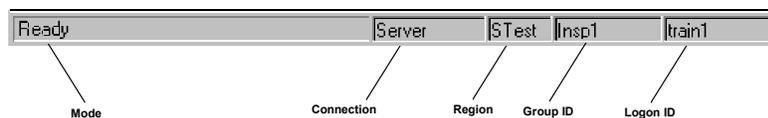


Figure 2-8 The Status Bar

2.2.3 Main Panel Icons - SiteManager Functional Areas

Icon	Description
 <p data-bbox="310 569 509 590">Contract Administration</p>	<p data-bbox="618 464 1279 558">Automates recording of important Contract data, including Contractor contacts, Contractor documents, and plan discrepancies.</p> <p data-bbox="618 590 1162 621">Automates verification of Contractor payrolls.</p> <p data-bbox="618 653 1360 711">Provides a mechanism to modify a Contract and document that change.</p> <p data-bbox="618 743 1325 802">Tracks critical dates for recurring contract items and special events.</p> <p data-bbox="618 833 1252 865">Calculates liquidated damages and contract retainage.</p> <p data-bbox="618 896 1338 991">Supports Contract Management with reference table viewing and maintenance for funding sources, item masters, vendors, and administrative offices.</p> <p data-bbox="618 1022 1344 1081">Allows SiteManager users to enter and maintain SiteManager Contract data, including project items and funding.</p> <p data-bbox="618 1113 1268 1171">Controls Contract access through Contract specific and administrative office authority.</p> <p data-bbox="618 1203 1182 1234">Maintains Contractor and Subcontractor details.</p> <p data-bbox="618 1266 1279 1297">Assists project management by tracking Contract status.</p> <p data-bbox="618 1329 1292 1360">Furnishes capability to monitor Contract disputes/claims.</p>
 <p data-bbox="310 1516 467 1537">Daily Work Report</p>	<p data-bbox="618 1415 1341 1474">Collects Inspector Daily Work Reports data, field samples, field tests, and stockpiled materials used.</p> <p data-bbox="618 1505 1308 1564">Automatically transfers (download) base Contract data for reference (Contract items, quantities, etc.).</p> <p data-bbox="618 1596 1341 1654">Collects and maintains Contractor data including Contractors working, work performed, and equipment used</p> <p data-bbox="618 1686 1284 1787">Collects and maintains installed item quantities, weather conditions, staff/consultant hours, and Force Account information (labor, equipment, and materials).</p> <p data-bbox="618 1818 1349 1850">Links to “reference” documents stored in third party packages</p>

Icon	Description
	<p>such as word processors, spreadsheets, sketching tools, etc.</p> <p>Allows on-line review of the Daily Work Report and authorization for incorporation into the Estimate process.</p> <p>Allows collected data on a laptop or “pen-enabled” laptop computer in the field or a workstation in a project office to be transferred (uploaded) to the SiteManager database.</p>
 <p>Pipeline</p>	<p>Allows the Project Manager and Inspector to upload and download data.</p>
 <p>Contractor Payments</p>	<p>Automatic generation and approval of payment estimates, based on the Contract and any Liquidated Damages, Contract Adjustments, and stockpiled data.</p> <p>Automatic calculation of DOT-defined adjustments for liquidated damages, incentives, disincentives, and Contract item price adjustments</p> <p>Automatic calculation of retainage amounts, encumbered amounts for securities, and escrow accounts, based on Contract parameters</p> <p>Discrepancy reporting and resolution during the estimate process for certified payrolls, DBE commitments, item overruns, and material testing deficiencies</p> <p>Tracking the estimate from the generation process through the approval process</p> <p>Creation of voucher data from the payment process which can be used as input to a DOT-specific financial management system</p> <p>Automatic management of stockpiled material as the material is being used</p> <p>Provide Stand Alone capability (i.e., Installed Work Summary Report)</p>
	<p>Ensures Contractor acceptance of changes by including Contractors in change order review and approval process</p>

Icon	Description
<p>Change Order</p>	<p>Ensures consistency in the change order process</p> <p>Establishes, maintains, and approves Force Accounts which includes details on labor, equipment, and material cost</p> <p>Tracks review and approval process to ensure accountability</p> <p>Assists in future planning by providing a means to track and identify reasons for change</p>
 <p>Civil Rights</p>	<p>Automates recording and tracking of Disadvantaged Business Enterprise goals/commitments, including the ability to track DBE work performed on “non-goal” contracts</p> <p>Automates generation of Federal Highway Administration DBE report detailing the level of DBE earnings on federal contracts</p> <p>Allows for planning and tracking of contract On-the-Job Training goals, including number of trainees, number of hours, and wage rate adjustments</p> <p>Automates reporting of potential wage rate violations based on pre-defined Department/DOL wage decisions</p> <p>Automates generation of annual Equal Employment Opportunity reports based on contractor payrolls</p> <p>Automates accrual of department trainee experience (even across contracts) based on contractor payrolls and alerts department personnel to potential violations</p> <p>Automates tracking of training experience on non-department contracts</p>
 <p>Material Management</p>	<p>Maintains Material Information</p> <p>Documents Sampling and Testing for a Contract or Client</p> <p>Incorporates Sampling and Testing requirements</p> <p>Maintains Approved lists</p> <p>Creates and maintains five types of Mix Designs</p> <p>Provides thirty Test windows</p> <p>Provides Stand-alone capability (Sampling & Testing and</p>

Icon	Description
	Approved list)
 <p>Accessories</p>	Allows access to the In-Box, SiteManager’s e-mail facility and to the Process Status Monitor
 <p>System Administration</p>	<p>Groups SiteManager system functions into one area and provide a single point of access for System Administrators</p> <p>Provides comprehensive security features with flexible administration</p> <p>Facilitates adding of custom templates</p>
 <p>Manuals</p>	Allows access to on-line versions of the User Reference Manual and Sampling and Testing Procedures

Table 2-1 The Main Panel Icons Table

2.2.4 Navigating in SiteManager Using the Main Panel

The SiteManager Panel is used to navigate to the components of the SiteManager application. The highest level is the SiteManager folder tab that contains the different functional groups, with each group individually represented by an icon. Double-clicking the icon of a functional group brings up another folder tab consisting of the sub-groups or the actual windows contained within that functional group. As icons are selected, the next level’s folder tab appears next to the previous level.

To select a main panel component of SiteManager:

1. Double-click the component’s icon.

To select up or down a level in SiteManager:

1. Click the level’s folder tab.

Main SiteManager Panel

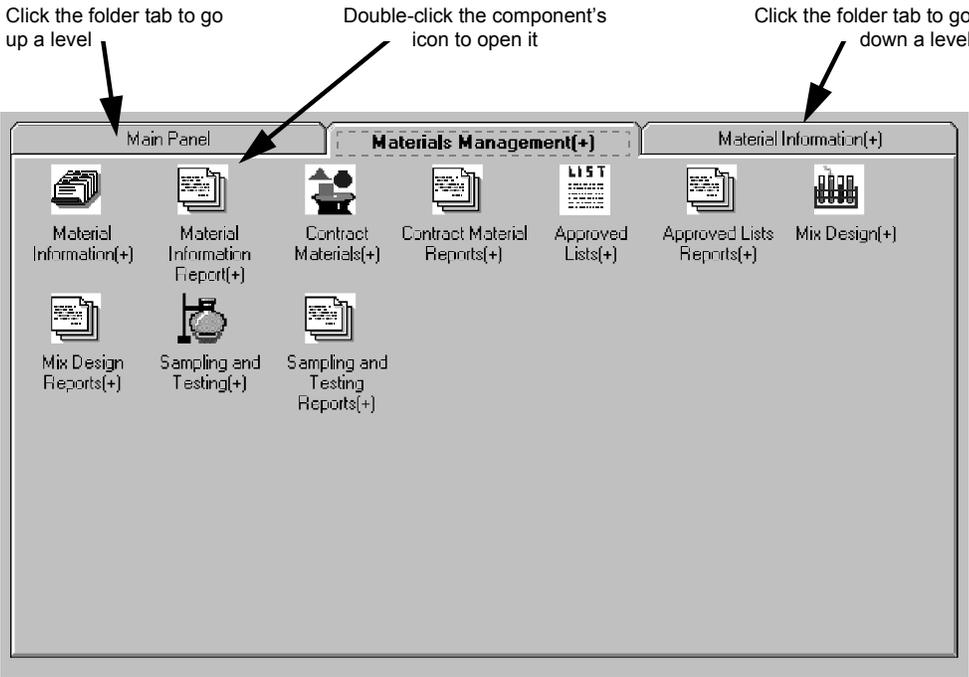


Figure 2-9 Navigating in SiteManager

2.3 Accessories

The Accessories panel provides access to the SiteManager communications and process monitoring components. These components include:

- In-Box,
- Distribution List,
- System Attachments,
- Process Status Monitor, and
- Custom List Record Usage.

To access Accessories:

- On the **Main Panel**, double-click the **Accessories** icon.
- Double-click the icon of the desired Accessories component.

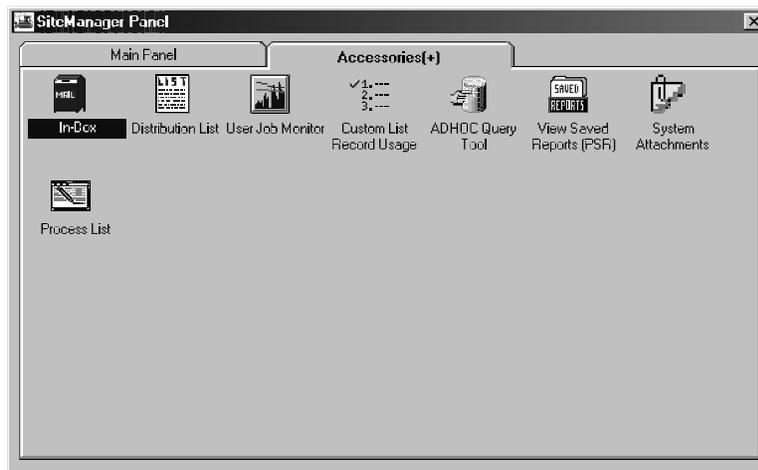


Figure 2-10 The Accessories Panel

2.3.1 In-Box Concepts

The SiteManager ‘In-Box’ provides three types of electronic messaging:

- User generated messages using the SiteManager In-Box,
- Access to compatible electronic mail systems, and
- System Generated Messages received in the SiteManager In-Box.



The In-Box Icon

Figure 2-11

2.3.1.1 In-Box E-mail Capability

The SiteManager 'In-Box' provides electronic mail capability for users, allowing them to send and receive electronic mail messages to each other through 'SiteManager' mail. SiteManager users can send, receive, reply, forward and print SiteManager mail, but cannot send attachments. Users also have the option to delete a single message or, if desired, several messages at a time. When a user deletes mail messages, SiteManager marks them for deletion so they will no longer appear in the user's In-Box. The marked messages are retained until the next archival process, when SiteManager will permanently delete the messages.

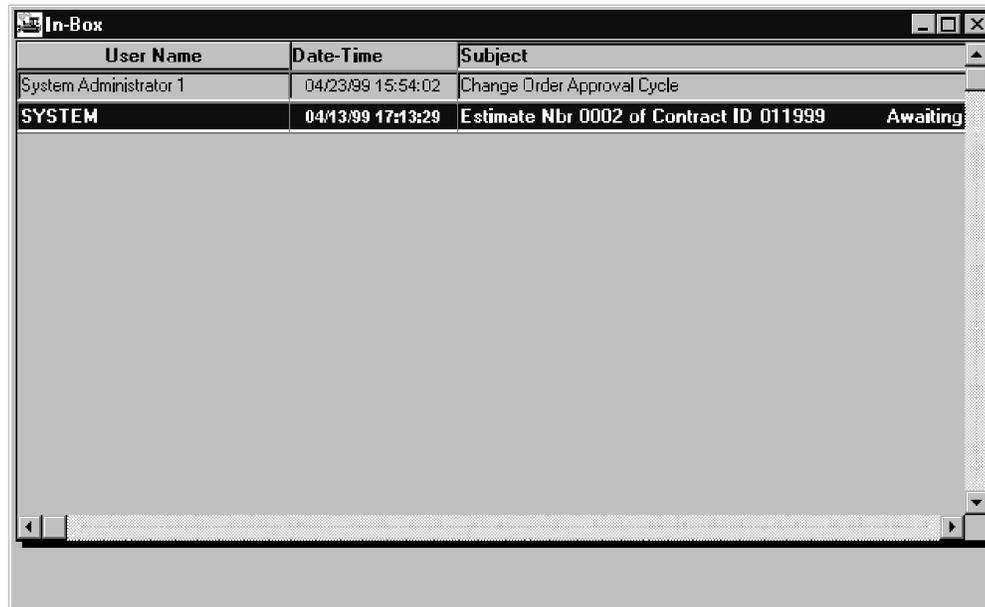


Figure 2-12 The In-Box Window

Additionally, SiteManager's In-Box provides menu level access to DOT'S native mail system. The native mail system must conform to one of two messaging standards:

- Messaging Application Programming Interface (MAPI) or
- Vendor Independent Messaging (VIM).

Mail systems, such as Microsoft Mail or Exchange are MAPI compliant while packages such as Lotus Notes and CC:Mail are VIM compliant.

Although SiteManager provides a menu option to access the external mail, it does not display the external mail message headers in SiteManager.

2.3.1.2 In-Box as a Workflow Manager

In addition to SiteManager mail and external mail, the In-Box acts as a workflow manager by routing System Generated Messages to the appropriate users. These messages are automatically generated by SiteManager and provide any number of users with access-specific SiteManager functions. System Generated Messages are primarily used to automatically jump to specific windows when further action is required by a user.

For example, when the user generates an estimate, SiteManager delivers a System Generated Message to the user's In-Box.

After the user opens the In-Box message,

If the estimate generation was successful and the request was for a progress or final estimate, SiteManager will display the Estimate Summary window.

If the estimate generation was successful and the request was for a supplemental estimate, SiteManager will display the Contract Adjustments window.

If the estimate generation was unsuccessful, then SiteManager will display the Estimate Activity Log report.

2.3.1.3 Using the In-Box

The In-Box is accessed using the Accessories panel.

To start the In-Box:

1. Double-click the **Accessories** icon.
2. Double-click the **In-Box** icon.

To open a mail message:

1. Click the message.
2. Click the **Services** menu and click the **Read Mail** choice.

To close a mail message:

1. Click the **Close** button.

To check for new mail messages:

1. In the **In-Box**, click the **File** menu and click the **Refresh** choice.

To delete a mail message:

1. Click the message to be deleted.
2. Click the **Delete** button.

To delete two or more mail messages:

1. Press and hold down the **SHIFT** key.
2. **Click** the first and last mail message in the range of messages to be deleted.
3. Click the **Delete** button.

To delete two or more mail messages that *are not in a range*:

1. Select the first mail message to be deleted.

2. Press and hold down the **CTRL** key.
3. **Click** each one of the remaining mail messages to be deleted.
4. Click the **Delete** button.

To print a message:

1. Open the message.
2. Click the **Print** button.

To close the In-Box:

1. Click the **File** menu and click the **Close** choice.

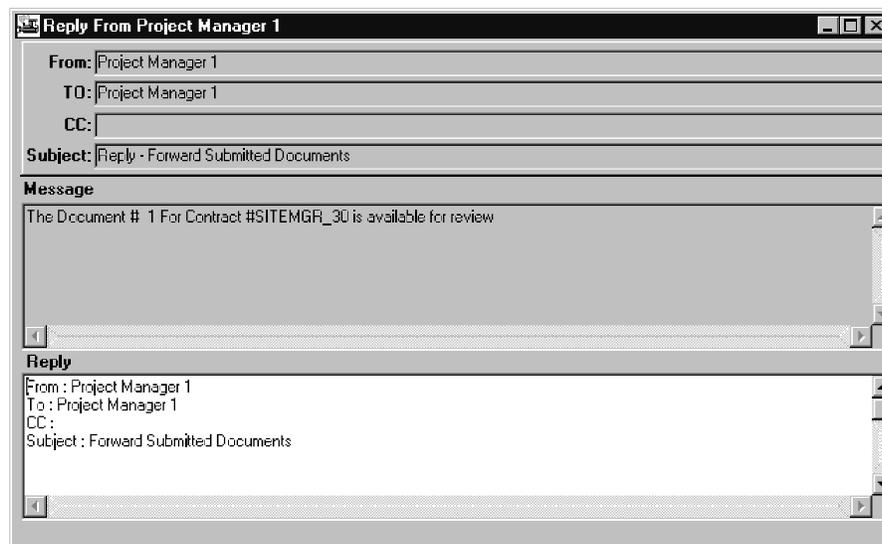


Figure 2-13 The Reply Window

2.3.1.4 Replying to or Forwarding a Message

When a message is opened, the Reply and Forward menu choices allows the user to reply to or forward a SiteManager message to other SiteManager users. When replying to a SiteManager message, the original mail message is not attached with the reply message. When forwarding a SiteManager message, the original message is included.

To reply to a message:

1. Open the message.
2. Click the **Services** menu and click the **Reply** choice.
3. Click to place your insertion point below the subject in the text area.
4. Type your reply.

5. Click the **Services** menu and click the **Send** choice.

To forward a message:

1. Open the message.
2. Click the **Services** menu and click the **Forward** choice.
3. Address the message
4. Click the **Services** menu and click the **Send** choice.

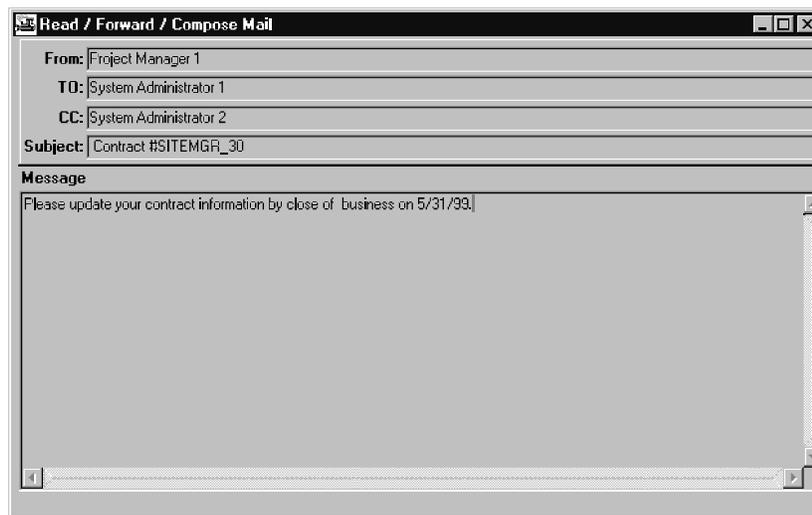


Figure 2-14 The Compose Window

2.3.1.5 Creating a Message

A SiteManager mail message may be send to other SiteManager users using the Compose menu choice of the In-Box.

To create a message:

1. Click the **Services** menu and click the **Compose** choice.
2. Address the message
3. Press the **Tab** key to advance to the Subject heading.
4. Type a subject for your message
5. Press the **Tab** key.
6. Type your message.
7. Click the **Services** menu and click the **Send** choice.

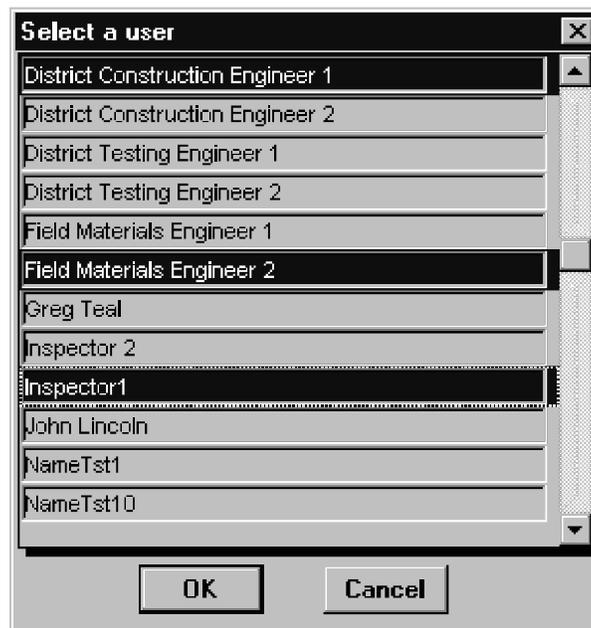


Figure 2-15 Addressing - Control+Clicking Allows Multiple IDs to be Selected

2.3.1.6 Addressing a Message

When creating a new message or forwarding an existing message, it can be sent to an individual SiteManager user or to multiple SiteManager users. However, it can NOT use SiteManager distribution lists which can only be accessed by system generated messages.

To address a message:

1. Click to place the insertion point in the **To:** or **CC:** field.
2. Click the **Services** menu and click the **Select Users** choice.
3. Select the recipient's name.
4. Click **Ok**.

To select multiple names next to each other:

1. Click the first name.
2. Hold down the **Shift** key and click the last name.

To select multiple names NOT next to each other:

1. Hold down the **Ctrl** key and click the each name.

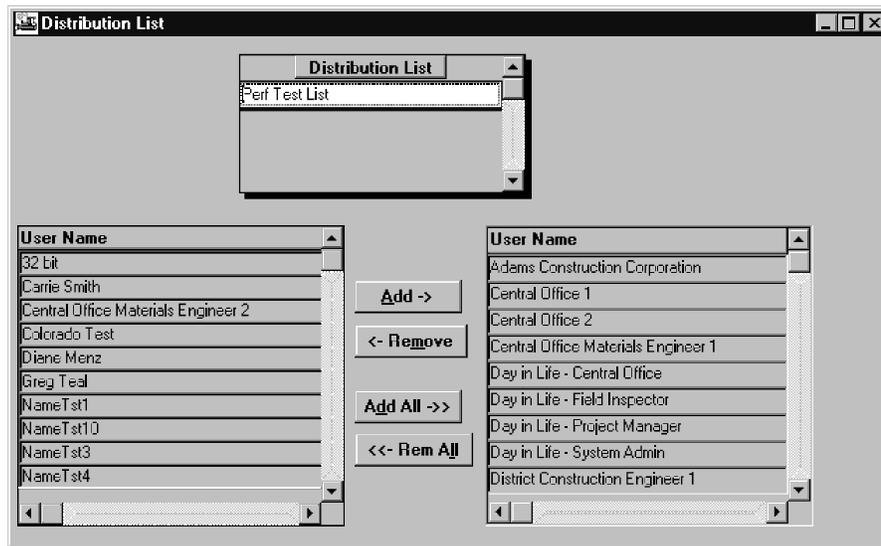


Figure 2-16 The Distribution List Window

2.3.2 Distribution List

To facilitate easier handling of multiple users, SiteManager provides a Distribution list. These lists are typically created by users only for system generated messages. The user can assign these lists to specific processes that generate system messages through specific SiteManager functions. For example, the Distribution List field on the Contract Key Dates window allows the user to select a user group to which a message is automatically sent, when a key event does not occur.

To add a new distribution list:

1. On the **Accessories** panel, double-click the **Distribution List** icon.
2. Click the **New** button.
3. Type the descriptive name for the distribution list. 
4. In the **User Name** list box *on the left side of the window*, scroll to and click the user's name.
5. Click the **Save** button.
6. Continue steps 4-5 until all recipients are included.
7. Click **Ok**.
8. Click the **Save** button.



A maximum of 20 characters are allowed including the use of spaces and special characters.

To modify an existing distribution list:

1. In the **Distribution List** box, scroll to and click the list to be modified.

To remove a user

2. In the **User Name** list box *on the right side of the window*, scroll to and click the user's name.
3. Click the **Remove** button.

To add a new user

1. In the **User Name** list box *on the left side of the window*, scroll to and click the user's name.
2. Click the **Save** button.

To delete a distribution list:

1. In the **Distribution List** box, scroll to and click the list to be deleted.
2. Click the **Delete** button.
3. Click **Ok**.
4. Click the **Save** button.

2.3.3 Process Status Window

The Process Status window is accessed through the SiteManager Accessories functional area. This window is available almost system wide by selecting Process Status from the Services menu. The window consists of two tab pages: Regular and Scheduled.

2.3.3.1 Regular Tab

The Regular tab page lists DPS submitted processes; that is, RTF custom report processes, SiteManager PowerBuilder reports, and background or batch processes. Here, authorized users can see the current status of submitted processes, delete submitted or complete jobs, or drill down to view or print the output produced by completed or failed processes.

Process Name	Status	Date Submitted	Queue Time	Start Time	End Time
RCPCSUM1A	REXX Error	6/28/01	10:12 am	10:12 am	10:13 am
RCPCSUM1B	REXX Error	6/28/01	10:14 am	10:14 am	10:14 am
RCPCSUM1B	REXX Error	6/28/01	10:17 am	10:17 am	10:17 am
RCACONSTA Daily	REXX Error	6/26/01	05:11 pm	10:00 am	10:46 am
RCAITQTYA Weekly	REXX Error	6/26/01	05:14 pm	10:46 am	10:46 am
Monthly Contract Status	REXX Error	6/26/01	05:18 pm	10:50 am	10:50 am
SONYATSTA	Application Error	6/28/01	10:58 am	10:58 am	10:59 am
RCAITQTYA Weekly	REXX Error	6/26/01	05:14 pm	11:09 am	11:09 am
RCPCSUM1A	Completed	6/28/01	11:13 am	11:13 am	11:13 am
test1	Completed	6/28/01	12:09 pm	12:09 pm	12:09 pm
SONYATSTA	Completed	6/28/01	12:40 pm	12:40 pm	12:40 pm
TEST4101A	Application Error	6/28/01	01:27 pm	01:48 pm	01:48 pm
Monthly Contract Status	REXX Error	6/26/01	05:18 pm	01:49 pm	01:49 pm
RCAITQTYA Weekly	REXX Error	6/26/01	05:14 pm	01:49 pm	01:49 pm
RCAITQTYA	REXX Error	6/28/01	02:36 pm	02:36 pm	02:36 pm
RCAITQTYB	REXX Error	6/28/01	02:36 pm	02:36 pm	02:36 pm

Figure 2-17 The Process Status Window Regular Tab

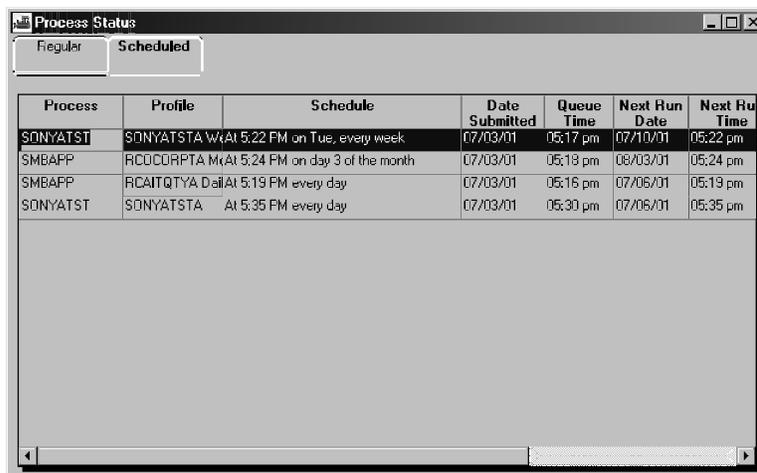
Field	Description
Process Name	The name of the process.
Status	Textual description of the process status; for example, Process Running, Application Error, Complete.
Date Submitted	Date the job was submitted.
Queue Time	Time the job was submitted.
Start Time	Time the job started processing.
End Time	Time the job finished processing.
Server	IP address of the server to which the job was submitted and run.

Table 2-2 The Process Status Regular Tab Field Names Table

2.3.3.2 Scheduled Tab

The Scheduled tab page lists DPS submitted processes; that is, RTF custom report processes, SiteManager PowerBuilder reports, and background or batch processes. Here, authorized users can see the current status of submitted processes, delete submitted or complete jobs, or drill down to view or print the output produced by completed or failed processes. The processes listed on the Scheduled tab are those processes which have been set to run on a specific schedule by an authorized user.

Standard SiteManager window and tab-level security applies to the Scheduled tab page window. Only those processes to which the user has been assigned security access will be presented on the displayed list.



Process	Profile	Schedule	Date Submitted	Queue Time	Next Run Date	Next Run Time
SONYATST	SONYATSTA	Wed At 5:22 PM on Tue, every week	07/03/01	05:17 pm	07/10/01	05:22 pm
SMBAPP	RCCDCRPTA	Mon At 5:24 PM on day 3 of the month	07/03/01	05:18 pm	08/03/01	05:24 pm
SMBAPP	RCAITQTYA	Daily At 5:19 PM every day	07/03/01	05:16 pm	07/06/01	05:19 pm
SONYATST	SONYATSTA	At 5:35 PM every day	07/03/01	05:30 pm	07/06/01	05:35 pm

Figure 2-18 The Process Status Window Scheduled Tab

Field	Description
Process	The name of the process.
Schedule	Textual description of the process schedule; for example, Time, Day of Week and Frequency
Date Submitted	Date the job was submitted.
Queue Time	Time the job was submitted.
Next Run Date	Date the job will next run.
Next Run Time	Time the job will next run.
Last Run Time	Time the job was last run.
Server	IP address of the server on which the job is scheduled to run.

Table 2-3 The Process Status Scheduled Tab Field Names Table

2.3.4 System Attachments

System Attachments are a stand-alone version of the URL, Plug-In and OLE functionality of SiteManager. The stand-alone feature allows URL links, Plug-In applications, and OLE objects to be accessible to the User by clicking the System Attachments icon through the Accessories panel.:



The System Attachments Icon

URL attachments are links to html documents

Plug-In attachments allow access to other programs similar to the OLE function. The Plug-In functionality also allows a limited amount of data to be automatically passed to a Plug-In application upon execution.

OLE object attachments are links to external documents.

Figure 2-19

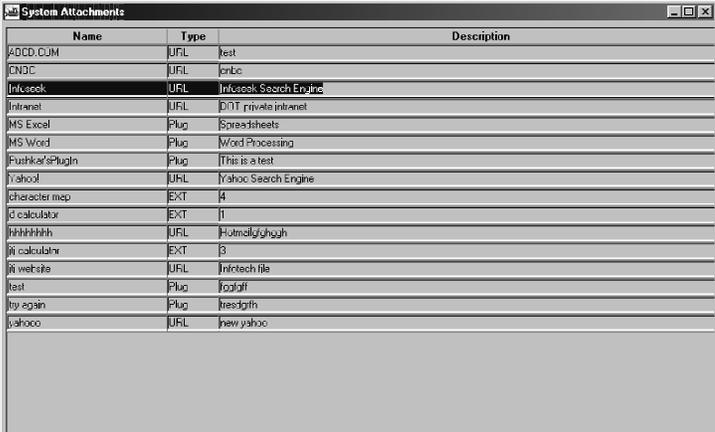
2.3.4.1 URL and Plug-In Attachment Icons

 Attachments	Activates the Attachments window. Appears on the Accessories panel, and activates the stand-alone Attachment window. Appears on the toolbar of any window that may have an attachment associated with it.
 Run Attachments	Allows User to activate Plug-In applications or URLs associated with the window.
 New URL	Opens a dialog box allowing the properties of a URL attachment to be modified or entered.
 New Plug-In	Opens a dialog box allowing the properties of a Plug-In attachment to be modified or entered.

	<p>Opens a dialog box allowing the properties of an OLE attachment to be modified or entered.</p>
<p>New OLE</p>	

Figure 2-20 The Attachment Icon Table

2.3.4.2 Attachment Usage



Name	Type	Description
40CD.CUM	UJFL	test
FNDC	UJFL	enbc
Internet	UJFL	Microsoft Search Engine
Intranet	UJFL	IBM private intranet
MS Excel	Plug	Spreadsheets
MS Word	Plug	Word Processing
Fushkar's PlugIn	Plug	This is a test
Yahoo!	UJFL	Yahoo Search Engine
Character map	EXT	4
Calculator	EXT	1
hhhhhhhh	UJFL	Humaidjghugh
Calculator	EXT	3
website	UJFL	Intotech file
test	Plug	fooliff
try again	Plug	headgrin
yahooo	UJFL	new yahoo

Figure 2-21 The System Attachments Window

To use Plug-In, URL, and OLE attachments:

1. The previously-created URL, Plug-In, and OLE attachments appear on a table grid on the Attachments window. **Sort** and **Filter** features may be used on this window by right-clicking and choosing a feature from the **Object** menu.
2. Double-click the desired attachment to activate, or highlight the desired attachment and click the **Run Attachments** icon.
3. Activating a Plug-In opens the specified application in a separate window. Activating a URL or HTML File item launches the system's default browser. Activating an OLE opens the specified document.
4. Once the User has completed work with the URL, Plug-In application, or OLE document the browser or application may be closed as normal.

3. General Concepts

August 2005

3.1 Menus

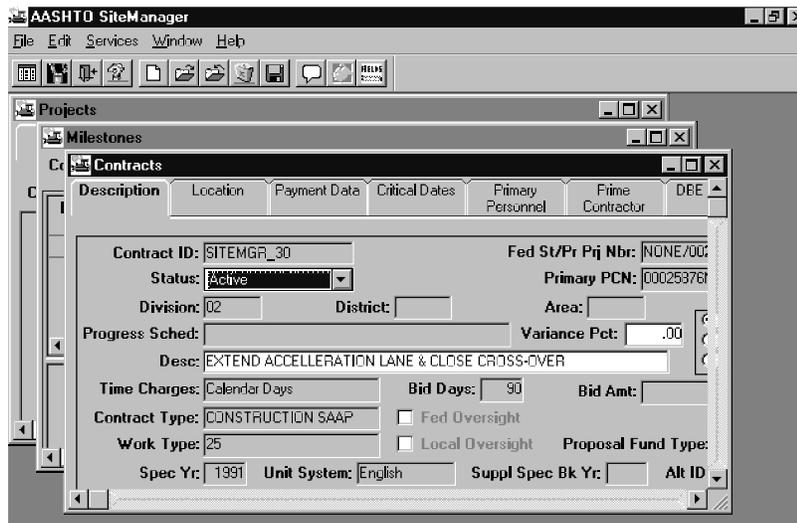


Figure 3-1 An Example of SiteManager Menus

3.1.1 General Guidelines

The following guidelines apply to the use and structure of SiteManager menus.

- SiteManager menus may have up to 3 levels with the main menu as the first level.
- Menu choices that invoke dialog boxes have an ellipsis (...) at the end of the choice.
- Menu choices that invoke a cascading submenu will have an arrow (>) at the end of the choice.

Some menu choices will be applicable in some instances and not applicable in others. For example, a menu choice may be applicable for one folder tab and may not be applicable for the second folder tab. When the menu choice is applicable for the active folder tab, it will display normally. When the menu choice is NOT applicable for the active folder tab, it will not appear on the menu.

Other menu choices may be applicable but only if a preliminary step is performed. For example, a menu choice may be applicable if you are in a new record, but not applicable when you have an existing record open. When the menu choice is applicable, it will be enabled and will display normally. When the menu choice is NOT applicable, it will be disabled and will display in gray. The menu choice will be enabled or disabled depending on the circumstances.

Menu choices will often have a corresponding toolbar button.

Keystroke shortcuts are assigned to all lowest level menu choices — menu choices that do NOT invoke a dialog box or a cascading submenu. Keystroke shortcuts will appear in the menu to the right of the menu choice.

Menus

Keystroke shortcuts will not clash with those commonly used by the Windows standard. For instance, even when there is no Edit menu, the **CTRL+C** keystroke shortcut will copy the current selected column value to the Clipboard.

All menu choices will have keystroke accelerators assigned. The menu itself will be invoked using the underlined letter in the menu name in combination with the **ALT** key. The menu choice will be invoked by typing the underlined letter in the menu choice's name.

When appropriate, an *object menu* can be invoked by right clicking the column.

3.1.2 Menu Layout

The SiteManager application has two menus to display — One at the frame level and the other at the sheet level. The sheet level menu could be any one of the several functional level sheet menus which in turn were inherited from the frame, with additional menu choices added for relevant functionality. The Frame level menu contains only a few menu choices that provide access to the application level functions such as bringing up the SiteManager Main Panel and exiting the application. At the sheet level, each window will display only one menu bar and one tool bar, with some of the frame level menu choices incorporated on the sheet menu itself.

3.1.3 Frame Menus

At the frame level, there are three menus: File, Window And Help.



Figure 3-2 The File Menu

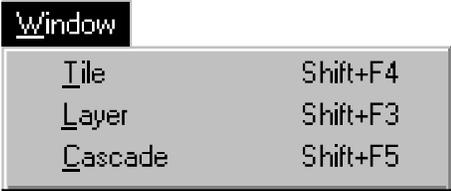


Figure 3-3 The Window Menu



Figure 3-4 The Help Menu

The File menu has the standard choices — Print Setup, Main Panel and Exit. The Print Setup choice invokes the standard Windows Print Setup dialog. The Main Panel choice displays the SiteManager Panel window,

which is useful in cases where the panel was closed at the frame level through the Close choice of the control menu. The Exit choice exits the SiteManager application.

The other two menu options, the Window and Help are the standard Windows menus with choices that function according to Windows standards.

3.1.4 Window Menus

The window level has five menus: File, Edit, Services, Window and Help. These options are applicable at the tab level.

3.1.4.1 File Menu

The File menu at the sheet level includes the frame level choices — Print Setup, Main Panel and Exit with the same functionality. It also contains several sheet specific choices — New, Open, Close, Delete, Save, Refresh, Print Preview and Print.

File	
<u>O</u> pen	Ctrl+O
<u>C</u> lose	Ctrl+F4
<u>N</u> ew	Ctrl+N
<u>D</u> elete	Ctrl+D
<u>S</u> ave	Ctrl+S
<u>R</u> efresh	Ctrl+F
Print <u>S</u> etup	Ctrl+U
Print <u>P</u> review	Ctrl+W
<u>P</u> rint	Ctrl+P
<u>M</u> ain Panel	Ctrl+M
<u>E</u> xit	Alt+F4

The Sheet's File Menu

Figure 3-5

Menu Choice	Description
Open	Allows another record to be selected. Typically, it is applicable to the current tab.
Close	Closes the current sheet. It will prompt for saving any changes, before closing the sheet.
New	Is used in context to clear all the columns for data entry. However, if the sheet contains more than one control capable of creating new rows, the New option will create a new row, on whichever control is currently active.

Menus

Menu Choice	Description
Delete	Like the New Choice, the Delete choice is contextual and is applicable for the current control. It will prompt for a confirmation from the user through a message.
Save	Saves the current unit of work.
Refresh	Clears the current changes to the record and retrieves the record again.
Print Setup	As with the Frame option, Print Setup displays the standard Windows Print Setup.
Print Preview	Displays a preview of the current print selection.
Print	Prints the current data.
Main Panel	The Main Panel choice opens another window or another instance of the same window. It invokes the navigation panel from which the appropriate choice of the window can be selected.
Exit	Exits the application. It will ask for saving of changes, if there are unsaved changes.

Table 3-1 The File Menu Choices Table

3.1.4.2 Edit Menu

The Edit menu has standard Windows choices: Undo, Cut, Copy and Paste. These will function as they would in any Windows program. The Undo choice has a limited functionality. If you delete a field and immediately choose Undo, the field value will probably be brought back. However, if you have deleted a record, the Undo function will NOT undo the deletion.



Figure 3-6 The Edit Menu

Menu Choice	Description
Undo	Undoes the last change.
Cut	Cuts the selected area from the item.
Copy	Copies the selected area from the item.
Paste	Pastes the contents of the clipboard.

Table 3-2 The Edit Menu Choices Table

3.1.4.3 Services Menu

The Services menu has several menu options grouped together. Some of the options like Address and Remarks extend the functionality. The other choices provide extended services.

The Services menu is also the most variable SiteManager menu. It will also contain choices other than the ones listed in the following table. When there is a Service menu, it is a good habit in SiteManager to check its contents for the additional choices that may be applicable only to that window.



Figure 3-7 The Services Menu

Menu Choice	Description
-------------	-------------

Menus

Choose Keys	Becomes available when the New choice is invoked. It brings up the pick list from which the appropriate value(s) can be chosen.
Address	Invokes the address (context sensitive).
Remarks	Invokes the remarks dialog.
Generic Fields	Displays a standard set of customizable, generic fields. Depending on the customization, these fields can be strings, codes, flags, or numbers.
Other menu choices	Other functional area specific menu choices (such as Approve) are incorporated under Services.

Table 3-3 The Service Menu Choices Table

3.1.4.4 Window Menu

The Window menu contains the MS Windows standard menu choice. All active SiteManager windows will be displayed under at the bottom of the Window menu.

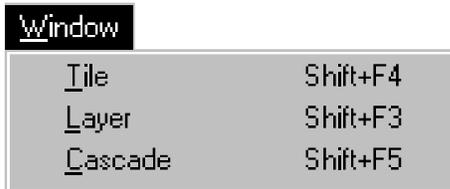


Figure 3-8 The Window Menu

Menu Choice	Description
Tile	Tiles the open sheets
Layer	Layers the open sheets
Cascade	Cascades the open sheets

Table 3-4 The Window Menu Choices Table

3.1.4.5 Help Menu

The Help menu contains the standard Windows options. The non-standard exception, Current Window choice, will display the help on the current window including the help on the fields under that window. All other options will work in the standard format.

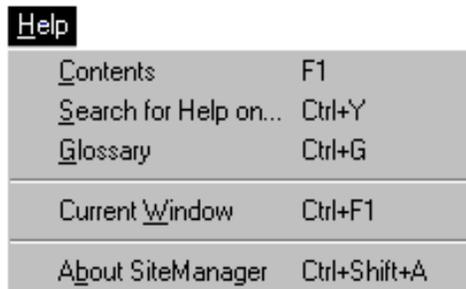


Figure 3-9 The Help Menu

Menu Choice	Description
Contents	Brings up the SiteManager Help Contents Window.
Search for Help on	Brings up the SiteManager Help Search Window.
Glossary	An alphabetized list of the items on the Help Contents Window.
Current Window	Brings up help window and displays the help on the current active window.
About SiteManager	Information about SiteManager Version.

The Help Menu Choices Table

Table 3-5

3.1.5 The Object Menu

The Object menu can be opened by right clicking a column. When the standard Windows selection pointer is positioned on a column that can be searched, it will be replaced by the *Search Lens*. The Search Lens indicates that an Object menu can be invoked to perform a search by clicking the right mouse button. 



Figure 3-10 The Search Lens

 If the mouse button that opens an item (double-click) has been reassigned to the right button using the Mouse control panel, the Object menu will be invoked using the left mouse button.

3.1.5.1 Object Menu Choices

As with other Windows applications, the *available* choices in the Object menu are context sensitive depending on what column the selection pointer is positioned on and whether it is selected or not. When choices in the object menu are inactive — grayed out — their inactive status usually indicates the column is not selected. The Object menu includes five choices described in the following.



Figure 3-11 The Object Menu

Object Menu Choices	Description
Search	Searches for the specified field value.
Filter	Eliminates all records other than the Filter criteria.
Find	Finds the specified field value.
Sort	Sort the records in ASCII order in either ascending or descending order.
Show Filter/Sort	Displays the applied Filter/Sort criteria.

Table 3-6 The Object Menu Choices Table

3.2

3.3 Using SiteManager Menus

SiteManager menus can be accessed using the mouse or using the keyboard. Many SiteManager menu choices can also be accomplished using a keystroke shortcut. 

To use a SiteManager menu using the mouse:

1. Click the desired menu and click the desired choice.

3.3.1 Using SiteManager Menus Using the Keyboard

As an alternative to using the mouse, all SiteManager menus can be selected using the keyboard. Some SiteManager menu choices can also be performed using keystroke shortcuts.

To use a SiteManager menu using the keyboard:

1. Hold down the **ALT** key and press the underlined letter in the menu name.
2. Type the underlined letter in the menu choice's name.

To perform a SiteManager menu choice using a keystroke shortcut:

1. Hold down the **CTRL** key and press the letter that performs the shortcut (e.g., **CTRL+C** copies the selected data).

3.3.2 Standard File Menu Choices

The following SiteManager File menu choices are standard throughout the application and will always be performed in the same way. Sheet specific menu functions will be covered with the applicable SiteManager functionality.

3.3.2.1 Changing the Print Setup

The File menu's Print Setup choice is used to change the standard Window print setup dialog.

To change the print setup:

1. Click the **File** menu and click the **Print Setup** choice.
2. Make the desired changes to the dialog.
3. Click **Ok**.



Keystroke shortcuts will appear in the menu to the right of the menu choice.

3.3.2.2 Printing

The File menu's Print choice is used to print. In a report, the Print choice will print the entire report. In a window, it will print the *current focus of the window*. Most SiteManager windows are divided into two or more zones. The results of the Print choice will vary depending on which zone is active.

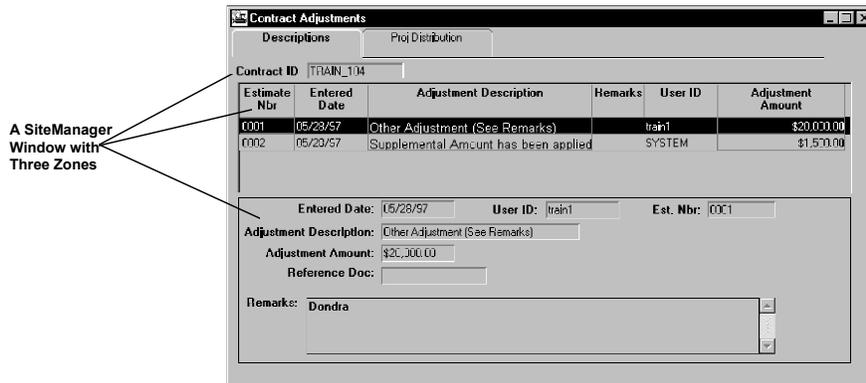


Figure 3-12 The Zones of a SiteManager Window

To print:

1. In a window, click the area of the window that you wish to print.
2. Click the **File** menu and click the **Print** choice.
3. Make the desired changes to the dialog.
4. Click **Ok**.

3.3.2.3 Using Print Preview

In a window, the File menu's Print Preview choice is used to preview what will print. Since most windows will print the *current focus of the window*, the Print Preview choice will help you determine that the focus is correct before you print.

To preview what will print:

1. In a window, click the area of the window that you wish to preview.
2. Click the **File** menu and click the **Print Preview** choice.
3. View the selection that will be printed.
4. Click **Ok**.

Components	Description
Next button	Displays the next page of a multi-page selection.
Prior button	Displays the prior page of a multi-page selection.
Print button	Invokes the Print dialog.
Setup button	Invokes the Print Setup dialog.
Zoom button	Invokes the Zoom dialog to magnify or reduce the display of the print preview.
Close button	Closes the print preview
Rulers check box	Displays or hides the rulers
Save As button	Invokes the Save As dialog allowing the results of the print preview to be saved in other file exportable file formats.

Table 3-7 The Print Preview Components Table

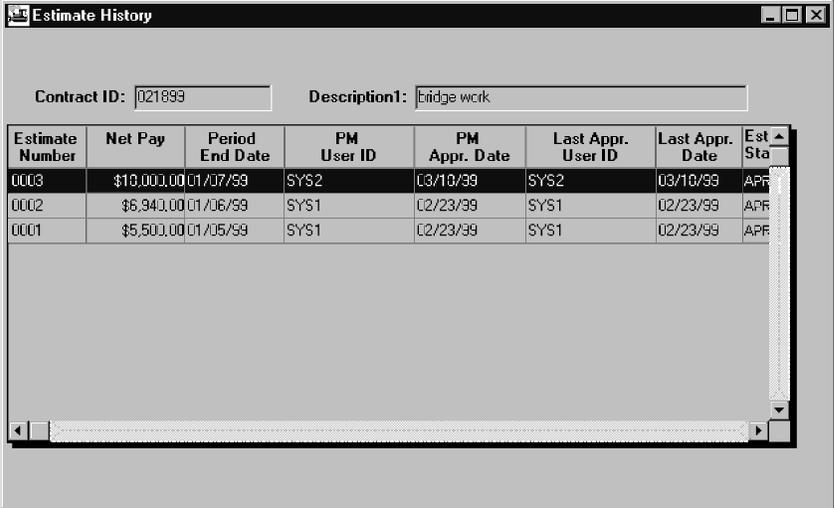


Figure 3-13 A SiteManager Window with a Multi-Row Focus

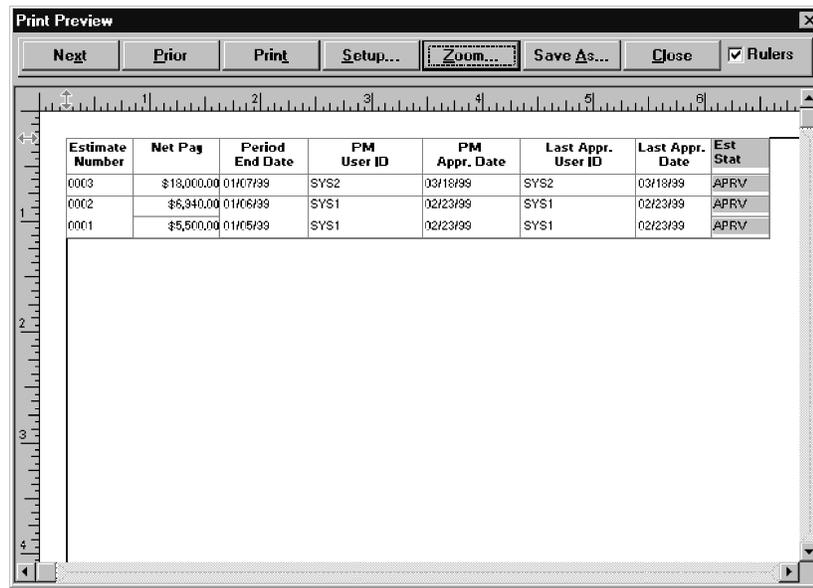


Figure 3-14 The Print Preview of a SiteManager Window with a Multi-Row Focus

3.3.2.4 Exporting A Window's Print Results —The Print Preview's Save As Button

The Print Preview is a File menu choice only available in a window — not a report. The Save As button of the Print Preview allows the current focus to be saved in other exportable file formats.

To save the print preview results in another format:

1. In a window, click the area of the window that you wish to preview.
2. Click the **File** menu and click the **Print Preview** choice.
3. Click the **Save As** button. 
4. In the **Save File As Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
5. To include column headings, choose a **With Headings** file type.
6. Highlight the text in the **File Name** field.
7. Type the name for the file.
8. Click **Ok**.

 The Save Rows As dialog also does not have the more traditional Windows methods of changing drive and folders. An exported file will be created in the default directory and drive on which SiteManager is installed. In step 5, a path can be typed in front of the filename to control where the file is created. The path **C:\DATA\ACTCONT.PSR** would create a file named ACTCONT.PSR in a directory named DATA on the C drive.

Radio Button	File Extension	File Format Description
Text	.TXT	ASCII Tab Separated (Delimited) format
CSV	.CSV	ASCII Comma Separated (Delimited) format
Dbase 2	.DBF	dBase 2 format
Dbase 3	.DBF	dBase 3 format
DIF	.DIF	Date Interchange Format
Excel	.XLS	Microsoft Excel Spreadsheet format
HTML Table	.HTM	Hyper Text Markup Language table format (Can be viewed in a web browser.)
PowerSoft Report	.PSR	PowerSoft Saved Report format (Can also be viewed in SiteManager.)
SQL	.SQL	ASCII text file containing the SQL syntax required to recreate the datawindow object when run through the database.
SYLK	.SLK	Microsoft MultiPlan format
Text	.TXT	Text file format (Can be viewed in any text editor.)
Windows Metafile	.WMF	Windows Metafile graphical format
WKS	.WKS	Lotus 123 early format
WK1	.WK1	Lotus 123 later format

Table 3-8 The Print Preview Save As File Formats Table

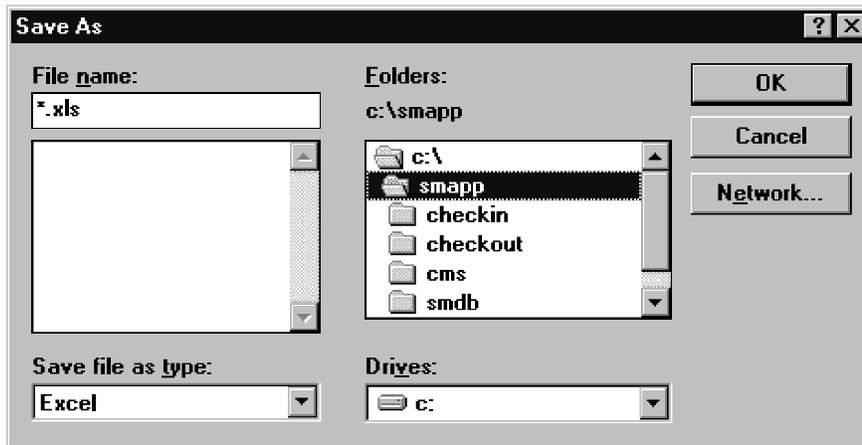


Figure 3-15 The Print Preview Save A Dialog

3.3.2.5 Displaying the SiteManager Panel

The File menu's Main choice is used to invoke the main SiteManager navigation panel. Typically, the SiteManager navigation panel would be activated to open another SiteManager component without closing the current active component.

To display the SiteManager Panel:

1. Click the **File** menu and click the **Main Panel** choice.
2. Click the desired icon.

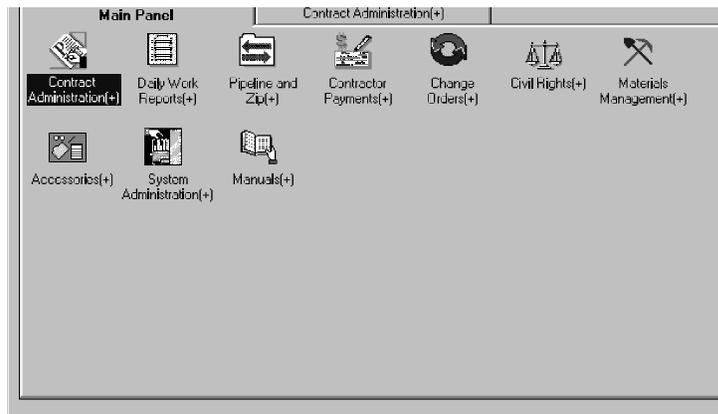


Figure 3-16 The SiteManager Main Panel

3.3.2.6 Exiting SiteManager Using the Menu

The File menu's Exit choice exits the SiteManager application. If current work has not been saved, a warning message will allow the data to be saved before the application is closed or to cancel the exit.

To exit SiteManager:

1. Click the **File** menu and click the **Exit** choice.
2. If the warning message displays, choose the desired choice.

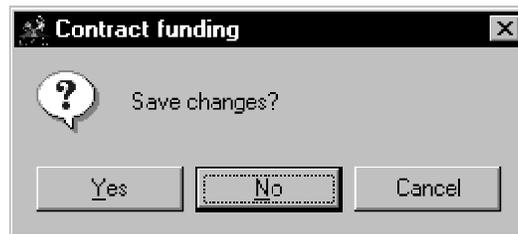


Figure 3-17 The Exit Warning Message

3.3.3 Standard Edit Menu Choices

The following SiteManager Edit menu choices are standard throughout the application and will always be performed in the same way. Sheet specific menu functions will be covered with the applicable SiteManager functionality.



Figure 3-18 The Edit Menu

3.3.3.1 Selecting

If no column is selected, the Cut and Copy choices will be disabled and will display in gray. To select a specific column to be cut or copied, use the mouse to highlight the field or press the **Tab** key repeatedly until the field becomes highlighted.

To select a field using the mouse:

1. In the desired field, position the I-beam in front of the current entry.
2. Press the mouse button and drag to highlight the current entry.

To select a field using the keyboard:

1. Press the **Tab** key repeatedly until the field is highlighted.

3.3.3.2 Undo

The Edit menu's Undo choice will “undo” the last entry made to a field, if the user has not performed a Save on the record.

To undo:

1. Click the **Edit** menu and click the **Undo** choice.

3.3.3.3 Cutting, Copying, and Pasting

When a column value is selected, the value can be moved (cut) if the entry was inappropriate in that field. A field value that needs to be entered repeatedly may also be copied to reduce typing. Pasting a cut or copied value can be done within SiteManager or to other Windows applications.

To move (cut) the current selection:

1. Select the column value(s) to be moved.
2. Click the **Edit** menu and click the **Cut** choice.

Or

1. Hold down the **Ctrl** key and press the letter **X**.

To copy the current selection:

1. Select the column value(s) to be moved.
2. Click the **Edit** menu and click the **Copy** choice.

Or

1. Hold down the **Ctrl** key and press the letter **C**.

To paste the current contents of the Clipboard:

1. Position the insertion point in the column location to receive the value.
2. Click the **Edit** menu and click the **Paste** choice.

Or

1. Hold down the **Ctrl** key and press the letter **V**.

3.3.4 Standard Services Menu Choices

The Services menu in the most context variable menu of SiteManager – its choices will vary from window to window. The Services menu is by far the most important menu for accessing custom SiteManager functionality

Upon entering any SiteManager window, it is a very good habit to check the contents of the Services menu as the first action. What appears in the Services menu may suggest the next logical step to take, such as Choosing Keys, or may suggest additional actions which could easily be overlooked, such as adding a Remark or recording an Address. On the other hand, the absence of these options might suggest an alternative course of action such as clicking the Open button, rather than Choosing Keys.

3.3.4.1 Choosing Keys

The Choose Keys choice displays a list of key field(s) to be selected. In many instances in SiteManager, the Choose Keys choice must be selected before a new record can be created. Choosing Keys is fundamental to using SiteManager.

To choose keys:

1. Click the **Services** menu and click the **Choose Keys** choice.
2. In the list box, scroll to and double-click desired value.
3. Repeat step 2 until all initial values are selected.

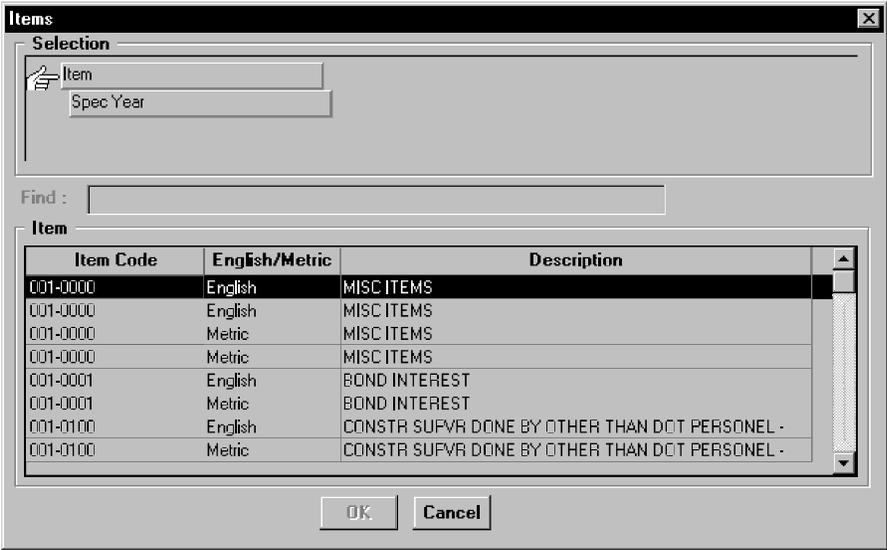


Figure 3-19 The Choose Keys Window

3.3.4.2 Address

Address information is tracked by a variety of components in SiteManager. The Address choice displays an address dialog that allows this information to be recorded.

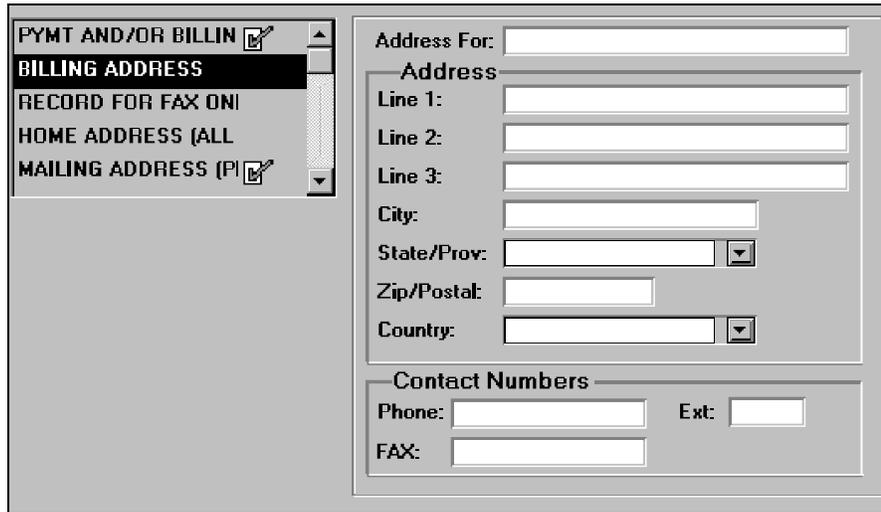


Figure 3-20 The Address Dialog

To attach an address:

1. Click the **Services** menu and click the **Address** choice.
2. In the address type list box, scroll to and click the desired type of address.
3. In the first field, type the appropriate information.
4. Press the **Tab** key.
5. Repeat step 2-3 until all text address information has been entered.
6. In the **State/Prov** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
7. In the **Country** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
8. Click outside the Address dialog to close the address.
9. Click the **Save** button.

3.3.4.3 Remarks

As with Addresses, Remarks may be attached to a variety of records in the various components of SiteManager. The Remarks choice displays a freeform dialog that allows any comment to be recorded.

When Remarks are available for a SiteManager window, the presence of the Remarks button on the Toolbar serves as a reminder that they are appropriate, makes it easier to access Remarks, and, unlike other Service menu choices, precludes the need to check the Services menu to see if Remarks are available.



The Remarks Button

Figure 3-21

To attach a remark:

1. Click the **Remarks** button.

Or

1. Click the **Services** menu and click the **Remark** choice.
2. Type the desired comment.
3. Click outside the Remarks dialog to close the Remark.
4. Click the **Save** button.

3.3.4.4 Generic Fields

SiteManager has a generic fields capability comparable to the same function in Trns•port™ (formerly known as BAMS). Generic fields are fields attached to some of the SiteManager windows that are transportation agency defined. After the installation of SiteManager, a transportation agency will attach descriptive labels to the generic fields of SiteManager, will enter, and track data unique to that transportation agency. Once this customization has been performed, the transportation agency will set up procedures for the uniform maintenance of the data in their customized fields.

The components of SiteManager that have this Generic Fields option are:

- Contract
- Vendor
- Office Information
- Address
- Vendor Personnel
- Item Master
- Affiliates
- Vendor Work Class
- Vendor Security
- Project Category
- Contract Item
- Sub Contract
- Contract Project
- Contract Milestone
- Change Order
- Checklist Events
- Contract Estimates
- Diary Milestone Credit

Figure 3-22 A Generic Fields Dialog Customized by a Transportation Agency

To update generic fields:

1. Click the **Services** menu and click the **Generic Fields** choice.
2. In the first field, type the appropriate information.
3. Press the **Tab** key.
4. Repeat step 2-3 until all fields information has been entered.
5. Click outside the Generic Fields dialog to close.
6. Click the **Save** button.

3.3.4.5 Other Services Menu Choices

The Services menu in the most context variable menu of SiteManager – its choices will vary from window to window. The Services menu is by far the most important menu for accessing custom SiteManager functionality

Upon entering any SiteManager window, it is a very good habit to check the contents of the Services menu as the first action. What appears in the Services menu may suggest the next logical step to take or may suggest additional actions which could easily be overlooked.

3.3.5 Standard Window Menu Choices

The following SiteManager Window menu choices are standard throughout the application and will always be performed in the same way. Sheet specific menu functions will be covered with the applicable SiteManager functionality.

Window menu choices will be used when you have more than one component of SiteManager open. Controlling the way the windows display can aid in navigation between these components.

3.3.5.1 Tiling

Tiling divides the screen into the number of SiteManager components that you have active. Typically, tiling is used to display two SiteManager components side by side horizontally to compare the entries in each or to return a single component to full screen once you have closed the other component. Typically, it is not used when more than two components of SiteManager are active since you would not be able to see enough of each component of SiteManager to make it worthwhile. With three components of SiteManager active, tiling would give each component only one third of the screen. Unless you have a very large display, tiling with more than two SiteManager components open may not be very useful.

To change your screen to a tile display:

1. Have open the number of SiteManager components that you want to tile.
2. Click the **Window** menu and click the **Tile** choice.

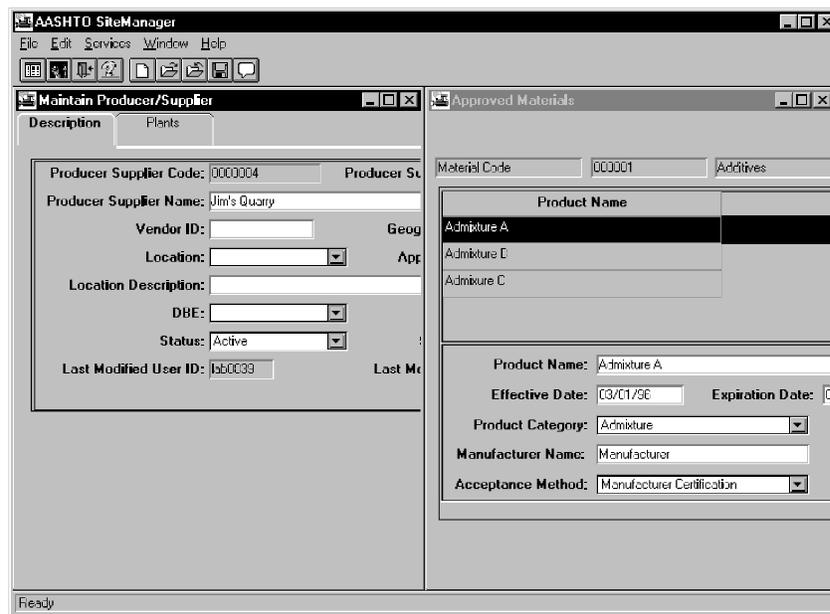


Figure 3-23 Two SiteManager Components Tiled

3.3.5.2 Cascading

Cascading makes the number of SiteManager components that you have active an equal size and arranges each component in an overlapping offset window. Typically, cascading is used to display *more than two* open SiteManager components offset. When you have a need to navigate between more than two open SiteManager components, the Cascade choice may make it easier to move between them.

To cascade:

1. Have open the number of SiteManager components that you want to cascade.
2. Click the **Window** menu and click the **Cascade** choice.
3. Click the visible portion of the window you want to display.

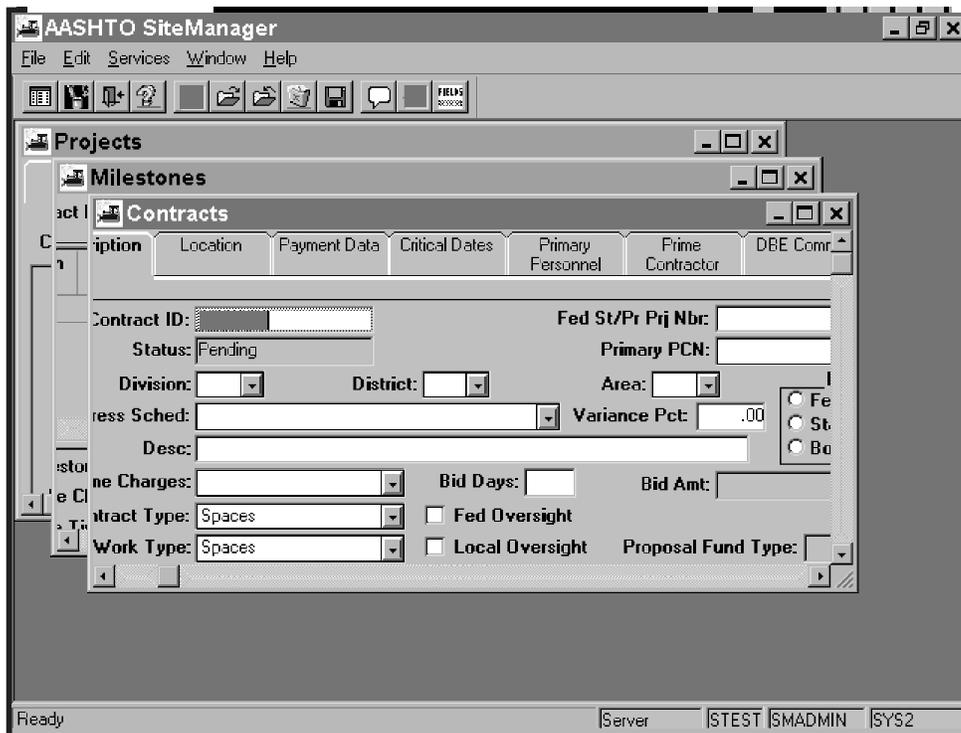


Figure 3-24 Three SiteManager Components Cascaded

3.3.5.3 Layering

Layering displays the SiteManager component that you have active in the most efficient full screen display. Typically, layering is used give each active component a full window for display or to return a single active component to full display after you have closed the other components that were tiled or cascaded.

To layer:

1. Have open the number of SiteManager components that you want to layer.
2. Click the **Window** menu and click the **Layer** choice.

To move between multiple layered SiteManager components:

1. Click the **Window** menu and click the name of the SiteManager component from the list.

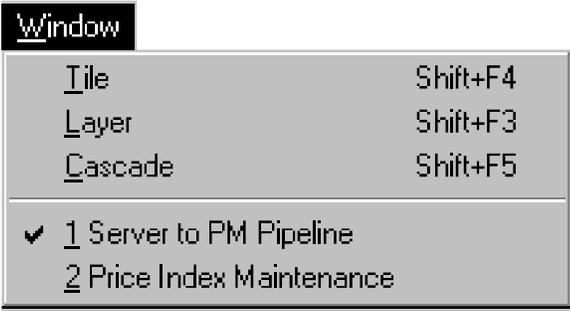


Figure 3-25 The Window Menu with two SiteManager Components Active

3.3.6 Standard Help Menu Choices

The Help menu will contain standard Help choices — Contents, Search Help on, and Glossary. Help in SiteManager will work like any other Windows Help.

3.3.6.1 Accessing Help Using the F1 Key

SiteManager help is context sensitive. When you are in a SiteManager window and have a question about the window, pressing the F1 key invokes the help for that particular window.

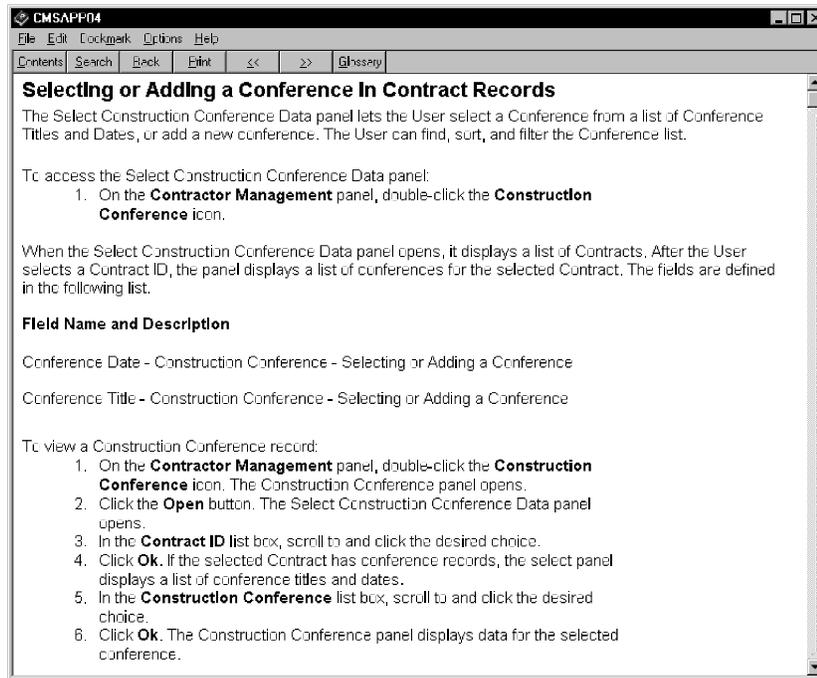


Figure 3-26 The F1 Key Invokes Help

To access Help using the F1 key:

1. In a SiteManager window, press the **F1** key.
2. When finished, click the **File** menu and click the **Exit** choice.

3.3.6.2 Accessing Help by Contents Using the Menu

The Content choice displays an alphabetized list of Help Topics that can be browsed for the subject on which you need help.

To access Help by Contents:

1. Click the **Help** menu and click the **Contents** choice.
2. In the topics list box, scroll to and click the desired topic.
3. When finished, click the **File** menu and click the **Exit** choice.



Figure 3-27 The Help Contents

3.3.6.3 Using Help by Searching

The Search for Help on choice displays a lengthy, alphabetized list of Help Topics that can be browsed or searched for the subject on which you need help.

To access Help by searching:

1. Click the **Help** menu and click the **Search for Help on** choice.
2. Type the topic on which you need help.
3. Click the topic.
4. Click the **Display** button.
5. When finished, click the **File** menu and click the **Exit** choice.

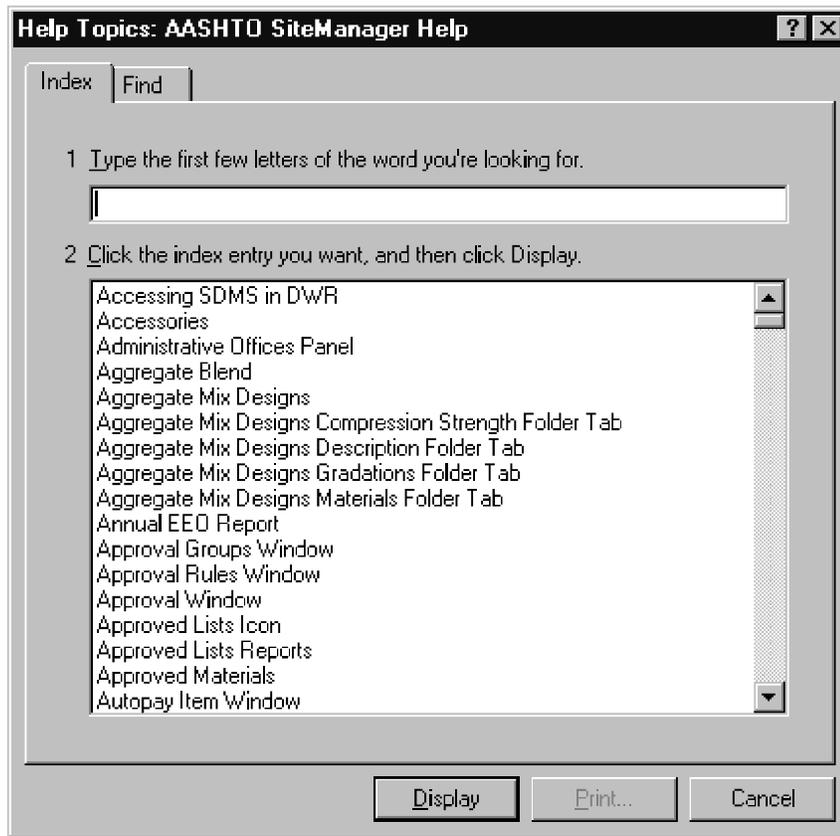


Figure 3-28 The Help Search

3.3.6.4 Using the Current Window Help

With any SiteManager window active, the Help menu's Current Window choice will access context sensitive help that includes Help on fields.

To access Help on the current window:

1. Display the SiteManager window for which you need help.
2. Click the **Help** menu and click the **Current Window** choice.
3. When finished, click the **File** menu and click the **Exit** choice.

To access Help on a field:

1. Display the SiteManager window that has the field for which you need help.
2. Click the **Help** menu and click the **Current Window** choice.
3. In the field list, scroll to and click the desired field.
4. When finished, click the **File** menu and click the **Exit** choice.

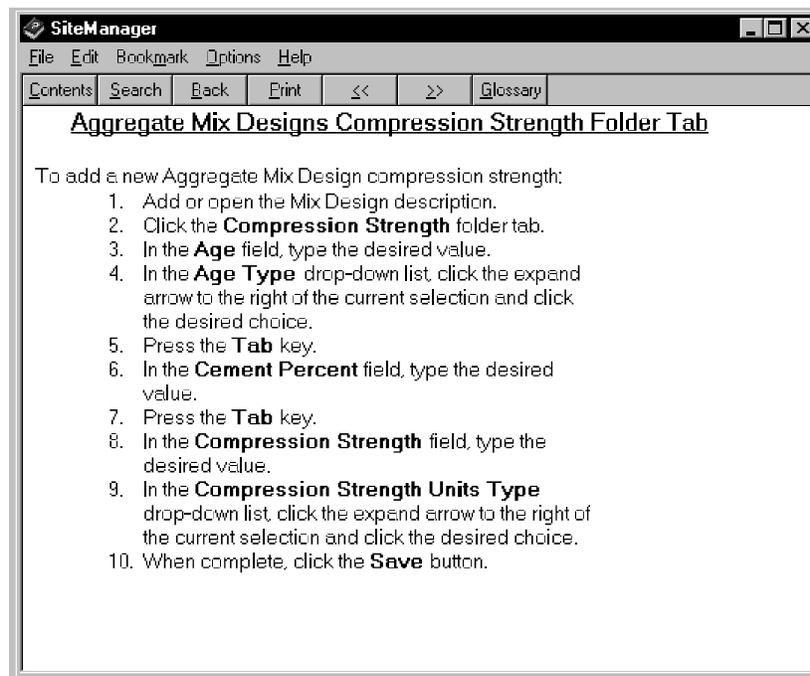


Figure 3-29 The Help on a SiteManager Window

3.3.6.5 On-Line Help Development

On-Line Help for SiteManager was created using RoboHELP™ by Blue Sky Software. The Microsoft Word files that were used to compile the help files were provided to AASHTO. To modify the Help files using RoboHELP, obtain the files from your AASHTO representative.

3.3.7 Using the Object Menu for Data Manipulation and Retrieval

The Object menu is a context sensitive capability — the choices that will appear in the Object menu is determined by where you right click. For instance, when you position the pointer above a searchable field, the Search Lens will appear. Right clicking the searchable field produces an Object menu with the Search choice as the only available choice.

To make data entry and retrieval easier, SiteManager provides a Search, Filter, Find, and Sort capability throughout the application. The Filter and Find functions also provide users with the ability to limit the data retrieved from the SiteManager database by specifying criteria using relational operators. The Clear function clears the current data retrieval choice in effect. The Show Filter/Sort choice shows the current criteria in effect for these choices.



The Object Menu

Figure 3-30

An easy way to access the Search feature is via the Object menu. The Object menu displays when the user clicks the right mouse button on a search field. When the pointer is positioned over a search field, the selection pointer changes to the *Search Lens*. 

3.3.7.1 Searching

When a data entry field requires selecting a value from a list of possible values, the Search choice allows the user to limit the list and quickly select the desired value.

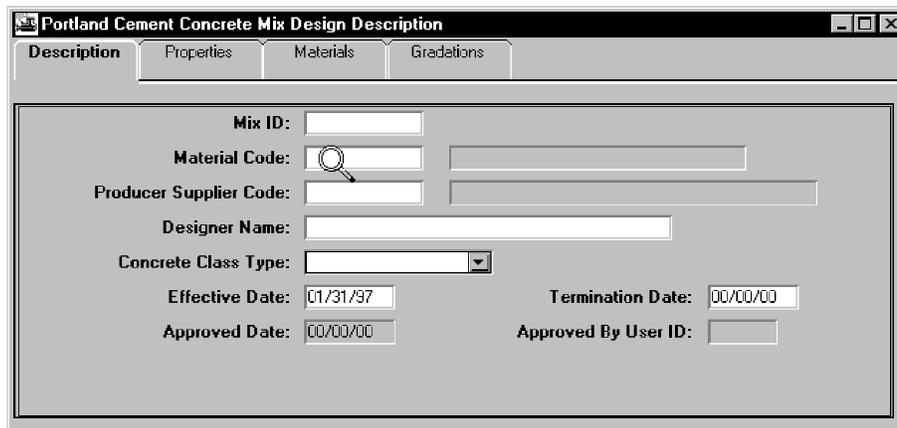


Figure 3-31 The Search Lens Appears

To search on a field:

1. Position the selection pointer (changes to the Search Lens) over a search field.
2. Using the *right* mouse button, click the field.
3. From the object menu click the **Search** choice.
4. Select the correct record from the list.
5. Click **Ok**.

 If the mouse button that opens an item (double-click) has been reassigned to the right button using the Mouse control panel, the buttons are switched — the right button selects the column and the left button invokes the Object menu.

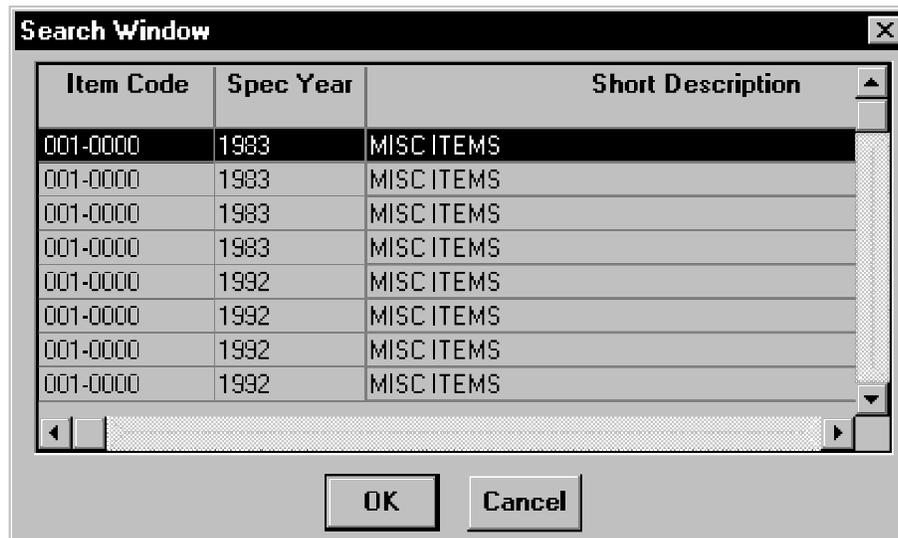


Figure 3-32 The Search Window

3.3.7.2 Filtering

The 'Filter' choice allows the user to specify filtering criteria for SiteManager fields and their limiting values using relational operators. Each time a window displays, the filtering criteria, marked as default, is automatically applied, thereby limiting the amount of data retrieved. Only one default filter criterion can be in effect for a window at any given time.

When creating multiple conditions, remember that AND joins will be executed before OR joins.

To filter out other records:

1. Position the selection pointer over a record
2. Using the *right* mouse button, click the record.
3. From the object menu click the **Filter** choice.
4. Click the **Add** button.
5. In the **Field** drop-down list, click the expand arrow to the right of the current selection and click the desired field.
6. In the **Condition** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
7. In the **Value** field, select the current entry and type the desired value.
8. To add additional conditions, click the **Add** button.
9. In the **Join** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.

10. Repeat steps 5-9 until you have selected all conditions.
11. Click **Ok**.

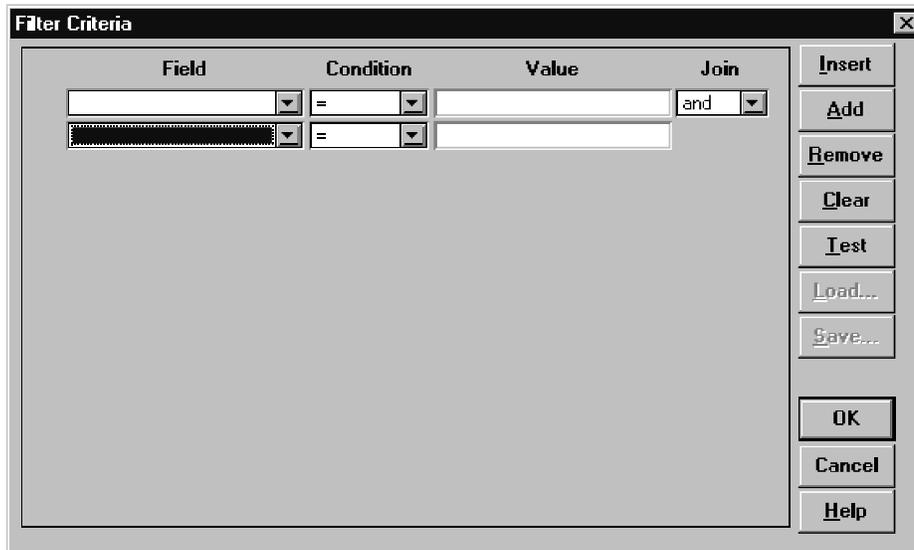


Figure 3-33 The Filter Criteria Window

3.3.7.3 Finding

When a window displays as a scrollable list, the Find choice allows the user to get to a specific row by selecting the appropriate value to find.

When creating multiple conditions, remember that AND joins will be executed before OR joins.

To find specific records:

1. Position the selection pointer over a record
2. Using the *right* mouse button, click the record.
3. From the object menu click the **Find** choice.
4. Click the **Add** button.
5. In the **Field** drop-down list, click the expand arrow to the right of the current selection and click the desired field.
6. In the **Condition** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
7. In the **Value** field, select the current entry and type the desired value.
8. To add additional conditions, click the **Add** button.

9. In the **Join** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
10. Repeat steps 5-9 until you have selected all conditions.
11. Click **Ok**.

3.3.7.4 Sorting

When the window displays as a list, the Sort feature allows the user to sort the list, based on specified criteria. Each time the window displays, the default sort criterion is automatically applied. As with the Filter function, only one default sort criterion can be in effect for a window at any given time.

To sort the records:

1. Position the selection pointer over a record
2. Using the *right* mouse button, click the record.
3. From the object menu click the **Sort** choice.
4. Click the **Add** button.
5. In the **Field** drop-down list, click the expand arrow to the right of the current selection and click the desired field.
6. In the **Order** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
7. To add additional sorts, click the **Add** button.
8. Repeat steps 4-7 until you have selected all sorts.
9. Click **Ok**.



Figure 3-34 The Sort Window

3.3.7.5 Displaying the Filter or Sort

The Display Filter/Sort choice displays the current criteria in effect.

To display the current criteria:

1. Position the selection pointer over a record
2. Using the *right* mouse button, click the record.
3. From the object menu click the **Show Filter/Sort** choice.
4. Click **Ok**.

3.4 Toolbars

3.4.1 General Guidelines

The following guidelines apply to the use and structure of SiteManager toolbars.

The most often used menu choices have a corresponding toolbar button for ease of use.

Buttons used on toolbars are consistent throughout the application.

All toolbar buttons have *Tool Tips* — text associated with the button that describes what the button does.

Toolbars

If a toolbar button is sometimes applicable and sometimes not applicable, it will be enabled or hidden. For example, a toolbar button may be applicable for one folder tab and may not be applicable for the second folder tab. When the menu item is applicable for the active folder tab, it will be enabled and will display normally. When the toolbar button is NOT applicable for the active folder tab, it will not appear on the toolbar. The toolbar button will be enabled or hidden depending on which folder tab is active.

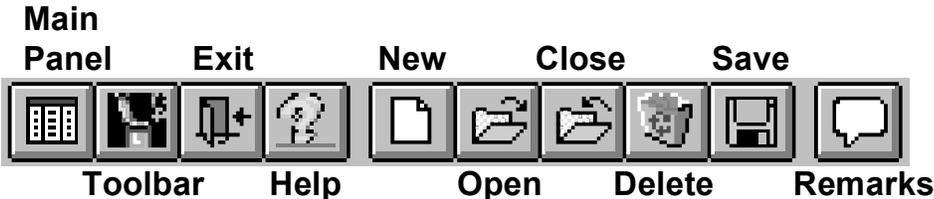


Figure 3-35 The SiteManager Toolbar

3.4.2 Toolbar Layout

The SiteManager Toolbar has seven common toolbar buttons to display: the Exit, New, Open, Close, Delete, Save, and Help buttons.

Toolbar Button	Tool Tip	Comparable Menu Function	Description
	Exit	File menu's Exit choice	Exits the application. It will ask for saving of changes, if the there are unsaved changes.
	Help	Help menu's Contents choice	Brings up the SiteManager Help Contents Window.
	New	File menu's New choice	Is used in context to clear all the columns for data entry. However if the sheet contains more than one control capable of creating new rows, the New option will create a new row, on whichever control is currently active.
	Open	File menu's Open choice	Allows another record to be selected. Typically, it is applicable to the current tab.

Toolbar Button	Tool Tip	Comparable Menu Function	Description
	Close	File menu's Close choice	Closes the current sheet. It will prompt for saving any changes, before closing the sheet.
	Delete	Edit menu's Delete choice	Like the New Choice, the Delete choice contextual and is applicable for the current control. It will prompt for a confirmation from the user through a message.
	Save	File menu's Save choice	Saves the sheet and stays on the sheet.
	Remarks	Services menu's Remarks choice	Displays the Remarks dialog to attach freeform comments.

Table 3-9 The Toolbar Button Table

3.5 Using the SiteManager Toolbar

The SiteManager Toolbar is accessed using the mouse. Buttons unlike icons only require a single click — not a double click.

To use a SiteManager toolbar button:

1. Click the desired button.

To display a Tool Tip:

1. Position the mouse point on the button (and hold the mouse still).

3.5.1 Standard Toolbar Buttons

The following SiteManager toolbar buttons are standard throughout the application and will always be performed in the same way. Sheet specific toolbar buttons will be covered with the applicable SiteManager functionality.

3.5.1.1 Exiting SiteManager Using the Toolbar

The Exit button exits the SiteManager application. If current work has not been saved, a warning message will allow the data to be saved before the application is closed or to cancel the exit.



The Exit Button

Figure 3-36

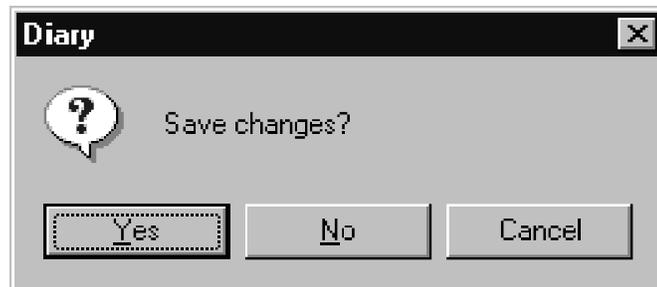


Figure 3-37 The Exit Warning Message

To exit SiteManager:

1. Click the **Exit** button.

3.5.1.2 Accessing Help by Contents Using the Toolbar

The Help button displays an alphabetized list of Help Topics that can be browsed for the subject on which you need help.



The Help Button

Figure 3-38

To access SiteManager Help:

1. Click the **Help** button.

3.5.1.3 Creating a New Record Using the Toolbar

The New button clears the old record and creates a new record. If changes have been made to the current record, it will prompt you to save changes before clearing the current record.



The New Button

Figure 3-39

To create a new record:

1. Click the **New** button.

3.5.1.4 Opening Using the Toolbar

The Open button allows another record to be opened.



The Open Button

Figure 3-40

To open another record:

1. Click the **Open** button.

3.5.1.5 Closing Using the Toolbar

The Close button closes the current sheet. As with the Exit button, a warning message will allow the data to be saved before the current activity.



The Close Button

Figure 3-41

To close the current sheet:

1. Click the **Close** button.

3.5.1.6 Deleting Using the Toolbar

The Delete button deletes the current works on the sheet. A message will require you to confirm the deletion, before it is made. If you subsequently save your work after deleting records, the Edit menu's Undo choice may not be able to retrieve the deleted records. When you confirm a delete, be sure that you do want to delete the data.



The Delete Button

Figure 3-42

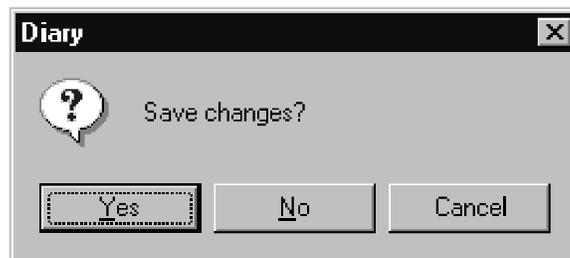


Figure 3-43 The Delete Confirmation Warning Message

To delete:

1. Click the **Delete** button.

3.5.1.7 Saving Using the Toolbar

The Save button saves your current work. If you have performed some deletion during a work session, you may need to reconsider whether the deletion were correct before saving. After you have saved, you may not be able to *undo* the deletions.



The Save Button

Figure 3-44

To save:

1. Click the **Save** button.

3.5.1.8 Attaching Remarks Using the Toolbar

Remarks may be attached to a variety of records in the various components of SiteManager. The Remarks button displays an freeform dialog that allows any comment to be recorded.



The Remarks Button

Figure 3-45

When Remarks are available for a SiteManager window, the presence of the Remarks button on the Toolbar serves as a reminder that they are appropriate

To attach an remark:

1. Click the **Remarks** button.

Or

2. Click the **Services** menu and click the **Remark** choice.
3. Type the desired comment.
4. Click outside the Remark dialog to close the Remark.
5. Click the **Save** button.

3.5.1.9 Other Buttons of the Toolbar

Depending on what SiteManager window you are using, other buttons may appear on the Toolbar. These other buttons will be equivalent to some SiteManager menu option that you use. To identify what a button does, use the Tool Tip for the button. If you check the menus, you will find a comparable capability on the menu.

To display a Tool Tip:

1. Position the mouse point on the button (and hold the mouse still).

3.6 General Procedures

3.6.1 Documentation Support

On-line versions of the User Reference Manual and the Sampling and Testing Procedures for your DOT are accessible in an Adobe Acrobat™ format. The Microsoft Word files that were used to compile the on-line documentation were provided to AASHTO. To modify the documentation files, obtain the files from your AASHTO representative.

The Sampling and Testing Procedures are also a resource provided by AASHTO.

To access on-line documentation:

1. On the Main Panel, double-click the **Documentation** icon.
2. Double-click the documentation icon you wish to reference.

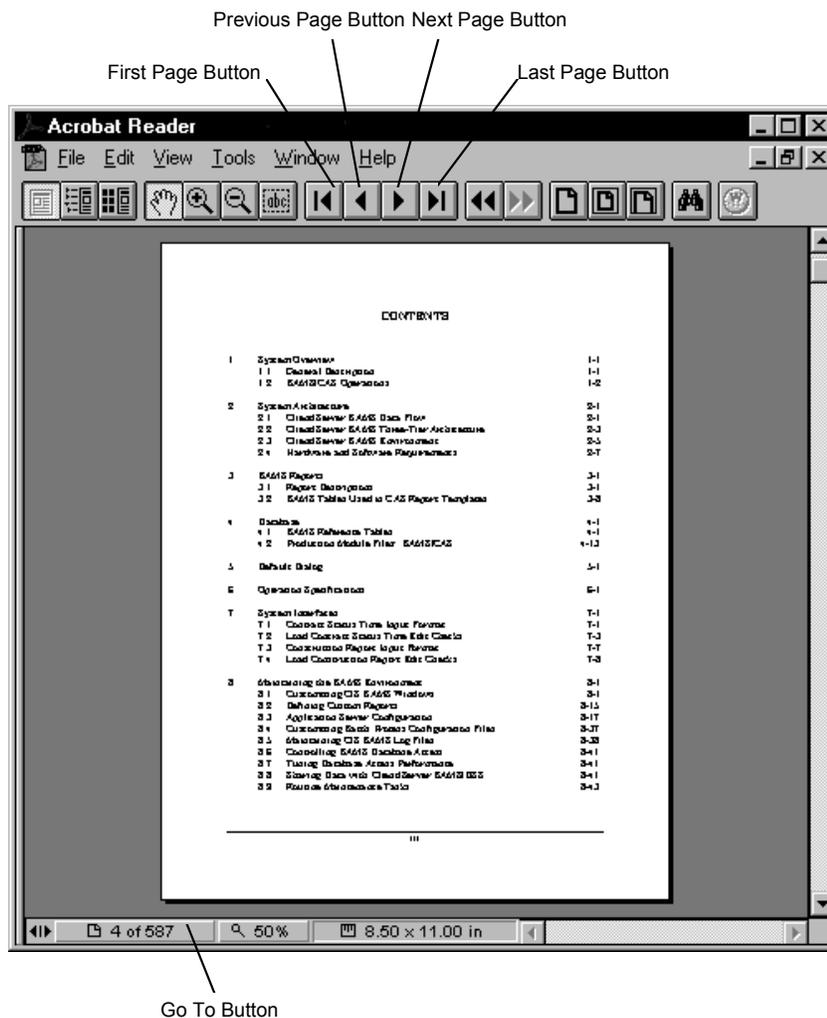


Figure 3-46 The Documentation in Adobe Acrobat

To navigate in Adobe Acrobat:

1. Click the **Next Page** button.

Or

2. Click the **Previous Page** button.

Or

3. Click the **First Page** button.

Or

4. Click the **Last Page** button.

Or

5. Click the **Go To** button.
6. Type page number you want to which you wish to go.
7. Press **Enter**.

3.6.2 Reports

The following procedures are a general description of how to generate PowerBuilder-based SiteManager reports. Each section of the manual describes report specifics for each component of SiteManager.

To generate a PowerBuilder-based report:

1. Double-click the desired report icon.
2. Select the criteria.
3. To generate the report on-line, click **Ok**.

Or

4. To generate the report off-line to a file, click the **Generate Off-line File** check box (ON).
5. Click **Ok**.

Or

6. To generate and print the report off-line, click the **Generate Off-line Print** check box (ON).
7. Click **Ok**.

The Summary by Project Report is unique in that multiple reports may be generated in a batch print process.

To select multiple reports to be printed:

1. On the Report Criteria window, click the **Generate Off-line Print** check box (ON).
2. To select multiple report criteria, highlight the desired criteria by holding down the shift and/or control keys and clicking the desired report criteria. The shift key allows an entire block of criteria to be selected, while the control key allows individual rows of criteria to be selected.
3. Click **Ok**.

To make selections in the **Report Criteria** dialog:

1. Click the desired radio button to select the desired format.
 - **By Summary** selects all items
 - **By Criteria (field name)** selects an individual field

In a **By Criteria (field name)** format:

2. Using the *right* mouse button, click the field.
3. Perform a **Search** using the object menu (referenced in the Getting Started section).
4. Click **OK**.

3.6.2.1 Report Options

The report options are available as toolbar buttons or menu options for reports that have been generated on-line.

Components	Description
Close button	Closes the report preview.
Save button	In a simple report (see Save Reports section) invokes the Save dialog allowing the report to be saved in a .PSR file format.
Print button	Prints the report.
Prior button	Displays the prior page of a multi-page selection.
Next button	Displays the next page of a multi-page selection.

Components	Description
Zoom spin button	Magnifies or reduces the display of the report preview.
Copies spin button	Allows more than one copy of the report to be printed.

Table 3-10 The Report Components Table

3.6.2.2 Saving, Opening, and Exporting Simple Reports

There are two types of reports in SiteManager — simple reports and complex reports. Simple report can be saved and exported, but complex reports cannot. It is easy to identify a simple report — the File menu's Save choice (or the Save button) and the Service menu's Export choice will be active for a simple report. They will not be active for a complex report.

3.6.2.2.1 Saving and Opening Simple Reports

A simple report can be saved for later retrieval. SiteManager saves the report using a **.PSR** extension. The View Saved Report icon on your reporting panel can be used to open a saved report.

To save a report:

1. Click the **File** menu and click the **Save** choice. 

Or

2. Click the **Save** button.
3. Type the name for the file.
4. Change the drive and directory as desired.
5. Click **OK** twice.

To open a saved report:

1. Double-click the **View Saved Reports (PSR)** icon on the reports panel.
2. Change the drive and directory as needed.
3. Select the PSR file.
4. Click **OK**.



If the File menu's Save choice or the Service menu's Export choice is grayed out, the report is a complex report that can NOT be saved or exported. The Save button will only make your standard error sound for the same reason.

3.6.2.2.2 Exporting Simple Reports

A simple report can also be exported into file formats other than PSR. To access an exported simple report file, you must have an applications software package that can access one of the file formats.

File Extension	File Format Description
.TXT	ASCII Tab Separated (Delimited) format
.XLS	Microsoft Excel Spreadsheet format
.WKS	Lotus 123 early format
.WMF	Windows Metafile graphical format

Table 3-11 The Export File Formats Table

To export a report:

1. Click the **Services** menu and click the **Export** choice. 
2. Type the name for the file.
3. In the **Save File As Type** drop-down list, click the expand arrow to the right of the current selection and click the desired file format.
4. Change the drive and directory as desired.
5. Click **OK** twice.

3.7 Plug-In, URL, and OLE Attachments

The URL/Plug-In/OLE functionality of SiteManager allows URL links, Plug-In applications, and OLE documents to be attached to certain SiteManager functions or specific records within that function. The stand-alone feature also allows URL links, Plug-In applications and OLE documents to be accessible to the User through a separate Attachments window accessed through the Accessories panel.



If the File menu's Save choice or the Service menu's Export choice is grayed out, the report is a complex report that can NOT be saved or exported. The Save button will only make your standard error sound for the same reason.

Plug-In, URL, and OLE Attachments

URL links, Plug-In applications, and OLE documents may be associated to:

- Material Test Templates
- DWR Templates
- Contracts
- Contract Estimate History
- Correspondence Log
- Change Order Header
- DWR - Record Work Item
- Maintain Sample - Additional Sample Data
- Force Accounts
- Contract Adjustments
- Contract Time Adjustments
- Line Item Adjustments
- Contractor Evaluation
- Milestone Time Adjustment

Attachments are activated either by a User click or configured to trigger automatically when a window to which an attachment is associated is initialized. Each Plug-In application, URL, or OLE document may be associated to a specific record.

The Plug-In functionality also allows a limited amount of data to be automatically passed to a Plug-In application upon execution.

3.7.1 URL, Plug-In and OLE Attachment Icons

 Attachments	Activates the Attachments window. Appears on the Accessories panel, and activates the stand-alone Attachment window. Appears on the toolbar of any window that may have an attachment associated with it.
 Run Attachments	Allows User to activate Plug-In applications or URLs associated with the window.
 New URL	Opens a dialog box allowing the properties of a URL attachment to be modified or entered.
 New Plug-In	Opens a dialog box allowing the properties of a Plug-In attachment to be modified or entered.
 New OLE Document	Opens a dialog box allowing the properties of an OLE attachment to be modified or entered.
 Delete OLE Document	Deletes the current OLE document.

Figure 3-47 The Attachment Icon Table

3.8 Using Attachments

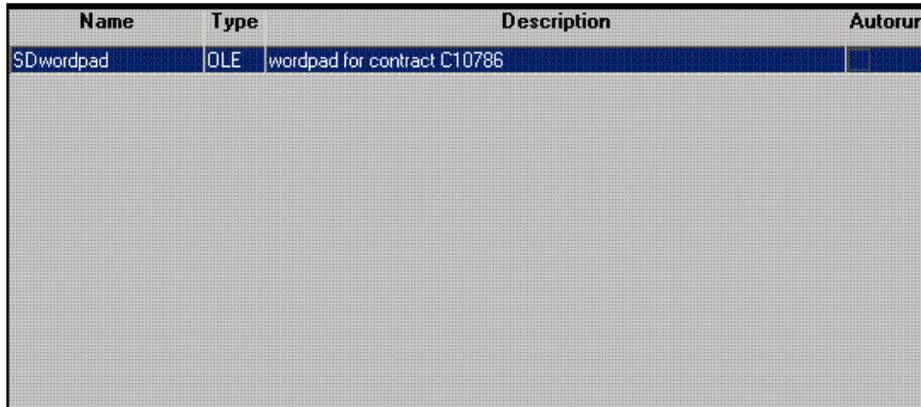
3.8.1 Attachments Associated with Records

URL links, Plug-In applications, and OLE documents may be associated to the following record types:

- Material Test Templates
- DWR Templates
- Contracts
- Contract Estimate History
- Correspondence Log
- Change Order Header
- Daily Work Reports - Record Work Item
- Maintain Sample - Additional Sample Data
- Force Accounts
- Contract Adjustments
- Contract Time Adjustments
- Line Item Adjustments
- Contractor Evaluation
- Milestone Time Adjustment

Attachments may be associated to a specific record. Attachments may also be configured to either activate when a window is opened, or when selected through the Attachment window. System-based attachments are URL links, Plug-In applications, and OLE documents that do not need to be associated with a specific SiteManager function or record. System Attachments are accessed through the Accessories panel.

3.8.1.1 Attachment Usage



Name	Type	Description	Autorun
SDwordpad	OLE	wordpad for contract C10786	<input checked="" type="checkbox"/>

Figure 3-48 The Attachment Window

To display Plug-In, URL, and OLE attachments:

1. Navigate to the SiteManager function associated with the attachment you wish to use.
2. Click the **Attachment** icon to access the Attachment window. *Note: As the attachment is associated to a specific record, that record must be opened before accessing the Attachment Window. The Autorun feature indicates that the attachment will be run as soon as the Attachment Window is opened without the user having to click the Run button.*
3. The previously-created URL, Plug-In, and OLE attachments appear as a table grid on the Attachments window. **Sort** and **Filter** features may be used on this window by right-clicking and choosing a feature from the **Object** menu.
4. Double-click the desired attachment to activate, or highlight the desired attachment and click the **Run Attachments** icon.
5. Activating a Plug-In opens the specified application in a separate window. Activating a URL or HTML File item launches the system's default browser. Activating an OLE opens the specified document.
6. Once the User has completed work with the URL, Plug-In application, or OLE document, the browser or application may be closed as normal.

3.8.1.2 Attachment Definition

Once the appropriate area of SiteManager has been reached, the creation steps are identical.

Using Attachments

Name	Type	Description	Autorun
SDwordpad	OLE	wordpad for contract C10786	<input type="checkbox"/>

Figure 3-49 The Attachment Window

Field	Description
Name	Name of the attachment
Type	OLE, URL or Plug (executable)
Description	Short textual description of the attachment.
Autorun	Indicates that the attachment will be run as soon as the user opens the attachment window.

Figure 3-50 The Attachment Window Field Description Table

To access the Attachments window, click the **Attachments** button, or click the **Services** Menu and click **Attachments**.

3.8.1.2.1 Plug-In Attachment Definition

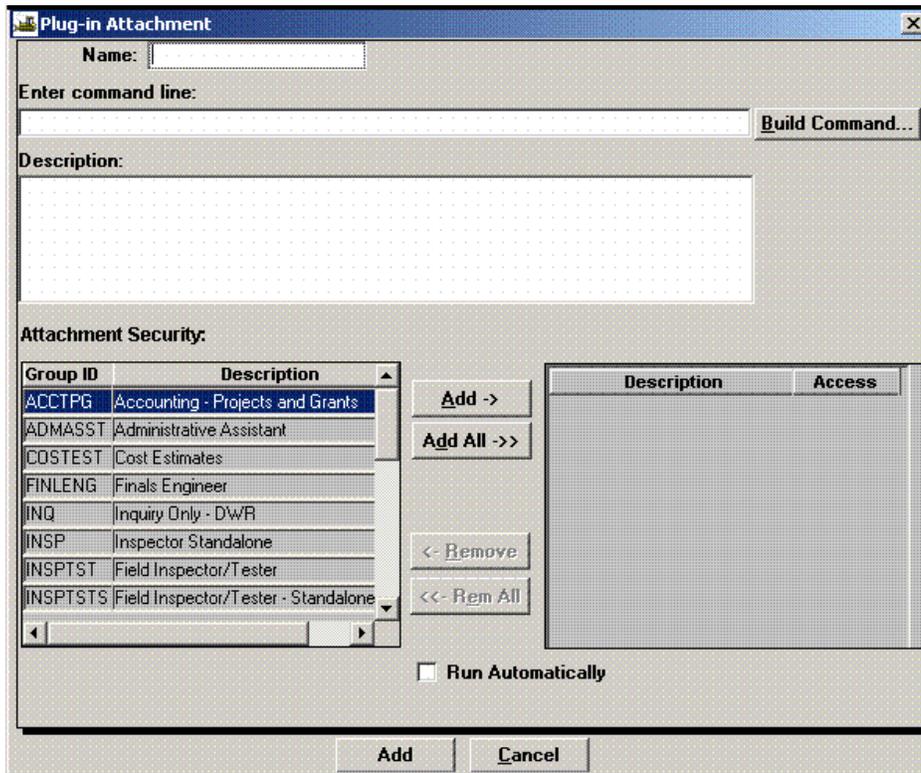


Figure 3-51 The Plug-In Attachment Window

Field	Description
Name	Required field. The User-entered name of the attachment entered in freeform text.
Enter Command Line	The executable application’s command line. Either entered by the User or returned through the Build Command function.
Description	Not a required field. A short, User-entered description of the executable application in freeform text.
Attachment Security	Allows the User to restrict access to the attachment at the Group level.
Run Automatically	If checked, the Plug-In is executed upon activation of the window it is attached to.

Figure 3-52 The Plug-In Attachment Window Fields Table

Using Attachments

To create a new Plug-In Attachment:

1. Click the **New Plug-In** button to access the Plug-In Attachment window.
2. On the Plug-In Attachment window, click the **Name** field and add a name for the new plug-in.
3. Click the **Enter Command Line** field. The command line may be entered directly into this field or returned from the **Build Command** button. *Note: The Build Command function is discussed in the next section.*
4. Click the **Description** field and enter a description.
5. In the **Attachment Security** box, choose the Group(s) to which this Attachment will be visible and click **Add** to add each one to the Access box.
6. To make the Plug-In executable upon window initialization, click the **Run Automatically** box on.
7. After all fields defining the Plug-In are entered, click the **Save** button.

Note: The Run Automatically check box does not appear in the stand-alone function.

3.8.1.2.1.1 The Build Command Function

The purpose of the Build Command function is to assist the User in the set up of a plug-in attachment’s executable command line and any additional data that needs to be passed to the application at execution.

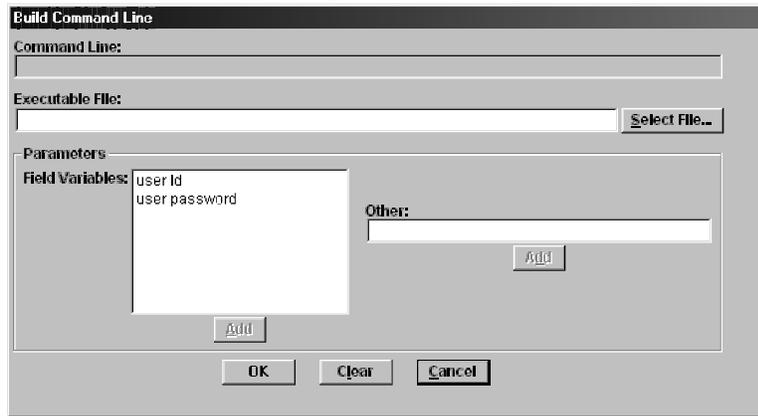


Figure 3-53 The Plug-In Attachment Build Command Window

Field	Description
Command Line	This protected field displays the command being built from the Executable File, Parameters: Field Variables, and Parameters: Other fields. This line may not be longer than 255 characters.
Executable File	Required field. This may be entered by the User or populated by selecting a file from the Select File function.
Parameters: Field Variables	Field variables are selected from the list provided. This list will differ depending upon which function is being accessed. Variables are retrieved from the SiteManager database and passed to the executable application.
Parameters: Other	Variables entered in this field are passed as entered to the plug-in application when it is activated by a User.

Figure 3-54 The Plug-In Attachment Window Fields Table

To build a command using the Build Command function:

1. On the Plug-In Attachment window, click the **Build Command** button. The Build Command window opens.
2. Enter the executable command path or click the **Select File** button. The Select File window opens, allowing browsing of the system’s directories to locate and select an executable file and its path

Using Attachments

directory. Click **Open**. The file name and path are passed to both the Executable File and the Command Line fields.

- If desired, select an item from the **Parameter Field Variable** list by clicking on the desired item. Click the **Add** button to add the field variable to the Command Line. These variables for the selected record will be passed to the plug-in attachment when it is activated.

Note: If the attachment is for Contracts, the Contract ID is a variable that may be passed to the attachment automatically by the system.

Note: Since a 'space' is the defined parameter delimiter for plug-in command lines, there should be no spaces in the path defining where the plug-in attachment can be found by the system. For example, if a user wishes to have a plug-in attachment that initializes a Word document called form.doc, the command line might be:

c:\program files\msoffice\winword\winword.exe c:\templates\form.doc

If the command line were written as follows, the command would not work because of the space in the 'my documents' directory name:

c:\program files\msoffice\winword\winword.exe c:\my documents\templates\form.doc

- To add additional data to be passed to the application at execution, click the **Parameter: Other** field and enter the desired data.
- Click **Add**. The additional data appears on the Command Line.
- When the Command Line has been completed, click the **OK** button. The Build Command Line window closes, and the Command Line is passed to the Plug-In Attachment window's Enter Command Line field.

Note: The Command Line may not be longer than 255 characters.

3.8.1.2.2 Fields Available For Use By Plug-Ins

The following table, organized by SiteManager functionality, lists the fields available to the Plug-In function.

Functional Area	Field ID	Field Description
All Areas		
	USER	User ID
	PSWD	User Password
Daily Work Reports		
	CONT	DWR Contract ID
	DATE	Daily Work Report Date
	INSP	DWR Inspector User ID
	PROJ	DWR Project Number
	ITEM	DWR Line Item Number

Functional Area	Field ID	Field Description
	LOCA	DWR Location Sequence Number
Materials Management		
	SMPL	Sample ID
	METH	Test Method
	TST#	Sample Test Number
	RGHT	User Rights
	MTR#	Material Code
	SPBY	Sampled By
	PSC#	Producer/Supplier Number
	ATHZ	Authorized By user ID
	RVS#	Revision Number
	SPFR	Sampled From
	GEOA	Geographic Area
	STAT	Sample Status
	MIX#	Sample Mix ID
	MIXT	Sample Mix Design
	LAB#	Lab ID
	SPDT	Date Sampled
	AZDT	Date Authorized
	CMDT	Date Completed
Contract Administration		
	CONT	Contract ID
	EST#	Estimate Number

Table 3-55 The Fields Available for Plug-Ins Table

3.8.1.2.3 URL Attachment Definition

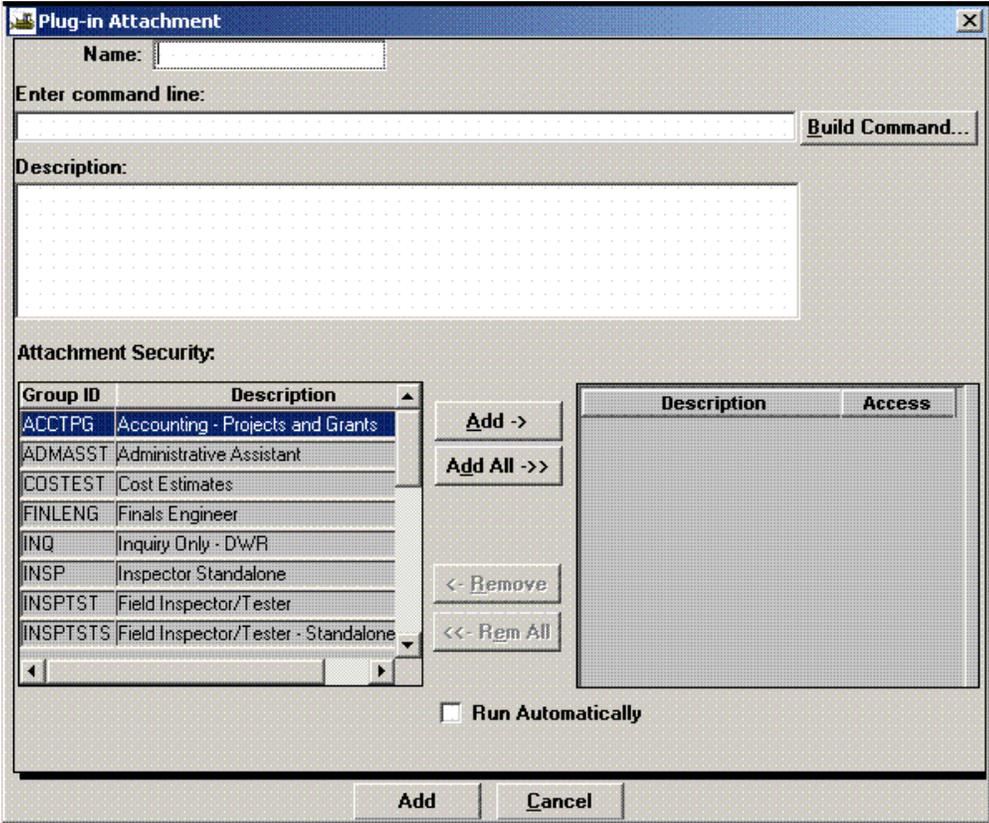


Figure 3-56 The Select File or URL Window

Field Name	Description
Name	Required field. The User-entered name of the attachment, entered in freeform text.
Enter the URL or Specify a Local File	Required field. The location of a local html document or web page address.
Description	Not required. A short, User-entered description of the html document or web page address.

Table 3-57 The Select File or URL Attachment Window Fields Table

To create a new URL or html File attachment:

1. Click the **New URL** button to access the Select File or URL window.
2. Click the **Name** field and add a name for the new URL.

3. Click the **Enter Command Line** field. The command line may be entered directly into this field or returned from the **Choose File** function.
4. Click the **Description** field and enter a description.
5. In the **Attachment Security** box, choose the Group(s) to which this Attachment will be visible and click the **Add** button to add each one to the Access box.
6. After all fields defining the URL or html File are entered, click the **Save** button.

3.8.1.2.4 OLE Attachment Definition

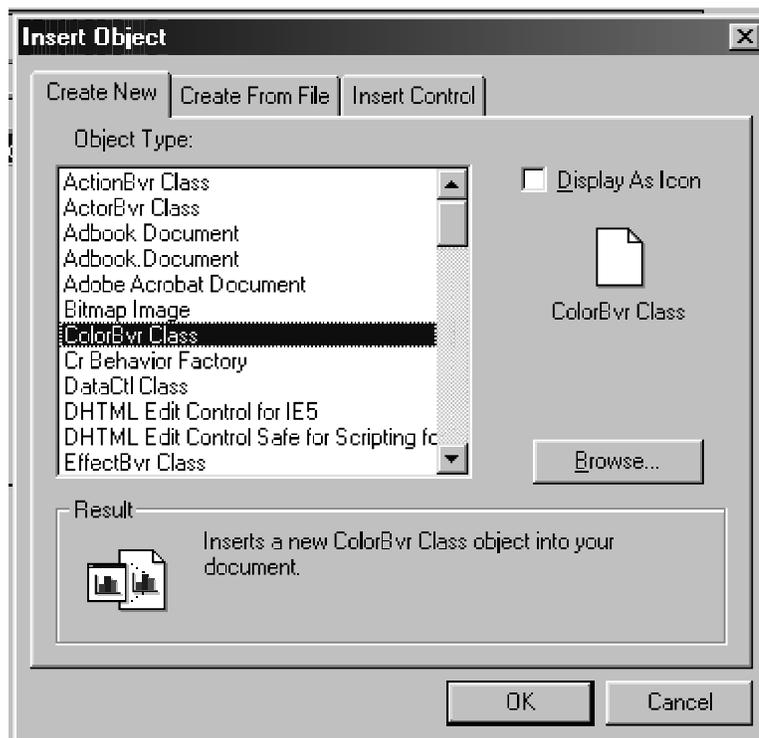


Figure 3-58 OLE Insert Object Dialog Box (Create New Tab)

Field Name	Description
Object Type	List of OLE-compliant applications that are installed on the client machine that may be used to create an OLE document.

Figure 3-59 The OLE Insert Object Dialog Box Fields Table

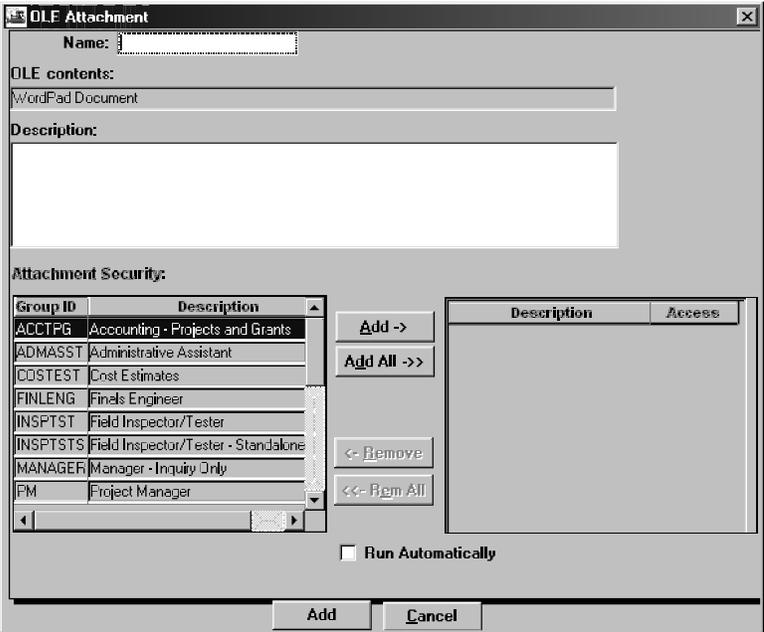


Figure 3-60 The OLE Attachment Definition Window

Field Name	Description
Name	Required field. The User-entered name of the attachment, entered in freeform text.
OLE Contents	A non-editable field which indicates the application in which the OLE attachment is generated.
Description	A freeform text explanation of the OLE attachment and its purpose.
Attachment Security: Group ID	The Group ID to which the attachment is to be accessible.
Attachment Security: Description	The full, descriptive name of the Group ID.
Run Automatically	When checked, this box indicates that the OLE will be run automatically when the Attachments icon is clicked.

Figure 3-61The OLE Attachment Definition Window Fields Table

To create a new OLE attachment:

1. Click the **OLE** button to access the Insert Object dialog box.
2. Select the type of OLE object to be created by clicking the application name in the Object Type box.
3. Click **OK**. The OLE Attachment definition window appearl
4. Click the **Name** field and enter a name for the OLE attachment.
5. Click the **Description** field and enter a description.
6. In the **Attachment Security** box, choose the Group(s) to which this Attachment will be visible and click the **Add** button to add each one to the Access box.
7. If it is desirable to have the OLE attachment appear upon entering the Attachments window, click the **Run Automatically** check box ON.
8. After all fields defining the OLE are entered, click the **Add** button.
9. On the Attachments window, double click the OLE definition just created to begin creating the OLE document.
10. When finished, click **File** then **Update**, and close the window normally.

4. Contract Administration - Reference Tables

August 2005

4.1 Contract Administration Overview

Contract Administration includes the reference data and program functions that are used to view, add, modify, and delete Contract records. These are grouped on the following panels:

Panel Name	Description
Reference Tables (CA) Panel	The Reference Tables (CA) panel contains the Contract defaults and standard data. This includes the Vendors, Funding Sources, and Items that the user can add to Contracts. The Interface Load Messages window displays the results of processes that load data from other systems.
Contract Records Panel	The Contract Records panel contains the functions that maintain Contract records. This includes the Contract description, Milestones, Projects, Categories, Items, Funding, Stockpiled Materials, Key Dates, Scheduled Events, Permits, user authority, and design evaluations.
Contractor Management Panel	The Contractor Management panel contains functions for recording Contract-specific data on Prime Contractors and Subcontractors. This includes conference and document tracking, Subcontract descriptions, Contractor Payrolls, Progress Schedules, and Contractor Evaluations.
Reports Panel	The Reports panel contains Contract-specific reports. These include reports on Contract status, Contractor status, Subcontract value, disputes and claims, Item quantity, Item work, and Contract history.

Table 4-1 The Contract Administration Panels Table

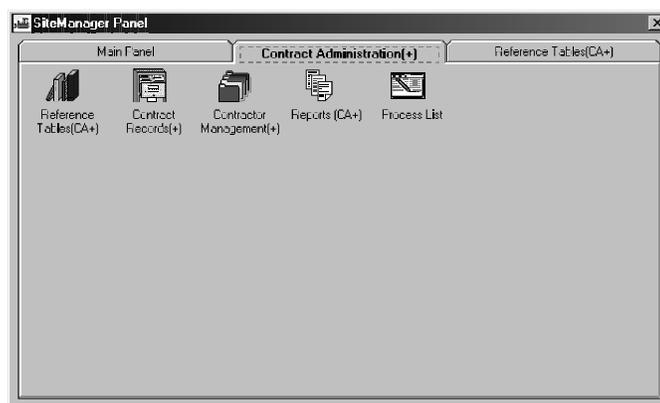


Figure 4-1 The Contract Administration Panel

To access the Contract Administration panel:

1. On the SiteManager main panel, double-click the Contract Administration icon.

4.2 Reference Tables (Contract Administration)

The Contract Administration reference tables store the defaults and the agency-defined standards that are added to Contracts. Typically, the reference table data is loaded into SiteManager from another system using an interface load process. This section of the manual describes how to view and maintain the reference table data in SiteManager.

Through the Reference Tables (CA) panel, an authorized user can add the following standards and defaults to the reference tables: Administrative Offices, Funding Sources, Vendor information, default Key Date types, default Checklist Event types, and default liquidated damage rates. The Reference Tables (CA) panel can not be used to add the default Critical Date types or Items. The default Critical Date types were defined during system development. Items are added to the Item Master via the Pre-construction system load program.

The defaults include the Critical Date types, Key Date types, Checklist Event types, and the liquidated damage rates. After defaults are entered in the reference tables, SiteManager adds the defaults to new Contracts automatically. For other Contract defaults, see the topic System Operational Parameters for Contracts.

The standards include the Administrative Offices, Items, Funding Sources, and Vendor information. The standards are defined by the transportation agency. After standards are entered in the reference tables, a user can add standard data to a Contract by selecting it on the appropriate SiteManager window. For example, the Funding Sources can be selected on the Contract Funding window.

Important! SiteManager will not let users overwrite the Reference Table data loaded from the Pre-construction system by the interface load process.

The Reference Tables (CA) icons represent the following windows:

- Interface Load Messages
- Administrative Offices

- Item Master
- Funding Sources
- Vendors
- Default Critical Dates
- Default Key Dates
- Default Checklist Events
- Default Liquidated Damages

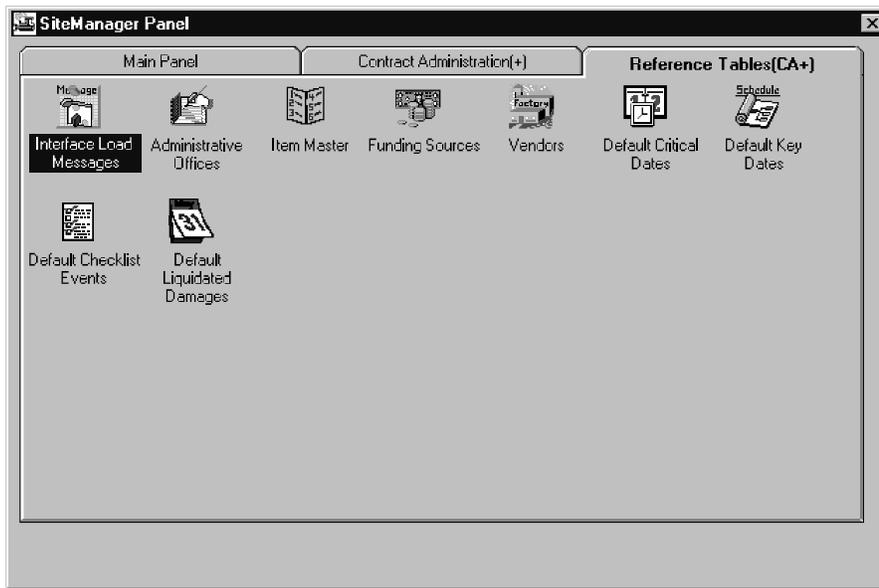


Figure 4-2 The Reference Tables (CA) Panel

To access the Reference Tables (CA) panel:

1. On the Contract Administration panel, double-click the Reference Tables (CA) icon.

4.2.1 Interface Load Messages

This Interface Load Messages window lists the messages generated during the interface load processes. The user can view and delete the messages on this window. The user can find, filter, and sort the message list.

Reference data load process (REFLOAD)	Reference Table data is loaded into SiteManager from another system by the REFLOAD process.
Pre-construction Contract data load process (PRELOAD)	New Contracts are loaded into SiteManager from the Pre-construction system by the PRELOAD process.

Construction Contract data load process (CONLOAD)	Contracts to be converted are loaded into SiteManager from the Pre-construction system by the CONLOAD process.
---	--

Table 4-2 The Interface Load Process Table

Date	Load Process	Contract ID	Table ID	Message
19990400	REFLOAD			Record 10 invalid
19990408	REFLOAD		T_INTRFC_MSG	NULL during insert!
19990408	REFLOAD		T_INTRFC_MSG	Record 8: SQLSTATE = 23000[[[INTERSQLV]]ODBC Oracle]ORA-01400: mandatory (NOT NULL) column is miss
19990408	REFLOAD		T_INTRFC_MSG	Record 3: SQLSTATE = 23000[[[INTERSQLV]]ODBC Oracle]ORA-01400: mandatory (NOT NULL) column is miss
19990408	REFLOAD		T_INTRFC_MSG	NULL during insert!
19990416	REFLOAD		T_INTRFC_MSG	Oracle]ORA-01400: mandatory (NOT NULL) column is miss
19990416	REFLOAD		T_INTRFC_MSG	NULL during insert!
19990416	REFLOAD			Record 10 invalid
19990416	REFLOAD		T_INTRFC_MSG	Oracle]ORA-01400: mandatory (NOT NULL) column is miss
19990416	REFLOAD		T_INTRFC_MSG	Record 8: SQLSTATE = 23000[[[INTERSQLV]]ODBC Oracle]
19990416	REFLOAD		T_INTRFC_MSG	NULL during insert!
19990416	REFLOAD		T_INTRFC_MSG	Record 3: SQLSTATE = 23000[[[INTERSQLV]]ODBC Oracle]

Figure 4-3 The Interface Load Messages Window

Field Name	Description
Date	Date the interface load message was generated.
Load Process	Name of the interface load process that generated the message (REFLOAD, PRELOAD, or CONLOAD).
Contract ID	Transportation agency-defined ID for the Contract associated with the interface load message.
Table ID	Name of the database table associated with the interface load message.
Message	Interface load message text.

Table 4-3 The Interface Load Messages Window Fields Table

To delete an interface load message:

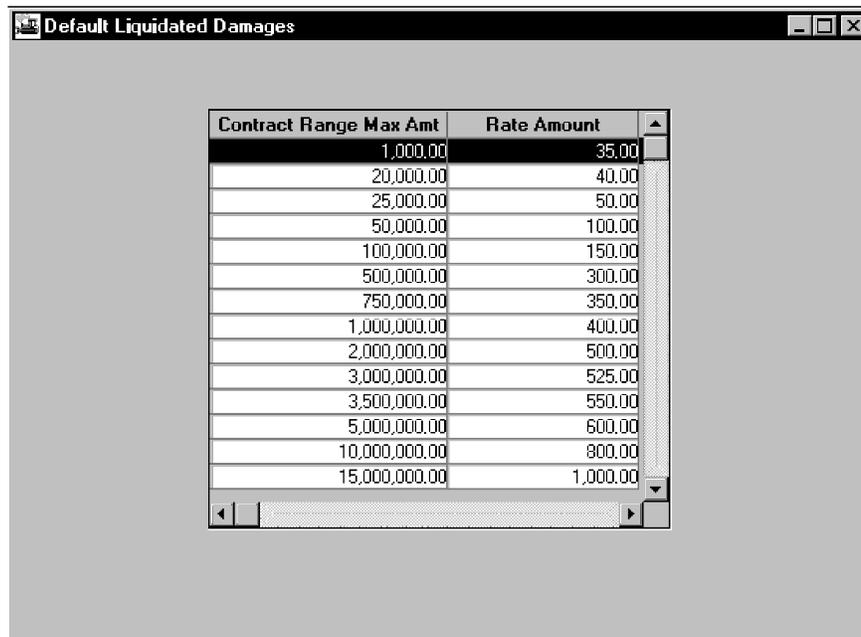
2. On the Reference Tables (CA) panel, double-click the Interface Load Messages icon.
3. To select one message to delete, click the row. To select multiple messages, Ctrl-click each row.
4. Click the Delete button. The selected message is deleted from the list.
5. Click the Save button.

Tip: Find, filter, or sort the list to find specific information.

4.2.2 Default Liquidated Damage Rates

The Default Liquidated Damages window lets the user view and modify the default liquidated damage rates. SiteManager adds a default rate to new Contracts based on the bid amount of the Contract. On the Default Liquidated Damages window, the user can enter the rate per day for each Contract bid amount range. The system only displays the highest value for each range. The lowest possible value for the Contract Amount Range is \$0.00, while the highest possible value is always \$999,999,999,99.99.

Tip: If the user does not enter a Contract's liquidated damages rate manually, the system adds the default rate to the Contract automatically when the Contract status is changed to active.



Contract Range Max Amt	Rate Amount
1,000.00	35.00
20,000.00	40.00
25,000.00	50.00
50,000.00	100.00
100,000.00	150.00
500,000.00	300.00
750,000.00	350.00
1,000,000.00	400.00
2,000,000.00	500.00
3,000,000.00	525.00
3,500,000.00	550.00
5,000,000.00	600.00
10,000,000.00	800.00
15,000,000.00	1,000.00

Figure 4-4 The Default Liquidated Damages Window

Field Name	Description
Contract Range Max Amount	The maximum amount for which the liquidated damages rate can be used. The total Contract bid amount must be equal to or less than this amount and more than the previous ending amount. This value must be unique. For states with one standard amount for all Contracts, this value defaults to 99,999,999,999.00 and cannot be modified.
Liquidated Damages Rate Amount	The default liquidated damages rate per day. This amount is associated with the Contract Range Maximum Amount.

Table 4-4 The Default Liquidated Damages Window Fields Table

To add a default liquidated damages rate:

1. On the Reference Tables (CA) panel, double-click the Default Liquidated Damages icon.
2. Click the New button. An empty row is inserted before the selected row.
3. Type the ending range for the Contract Range Max Amt.
4. Press the Tab key.
5. Type the Rate Amount.
6. Click the Save button.
7. Click the Yes button.
8. The list is sorted in ascending order of ending range amounts.

Tip: The large value in the last row cannot be modified or deleted.

4.2.3 Default Critical Dates

The Default Critical Dates window lets the user view and modify the default Critical Dates. The default Critical Date **types** were defined during system development. The transportation agency can not add, modify, or delete the Critical Date types. However, an authorized user can modify the default Critical Date settings. SiteManager adds the default Critical Dates automatically to each new Contract. The Critical Date types are listed here in alphabetical order:

- Accepted Date
- Adjusted Completion Date
- Award Date

- Checked Out to Field Date
- Contract Archived Date
- Contractor Bankruptcy Date
- Contractor Default Date
- Contractor Final Release Date
- Execution Date
- Letting Date
- Notice to Proceed Date
- Open to Traffic Date
- Original Completion Date
- Physical Work Complete Date
- Price Adjustments Base Date
- Signed Date
- Substantial Work Complete Date
- Work Begin Date

Tip: These dates are considered critical because SiteManager includes them in the standard Contract record reports.

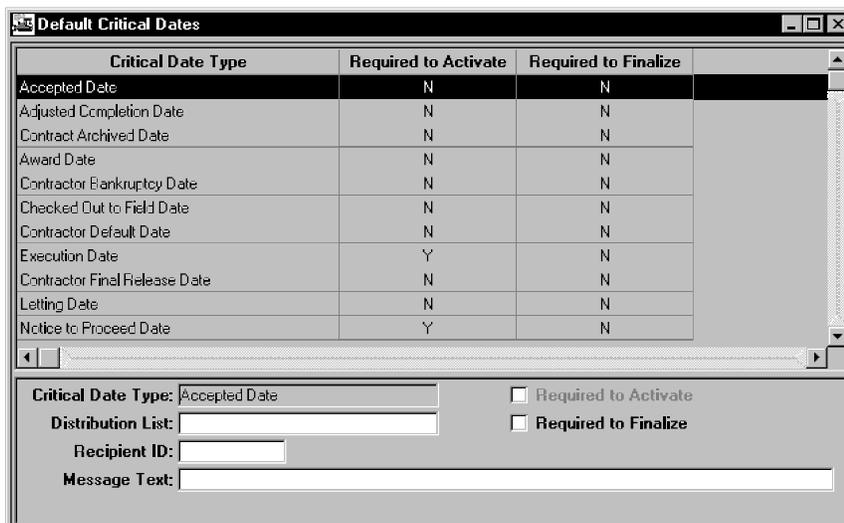


Figure 4-5 The Default Critical Dates Window

Field Name	Description
Critical Date Type	System-defined default Critical Date type. The default Critical Date types were defined during system development. The transportation agency can not add, modify, or delete the Critical Date types.
Required to Activate	Indicates that a Critical Date event must occur before the Contract status can be changed from Pending to Active (e.g., the Execution Date). A Critical Date can not be both Required to Activate and Required to Finalize.
Required to Finalize	Indicates that a Critical Date event must occur before the Contract status can be changed to Complete. A Critical Date can not be both Required to Activate and Required to Finalize.
Distribution List	Group to be notified when the actual date of the Critical Date event is entered. The user can search this field. After valid entry of a Distribution List, the Recipient ID field is protected.
Recipient ID	Person to be notified when the actual date of the Critical Date event is entered. The user can search this field. After valid entry of a Recipient ID, the Distribution List field is protected.
Message Text	Standard message to be sent to the recipient(s).

Table 4-5 The Critical Dates Window Fields Table

To make a Critical Date Required to Activate:

1. On the Reference Tables (CA) panel, double-click the Default Critical Dates icon.
2. Click the critical date.
3. If the date is currently not required for either status change, click the Required to Activate radio button.
4. Click the Save button.

To select one or more recipients for notification that a date has occurred:

1. On the Reference Tables (CA) panel, double-click the Default Critical Dates icon.
2. In the Distribution List field or the Recipient ID field, type the entry or click the *right* mouse button and perform a Search.
3. Click the Save button.

4.2.4 Default Key Dates

The Default Key Dates window lets the user add, modify, and delete the default Key Dates. The Key Date types are defined by the transportation agency in the system code tables. On the Default Key Dates window, the user can add pre-defined Key Date types to the default list. The user can find, filter, and sort the list, and modify the Key Date settings. SiteManager adds the default Key Dates automatically to each new Contract.

Tip: The main purpose of a Key Date is to monitor a key Contract activity and notify personnel when the activity actually occurs.

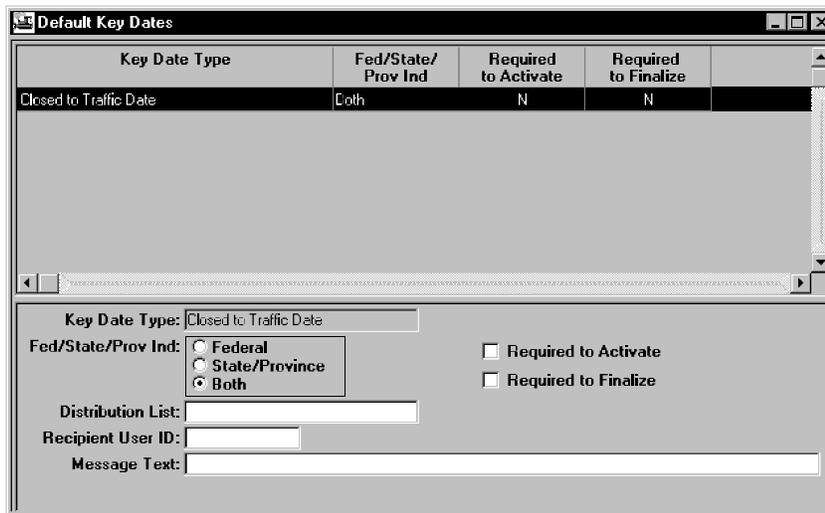


Figure 4-6 The Default Key Dates Window

Field Name	Description
Key Date Type	The Key Date Types are the names given by the transportation agency to the Key Dates (e.g., Closed to Traffic Date, State Final Inspection Date, Open to Traffic Date). The Key Date type is a required field and must be unique. This field is protected unless the user selects the New menu option.
Required to Activate	Indicates that a Key Date must occur before the Contract status can be changed from Pending to Active (e.g., Letting Date, Award Date, Execution Date) A Key Date can not be both Required to Activate and

Field Name	Description
	Execution Date). A Key Date can not be both Required to Activate and Required to Finalize.
Distribution List	Group to be notified when the actual date of the Key Date event is entered. The user can search this field. After valid entry of a Distribution List, the Recipient User ID field is protected.
Required to Finalize	Indicates that a Key Date is part of the Contract finalization process. A Key Date can not be both Required to Activate and Required to finalize.
Recipient User ID	Person to be notified when the actual date of the Key Date event is entered. The user can search this field. After valid entry of a Recipient, the Distribution List field is protected.
Fed/State/Prov Ind	Indicates that this date is for Federal Contracts, State/Province Contracts, or for both types of Contracts. This is a required field.
Message Text	Standard message to be sent to the recipient(s).

Table 4-6 The Default Key Date Window Fields Table

To add a default Key Date type to the window:

1. On the **Reference Tables (CA)** panel, double-click the **Default Key Dates** icon.
2. Click the **New** button. An empty row is added to the list.
3. In the **Key Date Type** drop-down list, click the expand arrow and click a Key Date Type on the list of available Key Date Types.
4. In the **Fed/State Prov Ind** field, select one of the radio buttons.
5. Click the **Save** button.

4.2.5 Default Checklist Events

The Default Checklist Events window lets the user add, modify, and delete the default Checklist Events. The Checklist Event types are defined by the transportation agency in the system code tables. On the Default Checklist Events window, the user can add pre-defined Checklist Event types to the default list. The user can find, filter, and sort the list, and modify the Checklist Event settings. SiteManager adds the default Checklist Events automatically to each new Contract.

Tip: The main purpose of a Checklist Event is to schedule an event that occurs more than once or at regular intervals, and to notify personnel when a date arrives and an action (e.g., approval) has not occurred.

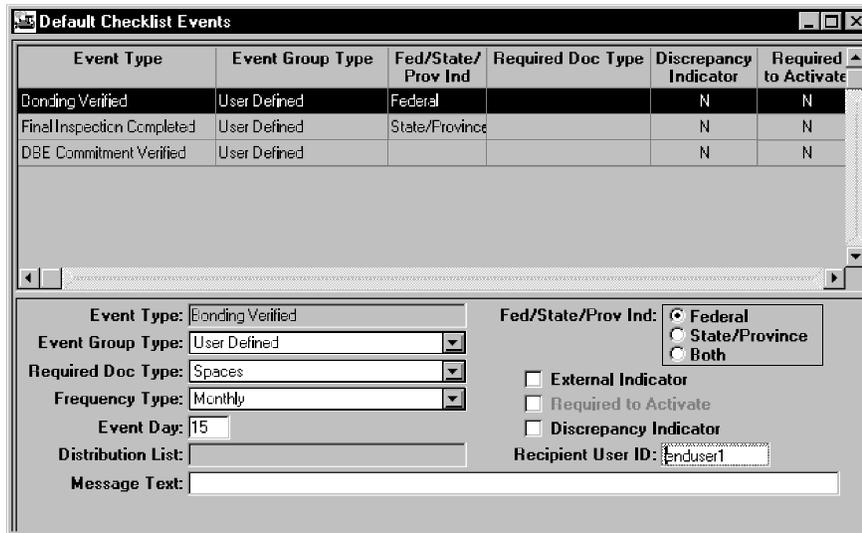


Figure 4-7 The Default Checklist Events Window

Field Name	Description
Event Type	The Event Types are the names given by the transportation agency to the Checklist Events that occur throughout the life of the Contract (e.g., Bonding Verified, DBE Commitment Verified, Final Inspection Completed). The Event Type is a required field and must be unique. This field is protected unless the user selects the New menu option.
Event Group Type	Grouping of associated event types (e.g., EEO, Training, and Certification). This is a required field.
Frequency Type	For repetitive events, the frequency with which they occur (i.e., Daily, Weekly, Biweekly, Monthly, Quarterly, Semi-Annually, Annually, and One Time Only). This is a required field. If the user selects One Time Only, the user can also select Required to Activate.
Event Day	The day of the week or month that the event is to occur. For weekly and bi-weekly events, enter the day of the week (01-07). For monthly events, enter the day of the month (01-30). This field is protected for all other frequency types.

Field Name	Description
Required Doc Type	Transportation agency-defined codes identifying each type of document (e.g., Trainee report, EEO report, and Material Certification). This field is required when the External Indicator is checked (ON).
Required to Activate	Indicates that an event must occur before the Contract status can be changed from Pending to Active (e.g., 'DBE commitment verified').
Discrepancy Ind	Indicates that if an event has not occurred before estimate generation, it will be reported as a discrepancy.
Distribution List	Group to be notified when the event's projected date expires before the actual date is entered. The user can search this field. After valid entry of a Distribution List, the Recipient User ID field is protected.
External Indicator	Indicates that a document is due to be received from an external source.
Recipient User ID	Person to be notified when the event's projected date expires before the actual date is entered. The user can search this field. After valid entry of a Recipient, the Distribution List field is protected.
Fed/State/Prov Ind	Indicates that the checklist event is for a Federal Contract, State/Province Contract, or Both. This is a required field.
Message Text	Standard message to be sent to the recipient(s).

Table 4-7 The Default Checklist Event Window Fields Table

To add a Checklist Event to this window:

1. On the Reference Tables (CA) panel, double-click the Default Checklist Events icon.
2. Click the New button. An empty row is added to the list.
3. In the Event Type drop-down list, click the expand arrow and click an Event Type on the list of available Event Types.
4. In the Fed/State Prov Ind field, click a radio button.
5. Press the Tab key.

6. In the Event Group Type drop-down list, click the expand arrow and click an Event Group Type on the list of available types.
7. Press the Tab key.
8. To require the receipt of an external document, in the Required Doc Type drop-down list, click the expand arrow and click the document type.
9. Press the Tab key.
10. To require the receipt of an external document, click the External Indicator check box (ON).
11. Press the Tab key.
12. In the Frequency Type drop-down list, click the expand arrow and click the frequency of the event.
13. If the Frequency Type is Weekly, Bi-weekly, or Monthly, tab to the Event Day field and type a number representing the day of the time period on which the event is to occur (e.g., type 3 to represent the third day of each month).
14. If the Frequency Type is One Time Only, tab to the Required to Activate check box. If desired, click the check box (ON).
15. Press the Tab key.
16. To require a discrepancy notification, click the Discrepancy Ind check box (ON).
17. To select a recipient or recipients, tab to either the Distribution List field or the Recipient ID field and type the entry, or click the *right* mouse button and perform a Search.
18. Click the Save button.

4.2.6 Funding Sources

The Funding Sources window lets the user add, modify, and delete standard funding sources. The user can view but not modify funding sources loaded from the Pre-construction system. After a funding source is entered on the Funding Sources window, the user can add the funding source to a Contract by selecting it on the appropriate SiteManager panels (e.g., Contract Funding).

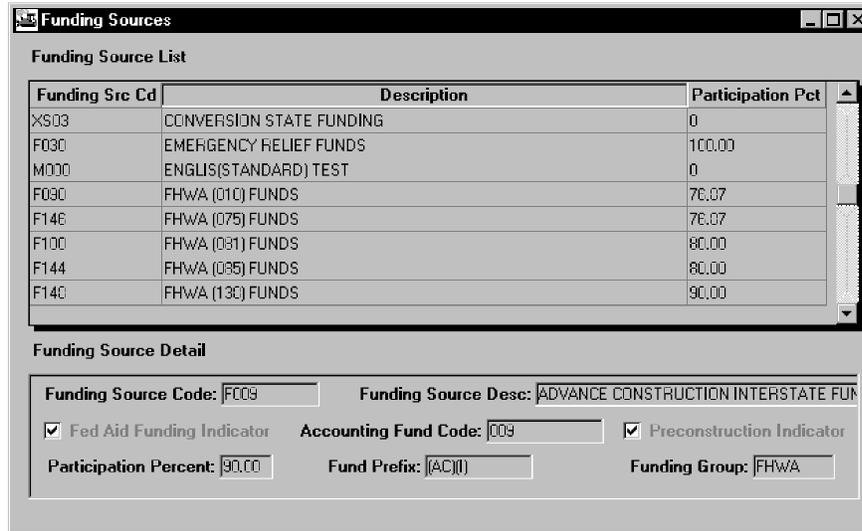


Figure 4-8 The Funding Source Window

Field Name	Description
Funding Source Code	Identifies a source of funding (e.g., Federal grant, Federal fuel tax, State general fund). This is a required field. This field can not be modified after the funding source is saved.
Description	Name or description of a funding source.
Fed Aid Funding Indicator	Indicates whether or not this fund contains federal aid dollars.
Accounting Fund Code	A code assigned to a fund by the transportation agency's accounting department. This field can not be modified after the funding source is saved.
Pre-Construction Ind	Indicator to show that the data is from the Pre-construction system and can not be modified.
Source Participation Percent	The percentage of this fund paid by federal aid. This field is required if the Federal Aid Funding Indicator is checked (ON).
Fund Prefix	An alternate identification code for a fund.

Field Name	Description
Funding Group	Allows several funds to be associated with the same group code.

Table 4-8 The Funding Source Window Fields Table

To add a funding source to the reference table:

1. On the **Reference Tables (CA)** panel, double-click the **Funding Source** icon.
2. Click the **New** button.
3. In the **Funding Source Code** field, type the source of funding (e.g., Federal grant, Federal fuel tax, State general fund).
4. Press the **Tab** key.
5. In the **Description** field, type a name or description of the funding source.
6. Press the **Tab** key.
7. If the funding includes federal aid money, click the **Fed Aid Funding Indicator** check box (ON).
8. Press the **Tab** key.
9. Click the **Accounting Fund Code** field and type the code assigned to the fund.
10. Press the **Tab** key.
11. If the funding includes federal aid money, in the **Participation Percent** field, type the percentage of this fund paid by federal aid.
12. Press the **Tab** key.
13. In the **Fund Prefix** field, type the fund prefix.
14. Press the **Tab** key.
15. In the **Funding Group** field, type the funding group.
16. Click the **Save** button.

To delete a funding source from the reference table:

1. On the **Reference Tables (CA)** panel, double-click the **Funding Source** icon.
2. In the **Funding Source** list box, scroll to and click the funding source.
3. Click the **Delete** button.
4. Click **Ok**.

Tip: If the funding source is loaded from the Pre-construction system, the data can not be modified or deleted in SiteManager.

4.2.7 Item Master

The Item Master window lets the user view the standard Item list. An interface load process adds the Items from the Pre-construction system to this list. The user can not add, modify, or delete Item Master data. The default sorting order of the list is by Item Code first, then Spec Year, and then Unit. The user can find, filter, and sort any column on the list. The selected Item's Historical Price is displayed only if the user has the authority to view this data. The user can add a standard Item to a Contract by selecting the Item on the appropriate SiteManager window (e.g., the Items window).



Figure 4-9 The Item Master Window

Field Name	Description
Item Code	Transportation agency-defined code that identifies an Item.
Spec Year	The year of the specification book in which the Item appears.
Unit	The unit of measure for this Item.
Unit Type	Indicates that the measurement system used is English (E) or Metric (M).
Short Description	Short text description of the Item.
Alternate ID	Alternate ID of an Item.

Field Name	Description
Spec Book Reference	Identifies an Item-specific section or paragraph from the transportation agency’s spec book.
Description	Text description of an Item. Two lines are provided.
Material Item Indicator	Indicates that materials are associated with the Item.
Obsolete Item Indicator	Indicates that this Item is obsolete and no longer used.
Major Item Indicator	Indicates that an Item is important enough to be printed on the notice to Contractors, regardless of the dollar amount allocated to it.
Require Supplemental Description Indicator	When checked, indicates that a supplemental description must be entered for an item being added to a project
Fuel Adjust Type	Fuel price adjustment type to use for this Item.
Item Historical Price	Historical price of an Item.

Table 4-9 The Item Master Window Fields Table

To view reference table Item data:

1. On the **Reference Tables (CA)** panel, double-click the **Item Master** icon.
2. In the **Item** list box, scroll to and click the Item or perform a **Find**. The window displays data for the selected Item.

4.2.8 Vendors

The Vendors window lets the user add, modify, and delete Vendors and related data in the reference table. The Vendors are the material suppliers, contractors, financial institutions, insurance companies, consultants, and others who provide goods and services to the transportation agency. Typically, an interface load process adds the Vendors from the Pre-construction system to SiteManager. The user cannot modify or delete Vendor data loaded from the Pre-construction system. The user can add Vendor data to a Contract by selecting it on the appropriate window (e.g., the Contract Prime Contractor folder tab). The Vendors window contains the following folder tabs:

Tab Name	Description
Description	The Description folder tab displays the Vendor description. The Vendor addresses and remarks can be accessed from this folder tab.
Work Classes	The Work Classes folder tab displays the Vendor's work classes and the qualification amount for each type.
Affiliates	The Affiliates folder tab displays the Vendor's Affiliates (i.e., the other Vendors affiliated with this Vendor) and their relationship. The Affiliate addresses can also be accessed from this folder tab.
Personnel	The Personnel folder tab displays the Vendor's personnel. The Vendor personnel addresses can also be accessed from this folder tab. If the Vendor is a Prime Contractor, the personnel entered here can be selected as Prime Contacts for specific Contracts on the Contract Prime Contractor folder tab.
Prime Contacts	The Prime Contacts folder tab displays the Vendor's personnel who have been selected as the Prime Contacts for specific Contracts.
Associates	The Associates folder tab displays the Vendor's Associates (i.e., the other Vendors associated with this Vendor) and the role of the Associate. If the Vendor is a Prime Contractor, the Vendor's insurance company and surety company must be entered here before they can be selected for specific Contracts on the Prime Contractor folder tab.
Security Accounts	The Security Accounts folder tab has a security accounts section and a security transaction section. The security accounts section displays the Vendor's security accounts; the security transaction section displays a history of transactions made against the selected account at the financial institution.
Securities Usage	On the Securities Usage folder tab, the user can associate the Vendor's security accounts to specific Contracts for use in lieu of retainage. After a Contract is selected, the current retainage percentage and other Contract amounts are calculated by the system and displayed on this folder tab.

Table 4-10 The Vendor Window Folder Tabs Table

4.2.8.1 Vendor Description

The Vendor Description folder tab lets the user add and modify the Vendor descriptions and addresses. The user can view but not modify Vendor data loaded from the Pre-construction system. The Vendor remarks can also be accessed from this folder tab. The Ethnic Group and Gender fields are displayed only if the user is authorized to see this data. The Ethnic Group and Gender data is required for federal reports when the Vendor is a DBE.

Figure 4-10 The Vendor Description Folder Tab

Field Name	Description
Vendor ID	Transportation agency-defined ID for the Vendor. Usually the company's Federal Tax ID.
IRS Tax Nbr	Federal Employer tax ID number.
Short Name	Short name for the Vendor.
Full Name	Full name of the Vendor.
Vendor Type	Identifies which type of company the Vendor is (e.g., Prime, Subcontractor, Sub-Subcontractor). This is a required field.

Field Name	Description
DBE Type	Transportation-agency defined code to indicate that the Vendor has certification as a Disadvantaged Business Enterprise (DBE). Examples are DBE, MBE, and WBE. 'Not a DBE' is also a valid DBE Type.
Corp Type	Identifies the Vendor's company type (e.g., private corporation, public corporation, partnership).
Corp State	Identifies the Vendor's state or province of incorporation.
Cert Type	Code indicating whether the DBE is certified by the federal government, state/provincial government, or both. If the Vendor is a DBE, this field is required.
Cert Date	For DBEs, the DBE certification date. If the Vendor is a DBE, this field is required.
Cert End Date	The date on which the Vendor's DBE certification expires.
Prequal Date	For transportation agencies that pre-qualify Contractors, the date on which the Vendor was pre-qualified.
Prequal End Date	The date on which the Vendor's pre-qualification expires.
Uncompleted Work Amount	Displays the uncompleted work amount for this Vendor. The uncompleted work amount is the sum of the Vendor's current Prime Contractor and Subcontract amounts minus the Vendor's installed-to-date amounts.
Preconstruction Ind	Indicates whether or not the data is from a Pre-construction system.
Ethnic Group	Transportation agency-defined code identifying the Vendor's certified ethnic background (e.g., Black American, Hispanic American, Native American). The Ethnic Group field is only displayed if the user is authorized to see this data.

Field Name	Description
Gender	Indicates the Vendor's certified gender (i.e., Male or Female). The Gender field is only displayed if the user is authorized to see this data.

Table 4-11 The Vendor Description Folder Tab Fields Table

To view a Vendor description:

1. On the **Reference Tables (CA)** panel, double-click the **Vendors** icon.
2. Click the **Open** button.
3. On the **Vendor Pick List** window, scroll to and click the Vendor or perform a **Find**.
4. Click the **OK** button. The Description folder tab displays data for the selected Vendor.
5. To access the Vendor's address, click the **Services** menu and click the **Address** choice.
6. In the **Address Type** list box, scroll to and click the address type. If the address type has multiple addresses, use the **Prior** and **Next** toolbar buttons to access all addresses.

To add a new Vendor:

1. On the **Reference Tables (CA)** panel, double-click the **Vendor** icon.
2. Click the **New** button.
3. In the **Vendor ID** field, type the Vendor's ID.
4. Press the **Tab** key.
5. In the **IRS Tax Nbr** field, type the IRS tax number.
6. Press the **Tab** key.
7. In the **Short Name** field, type the short name of the Vendor.
8. Press the **Tab** key.
9. In the **Full Name** field, type the full name of the Vendor.
10. In the **Vendor Type** drop-down list, click the expand arrow and click the vendor type.
11. If the Vendor is a DBE, in the **DBE Type** drop-down list, click the expand arrow and click the DBE type.
12. If the Vendor is a DBE, in the **Cert Type** drop-down list, click the expand arrow and click the certification type.
13. Press the **Tab** key.

14. If the Vendor is a DBE, in the **Cert Date** field, type the DBE certification date.
15. Press the **Tab** key.
16. If the Vendor is a DBE, in the **Cert End Date** field, type the DBE certification expiration date.
17. In the **Corp Type** drop-down list, click the expand arrow and click the Vendor's corporation type.
18. In the **Corp State** drop-down list, click the expand arrow and click the Vendor's state or province of incorporation.
19. Press the **Tab** key.
20. In the **Prequal Date** field, type the date on which the Vendor was pre-qualified.
21. Press the **Tab** key.
22. In the **Prequal End Date** field, type the date on which the Vendor's pre-qualified status expires.
23. In the **Ethnic Group** drop-down list, click the expand arrow and click the Vendor's ethnic group.
24. In the **Gender** drop-down list, click the expand arrow and click the Vendor's gender.
25. To enter the Vendor's address, click the **Services** menu and click the **Address** choice.
26. In the **Address Type** list box, scroll to and click the address type.
27. Type the Line 1 address information. If necessary, tab to and type Line 2 and Line 3 address information.
28. Press the **Tab** key.
29. In the **City** field, type the Vendor's city location.
30. In the **State/Prov** drop-down list, click the expand arrow and click the Vendor's state or province.
31. Press the **Tab** key.
32. In the **Zip/Postal** field, type the Vendor's zip code or other postal code.
33. In the **Country** drop-down list, click the expand arrow and click the Vendor's country location.
34. Press the **Tab** key.
35. Type the Vendor's primary phone number. If necessary, tab to the **ext** field and type the phone number extension.
36. Press the **Tab** key.
37. In the **FAX** field, type the Vendor's FAX number.
38. To add another address of the same type, click the **New** button and repeat Steps 27 through 37.

Or

39. To add another address type, repeat Steps 26 through 37.
40. To close the **Address** box, click the **Description** folder tab.
41. To save the new Vendor description, click the **Save** button.

Tip: To be selected as a Prime Contractor, a Vendor must have a Payment Address.

4.2.8.2 Address Function

In SiteManager, users can enter many types of addresses depending on the functional area. For example, a vendor can have shipping address, billing address, a field address, etc. A common interface has been developed to provide the same address functionality across the system.

The Address functionality has been implemented in two ways:

1. Access to the address through Address option under Services menu or an Address button on the main toolbar. Clicking the Address button or selecting Services/Address causes a pop up address window to appear.
2. The address information appears directly on the currently-selected window. This occurs when the window has enough space to accommodate the address. The Address window in Administrative Offices is an example of this type.

If a window does not allow address entry through the pop-up window, the Services/Address menu option and the Address button will not be available. In some cases, the Address button may appear in the toolbar, but it does not function. It beeps. The Services/Address menu option will appear grayed and will not function when address entry is not allowed.

When the address pops up, initially it displays the address for the first address type if address already exists. **Payment Address** is the default address-type. If the vendor, trainee, etc. has multiple address types, a list of available address types and an icon adjacent to each type indicating an address exists for that type is displayed. If a new address is to be entered, the Address entry area is empty and the user must click the new button.

The Address Pop-up

The Address pop-up window is divided in two parts. First part, Types, displays a list of available address types. If a Check Mark appears next to the address type, an address for that type has been entered. Whenever user selects a type (by clicking it), the corresponding address is displayed in the Address part of the window and the cursor is placed there. Each address type can have multiple addresses. For example, a vendor could have many Field Trailer type addresses. Users can see that multiple addresses are listed because the Address part of the window shows how many pages (addresses) are listed, i.e., 1 of 4. When the address pop-up appears, up and down arrows are present on the toolbar. The arrows are used to move through the list of addresses for a type.

Create an Address one time - Associate it thereafter

A new address is created one time only. Thereafter, the address is **associated** to the window by selecting it from the appropriate picklist. For example, a new vendor is created in the Contract Admin. Reference tables, Vendor window. In the Contracts, Prime Contractor tab, the **Current Prime:**, **Prime Contracts:**, and **Prime**

Associates: fields are completed by searching, selecting and associating the address to the field. The addresses for these fields are created in the Vendor window tabs, not in the Contracts window tabs.

An address is maintained, modified or deleted in the window where the address was created. An address may not be deleted if it is associated to any contract. Clicking the Delete button deletes the address for the selected Address type. The association of the address takes place in any window where the address capability exists. As in the preceding example, the address is created, maintained or deleted in the Vendor tabs, but is associated in the Contracts, Prime Contractor tab.

If an address pop-up window appears with the address fields grayed, the address originated in a pre-construction contract and cannot be modified or deleted.

An address may be maintained without ever being associated. For example, the address and telephone numbers for an EEO officer may never be associated.

A new, modified or deleted address is saved on window where the address was opened. The address is automatically saved when the origination window is saved. Save is performed on the window, not on the address object.

The Address function is available or displayed in the following components of SiteManager:

Contract Administration, Reference Tables, Vendors icon folder tabs:

Description - Create, modify or delete

Personnel - Create, modify or delete

Affiliates - Display only

Associates - Display only

Affiliates and Associates are Vendors. Select the Vendors ID to add, modify or delete an Address for them.

Prime Contact - Display only - associated in the Prime Contact tab

Civil Rights, Contract Compliance, Trainees icon

Materials Management, Approved Lists icon

Inspectors

Welders

Producer/Supplier

Qualified Labs

Testing Personnel

The address function works consistently across the system. Although the following figures and procedures relate specifically to Vendors, the methodology applies across the system.

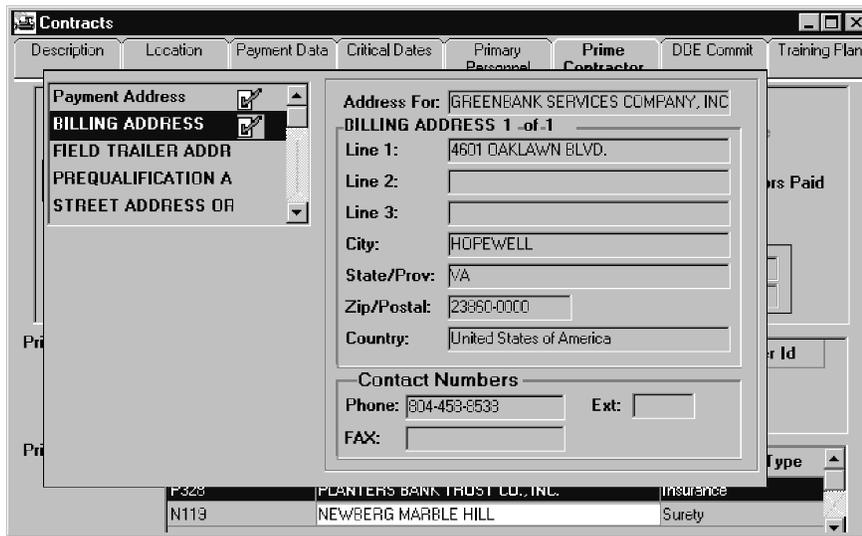


Figure 4-11 The Address Pop-Up Window

Field Name	Description
Types	This is a list of available address types. Users can select only one type at a time.
Address	This is the actual address for the selected type. One field of Line 1, 2, or 3 is a required field. City, State or Province: and Zip/Postal: are required fields. Messages will appear to complete required fields on the Address pop-up when the user saves the window.

Table 4-12 The Vendor Description Folder Tab Fields Table

To create an address for a new vendor:

1. On the main panel, double-click the **Contract Administration** icon.
2. On the Contract Administration icon, double-click the **Reference Tables** icon.
3. On the Reference Tables panel, double-click the **Vendors icon**.
4. Select the **Description** folder tab.
5. Click the **New** button.
6. In the **Address Type** list box, scroll to and click the address type.

7. Type the Line 1 address information. If necessary, tab to and type Line 2 and Line 3 address information.
8. Press the **Tab** key.
9. In the **City** field, type the Vendor's city location.
10. In the **State/Prov** drop-down list, click the expand arrow and click the Vendor's state or province.
11. Press the **Tab** key.
12. In the **Zip/Postal** field, type the Vendor's zip code or other postal code.
13. In the **Country** drop-down list, click the expand arrow and click the Vendor's country location.
14. Press the **Tab** key.
15. Type the Vendor's primary phone number. If necessary, tab to the **ext** field and type the phone number extension.
16. Press the **Tab** key.
17. In the **FAX** field, type the Vendor's FAX number.
18. To add another address of the same type, click the **New** button and repeat Steps 6 through 17.

Or,

19. To add another address type, repeat Steps 6 through 17.
20. To close the **Address** box, click the **Address** button or just outside the **Address** pop-up.
21. To save the new Vendor description and Address, click the **Save** button.

The screenshot shows a window titled "Vendors" with several tabs: Description, Work Classes, Affiliates, Personnel, Prime Contacts, Associates, Security Accounts, and Securities Usage. The "Description" tab is active. The form contains the following fields:

- Vendor ID: [text box]
- Short Name: [text box]
- Full Name: [text box]
- Vendor Type: [dropdown menu]
- DBE Type: [dropdown menu, value: Spaces]
- Cert Date: [date field, value: 00/00/00]
- Corp Type: [dropdown menu, value: Spaces]
- Prequal Date: [date field, value: 00/00/00]
- Uncompleted Work Amount: [text box, value: 0.00]
- Ethnic Group: [text box, value: Spaces]
- IRS Tax Nbr: [text box]
- Alt Vendor ID: [text box]
- Cert Type: [dropdown menu, value: Spaces]
- Cert End Date: [date field, value: 00/00/00]
- Corp State: [dropdown menu]
- Prequal End Date: [date field, value: 00/00/00]
- Preconstruction Indicator: [checkbox, unchecked]
- Gender: [text box]

Figure 4-12 The Vendor Window and Folder Tabs

Addresses for Vendors Personnel, are created using the procedures for creating a new address in the Description tab. Affiliates, Prime Contacts, and Associates folder tabs are display only.

The same procedures apply in Trainees, Materials Approved Lists.

To modify an address:

1. Navigate to the window where the address was created.
2. Click the **Open** button and select a vendor from the picklist.
3. Click **OK**
4. Click the **Address button** or the Services/Address choice.
5. Select the desired **Address type**.
6. Type the new information.
7. Click the **Address button** or click outside the pop-up to close the pop-up.
8. **Save** the window.

The same procedures apply in Trainees and Materials Approved Lists.

To delete an address not associated to a contract

1. Navigate to the window where the address was created.
2. Click the **Open** button and select a vendor.
3. Click **OK**
4. Click the **Address button** or the Services/Address choice.
5. Select the desired Address type (use the up and down arrows on the toolbar to move through multiple addresses for a type.)
6. Click the **Delete** button.
7. Click the **Address** button or click just outside the pop-up to close it.
8. **Save** the window.

The same procedures apply in Trainees and Materials Approved Lists.

To associate an address to a Contract:

1. On the main panel, double-click the **Contract Administration** icon.
2. On the Contract Administration icon, double-click the **Contract Records icon**.
3. On the Contract Records panel, double-click the **Contract icon**.
4. On the Contracts window, select the **Description folder tab**.

5. On the Description folder tab, click the **Open** button and select the desired contract.
6. Double-click the highlighted contract or click **Ok**.
7. Select the Prime Contractor folder tab.
8. Click on the Prime Contractor field to focus.
9. Associate a new Vendor's address by clicking the **New** button and selecting a vendor from the picklist,

Or

10. Change the existing vendor by clicking the **Open button** and selecting a different Vendor from the picklist.
11. Click **Ok** on the Vendor picklist.
12. On the Prime Contractor folder tab, click the **Services** menu and choose the **Select Address** choice.
13. Click the **Address** button or click just outside the pop-up to close it.
14. **Save** the window.

The same procedures apply in Trainees and Materials Approved Lists.

If an incorrect address is associated to a contract, the address is *replaced* with the correct address. The incorrect address is not deleted, but is replaced using the procedures for associating an address with a contract. SiteManager recognizes the most current association.

4.2.8.3 Vendor Work Classes

The Vendor Work Classes folder tab lets the user add, modify, and delete the Work Class type and qualification amount for the selected Vendor. If the Vendor was loaded from the Pre-construction system, the user can view but not modify the data on this folder tab.

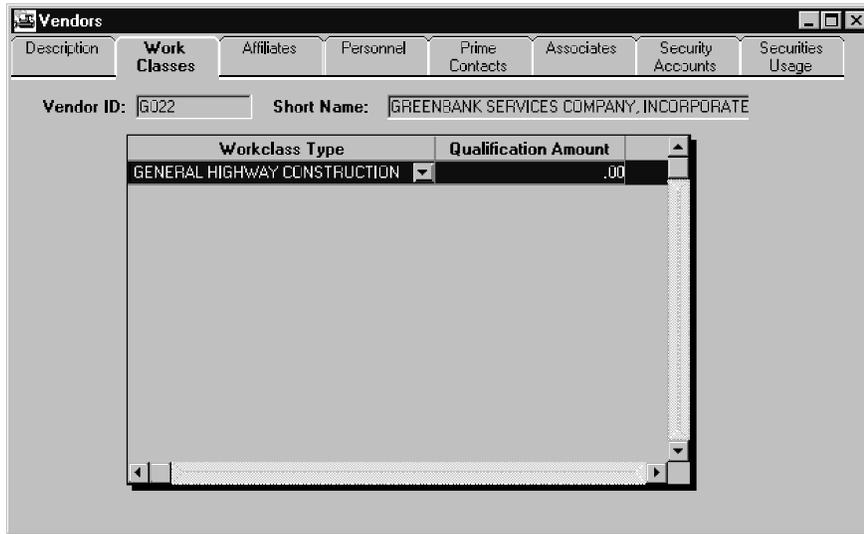


Figure 4-13 The Vendor Work Classes Folder Tab

Field Name	Description
Workclass Type	Code that identifies the major type of work class for a Vendor (e.g., Roadway Construction, Bridge Construction, Utilities).
Qualification Amt	Amount specified for the major type of work for which the Vendor is qualified.

Table 4-13 The Vendor Work Class Folder Tab Fields Table

To add a Vendor Work Class to the reference table:

1. On the **Reference Tables (CA)** panel, double-click the **Vendor** icon.
2. Click the **Open** button.
3. On the **Vendor Pick List** window, scroll to and click the Vendor or perform a **Find**.
4. Click the **OK** button. The Description folder tab displays data for the selected Vendor.
5. On the **Vendors** window, click the **Work Class** folder tab.
6. Click the **New** button.
7. In the **Work Class Type** drop-down list, click the expand arrow and click the Vendor's work class type.
8. Press the **Tab** key.
9. In the **Qualification Amt** field, type the Vendor's qualification amount.
10. Click the **Save** button.

Tip: If the Vendor is from a Pre-construction system, both the Work Class Type and the Qualification Amount fields are protected, and no work classes can be added.

4.2.8.4 Vendor Affiliates

The Vendor Affiliates folder tab lets the user add, modify, and delete the Affiliates for a selected Vendor. The Affiliates are also Vendors and must be entered in SiteManager as Vendors before they can be selected as Affiliates. On the Vendor Affiliates folder tab, the user specifies the Affiliate's relationship to the Vendor. For example, a 'Joint Venture' Contract must have a Prime Contractor with a 'Joint' Affiliate. If the Vendor was loaded from the Pre-construction system, the user can view but not modify the data on this folder tab.

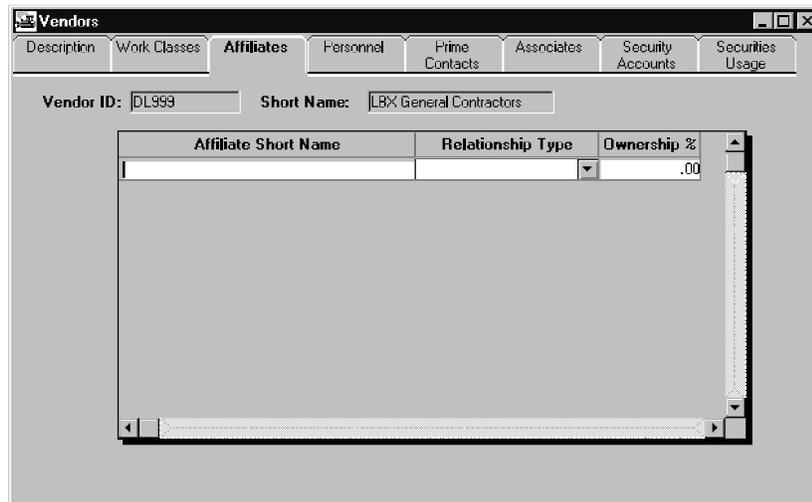


Figure 4-14 The Vendor Affiliates Folder Tab

Field Name	Description
Affiliate Short Name	Abbreviated name of the Vendor. The user can search this field. This field is required.
Relationship Type	Type of Affiliate (e.g., parent, joint, partner). This field is required.
Ownership %	The Vendor's percentage of ownership of the Affiliate. This field is required.

Table 4-14 The Vendor Affiliates Folder Tab Fields Table

To add a new Vendor Affiliate to the reference table:

1. On the **Reference Tables (CA)** panel, double-click the **Vendor** icon.
2. Click the **Open** button.
3. On the **Vendor Pick List** window, scroll to and click the Vendor or perform a **Find**.
4. Click the **OK** button. The Description folder tab displays data for the selected Vendor.
5. On the **Vendors** window, click the **Affiliates** folder tab.
6. Click the **New** button.
7. In the **Affiliate Short Name** field, type the short name of the Vendor's Affiliate or perform a **Search**.

8. In the **Relationship Type** drop-down list, click the expand arrow and click the relationship of the Affiliate to the Vendor.
9. Press the **Tab** key.
10. In the **Ownership %** field, type the Vendor's percentage of ownership of the Affiliate.
11. Click the **Save** button.

Tip: If the Vendor is from a Pre-construction system, all the fields are protected and no Affiliates can be added.

4.2.8.5 Vendor Personnel

The Vendor Personnel folder tab lets the user add and modify personnel records for the selected Vendor. The user can also add and modify Vendor addresses. This folder tab is primarily used to enter the contact person and DBE-related personnel for the Vendor, especially Vendors who are Prime Contractors. The folder tab displays the Vendor personnel list and data for the person selected on the list. The Social Security Number (SSN) or Social Insurance Number (SIN), Ethnic Group, and Gender fields are displayed only if the user is authorized to see this data.

The screenshot shows a window titled "Vendors" with several tabs: Description, Work Classes, Affiliates, Personnel (selected), Prime Contacts, Associates, Security Accounts, and Securities Usage. Below the tabs, there are input fields for "Vendor ID: DL939" and "Short Name: LD% General Contractors".

A table displays the personnel list:

Person Name	Officer Title	SSN
Christina Morris	PRESIDENT	000-00-0000

Below the table, there is a form for editing the selected person's details:

Person Name: Christina Morris User ID:

Officer Title: PRESIDENT (dropdown) SSN: 000-00-0000

Ethnic Group: Caucasian (dropdown) Gender: M F

Figure 4-15 The Vendor Personnel Folder Tab

Field Name	Description
User ID	Transportation agency-defined ID for the user. The user can search this field.
Personnel Name	The name of a person employed by the Vendor. When a valid User ID is entered, this field defaults to the name associated with the User ID and can not be modified. The name must be unique for the Vendor. This is a required field.
Officer Title	Transportation agency-defined code that identifies the title of the Vendor's employee (e.g., Owner).
SSN/SIN	Social Security Number or Social Insurance Number of the Vendor's employee. This field is displayed only if the user is authorized to see this data.
Ethnic Group	Transportation agency-defined code identifying an ethnic background (e.g., Black American, Hispanic American, Native American). This field is required when the Vendor is a DBE (i.e., a DBE Type is entered on the Vendor Description folder tab). The Ethnic Group field is displayed only if the user is authorized to see this data.
Gender	Indicates the gender of the person employed by the Vendor (i.e., Male or Female). This field is required when the Vendor is a DBE (i.e., a DBE Type is entered on the Vendor Description folder tab). The Gender field is displayed only if the user is authorized to see this data.

Table 4-15 The Vendor Personnel Folder Tab Fields Table

To add Vendor Personnel to the reference table:

1. On the **Reference Tables (CA)** panel, double-click the **Vendor** icon.
2. Click the **Open** button.
3. On the **Vendor Pick List** window, scroll to and click the Vendor or perform a **Find**.
4. Click the **OK** button. The Description folder tab displays data for the selected Vendor.
5. On the **Vendors** window, click the **Personnel** folder tab.

6. Click the **Person Name** field and type the person's name.
7. In the **Officer Title** drop-down list, click the expand arrow and click the title.
8. Press the **Tab** key.
9. In the **SSN** field, type the person's social security number.
10. In the **Ethnic Group** drop-down list, click the expand arrow and click the ethnic group.
11. To select a **Gender**, click the 'M' or 'F' radio button.
12. To enter the Vendor's address, click the **Services** menu and click the **Address** choice.
13. In the **Address Type** list box, scroll to and click the address type. If an address is displayed, click the **New** button to add another address of the same type.
14. Type the Line 1 address information. If necessary, tab to and type Line 2 and Line 3 address information.
15. Press the **Tab** key.
16. In the **City** field, type the person's city location.
17. In the **State/Prov** drop-down list, click the expand arrow and click the person's state or province.
18. Press the **Tab** key.
19. In the **Zip/Postal** field, type the person's zip code or other postal code.
20. In the **Country** drop-down list, click the expand arrow and click the person's country location.
21. Press the **Tab** key.
22. In the **Phone** field, type the person's primary phone number. If necessary, tab to the **ext** field and type the phone number extension.
23. Press the **Tab** key.
24. In the **FAX** field, type the person's FAX number.
25. To close the **Address** box, click the **Personnel** folder tab.
26. To save the new personnel description, click the **Save** button.

Tip: To be selected as a contact person for a Vendor who is a Prime Contractor, the person must have a title and an address entered.

To delete Vendor Personnel from the reference table:

1. On the **Reference Tables (CA)** panel, double-click the **Vendor** icon.
2. Click the **Open** button.
3. On the **Vendor Pick List** window, scroll to and click the Vendor or perform a **Find**.
4. Click the **OK** button. The Description folder tab displays data for the selected Vendor.
5. On the **Vendors** window, click the **Personnel** folder tab.
6. In the **Personnel** list box, scroll to and click the person.
7. Click the **Delete** button.
8. Click **Ok**.

4.2.8.6 Vendor Prime Contacts

The Vendor Prime Contacts folder tab lets the user view the Vendor's personnel who have been selected as Prime Contacts. A Prime Contact is a Prime Contractor's contact person for a specific Contract. The Prime Contacts folder tab displays the name and contact type of the person, and the Contract ID for which the person is a contact. The user cannot add, modify, or delete a Prime Contact on this folder tab. To add a Prime Contact, the user must first enter the name as personnel on the Vendor Personnel folder tab. Then the user can select the name as a Prime Contact for a specific Contract. This is done on the Contract Prime Contractor folder tab.

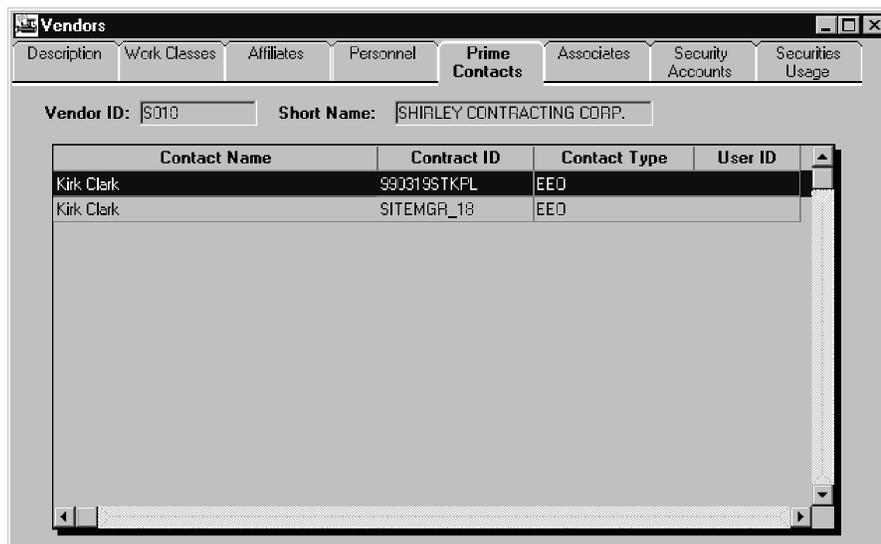


Figure 4-16 The Vendor Prime Contacts Folder Tab

Field Name	Description
Contact Name	Name of the person who is a contact for this Vendor.
Contact Type	Title of the person who is a contact for this Vendor (e.g., EEO).
Contract ID	Transportation agency-defined ID of the Contract for which this person is a contact.
User ID	Transportation agency-defined ID of the user who is a contact for this Vendor.

Table 4-16 The Vendor Prime Contact Folder Tab Fields Table

To view a Vendor's Prime Contacts:

1. On the **Reference Tables (CA)** panel, double-click the **Vendor** icon.
2. Click the **Open** button.
3. On the **Vendor Pick List** window, scroll to and click the Vendor or perform a **Find**.
4. Click the **OK** button. The Description folder tab displays data for the selected Vendor.
5. On the **Vendors** window, click the **Prime Contacts** folder tab.
6. If Prime Contacts have been recorded for the selected Vendor, the window displays the Prime Contact data.

Tip: The user cannot add, modify, or delete a Prime Contact on this folder tab.

4.2.8.7 Vendor Associates

The Vendor Associates folder tab lets the user add, modify, and delete the Associates in the reference table. The Associates are also Vendors and must be entered in SiteManager as Vendors before they can be selected as Associates. On the Vendor Associates folder tab, the user selects the type of association the Associate has with the Vendor.

Tip: To be selected as a Prime Contractor, a Vendor must have at least two Associates—an insurance company and a surety company.

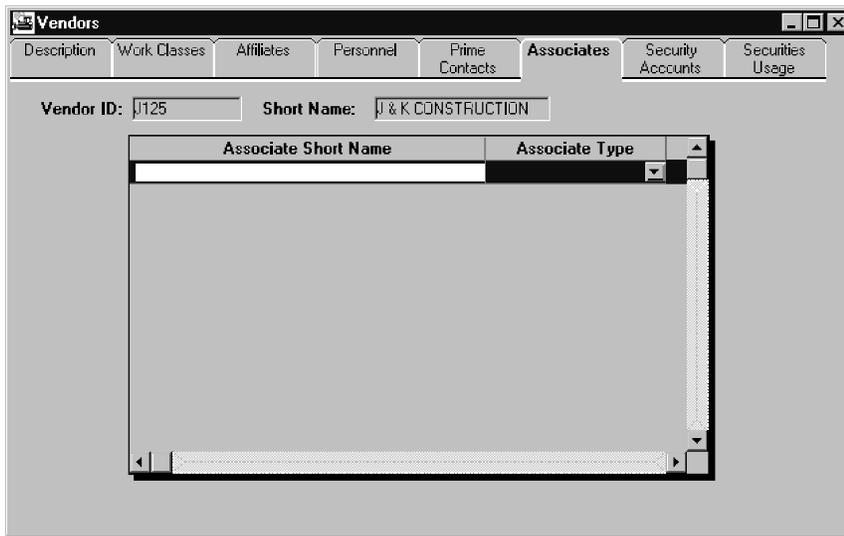


Figure 4-17 The Vendor Associates Folder Tab

Field Name	Description
Associate Short Name	Short name for an Associate of the Vendor. The user can search this field. This field is required.
Associate Type	Type of Vendor Associate (e.g., Surety, Escrow). This field is required.

Table 4-17 The Vendor Associates Folder Tab Fields Table

To add a Vendor Associate to the reference table:

1. On the **Reference Tables (CA)** panel, double-click the **Vendor** icon.
2. Click the **Open** button.
3. On the **Vendor Pick List** window, scroll to and click the Vendor or perform a **Find**.
4. Click the **OK** button. The Description folder tab displays data for the selected Vendor.
5. On the **Vendors** window, click the **Associates** folder tab.
6. Click the **New** button.
7. Click the **Associate Short Name** field and type the name of the associate or perform a **Search**.
8. In the **Associate Type** drop-down list, click the expand arrow and click the type of associate.
9. To save the new Associate description, click the **Save** button.

To delete a Vendor Associate from the reference table:

1. On the **Reference Tables (CA)** panel, double-click the **Vendor** icon.
2. Click the **Open** button.
3. On the **Vendor Pick List** window, scroll to and click the Vendor or perform a **Find**.
4. Click the **OK** button. The Description folder tab displays data for the selected Vendor.
5. On the **Vendors** window, click the **Associates** folder tab.
6. In the **Associate Short Name** list box, scroll to and click the Vendor.
7. Click the **Delete** button.
8. Click **Ok**.

4.2.8.8 Vendor Security Accounts

The Vendor Security Accounts folder tab lets the user add, modify, and delete the Vendor's security accounts and account transactions. The folder tab has a security account list at the top and a transaction section at the bottom. The transaction section lists the transactions made against the selected account at the financial institution. The transactions are the amounts deposited and withdrawn, which are recorded as credits and debits to the account.

Tip: The usage of the securities on Contracts is shown on the Securities Usage folder tab.

Account ID	Description	Current Balance	Retainage Required	Amount Available
4005-23-41	SUNTRUST	10000	0	10000

Type	Sec Type	Certificate ID	Amount	Post Date	Maturity Dt	Comments
Credit	Bond	R9432-RT-4250	\$10,000.00	1333/04/27 12:09	04/27/19	

Figure 4-18 The Vendor Security Accounts Folder Tab

Field Name	Description
Account ID	Transportation agency-defined ID for a security account for the Vendor.
Description	Description of a security account for the Vendor.
Current Balance	Current value of a security account for the Vendor. The current balance is the sum of all credits to the account minus the sum of all debits to the account. This value is calculated by the system. The system will not accept account transactions that make the Current Balance negative.
Retainage Required	The amount required to be encumbered for all the Contracts associated to this account. The required amount is the sum of all estimate retainage amounts and securities used amounts for all Contracts associated with this account. This value is calculated by the system.
Amount Available	Amount of the current balance that can be encumbered. The amount available is the difference between the current balance of the account and the total amount encumbered for all Contracts associated to the account. This value is calculated by the system. The system will not accept account transactions that make the Amount Available negative.
Transaction Type	Type of transaction (D = Debit or C = Credit).
Transaction Sec Type	Type of security (e.g., Bond, Certificate of Deposit).
Transaction Certificate ID	Certificate of Deposit ID number.
Transaction Amount	Amount of the transaction. Only positive values are accepted in this field. (If the amount is a withdrawal, enter 'D' for debit as the Transaction Type.) A value that makes the account negative can not be entered.
Transaction Post Date	System-generated date when the transaction is entered into the svstem.

Field Name	Description
	system.
Transaction Maturity Date	Date on which the security matures.
Transaction Comments	Description of the transaction.

Table 4-18 The Security Account Folder Tab Fields Table

To add a Security Account:

1. On the **Reference Tables (CA)** panel, double-click the **Vendor** icon.
2. Click the **Open** button.
3. On the **Vendor Pick List** window, scroll to and click the Vendor or perform a **Find**.
4. Click the **OK** button. The Description folder tab displays data for the selected Vendor.
5. On the **Vendors** window, click the **Security Account** folder tab.
6. In the **Account ID** field, type the security account ID.
7. Press the **Tab** key.
8. In the **Description** field, type the name of the account.
9. Click the **Save** button.

Tip: The system updates the Current Balance of the account when the user records transactions. The system calculates the Retainage Required and the Amount Available when the user associates Contracts with the account and securities are encumbered in lieu of retainage.

To delete a Security Account:

1. On the **Reference Tables (CA)** panel, double-click the **Vendor** icon.
2. Click the **Open** button.
3. On the **Vendor Pick List** window, scroll to and click the Vendor or perform a **Find**.
4. Click the **OK** button. The Description folder tab displays data for the selected Vendor.
5. On the **Vendors** window, click the **Security Account** folder tab.
6. In the **Account ID** list box, scroll to and click the account.
7. Click the **Delete** button.
8. Click **Ok**.

Tip: If a security account is associated with a Contract, the account can not be deleted. When an account is deleted, the account transactions are also deleted.

To add a Security Transaction:

1. On the **Reference Tables (CA)** panel, double-click the **Vendor** icon.
2. Click the **Open** button.
3. On the **Vendor Pick List** window, scroll to and click the Vendor or perform a **Find**.
4. Click the **OK** button. The Description folder tab displays data for the selected Vendor.
5. On the **Vendors** window, click the **Security Account** folder tab.
6. In the **Account ID** list box, scroll to and click the account description.
7. Click the Transaction data window.
8. Click the **New** button.
9. In the **Type** drop-down list, click the expand arrow and click the transaction type ('D' for debit or 'C' for credit).
10. In the Sec Type list box, click the expand arrow and click the security type.
11. Press the **Tab** key.
12. In the **Certificate ID** field, type the ID number.
13. Press the **Tab** key.
14. In the **Amount** field, type the amount of the transaction.
15. Press the **Tab** key. The current date is displayed in the **Post Date** field.
16. In the **Maturity Date** field, type the date on which the security matures.

17. Press the **Tab** key.
18. In the **Comments** field, type additional information about the transaction.
19. Click the **Save** button. The Current Balance is updated.

Tip: The user cannot add or delete an account transaction that would cause the Current Balance or the Amount Available to become negative.

4.2.8.9 Vendor Securities Usage

The Vendor Securities Usage folder tab lets the user associate security accounts with Contracts, and displays the securities used in lieu of retainage. A security account can be associated to one or more Contracts, or not associated with any Contract. The folder tab lists the accounts at the top and displays Contract data at the bottom. In the Contracts section, the user can select Contracts to associate with an account.

Tip: The security accounts are entered on the Security Accounts folder tab.

Figure 4-19 The Vendor Securities Usage Folder Tab

Field Name	Description
Account ID	Transportation agency-defined ID for a security account for a Vendor.
Description	Description of the security account.
Current Balance	Current value of the account. The current balance is the sum of all the credits to the account minus the sum of all debits to the

Field Name	Description
	account.
Retainage Required	The amount required to be encumbered for all the Contracts associated to this account. The required amount is the sum of all estimates retainage amounts and securities used amounts for all Contracts associated with this account.
Amount Available	Amount available that can be encumbered. The amount available is the difference of the current balance of the account and the total amount encumbered from the amount for all the Contracts associated to the account.
Contract ID	Transportation agency-defined ID for the Contract.
Retain Pct	Percentage retainage for the Contract.
Contract Original Amount	Displays the bid amount of the Contract. The Contract bid amount is the sum of the Contract Item amounts (Item quantity * Item price).
Contract Installed Amount	Displays the total installed amount for the Contract. The installed amount is the sum of the installed-to-date amounts from the Daily Work Reports (quantity * Item price).
Contract Paid Amount	Displays the total paid amount for the Contract. The Contract paid amount is the sum of the estimate net pay totals.
Covered Amount	Displays the total amount covered by the securities for this Contract. The covered amount is the sum of all estimates' securities used amounts.
Required Amount	Displays the required retainage withholding from this account for this Contract. The required amount is the sum of all estimates' retainage amounts and securities used amounts.
Difference Amount	Displays the difference between the covered amount and the required amount.

Table 4-19 The Vendor Securities Usage Folder Tab Fields Table

To associate a Contract to a Security Account:

1. On the **Reference Tables (CA)** panel, double-click the **Vendor** icon.
2. Click the **Open** button.
3. On the **Vendor Pick List** window, scroll to and click the Vendor or perform a **Find**.
4. Click the **OK** button. The Description folder tab displays data for the selected Vendor.
5. On the **Vendors** window, click the **Securities Usage** folder tab.
6. In the **Account ID** list box, scroll to and click the account description.
7. Click the **New** button.
8. In the **Contract ID** drop-down list, click the expand arrow and click the Contract.
9. Click the **Save** button.

Tip: The drop-down list displays the Contract IDs for which the Vendor is the Prime Contractor. After a Contract ID is selected, the window displays data for the selected Contract.

To disassociate a Contract from a Security Account:

1. On the **Reference Tables (CA)** panel, double-click the **Vendor** icon.
2. Click the **Open** button.
3. On the **Vendor Pick List** window, scroll to and click the Vendor or perform a **Find**.
4. Click the **OK** button. The Description folder tab displays data for the selected Vendor.
5. On the **Vendors** window, click the **Securities Usage** folder tab.
6. In the **Account ID** list box, scroll to and click the account description.
7. In the **Contract ID** drop-down list, click the expand arrow and click the Contract ID.
8. Click the **Delete** button.
9. Click **Ok**.

4.2.9 Administrative Offices

The Administrative Office window lets the user add, modify, and delete the offices in the reference table. Every state or province must have at least three levels of administrative offices—the transportation agency headquarters and two lower levels. No state or province can have less than three or more than four levels. States or provinces with three levels will display three office datawindows. States or provinces with four levels will display four office datawindows. The office level field labels are stored in a system operational parameter table. Since the transportation agency defines the labels, this manual does not specify the actual labels that appear on the window.

The office datawindows display top to bottom on the left side of the window. The selected (highlighted or focused) office’s address will display on the window’s right side. Upon entry into this window, the first row in the level two office datawindow will be highlighted and the address information pertaining to that office will be displayed on the right side datawindow.

To view the information for a different level two office or a specific level three or four office, the user must select the desired row in the proper office datawindow. Third level offices are subordinate to the highlighted second level office. Fourth level offices are subordinate to the third level offices.

The current selected office is listed at the top of the right side data window (above the address information).

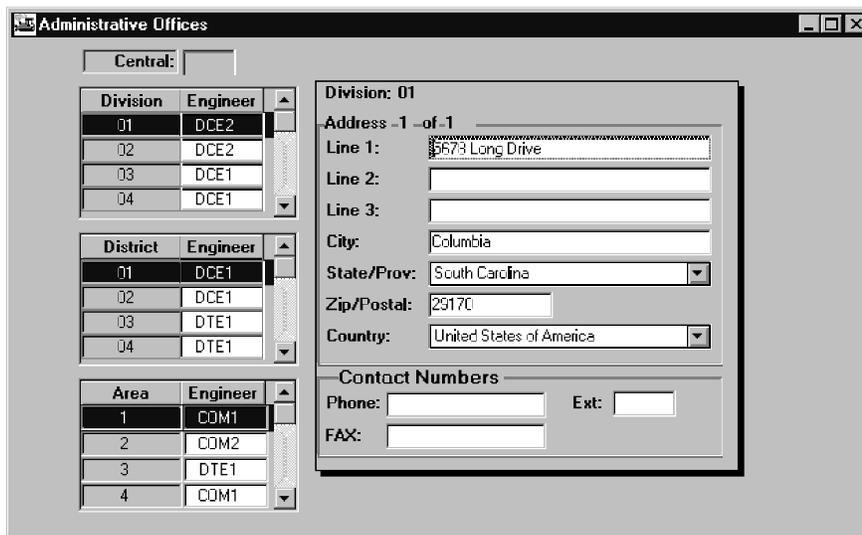


Figure 4-20 The Administrative Offices Window

Field Name	Description
Level 1 Office (user-defined label)	The name of the Level 1 office. The Level 1 office is the transportation agency headquarters (i.e., the Central Office or Department of Transportation).
Level 2 Office (user-defined label)	The office number or transportation agency-defined ID of the Level 2 office. The Level 2 office can have any user-defined label, such as District, Division, Region, or Section.
Level 2 Office Engineer	User ID of the Level 2 office’s chief engineer. The user can search this field. The title of engineer is unrelated to the transportation agency’s actual title used.
Level 3 Office	The office number or transportation agency-defined ID of the Level 3 office. The Level 3 office can have any user-defined label,

Field Name	Description
(user-defined label)	such as District, Division, Region, or Section.
Level 3 Office Engineer	User ID of the Level 3 office's chief engineer. The user can search this field. The title of engineer is unrelated to the transportation agency's actual title used.
Level 4 Office (user-defined label)	The office number or transportation agency-defined ID of the Level 4 office. The Level 4 office can have any user-defined label, such as District, Division, Region, or Section. If a state a province has only three office levels this list and its columns will not display.
Level 4 Office Engineer	User ID of the Level 4 office's chief engineer. The user can search this field. The title of engineer is unrelated to the transportation agency's actual title used.
Address Line 1	First address line that identifies the office location.
Address Line 2	Second address line that identifies the office location.
Address Line 3	Third address line that identifies the office location.
City	City location of the office.
Zip/Postal	Postal code for the office.
State/Prov	Two-character abbreviation for the state/province.
Country	Four-character code identifying the country.
Phone	Primary telephone number for the office.
Ext	Extension number of the primary telephone number for the office.
FAX	Primary fax number for the office.

Table 4-20 The Administrative Office Window Fields Table

To add the Level 1 office:

1. On the Reference Tables (CA) panel, double-click the Administrative Offices icon.
2. Click the Level 1 office field. (The Level 1 office is displayed in the top left corner. The window will not have a label that says 'Level 1.' The office level labels are user-defined.)
3. Click the New button.
4. Type the ID of the Level 1 office.
5. Press the Tab key.
6. In the Line 1 field, type the first line of the office address.
7. If necessary, tab to Line 2 and Line 3 and type additional address lines.
8. Press the Tab key.
9. In the City field, type the city name.
10. In the State/Prov drop-down list, click the expand arrow to the right of the current selection and click the state or province.
11. Press the Tab key.
12. In the Zip/Postal field, type the zip code or other postal number.
13. In the Country drop-down list, click the expand arrow to the right of the current selection and click the country.
14. Press the Tab key.
15. In the Phone field, type the office's primary phone number.
16. Press the Tab key.
17. In the Ext field, type the phone number extension.
18. In the FAX field, type the office's primary fax number.
19. To save the office description, click the Save button.

To add a new Level 2 office:

1. On the Reference Tables (CA) panel, double-click the Administrative Offices icon.
2. Click the Level 2 office datawindow. (The Level 2 office IDs are displayed directly under the Level 1 office ID. The window will not have a label that says 'Level 2.' The office level names are user-defined.)
3. Click the New button. A new row is added to the end of the list.
4. Type the office ID of the new office.

5. Press the Tab key.
6. In the Engineer User ID field, type the User ID of the office's Chief Engineer or perform a Search.
7. Press the Tab key.
8. In the Line 1 field, type the first line of the office address.
9. If necessary, tab to Line 2 and Line 3 and type additional address lines.
10. Press the Tab key.
11. In the City field, type the city name.
12. In the State/Prov drop-down list, click the expand arrow to the right of the current selection and click the state or province.
13. Press the Tab key.
14. In the Zip/Postal field, type the zip code or other postal number.
15. In the Country drop-down list, click the expand arrow to the right of the current selection and click the country.
16. Press the Tab key.
17. In the Phone field, type the office's primary phone number.
18. Press the Tab key.
19. In the Ext field, type the phone number extension.
20. In the FAX field, type the office's primary fax number.
21. To save the office description, click the Save button.

To delete a Level 2 office:

1. On the Reference Tables (CA) panel, double-click the Administrative Offices icon.
2. In the Level 2 office datawindow, scroll to and click the office ID. (The Level 2 offices are displayed directly under the Level 1 office ID. The window will not have a label that says 'Level 2.' The office level names are user-defined.)
3. Click the Delete button.

For more information on making individual users available as Engineers for Administrative Offices, please refer to the section on User Security.

4.3 System Operational Parameters for Contracts

The following are the default settings of the system operational parameters related to Contract Administration. The system operational parameters are defined by the transportation agency. For information on how your SiteManager installation varies from these defaults, contact your local support personnel.

Default	Description
Number of Office Levels	The number of administrative office levels, including the central office, for the state/province. For every level, the state must have a label identifying the level as division, section, region, district, area, etc. Every state/province must have at least two levels below central office. No state/province can have more than three levels below central office. The range is 3 to 4. The default is 3.
Level 1 Office Long	Label to identify the first level office. Examples are Division, Section, Region, District, Area. The default is Central.
Level 2 Office Long	Label to identify the second level office. Examples are Division, Section, Region, District, Area. The default is District.
Level 3 Office Long	Label to identify the third level office. Examples are Division, Section, Region, District, Area. The default is Residency.
Level 4 Office Long	Label to identify the fourth level office. Examples are Division, Section, Region, District, Area. The default is Area.
Level 1 Office Short	Label to identify the first level office. Examples are Division, Section, Region, District, Area. The default is Cent.
Level 2 Office Short	Label to identify the second level office. Examples are Division, Section, Region, District, Area. Default is Dist.
Level 3 Office Short	Label to identify the third level office. Examples are Division, Section, Region, District, Area. The default is Resi.
Level 4 Office Short	Label to identify the fourth level office. Examples are Division, Section, Region, District, Area. The default is Area.

Default	Description
Level 2 Office Left	The beginning (left most) position of the state's/province's second level of administrative office in the 5-character Trns•port™ office number format. The first level is central or department. The second level could be division, region, district, etc. The third level could be district, area, residency, etc. Valid values are 1 through 5. The default is 0.
Level 2 Office Right	The ending (right most) position of the state's/province's second level of administrative office in the 5-character Trns•port™ office number format. The first level is central or department. The second level could be division, region, district, etc. The third level could be district, area, residency, etc. Valid values are 1 through 5. This position must be equal to or greater than the beginning (left most) position. The default is 0.
Level 3 Office Left	The beginning (left most) position of the state's/province's third level of administrative office in the 5-character Trns•port™ office number format. The first level is central or department. The second level could be division, region, district, etc. The third level could be district, area, residency, etc. Valid values are 1 through 5. The default is 0.
Level 3 Office Right	The ending (right most) position of the state's/province's third level of administrative office in the 5-character Trns•port™ office number format. The first level is central or department. The second level could be division, region, district, etc. The third level could be district, area, residency, etc. Valid values are 1 through 5. This position must be equal to or greater than the beginning (left most) position. The default is 0.
Level 4 Office Left	The beginning (left most) position of the state's/province's fourth level of administrative office in the 5-character Trns•port™ office number format. The first level is central or department. The second level could be division, region, district, etc. The third level could be district, area, residency, etc. Valid values are 1 through 5. The default is 0.

Default	Description
Level 4 Office Right	The ending (right most) position of the state's/province's fourth level of administrative office in the 5-character Trns•port™ office number format. The first level is central or department. The second level could be division, region, district, etc. The third level could be district, area, residency, etc. Valid values are 1 through 5. This position must be equal to or greater than the beginning (left most) position. The default is 0.
Maximum Allowed Subcontractor %	The default value for the maximum percentage of the total Contract amount the Prime Contractor is allowed to subcontract (excluding specialty items).
Progress Schedule Variance	The default percentage difference between a contract's scheduled completion date and the actual completion date, which will generate a warning message when exceeded. The default percentage is 0. The user can override the default while setting up a Contract.
Default Funding Source Code	The user-designated code that identifies the default contract funding source. The code appears in the Funding Source Code field on the Contract Funding window. The user can override the default while setting up a Contract.

Table 4-21 The System Operational Parameters Fields Table

4.4 Tab-Level Security for Contracts

As of release 2.3a, SiteManager provides the system administrator with the ability to establish security level access for each Contract tab for each SiteManager user group.

For example, a user group that monitors on-the-job training commitments might need Update access to the Training Plan tab, whereas a different user group might be assigned No Rights to this information.

These security levels are set on the Group Security window. Each tab name will appear on the window, and access for each tab may be set to Update, Inquiry, or No Rights.

5. Contract Administration - New Contracts

August 2005

5.1 Adding New Contracts

SiteManager gives the user the option of adding new Contracts either by loading the data from a Pre-construction system or by entering the data into SiteManager one field at a time. The transportation agency specifies which method to use, and should provide the user with instructions for any Pre-construction system that is used in conjunction with SiteManager.

The procedures given here describe how to add Contract data to the SiteManager database through SiteManager's windows and data entry fields. An authorized user can add a new Contract using these data entry procedures. New Contracts from the Pre-construction system may also need some data added or modified by an authorized user.

New Contracts are given pending status by default. While a Contract is in pending status, an authorized user can modify the Contract data and even delete the Contract, if necessary. To begin tracking the construction work in SiteManager, an authorized user must change the Contract's status to active. Whenever a Contract's status is changed, the system notifies selected personnel.

Tip: To add a new Contract, the user must have a Level 1 or Level 2 office assignment, Contract Record window Update rights, and belong to a group with office-wide access. For more information, refer to the Security Administration topic.

5.1.1 From Pre-Construction Systems

Trns•port™ is one of the Pre-construction systems that can be used to add a new Contract to the SiteManager system. In addition to Trns•port™, there are several other Pre-construction systems that can be used to add a new Contract to the SiteManager system. For information on the Pre-construction system that your transportation agency uses, refer to the documentation provided by your local support personnel.

Contract data can be loaded into SiteManager using the Pre-construction Contract data load process (PRELOAD) or the Construction Contract data load process (CONLOAD). When Contract data is loaded into SiteManager from a Pre-construction system, the SiteManager system verifies that required data is present and that the data is acceptable. If a Contract fails the verification process, SiteManager generates error messages and displays them on the Interface Load Messages window. Some SiteManager windows have a check box that indicates whether or not a Pre-construction system was used to add the selected Contract. After the Contract status is changed to active, the data loaded from the Pre-construction system can not be modified.

5.1.2 Entry Directly into SiteManager

An authorized user can add Contract data to the SiteManager database through SiteManager's windows and data entry fields. For field definitions and detailed data entry procedures, the user can refer to the appropriate topic. The field definitions include information about data that is subject to limitations or validation by the system. The transportation agency should provide the user with any agency-defined procedures for entering new Contract data.

5.1.3 General Procedure for Adding New Contracts

To add a new Contract to the SiteManager system, without using a Pre-construction system, an authorized user can follow the general procedure below. For field definitions and detailed data entry procedures, refer to the appropriate topic.

Step 1 Saving a New Contract

Enter the data required to save the Contract as follows:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens and displays the Description folder tab.
2. Enter Contract description data on this folder tab.
3. Click the **Location** folder tab. Enter location data on this folder tab.
4. Click the **Primary Personnel** folder tab. Enter the Project Manager and Project Engineer on this folder tab.
5. Click the **Prime Contractor** folder tab. Enter the Prime Contractor and associated data on this folder tab.
6. At this point, if data is entered in all required fields, the user can save the Contract. Click the **Save** button. After the Contract is saved, proceed to Step 2.

Tip: The following data must be entered before the Contract can be saved:

- a. Contract ID
- b. Level 2 Office (the field label is user-defined)
- c. Federal/State/Province Project Number
- d. Funding Indicator
- e. Time Charges
- f. Bid Days (if time is charged as Calendar Days or Work Days)
- g. Description
- h. Contract Type
- i. Work Type
- j. Spec Year
- k. Unit System (English or metric)
- l. Location
- m. Project Manager

- n. Project Engineer
- o. Prime Contractor

Step 2 Adding Contract Data

To finish defining the Contract:

- Click the **Payment Data** folder tab. Enter Contract payment data on this folder tab and save the data.
- Click the **Critical Dates** folder tab. Enter Contract Critical Date data on this folder tab and save the data. (The user is no longer required to enter a 'Notice to Proceed' date before activating the Contract.)

Note: Contract activation is no longer tied to the Notice to Proceed date. The user can now activate a contract using the Contract Status field on the Description tab. All functions, *except for the Estimate functions*, are available to the user after the contract status is changed to 'Active.' Estimate functions are not available to the user until the Notice To Proceed date is entered.

- Click the **DBE Commit** folder tab. Enter DBE commitment data on this folder tab and save the data.
- Click the **Training Plan** folder tab. Enter training plan data on this folder tab and save the data. Close the Contracts window.
- To add Milestones, on the **Contract Records** panel, double-click the **Milestones** icon. The Milestones window opens. Enter Contract milestone data and save the data. Close the Milestones window.
- To add Project data, on the **Contract Records** panel, double-click the **Projects** icon. The Projects window opens. Enter Contract Project data and save the data. Close the Projects window.
- To group Items under a funding Category, on the **Contract Records** panel, double-click the **Categories** icon. The Categories window opens. Enter Category data and save the data. Close the Categories window.
- On the **Contract Records** panel, double-click the **Items** icon. The Items window opens. Enter Items data and save the data. Close the Items window.
- On the **Contract Records** panel, double-click the **Contract Funding** icon. The Contract Funding window opens. Enter funding source data and save the data. Close the Contract Funding window.
- On the **Contract Records** panel, double-click the **Contract Authority** icon. The Contract Authority window opens. Enter Contract authority data and save the data. Close the Contract Authority window.
- On the **Contract Records** panel, double-click the **Key Dates** icon. The Key Dates window opens. Enter Key Date data and save the data. Close the Key Dates window.
- On the **Contract Records** panel, double-click the **Checklist Scheduled Events** icon. The Checklist Scheduled Events window opens. Enter Checklist Event data and save the data. Close the Checklist Scheduled Events window.

- On the **Contract Records** panel, double-click the **Permits** icon. The Permits window opens. Enter permit data and save the data. Close the Permits window.
- To enter invoice data for stockpiled materials, on the **Contract Records** panel, double-click the **Stockpiled Materials** icon. The Stockpiled Materials window opens. Enter stockpiled materials data and save the data. Close the Stockpiled Materials window.
- To record construction conferences, on the **Contractor Management** panel, double-click the **Construction Conference** icon. The Construction Conference window opens. Enter construction conference data and save the data. Close the Construction Conference window.
- To enter progress schedule data, on the **Contractor Management** panel, double-click the **Progress Schedule** icon. The Progress Schedule window opens. Enter progress schedule data and save the data. Close the Progress Schedule window.
- To enter Subcontract data, on the **Contractor Management** panel, double-click the **Subcontracts** icon. The Subcontracts window opens. Enter Subcontract data and save the data. Close the Subcontracts window.

Step 3 Activating a Contract

Contract work cannot be recorded in SiteManager until the Contract status is changed from pending to active. After all required Contract data is entered, an authorized user can change the status to active. The following data is required for activation:

- A Wage Decision selected on the Description folder tab.
- A Primary County selected on the Location folder tab.
- A surety company and an insurance company entered as Associates on the Prime Contractor folder tab. (If the selected contractor has no associates, enter these companies first as Associates of the contractor in the Vendor reference tables.)
- Actual Dates for all dates marked 'Required to Activate' on the Key Dates window.
- Actual Dates for all events marked 'Required to Activate' on the Checklist Event Dates window.
- At least one Project defined on the Projects window.
- At least one Item defined on the Items window.
- Funding sources selected on the Contract Funding window to fully fund the Contract.
- Actual Dates for all dates marked 'Required to Activate' on the Critical Dates folder tab.

Tip: The user must change the contract status to 'Active', using the Contract Status field on the Description tab. All functions, *except for the Estimate functions*, are available to the user after the contract status is changed to 'Active.' Estimate functions are not available to the user until the Notice To Proceed date is entered.

5.2 Contract Status Validation

SiteManager looks at the data entered for a Contract to determine the Contract's status. When the user saves a Contract, the save process determines if the Contract status has been changed. If the Contract status has been changed, the system validates the status and performs related tasks as described below. The following Contract states are possible:

- Pending
- Active
- Complete
- Archived

To change the Contract's status from pending to active, the following criteria must be met:

- There must be an Execution Contract Critical Date with the Actual Date filled in.
- If the Contract's price adjustment allowed indicator is Yes, the Price Adjustment Base Contract Critical Date must have an Actual Date.
- The Prime Contractor must have a surety and an insurance company.
- The Contract must have entries in all of the following fields:

Wage Decision

Primary County

Project Manager

Project Engineer

Prime Contractor

Liquidated Damages Rate Amount

- The Contract must have at least one record for each of the following:

Project

Item

Retainage

Contract Funding (all parts fully funded)

Contract Authority for the Project Manager and Project Engineer

Note: For transportation agencies that do not include Contract Funding in their construction management system, a dummy Contract Funding record is added with 100% non-participating no-limit funding. Funding source validation is bypassed.

When the Contract's status changes to active, the system performs the following tasks:

- Personnel identified in the Primary Personnel folder are notified by an In-Box message.
- All Contract Item status will be modified from pending to active.
- If a Contract Liquidated Damages Amount does not exist, this amount is obtained and displayed from the default Liquidated Damages table.
- If no Project is indicated as the Primary Project, the Primary Project is defaulted as:
The only Project, if the Contract has only one Project.
The Project with greatest total dollar amount, if the Contract has multiple Projects.
- All Checklist Scheduled Events that do not have Next Projected Date displayed are automatically updated with the first logical date after the Notice To Proceed Date.

To delete a Contract, its status must be pending.

To change a Contract's status back to pending, the following criteria must be met.

- Contract Items can not have:
 - An associated Change Order
 - An associated Dispute
 - An associated Stockpiled Material

The Contract cannot have:

- An associated Force Account
- An associated Estimate
- An associated Dispute
- An associated Sample
- An associated Change Order
- An associated Plan Discrepancy
- Been downloaded (checked out) to the field
- Milestones can not have an associated Change Order.
- The Contract can not have Daily Work Reports associated with it.

If a Contract status change cannot be saved because the data fails validation:

- Change the Contract's status to pending.
- Delete the Contract.

If the Contract has been active, delete the Contract's associated record(s), or upload the Contract back to the Server (check it in).

Entering the Physical Work Complete Date does not change the Contract status. However, it marks the beginning of the Contract completion procedure. To save the Physical Work Complete Date, all draft and pending Change Orders must be either approved or not approved. When the Physical Work Complete Date is entered, the Project Manager and Project Engineer are notified by In-Box message, any active Items are assigned final quantities and the Items' status is changed to from 'Active' to 'Final' (i.e., no longer able to log work to these items).

To change a Contract's status from active to complete, the following criteria must be met.

- The Physical Work Complete Date must have an Actual Date.
- All Critical Dates and Key Dates marked 'Required to Finalize' must have Actual Dates.
- All Checklist Scheduled Events must have Actual Dates.
- All Items must have approved final quantity.
- No Change Order can have a status of pending.
- All Progress and Final Estimates must be paid.
- All Disputes and Claims must be resolved.
- All stockpiled materials must be zero.

When the Contract status changes to complete, Contract authority is end-dated for all Contract personnel except the Project Manager and Project Engineer. After a Contract is complete, only the Project Manager, Project Engineer, and personnel with Office-Wide and Update access can make changes to a Contract. When the Contract status changes to complete, the system marks the Contract 'To Be Sent to DSS.' The archived status is used to store the archived file.

5.3 Contract Records

The Contract Records panel lets the user access other windows to view, add, modify, and delete Contract records. The Contract Records panel has icons that represent the following windows:

- Contracts
- Milestones
- Projects
- Categories
- Items
- Contract Funding
- Contract Authority
- Key Dates
- Checklist Scheduled Events
- Checklist Event Dates
- Correspondence Log
- Plan Discrepancies

- Stockpiled Materials
- Force Accounts
- Design Evaluation
- Disputes/Claims

The screenshot shows the 'Subcontracts' window with the following details:

- Contract ID:** C10028
- Subcontract Nbr:** 06
- Table Headers:** Project Number, Line Item, Item Code, Units Type, Specialty, Short Description
- Summary Table:**

	Quantity	Unit	Price \$	Amount \$
Contract Bid:	.000		.00000	.00
Current Contract:	.000		.00000	.00
Parent Subcontract:	.000		.00000	.00
This Subcontract:	0.000		0.00000	.00
- Subcontract Amount:** .00

Figure 5-1 The Contract Records Panel

To access the Contract Records panel:

1. On the **Contract Administration** panel, double-click the **Contract Records** icon.

5.4 Contracts

The Contracts window lets the user add new Contracts, and view, add, modify, or delete the basic Contract data. The following table describes the nine folder tabs on the Contracts window:

Folder Tab Name	Description
Description	The Description folder tab displays the Contract description data. This includes the Contract’s status, Project number(s), administrative offices, funding sources, and other descriptive information that determines how the system processes data for this Contract.
Location	The Location folder tab displays the Contract location data that can be added, modified, or deleted. This includes the list of available counties for each state or province and those associated with the selected Contract. Authorized users may add and remove counties to and from the Contract. A primary county must be selected.
Payment Data	The Payment Data folder tab displays the Contract payment data that can be added, modified, or deleted. This data includes Liquidated Damages Rate Amount, Retainage, Estimate Generation indicators, and Limit Amount.
Critical Dates	The Critical Dates folder tab displays the Critical Dates (Letting date, Notice to Proceed date, etc.). These dates are required by the system for the standard Contract status reports. The default date types can not be deleted or modified.
Primary Personnel	The Primary Personnel folder tab lets the user maintain data on the Contract creator, designer, Project Manager, and Project Engineer. This folder tab also identifies the personnel who will receive messages when the Contract becomes active or falls behind schedule.
Prime Contractor	The Prime Contractor folder tab displays the Prime Contractor data that can be added, modified, or deleted. This data includes the Prime Contractor, contractor defaulted data, maximum Subcontract amount, payroll requirements, Prime Contacts, and Prime Associates. The Prime Contractor’s surety and insurance companies must be

Folder Tab Name	Description
	entered as Prime Associates.
DBE Commitment	The DBE Commitment folder tab lets the user add and modify Contractor DBE Commitments. This folder tab also displays system-calculated DBE amounts.
Training Plan	The Training folder tab lets the user identify the Prime Contractor’s on-the-job training commitments for a Contract (i.e., the training plan), which is then used during estimate generation to perform automated reimbursement. This folder tab also displays system-calculated training hour usage.

Table 5-1 The Contracts Window Folder Tabs Table

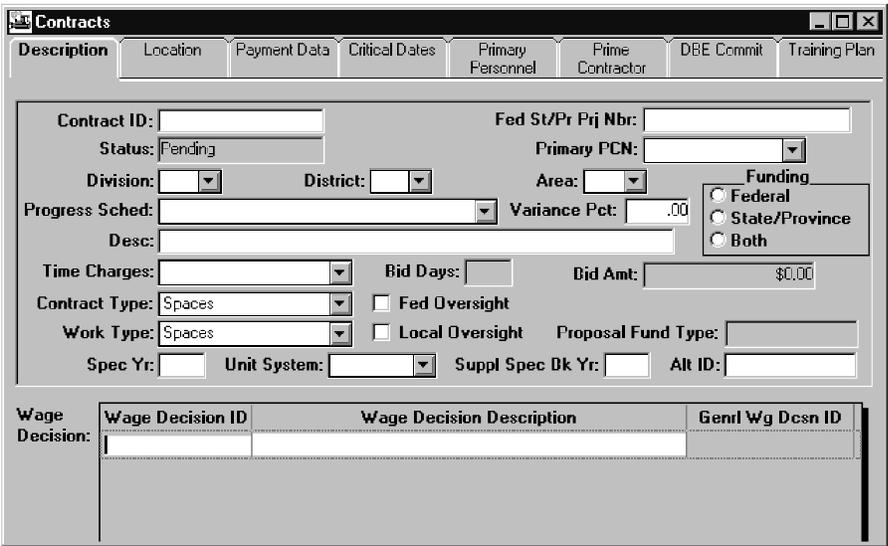


Figure 5-2 The Contracts Window

To access the Contracts window:

1. On the **Contract Administration** panel, double-click the **Contract Records** icon.
2. On the **Contract Records** panel, double-click the **Contracts** icon.

5.4.1 Contract Description

The Description folder tab displays the Contract description data that can be added, modified, or deleted. This includes the Contract’s status, project number(s), administrative offices, funding type, and other descriptive information that determines how the system processes data for this Contract.

Field Name	Description
Contract ID	Transportation agency-defined ID for the Contract. Corresponds to the Contract ID assigned by Trns•port™ or another Pre-construction system. This is a required field.
Status	Indicates the current status of a Contract (e.g., Pending, Active, Complete, Archived).
Primary PCN	The Contract's primary Project Control Number. This field lists the Projects defined for this Contract. If multiple Contracts are defined, the user selects the primary Project in this field.
Fed St/Pr Prj Nbr	The federal, state, or province Project number for the Contract, Project or Category. This is a required field.
Level 2 Office (user-defined label)	The office number for the Level 2 office responsible for administering the Contract. The Level 2 office can have any user-defined label, such as District, Division, or Region. This is a required field. (The Level 1 office is the transportation agency headquarters, e.g., the Central Office or the Department of Transportation.)
Level 3 Office (user-defined label)	The office number for the Level 3 office responsible for administering the Contract. The Level 3 office can have any user-defined label. If there are only two administration levels, this field does not display.
Level 4 Office (user-defined label)	The office number for the Level 4 office responsible for administering the Contract. The Level 4 office can have any user-defined label. If there are only two or three administration levels, this field does not display.
Progress Sched	The type of Progress Schedule used for the Contract (i.e., Percent Complete for a Time Period, Percent of Critical Items Complete for a Time Period, or Critical Path Method.) If Critical Path Method is selected, no schedule is processed for this Contract in SiteManager. If the user selects a different schedule type on the Progress Schedule window, the system changes this field.

Field Name	Description
Variance Pct	The percentage difference between a schedule's anticipated and actual completion percent. A message is generated when the difference is greater than this percentage. For example, if 30% of the work is anticipated to be complete by a certain date and the actual percentage complete is 19%, if the Variance Pct is 10%, a message notifies the recipient(s) of the variance.
Time Charges	How time charges are assessed for the Contract (i.e., Work Days, Calendar Days, or Fixed Completion Date). This is a required field.
Bid Days	The original number of days for the Contract. This field is required when the Time Charges entry is Work Days or Calendar Days.
Bid Amt	The original bid amount of the contract. This field is display only.
Desc	Text description of the Contract. This is a required field.
Alt ID	An alternate transportation agency-defined ID for the Contract. This field can not be modified if an estimate has been generated.
Contract Type	Transportation agency-defined classification of the Contract type (e.g., Biddable, Safety, A + B, Prime Contract). This is a required field.
Work Type	Transportation agency-defined classification of the major type of work being done on the Contract (e.g., Bridge Work, Beautification). This is a required field.
Spec Yr	The Item Master specification year of the Items used for the Contract. This is a required field.
Unit System	Indicates that the measurement system used for the Contract is either English or Metric. This is a required field.
Fed Oversight	Indicates that federal authorities must receive and approve any Change Orders for this Contract.

Field Name	Description
Funding	Indicates that the Contract is funded by federal funds only, non-federal funds only (state, province, etc.), or both. This is a required field. If the user selects funding sources on the Contract Funding window that do not match this field, the system changes this field. If funding is subsequently changed, the indicator will change with the funding assignment.
Suppl Spec Bk Yr	A supplemental Item Master specification year of the Items used for the Contract.
Local Oversight	Indicates that local authorities must be copied on and approve Change Orders.
Wage Decision ID	Transportation agency-defined ID for a wage decision applicable to the Contract. The user can search this field. Wage decision data is required during the loading of Contractor payrolls; it is used to determine potential wage rate variances. The wage decision records are maintained in the Civil Rights reference tables.
Genrl Wg Dcsn ID	General Wage Decision ID.
Wage Decision Description	Description of the wage decision (first 40 characters).
Proposal Fund Type	Type of funds used for the Contract (e.g., ST1 = State Fund 1, FED1 = Federal Fund 1, MUNI = Municipal Fund)

Table 5-2 The Description Folder Tab Fields Table

To add a new Contract:

1. On the **Contract Records** panel, double-click the **Contracts** icon. If the user is authorized to add Contracts, the Description folder tab fields are empty and the user can add new Contract data.
2. To add a new Contract ID, click the **Contract ID** field and type the new ID.
3. Press the **Tab** key.
4. In the **Fed St/Prj Nbr** field, type the federal, state, or province Project number for the Contract.
5. In the **Primary PCN** drop-down list, click the expand arrow and click the Project's Primary Control Number.

6. In the **Level 2 Office** drop-down list, click the expand arrow and click the office ID.
7. If a Level 3 or 4 office administers the Contract, in the **Level 3 Office** drop-down list, click the expand arrow and click the office ID.
8. If a Level 4 office administers the Contract, in the **Level 4 Office** drop-down list, click the expand arrow and click the office ID.
9. In the **Progress Schedule** drop-down list, click the expand arrow and click the schedule type.
10. To change the default variance percentage, tab to the **Variance Pct** field and type the percentage.
11. In the **Time Charges** drop-down list, click the expand arrow to the right of the current selection and click the time charges type.
12. If the Time Charges entry is Work Days or Calendar Days, tab to the **Bid Days** field and type the original number of days for the Contract.
13. Press the **Tab** key.
14. In the **Desc** field, type a description of the Contract.
15. In the **Contract Type** drop-down list, click the expand arrow and click the Contract type.
16. If Federal Oversight is required, click the **Fed Oversight** check box (ON).
17. In the **Work Type** drop-down list, click the expand arrow and click the work type.
18. If Local Oversight is required, click the **Local Oversight** check box (ON).
19. Press the **Tab** key.
20. In the **Spec Yr** field, type the Item Master specification year.
21. Press the **Tab** key.
22. In the **Unit System** drop-down list, click the expand arrow and click either English or Metric.
23. Press the **Tab** key.
24. If required, in the **Suppl Spec Bk Yr** field, type a supplemental Item Master spec year.
25. Press the **Tab** key.
26. In the **Alt ID** field, type an alternate ID for the Contract.
27. To select a **Funding** type, click the radio button for Federal, State/Province, or Both.
28. A new Contract ID can not be saved until the following data is entered: the Location, the Primary Personnel, and the Prime Contractor. Click the **Location** folder tab and continue adding data (refer to the Location topic).

To modify a pending Contract's description:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**. The Select Contract list closes and the Description folder tab is displayed.
4. In the **Fed St/Pr Prj Nbr** field, type the federal, state, or province Project number for the Contract.
5. In the **Primary PCN** drop-down list, click the expand arrow and click the Project's Primary Control Number.
6. In the **Level 2 Office** drop-down list, click the expand arrow and click the office ID.
7. If a Level 3 or 4 office administers the Contract, in the **Level 3 Office** drop-down list, click the expand arrow and click the office ID.
8. If a Level 4 office administers the Contract, in the **Level 4 Office** drop-down list, click the expand arrow and click the office ID.
9. To change the default variance percentage, tab to the **Variance Pct** field and type the percentage.
10. In the **Time Charges** drop-down list, click the expand arrow to the right of the current selection and click the time charges type.
11. If the Time Charges entry is Work Days or Calendar Days, tab to the **Bid Days** field and type the original number of days for the Contract.
12. Press the **Tab** key.
13. In the **Desc** field, type a description of the Contract.
14. In the **Contract Type** drop-down list, click the expand arrow and click the Contract type.
15. If Federal Oversight is required, click the **Fed Oversight** check box (ON).
16. In the **Work Type** drop-down list, click the expand arrow and click the work type.
17. If Local Oversight is required, click the **Local Oversight** check box (ON).
18. Press the **Tab** key.
19. In the **Spec Yr** field, type the Item Master specification year.
20. Press the **Tab** key.
21. In the **Unit System** drop-down list, click the expand arrow and click either English or Metric.
22. Press the **Tab** key.
23. If required, in the **Suppl Spec Bk Yr** field, type a supplemental Item Master spec year.

24. Press the **Tab** key.
25. In the **Alt ID** field, type an alternate ID for the Contract.
26. To select a **Funding** type, click the radio button for Federal, State/Province, or Both.
27. Click the **Save** button.

To add a Wage Decision to a Contract:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**. The Select Contract list closes and the Description folder tab is displayed.
4. Click the **Wage Decision ID** list box and click the **New** button. An empty row is added to the list.
5. In the **Wage Decision ID** field, type a wage decision ID or click the *right* mouse button and perform a **Search**.
6. Click the **Save** button.

Tip: The wage decision records are maintained in the Civil Rights reference tables.

To change a Contract's status:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**. The Select Contract list closes and the Description folder tab is displayed.
4. In the **Status** drop-down list, click the expand arrow to the right of the current selection and click the status.
5. Click the **Save** button.

Tip: When the user saves a Contract status change, the system runs a validation process. If the Contract data passes validation, the status change is saved in the database.

To delete a pending Contract:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**. The Select Contract list closes and the Description folder tab is displayed.
4. Click the **Delete** button.

5. Click the **Yes** button (to confirm the deletion).
6. Click the **Yes** button (to confirm deletion of associated records).
7. Click the **Save** button.

5.4.2 Contract Location

The Location folder tab lets the user add, modify, and delete Contract location data, and to add or remove counties. Each Contract must have one county selected as the primary county. The user can not remove a county that is currently associated with one of the Contract’s projects.

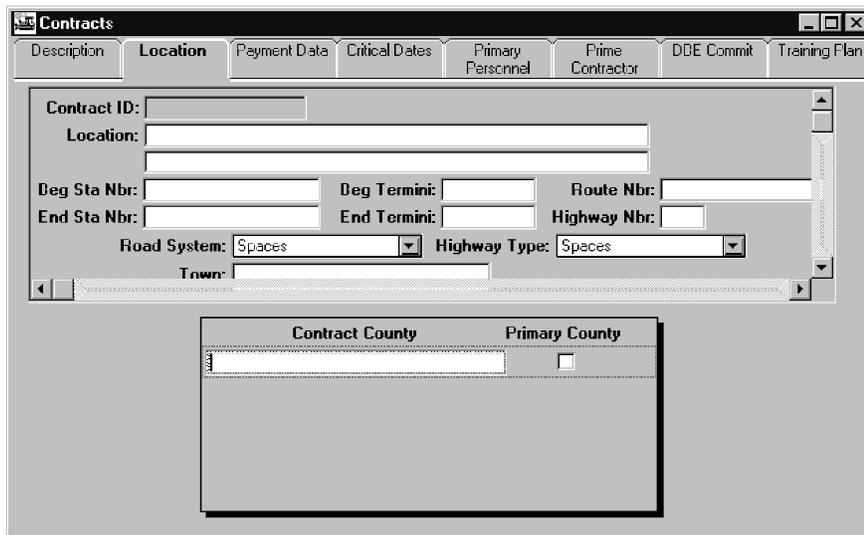


Figure 5-3 The Location Folder Tab

Field Name	Description
Location	Description of the Contract location. This is a required field. Two lines are provided.
Beg Sta Nbr	Precisely defines the station number where the work begins.
Beg Termini	Precisely defines the termini where the work begins.
Route Nbr	Route number where the primary work is done.
End Sta Nbr	Precisely defines the station number where the work ends.

Field Name	Description
End Termini	Precisely defines the termini where the work ends.
Highway Nbr	Highway number where the primary work is done.
Road System	Type of road system where the primary work is done (e.g., interstate, state highway, county road).
Highway Type	Type of highway where the primary work is done (e.g., asphalt, concrete, gravel).
Contract County	Name of a county in which the work is done. The user can search this field.
Primary County	Indicates the primary county in which the work is done. At least one and only one county must be indicated as the primary county.

Table 5-3 The Location Folder Tab Fields Table

To modify the Contract location:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**. The Select Contract list closes and the Description folder tab is displayed.
4. Click the **Location** folder tab.
5. In the **Location** field, type a description of the construction location. If necessary, tab to the second line and type more text.
6. Press the **Tab** key.
7. In the **Beg Sta** field, type the Station number where the work begins.
8. Press the **Tab** key.
9. In the **Beg Termini** field, type the Termini where the work begins.
10. Press the **Tab** key.
11. In the **Route Nbr** field, type affected route number.
12. Press the **Tab** key.

13. In the **End Sta** field, type the Station number where the work ends.
14. In the **End Termini** field, type the Termini where the work ends.
15. In the **Highway Nbr**, type the primary work roadway number.
16. In the **Road System** drop-down list, click the expand arrow and click the road system.
17. In the **Highway Type** drop-down list, click the expand arrow and click the highway type.
18. Press the **Tab** key.
19. In the **Town** field, type the name of the town.
20. Click the **Contract County** datawindow and click the **New** button. An empty row is added to the datawindow.
21. In the **Contract County** field, type the name of the county or perform a **Search**.
22. To add another county, click the **New** button and repeat Step 21.
23. In the **Contract County** list box, scroll to the primary county and click the **Primary County** indicator (ON).
24. Click the **Save** button.

To delete a county from a Contract:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**. The Select Contract list closes and the Description folder tab is displayed.
4. Click the **Location** folder tab.
5. In the **Contract County** list box, scroll to and click the county (click the **Primary County** indicator).
6. Click the **Delete** button.
7. In the **Contract County** list box, scroll to the primary county and click the **Primary County** indicator (ON).
8. Click the **Save** button.

Tip: The user cannot remove a county that is currently associated with one of the Contract's projects.

5.4.3 Contract Payment Data

The Payment Data folder tab lets the user add, modify, or delete Contract payment data such as the Liquidated Damages Rate Amount, the day of the month to generate estimates, Contract payment amount limits, and retainage data. The retainage data includes the type of retainage allowed and the values that determine how retainage is to be applied to the Contract.

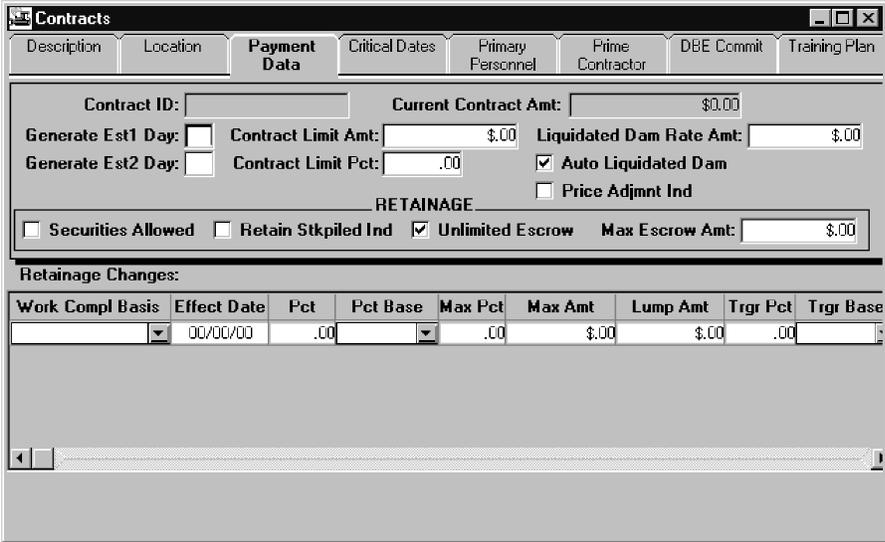


Figure 5-4 The Payment Data Folder Tab

Field Name	Description
Current Contract Amt	The current amount of the contract (original bid amount plus approved change orders). This field is display only.
Generate Est1 Day	The day of the month, 1 - 30, that the Contract’s first monthly estimate should be generated. Three days before this day, the system notifies the Project Manager that estimate generation is approaching.
Contract Limit Amt	The amount over the original bid amount that is allowed for the Contract. The limit amount is added to the bid amount to calculate the maximum amount that can be paid for the Contract. If a value is entered in this field, the Contract Limit Pct field is protected.
Liquidated Dam Rate Amt	The liquidated damages rate amount for the Contract.

Field Name	Description
Generate Est2 Day	The day of the month, 2 - 30, that the Contract's second monthly estimate should be generated. Three days before this day, the system notifies the Project Manager that estimate generation is approaching. The value in this field must be greater than the Generate Est1 Day.
Contract Limit Pct	The percent over the original bid amount that is allowed for the Contract. The product of the limit percent multiplied by the bid amount is added to the bid amount to calculate the maximum amount that can be paid for this Contract. If a value is entered in this field, the Contract Limit Amt field is protected.
Auto Liquidated Dam	Indicates that liquidated damage values are generated automatically.
Price Adjmnt Ind	Indicates that price adjustments are allowed for the Contract's Items.
Retainage	
Retainage Securities Allowed	Indicates whether or not securities are allowed in lieu of Retainage for the Contract.
Retainage Stk piled Ind	Indicates that Retainage includes stockpiled materials in the earnings calculation.
Retainage Max Escrow Amt	Maximum amount that can be encumbered in an escrow account used in lieu of Retainage.
Retainage Unlimited Escrow Ind	Indicates that there is no limit to how much Retainage can be covered by the escrow account.
Retainage Changes	
Retainage Changes Work Compl Basis	Method for calculating Retainage (i.e., Work Reported Per Period, Work Remaining, or Work In Place).

Field Name	Description
Retainage Changes Effect Date	Effective date of Retainage. The effective date can not be duplicated on different Retainage records.
Retainage Changes Pct	The Retainage percentage to be applied to the Contract. Must be less than or equal to the maximum Retainage percentage. This field is required if a lump sum amount is not entered.
Retainage Changes Pct Base	Indicates that Retainage should be calculated as a percentage of the bid amount or the current amount.
Retainage Changes Max Pct	The maximum Retainage percentage allowed for the Contract.
Retainage Changes Max Amt	The maximum Retainage amount allowed for the Contract.
Retainage Changes Lump Amt	The lump sum amount of Retainage. If a Retainage percentage is not entered, a value must be entered here.
Retainage Changes Trgr Pct	The percentage of Contract completion at which the Retainage change is to occur.
Retainage Changes Trgr Base	Indicates that the trigger percentage should be a percentage of the bid amount or current amount.

Table 5-4 The Payment Data Folder Tab Fields Table

To modify a pending Contract's payment data:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**. The Select Contract list closes and the Description folder tab is displayed.
4. Click the **Payment Data** folder tab.
5. In the **Generate Est 1** field, select the current entry and type the day of the month the Contract's first monthly estimate should be generated.
6. Press the **Tab** key.

7. In the **Contract Limit Amt** field, type the payment limit amount.
8. Press the **Tab** key.
9. To enter a Liquidated Damages Rate Amount or overwrite the default value, in the **Liquidated Dam Rate Amt** field, select the current entry and type the rate.
10. Press the **Tab** key.
11. In the **Generate Est 1** field, select the current entry and type the day of the month the Contract's second monthly estimate should be generated.
12. Press the **Tab** key.
13. In the **Contract Limit Pct** field, select the current entry and type the Contract's limit percentage
14. To turn off automated liquidated damage generation, click the **Auto Liquidated Dam** check box (OFF).
15. To allow Item price adjustments, click the **Price Adjmnt Ind** check box (ON).
16. To allow securities to be used in lieu of Retainage, click the **Securities Allowed** check box (ON).
17. To include stockpiled materials in earnings calculations, click the **Retain Stk piled Ind** check box (ON).
18. To allow unlimited Retainage coverage by the escrow account, click the **Unlimited Escrow** check box (ON).
19. In the **Max Escrow Amt** field, select the current entry and type the maximum amount to be encumbered in an escrow account.
20. Click the **Save** button.

To add data that determines how retainage is to be applied to the Contract:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**. The Select Contract list closes and the Description folder tab is displayed.
4. Click the **Payment Data** folder tab.
5. In the **Retainage Changes** area, click the **Work Compl Basis** field and click the **New** button. An empty row is added.
6. In the **Work Compl Basis** drop-down list, click the expand arrow to the right of the current selection and click the method for calculating Retainage.
7. Press the **Tab** key.
8. In the **Effect Date** field, select the current entry and type the effective date of Retainage.

9. Press the **Tab** key.
10. In the **Pct** field, select the current entry and type the Retainage percent to be applied.
11. In the **Pct Base** drop-down list, click the expand arrow to the right of the current selection and click either Bid Amount or Current Amount.
12. Press the **Tab** key.
13. In the **Max Pct** field, select the current entry and type the maximum Retainage percentage allowed.
14. Press the **Tab** key.
15. In the **Max Amt** field, select the current entry and type the maximum Retainage amount allowed.
16. Press the **Tab** key.
17. In the **Lump Amt** field, select the current entry and type the lump sum amount of Retainage.
18. Press the **Tab** key.
19. In the **Trgr Pct** field, select the current entry and type the trigger percentage (percentage of Contract completion at which the Retainage change is to occur).
20. Press the **Tab** key.
21. In the **Trgr Base** drop-down list, click the expand arrow to the right of the current selection and click either Bid Amount or Current Amount.
22. Click the **Save** button.

Tip: If a Retainage record is effective when an estimate is generated, the record can not be deleted. Therefore, the user can not delete a Retainage record when:

- The Retainage Effective Date is less than or equal to the current date, and an estimate has been generated.
- The Estimate Generate date is greater than or equal to the Retainage Effective Date.

5.4.4 Contract Critical Dates

The Critical Dates folder tab lets the user view and record the occurrence of Critical Dates. The user can also add or modify related data. The actual occurrence of a Critical Date event is recorded as the Actual Date of the event. Some Actual Dates are entered by the system and some are entered by an authorized user. The Critical Date types were defined during system development and cannot be added or deleted. These dates are considered critical because SiteManager includes them in the standard Contract record reports. When a new Contract is added, either manually or from the pre-construction system, SiteManager includes the Critical Date types defined in the Default Critical Date reference table. Therefore, every Contract has the same Critical Date types.

Critical Date Type	Requirements for entering the Actual Date
Accepted Date	This date can not be required to activate the Contract.
Adjusted Completion Date	The system enters this date and the user can not modify it. This date is entered by the Change Order process.
Award Date	This date can not be modified when the Contract is from the pre-construction system.
Checked Out to Field Date	The system enters this date and the user cannot modify it. This date is entered by Pipeline when the Contract is checked out. This date cannot be required to activate the Contract.
Contract Archived Date	The system enters this date and the user cannot modify it. This date is entered by the Contract archival process. This date cannot be required to finalize the Contract. This date cannot be required to activate the Contract.
Contractor Bankruptcy Date	This date cannot be required to finalize the Contract. This date cannot be required to activate the Contract.
Contractor Default Date	This date cannot be required to finalize the Contract. This date cannot be required to activate the Contract.
Contractor Final Release Date	This date cannot be required to activate the Contract.
Execution Date	This date can be modified only when the Contract is pending.
Letting Date	The user cannot modify this date if the contract was transferred from the pre-construction system.
Notice to Proceed Date	The user cannot modify this date until the Contract's status is changed to 'Active.'

Critical Date Type	Requirements for entering the Actual Date
Open to Traffic Date	This date can not be required to activate the Contract.
Original Completion Date	If time is charged as Calendar Days, the system enters this date and the user can not modify it. If time is charged as a Fixed Completion Date, this date can be modified while the Contract is pending. If time is charged as Available Work Days, this date should not be entered.
Physical Work Complete Date	This date can not be required to activate the Contract. This date can be modified only when the Contract is active. Before entering this date, all Change Orders must be approved or denied. When this date is entered, the system notifies personnel and enters final quantities for active Items and moves all active items to final status. Note: The user is now notified that all items will be moved to Final status upon entering and saving this date, and is prompted whether to continue the operation. Once this date has been entered and saved, the user will no longer be able to post DWR's on items moved to the Final status.
Price Adjustments Base Date	This date can be modified only when the Contract is pending.
Signed Date	This date can not be modified when the Contract is from the pre-construction system.
Substantial Work Complete Date	This date can not be required to activate the Contract. This date can be modified only when the Contract is active.
Work Begin Date	This date can not be required to activate the Contract.

Table 5-5 The Critical Date Type Requirements Table

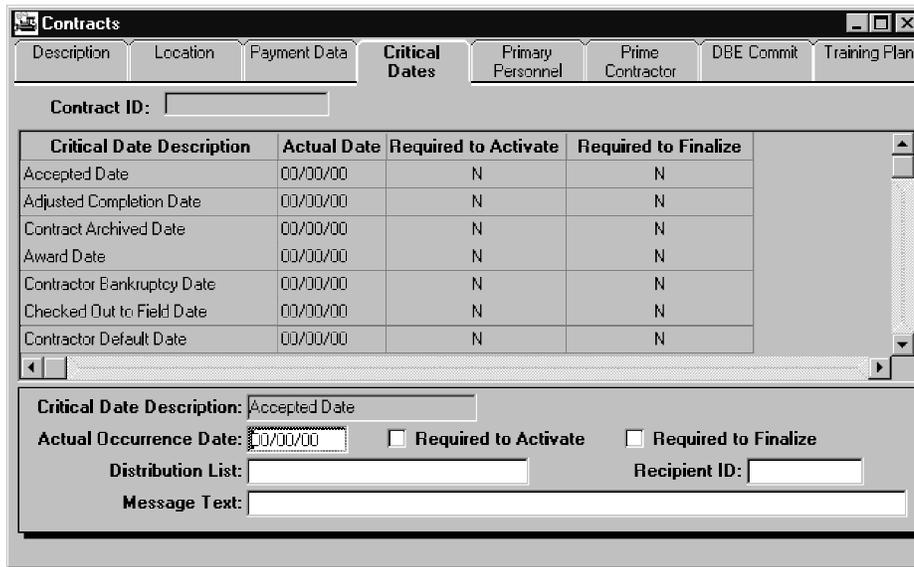


Figure 5-5 The Critical Dates Folder Tab

Field Name	Description
Critical Date Description	System-defined Critical Date type. All Contracts have the default Critical Date types. The Critical Date types can not be added, modified, or deleted.
Actual Date	The date the event actually occurred. In most cases, the date must be current or in the past. If time is charged as 'Fixed Completion Date,' the 'Original Completion Date' can be in the future. When an Actual Date is entered, the system notifies the selected recipient(s). When an Actual Date is entered for the 'Physical Work Complete Date,' the system notifies Level 1 office personnel, and enters final quantities for any active Items and changes their status to final (i.e., no longer able to log work to these items).
Rqrd to Activate	Indicates that the event must occur before the Contract status can be changed from pending to active (e.g., Letting Date, Award Date, Execution Date).
Rqrd to Finalize	Indicates that the event must occur before the Contract status can be changed to complete.

Field Name	Description
Distribution List	Group of users to be notified that the event has occurred. Either a Distribution List or Recipient must be entered. After valid entry of either, the other is protected. The user can search this field.
Recipient ID	User ID of the person to be notified that the event has occurred. Either a Distribution List or Recipient must be entered. After valid entry of either, the other is protected. The user can search this field.
Message Text	Standard message to be sent to the recipient(s).

Table 5-6 The Critical Dates Folder Tab Fields Table

To enter the Actual Date of a Contract Critical Date:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**. The Select Contract list closes and the Description folder tab is displayed.
4. Click the **Critical Dates** folder tab.
5. In the **Critical Date Description** list box, scroll to and click the date. The data for the selected date is displayed below the list.
6. In the **Actual Date** field, click in front of the current entry and type the date when the Critical Date event occurred.
7. To make this date Required to Activate, click the **Rqrd to Activate** check box (ON).
8. To make this date Required to Finalize, click the **Rqrd to Finalize** check box (ON).
9. To select a recipient for notification, in either the **Distribution List** field or the **Recipient ID** field, perform a **Search**.
10. In the **Message Text** field, type a message to include with the notification.
11. Click the **Save** button.

Tip: The Notice to Proceed Date can only be entered when the Contract status is 'Active.' Before the Physical Work Complete Date is entered, Item final quantities should be approved and all Change Orders must be approved or denied.

Tip: If an Original Completion Date is entered for an Available Work Days Contract, the date will be removed when the Contract is activated.

5.4.5 Contract Primary Personnel

The Primary Personnel folder tab lets the user add, modify, and delete the Contract’s primary personnel. Every Contract must have a Project Manager and a Project Engineer. When an authorized user adds the Project Manager and Project Engineer to the Contract, SiteManager adds them to Contract Authority automatically. If primary personnel are later replaced, SiteManager starts authority for the new personnel and ends authority for the previous personnel.

The user can also select personnel—an individual or group—to be notified of certain conditions. Personnel can be notified when the Contract status is changed to active, when the Contract work falls behind schedule, or when Civil Rights data fails validation.

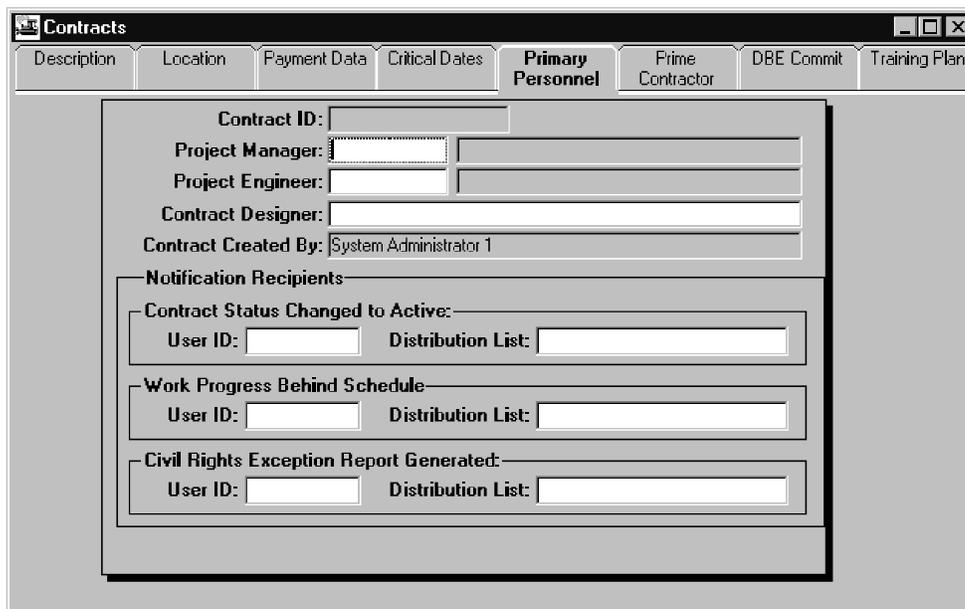


Figure 5-6 The Primary Personnel Folder Tab

Field Name	Description
Project Manager	Name of the Project Manager for the Contract. Specific messages and reports are sent to this person. The user can search this field. This is a required field.
Project Engineer	Name of the Project Engineer for the Contract. Specific messages and reports are sent to this person. The user can search this field. This is a required field.
Contract Designer	Name of the person or firm that designed the Contract.

Field Name	Description
Contract Created By	Name of the user who added the Contract, or a system indicator for Contracts built by the system.
Recipient Notified when Contract Status Changed to Active	
User ID	User ID of the person to be notified when the Contract's status changes from pending to active. The value is protected if a Distribution List is entered. Either a User ID or Distribution List must be entered. The user can search this field.
Distribution List	Name of the Distribution List to be notified when the Contract's status changes from pending to active. The value is protected if a User ID is entered. Either a User ID or Distribution List must be entered. The user can search this field.
Recipient Notified when Work Progress Behind Schedule	
User ID	User ID of person to be notified when the Contract's progress falls behind schedule equal to or greater than the variance percentage. This message can be generated only if the Variance Pct is entered and the Contract work is tracked by a Progress Schedule. The value is protected if a Distribution List is entered. Either a User ID or Distribution List must be entered. The user can search this field.
Distribution List	Name of the Distribution List to be notified when the Contract's progress falls behind schedule equal to or greater than the variance percentage. This message can be generated only if the Variance Pct is entered and the Contract work is tracked by a Progress Schedule. The value is protected if a User ID is entered. Either a User ID or Distribution List must be entered. The user can search this field.
Recipient Notified when Civil Rights Exception Report Generated	

Field Name	Description
User ID	User ID of the person to be notified when the Contract's civil rights monitoring generates an exception report. This field is protected if a Distribution List is entered. Either a User ID or Distribution List must be entered. The user can search this field.
Distribution List	Name of the Distribution List to be notified when the Contract's civil rights monitoring generates an exception report. This field is protected if a User ID is entered. Either a User ID or Distribution List must be entered. The user can search this field.

Table 5-7 The Primary Personnel Folder Tab Fields Table

To add Primary Personnel to a pending Contract:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**. The Select Contract list closes and the Description folder tab is displayed.
4. Click the Primary Personnel folder tab.
5. In the **Project Manager** field, type the User ID of the Contract's Project Manager or perform a **Search**.
6. Press the **Tab** key.
7. In the **Project Engineer** field, type the User ID of the Contract's Project Engineer or perform a **Search**.
8. Press the **Tab** key.
9. In the **Contract Designer** field, type the name of the Contract's Designer.
10. To select a recipient to be notified when a Contract's status changes from pending to active, tab to the appropriate field and type the **User ID** or **Distribution List** name or perform a **Search**.
11. To select a recipient to be notified when a Contract's progress falls behind schedule, tab to the appropriate field and type the **User ID** or **Distribution List** name or perform a **Search**.
12. To select a recipient to be notified when a Contract's civil rights monitoring generates an exception report, tab to the appropriate field and type the **User ID** or **Distribution List** name or perform a **Search**.

13. Click the **Save** button.

5.4.6 Prime Contractor, Contacts, and Associates

The Prime Contractors folder tab lets the user add and delete the Prime Contractor, the Prime Contacts, and the Prime Associates. The user can also specify the Prime Contractor’s payroll frequency and the maximum percentage of the Contract work that can be subcontracted. If the Prime Contractor is in default, the user can record the defaulted date and reason. The Prime Contractor entities are defined as follows:

Prime Contractor	The Prime Contractor is the Contractor who is awarded the Contract.
Prime Contacts	The Prime Contacts are the Prime Contractor’s personnel who are contact persons for the Contract. This includes safety officers, Contractor supervisors, and EEO compliance officers.
Prime Associates	The Prime Associates are vendors who have a Contract-specific relationship with the Prime Contractor. This includes the surety and insurance companies that are supplying business services to the Prime Contractor for the Contract.

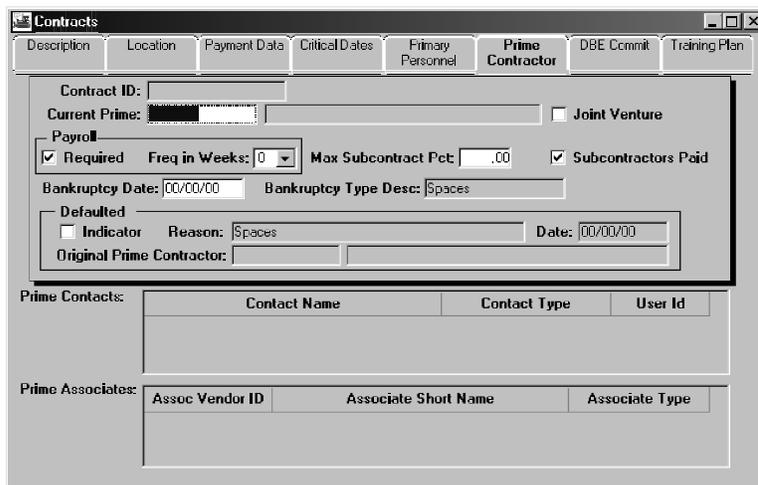


Figure 5-7 The Prime Contractor Folder Tab

Field Name	Description
Current Prime	Transportation agency-defined Vendor ID and short name for the current Prime Contractor. The user can search this field. This is a required field. If the user changes the current Prime Contractor, the data in the other fields is deleted.

Field Name	Description
Defaulted Original Prime Contractor	Transportation agency-defined Vendor ID and short name for the original Prime Contractor who was awarded the Contract and then defaulted.
Joint Venture	Indicates that the Contract was awarded to a joint venture.
Subcontractors Paid	Indicates whether or not the Prime Contractor has paid all of the Subcontractors. This indicator is checked (ON) by default.
Payroll Required	Indicates that certified payrolls are required for the Contract. Must be checked (ON) for federal Contracts. Must be checked (ON) to process payrolls in SiteManager. If this indicator is checked, a Payroll Frequency in Weeks must be entered.
Payroll Freq in Weeks	Weekly frequency that certified payrolls are required to be received for the Contract. Every week (1), every 2 weeks (2), every 4 weeks (4), etc. This field is required if the Payroll Required indicator is checked. This value must be entered before the Contract status is changed to active.
Max Subcontract Pct	Maximum percentage of the total Contract amount that the Prime Contractor is allowed to subcontract (excluding specialty items).
Bankruptcy Date	Date the Prime Contractor filed for bankruptcy.
Bankruptcy Type Desc	Type of bankruptcy filed (e.g., Chapter 11 or Chapter 13).
Defaulted Indicator	When checked (ON), the Defaulted Indicator indicates that the Prime Contractor is in default and another Contractor or surety has taken over responsibility for the Contract.
Defaulted Date	The date the Prime Contractor defaulted. This field is required if the Defaulted Indicator is checked (ON).
Defaulted Reason	Reason the Original Prime Contractor is defaulted (e.g., performance or bankruptcy). This field is required if the

Field Name	Description
	Defaulted Indicator is checked (ON).
Defaulted Reason	Reason the Original Prime Contractor is defaulted (e.g., performance or bankruptcy). This field is required if the Defaulted Indicator is checked (ON).
Prime Contact Name	The name of the Contact person for the Prime Contractor. The user can search this field.
Prime Contact Type	Title of the Contact person for the Prime Contractor (e.g., EEO).
Prime Contact User ID	The transportation agency-defined user ID for the Prime Contact, if one has been assigned.
Prime Assoc Vendor ID	Transportation agency-defined ID for the Prime Contractor's Associate. Usually the Federal Tax ID. The user can search this field.
Associate Short Name	Short name for the Prime Contractor's Associate.
Associate Type	Type of Prime Contractor Associate (i.e., Surety, Insurance, Escrow, Banking, Surety Agent, Escrow Agent, Other Payee, Other)

Table 5-8 The Prime Contractor Folder Tab Fields Table

To add a Prime Contractor to a pending Contract:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**.
4. Click the **Prime Contractor** folder tab.
5. In the **Current Prime** field, type the name of the Contract's Current Prime Contractor or perform a **Search**.
6. If a joint venture won the award, click the **Joint Venture** check box (ON). The Prime Contractor must have Affiliates defined in the Vendor reference table.

7. If the payrolls will be processed in SiteManager, in the **Freq in Weeks** drop-down field, click the frequency of receipt in weeks.
8. Or
9. If the payrolls will not be processed in SiteManager, click the **Payroll Required** check box (OFF).
10. Press the **Tab** key.
11. In the **Max Subcontract Pct** field, type the maximum percentage of the total Contract amount that the Prime Contractor is allowed to subcontract.
12. Click the **Services** menu and select **Address**.
13. Choose the **Address** that will be used as the Prime Contractor's Payment Address.
14. Click the **Services** menu and choose **Select Address**.
15. (or click the **Address** button on the Toolbar).
16. Click the **Save** button.

Tip: To be selected as a Current Prime, a contractor must first be entered as a vendor in the Vendor reference tables. To save a Contract, the Prime Contractor must have a Payment Address selected via the Services menu.

To add a Prime Contractor to a Contract:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**.
4. Click the **Prime Contractor** folder tab.
5. To add a Contact, click the **Prime Contact Name** field and click the **New** button. An empty row is added to the list.
6. In the **Prime Contact Name** field, perform a **Search**. After the user selects a name, the system enters the **User ID**.
7. In the **Contact Type** drop-down list, click the contact type.
8. Click the **Save** button.

Tip: To be selected as a Prime Contact, a contact person must first be entered as personnel of the Prime Contractor on the Vendor Personnel folder tab.

To add a Prime Associate to a Contract:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.

3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**.
4. Click the **Prime Contractor** folder tab.
5. To add an Associate, click the **Prime Assoc Vendor ID** field and click the **New** button. An empty row is added.
6. In the **Prime Assoc Vendor ID** field, perform a **Search**. After the user selects an ID, the system enters the **Associate Short Name** and the **Associate Type**.
7. Click the **Save** button.

Tip: To be selected as a Prime Associate, a Vendor must first be selected as an Associate of the Prime Contractor on the Vendor Associates folder tab. Every Contract requires two Associates—a surety company and an insurance company.

To record a Prime Contractor's defaulted status:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**.
4. Click the **Prime Contractor** folder tab.
5. If the Prime Contractor has filed for bankruptcy, in the **Bankruptcy Date** field, type the date the bankruptcy was filed.
6. If the Prime Contractor has filed for bankruptcy, in the **Bankruptcy Type Desc** drop-down list, click the bankruptcy type.
7. Click the **Defaulted** indicator. A message says that defaulting the Current Prime also removes the Prime Contacts and Associates.
8. Click **Yes** to continue. The system removes the Prime Contacts and Associates and enters the defaulted Prime Contractor in the Original Prime Contractor field.
9. In the **Reason** drop-down list, click the reason for defaulting.
10. In the **Date** field, type the date the Prime Contractor defaulted.
11. In the **Current Prime** field, type the name of the Contract's new Current Prime Contractor or perform a **Search**.
12. To add an Associate, click the **Prime Assoc Vendor ID** field and click the **New** button. An empty row is added.
13. In the **Prime Assoc Vendor ID** field, perform a **Search**. After the user selects an ID, the system enters the **Associate Short Name** and the **Associate Type**.
14. Click the **Save** button.

Tip: When the user places the Current Prime in defaulted status, the user must also select a new Current Prime and Prime Associates. For example, the Original Prime Contractor’s surety company can be selected as the Current Prime.

5.4.7 DBE Commitments

The DBE Commit folder tab lets the user add and modify the DBE goal percentage and view the DBE commitments for a Contract. If the Prime Contractor is a DBE, the user can also enter the DBE Work Class on this folder tab. The system calculates the DBE commitment amounts displayed on this folder tab using values entered on the Subcontracts window.

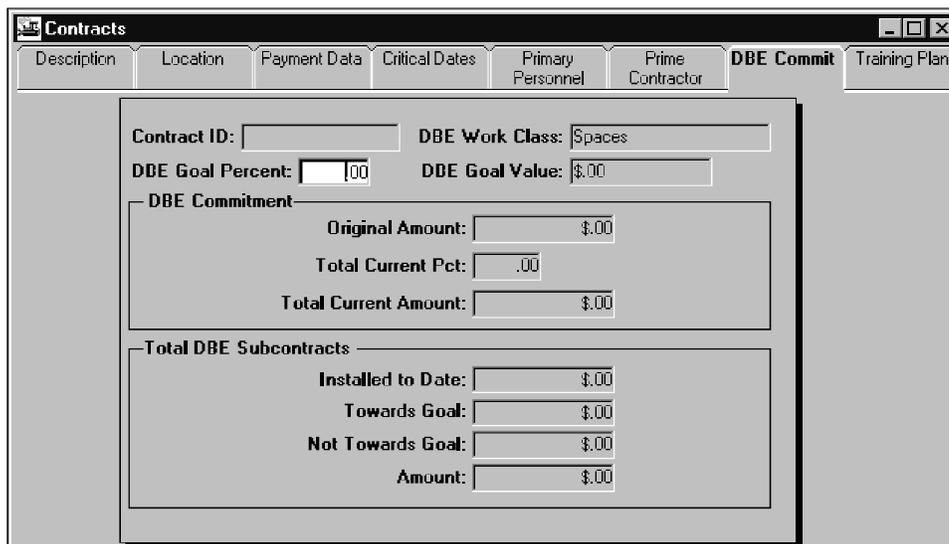


Figure 5-8 The DBE Commit Folder Tab

Field Name	Description
DBE Work Class	The Prime Contractor’s DBE Work Class for the Contract. This value can only be entered if the Prime Contractor is a DBE.
DBE Goal Percent	DBE goal percentage for the Contract. This value can be modified.
DBE Goal Value	DBE goal amount for the Contract. The system calculates this field by multiplying the Contract bid amount by the DBE goal percentage.
DBE Commitment	

Field Name	Description
DBE Commitment Original Amount	DBE commitment amount at award of the Contract.
DBE Commitment Total Current Pct	Percentage of the current DBE commitment on the Contract. The system calculates this value by dividing the total current amount of the DBE commitment by the Contract bid amount.
DBE Commitment Total Current Amount	Sum of the current DBE commitments for all Subcontracts to date. Calculated by the system.
Total DBE Subcontracts	
Installed to Date	Installed to Date amount for all DBE Subcontracts in the Contract. The sum of all DBE Subcontract reported Item quantities multiplied by the Item prices.
Towards Goal	Subcontract amount counted towards the DBE commitment goal. The sum of the DBE Subcontract amounts multiplied by the DBE goal percentage.
Not towards Goal	Subcontract amount not counted towards the DBE commitment goal. The sum of the DBE Subcontract amounts minus the amount counted towards the DBE commitment goal.
Amount	Sum of all the DBE Subcontract amounts for the Contract.

Table 5-9 The DBE Commitments Folder Tab Fields Table

To modify the DBE goal percentage for a Contract:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**. The Select Contract list closes and the Description folder tab is displayed.
4. Click the **DBE Commitments** folder tab.
5. If the Prime Contractor is a DBE, in the **DBE Work Class** drop-down list, click the expand arrow to the right of the current selection and click the DBE Work Class.

6. In the **DBE Goal Percent** field, type the DBE goal percentage for the Contract. The remaining fields are calculated by the system.
7. Click the **Save** button.

5.4.8 Training Plan

The Training Plan folder tab lets the user view, add, and modify the Prime Contractor's on-the-job-training commitments for a Contract. If the Contract includes the training plan as a Line Item, the system enters the training plan and the user can not modify it. If training is not a Line Item, the user can enter the plan. The plan consists of the total training hours for the Contract, the hourly (unit) price to be used for reimbursement, and the approximate number of trainees. This data is used by the estimate process to reimburse the Prime Contractor.

If a training plan is specified, the trainees must be entered on the Trainees window in Civil Rights. The training plan hour usage is typically entered through certified payrolls. To accrue training plan hours, the trainee data (names, SSN/SIN numbers, and training program) must match the payroll employee data. The Total Hours Used to Date field is updated automatically via the Accrue Training Experience batch process. The hours are accrued from certified payrolls that include trainee data. The Total Hours Paid to Date field is calculated during the estimate generation process. For more information, refer to the Civil Rights, Contractor Payroll, and Contract Adjustment topics.

Tip: If the training plan is a Line Item, it must be a single Line Item. The Training Plan folder tab retrieves only the first Item Code of the type (metric or English) specified in the system operational parameter table.

The screenshot shows a software window titled "Contracts" with a tabbed interface. The "Training Plan" tab is active. The window contains the following fields:

- Contract ID:** A text input field.
- Planned Training Hours:** A spinner control set to 100.
- Training Unit Price:** A text input field with a dropdown menu set to \$.00.
- Planned Number of Trainees:** A text input field.
- Total Hours Used To Date:** A text input field with a small downward arrow.
- Total Hours Paid To Date:** A text input field with a small downward arrow.
- Actual Number of Trainees:** A text input field with a small downward arrow.

Figure 5-9 The Training Plan Folder Tab

Field Name	Description
Planned Training Hours	Specifies the planned number of training hours committed by the Prime Contractor. If specified by a training Item Code, this field defaults to the Item's bid quantity and can not be modified.
Planned Number of Trainees	Specifies the planned number of trainees committed by the Prime Contractor. If specified by a training Item Code, this field defaults to the Item's bid quantity divided by the system operational parameter's average training program hours and can not be modified.
Training Unit Price	Specifies the hourly (unit) price to reimburse a Prime Contractor for training hours logged via Contractor Payrolls. If specified by a training Item Code, this field defaults to the Item's bid unit price and can not be modified.
Total Hours Used To Date	Total number of hours used by the trainees on the Contract to date. This value is calculated by a batch process using data from Contractor Payrolls and Civil Rights. The user can modify this value by entering DOT Hours on the Trainee window.
Actual Number of Trainees	Actual number of trainees allocated to the Contract. This value is calculated by a batch process using Trainee data from Civil Rights.
Total Hours Paid To Date	Total number of hours used by the trainees on the Contract after the last paid date. This value is calculated during estimate generation.

Table 5-10 The Training Plan Folder Tab Fields Table

To add a Training Plan to a Contract:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contracts window opens.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the **Contract ID** or perform a **Find**. The Select Contract list closes and the Description folder tab is displayed.
4. Click the **Training Plan** folder tab.
5. In the **Planned Training Hours** field, type the number of planned training hours.
6. Press the **Tab** key.
7. In the **Training Unit Price** field, type the unit price (hourly) that the Contractor will be reimbursed for training.
8. Press the **Tab** key.
9. In the **Planned Number of Trainees** field, type the number of trainees.
10. Click the **Save** button.

5.4.9 Custom Records

The Custom Contract Record Usage window is a Services menu option on the Contracts window. The Custom Contract Record Usage window lets the user add and modify Contract data on a custom template. The user selects a custom template on the window, and the window displays the selected template. If data has been entered on this template for the selected Contract, the data is displayed. The templates are created by the System Administrator.

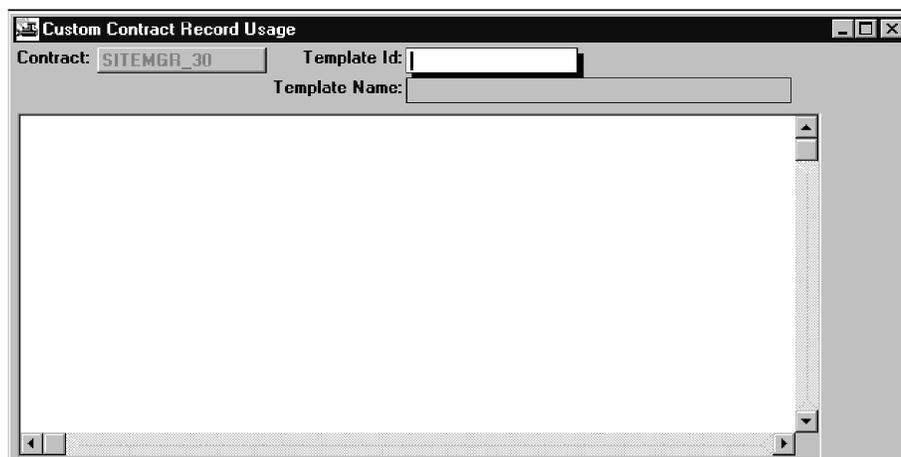


Figure 5-10 The Custom Contract Record Usage Window

Field Name	Description
Contract	Transportation agency-defined ID for the selected Contract.
Template ID	Templates available for selection. The user can search this field.
Template Name	Name of the template selected on the window.

Table 5-11 The Custom Contract Record Usage Window Fields Table

To modify custom records:

1. On the **Contract Records** panel, double-click the **Contracts** icon. The Contract Description folder tab is displayed.
2. Click the **Open** button. The Select Contract window opens.
3. In the **Contract** list box, scroll to and double-click the Contract ID.
4. Click the **Services** menu and click the **Custom Record** choice. The Custom Contract Record Usage window opens.
5. In the **Template ID** field, type the template ID or perform a **Search**. The window displays the template.
6. Add or modify the data.
7. Click the **Save** button.

5.5 Contract Milestones

The Milestone window lets the user add, modify, and delete Contract Milestones. The user can enter an incentive or disincentive rate for each milestone, and specify either days or hours to be used in calculating the amount to be paid or withheld. The user also enters the dates the milestone work was started and completed.

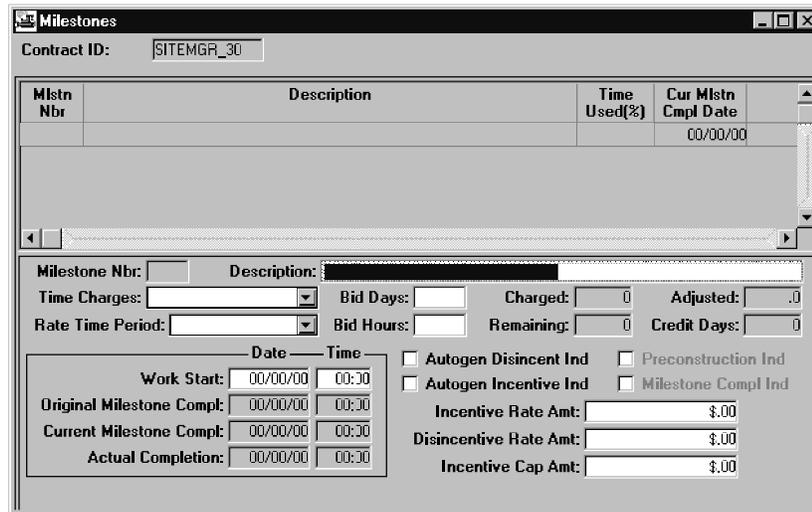


Figure 5-11 The Milestones Window

Field Name	Description
Milestone Nbr	System-generated sequential number of the milestone. This value can not be modified.
Description	Text description of the milestone.
Time Charges	How time charges are assessed for the Contract. Can be Available Work Days, Calendar Days, or Fixed Completion Date.
Bid Days	The original number of days bid for the milestone. This field is required if the Time Charges value is Available Work Days or Calendar Days and the Rate Time Period value is Days. A value can not be entered if the Time Charges value is Fixed Completion Date.
Charged	The total number of days charged to the milestone to date. Calculated by the system. Can be Available Work Days or Calendar Days, depending on the Time Charges entry. This field is empty if the Time Charges value is Fixed Completion Date.
Adjusted	Adjustment to the days charged for a milestone. This value is provided by the Change Order function.

Field Name	Description
Remaining	Total days remaining to complete the milestone work on time. This value is calculated by the system [(Bid Days + Adjusted Days) - Charged Days].
Credit Days	The total number of credit days recorded for the milestone to date. Calculated by the system.
Bid Hours	The original number of hours for the milestone. This field is required if the Time Charges value is Available Work Days or Calendar Days and the Rate Time Period value is Hours. The Bid Hours value must be evenly divisible by 12. A value can not be entered if the Time Charges value is Fixed Completion Date.
Original Milestone Compl Date	Original date the milestone is to be completed. If the Time Charges entry is Calendar Days, the system calculates this value (Work Start Date + Bid Days). This field is required if the Time Charges entry is Fixed Completion Date.
Original Milestone Compl Time	Original time the milestone is to be completed. Calculated from the Work Start Time if the Time Charges entry is Calendar Days (Work Start Time + Hours).
Current Milestone Compl Date	Current expected date of completion. Calculated by the system. The Change Order function enters this date when time adjustments for milestones are approved. For new milestones, this field defaults to the milestone's original completion date.
Current Milestone Compl Time	Current expected time of completion. Always calculated from the Work Start Time if the Time Charges entry is Available Work Days or Calendar Days (Work Start Time + Hours).
Actual Completion Date	The date the work was completed for the milestone. Must be greater than or equal to the Work Start Date.
Actual Completion Time	The time the work was completed for the milestone.

Field Name	Description
Work Start Date	The date the work is expected to begin and time is charged against the milestone. Must be less than or equal to the Current Milestone Completion Date.
Work Start Time	The time the work is expected to begin and time is charged against the milestone.
Incentive Rate Amt	Rate in dollars paid to the Contractor if the milestone work has progressed beyond expectations.
Disincentive Rate Amt	Rate in dollars the Contractor is to be penalized if the milestone work has not progressed to expectations.
Incentive Cap Amt	Maximum incentive amount allowed for this milestone.
Rate Time Period	The rate time period (days or hours) is used to calculate the incentive or disincentive for the milestone.
Autogen Disincent Ind	Indicates whether or not a disincentive is automatically generated for the milestone.
Autogen Incentive Ind	Indicates whether or not an Incentive is automatically generated for the milestone.
Preconstruction Ind	Indicates that the data was entered from a Pre-construction system and can not be modified.
Milestone Compl Ind	Indicates that the Milestone work is completed.

Table 5-12 The Milestones Window Fields Table

To add a Milestone with time charges of Available Work Days or Calendar Days:

1. On the **Contract Records** panel, double-click the **Milestones** icon. The Milestone window opens and a Contract select list is displayed.
2. In the **Contract ID** list box, scroll to and double-click the Contract. The Milestones for the selected Contract are displayed.
3. Click the **New** button. An empty row is inserted in the Milestone list box.
4. In the **Description** field, type a description of the Milestone.
5. In the **Time Charges** drop-down list, click the expand arrow and click Available Work Days or Calendar Days.
6. In the **Rate Time Period** drop-down list, click the expand arrow and click either Hours or Days to be used for the incentive or disincentive calculation.
7. If the Rate Time Period is days, in the **Bid Days** field, type the number of days bid for the milestone.
8. If the Rate Time Period is hours, in the **Bid Hours** field, type the number of hours bid for the milestone.
9. To generate a disincentive automatically, click the **Autogen Disincent Ind** check box (ON).
10. To generate an incentive automatically, click the **Autogen Incentive Ind** check box (ON).
11. In the **Incentive Rate Amt** field, type the rate in dollars a Contractor is to be compensated if work has progressed beyond expectations.
12. Press the **Tab** key.
13. In the **Disincentive Rate Amt** field, type the rate in dollars a Contractor is to be penalized if work has not progressed to expectations.
14. Press the **Tab** key.
15. In the **Incentive Cap Amt** field, type the maximum incentive amount for this milestone.
16. Click the **Save** button. The system enters the next sequential Milestone Number for the new Milestone.

To add a Milestone with a Fixed Completion Date:

1. On the **Contract Records** panel, double-click the **Milestones** icon. The Milestone window opens and a Contract select list is displayed.
2. In the **Contract ID** list box, scroll to and double-click the Contract. The Milestones for the selected Contract are displayed.
3. Click the **New** button. An empty row is inserted in the Milestone list box.
4. In the **Description** field, type a description of the Milestone.

5. In the **Time Charges** drop-down list, click the expand arrow and click Fixed Completion Date.
6. In the **Rate Time Period** drop-down list, click the expand arrow and click either Hours or Days to be used for the incentive or disincentive calculation.
7. In the **Original Milestone Compl Date** field, type the date the Milestone is to be completed.
8. In the **Original Milestone Compl Time** field, type the time the Milestone is to be completed.
9. To generate a disincentive automatically, click the **Autogen Disincent Ind** check box (ON).
10. To generate an incentive automatically, click the **Autogen Incentive Ind** check box (ON).
11. In the **Incentive Rate Amt** field, type the rate in dollars a Contractor is to be compensated if work has progressed beyond expectations.
12. Press the **Tab** key.
13. In the **Disincentive Rate Amt** field, type the rate in dollars a Contractor is to be penalized if work has not progressed to expectations. Press the **Tab** key.
14. In the **Incentive Cap Amt** field, type the maximum incentive amount for this milestone.
15. Click the **Save** button. The system enters the next sequential Milestone Number for the new Milestone.

Tip: The user can not enter values for Milestone Number, Current Milestone Completion Date, and Current Milestone Completion Time.

To record a Milestone Actual Completion date:

1. On the **Contract Records** panel, double-click the **Milestones** icon. The Milestone window opens and a Contract select list is displayed.
2. In the **Contract ID** list box, scroll to and double-click the Contract. The Milestones for the selected Contract are displayed.
3. In the **Milestone** list box, scroll to and click the milestone. Data for the selected Milestone is displayed in the fields below.
4. In the **Actual Completion Date** field, type the date of completion.
5. Press the **Tab** key.
6. In the **Actual Completion Time** field, type the time of completion.
7. Click the **Save** button.

To delete a Milestone:

1. On the **Contract Records** panel, double-click the **Milestones** icon. The Milestone window opens and a Contract select list is displayed.
2. In the **Contract ID** list box, scroll to and double-click the Contract. The Milestones for the selected Contract are displayed.
3. In the **Milestone** list box, scroll to and click the milestone. Data for the selected Milestone is displayed in the fields below.
4. Click the **Delete** button. The system asks the user to confirm the deletion.
5. Click **Yes**.
6. Click the **Save** button.

Tip: A Milestone can not be deleted if it has an associated record, such as a Change Order or an Estimate Adjustment, or if the Contract is checked out to the field.

5.6 Projects

The Projects window contains descriptions of the Contract Projects. Every Contract must have at least one Project. The Projects window folder tabs are described in the following table.

Description	The Description folder tab displays the Project description. The user can add, modify, and delete the Project data.
Counties	The Counties folder tab displays a list of available counties and a list of those associated with the selected Project. The user can add and remove counties to and from the Project.
Adjustment Indices	The Adjustment Indices folder tab displays a list of available price adjustment indices and a list of those associated with the selected Project. The user can add and remove price adjustment indices to and from the Project.

Table 5-13 The Projects Window Folder Tab Fields Table

Figure 5-12 The Project Description Window

To access the Project Description folder tab:

1. On the Contract Records panel, double-click the Projects icon. The Project window opens with the Description folder tab selected by default.

5.6.1 Project Description

The Project Description folder tab lets the user add, modify, and delete Projects. New Projects can be added while the Contract is in pending or active status. To add a Project to an active Contract, an authorized user may create the Project on the Project Description folder tab of the Project window. Before any items may be added to a new project, at least one category and one funding source must be associated to that project. A Project with dependent data, such as Categories or Items, can not be deleted. When a Contract has multiple Projects, the user must select the primary Project on the Contract Description folder tab.

Field Name	Description
PCN	Transportation agency-defined Project Control Number. This field is required.
Fed St Prj Nbr	The federal/state number for the Project. Must be unique within a Contract. Can not be modified after an estimate has been generated. This field is required.
Alt Prj ID	Alternate transportation agency-defined ID for the Project. Can not be modified after an estimate has been generated.

Field Name	Description
Auth Pay Limit	The Authorized Payment Limit is used to determine if a voucher will be processed. If the total payments exceed this amount, the voucher will not be processed. Leaving this field blank indicates that no cap exists for total payments. The Authorized Payment Limit can not be modified after an estimate has been generated.
Status	Indicates the current status of a Project (e.g., Complete, Construction, Active Construction, Awaiting Award).
Acct Prj Nbr	An accounting department-defined Project number. Can not be modified if an estimate has been generated.
Engr Pct	The engineering construction percentage represents the state or province's cost of managing a Project. This percentage of the total Project Item amounts can be used to compute the total Project estimated cost as follows: [total Project Item amount × (100 + Engr Pct)]
Description	Text description of the Project. This field is required. Two lines are provided.
Prj Type	Identifies the type of Project (e.g., Federal). This field is required.
Work Type	Transportation agency-defined code that identifies the major type of work being done in the Project (e.g., Grading, Widening, Overlay, Construction). This field is required.
Surface Type	Type of surface grading used in the Project (e.g., Asphalt).
Road Name	Name of the road where the Project work is done.
Route Nbr	Route number where the Project work is done.
Road System	Type of road system where the Project work is done (e.g., interstate, federal highway, state highway, or county highway).

Field Name	Description
Sect Nbr	Road section number where the Project work is done.
Location	Description of the physical location of the Project. This field is required. Two lines are provided.
Work Site	Identifies the landscape of the Project work site (e.g., Urban).
Beg Sta	Precisely defines the station number where the Project work begins.
Beg Termini	Precisely defines the termini where the Project work begins.
Latitude	The midpoint latitude of the Project location.
End Sta	Precisely defines the station number where the Project work ends.
End Termini	Precisely defines the termini where the Project work ends.
Longitude	The midpoint longitude of the Project location.
Complete	Indicates that the Project work is complete.
Release Retainage	Indicates that the Project Retainage is to be automatically released when the Project status is changed to complete.

Table 5-14 The Projects Description Folder Tab Fields Table

To add a Project to a Contract:

1. On the **Contract Records** panel, double-click the **Projects** icon. The Projects window opens.
2. To select a Contract, click the **Services** menu and click the **Choose Keys** choice. The Select Contract ID window opens.
3. In the **Contract ID** list box, scroll to and click the Contract.
4. Click **Ok**. The Project window opens with the selected Contract ID displayed in the Contract ID field.
5. In the **PCN** field, click the **Open** button, highlight the desired PCN and click **Ok**.

Projects

6. Press the **Tab** key.
7. In the **Fed St Prj Nbr** field, select the current entry and type the federal or state Project number.
8. Press the **Tab** key.
9. In the **Alt Prj ID** field, select the current entry and type an alternate ID.
10. Press the **Tab** key.
11. In the **Description** field, type a description of the Project. If necessary, tab to the next line and add to the description.
12. In the **Status** drop-down list, click the expand arrow and click the current status of the Project.
13. To indicate that the Project is complete, click the **Complete** check box (ON).
14. In the **Auth Pay Limit** field, select the current entry and type a limit value for payment.
15. To automatically release Retainage when the Project is completed, click the **Release Retainage** check box (ON).
16. In the **Acct Prj Nbr** field, select the current entry and type an accounting Project number.
17. In the **Prj Type** drop-down list, click the expand arrow to the right of the current selection and click the Project type.
18. In the **Work Type** drop-down list, click the expand arrow to the right of the current selection and click the work type.
19. In the **Surface Type** drop-down list, click the expand arrow to the right of the current selection and click the surface type.
20. In the **Route Nbr** field, select the current entry and type the affected route number.
21. Press the **Tab** key.
22. In the **Sect Nbr** field, select the current entry and type the affected section number.
23. In the **Road System** field, select the current entry and type the road system type.
24. In the **Road Name** field, select the current entry and type the name of the road affected by the Project.
25. In the **Location** field, type a description of the location. If necessary, tab to the next line and add to the description.
26. Press the **Tab** key.
27. In the **Engr Pct** field, select the current entry and type the percentage of the Project cost charged to the state or province.
28. In the **Urb/Rural** drop-down list, click the expand arrow and click Urban or Rural.

29. In the **Beg Sta** field, select the current entry and type the station where the work begins.
30. Press the **Tab** key.
31. In the **End Sta** field, select the current entry and type the station where the work ends.
32. Press the **Tab** key.
33. In the **Beg Termini** field, select the current entry and type the termini where the work begins.
34. Press the **Tab** key.
35. In the **End Termini** field, select the current entry and type the termini where the work ends.
36. Press the **Tab** key.
37. In the **Latitude** field, select the current entry and type the midpoint latitude of the job.
38. Press the **Tab** key.
39. In the **Longitude** field, select the current entry and type the midpoint longitude of the job.
40. Click the **Save** button.

To delete a Project:

1. On the **Contract Records** panel, double-click the **Projects** icon. The Projects window opens.
2. To select both a Contract and a Project, click the **Open** button. The Select Contract ID window opens.
3. In the **Contract ID** list box, scroll to and double-click the Contract. The Project List for the selected Contract is displayed.
4. In the **Project** list box, scroll to and click the Project.
5. Click **Ok**. The Projects window displays data for the selected Project.
6. Click the **Delete** button. The system asks the user to confirm the deletion.
7. Click **Yes**. When the Project is deleted, the corresponding Project counties and adjustment indices are also deleted.

Tip: If the selected Project has dependent data such as Categories or Items associated to it, the Project cannot be deleted.

5.6.2 Project Counties

The Counties folder tab lets the user add and remove counties to and from the Project. For every county included in the Project, the user must enter the percentage of the Project work to be done in the county. The percentages for all counties must add up to 100%.

Tip: To select the Counties folder tab, the user must open or create a Project record on the Description folder tab.

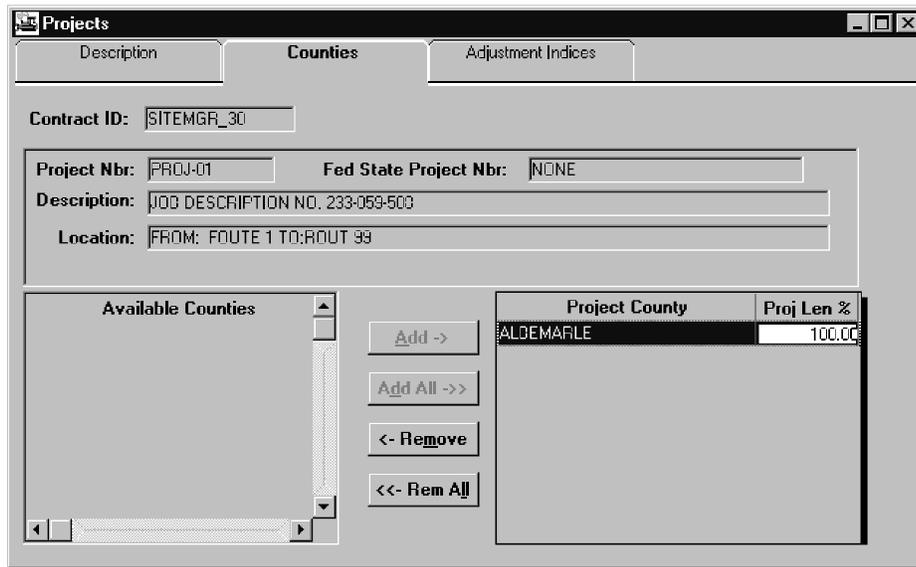


Figure 5-13 The Project Counties Folder Tab

Field Name	Description
Fed State Project Number	The federal or state Project Number for the Contract or Project.
PCN	Transportation agency-defined Project Control Number.
Description	Description of the Project.
Location	Description of the Project location.
Available Counties	Counties included in the Contract that have not been associated with this Project.
Project Counties	Counties that have been associated with this Project.
Proj Len %	Percentage of the total length of the work to be done in each county. This field is required for every Project county. The percentages for all counties must add up to 100%.

Table 5-15 The Project Counties Folder Tab Fields Table

Button	Description
Add	The Add button adds a county to the Project. If all available counties have been associated with the Project, this button is disabled.
Add All	The Add All button adds all the counties to the Project. If all available counties have been associated with the Project, this button is disabled.
Remove	The Remove button removes a county from the Project. There will be no message confirming the removal.
Remove All	The Remove All button removes all the counties from the Project. There will be no message confirming the removal.

Table 5-16 The Project Counties Folder Tab Buttons Table

To add a Project County:

1. On the **Contract Records** panel, double-click the **Projects** icon. The Projects window opens.
2. To select both a Contract and a Project, click the **Open** button. The Select Contract ID window opens.
3. In the **Contract ID** list box, scroll to and double-click the Contract. The Projects for the selected Contract are listed.
4. In the **Project** list box, scroll to and click the Project.
5. Click **Ok**. The Projects window opens with the Description folder tab displayed and data for the selected Project displayed in the fields.
6. Click the **Project Counties** folder tab.
7. In the **Available Counties** list box, scroll to and click the county or ctrl-click multiple counties. To deselect a county, click it again.
8. Click the **Add** button. The selection is added to the **Project County** list on the right.
9. In each **Proj Len %** field, type the percentage of the Project work to be done in the county.
10. Click the **Save** button.

5.6.3 Project Price Adjustment Indices

The Adjustment Indices folder tab lets the user add or delete a Price Adjustment Index to or from a Project. Price Adjustment Indices are used to adjust the cost of Items that are known to have fluctuating prices, such as gas and oil products. If the user adds an Item's Price Adjustment Index to a Project, the index will be used during estimate generation to calculate the cost of the Item.

Projects

Tip: To select the Adjustment Indices folder tab, the user must open or create a Project record on the Description folder tab.

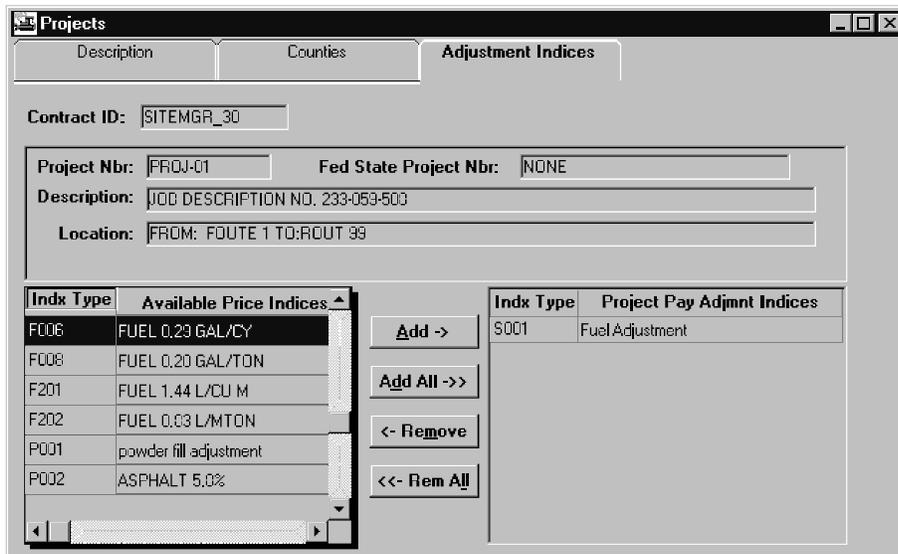


Figure 5-14 The Adjustment Indices Folder Tab

Field Name	Description
Fed State Project Number	Federal or state Project Number for the Project.
PCN	Transportation agency-defined Project Control Number.
Description	Description of the Project.
Location	Description of the Project location.
Indx Type	Identifying code of a Price Adjustment Index.
Available Price Indices	Price Adjustment Indices that can be associated with this Project.
Project Pay Adjmnt Indices	Price Adjustment Indices that have been selected for this Project.

Table 5-17 The Adjustment Indices Folder Tab Fields Table

Button	Description
Add	The Add button adds the selected price adjustment index to the Project. If all available indices have been associated with the Project, this button is disabled.
Add All	The Add All button adds all the price adjustment indices to the Project. If all available indices have been associated with the Project, this button is disabled.
Remove	The Remove button removes the price adjustment index from the Project. There will be no message confirming the removal. If no indices are associated with the Project, this button is disabled.
Remove All	The Remove All button removes all the price adjustment indices from the Project. There will be no message confirming the removal. If no indices are associated with the Project, this button is disabled.

Table 5-18 The Adjustment Indices Folder Tab Buttons Table

To add a Project Price Adjustment Index:

1. On the **Contract Records** panel, double-click the **Projects** icon. The Projects window opens.
2. To select both a Contract and a Project, click the **Open** button. The Select Contract ID window opens.
3. In the **Contract ID** list box, scroll to and double-click the Contract. The Projects for the selected Contract are listed.
4. In the **Project** list box, scroll to and click the Project.
5. Click **Ok**. The Projects window opens with the Description folder tab displayed and data for the selected Project displayed in the fields.
6. On the Projects window, click the **Adjustment Indices** folder tab.
7. In the **Available Price Indices** list box, scroll to and click the index or ctrl-click multiple indices. To deselect an index, click it again.
8. Click the **Add** button. The selection is added to the **Project Pay Adjmnt Indices** list on the right.
9. Click the **Save** button.

5.7 Categories

The Categories window lets the user add, modify, and delete Categories. Categories are typically used to group Items within a Project that are to be funded by the same source. To do this, the user can create a Category, associate Items with the Category, and select a funding source for the Category. Each Category in a Project can have a different funding source. A Category with Items associated to it can not be deleted.

The Categories window lists the Categories for the selected Contract and Project. The window displays detailed data for the selected Category below the list. After a Category is saved, the Project Control Number (PCN) and Category number can not be modified. The Project Number can not be modified after an estimate has been generated. When a new project is being added to a contract, at least one category must be associated to the new project.

Figure 5-15 The Category Window

Field Name	Description
Catg Nbr	Category number assigned to Items during Pre-construction. Items can be grouped in Categories, primarily for funding. This number must be unique within a Project. The Category Number can not be modified. Erroneously created Categories must be deleted.
PCN	Transportation agency-defined Project Control Number.
Fed St/Pr Prj Nbr	Federal, state, or province Project Number for the Category. If not entered, defaults to the Fed St/Pr Prj Nbr for the Project. The user can find, filter, and sort this field.

Field Name	Description
Desc	Description of the Category. Two lines are provided. The user can find, filter, and sort these fields.
Length	The length of road represented by this Category. If more than one Category contains work for the same portion of road, the length is split between them. The user can find, filter, and sort this field.
Width	The width of road represented by this Category. If more than one Category contains work for the same portion of road, the width is split between them. The user can find, filter, and sort this field.
Catg Wk Cls Type	Classification of work for a Category within a Project (e.g., Roadway Construction, Bridge Construction, Beautification, Furnished Materials, Utilities).
Bridge ID	Transportation agency-defined value that identifies a bridge or other structure. This field is empty if the Category does not represent structure work. The user can find, filter, and sort this field.
Engr Pct	Engineering construction percentage that represents the state or province's cost of managing a Category. This percentage of the total Category Item amounts can be used to compute the total Category estimated cost as follows: [total Category Item amount × (100 + Engr Pct)]. The user can find, filter, and sort this field.
Brdg Type	Type of bridge represented by this Category (e.g., Concrete Bridge, Steel Bridge, First Tier Overpass, Second Tier Overpass). This value can not be modified if the Bridge ID field is empty.
Fed Wrk Catg Type	Identifies the type of work for the Category (e.g., General, Roadway, Construction & Engineering, Alternates).
Bridge Span Nbr	Number of spans within the bridge structure. Protected if the Bridge ID field is empty.

Field Name	Description
Rd Sect Nbr	Road section number where the Category work is done. The user can find, filter, and sort this field.
Fed Wrk Cls Type	Class of construction used for the Category (e.g., General, Roadway, Construction & Engineering, Alternates).
Brdg Lth	Length of the structure represented by this Category. Protected if the Bridge ID field is empty.
Hwy Nbr	Highway number where the primary Category work is done. The user can find, filter, and sort this field.
Suppl Wrk Cls Type	Federal supplementary work class for a Category (e.g., Emergency Evacuation Routing, Rest Areas, Safety Improvements).
Brdg Wth	The width of the structure represented by this Category. Protected if the Bridge ID field is empty.
Hwy Type	Highway type where the primary Category work is done. Transportation agency-defined values such as interstate, state route, county route, and rest area.
Beg Sta Nbr	Precisely defines the station number where the Category work begins. The user can find, filter, and sort this field.
Beg Termini	Precisely defines the termini where the Category work begins. The user can find, filter, and sort this field.
End Sta Nbr	Precisely defines the station number where the Category work ends. The user can find, filter, and sort this field.
End Termini	Precisely defines the termini where the Category work ends.
Unit Nbr	Unit Number under which the Category is grouped. Categories can be grouped under a Unit Number for reporting purposes. The user can find, filter, and sort this field.

Field Name	Description
Desc	Description of the Unit Number under which the Category is grouped. Categories can be grouped under a Unit Number for reporting purposes. The user can find, filter, and sort this field.

Table 5-19 The Category Window Fields Table

To add a Category to a Project:

1. On the **Contract Records** panel, double-click the **Categories** icon. The Categories window opens.
2. To select both a Contract and a Project, click the **Open** button. The Select Contract Project window opens.
3. In the **Contract ID** list box, scroll to and double-click the Contract. The Projects for the selected Contract are listed.
4. In the **Project** list box, scroll to and click the Project.
5. Click **Ok**. The Categories window opens with data for the first Category on the list displayed in the fields below the list.
6. Click the **New** button.
7. In the **Catg Nbr** field, type the Category Number.
8. Press the **Tab** key.
9. To change the default Project Number in the **Fed St/Pr Prj Nbr** field, select the current entry and type the Project Number for the Category.
10. Press the **Tab** key.
11. In the **Desc** field, type a description of the Category.
12. Press the **Tab** key.
13. In the **Length** field, type the length of road represented by this Category for the selected Project.
14. Press the **Tab** key.
15. If necessary, in the second **Desc** field, add a second line to the description of the Category.
16. Press the **Tab** key.
17. In the **Width** field, type the width of road represented by this Category for the selected Project.
18. In the **Catg Wk Cls Type** drop-down list, click the expand arrow click the work class type.
19. Press the **Tab** key.

Categories

20. To identify a structure, in the **Bridge ID** field, type an agency-defined value to identify the structure.
21. Press the **Tab** key.
22. In the **Engr Pct** field, type the engineering construction percentage.
23. Press the **Tab** key.
24. If a structure has been entered in the **Bridge ID** field, in the **Brdg Type** drop-down list, click the expand arrow and click the bridge type.
25. In the **Fed Wrk Catg Type** drop-down list, click the expand and click the work category type.
26. Press the **Tab** key.
27. If a structure has been entered in the **Bridge ID** field, in the **Bridge Span Nbr** field, type the number of spans.
28. Press the **Tab** key.
29. In the **Rd Sect Nbr** field, type the road section number where construction will take place.
30. In the **Fed Wrk Cls Type** drop-down list, click the expand arrow and click the work class type.
31. Press the **Tab** key.
32. If a structure has been entered in the **Bridge ID** field, in the **Brdg Lth** field, type the length of the structure.
33. Press the **Tab** key.
34. In the **Hwy Nbr** field, type the primary work roadway number.
35. In the **Suppl Wrk Cls Type** drop-down list, click the expand arrow and click the federal supplementary work type for the Category.
36. If a structure has been entered in the **Bridge ID** field, in the **Brdg Wth** field, type the width of the structure.
37. In the **Hwy Type** drop-down list, click the expand arrow and click the type of the primary work roadway.
38. Press the **Tab** key.
39. In the **Beg Sta Nbr** field, type the station number where the work begins.
40. Press the **Tab** key.
41. In the **Beg Termini** field, type the termini where the work begins.
42. Press the **Tab** key.
43. To group this Category in a Unit with other Categories, in the **Unit Nbr** field, type the unit number.

44. Press the **Tab** key.
45. In the **End Sta Nbr** field, type the station number where the work ends.
46. Press the **Tab** key.
47. In the **End Termini** field, type the termini where the work ends.
48. Press the **Tab** key.
49. If a Unit number has been entered in the **Unit Nbr** field, in the **Desc** field, type a description of the Unit.
50. Click the **Save** button.

To delete a Category:

1. On the **Contract Records** panel, double-click the **Categories** icon. The Categories window opens.
2. To select both a Contract and a Project, click the Open button. The Select Contract Project window opens.
3. In the **Contract ID** list box, scroll to and double-click the Contract. The Projects for the selected Contract are listed.
4. In the **Project** list box, scroll to and click the Project.
5. Click **Ok**. The Categories window opens with data for the first Category on the list displayed in the fields below the list.
6. In the **Category** list box, scroll to and click the Category. The fields display data for the selected Category.

Tip: A Category can only be deleted if there are no Items associated to it.

5.8 Items

The Items window lets the user add, modify, and delete Items on the selected Contract and Project. The transportation agency defines standard Items and lists them on the Item Master. The user can add an Item to a Contract by selecting the Item from the Item Master. While the Contract is pending, this can be done on the Items window. **After the Contract is active, Items are added through Change Orders.** The Items window fields have specific display, protection, and calculation requirements depending on whether or not the data was added through a Change Order. These requirements are included in the field definitions.

Figure 5-16 The Items Window

Field Name	Description
Line Item Nbr	The Contract Line Item number that identifies each Item as it appears on the Contract. The user supplies this value for all Items added to the Contract after construction begins and all Contracts entered on-line. When entered, must be unique within the Contract. Once saved, this value can not be modified. Items added with wrong line Item numbers must be deleted and added again.
Project Nbr	Transportation agency-defined ID for the Project. There can be multiple Project Control Numbers per Contract. After a value is entered and saved, it can not be modified. Items added to wrong Projects must be deleted and added again.
Category Nbr	Category number under which Items are grouped for various reasons, primarily for funding. After a Category number is saved, it can not be modified. Items added to wrong Categories must be deleted and added again.

Field Name	Description
Status Type	<p>Code indicating the current status of an Item.</p> <p>Pending. Status defaults to pending when the Item is added.</p> <p>Active. When a Contract's status is changed to active, the status of all of the Contract's Items is changed to active. An active Item can not be deleted.</p> <p>Final. When a Final Item Quantity Change Order is approved, the status of all of the Change Order's Items is changed to Final.</p> <p>Audited. When an Item has been approved or accepted through an audit, the user must indicate its status as Audited.</p> <p>Complete. When a Contract's status is changed to complete, the status of all of the Contract's Items is changed to complete.</p>
Item Code	<p>Transportation agency-defined code used to identify an Item. This value is supplied by the Item Master list. The user can search this field. This value is protected from modification once the Contract status is changed from pending to active.</p>
Description	<p>Text description of the Item. This value is supplied by the Item Master list. An Item Description cannot be modified.</p>
Units Type	<p>The unit of measure for this Item. This value is supplied by the Item Master list. Cannot be modified.</p>
Unit Price	<p>Unit price of the Item; identified on the invoice and Contract documents. Protected from modification once the Contract status is changed from pending to active.</p>
Spec Year	<p>Specification year from the Item Master record.</p>

Field Name	Description
Bid Quantity	This is the original quantity of the line Item, as indicated on the proposal or Contract. Must be greater than zero. Must be equal to one, if the Item's unit of measure is Lump Sum. Protected from modification once the Contract status is changed from pending to active. Protected from entry if Item is being added through a Change Order. If the bid quantity is zero, the Item was added through a Change Order and its quantity is obtained through the Change Order Item quantity amount and not the Item bid amount.
Bid Amount	Total dollar amount of Item at bid. Protected; Bid Qty * Unit Price
Proposal Line Nbr	The line number that identifies the Item as it appears on the proposal. Protected; display only; entered by a Pre-construction system.
Specialty	Indicates if the line Item is a specialty Item. Specialty Items are excluded from the calculation to determine the amount of the Contract which can be sublet. Protected from modification if the Contract has an associated estimate, or if the Item has any of the following: An associated Change Order An associated dispute An associated plan discrepancy (through a Change Order) An associated stockpiled material
Major	Indicates that the Item is considered major rather than minor. Major Items can have different overrun limits and parameters for Change Order approvals. Protected from modification if the Contract has an associated estimate, or if the Item has any of the following: An associated Change Order An associated dispute An associated plan discrepancy (through Change Order) An associated stockpiled material

Field Name	Description
Critical	<p>Indicates that the Item is considered critical. Used for tracking the progress of Contracts with the ‘Critical Items Installed’ progress schedule type. Non-critical Items such as landscaping are not included in progress tracking.</p> <p>If the ‘Allow Critical Item Indicator Update’ System Operational Parameter is set to No., the indicator is protected from modification if the Contract has an associated estimate, or if the Item has any of the following:</p> <ul style="list-style-type: none"> An associated Change Order An associated dispute An associated plan discrepancy (through a Change Order) An associated stockpiled material An associated Subcontract <p>If the ‘Allow Critical Item Indicator Update’ System Operator Parameter is set to Yes, the indicator is available at all times until the Item has a Final status.</p>
Pay Plan Qty	<p>Indicates if the line Item is paid to plan quantity. If this indicator is ON, an in-box message indicating that the item has exceeded the notified quantity will be issued to the user who generated the estimate. Protected from modification if the Contract has an associated estimate, or if the Item has any of the following:</p> <ul style="list-style-type: none"> An associated Change Order An associated dispute An associated plan discrepancy (through a Change Order) An associated stockpiled material

Field Name	Description
Related Item	<p>Allows grouping of line Items (e.g., all traffic control Items or all Items for a structure) for reporting and funding purposes. To report Items together, the user may create a related Item code such as RPT1 = Report #1 and then develop a report which selects and groups these Items together. Similarly, to fund a group of Items the same but not within the same Category, the user may create a related Item code such as FND1 = Funding Source #1 and select those Items with this code in the funding process, thereby funding all these Items with the same source and participation percentages. Protected from modification if the Contract has an associated estimate, or if the Item has any of the following:</p> <p>An associated Change Order</p> <p>An associated dispute</p> <p>An associated plan discrepancy (through a Change Order)</p> <p>An associated stockpiled material</p>
Supplemental Description	User-entered description that is supplemental to the Item's description from the Item Master. Two lines are provided.
Material Discrepancy Adjustment	<p>When an authorized user adds contract items online in SiteManager, the item's adjustment flag will be set according to the settings in System Operational Parameters. This flag's checkbox will default to 'On' if system-wide discrepancy adjustments flag is checked on, and if the default calculation for all items flag is turned on. The default setting for the item may be changed at any time during the course of a contract. The item's checkbox will be disabled if the system setting for the discrepancy adjustments flag is checked off.</p>

Table 5-20 The Item Window Fields Table

To view or modify a Contract Line Item:

1. On the **Contract Records** panel, double-click the **Items** icon. The Items window opens.
2. To select a Contract, Project, and Contract Item, click the **Open** button. The **Select Contract ID** window opens.

3. In the **Contract ID** list box, scroll to and double-click the Contract. The Projects for the selected Contract are listed.
4. In the **Project** list box, scroll to and click the Project. The Contract Items for the selected Project are listed.
5. In the **Items** list box, scroll to and click the Item.
6. Click **Ok**. The Items window opens and displays data for the selected Item.
7. To change the Item's status, in the **Status Type** drop-down list, click the expand arrow to the right of the current selection and click the status type.
8. To save modifications, click the **Save** button.

Tip: A Contract Line Item can be deleted only if the Contract status is pending.

Tip: A supplemental description is required if the Require Supplemental Description indicator is turned on in an item's Master List entry.

To add an Item to a pending Contract:

1. On the **Contract Records** panel, double-click the **Items** icon. The Items window opens.
2. To select both a Contract and a Project, click the **Services** menu and click the **Choose Keys** choice. The **Select Contract ID** window opens.
3. In the **Contract ID** list box, scroll to and double-click the Contract. The Projects for the selected Contract are listed.
4. In the **Project** list box, scroll to and click the Project.
5. Click **Ok**. The Items window opens and displays data for the selected Item.
6. In the **Line Item Nbr** field, type a unique Contract Line Item to identify the Item on the Contract.
7. Press the **Tab** key.
8. To group this Item under a Category, in the **Category** drop-down list, click the expand arrow and click the Category.
9. In the **Item Code** field, perform a **Search**. After an Item is selected from the Item Master, the system fills in some of the data on the Items window.
10. To indicate that the Item is considered major, click the **Major** check box (ON).
11. To indicate that the Item is considered a specialty Item, click the **Specialty** check box (ON).
12. Press the **Tab** key.
13. In the **Unit Price** field, type the unit price of the Item.
14. Press the **Tab** key.

Items

15. In the **Bid Quantity** field, type the original quantity of the Line Item.
16. To group this Item with other Line Items, in the **Related Item** drop-down list, click the expand arrow and click the related Item code.
17. To indicate that the Item is considered critical, click the **Critical** check box (ON).
18. To indicate that the Item is paid to plan quantity, click the **Pay Plan Qty** check box (ON).
19. If desired, tab to the **Supplemental Description** field(s) and type a description.
20. Click the **Save** button.

Tip: Items that are not on the Item Master can not be added to a Contract through this window. To add an Item to an active Contract, refer to the Change Order topic.

5.9 Contract Funding

The Contract Funding window lets the user specify funding for the whole Contract, and for the Contract's Projects, Categories, and Line Items. The Contract Funding window lists the current funding specifications in the top datawindow. Data for the selected funding record is displayed in the bottom datawindow. If the user adds funding that does not match the funding selection on the Contract Description folder tab (i.e., Federal, State/Province, or Both), SiteManager automatically updates the Contract Description folder tab.

Active Contracts must be fully funded. For any part of the Contract funded by multiple sources, the combined funding must equal 100%. If more than one priority level is assigned, the combined funding for each priority level must equal 100%. In addition, each funding source can be assigned a Cap amount. When the highest priority funding source reaches its Cap amount, the funding source with the next highest priority continues the funding. If the lowest priority level fund has a Cap amount, the Cap amount will be ignored until a lower level fund is added.

When adding a Project to an existing active contract, the Project must have funding associated with it prior to creating the Change Order that adds Items to the Project. Change Orders cannot be approved without a funding source for the Project / Category the line items are associated with.

Related Item Codes

Line Items with the same Proposal Line Number or Related Item Code can be funded together. Related Item Codes can be created specifically to group Line Items (e.g., all traffic control items) for funding purposes. To do this, the user creates a Related Item Code in the system code tables and associates Line Items with this code on the Items window. The user can then select a funding source for Related Items on the Contract Funding window.

Tip: The funding sources are defined in the Contract Administration reference tables.

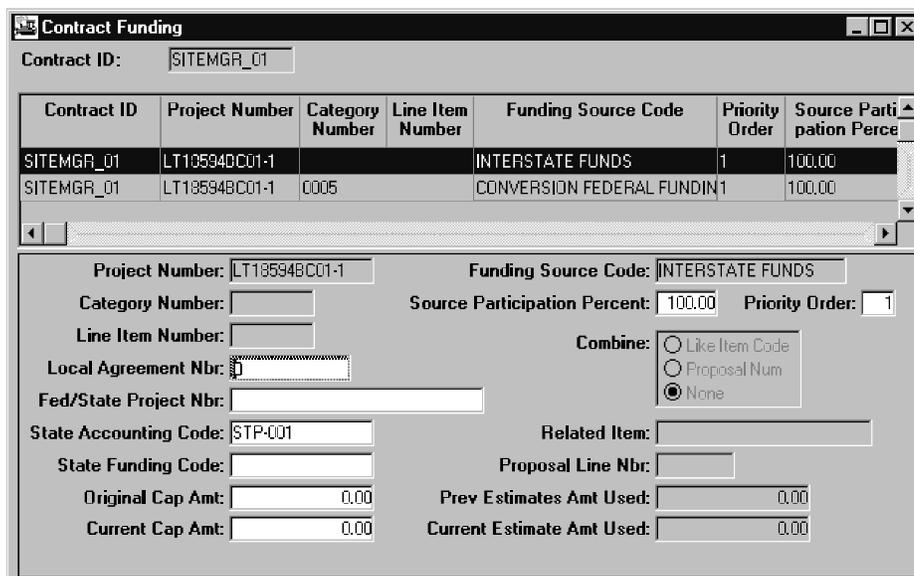


Figure 5-17 The Contract Funding Window

Field Name	Description
Funding Source Code	Identifies a particular source of funding (e.g., Federal grant, Federal fuel tax, State general fund). This is a required field. After a record is saved, this field is protected. To change the Funding Source Code, delete the record and add it again.
Project Number	Transportation agency-defined ID for the Project. Lists Projects within the Contract.
Fed/State Project Nbr	The federal or state Project Number for the Project.
Category Number	A grouping of Items assigned during Pre-construction. Items can be grouped within Categories for various reasons, primarily for funding. Lists Categories within the Contract and Project.
Priority Order	Indicates the order in which funds are appropriated to the Contract. The valid range is between 1 and 9.
Line Item Number	The Contract Line Item Number that identifies each Item as it appears on the Contract. All bid Line Item Numbers are assigned by the Pre-construction function. All Line Item Numbers added to the Contract after construction begins are assigned by the user.
Local Agreement Nbr	Number used to identify an agreement between a local authority and the transportation agency. The agreement defines the funding provided by the local authority with regard to a particular job.
Source Participation Percent	The percentage of the total amount in the Project/Category provided by the Funding Source. (For example, many federal aid Funding Sources provide 80% of the funding for the Project/Category.). This is a required field, a valid percentage is between 1 and 100.
Combine	This field indicates whether or not Items are combined by Related Item Code or Proposal Line Number for funding purposes. This is a required field. To combine no Items, the user selects None. To combine Items under the same funding source, the user selects either Like Item Code or Proposal Number. When Like Item Code is selected, an entry in the Related Item field is required. When Proposal Number is selected, an entry in the Proposal Line Nbr field is required.

Field Name	Description
Proposal Line Nbr	The line number that identifies the Item as it appears on the proposal. This is a required field when the user selects the Proposal Number radio button.
Related Item	Related Item codes allow grouping of Items (e.g., all traffic control Items) for reporting and funding purposes. To group Items for funding by the same source and percentage, if the Items are not in the same Category, the user creates a Related Item code and selects Items with this code in the funding process. To report Items together, the user creates a Related Item code, such as RPT1 = Report 1, and then creates a report that selects and groups these Items together. This is a required field when the user selects the Like Item Code radio button. The Related Item codes are defined in the system code tables.
State Funding Code	Transportation agency-defined code needed by financial system.
State Accounting Code	Transportation agency-defined code needed by financial system.
Original Cap Amt	Original funding limit.
Current Cap Amt	Current funding limit.
Total Amt Used	Amount used up to the last paid estimate.
Current Amt Used	Amount used in the current estimate.

Table 5-21 The Funding Source Window Fields Table

To add funding to a Contract:

1. On the **Contract Records** panel, double-click the **Contract Funding** icon. The Contract Select List opens.
2. In the **Contract ID** list box, scroll to and click the Contract.
3. Click **Ok**. The Contract Funding window opens.
4. Click the **New** button.

5. To select a Project Number, in the **Project Number** drop-down list, click the expand arrow and click the Project Number.
6. To select a Category Number, in the **Category Number** drop-down list, click the expand arrow and click the Category Number.
7. To select a Line Item Number, in the **Line Item Number** drop-down list, click the expand arrow and click the Line Item Number.
8. Press the **Tab** key.
9. In the **Local Agreement Nbr** field, type the number used to identify an agreement between a local authority and the transportation agency.
10. Press the **Tab** key.
11. In the **Fed/State Project Nbr** field, type the federal or state Project Number.
12. Press the **Tab** key.
13. In the **State Accounting Code** field, type the state accounting code.
14. Press the **Tab** key.
15. In the **State Funding Code** field, type the state funding code.
16. Press the **Tab** key.
17. In the **Original Cap Amt** field, type the original funding limit.
18. Press the **Tab** key.
19. In the **Current Cap Amt** field, type the current funding limit.
20. In the **Funding Source Code** drop-down list, click the expand arrow and click the source of funding (e.g., Federal grant, Federal fuel tax, State general fund).
21. In the **Source Participation Percent** field, type the percentage of the selected Project/Category/Line Item provided by the source.
22. Press the **Tab** key.
23. In the **Priority** field, type a value between one and nine that indicates the order in which the fund is appropriated to the Contract.
24. To apply funding to combined Line Items, in the **Combine** field, click the Like Item Code or Proposal Number radio button.
25. If Like Item Code is selected, tab to the **Related Item** field, click the expand arrow and click the Related Item Code.

Or

26. If Proposal Number is selected, tab to the **Proposal Line Nbr** field, click the expand arrow and click the Proposal Line Number.
27. Press the **Tab** key.
28. In the **Total Amt Used** field, type the amount of funding used, up to the last paid estimate.
29. Press the **Tab** key.
30. In the **Current Amt Used** field, type the amount of funding used in the current estimate.
31. Click the **Save** button.

To modify Contract funding:

1. On the **Contract Records** panel, double-click the **Contract Funding** icon. The Contract Select List opens.
2. In the **Contract ID** list box, scroll to and click the Contract.
3. Click **Ok**. The Contract Funding window opens.
4. In the **Contract Funding** list box, scroll to and click the funding record.
5. In the bottom datawindow, tab to the fields to be modified and enter data.
6. Click the **Save** button.

Tip: Active Contracts must be fully funded. When the user modifies funding, if any part of the Contract is not funded 100%, the system prompts the user to fully fund the Contract.

5.10 Contract Group Authority

5.10.1 Contract Group Authority Overview

Contract Group Authority works in conjunction with other security features to give users the authority to access and modify Contracts. The user's ability to add, modify, or delete Contract data also depends on the user group window access rights, the office level assignment, and whether or not the user is assigned to a group that has Office-wide Contract Access. This section includes a brief summary of Contract Authority and the following three security features:

- Window Access Rights
- Office-wide Contract Access
- Contract Authority (Contract-specific)

Window Access Rights

Window security is the highest security level in SiteManager. Window access rights determine the user's ability to view and modify SiteManager windows. To view or modify a specific type of window, the user must belong to a user group that has been assigned inquiry or update access rights for that window. Inquiry

access rights let the user view the window. Update access rights let the user add and delete data on a window. The states and provinces assign user groups and window access rights to meet their specific needs. To be given Contract Authority, a user must first be assigned to a user group with window access rights to the Contract windows.

Office-Wide Contract Access

Office-Wide Contract Access for a group gives a user the authority to view or modify any Contract delegated to the office to which the user is assigned when the user is logged on under that group. Most states and provinces have three office levels. In SiteManager, the office labels are user-defined. The Level 1 office is always the transportation agency headquarters.

- Level 1 Office (Central office or DOT)
- Level 2 Offices
- Level 3 Offices
- Level 4 Offices

Each user is assigned to an office level.

For example, a user is assigned to the Level 1 office and the user has office-wide contract access for the Project Manager group. When the user is logged on under the Project Manager group, the user can view, add, modify, or delete any Contract delegated to the user's state or province.

A user who is assigned to the Level 2 office and who has been assigned to the office-wide contract access Project Manager group can view, add, modify, or delete any Contract within the user's Level 2 office. A user must have at least Level 2 Office-Wide Contract Access to add or delete Contracts, Milestones, Projects, Categories, and Items.

5.10.2 Contract Authority Examples

Window security can give the user window access rights to Contract panels. Contract Authority can only give the user access to specific Contracts. The assignment of Office-Wide Contract Access groups to a user allows the user to access all the contracts administered by their respective office when the user is logged on under those groups. All states and provinces require a Project Manager and Project Engineer for all Contracts. To give a user the authority to view, modify, or add and delete Contract data, the following assignments are required:

To view Contract data, the user must

Belong to a user group with inquiry access rights to the Contract panels, and have one of the following:

Contract Authority and group access assignment specific to the Contract OR

- Office-Wide Access with group assignment

To modify Contract data, the user must

Belong to a user group with update access rights to the Contract panels, and have one of the following:

Contract Authority and group access assignment specific to the Contract OR

- Office-Wide Access with group assignment

To add or delete a Contract, the user must

- Belong to a user group with update access rights to the Contract panels
- Have at least Level 2 Office-Wide Contract Access
- Belong to the office that adminsters the Contract

Contract Authority Example 1

The state or province needs personnel authorized to view and modify all state or province-wide Contracts, add new Contracts on-line, and delete Contracts that are incorrectly built.

Step 1

Assign specific users to the Level 1 office.

Step 2

Create a user group, e.g. Contract Administrators, with window update access to all Contract windows.

Step 3

Assign Level 1 office users to the Contract Administrators user group with office-wide contract access.

To implement Example 1, the Contract Administrators user group would be assigned window access rights as stated—update access rights for all Contract windows except Daily Work Reports, which would be inquiry access only. Additionally, the user's assigned office would be Level 1. The user would be assigned to the Contract Administrator group and the office-wide check box would be checked ON. If a Contract Administrator attempts to open a Contract window, the window will first look at the user's window access rights. Since the user has window access rights, the window will next look at the user's Contract Access, and permit or deny access accordingly. In the case of the Daily Work Report window, the system would discover that the user has inquiry rights. The system would permit the user to view the Daily Work Report window but not to add, update, or delete a Daily Work Report.

Contract Authority Example 2

The state or province needs personnel authorized to view and modify all Level 2 office Contracts. These users would not be able to view or modify any Contracts not assigned to their office.

Step 1

Assign specific users to the Level 2 office.

Step 2

Create a user group, e.g., District Project Engineers, with window update access to all Contract windows except:

Windows relevant to an inspector's Daily Work Reports (inquiry only)

Daily Work Report approval window (inquiry only)

Step 3

Assign Level 2 office users to the District Project Engineers user group with office-wide contract access.

If a user in Example 2 needs to view or update a Contract out of the office's jurisdiction, the user will need Contract Authority for that Contract. Because the user group has window update access, the user would be able to modify any Contract he is assigned to through Contract Authority. The user would not be limited to view-only access for this Contract.

Contract Authority Example 3

The state or province needs Level 3 office personnel assigned as Daily Work Report Inspectors who can view and modify specific Contracts only.

Step 1

Assign users to the Level 3 office.

Step 2

Create a user group, e.g., Project Inspectors, with the following window access rights:

Inquiry access to specific Contract windows, such as those related to daily work Items and reporting.

Update access to windows relevant to an inspector's Daily Work Reports.

Step 3

Assign the Level 3 office users to the Project Inspectors user group.

Step 4

Assign Contract Authority for specific Contracts to individual Project Inspector users.

5.10.3 Contract Authority

The Contract Authority window displays the users, office level assignments, and group assignments for each individual user. When the Project Manager and Project Engineer are added to the Contract, the system adds a row for each user's group assignment to the Contract Authority window automatically. An authorized user can end Contract Authority for personnel no longer needed to work on the Contract.

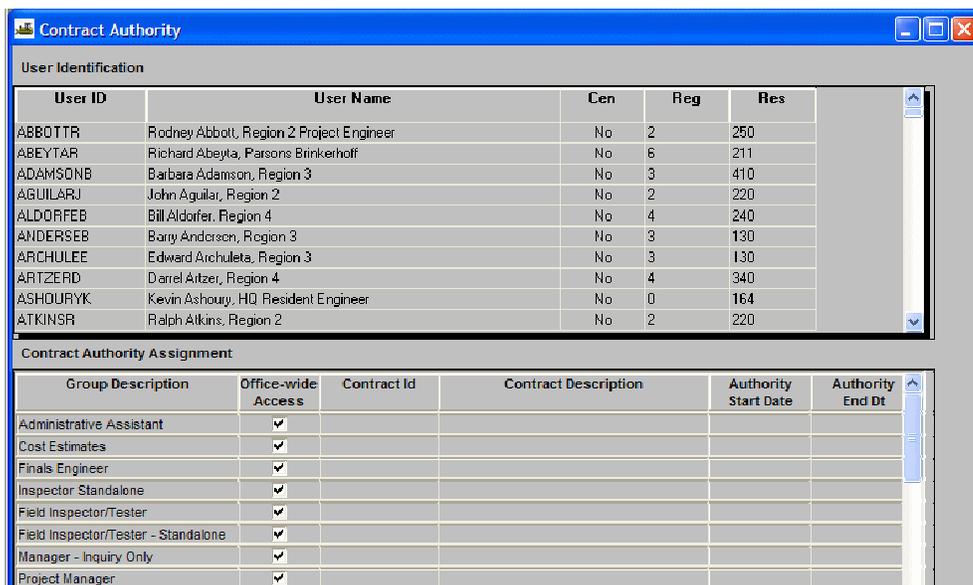


Figure 5-18 The Contract Authority Window

Field Name	Description
User ID	Transportation agency-defined ID of the user.
User Name	Name of the user with this ID.
Cen	Central Office Assignment. Indicates whether or not the user is assigned to the central office.
Reg	Region. The user's level 2 region assignment.
Res	Residency. The user's level 3 office assignment.
Group Description	Drop-down list containing all the current user's active group assignments. The administrator selects from among these groups to assign the user office-wide or specific contract authority. Upon selecting a new value, the office-wide access and contract ID fields will be cleared. Required field.
Office-wide Access	This field indicates whether the user has been assigned group access rights to all contracts within the user's assigned office. This field will be protected if the user already has current, non-end-dated, office-wide contract authority for the specified group. Once this field is selected, the contract field will be cleared and protected.
Contract ID	This field is required if Office-wide Access is not selected. Identifies the contract to which the user is assigned group access rights. The search capability for this field is limited to contracts on which the user is not currently assigned authority.
Contract Description	Protected field. Describes the contract to which the user is assigned group access rights.
Authority Start Date	The date Contract Authority begins for this user. The value defaults to the current date when a save is performed. This field will only be populated for contract-specific rows – it is not used for office-wide contract authority.

Field Name	Description
Authority End Date	The date Contract Authority ends for this user. The value defaults to the current date upon choosing End Contract Authority from the window's Services menu. The user has authority until the following day. This field will only be populated for contract-specific rows – it is not used for office-wide contract authority.

Table 5-22 The Contract Authority Window Fields Table

To grant a user Contract Authority:

1. On the **Contract Records** panel, double-click the **Contract Authority** icon. The Contract Authority window opens.
2. Select and click the desired user ID.
3. Click the **New** button. The **New Contract Group Authority** window opens.
4. In the **Group Description** field, click the down arrow to the right of the field, and select the desired group.
5. If desired, use the Search function to select a specific contract.
6. Click the **Save** button.

To end a user's Contract Authority:

1. On the **Contract Records** panel, double-click the **Contract Authority** icon. The Contract Authority window opens.
2. Select and click the desired user ID.
3. Select and click the desired group in the lower datawindow.
4. If the authority is specific to a contract, click the **Services** menu and select the **End Contract Authority** choice.
5. If the authority is office-wide access, click the **Delete** button.
6. Click the **Save** button.

5.11 Key Dates and Checklist Events

Key Dates and Checklist Events allow the user to establish, monitor, and maintain a series of key dates and scheduled events specifically related to the administration of the Contract. The messages and discrepancy tracking associated with Key Dates and Checklist Events enhance the ability of the user to administer the Contract. For more information, refer to the Key Dates, Checklist Scheduled Events, and Checklist Event Dates topics.

5.12 Progress Schedule

The Progress Schedule window lets the user add, modify, and view a Contract's Progress Schedule. The user selects a schedule type, enters time periods, and enters the percentage of Contract work to be completed in each time period. The time periods are measured in either days or dates, depending on the Time Charges Type of the Contract. If the 'Critical Path Method' schedule type is selected, only the final day or date can be tracked. If a schedule type is not selected, SiteManager does not track the Contract's progress.

A daily batch process calculates the actual percentages of the Contract time and work completed in each time period. If the work falls behind schedule by an amount that exceeds the Variance Percentage, the batch process notifies Contract personnel. The user can override the percentages calculated by the batch process and enter new values. If the user changes the schedule type, any time period with an actual percentage value is deleted and the user can enter new time periods.

The Progress Schedule window displays a column graph corresponding to the schedule data. The graph displays the actual percentage completed (amount and time) versus the schedule. The user can maximize the graph by clicking the maximize box and return it to original size by clicking the original box.

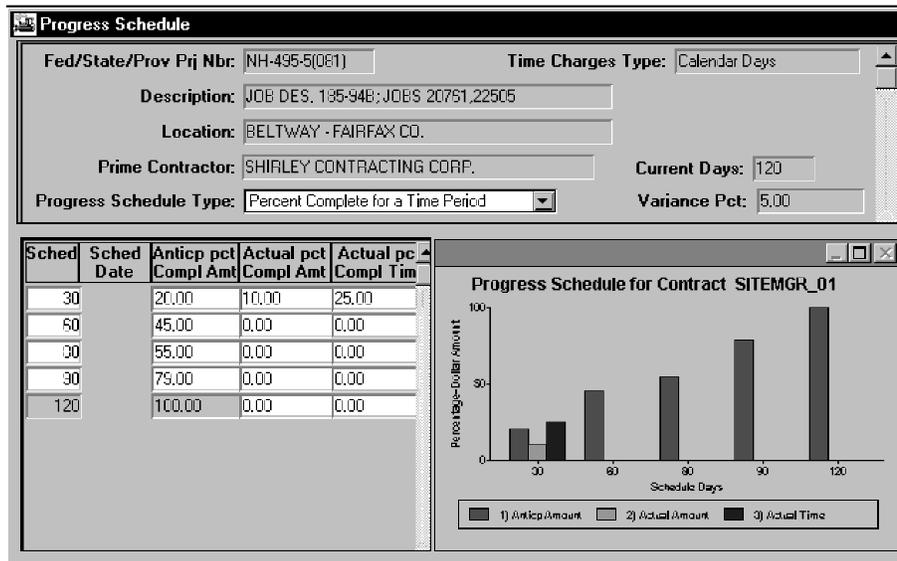


Figure 5-19 The Progress Schedule Window

Field Name	Description
Fed/State/Prov Prj Nbr	Federal, state, or province Project Number for the Contract, Project, or Category.
Current Days	The current number of days required to complete the Contract. This is the sum of the bid days and the total adjustment days for the Contract.
Description	Text description of the Contract.
Location	Text describing the physical location of the Contract work site.
Prime Contractor	Short name for the Prime Contractor for the Contract.
Time Charges Type	Indicates how time charges are assessed for the Contract (i.e., Available Work Days, Calendar Days, Fixed Completion Date).

Field Name	Description
Progress Schedule Type	Type of Progress Schedule used for the Contract (i.e., Percent Complete for a Time Period, Percent of Critical Items Complete for a Time Period, and Critical Path Method). If the Progress Schedule type is changed, the data is deleted and the user can enter a new Progress Schedule. If the selected schedule type is Critical Path Method, only the final day or date is tracked.
Sched Days/Date	Number of days in which the work is expected to be done or the date on which the work is expected to be done. Either Schedule Days or Schedule Date is displayed, depending on the time charges type of the Contract. If the time charges type is Available Work Days or Calendar Days, only days are tracked. If the time charges type is Fixed Completion Date, only dates are tracked.
Anticip Pct Compl Amt	Anticipated Percentage Completion of the Contract's scheduled dollar amount by the end of the scheduled period. The sum of the percentages for all time periods in the schedule must equal 100.
Actual Pct Compl Amt	Actual Percentage Completion of the Contract's dollar amount by the end of the scheduled period. A daily batch process calculates this value. The user can override this value. Actual percentages can not be entered for future days. The formula for computation of this field is as follows: <i>Earnings to date / Contract amount * 100</i>
Actual Pct Compl Time	Actual Percentage Completion of the Contract's scheduled time by the end of the scheduled period. A daily batch process calculates this value. The user can override this value. Actual percentages can not be entered for future days.

Table 5-23 The Progress Schedule Window Fields Table

To create a Progress Schedule:

1. On the **Contractor Management** panel, double-click the **Progress Schedule** icon. The Contract Select List opens.
2. In the **Contract ID** list box, scroll to and click the Contract.
3. Click **Ok**. The top datawindow displays information about the selected Contract.

4. In the **Progress Schedule Type** drop-down list, click the expand arrow and click the progress schedule type. (If 'Critical Path Method' is selected, the schedule can be saved at this point because only the final day or date can be tracked.)
5. Click the **New** button. An empty row is added to the schedule.
6. If the Time Charges Type is Fixed Completion Date, in the **Schedule Date** field, type the date on which the scheduled work is expected to be complete.

Or

7. If the Time Charges Type is Available Work Days or Calendar Days, in the **Schedule Days** field, type the number of days in which the scheduled work is expected to be complete.
8. Press the **Tab** key.
9. In the **Anticip Pct Compl Amount** field, type the percentage of the total Contract expected to be completed in this time period.
10. To add another time period, repeat Steps 5 through 9.
11. Click the **Save** button. The Progress Schedule graph is updated immediately.

Tip: A daily batch process calculates the actual percentages of the Contract time and work completed in each time period.

5.13 Permits

The Permits window lets the user add, modify, and delete Contract permit data. This is a record of the permits obtained for the Contract, including the permit type, the person who requested the permit, and the date the request was submitted. The top datawindow lists the permits for the selected Contract. The data for the selected record is displayed in the bottom datawindow.

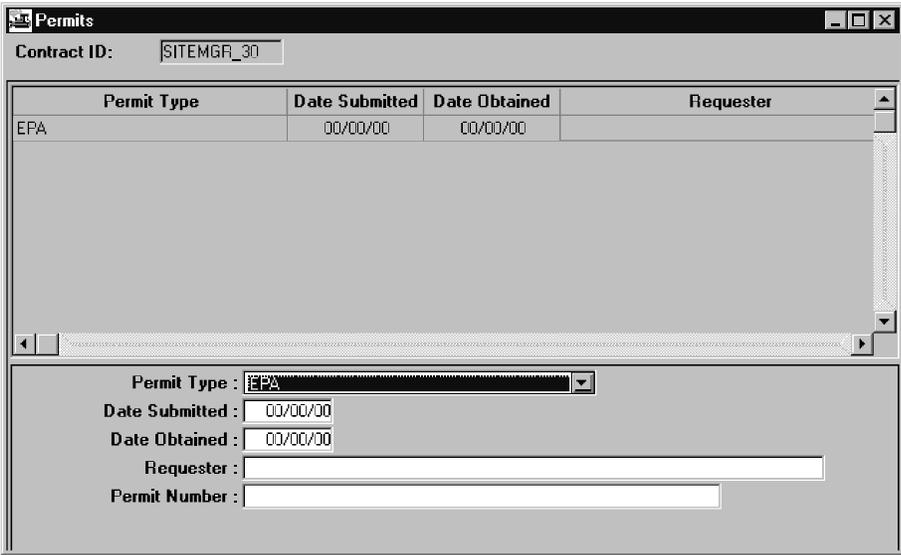


Figure 5-20 The Permits Window

Field Name	Description
Permit Type	Transportation agency-defined value for the type of permit (e.g., EPA, Water, Environmental, Hazardous Waste, and Electrical). This is a required field.
Date Submitted	The date the permit was requested. This is a required field. When entered, the date should not be in the future.
Date Obtained	The date the permit was received. When entered the date should not be in the future.
Requester	The person who requested the permit. This is a required field.
Permit Number	The number associated with the permit (if available).

Table 5-24 The Permits Window Fields Table

To add a Permit record to a Contract:

1. On the **Contract Records** panel, double-click the **Permits** icon. The Contract Select List opens.
2. In the **Contract ID** list box, scroll to and click the Contract.
3. Click **Ok**. The Permits window displays the permits for the selected Contract. Data for the selected permit is shown in the fields below the list.

4. Click the **New** button. An empty row is added to the Permit list.
5. In the **Permit Type** drop-down list, click the expand arrow and click the permit type.
6. Press the **Tab** key.
7. In the **Date Submitted** field, type the date the permit was requested.
8. Press the **Tab** key.
9. In the **Date Obtained** field, type the date the permit was obtained.
10. Press the **Tab** key.
11. In the **Requester** field, type the name of the person who requested the permit.
12. Press the **Tab** key.
13. In the **Permit Number** field, type the permit number.
14. Click the **Save** button.

5.14 Stockpiled Materials

The Stockpiled Materials window allows the user to select materials to stockpile for the Contract, and enter invoice data for the materials. The window also allows the user to replenish depleted material stockpiles, as needed. Contract Line Item data is displayed in the top datawindow and stockpiled material data in the bottom datawindow. This data is used during estimate generation to determine the amount to be paid for the Items installed. The estimate process enters the installed quantity and the amount paid to date on the Stockpiled Materials window. When the user closes out a stockpile, the estimate process also generates a line item adjustment which will retain any of the initial payment amount indicated on the stockpile that has not been recouped during usage of the stockpile. The system will automatically close a stockpiled material record when the remaining quantity reaches zero (0), or the user can manually close out the balance of a stockpiled material and transfer it to another contract.

Tip: The stockpiled material data is downloaded with the Basic Contract Data for viewing by the inspector while posting the Daily Work Reports. It can also be viewed in Contractor Payments.

The screenshot shows a software window titled "Stockpiled Materials". It contains several input fields and sections:

- Contract Information:** Contract ID, Project Nbr, Catg Nbr, Line Itm Nbr.
- Unit Information:** Units, Unit Price, Bid Quantity.
- Description Fields:** Item Description, Supp Description 1, Supp Description 2.
- Material Code Section:** Matl Code (with a dropdown arrow), Stockpiled Desc, Status (Open).
- Invoice Summary Table:**

Invoice Date	Invoice Number	Quantity	Units	Unit Price
04/16/02		.000		\$0.00000
- Conversion and Payment Fields:** Conv Factor, Conv Unit Price, Invoice Amt, Initial Invoice Payment, Matl Sn, Replenish Sn.
- Summary Fields:** Remaining Qty, Installed Qty To Date, Paid To Date.

Figure 5-21 The Stockpiled Materials Window

Field Name	Description
Contract ID	Transportation agency-defined ID for the Contract.
Project Nbr	Transportation agency-defined ID for the Project.
Catg Nbr	Category number assigned to the Line Item.
Line Item Nbr	Contract Line Item number that identifies each Item as it appears on the Contract.
Units	Description of the unit of measurement for the Line Item.
Unit Price	Unit price of the Line Item, as indicated on the proposal or Contract.
Bid Quantity	The quantity of the Line Item, as indicated on the proposal or Contract.
Item Description	Short text explanation of the Item.

Field Name	Description
Material Code	Transportation agency-defined ID for the material. The search lens displays the materials for the selected Contract Line Item. If the user selects a Material Code using the search lens, the Stockpiled Description is entered by the system. If the user types a description, the Material Code field is protected.
Stockpiled Description	Description of the material (or Item) being stockpiled. If the user selects a Material Code using the search lens, the Stockpiled Description is entered by the system. If the user types a description, the Material Code field is protected.
Status	The status of a stockpiled material is either Open, Active, or Closed. New materials are given open status. Materials included in an estimate are given active status. When a balance is closed out, the material is given closed status. Open and active materials can be modified unless an estimate is pending. Only open materials can be deleted.
Invoice Date	Date of the invoice.
Invoice Number	Identifies the invoice with which the material was received. This field is required.
Quantity	Number of units received. This field is required. When modified, this value can not be less than Installed Qty To Date.
Units	Description of the unit of measure for the material.
Unit Price	Unit price of the material; identified on the invoice. This field is required.
Conv Factor	The Conversion Factor is derived from the Contract Line Item information. It is the number of units of the material used in one unit of the Line Item. Defaults to 1.0 when the Stockpiled Description is typed by the user. The user can modify the default value.

Field Name	Description
Conv Unit Price	Unit price of the material multiplied by the Conversion Factor. This field is display only.
Invoice Amount	System-calculated product of the material Quantity and Unit Price.
Matl Sn	The stockpile material sequence number. Each time the user creates a stockpiled material record, it will receive a Material Sequence number. The first stockpile material record will be assigned the number one (1) for the Material Sequence number and subsequent Material Sequence numbers (for each newly created stockpile record) will increase by increments of one (1).
Replenish Sn	The replenishment sequence number. Each time the user replenishes a stockpile, SiteManager copies the existing stockpile information to a new stockpile record, which the user can modify. When the new stockpile record is saved, it is assigned the same Material Sequence Number as the original stockpile. The first replenishment stockpile will be assigned the number zero (0) for the Replenish Sequence number and subsequent Replenish Sequence numbers will increase by increments of one (1).
Initial Invoice Payment	The initial payment to be applied to the invoice upon generation of the first estimate for the stockpiled material. This value can not be more than the Invoice Amount.
Remaining Qty	The quantity of the material that remains. Calculated as the difference between Quantity and Installed Quantity To Date. May be zero if the Project is closed or the Contract is ended.
Installed Qty To Date	The quantity of the material installed to date. This value is calculated by the estimate generation process. This is a protected field.
Paid To Date	The amount that has been paid for the stockpiled material to date. This value is calculated by the estimate generation process. This is a protected field.

Field Name	Description
Supp Description 1	This field contains a textual description that is supplemental to the item's description and may be required by the transportation agency.
Supp Description 2	This field contains a second textual description that is supplemental to the item's description and may be required by the transportation agency.

Table 5-25 The Stockpiled Materials Window Fields Table

5.14.1 Before Adding Data

SiteManager calculates payments for stockpiled materials based on the quantity of material used per Contract Item. SiteManager does not automatically apply portions of the invoiced material quantity and payment amount to different Contract Items. This means that the user must decide how to allocate the invoiced amounts for a stockpiled material. Before adding invoice data to SiteManager, the user must determine the following:

- Which Items include the invoiced material
Which Contracts include these Items
How much of the total invoiced material quantity to allocate to each Item
- If an initial payment amount is due, which Contracts or Contract Items pay this amount

From these numbers, the user can calculate the values to enter in the Quantity field of the Stockpiled Materials window

Example

The user receives an invoice for 100,000 bolts. The total amount due on the bolts is \$8,000.00. These bolts are stockpiled for use on retaining walls and bridges. Contracts A, B, and C are active Contracts that include either retaining walls or bridges or both as line Items. The user splits the total invoiced quantity as follows:

	Contract A		Contract B	Contract C	
Item Description	Retaining Wall	Bridge	Retaining Wall	Retaining Wall	Bridge
Stockpiled Description	Bolt	Bolt	Bolt	Bolt	Bolt
Quantity	5,000	1,000	29,000	15,000	50,000
Invoice Amount	\$400.00	\$80.00	\$2,320.00	\$1,200.00	\$4,000.00

To add the invoice data, the user must enter the Quantity values per Contract Item. To do this, the user enters new invoice data on the Stockpiled Materials window five times, selecting the stockpiled material (i.e., Bolt) under a different Contract Item each time. The system calculates the Invoice Amount by multiplying the Quantity by the Unit Price of the material.

Conversion Factor

The conversion factor is derived from the Contract information. It indicates how many units of the stockpiled material are used in one unit of the Contract Line Item. If the user enters a non-contract material in the Stockpiled Description field, the conversion factor defaults to one (1.0). This value indicates that one unit of the material is used in each unit of the Item. The user should verify that the conversion factor is correct and, if not, enter the correct value. For example, if each linear foot of retaining wall requires three bolts, the user enters a conversion factor of three (3.0) for the bolts.

To view a stockpiled materials record:

1. On the **Contract Records** panel, double-click the **Stockpiled Materials** icon. The Stockpiled Materials window opens.
2. Click the **Open** button. The **Stockpiled Material Select** window opens.
3. In the **Contract ID** list box, scroll to and double-click the Contract.
4. In the **Stockpiled Materials** list box, scroll to and click the stockpiled material.
5. Click **Ok**. The Stockpiled Materials window displays data for the selected material.

To add stockpiled materials to a Contract:

1. Read and understand the **Before Adding Data** topic. Calculate the invoiced quantity to add to each Contract.
2. On the **Contract Records** panel, double-click the **Stockpiled Materials** icon. The Stockpiled Materials window opens.
3. Click the **Services** menu and click the **Choose Keys** choice.
4. In the **Contract ID** list box, scroll to and double-click the Contract.
5. In the **Contract Project** list box, scroll to and double-click the Project.
6. In the **Contract Item** list box, scroll to and click the Contract Line Item that uses the material.
7. Click **Ok**. The Stockpiled Materials window displays the Contract Line Item data.
8. In the **Material Code** field, perform a **Search** and select the material.

Or

9. In the **Stockpiled Description** field, type a description of the material.
10. In the **Invoice Date** field, type the date of the invoice.
11. Press the **Tab** key.
12. In the **Invoice Number** field, type the number of the invoice.
13. Press the **Tab** key.
14. In the **Quantity** field, type a previously determined quantity of the stockpiled material to be applied to this Item and this Contract.
15. In the **Units** drop-down list, click the expand arrow and click the unit of measurement in which the material is sold.
16. In the **Unit Price** field, type the price per unit from the invoice.
17. In the **Conv Factor** field, select the current value and type the conversion factor.
18. If the invoice requires only an initial payment, in the **Initial Invoice Payment** field, type the previously determined dollar amount of the initial payment to be applied to this Item and this Contract.
19. To add another stockpiled material to the selected Item, click the **New** button and repeat Steps 8 through 18.
20. Click the **Save** button.

To replenish a stockpiled material:

1. On the **Contract Records** panel, double-click the **Stockpiled Materials** icon. The Stockpiled Materials window opens.
2. Click the **Services** menu and click the **Choose Keys** choice.
3. In the **Contract ID** list box, scroll to and double-click the Contract.
4. In the **Contract Project** list box, scroll to and double-click the Project.
5. In the **Contract Item** list box, scroll to and click the Contract Line Item that uses the material.
6. Click **Ok**. The Stockpiled Materials window displays the Contract Line Item data.
7. Click the **Services** menu and click the **Replenish Material** choice. *SiteManager copies the existing stockpile information to a new stockpile record and assigns a new Replenish Sequence number.*
8. In the **Invoice Date** field, type the date of the invoice.
9. Press the **Tab** key.
10. In the **Invoice Number** field, type the number of the invoice.
11. Press the **Tab** key.
12. In the **Quantity** field, type the replenishment quantity of the stockpiled material.
13. If the invoice requires an initial payment, in the **Initial Invoice Payment** field, type the previously determined dollar amount of the initial payment to be applied to the current item and contract.
14. Click the **Save** button.

To close out the balance of a stockpiled material:

1. On the **Contract Records** panel, double-click the **Stockpiled Materials** icon. The Stockpiled Materials window opens.
2. Click the **Open** button. The **Stockpiled Material Select** window opens.
3. In the **Contract ID** list box, scroll to and double-click the Contract.
4. In the **Stockpiled Materials** list box, scroll to and click the stockpiled material.
5. Click **Ok**. The Stockpiled Materials window displays data for the selected material.
6. Click the **File** menu and click the **Print** choice to produce a copy of the data (or copy the data by hand).
7. Click the **Services** menu and click the **Close Out Balance** choice. Zero is entered in the Remaining Quantity field. The status changes to closed. All fields are protected.
8. Click the **Save** button.

To delete a stockpiled material from a Contract:

1. On the **Contract Records** panel, double-click the **Stockpiled Materials** icon. The Stockpiled Materials window opens.
2. Click the **Open** button. The **Stockpiled Material Select** window opens.
3. In the **Contract ID** list box, scroll to and double-click the Contract.
4. In the **Stockpiled Materials** list box, scroll to and click the stockpiled material.
5. Click **Ok**. The Stockpiled Materials window displays data for the selected material.
6. Click the **Delete** button. The system asks the user to confirm the deletion.
7. Click **Ok**.

Tip: The user can not delete a stockpiled material with active or closed status.

5.15 Construction Conferences

The Construction Conference window lets the user view and add construction conference data. The user typically adds conference data after the conference occurs. This window is used to record the conference title, date, attendees, and notes on the directives, issues, and major topics discussed at the conference. The system assigns a serial number to the conference record. If attendees are listed on the window, the conference record cannot be deleted.

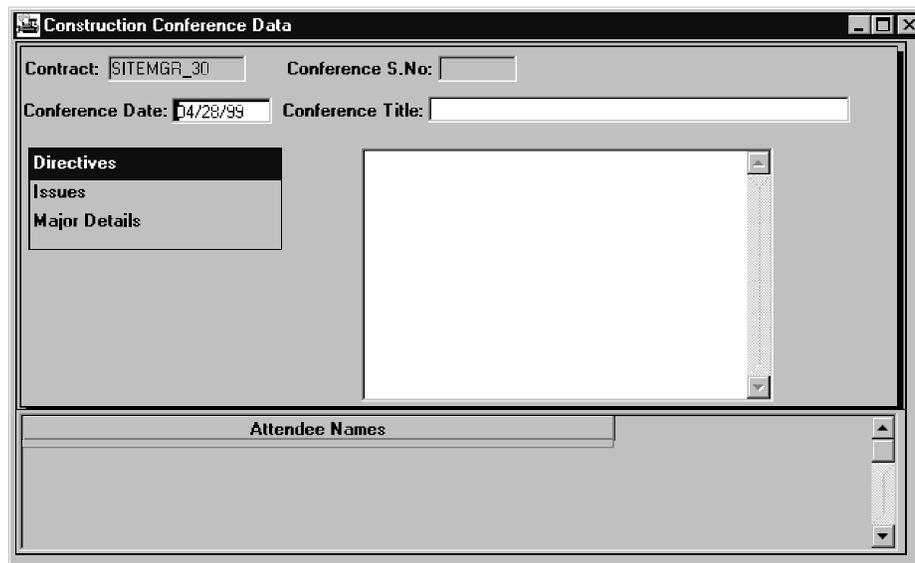


Figure 5-22 The Construction Conference Window

Field Name	Description
Contract	Transportation agency-defined ID of the selected Contract.
Conference S No	Conference Serial Number that the system gives to the conference when the user adds the conference.
Conference Date	Date that the conference was held. For new conference data, the value defaults to the system date. This date can not be in the future. The user can not modify the date after saving the conference data.
Conference Title	The title of the conference.
Major Topics	The topics of the conference. This is stored as a remark on the window. If this field has a check mark next to it, click the field once to see the remark in the box to the right.
Directives	The directives issued to the Contractor. This is stored as a remark on the window. If this field has a check mark next to it, click the field once to see the remark in the box to the right.
Issues	The issues that were discussed in the conference. This is stored as a remark on the window. If this field has a check mark next to it, click the field once to see the remark in the box to the right.
Attendee Names	The names and affiliations of the attendees.

Table 5-26 The Construction Conference Window Fields Table

To view a Construction Conference record:

1. On the **Contractor Management** panel, double-click the **Construction Conference** icon. The Construction Conference window opens.
2. Click the **Open** button. The Select Construction Conference window opens.
3. In the **Contract ID** list box, scroll to and double-click the Contract.
4. In the **Construction Conference** list box, scroll to and click the conference.
5. Click **Ok**. The Construction Conference window displays data.
6. To view **Major Topics**, **Directives**, or **Issues**, click the field and read the notes in the box to the right.

To add Construction Conference records:

- a. On the **Contractor Management** panel, double-click the **Construction Conference** icon. The Construction Conference window opens.
- b. Click the **Services** menu and click the **Choose Keys** choice. The Contract Select window opens.
- c. In the **Contract ID** list box, scroll to and click the Contract.
- d. Click **Ok**. The Construction Conference window displays the Contract ID.
- e. In the **Conference Date** field, type the date the conference was held.
- f. Press the **Tab** key.
- g. In the **Conference Title** field, type the title of the conference.
- h. Press the **Tab** key.
- i. To add a remark, click either the **Major Topics**, **Directives**, or **Issues** check box (ON), and type the remark.
- j. Click the **Save** button. The system enters the conference serial number.
- k. To add an attendee, click the **Attendee Names** datawindow and click the **New** button. An empty row is added to the datawindow.
- l. In the **Attendee Names** field, type the attendee's name.
- m. Click the **Save** button.
- n. To add another conference record for the same Contract, click the **New** button and repeat Steps 5 through 13.

5.16 Subcontracts

The Subcontract window lets the user add, modify, and delete Subcontracts and Subcontract data. The window also displays calculated DBE commitment amounts. The user can define both parent Subcontracts and lower level Subcontracts. The Subcontract window has two folder tabs as follows:

- Descriptions
- Items

5.16.1 Subcontract Descriptions

The user enters the Subcontractor and DBE commitments on the Description folder tab. To be selected as a Subcontractor, a contractor must first be entered as a vendor in the Vendor reference tables. When a new Subcontract is saved, the system adds the Subcontract amount to the total amount of uncompleted work for the Subcontractor. This value is displayed on the Vendors window in Reference Tables (CA). The Contract's Prime Contractor can not be selected as a Subcontractor on the Contract.

The percentage of the Subcontract that can be counted towards the Contract's DBE goal depends on the Subcontract's level, the Subcontractor's DBE status, and whether or not the Subcontract includes Items. A Parent Subcontract with a DBE Subcontractor and Items is always counted 100% towards the Contract's DBE goal. If the Subcontract has no Items (i.e., the Subcontractor is a supplier/hauler), the user enters the percentage counted towards the DBE goal. For nested Subcontracts, if a higher-level DBE Subcontract is counted 100% towards the DBE goal, the percentage of the nested Subcontract is always zero.

	Amounts	Pct of Total Sub'd	Pct of Total Contract
This SubContract:	.00	0	.00
This Original Commitment :	.00	0	.00
This Current Commitment:	.00	0	.00
<hr/>			
Total Original Commitment:	.00		.00
Total Current Commitment:	.00		.00
Total Allowable Max (non-spclty):	.00		.00
Total Towards Max (non-spclty):	.00		.00
Total Spclty Subcontracted:	.00		.00
Total Subcontracted:	.00		.00

Figure 5-23 The Subcontract Description Folder Tab

Field Name	Description
Contract ID	The transportation agency-defined ID for the Contract.
Subcont Nbr	User-entered number associated with each Subcontract. After saving, it can not be modified. This field is required.
Parent Subcont Nbr	Subcontract number for the parent Subcontract. After saving, it can not be modified. The user can search this field.
Subcontractor	Short name for the Subcontractor. The user can search this field. This field is required.
Subcont Type	Transportation agency-defined Subcontract Type. This field is required.
Work Type	Transportation agency-defined code of work class. A warning is displayed if the work class selected does not match one of the work classes associated to the Vendor. This field is required.
Approval Date	The date the approval was given for this Subcontract. Must be equal to or later than the Contract award date. If the sum of the Subcontractor's uncompleted work amount for all Contracts (including the total amount of the new Subcontract) exceeds the sum of the Subcontractor's work class qualification amounts, a warning message is displayed. <i>Note: If an Approval Date is not entered, SiteManager will not display the Subcontractor name in the Contractor drop down list on the Contractors and Record Work Items tabs in DWR.</i>
DBE Type	Transportation agency-defined code for the Subcontractor's DBE Type. Defaults to the DBE Type in the vendor reference table. A warning is displayed if the DBE Type selected does not match the DBE Type in the reference table.
Cert Type	System-defined code for whether the Subcontractor is certified as a DBE by the State or Federal government, or Both. This value is from the DBE Cert Type on the Vendor reference table, and can not be changed.

Field Name	Description
Supp/Hauler Ind	Indicates that the Subcontractor is a supplier or hauler only. If so, the Subcontract can not have Items. The user must enter the Total Subcontract Amount manually. This field can not be modified when there are existing Items on the Subcontract.
Pct Twrds DBE Goal	Percentage of the Subcontract amount counted towards the DBE commitment goal. For nested Subcontracts, if any higher-level DBE Subcontract has counted the Item towards the DBE goal, then this field defaults to 0% and can not be modified. For non-nested DBE Subcontracts with no line Items (i.e., a supplier or hauler), the field defaults to 100% and can be modified. For other non-nested DBE Subcontracts, the field defaults to 100% and can not be modified.
Fed Supp/Haul Fund Pct	Percentage of the Subcontract DBE commitment goal that is covered by federal funding for a DBE supplier or hauler. Defaults to 100 when Contract Funding is Federal. Defaults to zero when Contract Funding is State. Entered by the user when Contract Funding is Both.
Last Verified Payment Amt	Last verified amount that has been paid to the Subcontractor. Positive or negative values may be entered.
Total Verified Payment Amt	Total verified amount that has been paid to the Subcontractor. Must be a positive number.
Amounts	
This Subcontract Amount	Quantity multiplied by Subcontract line Item unit price for all Subcontract Items. Must be entered manually if a Subcontract without any Items is entered (i.e., a supplier or hauler).
This Original Commitment Amount	Original amount that the Prime Contractor commits to subcontract to the DBE. Can not be modified if this data is from a Pre-construction system, or if the Contract's status is active. Must be a positive number.
This Current Commitment Amount	For Subcontracts where DBE Type is indicated, this is calculated by multiplying the Subcontract Amount by the Pct Towards DBE Goal.

Field Name	Description
Total Original Commitment Amount	Sum of the original commitment amounts for all the DBE Subcontracts for a Contract.
Total Current commitment Amount	Sum of current commitment amounts for all the DBE Subcontracts for a Contract.
Total Allowable Max Amount (non-spcly)	Maximum allowed amount (excluding specialty Items) for all Subcontracts in a Contract. This is the Max Allowed Subcontract Percent in the System Operational Parameter table multiplied by the difference of the total Contract amount minus the specialty Items amount.
Total Towards Max Amount (non-spcly)	Current amount of all Subcontracts that contribute towards the Max Allowable Amount (non-spcly). This is the sum of all of the non-line Item Subcontract amounts plus all of the non-specialty Subcontract line Item amounts.
Total Spclty Subcontracted Amount	Sum of all specialty Item amounts for all of the Subcontracts in the Contract.
Total Subcontracted Amount	Sum of all parent Subcontract amounts for the Contract.
Pct of Total Subcontracted	
Percentage of Total Subcontracted This Subcontract	Percentage of the sum of the parent Subcontract amounts covered by this Subcontract.
Percentage of Total Subcontracted This Original Commitment	Percentage of the sum of the Subcontract original commitment amounts covered by this Subcontract.
Percentage of Total Subcontracted This Current Commitment	Percentage of the sum of the Subcontract current commitment amounts covered by this Subcontract current commitment amount.
Pct of Total Contract	

Field Name	Description
Percentage of Total Contract This Subcontract	Percentage of the Contract's current amount covered by this Subcontract's Total Amount.
Percentage of Total Contract This Original Commitment	Percentage of the Contract's current amount covered by this Subcontract's Original Commitment Amount.
Percentage of Total Contract This Current Commitment	Percentage of the Contract's current amount covered by this Subcontract's Current Commitment Amount.
Percentage of Total Contract Total Original Commitment	Percentage of the Contract's current amount covered by the Total Original Commitment Amount.
Percentage of Total Contract Total Current Commitment	Percentage of the Contract's current amount covered by the Total Current Commitment Amount.
Percentage of Total Contract Total Allowable Max (non-spclty)	Percentage of the Contract's current amount covered by the Total Allowable Max (non-spclty) Amount.
Percentage of Total Contract Total Towards Max (non-spclty)	Percentage of the Contract's current amount covered by the Total Towards Max (non-spclty) Amount.
Percentage of Total Contract Total Spclty Subcontracted	Percentage of the Contract's current amount covered by the Total Spclty Subcontracted Amount.
Percentage of Total Contract Total Subcontracted	Percentage of the Contract's current amount covered by the sum of all the parent Subcontract amounts.

Table 5-27 The Subcontract Description Folder Tab Fields Table

To add a Subcontract with a non-DBE Subcontractor:

1. On the **Contractor Management** panel, double-click the **Subcontracts** icon. The Subcontracts window opens.
2. Click the **Services** menu and click the **Choose Keys** choice. The Select Contract window opens.
3. In the **Contract ID** list box, scroll to and click the Contract.
4. Click **Ok**. The window displays the Contract ID.
5. In the **Subcontract Nbr** field, type the ID number of the new Subcontract.
6. Press the **Tab** key.
7. If this Subcontract is not a parent Subcontract, in the **Parent Subcontract Nbr** field, type the ID number of the parent Subcontract or perform a **Search**.
8. In the **Subcontractor** field, type the short name of the Subcontractor or perform a **Search**.
9. In the **Subcont Type** drop-down list, click the expand arrow and click the Subcontract type.
10. In the **Work Type** drop-down list, click the expand arrow to the right of the current selection and click the Work Class type. (If the selected Work Type does not match the reference table data, a message is displayed. To acknowledge the message, click **OK**.)
11. In the **Last Verified Payment Amt** field, type the last verified amount that was paid to the Subcontractor.
12. Click the **Save** button.

Tip: If the Subcontractor is not a supplier or hauler, Items must be added to the Subcontract.

To add a Subcontract with a DBE Subcontractor (non-hauler/supplier):

1. On the **Contractor Management** panel, double-click the **Subcontracts** icon. The Subcontracts window opens.
2. Click the **Services** menu and click the **Choose Keys** choice. The Select Contract window opens.
3. In the **Contract ID** list box, scroll to and click the Contract.
4. Click **Ok**. The window displays the Contract ID.
5. In the **Subcontract Nbr** field, type the ID number of the new Subcontract.
6. Press the **Tab** key.
7. If this Subcontract is not a parent Subcontract, in the **Parent Subcontract Nbr** field, type the ID number of the parent Subcontract or perform a **Search**.
8. In the **Subcontractor** field, type the short name of the Subcontractor or perform a **Search**. The DBE Type is entered on the Subcontracts window.

9. In the **Subcont Type** drop-down list, click the expand arrow and click the Subcontract type.
10. In the **Work Type** drop-down list, click the expand arrow to the right of the current selection and click the Work Class type. (If the selected Work Type does not match the reference table data, a message is displayed. To acknowledge the message, click **OK**.)
11. In the **Last Verified Payment Amt** field, type the last verified amount that was paid to the Subcontractor.
12. Click the **Save** button.

Tip: The DBE Type can be changed on the Subcontracts window. If the selected DBE Type does not match the reference table data, a message is displayed, but the change can be saved.

To add a Subcontract with a supplier or hauler as Subcontractor:

1. On the **Contractor Management** panel, double-click the **Subcontracts** icon. The Subcontracts window opens.
2. Click the **Services** menu and click the **Choose Keys** choice. The Select Contract window opens.
3. In the **Contract ID** list box, scroll to and click the Contract.
4. Click **Ok**. The window displays the Contract ID.
5. In the **Subcontract Nbr** field, type the ID number of the new Subcontract.
6. Press the **Tab** key.
7. If this Subcontract is not a parent Subcontract, in the **Parent Subcontract Nbr** field, type the ID number of the parent Subcontract or perform a **Search**.
8. Click the **Supp/Hauler Ind** check box (ON).
9. In the **Subcontractor** field, type the short name of the Subcontractor or perform a **Search**. If the Subcontractor is a DBE, the DBE Type is entered on the Subcontracts window.
10. In the **Subcont Type** drop-down list, click the expand arrow and click the Subcontract type.
11. In the **Work Type** drop-down list, click the expand arrow to the right of the current selection and click the Work Class type. (If the selected Work Type does not match the reference table data, a message is displayed. To acknowledge the message, click **OK**.)
12. In the **Last Verified Payment Amt** field, type the last verified amount that was paid to the Subcontractor.
13. In the **Pct Towards DBE Goal** field, type the percentage of the Subcontract amount that counts towards DBE goals.
14. If the Contract has both Federal and State funding, in the **Fed Supp/Haul Fund Pct** field, type the percentage of the Subcontract amount that is paid by Federal funds.
15. In the **This Subcontract Amount** field, type the dollar amount of the Subcontract.

16. Click the **Save** button.

Tip: Items can not be entered on a Subcontract with a supplier or hauler.

To approve a Subcontract:

1. On the **Contractor Management** panel, double-click the **Subcontracts** icon. The Subcontracts window opens.
2. Click the **Open** button. The Select Contract window opens.
3. In the **Contract ID** list box, scroll to and click the Contract.
4. Click **Ok**. The window displays a list of Subcontracts for the selected Contract.
5. In the **Subcontract** list box, scroll to and click the Subcontract.
6. Click **Ok**. The window displays data for the selected Subcontract.
7. In the **Approval Date** field, type the date approval was given for this Subcontract. (If the Subcontractor's total uncompleted work amount exceeds the Subcontractor's work class qualification amount, a message is displayed. To acknowledge the message, click **OK**.)
8. Click the **Save** button.

Tip: Enter the Subcontract Items (or Subcontract Amount for a supplier/hauler) before approving the Subcontract. Then the amount of the new Subcontract is included in the Subcontractor's Uncompleted Work Amount when the approval is saved. A message is displayed if the Subcontractor's work class qualification amount has been exceeded.

To delete a Subcontract:

1. On the **Contractor Management** panel, double-click the **Subcontracts** icon. The Subcontracts window opens.
2. Click the **Open** button. The Select Contract window opens.
3. In the **Contract ID** list box, scroll to and click the Contract.
4. Click **Ok**. The window displays a list of Subcontracts for the selected Contract.
5. In the **Subcontract** list box, scroll to and click the Subcontract.
6. Click **Ok**. The window displays data for the selected Subcontract.
7. Click the **Delete** button. The system asks the user to confirm the deletion.
8. Click **Yes**. When the Subcontract is deleted, the corresponding Items are also deleted.
9. Click the **Save** button.

Tip: A Subcontract can not be deleted if there is work recorded against it, or if the Subcontract was part of the Contract award.

5.16.2 Subcontract Items

The Subcontract Items folder tab lets the user add, modify, and delete Subcontract Items. If the Subcontractor is a hauler or supplier only, the Subcontract will not have Items. If the Subcontract has no Items, the user must enter the Subcontract Amount manually. If the Subcontract has Items, the Subcontract Amount is the sum of all of the Item amounts and the user cannot modify it.

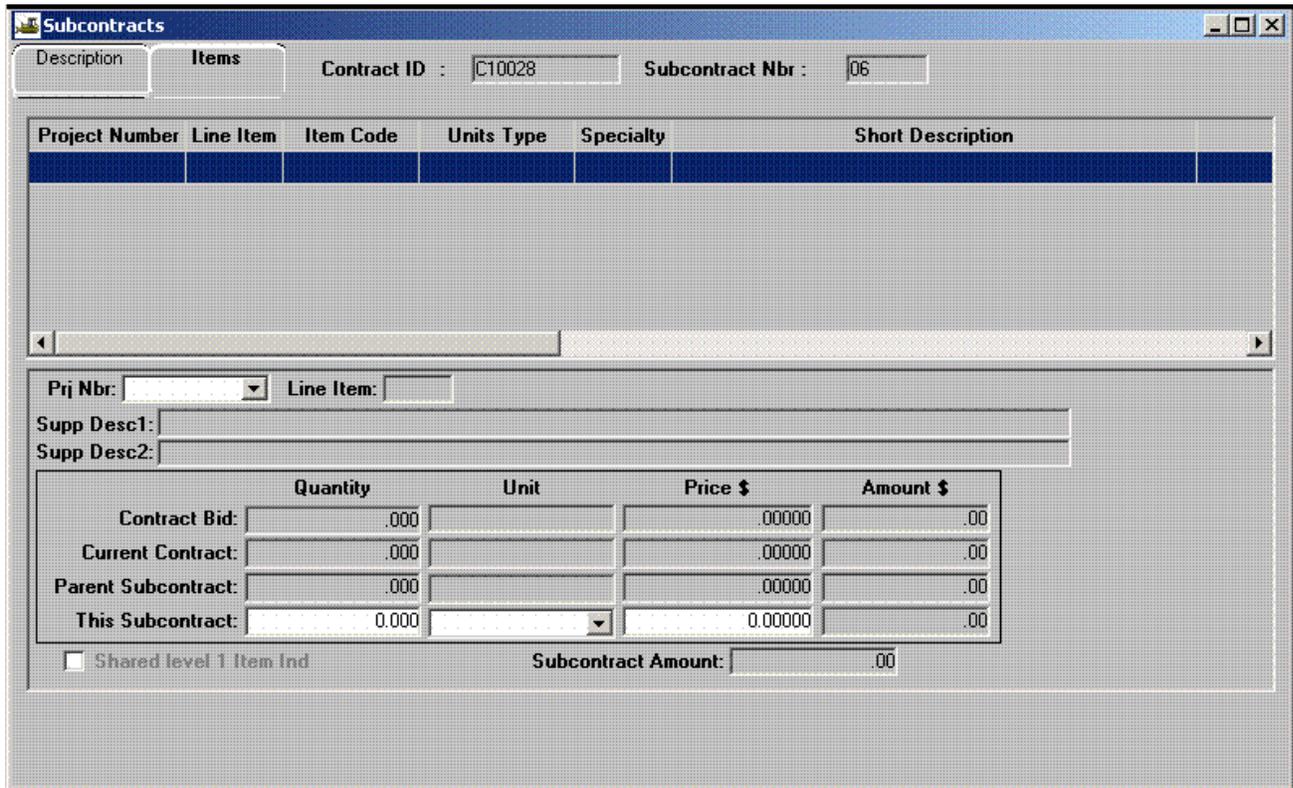


Figure 5-24 The Subcontract Items Window

Field Name	Description
Contract ID	Transportation agency-defined ID for the Contract
Subcontract Nbr	user-entered number associated with each Subcontract.
Project Number	Transportation agency-defined ID for the Project.
Line Item	Contract line Item to be worked on by the Subcontractor. The user can search this field.

Field Name	Description
Item Code	Transportation agency-defined code that identifies a particular Item.
Unit Type	Unit of measure for the Subcontract line Item
Specialty	Indicates if the line Item is a specialty Item. Specialty Items are excluded from the calculation to determine the maximum amount of the Contract that can be Subcontracted.
Short Description	Text description of the line Item.
Line Item Nbr	The user can search this field. For a parent Subcontract, the line Item is selected from the Contract Item list. For lower level Subcontracts, the line Item is selected from the parent Subcontract line Item drop-down list.
Supp Description 1	This field contains a textual description that is supplemental to the item’s description and may be required by the transportation agency.
Supp Description 2	This field contains a secondary textual description that is supplemental to the item’s description and may be required by the transportation agency.
Quantity	
Contract Bid Quantity	Contract bid quantity of the Contract line Item.
Current Contract Quantity	Current quantity of the Contract line Item including any Change Orders. Current Quantity is calculated by the sum of Bid Quantity and the net Change Order quantity
Parent Subcontract Quantity	The quantity of the line Item that is subcontracted to the parent Subcontract. If this is a parent Subcontract, this field is empty.

Field Name	Description
This Subcontract Quantity	The quantity of the line Item subcontracted to this Subcontract. The Subcontract Quantity must be a positive value. It must be less than or equal to the parent Subcontract Quantity for a lower level Subcontract. For a parent Subcontract, it must be less than or equal to the Current Quantity minus all other parent Subcontract quantities for this Item. The Quantity edit will not be performed if the unit on this Subcontract or the parent Subcontract is changed.
Unit	
Contract Bid Unit	Unit of the Item identified on the invoice.
Current Contract Unit	Unit of the Item identified on the invoice.
Parent Subcontract Unit	Unit of the parent Subcontract line Item.
This Subcontract Unit	Unit of this Subcontract line Item. Defaults to the unit on the Contract bid Item.
Price	
Contract Bid Price	Unit price of the Item identified on the invoice.
Current Contract Price	Unit price of the Item identified on the invoice
Parent Subcontract Price	Unit price of the Item for parent Subcontract. If this is a parent Subcontract, it will be blank.
This Subcontract Price	Unit price of the Item for this Subcontract.
Amount	

Field Name	Description
Contract Bid Amount	Total amount of the bid Item available for Subcontract. Contract Bid Amount Item amount is calculated by the Contract bid unit price of the Item multiplied by the Contract bid quantity.
Current Contract Amount	Total amount of the current Item available for Subcontract. Current Contract amount is calculated by the Contract bid unit price of the Item multiplied by the current Contract quantity.
Parent Subcontract Amount	Total amount of the Item available for lower level Subcontract. Parent Subcontract Item amount is calculated by multiplying the parent Subcontract unit price of the Item times the parent Subcontract quantity.
This Subcontract Amount	Total amount of the Subcontract Item. Sub Item amount is calculated by multiplying the Subcontract unit price of this Subcontract Item times the Subcontract quantity. If this amount exceeds the current Contract amount (for level one Subcontracts), or the parent Subcontract amount (for lower level Subcontracts), a warning will be displayed.
Subcontract Amount	The sum of quantity times unit price for all Subcontract Items, or the value entered directly if the Subcontract has no line Items (i.e., a supplier or hauler).
Shared Level 1 Item Ind	Indicates whether this Item is included on any other Level 1 Subcontract for this Contract.

Table 5-28 The Subcontract Item Folder Tab Fields Table

To add an Item to a Subcontract:

1. On the **Contractor Management** panel, double-click the **Subcontracts** icon. The Subcontracts window opens.
2. Click the **Open** button. The Select Contract window opens.
3. In the **Contract ID** list box, scroll to and click the Contract.
4. Click **Ok**. The window displays a list of Subcontracts.
5. In the **Subcontract** list box, scroll to and click the Subcontract.

6. Click **Ok**. The window displays data for the selected Subcontract.
7. Click the **Items** folder tab.
8. Click the **New** button.
9. In the **Line Item Nbr** field, perform a **Search**.
10. Press the **Tab** key.
11. In the **This Subcontract Quantity** field, type the quantity of the line Item subcontracted to this Subcontract.
12. To change the unit type for the Item, in the **This Subcontract Unit** drop-down list, click the expand arrow to the right of the current selection and click the unit type.
13. In the **This Subcontract Price** field, type the unit price of the line Item.
14. Click the **Save** button.

To delete an Item from a Subcontract:

1. On the **Contractor Management** panel, double-click the **Subcontracts** icon. The Subcontracts window opens.
2. Click the **Open** button. The Select Contract window opens.
3. In the **Contract ID** list box, scroll to and click the Contract.
4. Click **Ok**. The window displays a list of Subcontracts.
5. In the **Subcontract** list box, scroll to and click the Subcontract.
6. Click **Ok**. The window displays data for the selected Subcontract.
7. Click the **Items** folder tab.
8. In the **Items** list box, scroll to and click the Item.
9. Click the **Delete** button. The system asks the user to confirm the deletion.
10. Click **Yes**.
11. Click the **Save** button.

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6. Contract Administration - Maintenance

August 2005

6.1 Correspondence Log

The Correspondence Log window lets the user add and modify records of correspondence related to a specific Contract. A correspondence record describes a document that has been either sent or received by a user. The user can describe the document, identify related records and disputes, attach and view URLs, plug-ins and OLE documents, and forward the correspondence record to other users.

The screenshot shows a window titled "Correspondence Log" with the following fields:

- Contract ID: [Text Box]
- Contract Correspondence Serial Number: [Text Box]
- Correspondence Type: [Dropdown Menu]
- [Dropdown Menu] On: 00/00/00 Correspondence ID: [Text Box]
- Sent From: [Text Box]
- Sent To: [Text Box]
- Document Category: [Dropdown Menu]
- Document Location: [Text Box]
- Major Topics: [Text Box]
- Related Correspondence: [Text Box]
- Required Response Text: [Text Box]
- Dispute: [Text Box]

Figure 6-1 The Correspondence Log Window

Field Name	Description
Contract ID	Transportation agency-defined ID of the Contract associated with the correspondence.
Contract Correspondence Serial Number	System-generated serial number for the correspondence record.
Received/Sent	Field in which the user can select 'Received' or 'Sent' from a drop-down list to identify the correspondence as received or sent.

Field Name	Description
On	Date on which the correspondence was received or sent. This date cannot be in the future. Defaults to the system date.
Correspondence Type	Transportation agency-defined type of correspondence.
Correspondence ID	user-defined alphanumeric field to identify the correspondence (e.g., USRTE-47-8).
Sent From	Name of the person or agency sending the document.
Sent To	Name of the person or agency receiving the document.
Document Category	Transportation agency-defined category of correspondence used for retrieval and analysis.
Document Location	Physical location of the correspondence.
Major Topics	Major topics associated with the correspondence.
Related Correspondence	Serial number and type of a related correspondence record. The user can search this field.
Required Response Text	Description of the response to the correspondence that is required.
Dispute	ID of a dispute associated with this correspondence. This field can be searched.

Table 6-1 The Correspondence Log Window Fields Table

To add a correspondence record:

1. On the **Contract Records** panel, double-click the **Correspondence Log** icon.
2. Click the **Services** menu and click the **Choose Keys** choice. The Select Contract list opens.
3. In the **Select Contract** list box, scroll to and double-click the Contract.
4. In the **Document Type** drop-down list, click the expand arrow and click the document type.

5. In the **Received/Sent** drop-down list, click the expand arrow and click either 'Received' or 'Sent' to indicate the direction of the correspondence.
6. In the **Date** field, type the date the correspondence was received or sent.
7. In the **Correspondence ID** field, type the ID of the document.
8. In the **Sent From** field, type the name of the person or agency who sent the correspondence.
9. In the **Sent To** field, type the name of the person or agency to whom the correspondence was sent.
10. In the **Document Category** drop-down list, click the expand arrow and click the document category.
11. In the **Major Topics** field, type the major topics associated with the correspondence.
12. To assign related correspondence, in the **Related Correspondence** field, type the document serial number or perform a **Search**.
13. In the **Required Response Text** field, type the response required to the correspondence.
14. To assign a related dispute, in the **Dispute** field, type the Dispute ID, or perform a **Search**.
15. Click the **Save** button.

To forward a correspondence record:

1. On the **Contract Records** panel, double-click the **Correspondence Log** icon.
2. Click the **Open** button.
3. In the **Select Contract** list box, scroll to and double-click the Contract.
4. In the **Select Correspondence** list box, scroll to and double-click the document.
5. Click the **Services** menu and click the **Forward to** choice. The Forward to Selected User window opens.
6. In the **Forward to Selected User** list box, scroll to and click or shift-click the user(s).
7. Click **Ok**. SiteManager sends In-Box messages to the selected users and the window displays a 'Mail sent' message.
8. Click **Ok**.
9. Click the **Save** button.

6.2 Force Accounts

The purpose of a Force Account is to record unexpected and unplanned expenses. A new Force Account describes the work to be done and lists the equipment, labor, and materials to be used, including rates per hour and costs per unit. To expedite the work, the equipment, labor, and materials can be listed generically (e.g., Equipment 1 and Equipment 2) when the account is created. Force Accounts are created on the Force Accounts window, which has the following folder tabs:

- Equipment
- Labor
- Materials
- Summary

After the office creates the account, the inspector can download the Force Account data and begin recording the actual usage values (hours and quantities) in Daily Work Reports. The Force Account Summary folder tab calculates and displays the total actual Force Account costs. The user can adjust the actual costs by entering a lump sum adjustment to the whole account, and by entering adjustment percentages to the labor, equipment, and materials costs. To determine adjustment amounts, the user can create or view OLE, URL or plug-in attachments.

The system does not include Force Account data in estimates automatically. To pay for Force Account work, the user creates a Force Account Change Order for each Item (equipment, labor, and materials) used on the Force Account. After approval of the Change Order(s), the inspector reports the Item(s) as installed in Daily Work Reports. The installed Items are then included in estimates and paid for along with other Contract Items.

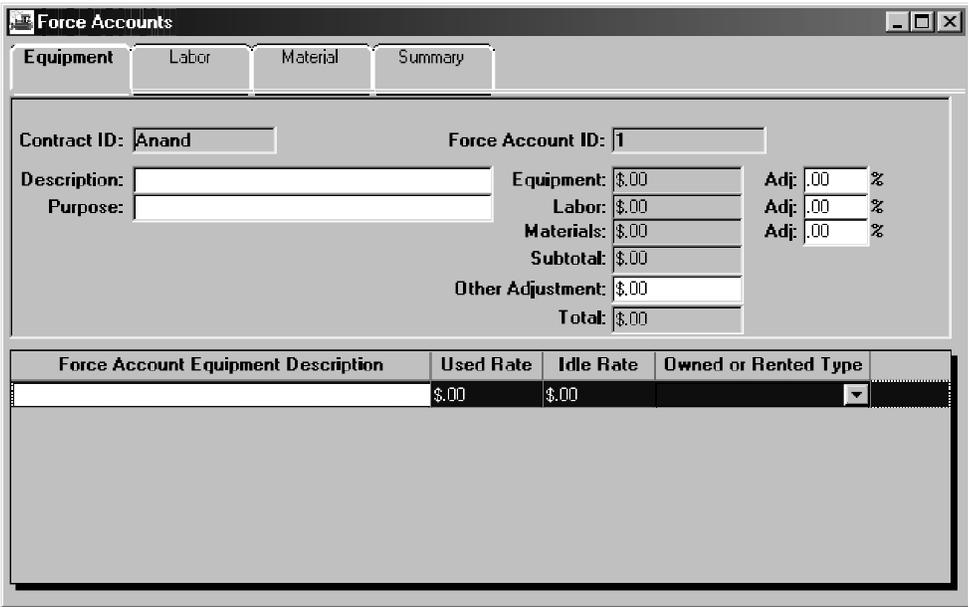


Figure 6-2 The Force Account Window

Field Name	Description
Contract ID	Transportation agency-defined ID for the Contract that includes the Force Account.
Force Acct	System-generated ID for the Force Account.
Description	Work the Force Account is intended to cover. This field is required.
Purpose	Reason for the Force Account. This field is required.
Equipment	Total amount of Force Account equipment costs derived from the usage reported by daily inspectors and the adjustment percentage. This field is display only.
Equipment Adj %	Percentage of the equipment cost added as an adjustment to the equipment cost. This is an optional field.
Labor	Total amount of Force Account labor costs derived from the usage reported by daily inspectors and the adjustment percentage. This field is display only.
Labor Adj %	Percentage of the labor cost added as an adjustment to the labor cost. This is an optional field.
Materials	Total amount for Force Account material costs derived from the daily usage reported by Inspectors and the adjustment percentage. This field is display only.
Materials Adj %	Percentage of the material cost added as an adjustment to the material cost. This is an optional field.
Subtotal	Sum of the equipment, labor, and material costs after adjustment. This field is display only.
Other Adjustment	Additional lump sum cost incurred by the Force Account. This is an optional field.

Field Name	Description
Total	Sum of the Subtotal and Other Adjustment amounts. This field is display only.

Table 6-2 The Force Account Window Header Fields Table

To add a Force Account to a Contract:

1. On the **Contract Records** panel, double-click the **Force Account** icon.
2. Click the **Services** menu and click the **Choose Keys** choice. The Select Contract list opens.
3. In the **Select Contract** list box, scroll to and click the Contract.
4. Click **Ok**.
5. In the **Description** field, type a description of the work covered by the Force Account.
6. Press the **Tab** key.
7. In the **Purpose** field, type the reason for the Force Account.
8. Click the **Save** button.
9. Click the bottom datawindow and click the **New** button.
10. In the **Force Account Equipment Description** field, type a description of the piece of equipment.
11. Press the **Tab** key.
12. In the **Used Rate** field, type the used rate for the equipment.
13. Press the **Tab** key.
14. In the **Idle Rate** field, type the idle rate for the equipment.
15. In the **Owned or Rented Type** drop-down list, click the expand arrow and click the ownership type.
16. Click the **Save** button.
17. Click the **Labor** folder tab.
18. Click the **New** button.
19. In the **Worker Name** field, type the worker's name.
20. In the **Class** drop-down list, click the expand arrow and click the job classification of the worker.
21. Press the **Tab** key.
22. In the **Regular Rate** field, type the regular hourly rate for the worker.

23. Press the **Tab** key.
24. In the **Fringe Rate** field, type the fringe hourly rate for the worker.
25. Press the **Tab** key.
26. In the **Overtime Rate** field, type the overtime hourly rate for the worker.
27. Click the **Save** button.
28. Click the **Material** folder tab.
29. Click the **New** button.
30. In the **Invoice ID** field, type the invoice for the material.
31. In the **Invoice Date** field, type the date of the invoice.
32. In the **Contract FA Material Description** field, type a description of the material.
33. Press the **Tab** key.
34. In the **Delivered Qty** field, type the invoice quantity of the delivered material.
35. In the **Units Type** drop-down list, click the expand arrow and click the unit of measure to be used in installing the material.
36. Press the **Tab** key.
37. In the **Unit Price** field, type the unit price of the material.
38. Click the **Save** button.

Tip: When a new Force Account is created, the equipment, labor, and materials can be listed generically so that the inspector can begin recording usage data in Daily Work Reports.

To adjust Force Account actual costs:

1. On the **Contract Records** panel, double-click the **Force Account** icon.
2. Click the **Open** button. The Force Account Select window opens. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the Contract. The window displays a list of Force Accounts.
4. In the **Force Account** list box, scroll to and click the Force Account.
5. Click **Ok**.
6. In the **Equipment Adj%** field, type the percentage of the equipment cost added as an adjustment to the equipment cost.
7. Press the **Tab** key.

8. In the **Labor Adj%** field, type the percentage of the labor cost added as an adjustment to the labor cost.
9. Press the **Tab** key.
10. In the **Materials Adj%** field, type the percentage of the materials cost added as an adjustment to the materials cost.
11. Press the **Tab** key.
12. In the **Other Adjustment** field, type the lump sum amount of other costs to be added to this Force Account.
13. Click the **Save** button.

To delete a Force Account:

1. On the **Contract Records** panel, double-click the **Force Account** icon.
2. Click the **Open** button. The Force Account Select window opens. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the Contract. The window displays a list of Force Accounts.
4. In the **Force Account** list box, scroll to and click the Force Account.
5. Click **Ok**.
6. Click the **Delete** button. The system asks the user to confirm the deletion.
7. Click **Yes**.
8. Click the **Save** button.

Tip: If any Items are paid for, the Force Account can not be deleted.

6.2.1 Force Account Equipment

The Force Account Equipment folder tab lets the user create and maintain a list of equipment and usage rates for the selected Force Account.

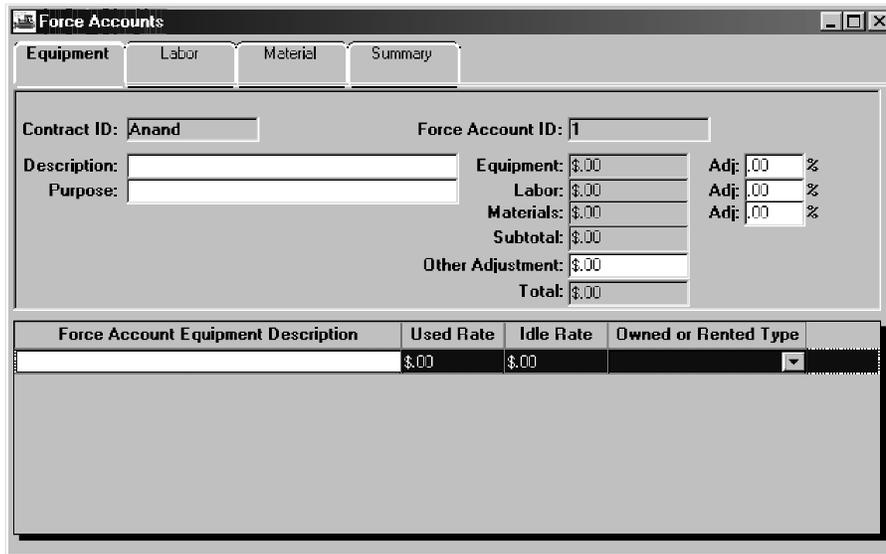


Figure 6-3 The Force Account Equipment Folder Tab

Field Name	Description
Force Account Equipment Description	Text description of the piece of equipment or a type of equipment. This is a required field. This field scrolls horizontally.
Used Rate	Used rate for the equipment. This is a required field.
Idle Rate	Idle rate for the equipment. This is a required field.
Owned or Rented Type	Indicates if the equipment is owned by the Contractor and kept on the site, owned by the Contractor and brought to the site, or rented. This is a required field.

Table 6-3 The Force Equipment Fields Table

To add equipment to a Force Account:

1. On the **Contract Records** panel, double-click the **Force Account** icon.
2. Click the **Open** button. The Force Account Select window opens. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the Contract. The window displays a list of Force Accounts.

4. In the **Force Account** list box, scroll to and click the Force Account. The Force Account window opens with the Equipment folder tab displayed.
5. Click the **New** button.
6. In the **Force Account Equipment Description** field, type a description of the piece of equipment.
7. Press the **Tab** key.
8. In the **Used Rate** field, type the used rate for the equipment.
9. Press the **Tab** key.
10. In the **Idle Rate** field, type the idle rate for the equipment.
11. In the **Owned or Rented Type** drop-down list, click the expand arrow and click the ownership type.
12. Click the **Save** button.

6.2.2 Force Account Labor

The Force Account Labor folder tab lets the user create and maintain a list of Force Account workers and their wage rates.

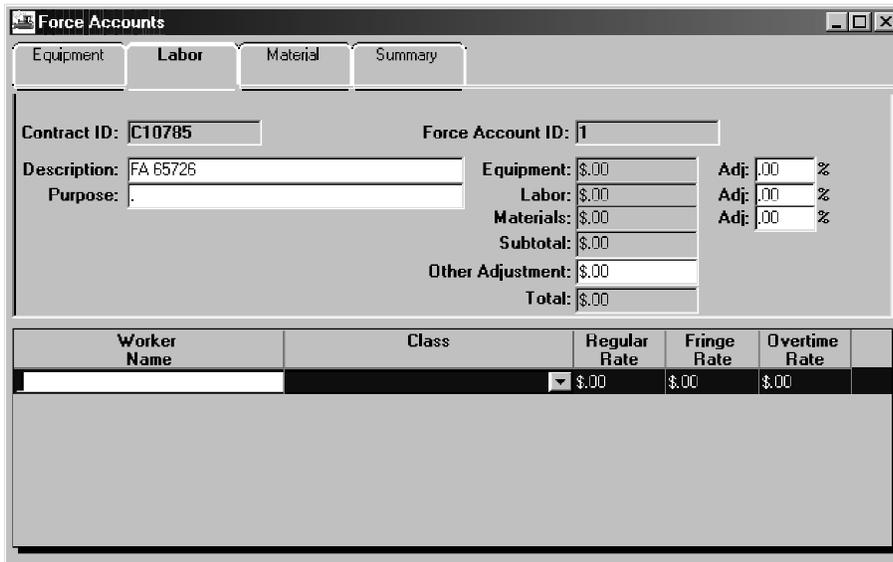


Figure 6-4 The Force Account Labor Folder Tab

Field Name	Description
Worker Name	Name of the worker for the Force Account work. This is a required field.
Class	Job classification of the worker for the Force Account work. The user can search this field. This is a required field.
Regular Rate	Regular hourly rate of the worker for the Force Account work. This is a required field.
Fringe Rate	Fringe hourly rate of the worker for the Force Account work. This is an optional field.
Overtime Rate	Overtime hourly rate of the worker for the Force Account work. This is a required field.

Table 6-4 The Force Account Labor Fields Table

To add a Force Account labor record:

1. On the **Contract Records** panel, double-click the **Force Account** icon.
2. Click the **Open** button. The Force Account Select window opens. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the Contract. The window displays a list of Force Accounts.
4. In the **Force Account** list box, scroll to and click the Force Account. The Force Account window opens with the Equipment folder tab displayed.
5. Click the **Labor** folder tab.
6. Click the **New** button.
7. In the **Worker Name** field, type the worker's name.
8. In the **Class** drop-down list, click the expand arrow and click the job classification of the worker.
9. Press the **Tab** key.
10. In the **Regular Rate** field, type the regular hourly rate for the worker.
11. Press the **Tab** key.

Force Accounts

- 12. In the **Fringe Rate** field, type the fringe hourly rate for the worker.
- 13. Press the **Tab** key.
- 14. In the **Overtime Rate** field, type the overtime hourly rate for the worker.
- 15. Click the **Save** button.

6.2.3 Force Account Materials

The Force Account Material folder tab lets the user create and maintain a list of Force Account materials and related invoice quantities and costs.

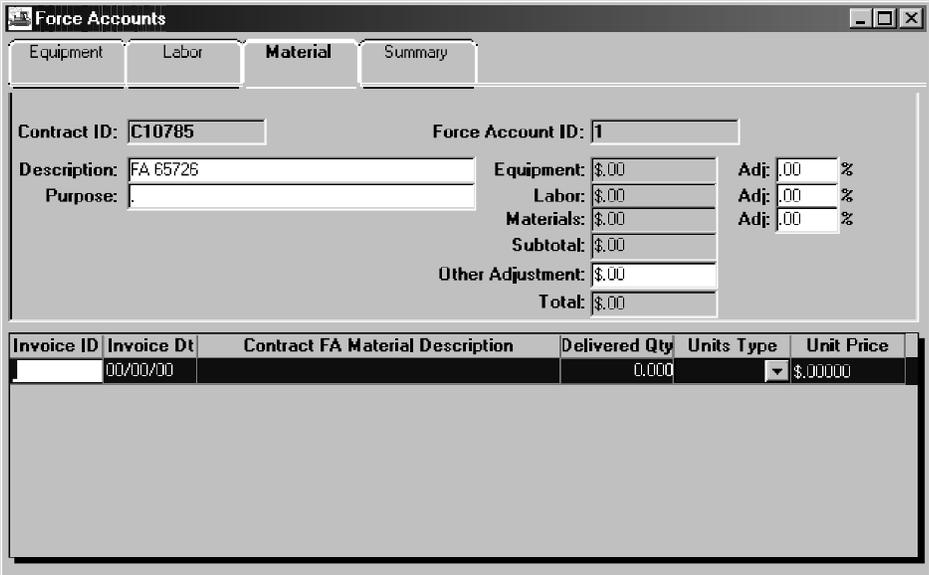


Figure 6-5 The Force Account Materials Folder Tab

Field Name	Description
Invoice ID	Invoice received with the material used for the Force Account. This is an optional field.
Invoice Dt	Date of the invoice received with the material used for the Force Account. This is an optional field.
Contract FA Material Description	Description of the material used for the Force Account. This is a required field.
Delivered Qty	Invoiced quantity of the delivered material used for the Force Account. This is a required field.

Field Name	Description
Units Type	Unit of measurement of the material used for the Force Account. This is a required field.
Unit Price	Unit price of the material used for the Force Account. This is a required field.

Table 6-5 The Force Account Materials Fields Table

To add Force Account materials:

1. On the **Contract Records** panel, double-click the **Force Account** icon.
2. Click the **Open** button. The Force Account Select window opens. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the Contract. The window displays a list of Force Accounts.
4. In the **Force Account** list box, scroll to and click the Force Account. The Force Account window opens with the Equipment folder tab displayed.
5. Click the **Material** folder tab.
6. Click the **New** button.
7. In the **Invoice ID** field, type the invoice for the material.
8. In the **Invoice Date** field, type the date of the invoice.
9. In the **Contract FA Material Description** field, type a description of the material.
10. Press the **Tab** key.
11. In the **Delivered Qty** field, type the invoice quantity of the delivered material.
12. In the **Units Type** drop-down list, click the expand arrow and click the unit of measure to be used in installing the material.
13. Press the **Tab** key.
14. In the **Unit Price** field, type the unit price of the material.
15. Click the **Save** button.

6.2.4 Force Account Summary

The Force Account Summary folder tab calculates and displays the total actual cost of the Force Account and the actual costs per type and per day. This is a view-only window. The total actual costs are derived from the hours and quantities reported on Daily Work Reports. The user can access the Daily Work Reports from this window.

Daily ID	Labor	Fringe	Equipment	Material	Total
00/00/0000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Daily ID Totals:	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Daily ID Adjustments:	\$0.00		\$0.00	\$0.00	\$0.00
			Force Account Adjustment:		\$0.00
			Total Cost:		\$0.00

The Force Account Summary Folder Tab

Figure 6-6 The Force Account Summary Folder Tab

Field Name	Description
Daily ID	Date and User ID of the Daily Work Report that includes the Force Account information.
Labor Costs	Accumulated amount of regular and overtime labor costs for the Force Account.
Fringe Costs	Accumulated amount of regular and overtime fringe labor costs for the Force Account.
Equipment Costs	Accumulated amount of used and idle equipment costs for the Force Account.
Material Costs	Accumulated amount of material costs for the Force Account.

Field Name	Description
Total Costs	Total labor, fringe, equipment, and material costs on one Daily ID for the Force Account.
Daily ID Totals	Total labor, fringe, equipment, and material costs on all Daily IDs for the Force Account.
Daily ID Adjustments	Adjusted labor, equipment, and material costs computed with the adjustment percentage entered for each. The Total Daily ID Adjustment is the total of the adjusted labor, equipment, and material costs for the Force Account.
Force Account Adjustment	Additional lump sum cost adjustment to the Force Account.
Total Cost	Sum of the Daily ID Totals, Total Daily ID Adjustments, and Force Account Adjustment for the Force Account.

Table 6-6 The Force Account Summary Fields Table

To view a Daily Work Report related to a Force Account:

1. On the **Contract Records** panel, double-click the **Force Account** icon.
2. Click the **Open** button. The Force Account Select window opens. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the Contract. The window displays a list of Force Accounts.
4. In the **Force Account** list box, scroll to and click the Force Account.
5. Click **Ok**.
6. Click the **Summary** folder tab.
7. In the **Daily Work Report** list box, scroll to and click the Daily Work Report.
8. Click the **Services** menu and click the **Daily Work Report** choice.
9. Click the **Close** button to return to the Force Accounts window.

6.3 Design Evaluation

The Design Evaluation window lets the user rate Contract designs by design category. The user can add, modify, or delete a Design Evaluation. The Contract can be evaluated for any of the design categories in the system. Only one evaluation can be made for a design category per evaluator. The numeric rating is required.

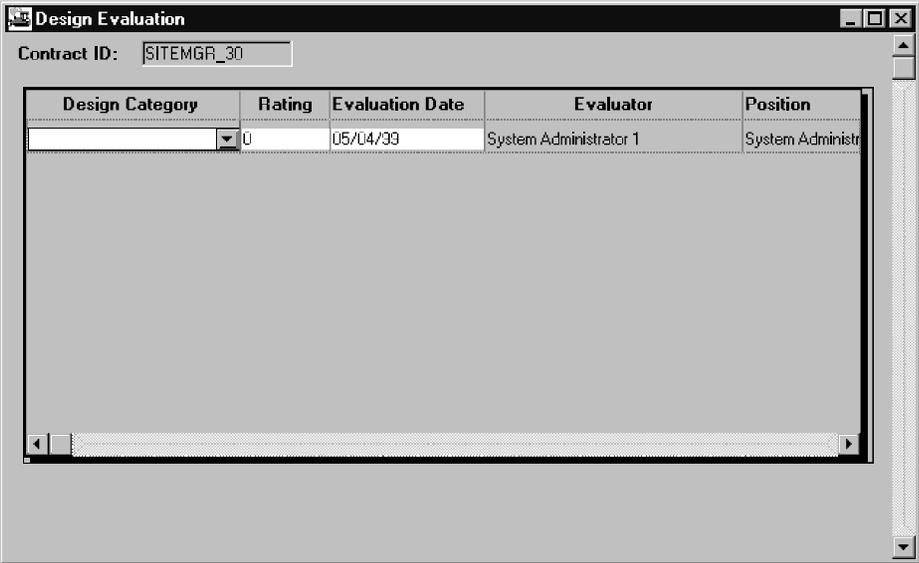


Figure 6-7 The Design Evaluation Window

Field Name	Description
Design Category	user-defined design category description. Only one rating allowed for a design category. This is a required field.
Rating	Numeric rating assigned to an evaluation. This is a required field. Valid values are on a scale from 1 to 10.
Evaluation Date	Date on which the design category was evaluated. Cannot be in the future. Defaults to the date on which the evaluation is entered in the system.
Evaluator	User ID of the individual entering the evaluation data. Defaults to the current user name. This value can not be modified after it is saved.
Position	Designation of the evaluator. Defaults to the current user. This value can not be modified after it is saved.

Table 6-7 The Design Evaluation Window Fields Table

To add a Design Evaluation:

1. On the **Contract Records** panel, double-click the **Design Evaluation** icon. The Contract Select window opens.
2. In the **Contract ID** list box, scroll to and click the Contract.
3. Click **Ok**. The Design Evaluation window lists design evaluations.
4. Click the **New** button. An empty row is added to the list.
5. In the **Design Category** drop-down list, click the expand arrow and click the design category.
6. Press the **Tab** key.
7. In the **Rating** field, type the numeric rating for the evaluation.
8. Press the **Tab** key.
9. In the **Evaluation Date** field, type the date of the evaluation.
10. Click the **Save** button.

6.4 Plan Discrepancy

The Plan Discrepancies window lets the user record discrepancies to the Contract plan. The discrepancy types are defined by the transportation agency.

The screenshot shows a window titled "Plan Discrepancies" with the following fields and values:

- Cont ID: SITEMGR_01
- Discrepancy Serial No: [Empty]
- Entry Date: 08/20/97
- Discrepancy Entered By: Central Office 1
- Discovered By: [Dropdown menu]
- Discovery Date: 00/00/00
- Discrepancy Type: [Dropdown menu]
- Plan Page Number: [Empty]
- Discrepancy Description: [Text area]
- Correction Date: 00/00/00
- Discrepancy Correction: [Text area]
- Designer Information: [Text area]
- Reference to:
 - Change Order Number: [Empty]
 - DWR: [Empty]
 - 00/00/00
 - Dispute: 0

Figure 6-8 The Plan Discrepancies Window

Field Name	Description
Cont ID	Transportation agency-defined ID for the Contract.
Discrepancy Serial No	System-generated serial number for the discrepancy record.
Entry Date	Date when the discrepancy record was entered. Defaults to the current date.
Discovered By	The entity discovering the discrepancy, e.g., Consultant, Contractor, Department, or Other.
Discrepancy Entered By	Name of the person entering the discrepancy. Defaults to the name of the logged on SiteManager user.
Reference to Change Order Number	Change Order number associated with the discrepancy. The user can search this field.
Discrepancy Description	Description of the discrepancy. This is a required field.

Field Name	Description
Discrepancy Correction	Description of the correction of the discrepancy. This field is optional.
Discrepancy Type	Transportation agency-defined type of the discrepancy. This is a required field.
Discovery Date	Discovery date of the discrepancy. The discovery date can not be after the current date or before the Daily date. This field is required.
Correction Date	Correction date of the discrepancy. This field is optional and can not be after the current date.
Plan Page Number	Page number of the design plan associated with the discrepancy. This field is optional.
Reference to Dispute	ID of the dispute associated with the discrepancy. The user can search this field. This field is optional.
Reference to DWR	Date and User ID on the Daily Work Report associated with the discrepancy. The user can search this field. This field is optional.
Designer Information	Information about the designer associated with the discrepancy. This field is optional.

Table 6-8 The Plan Discrepancies Window Fields Table

To add a plan discrepancy to the Contract:

1. On the **Contract Records** panel, double-click the **Plan Discrepancy** icon.
2. Click the **Services** menu and click the **Choose Keys** choice. The Select Contract list opens.
3. In the **Select Contract** list box, scroll to and click the Contract.
4. Click **Ok**.
5. In the **Discovered By** drop-down list, click the expand arrow and click the entity that found the discrepancy.
6. Press the **Tab** key.

7. In the **Discovery Date** field, click in front of the current entry and type the date the discrepancy was discovered.
8. In the **Discrepancy Type** drop-down list, click the expand arrow and click the discrepancy type.
9. Press the **Tab** key.
10. To enter a reference to the design plan, in the **Plan Page** field, type the page number.
11. Press the **Tab** key.
12. In the **Discrepancy Description** field, type a description of the discrepancy.
13. Press the **Tab** key.
14. In the **Correction Date** field, type the date the discrepancy was corrected.
15. Press the **Tab** key.
16. In the **Discrepancy Correction** field, type a description of the discrepancy correction.
17. In the **Designer Information** field, type desired data.
18. Press the **Tab** key.
19. To add a reference to a Change Order, in the **Change Order Number** field, perform a **Search**.
20. Press the **Tab** key.
21. To add a reference to a Daily Work Report, in the **DWR** field, perform a **Search**.
22. Press the **Tab** key.
23. To add a reference to a dispute, in the **Dispute** field, perform a **Search**.
24. Click the **Save** button.

To modify a plan discrepancy record:

1. On the **Contract Records** panel, double-click the **Plan Discrepancy** icon.
2. Click the **Open** button. The Discrepancy Select window opens. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the Contract ID. The window displays a list of discrepancies.
4. In the **Plan Discrepancy** list box, scroll to and double-click the record. The Plan Discrepancy Select window closes and the Plan Discrepancy window is displayed.
5. Modify data on the window.
6. Click the **Save** button.

6.5 Dispute/Claim

The Dispute/Claim window lets the user add, modify, and delete dispute and claim records. The Dispute/Claim window contains the following folder tabs:

Tab Name	Description
Description	The Description folder tab displays the basic dispute or claim description data that can be added, deleted, updated, or viewed.
Recipients	The Recipients folder tab displays the dispute or claim recipients data that can be added, deleted, updated, or viewed. This folder tab records data on people who have been assigned to respond to the dispute or claim. In addition, the system notifies each recipient of his pending assignment with an In-Box message.
Related Records	The Related Records tab displays a list of SiteManager records related to the selected dispute or claim. This lets the user navigate automatically to the related record's window (e.g., Plan Discrepancies, Change Order, Correspondence Log).

Table 6-9 The Dispute/Claim Folder Tabs Table

6.5.1 Dispute/Claim Descriptions

The Description folder tab lets the user add, modify, or delete the Contract disputes and claims.

Figure 6-9 The Dispute/Claim Description Folder Tab

Field Name	Description
Contract ID	Transportation agency-defined ID for the Contract.
Dispute ID	System-generated ID for the dispute or claim.
Type Ind	Identifies whether this is a dispute or a claim. This is a required field.
Status	Status of the dispute or claim (e.g., Received, Logged, Open, Rescinded, Resolved, Denied, Closed). This is a required field.
Subcontr ID	Transportation agency-defined ID for the Subcontractor associated with the dispute or claim.
Category Type	Transportation agency-defined Category of the dispute or claim. Categories are defined for reporting, inquiry, and analysis purposes. Normally based on the nature of the dispute or claim (e.g., material, utility, time). This is a required field.

Field Name	Description
Requested Amt	Dollar amount requested by the Contractor in the dispute or claim. Either Requested Amt or Requested Days is required.
Requested Days	Number of days requested by the Contractor in the dispute or claim. Either Requested Amt or Requested Days is required.
Settled Amt	Amount settled for the dispute or claim.
Settled Days	Days settled for the dispute or claim.
Estimate Nbr	System-generated number assigned to the estimate during the estimate generation process. The user can search this field.
Received Date	Date the dispute or claim was received by the department. This is a required field.
Logged Date	Date the dispute or claim was entered into SiteManager. Assigned by the system.
Contractor Accepted Date	Date the resolution was accepted by the Contractor. Can not be after the current date or equal to the Dept Resolved Date.
FHWA Concurrence Date	Date the FHWA concurred with the resolution. Can not be after the current date.
Diary Start Date	Start date of a range of diaries that document the dispute or claim. Can not be after the current date.
Diary End Date	End date of a range of diaries that document the dispute or claim. Must be greater than or equal to the Diary Start Date.
Release/Payment Date	Date the payment was released for the dispute or claim. Can not be after the current date.
Dept Resolved Date	Date the dispute or claim was resolved or overridden by the department. Can not be after the current date.

Dispute/Claim

Field Name	Description
Resolution Reason Type	Resolution reason type that identifies how the dispute or claim was resolved (e.g., Change Order issued).
Remark	Remarks about the dispute or claim.
Project Number	Transportation agency-defined ID for the Project related to the dispute or claim.
Line Item	Line Item Number of an Item associated with the dispute or claim. The user can search this field. An Item can be in multiple disputes (e.g., a paving Item can be disputed one day because of density controversy and the next day because of an aggregate mix). This field is protected in update mode.
Seq Nbr	System-generated sequence number that identifies the Project and Line Item associated with the dispute or claim.
Item Code	Transportation agency-defined code for the Item associated with the dispute or claim.
Short Description	Short description of the Item associated with the dispute or claim.

Table 6-10 The Dispute/Claim Description Folder Tab Fields Table

To add a dispute or claim record to a Contract:

1. On the **Contract Records** panel, double-click the **Dispute/Claim** icon.
2. Click the **Services** menu and click the **Choose Keys** choice. The Select Contract list opens.
3. In the **Select Contract** list box, scroll to and click the Contract.
4. Click **Ok**.
5. In the **Type Ind** drop-down list, click the expand arrow and click either 'dispute' or 'claim.'
6. In the **Status** drop-down list, click the expand arrow and click the status of the dispute or claim.
7. In the **Subcontractor ID** drop-down list, click the expand arrow and click the ID of the subcontractor who started the dispute or claim.
8. In the **Category Type** drop-down list, click the expand arrow and click the category of the dispute or claim.
9. Press the **Tab** key.
10. In the **Estimate Nbr** field, type an estimate number or perform a **Search**.
11. Press the **Tab** key.
12. In the **Requested Days** field, type the number of days requested by the Contractor, or tab to the **Requested Amt** field and type the dollar amount requested by the Contractor.
13. Press the **Tab** key.
14. In the **Settled Amt** field, type the amount for which the dispute or claim was settled.
15. Press the **Tab** key.
16. In the **Received Date** field, type the date the dispute or claim was received by the transportation agency.
17. Press the **Tab** key.
18. In the **Diary Start Date** field, type the start date of a range of diaries that captured information about the dispute or claim.
19. Press the **Tab** key.
20. In the **Diary End Date** field, type the end date of a range of diaries that captured information about the dispute or claim.
21. Press the **Tab** key.
22. In the **Contractor Accepted Date** field, type the date the resolution was accepted by the Contractor.
23. Press the **Tab** key.

Dispute/Claim

24. In the **Dept Resolved Date** field, type the date that the dispute or claim was resolved by the transportation agency.
25. Press the **Tab** key.
26. In the **FHWA Concurrence** field, type the date the FHWA concurred with the resolution.
27. Press the **Tab** key.
28. In the **Release/Payment Date** field, type the date the payment was released for this dispute or claim.
29. In the **Resolution Reason Type** drop-down list, click the expand arrow and click the reason that identifies how the dispute or claim was resolved.
30. Press the **Tab** key.
31. In the **Remarks** field, type remarks about the dispute or claim.
32. Click the **Save** button.

To add an Item to a dispute or claim record:

1. On the **Contract Records** panel, double-click the **Dispute/Claim** icon.
2. Click the **Open** button. The Dispute/Claim Select window opens. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the Contract. The window displays a list of disputes.
4. In the **Dispute/Claim** list box, scroll to and click the dispute.
5. Click **Ok**.
6. Click the bottom datawindow and click the **New** button.
7. In the **Project Number** drop-down list, click the expand arrow and click the number of the Project that includes the Item.
8. In the **Line Item** field, type the Line Item number or perform a **Search**.
9. Click the **Save** button.

To view a Line Item related to a dispute or claim:

1. On the **Contract Records** panel, double-click the **Dispute/Claim** icon.
2. Click the **Open** button. The Dispute/Claim Select window opens. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the Contract. The window displays a list of disputes.
4. In the **Dispute/Claim** list box, scroll to and click the dispute.
5. Click **Ok**.
6. In the **Line Item** list box, scroll to and click the Line Item.
7. Click the **Services** menu and click the **View Item** choice.
8. Click the **Close** button to return to the Dispute/Claim window.

To view an estimate related to a dispute or claim:

1. On the **Contract Records** panel, double-click the **Dispute/Claim** icon.
2. Click the **Open** button. The Dispute/Claim Select window opens. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the Contract. The window displays a list of disputes.
4. In the **Dispute/Claim** list box, scroll to and click the dispute.
5. Click **Ok**.
6. Look at the **Estimate Nbr** field to make sure the selected dispute or claim has a valid estimate number.
7. Click the **Services** menu and click the **View Estimate** choice.
8. Click the **Close** button to return to the Dispute/Claim window.

Tip: If the View Estimate menu option is not available, make sure that focus is on the top datawindow and there is a valid number in the Estimate Nbr field.

6.5.2 Dispute/Claim Recipients

The Dispute/Claim Recipients folder tab lets the user add, modify, and delete the recipients of the dispute and claim records. This folder tab lets the user maintain tracking and deposition information on personnel assigned to respond to the dispute. This includes assigning the personnel, documenting when the dispute or claim documentation was sent and received, and recording the recipient's comments or deposition. Each newly assigned recipient is notified of the assignment by an In-Box message.

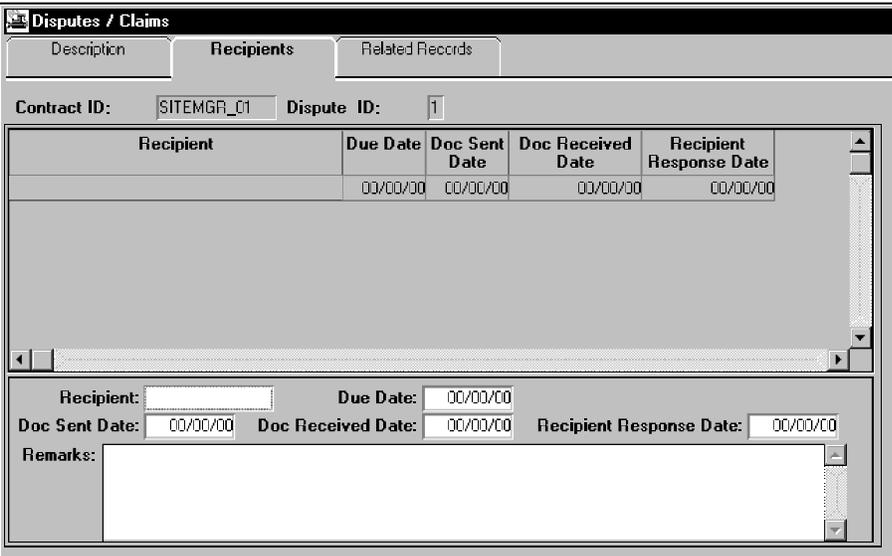


Figure 6-10 The Dispute/Claim Recipient Folder Tab

Field Name	Description
Recipient	User ID of a person assigned to receive dispute or claim documents (e.g., Project Engineer). The user can search this field. This is a required field. Should be unique within the dispute or claim.
Due Date	Date the dispute or claim document is due to be received by the recipient. This is a required field. Can not be before the current date.
Doc Sent Date	Date the dispute or claim document was sent to the recipient. Can not be after the current date.
Doc Received Date	Date the recipient received the dispute or claim document. Should be greater than or equal to the Doc Sent Date. Can not be after the current date.
Remark	Remarks received from the recipient of dispute or claim documents.
Recipient Response Date	Date the recipient responded to the dispute or claim document. Should be greater than or equal to the Doc Sent Date. Can not be after the current date.

Table 6-11 The Dispute/Claim Recipients Folder Tab Fields Table

To add a recipient:

1. On the **Contract Records** panel, double-click the **Dispute/Claim** icon.
2. Click the **Open** button. The Dispute/Claim Select window opens. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the Contract. The window displays a list of disputes.
4. In the **Dispute/Claim** list box, scroll to and click the dispute or claim.
5. Click **Ok**.
6. On the **Dispute/Claim** window, click the **Recipients** folder tab.
7. Click the **New** button.
8. In the **Recipient** field, type the title of the person who has been assigned to respond to the dispute or perform a **Search**.
9. Press the **Tab** key.
10. In the **Due Date** field, type the date the document is due to be received by the recipient.
11. Press the **Tab** key.
12. In the **Doc Sent Date** field, type the date the document was sent to the recipient.
13. Press the **Tab** key.
14. In the **Doc Received Date** field, type the date the recipient received the document.
15. Press the **Tab** key.
16. In the **Recipient Response Date** field, type the date the recipient responded to the dispute or claim.
17. Press the **Tab** key.
18. In the **Remarks** field, type the recipient's remarks.
19. Click the **Save** button.

Tip: When a new recipient is added to the list and the record is saved, the system notifies the recipient by In-Box message.

6.5.3 Dispute/Claim Related Records

The Dispute/Claim Related Records folder tab lets the user view and navigate to the plan discrepancies, change orders, and correspondence logs related to the dispute or claim.

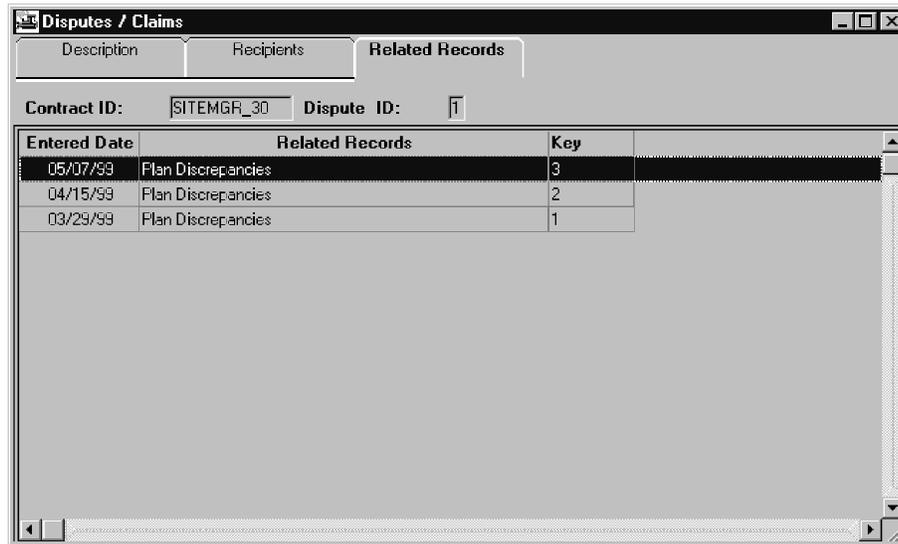


Figure 6-11 The Dispute/Claim Related Records Folder Tab

Field Name	Description
Entered Date	Date the record related to the dispute or claim was entered.
Related Records	Records that are related to the dispute or claim (i.e., correspondence log, plan discrepancy, Change Order).
Key	System-generated sequence number that identifies the record associated with the dispute or claim.

Table 6-12 The Dispute/Claim Related Records Folder Tab Fields Table

To navigate to a related record:

1. On the **Contract Records** panel, double-click the **Dispute/Claim** icon.
2. Click the **Open** button. The Select Contract list is displayed.
3. In the **Select Contract** list box, scroll to and double-click the Contract. The window displays a list of disputes.
4. In the **Dispute/Claim** list box, scroll to and click the dispute or claim.
5. Click **Ok**.
6. Click the **Related Records** folder tab.

7. Click the **Related Record** and click an option on the **Services** menu, depending on the type of record selected as follows:
 - To view a Plan Discrepancy record, click View Plan Discrepancies.
 - To view a Change Order record, click View Change Orders.
 - To view a Correspondence Log record, click View Correspondence Log.
8. To return to the **Dispute/Claim** window, close the open window.

6.6 Contractor Payrolls

The Contractor Payrolls window lets the user add and modify Contractor Payroll data and related employee information. The user can enter the payroll data manually or upload the payroll data electronically (refer to the Contractor Payroll Load topic). The employee information is used primarily for civil rights and government reporting functions. The payroll data can be used to track on-the-job training commitments and training reimbursements to the Contractor.

Certain factors must be considered for payroll entry:

- SiteManager accepts payroll data only if the Prime Contractor folder tab on the Contract indicates that payrolls are required.
- The Work Begin Date on the Contract's Critical Dates tab must be populated.
- The payroll frequency is determined by the Frequency In Weeks field on the Contract's Prime Contractor folder tab. This value determines the ending date for the payrolls.
- A payroll for the Prime Contractor must be entered before a Subcontractor payroll may be entered and saved.
- The payroll information for the Prime is present from the beginning of the contract until the end allowing for no gaps.
- The payroll frequency cycle for Subcontractors must be the same as that of the Prime, but it does not have to be continuous.

Tab Name	Description
Payroll Information	The Payroll Information folder tab displays the payroll dates, the payroll's certified status, and whether or not the payroll includes employee hours.
Employee Information	The Employee Information folder tab displays a list of employees for the selected payroll and details for the employee selected on the list.
Employee Daily Information	The Employee Daily Information folder tab displays the daily records for each employee during a payroll period.

Table 6-13 The Contractor Payrolls Window Folder Tabs Table

To access the Contractor Payrolls window:

1. On the Contractor Management panel, double-click the Contractor Payrolls icon.
2. Click the Services menu and click the Choose Keys choice. The Select Payroll for Vendor window opens.
3. In the Select Contract list box, scroll to and double-click the Contract.
4. In the Vendor list box, scroll to and click the Prime Contractor.
5. Click Ok.

6.6.1 Payroll Information

The Payroll Information folder tab lets the user add and modify payroll data. This information is submitted to the transportation agency by Prime Contractors and Subcontractors who employ at least one non-supervisory employee. The user may enter payrolls manually on this window or the payrolls may be uploaded electronically. (See the Contractor Payroll Load topic for details.)

If there is no employee data, the No Employees for Period indicator is checked. If a payroll with employee hours is selected, the user can access all three folder tabs.

When the payroll has been processed via the Payroll Exceptions batch process, the Payroll Exception Process indicator is checked automatically by the system. This indicates that the employee wage rates have been checked against the contract's wage decision and Trainee hours have been processed for on-the-job training reimbursement.

Once a payroll has been included in an estimate – meaning its Trainee hours have been processed for on-the-job training reimbursement – the On Estimate field will display the corresponding estimate number. The estimate number will be removed if the estimate is deleted.

Note: Once a payroll has been processed and included on a paid estimate, the payroll can later be decertified and modified manually or reloaded electronically into the system. However, any employee hour modifications will not be processed by the next Payroll Exceptions batch job. Therefore, any changes to a Trainee's work hours will not be reflected on the Trainee record and an on-the-job training reimbursement adjustment will not be calculated on the next estimate. If the DOT hours accrued for a Trainee must be modified, then the changes must be manually made on the Trainee window.

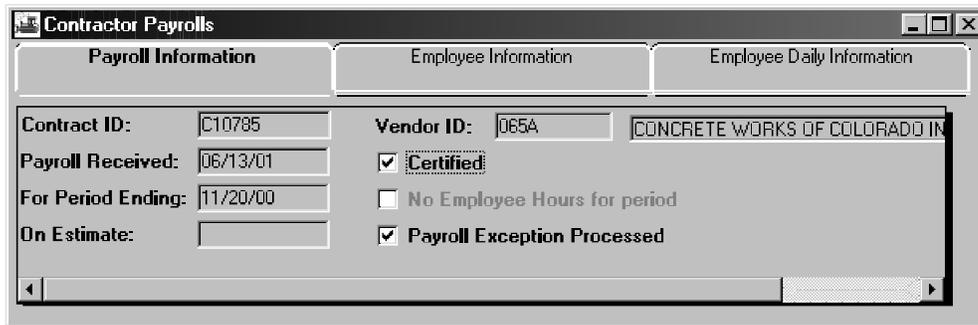


Figure 6-12 The Payroll Information Folder Tab

Field Name	Description
Contract ID	Transportation agency-defined ID of the Contract. <i>This field is also displayed on the Employee Information and the Daily Employee Information tabs.</i>
Vendor ID	Vendor ID of the Prime Contractor or Subcontractor. <i>This field is also displayed on the Employee Information and the Daily Employee Information tabs.</i>
Payroll Received	This is the payroll received date. Defaults to the current date. Can not be after the current date.
For Period Ending	The end of the payroll period. Defaults to a date based on the payroll frequency of the Prime Contractor. If a Prime Contractor is selected, this field can not be modified. <i>This date is also displayed on the Employee Information and the Daily Employee Information tabs in the Payroll Ending Date field.</i>
Certified	Indicates that the payroll is certified.
No Employee Hours for period	Indicates that no employees worked in the payroll period.
Payroll Exception	Indicates that the payroll has been processed via the Payroll Exceptions

Field Name	Description
Processed	batch process.
On Estimate	Displays the number of the estimate that included the payroll.

Table 6-14 The Payroll Information Folder Tab Fields Table

To manually add the first payroll:

1. On the **Payroll Information** tab, in the **Payroll Received** field, type the date the payroll was received.
2. In the **For Period Ending** field, type the ending date of the payroll period.
3. Click the **Save** button.

To manually add a payroll with no employee hours:

1. On the **Payroll Information** tab, in the **Payroll Received** field, type the date the payroll was received.
2. In the **For Period Ending** field, type the ending date of the payroll period.
3. Click the **No Employees for Period** indicator.
4. Click the **Save** button.

Note: After the system verifies that the period ending date corresponds to the Prime Contractor's payroll period, the record is saved.

6.6.2 Employee Information

The Employee Information folder tab displays a list of employees for the selected payroll and details for the employee selected on the list. To add payroll employee information, the user can search the Vendor's personnel list by name or SSN/SIN and select the employees who worked on the payroll. The user can also enter employee information manually. If the selected payroll is not certified, the user can modify the data.

If the employee is a Trainee, the data on this record (Class Type, Class Group, Program Type, etc.) should match the information on the Trainee record exactly.

Figure 6-13 The Employee Information Folder Tab

Field Name	Description
Contract ID	Transportation agency-defined ID of the Contract.
Vendor ID	Vendor ID of the Prime Contractor or Subcontractor.
Payroll Ending Date	End of the payroll period for the selected payroll.
Name	Name of a non-supervisory employee. The user can search this field.
SSN/SIN	Social Security Number or Social Insurance Number of the employee. The user can search this field.
Ethnicity	Transportation agency-defined ethnic background of the employee.
Gender	Gender of the employee.
Class Group	Class Group of the employee.
Class Type	Class Type of the employee.

Field Name	Description
Program Type	Program type in which the employee is enrolled.
Deductions	Deductions to the employee's payroll for the payroll period.
Net Pay	Gross Pay minus Deductions for the payroll period.
Deduction Type	A drop-down list from which the user can select a deduction type, such as FICA, State, Federal, Local or other deductions.
Deduction Amount	The amount to be withheld from the employees gross pay for the specified Deduction Type.

Table 6-15 The Employee Information Folder Tab Fields Table

To add an employee payroll record:

1. On the **Employee Information** folder tab, click the **New** button.
2. In the **Name** field, type the name or, using the *right* mouse button, click the field and perform a **Search** . *The system will automatically enter existing data for the employee. The user can modify this data as needed.*
3. In the **SSN/SIN** field, type the number or perform a **Search**.
4. In the **Ethnicity** drop-down list, click the expand arrow and select the ethnic group.
5. In the **Gender Type** drop-down list, click the expand arrow and select the gender.
6. In the **Class Type** drop-down list, click the expand arrow and select the work class type.
7. In the **Class Group** field, type a new work class group or perform a **Search**.
8. In the **Program Type** drop-down list, click the expand arrow and select the program type.
9. In the **Deductions** field, type the deduction value.
10. In the **Total Hours** field, type the total hours worked for the pay period.
11. In the **Gross Amount** field, type the gross pay amount for the pay period.
12. Click the **Save** button.

Or,

13. In the **Total Hours** field, type the total hours worked for the pay period.

14. In the **Gross Amount** field, type the gross pay amount for the pay period.
15. Click the **Save** button.
16. Click in the bottom data window.
17. Click the **New** button.
18. In the **Deduction Type** drop-down list, click the expand arrow and select the desired deduction type.
19. In the **Deduction Amount** field, type the amount for the selected deduction type.
20. To enter additional deductions, repeat Steps 11 through 13.
21. Click in the **Total Hours** field and type the total hours worked for the pay period.
22. In the **Gross Amount** field, type the gross pay amount for the pay period.
23. Click the **Save** button.

Note: The user should not manually enter a value in the Deductions field if the employee has more than one type of deduction.

To modify employee payroll information for a selected pay period:

1. On the Contractor Management panel, double-click the Contractor Payrolls icon.
2. Click the Open button. The Select Payroll for Vendor window opens.
3. In the Select Contract list box, scroll to and double-click the Contract ID.
4. In the Vendor list box, scroll to and double-click the Prime Contractor or Subcontractor.
5. In the Payroll list box, scroll to and click the payroll.
6. Click Ok. The Payroll Information folder tab displays data for the selected payroll.
7. Click the Employee Information folder tab.
8. In the Employee list box, scroll to and click the employee name. The window displays data for the selected employee below the list.
9. In the Name field, type the name or perform a Search.
10. In the SSN/SIN field, type the number or perform a Search.
11. In the Ethnicity drop-down list, click the expand arrow and click the ethnic group.
12. In the Gender drop-down list, click the expand arrow and click the gender.
13. In the Class Type drop-down list, click the expand arrow and click the work class type.
14. In the Class Group field, type a new work class group or perform a Search.
15. In the Deductions field, type the deduction value.

- 16. In the Total Hours field, type the total hours worked for the pay period.
- 17. In the Gross Amount field, type the gross pay amount for the pay period.
- 18. Click the Save button.

Or,

- 19. In the Total Hours field, type the total hours worked for the pay period.
- 20. In the Gross Amount field, type the gross pay amount for the pay period.
- 21. Click the Save button.
- 22. Click in the bottom data window.
- 23. Click the New button.
- 24. In the Deduction Type drop-down list, click the expand arrow and select the desired deduction type.
- 25. In the Deduction Amount field, type the amount for the selected deduction type.
- 26. To enter additional deductions, repeat Steps 11 through 13.

Tip: If the selected payroll is certified, the employee data can not be modified or deleted.

6.6.3 Employee Daily Information

The Employee Daily Information folder tab shows the daily record for each employee during a payroll period. This includes the dates worked on this payroll, the number of hours worked per day, and the hourly rates paid to the employee. The work dates entered must fall within the payroll period. Once the user enters and saves the data on this tab, the application will calculate and display the total hours worked and gross pay on the Employee Information tab in the Total Hours and Gross Amount fields. The application will then display these fields in read-only mode.

Payroll Information		Employee Information		Employee Daily Information	
ContractID:	051399	VendorID:	A002-B	Payroll Ending Date:	12/14/99
Name	SSN/SIN	Employee Class Type	Employee Class Group		
Employee 1	999-93-9993	Powc			
Work Date	Wage Rate	Fringe Benefit Rate	Overtime Rate	Regular Hours	Overtime Hours
12/14/99	\$10.00	\$5.00	\$15.00	8.00	2.00

Figure 6-14 The Employee Daily Information Folder Tab

Field Name	Description
Contract ID	Transportation agency-defined ID of the Contract.
Vendor ID	Vendor ID of the Prime Contractor or Subcontractor.
Payroll Ending Date	End of the payroll period for the selected payroll.
Name	Name of a non-supervisory employee on the payroll.
SSN/SIN	Social Security Number or Social Insurance Number of the employee on the payroll.
Employee Class Type	Class Type of the employee on the payroll.
Employee Class Group	Class Group of the employee on the payroll.
Work Date	Date on which the employee worked in the payroll period.
Wage Rate	Hourly wage rate for the employee on this date in the payroll period.
Fringe Benefit Rate	Hourly fringe benefit rate for the employee on this date in the payroll period.
Overtime Rate	Hourly overtime rate for the employee on this date in the payroll period.
Regular Hours	Regular hours worked by the employee on this date in the payroll period.
Overtime Hours	Overtime hours worked by the employee on this date in the payroll period.

Table 6-16 The Employee Daily Information Folder Tab Fields Tab

To modify employee daily information:

1. Click the Employee Daily Information folder tab.
2. In the Employee list box, scroll to and click the employee name. The window displays data for the selected employee below the list.
3. Click the New button. An empty row is added.
4. Click in front of the current Work Date and type the date.
5. Press the Tab key.
6. In the Wage Rate field, type the wage rate.
7. Press the Tab key.
8. In the Fringe Benefit Rate field, type the fringe benefit rate.
9. Press the Tab key.
10. In the Overtime Rate field, type the overtime rate.
11. Press the Tab key.
12. In the Regular Hours field, type the number of regular hours.
13. Press the Tab key.
14. In the **Overtime Hours** field, type the number of overtime hours. To record hours worked by this employee on another date, repeat Steps 3 through 14. To record hours worked by another employee, repeat Steps 1 through 15.
15. Click the **Save** button.

Tip: The Prime Contractor's payrolls must be recorded before the Subcontractor's payrolls.

To delete a payroll:

1. On the Contractor Management panel, double-click the Contractor Payrolls icon.
2. Click the Open button. The Select Payroll for Vendor window opens.
3. In the Select Contract list box, scroll to and double-click the Contract.
4. In the Vendor list box, scroll to and double-click the Prime Contractor or Subcontractor.
5. In the Payroll list box, scroll to and click the payroll.
6. Click Ok. The Payroll Information folder tab displays data for the selected payroll.
7. If the payroll is certified, click the Certified check box (OFF). *SiteManager displays the message, "that uncertifying the payroll permits changes to this payroll and associated data." Click OK.*

8. Click the Employee Daily Information folder tab.
9. In the Employee list box, click the Employee name. The window displays data for the selected employee below the list.
10. Select a row of daily data and click the Delete button. *SiteManager displays the message, "Do you want to delete Employee's Daily Information?"*
11. Click Yes.
12. Repeat Steps 10 and 11 until all employee daily information is deleted for every employee payroll record.
13. Click the Save button.
14. Click the Employee Information folder tab.
15. In the Employee list box, click the Employee name.
16. Click the Delete button. *SiteManager displays the message, "Do you want to delete Employee's Information?"*
17. Click Yes. *Delete each employee listed.*
18. Click the Payroll Information folder tab.
19. Click the Delete button. A delete confirmation message displays.
20. Click Yes.
21. Click the Save button.

Tip: If the selected payroll has Employee Information and/or Employee Daily Information, all records must be deleted before the payroll may be deleted.

6.7 Contractor Payroll Load

Contractor Payroll Load is a two step process which loads payroll data received from the contractor electronically from the server to the database. (To enter payroll data manually, refer to the Contractor Payrolls topic.) The first step is accomplished by the user selecting payroll files to be loaded via the Contractor Payroll Load window. The files must be correctly formatted and contain valid data. When the user selects payroll files to be loaded, the system performs preprocessing validation of the following:

- Correct file format.
- Valid Contract ID, Vendor ID, and Payroll Ending Date.
- Payroll data for only one payroll period per file.
- Multiple files must be entered in increasing order by Payroll Ending Date.

TIP: A payroll must be loaded for the Prime Contractor before a Subcontractor payroll can be loaded.

After the file selection is saved, the system copies the files that passed validation to a specific directory on the server. The system also generates a Payroll Preprocessing Report and sends the report name to the user who selected the files. This report gives the preprocessing results.

The second step involves a batch process which loads data from the files queued on the server to the database. The loaded payroll data can be viewed and modified on the Contractor Payrolls window. If a payroll has no employee data, the 'No Employees for Period' indicator is checked (ON) automatically. If a payroll is certified, the 'Certified' indicator must be checked (ON) manually. If any files fail to load, the batch process generates a Payroll Batch Report and notifies the Contract's primary personnel. This report lists the files that failed and the reasons for failure. Possible load failure reasons include:

- Missing data, e.g., if non-supervisory employees are on the payroll, specific employee data is required.
- Invalid data, e.g., regular hours not between zero and 24.
- Invalid data format, e.g., numeric vs. non-numeric.
- If one payroll fails, all subsequent payrolls fail because the payroll ending dates are out of sequence.

Contractor Payrolls Text File Format

Payroll files to be uploaded must have the text file format described below with required fields and delimited by semi-colons (;). An example is provided.

Rec Type	Field	Ord	Req	Type/Length	Notes/Issues
Contract ID:	Contract ID	1	Y	Char 15	Must be a valid Contract ID in the SiteManager database
Vendor ID:	Vendor ID	1	Y	Char 14	Must be a valid Vendor ID in the SiteManager database for the above listed Contract ID
Payroll Ending Date:	Payroll Ending Date	1	Y	Num 8	Must be a date greater than the last Payroll Ending Date.
EMPLOYEE:	SSN	1	Y	Char 9	
EMPLOYEE:	Name	2	Y	VarChar 50	
EMPLOYEE:	Gender	3	Y	Char 1	Must be "F" or "M"

Rec Type	Field	Ord	Req	Type/Length	Notes/Issues
EMPLOYEE:	Ethnicity	4	Y	Char 4	Must be a valid code in the SiteManager Ethnicity code table
EMPLOYEE:	Class Group	5	Y	Char 2	Spaces or valid code in the SiteManager Job Class code table
EMPLOYEE:	Class Type	6	Y	Char 4	Must be a valid code in the SiteManager Class Type code table
EMPLOYEE:	Program Type	7	Y	Char 4	Must be EITHER space OR a valid code in the SiteManager Program Type code table
EMPLOYEE:	Deductions	8	Y	Dec 14.3	Spaces or valid sum if itemized deductions exist. Otherwise value must be ≥ 0
EMPLOYEE:	Tot Hrs	9	Y	Dec 7.2	Spaces or valid sum if employee details exist. Otherwise value must be ≥ 0
EMPLOYEE:	Gross amount	10	Y	Dec 14.3	Spaces or valid sum if employee details exist. Otherwise value must be ≥ 0
REMARK:	Employee remark	1	N	0 to 2,147483,647 PB String length 32 bit. 60,000 for 16 bit	Not required

Rec Type	Field	Ord	Req	Type/Length	Notes/Issues
ADDRESS:	Employee address Line 1	1	Y	Char 40	Spaces or value
ADDRESS:	Line 2	2	Y	Char 40	Spaces or value
ADDRESS:	Line 3	3	Y	Char 40	Spaces or value
ADDRESS:	City	4	Y	Char 40	Spaces or value
ADDRESS:	State/prov	5	Y	Char 2	Spaces or value
ADDRESS:	Zip	6	Y	Char 10	Spaces or value
ADDRESS:	Country	7	Y	Char 14	Spaces or value
ADDRESS:	Phone	8	Y	Char 13	Spaces or value
ADDRESS:	Ext	9	Y	Char 6	Spaces or value
ADDRESS:	Fax	10	Y	Char 13	Spaces or value
DEDUCTION	TYPE	1	N	Char 4	Must be a valid code in the SiteManager Deduction Type code table
DEDUCTION	Deductions Amount	2	N	Dec 14.3	Must be ≥ 0.00
EMPLOYEE DAILY:	Date	1	Y	Num 8	No duplicates allowed and should lie within the Payroll Frequency Cycle

Rec Type	Field	Ord	Req	Type/Length	Notes/Issues
EMPLOYEE DAILY:	Reg Hours	2	Y	Dec 5.2	Valid range of 0.00 to 24.00
EMPLOYEE DAILY:	Overtime Hours	3	Y	Dec 5.2	Valid range of 0.00 to 24.00
EMPLOYEE DAILY:	Wage Rate	4	Y	Dec 5.2	Valid range of 0.00 to 999.99. If Reg Hours field from above is > 0.00, then it must be > 0.00.
EMPLOYEE DAILY:	Fringe Rate	5	Y	Dec 5.2	Valid range of 0.00 to 999.99.
EMPLOYEE DAILY:	Overtime Rate	6	Y	Dec 5.2	Valid range of 0.00 to 999.99. If Overtime Hours field from above is > 0.00, then it must be > 0.00.

Example of a Payroll Text File

Contract ID:TESTCONTRACT
 Vendor ID:G022
 Payroll Ending Date:12/17/99
 EMPLOYEE:250992222;SHIRLEY M. SMITH;F;01;II;ELEC;UNN;150;40;480
 REMARK:NEW EMPLOYEE AND FIRST WEEK ON SITE;
 ADDRESS:88 BAKER ST.;SECOND FLOOR;SUITE 200;COLUMBIA;SC;29170;USA;803-123-4567;;803-222-1111

DEDUCTION:FEDL;100
 DEDUCTION:STAT;50
 EMPLOYEE DAILY:12/13/99;8.00;0.00;12;0.00;0.00
 EMPLOYEE DAILY:12/14/99;8.00;0.00;12;0.00;0.00
 EMPLOYEE DAILY:12/15/99;8.00;0.00;12;0.00;0.00
 EMPLOYEE DAILY:12/16/99;8.00;0.00;12;0.00;0.00
 EMPLOYEE DAILY:12/17/99;8.00;0.00;12;0.00;0.00
 EMPLOYEE:250136184;FRANK G. MOORE;M;02;II;PLUM;UNN;200;50;750
 REMARK:ADDRESS NOT KNOWN
 EMPLOYEE DAILY:12/13/99;10.00;0.00;15;0.00;0.00
 EMPLOYEE DAILY:12/14/99;10.00;0.00;15;0.00;0.00
 EMPLOYEE DAILY:12/15/99;10.00;0.00;15;0.00;0.00

EMPLOYEE DAILY:12/16/99;10.00;0.00;15;0.00;0.00
 EMPLOYEE DAILY:12/17/99;10.00;0.00;15;0.00;0.00
 EMPLOYEE:248116767;TERRY CRANE;F;01;;POWD;UNN;25;40;500
 DEDUCTION:EDUC;25

EMPLOYEE:248558812;CHRIS SULLIVAN;M;02;;POWC;UNN;;40;425

Tips: The Employee and Employee Daily Rec Types are not required to store a payroll, but if they are supplied, then all the associated fields MUST be completed.

The user may leave the Total Hours and Gross Amount records empty or enter a valid sum. Otherwise, the user may enter values that are greater than or equal to zero for the Total Hours and Gross Amount.

The user may leave the Deduction records empty or enter the sum of the itemized deductions (if applicable). Otherwise, the user may enter a value that is greater than or equal to zero for the Deductions Amount.

Note: Address, Remarks and Deductions are not required. Only one address may be entered for each Employee Name/SSN combination. When adding an existing employee and new address, SiteManager will update the employee's old address.

Vendor ID	Vendor Name	Payroll Ending Date

Figure 6-15 The Contractor Payroll Load Window

Field Name	Description
Vendor ID	The transportation agency-assigned ID of the Vendor.
Vendor Name	Full name of the Vendor.
Payroll Ending Date	The end of the payroll period.
Files to be Uploaded	The name of the electronic payroll file which needs to be uploaded
Prompt for Messages	A check box that is checked if the user wants to be prompted for Informational and warning messages

To select payroll files to upload:

1. On the **Contractor Management** panel, double-click the **Contractor Payroll Load** icon. The Payroll Load window opens.
2. In the **Select Contract** list box, scroll to and double-click the Contract.
3. Click the **Prompt for Messages** check box (ON).
4. Click the **Services** menu and click the **Select Another** choice.
5. In the **Select File for Payroll** window, select a payroll file and click **OK**. The preprocessing validation results are displayed.
6. Click **Ok**.
7. To select another payroll file, repeat Steps 4 through 6.
8. Click the **Save** button. A message says 'Mail sent.'
9. Click **Ok**.

Tip: The preprocessing validation messages are displayed only when the 'Prompt for Messages' check box is checked (ON).

6.8 Document Submission

The Document Submission window lets the user track documents that have been submitted for approval or resolution. Examples include drawings, catalog cuts, changes to traffic control plans, EEO reports, and complaints from the public. The user can enter or view the document type, the document category, the submission date, the submitter's name, and a document description. The user can modify or delete a record only if there are no reviewers assigned to the document.

To begin the review process, the user selects one or more reviewers. The reviewer receives an In-Box notification that the document is ready for review. After reviewing the document, the reviewer records his recommendation on the Review Submitted Document window. A recommendation can not be modified after it is saved, but a reviewer can add another recommendation. A new tracking record is created for every new recommendation. The user can track the document reviews in the bottom datawindow of the Document Submission window.

Checklist Event Documents

Some documents are entered in the system as Checklist Scheduled Events with projected due dates. A daily process, Monitor Contract Status looks for Checklist Event documents that are due from external sources. The process creates document submission records to track the date the document is received. When the user records the submission of such a document on the Document Submission window, the date is also added to the Checklist Event Dates window for the corresponding event date. For more information, refer to the Checklist Scheduled Event topic.

The screenshot shows a window titled "Document Submission" with the following fields and a table:

- Contract ID: SITEMGR_30
- Document Serial No: 1
- Submitted By: DOT
- On: 05/31/99
- Document Type: Inspection Report
- Document Category: (empty)
- Description: (empty text area)

Reviewer	Review Date	Recommendation	Remarks
Project Manager 1	00/00/00	Pending	

Figure 6-16 The Document Submission Window

Field Name	Description
Contract ID	Transportation agency-defined ID of the Contract associated with the submitted document.
Document Serial No	Serial number assigned to the submitted document by the system.
Submitted By	Name of the person submitting the document.
On	Date on which the document was submitted. Can not be after the current date. Can not be changed after the record is saved.
Document Type	Transportation agency-defined code for the type of the submitted document.
Document Category	Transportation agency-defined category of correspondence for the submitted document (used for retrieval and analysis).
Description	Description of the submitted document.
Reviewer	Name of the reviewer of the submitted document. This field is display only.
Review Date	Date of review of the submitted document. This field is display only.
Recommendation	Recommendation given by the person who reviewed the submitted document (Approved or Denied). This field is display only.
Remarks	Remarks given by the person who reviewed the submitted document. This field is display only.

Table 6-17 The Document Submission Window Fields Table

To add a document submission record:

1. On the Contractor Management panel, double-click the Document Submission icon.
2. Click the Services menu and click the Choose Key choice. The Select Contract list opens.
3. In the Select Contract list box, scroll to and click the Contract ID.
4. Click Ok.
5. In the Submitted By field, type the name of the person submitting the document.
6. Press the Tab key.
7. In the On field, type the date on which the document was submitted.
8. In the Document Type drop-down list, click the expand arrow and click the document type.
9. In the **Document Category** drop-down list, click the expand arrow and click the document category.
10. Press the **Tab** key.
11. In the **Description** field, type a description of the document.
12. Click the **Save** button.

To assign a document reviewer:

1. On the Contractor Management panel, double-click the Document Submission icon.
2. Click the Open button. The Document Submission Select window opens. The Select Contract list is displayed.
3. In the Select Contract list box, scroll to and double-click the Contract ID.
4. In the Submitted Document list box, scroll to and click the document.
5. Click Ok. The Document Submission window displays information about the submitted document.
6. Click the Services menu and click the Forward to choice.
7. In the Forward to Selected Users list box, scroll to and click the reviewer.
8. Click Ok.
9. Click the Save button.
10. A message says 'Mail sent.'
11. Click OK.
12. To select another reviewer, repeat Steps 6 through 9.
13. Each reviewer is listed in the bottom datawindow with a 'Pending' recommendation.

Tip: After reviewers are assigned, the record cannot be deleted.

To modify a document submission record:

1. On the Contractor Management panel, double-click the Document Submission icon.
2. Click the Open button. The Document Submission Select window opens. The Select Contract list is displayed.
3. In the Select Contract list box, scroll to and double-click the Contract ID.
4. In the Submitted Document list box, scroll to and click the document.
5. Click Ok. The Document Submission window displays information about the submitted document.
6. Modify data as needed.
7. Click the Save button.

6.9 Document Submission Review

The Document Submission Review window lets the user enter recommendations for a submitted document. To access this window, the user must be one of the reviewers assigned to review the document. When a submitted document is forwarded for review, the system notifies all reviewers by In-Box message that the document is ready for review.

The top datawindow displays the document type, document category, submission date, name of the submitter, and document description. The reviewer adds a recommendation in the bottom datawindow. The three valid choices are Approved, Approved as Noted, and Denied. The reviewer can add comments in the Remarks field. A recommendation cannot be changed or deleted after it is saved, but the reviewer can add another recommendation. A new record is created for each new recommendation.

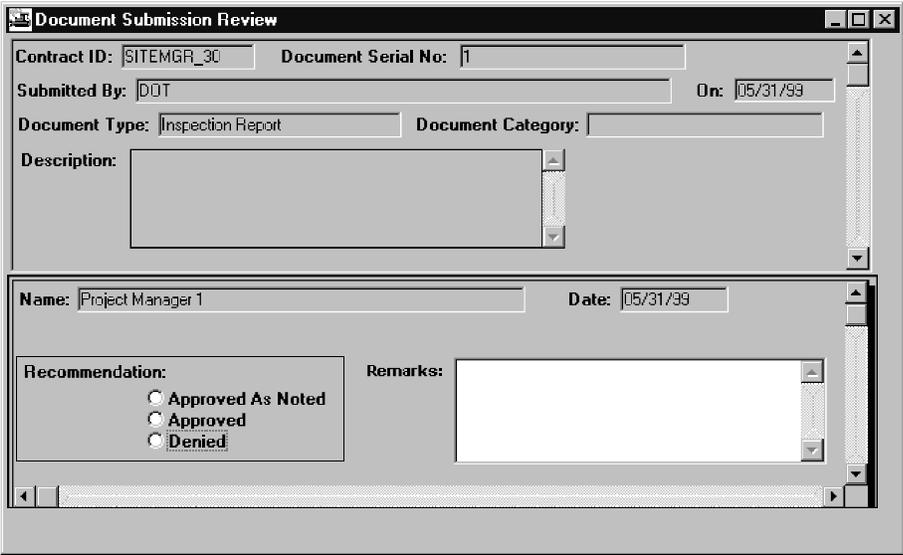


Figure 6-17 The Document Submission Review Window

Field Name	Description
Contract ID	Transportation agency-defined ID of the Contract associated with the submitted document.
Document Serial No	Serial number assigned to the submitted document by the system.
Submitted By	Name of the person submitting the document. This field is display only.
On	Date on which the document was submitted. This field is display only.
Document Type	Transportation agency-defined code for the type of the submitted document. This field is display only.
Document Category	Transportation agency-defined category of correspondence for the submitted document. This field is display only.

Field Name	Description
Description	Description of the submitted document. This field is display only.
Name	Name of the reviewer of the submitted document. This field is display only.
Date	Date of the review of the submitted document. Can not be after the current date. This field is display only.
Recommendation	Recommendation given by the person who is reviewing the submitted document. Can be Approved, Approved as Noted, or Denied.
Remarks	Comments that the reviewer adds to the recommendation for the submitted document.

Table 6-18 The Document Submission Review Window Fields Table

To add a review record for a submitted document:

1. Receive notification by In-Box message that the document is ready for review.
2. Review the document, which could be either hard copy or soft copy.
3. On the **Contractor Management** panel, double-click the **Document Submission Review** icon. The Documents Submitted Select window opens.
4. In the **Select Contract** list box, scroll to and double-click the Contract ID.
5. In the **Submitted Document** list box, scroll to and click the document.
6. Click **Ok**. The Document Submission Review window displays information about the submitted document.
7. In the **Recommendation** area, click the Approved, Approved As Noted, or Denied radio button.
8. In the **Remarks** field, type comments to add to the review.
9. Click the **Save** button.
10. To add another review, click the **New** button and repeat Steps 7 through 9.

Tip: The reviews are displayed as view only on the Document Submission window.

6.10 Contractor Evaluation

The Contractor Evaluation window lets the user rate the Contract’s Prime Contractor and Subcontractors. The user can add, modify, or delete a Contractor evaluation. The user can specify the period of time for which the Contractor is being evaluated or give a final rating for the entire Contract. The window lists all Contractors for the selected Contract, with the Prime Contractor listed first. Evaluation data for the selected Contractor is displayed below the list.

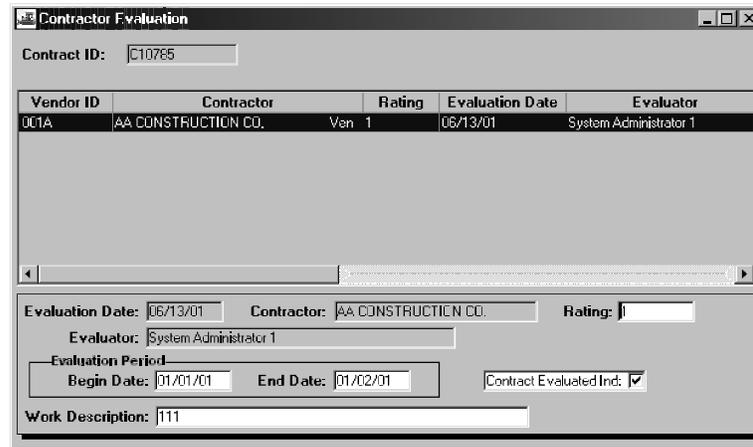


Figure 6-18 The Contractor Evaluation Window

Field Name	Description
Vendor ID	Transportation agency-defined Vendor ID of the Contractor.
Contractor	Short name of the Contractor. Selected from a list of Vendors approved to work on the Contract. This is a required field.
Rating	Numeric rating assigned to the Contractor evaluation. This is a required field.
Documents	External reference documents attached to the evaluation record.
Evaluation Date	Date of the Contractor evaluation. Defaults to the current date. This is a required field.
Evaluator	User ID of the person entering the Contractor evaluation. Defaults to the current User ID.

Field Name	Description
Evaluation Period Begin Date	Beginning date of the evaluation period of the Contractor evaluation. This is a required field.
Evaluation Period End Date	End date of the evaluation period of the Contractor evaluation. This is a required field.
Contract Evaluated Ind	Indicates that the evaluation is for the entire Contract period.
Work Description	Description of the work for which the Contractor is evaluated.

Table 6-19 The Contractor Evaluation Window Fields Table

To add a Contractor evaluation:

1. On the **Contractor Management** panel, double-click the **Contractor Evaluation** icon. The Contract Select window opens.
2. In the **Contract ID** list box, scroll to and double-click the Contract.
3. Click the **New** button. An empty row is added to the list of evaluations.
4. In the **Evaluation Date** field, type the date of the evaluation.
5. In the **Contractor** drop-down list, click the expand arrow and click the name of the evaluated Contractor or Subcontractor.
6. Press the **Tab** key.
7. In the **Rating** field, select the current entry and type a numerical rating of the Contractor.
8. Press the **Tab** key.
9. In the **Evaluation Period Begin Date** field, type the beginning date of the evaluation period.
10. Press the **Tab** key.
11. In the **Evaluation Period End Date** field, type the ending date of the evaluation period.
12. To indicate that this evaluation applies to the entire Contract, click the **Contract Evaluated Ind** check box (ON).
13. Press the **Tab** key.
14. In the **Work Description** field, type a description of the work for which this Contractor is being evaluated.
15. Click the **Save** button.

6.11 Contract Completion

The Contract completion procedure includes any activity related to changing the Contract status from active to complete. The general procedure described here can be adapted to the specific needs of the transportation agency.

The procedure typically begins after the physical work is done and the Item final quantities have been approved. When the user enters the Physical Work Complete Date, the system notifies Contract personnel that it is time to complete the contract. At this point, the user looks for any Contract data that would prevent final estimate generation or approval. After all required data is entered and all discrepancies are resolved, the final estimate can be generated and approved. After the final estimate is approved, the Contract status can be changed to complete.

There are several SiteManager reports that can be used to track data during the completion procedure. The user can run these reports to make sure that all required data has been entered, or to find data that causes a discrepancy. The following reports are particularly helpful:

- Contract Status Report
- Item Quantity Report
- Change Order Report
- Required Documents Report
- Dispute/Claim Report

6.11.1 Physical Work Complete Date Requirements

Entering the Physical Work Complete Date begins the Contract completion procedure. Before entering this date, the user should verify the following:

- Final quantities have been approved for any Items that need a Final Quantity Change Order. Otherwise, the system will enter the Item final quantities.
- All Change Orders are either approved or not approved. If there are any pending or draft Change Orders, the date can not be saved.

Final quantities are normally determined at the end of the Contract. Before completion, the user can generate Final Quantity Change Orders to approve final quantities. When the Physical Work Complete Date is entered, any Item that has not had a final quantity approved on a Change Order is automatically assigned a final quantity by the system. The user can run an Item Quantity report to find out which Contract Items have approved final quantities and which Items do not. If the Contractor must agree on the final quantities, the report can be sent to the Contractor.

Some Contract Items include Stockpiled Materials. During completion, any Stockpiled Materials with a balance remaining on the Contract must have the balance closed (i.e., changed to zero).

The remaining quantity of the Stockpiled Material can be transferred to another Contract.

After the Physical Work Complete date is saved, the system does the following:

- Notifies all Level 1 personnel
- Notifies the Project Manager and Project Engineer that Contract Authority should be end-dated for personnel no longer working on the Contract.
- Automatically assigns final quantities and changes status to 'Final' for any Item that does not have a final quantity approved on a Change Order.

6.11.2 Final Estimate Requirements

Typically, the final estimate is generated after the Physical Work Complete Date is entered. To generate the final estimate, the following criteria must be met:

- All progress estimates must be approved

The transportation agency defines the requirements for final estimate approval. Discrepancies can not be overridden during the processing of the final estimate. This means that all discrepancies must be resolved before the final estimate is approved. As a part of the completion process, the user can search for Contract data that the estimate process would identify as a discrepancy. Discrepancies can include:

- Contractor payrolls missing or not certified (if payrolls are required)
- Material sampling incomplete
- Checklist Events incomplete
- DBE compliance criteria not met
- Item overruns
- Contract Completion date missed
- Milestone Completion date missed

Required Documents

Required documents are the documents that have been identified on the Checklist Event schedule as 'Required to Finalize.' SiteManager provides a Required Documents report that lists a Contract's current document requirements. As a part of the completion process, the user can run a Required Documents report on external document requirements and send it to the Contractor who submits the documents. This reminds the Contractor to submit any documents that are required for completion. The user can also run a Required Documents report on internal documents, which are produced by the transportation agency.

Required Actual Dates

The transportation agency identifies some Critical Dates and Key Dates as requirements for the completion of the Contract. This begins with the Physical Work Complete Date and generally includes audit dates, review dates, the final Federal voucher date (for Federal jobs), and the date the final estimate is paid. SiteManager performs a daily batch process that monitors Contract status and notifies the Project Manager when specific dates have not been entered as required. This tells the Project Manager which dates need to be entered before the Contract can be completed. To track the status of the required dates, the Project Manager can view the following Contract Records panels:

- Contract Critical Dates folder tab
- Key Dates window
- Checklist Event Dates window

6.11.3 Complete Status Requirements

After the final estimate is approved, the user can change the Contract's status from active to complete. To save this status change, the following criteria must be met:

- Critical Dates, Key Dates, and Checklist Event Dates marked 'Required to Finalize' must be entered
- Items must have approved final quantities
- Change Orders must be approved or not approved (none pending or draft)
- Disputes, and claims must be resolved
- Stockpiled Material balances must be zero
- The final estimate must be approved

Most of these requirements will already be met in preparation for the final estimate. If the system does not accept the status change, it displays error messages that identify the type of data that did not meet the validation criteria (e.g., Change Order). The user can run reports or look at the appropriate SiteManager windows to pinpoint the data that prevented the status change.

When the Contract status is changed to complete, the system performs the following tasks:

- Automatically end-dates Contract Authority for all users except the Project Manager and Project Engineer and personnel with Global Contract Access and Update rights.
- Marks the Contract 'To Be Sent to DSS.' Any Contract that is marked 'To Be Sent to DSS' is sent automatically by a daily batch process.

6.12 DSS Contracts

The DSS Contracts window lets the user select or deselect a Contract to be sent to the Decision Support System (DSS). A batch process creates flat files for all Contracts marked 'To Be Sent to DSS' and loads the Contract data to the flat files. The system enters the date the Contract is loaded to a flat file as the Contract's 'DSS Last Sent Date.' When a Contract's status is changed to complete, the system selects it to be sent to DSS automatically.

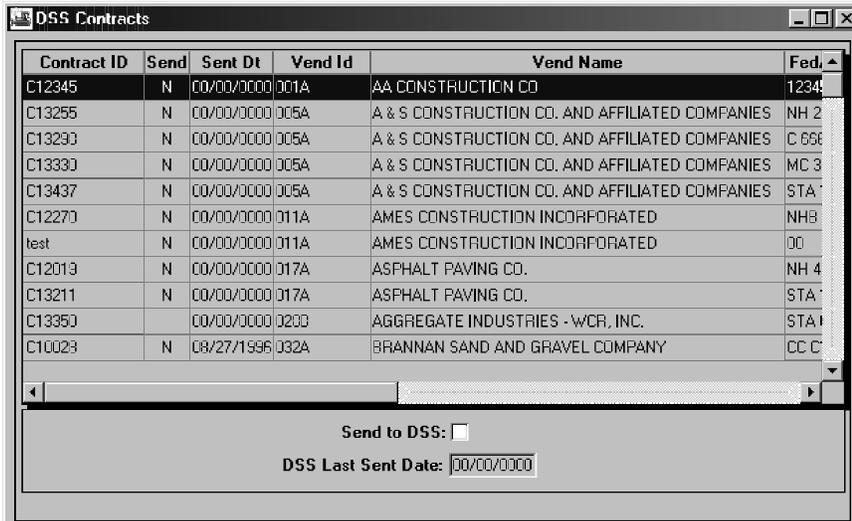


Figure 6-19 The DSS Contracts Window

Field Name	Description
Lv2 Ofc	Contract's Level 2 office.
Lv3 Ofc	Contract's Level 3 office.
Lv4 Ofc	Contract's Level 4 office.
Contract ID	Transportation agency-defined ID for the Contract.
Vend ID	Transportation agency-defined Vendor ID for the Contract's Prime Contractor.
Vend Name	Full name of the Vendor.
Fed St/Prov Prj Nbr	Federal, state, or province Project Number that identifies the Contract.
Status	Current status of the Contract (e.g., Pending, Active, Finalization, Complete, Archived).
Cnty	Contract's primary county. The county in which most of the work will be performed.

Field Name	Description
	work will be performed.
Location Description	Description of the Contract's work location. Describes where the work is being done.
Send	Indicates whether or not ('Y' or 'N') a Contract is to be sent to DSS.
Sent Dt	Date the Contract was last loaded to DSS.
Send to DSS	Indicates whether or not a Contract is to be sent to DSS.
DSS Last Sent Date	Date the Contract was last loaded to DSS.

Table 6-20 The DSS Contracts Window Fields Table

To select a Contract to be sent to DSS:

1. On the **Contract Records** panel, double-click the **DSS Contracts** icon. The DSS Contracts window opens.
2. In the **Contract** list box, scroll to and click the Contract ID.
3. Click the **Send to DSS** check box (ON). The value in the 'Send' column changes from 'N' to 'Y.'
4. Click the **Save** button.

Tip: When a Contract's status is changed to complete, the system selects it to be sent to DSS automatically.

To deselect a Contract to be sent to DSS:

1. On the **Contract Records** panel, double-click the **DSS Contracts** icon. The DSS Contracts window opens.
2. In the **Contract** list box, scroll to and click the Contract ID.
3. Click the **Send to DSS** check box (OFF). The value in the 'Send' column changes from 'Y' to 'N.'
4. Click the **Save** button.

6.13 Reports (Contract Administration)

The Contract Administration Reports panel generates commonly used Contract reports. The following report topics are available on this panel:

- Contract Status
- Required Documents
- Item Quantity
- Item Work
- Contract Dispute/Claim
- Subcontract Value
- Contractor Current Status
- Contractor Behind Schedule
- Past History - Work Completion
- Past History - Claims
- View Saved Reports (PSR)

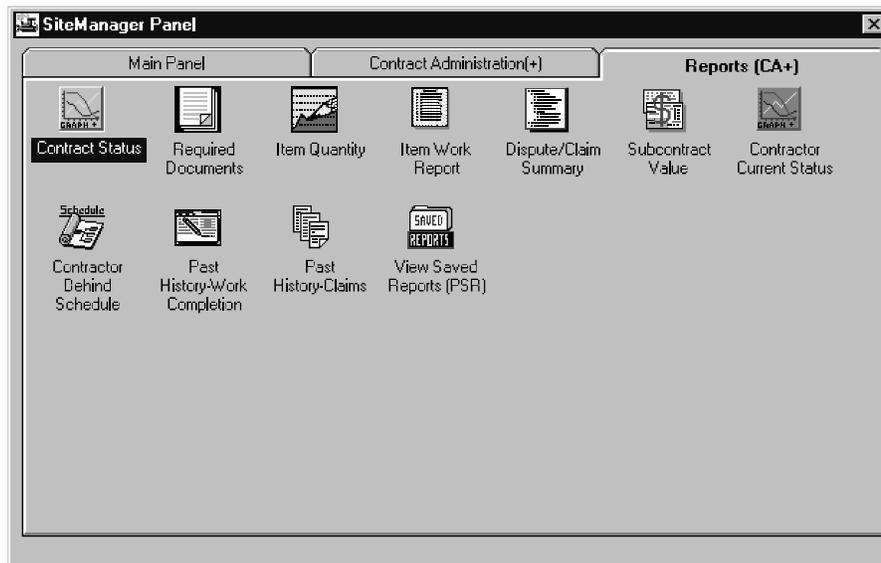


Figure 6-20 The Reports (CA) Panel

To access Contract Administration Reports:

1. On the **Contract Administration** panel, double-click the **Reports (CA)** icon.
2. Double-click the icon for the report.

To generate a Contract Administration report:

1. Double-click the report icon.
2. Select the criteria.
3. To generate the report on-line, click **Ok**.

Or

4. To generate the report off-line to a file, click the **Generate Off-line File** check box (ON).
5. Click **Ok**.

Or

6. To generate and print the report off-line, click the **Generate Off-line Print** check box (ON).
7. Click **Ok**.

6.13.1 Report Options

The report options are available as toolbar buttons or menu options for reports that have been generated on-line.

Components	Description
Close button	Closes the report preview.
Save button	In a simple report (see Save Reports section) invokes the Save dialog allowing the report to be saved in a .PSR file format.
Print button	Prints the report.
Prior button	Displays the prior page of a multi-page selection.
Next button	Displays the next page of a multi-page selection.
Zoom spin button	Magnifies or reduces the display of the report preview.
Copies spin button	Allows more than one copy of the report to be printed.

Table 6-21 The Report Components Table

6.13.2 Saving and Exporting Simple Reports

There are two types of reports in SiteManager—simple reports and complex reports. Simple report can be saved and exported, but complex reports cannot. It is easy to identify a simple report—the File menu’s Save choice (or the Save button) and the Service menu’s Export choice will be active for a simple report. They will not be active for a complex report. For procedures on saving, opening, and exporting a report, please refer to the General Concepts section.

6.13.3 View Saved Reports (PSR)

A saved simple report can be viewed using the View Saved Reports (PSR) icon. For procedures on opening and viewing a saved report, please refer to the General Concepts section.

6.13.4 Contract Status Report

The Contract Status Report window lets the user generate a Contract status report consisting of a report header, the Contract critical dates, the percentage of work complete by time and dollars, the current Contract amounts, and a Project breakdown. The current Contract amounts include values from approved estimates; pending estimates are not included.

The Contract Status Report displays information on contracts with a status of Active or Pending, unless the user specifically selects an Archived or Complete contract through the Contract ID field on the report criteria window. In all other instances, a filter is applied to the report so that only Active and Pending contracts are displayed.

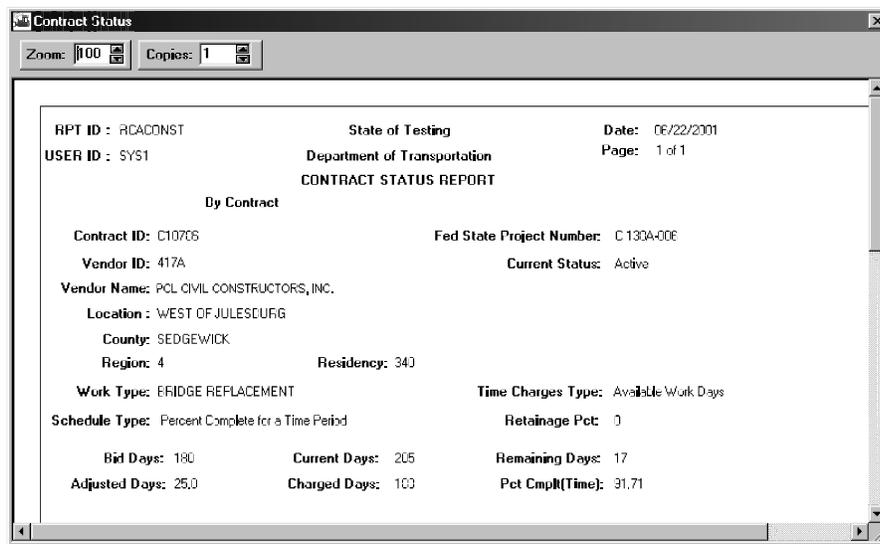


Figure 6-21 The Contract Status Report Window

Field Name	Description
Rpt ID	Report ID number.
Date	Date the report was run.
User ID	Transportation agency-defined ID of the user running the report.
Contract ID	Transportation agency-defined ID for the contact.
Fed/State Project Nbr	The federal or state Project number for the Contract.

Field Name	Description
Vendor ID	Transportation agency-defined Vendor ID of the Contract's Prime Contractor.
Current Status	Current status of the Contract.
Location	Text describing the physical location of the work.
County	Primary county where most of the Contract work is done.
Level 2 Office (user-defined label)	Office number for the Level 2 office responsible for administering the Contract.
Level 3 Office (user-defined label)	Office number for the Level 3 office responsible for administering the Contract. If there are only two office levels, this field will not report.
Level 4 Office (user-defined label)	Office number for the Level 4 office responsible for administering the Contract. If there are only two or three office levels, this field will not report.
Work Type	Transportation agency-defined code to identify the major type of work being done on the Contract.
Time Charges Type	How time charges are assessed for the Contract. Can be Work Days, Calendar Days, or Fixed Completion Date.
Schedule Type	The type of progress schedule used for the Contract. Can be Percent Complete for a Time Period, Percent of Critical Items Complete for a Time Period, or Critical Path Method. If Critical Path Method, no schedule is held on SiteManager.
Retainage Pct	Current percentage required to be retained for the Contract.
Bid Days	Original number of work days or calendar days of the awarded Contract.

Field Name	Description
Current Days	Total current number of work days or calendar days of the Contract. Calculated: bid days + adjusted days
Remaining Days	Total current number of work days or calendar days available for construction. Calculated: current days - charged days
Adjusted Days	Total positive or negative number of work days or calendar days added or removed from the Contract by Change Orders. Sum of adjusted days on all approved Contract time extension Change Orders.
Charged Days	Total number of days worked recorded on the daily work reports. Sum total of days worked recorded on the daily work reports.
Pct Cmpl (Time)	Work completion percentage by time. For Work Days and Calendar Days: $(\text{charged days} / \text{current days}) * 100$. For Fixed Date: $(\text{current date} - \text{notice to proceed date}) / (\text{current estimated date} - \text{notice to proceed date}) * 100$.
Date Let	Date the proposal for the Contract was let.
Open to Traffic	Date the road construction area was open to traffic.
Original Completion	Contract's original (bid) estimated completion date.
Notice to Proceed	Date the Contractor was given notice to proceed with the work.
Work Complete	Date the Contract's physical work was completed.
Extension Date	Date the Contract's current completion date is extended to.
Work Began	Date the Contractor actually began work on the Contract.
Substantial Complete	Date the Contract's physical work was substantially completed.

Field Name	Description
Current Completion	The current estimated date the Contract’s physical work is/was expected to be completed. For completed Contract this will be the last estimated completion date.
Current Contract Amounts	
Bid	Sum of all the Contract’s Item dollar amounts. Item dollar amount is the Contract item’s bid quantity times the unit price. Calculated once at Contract activation time and then stored.
Approved CO	Contract’s net CO amount. The amount of the Contract’s approved Change Orders.
Current	Total current amount for the Contract. Bid amount + approved CO amount.
Pend CO	Contract’s pending CO amount. The amount of the Contract’s unapproved Change Orders.
Anticipated	Anticipated or expected amount for the Contract. Current amount + pending CO amount.
Pos Adjmnt	Total of the Contract’s positive Contract and line Item adjustments. The sum of the Contract’s positive Contract adjustments and line Item adjustments amounts.
Installed	Total dollar amount for all Contract Items installed to date. Calculated sum of all the Contract Items’ installed amounts.
Over/Under	Total current amount of Contract over/under runs. Installed amount minus current amount for Contracts with complete status.
Paid to Date	Total amount paid to date for the Contract. If latest Contract estimate status = paid, then paid to date = previous amount paid + current amount paid, else paid to date = previous amount paid

Field Name	Description
Pend Paid	Amount allocated for payment but not actually paid to the Contractor. Does not include amounts for estimates which do not meet the minimum amount required for payment.
Remaining	Amount of work remaining on the Contract. Current amount - installed amount.
Neg Adjmnt	Total of the Contract's negative Contract and line Item adjustments. The sum of the Contract's negative Contract adjustments and line Item adjustments amounts.
Liq Damages	Total liquidated damages assessed to the Prime Contractor. If latest Contract estimate status = paid, then total liquidated damages = (previous Project liquidated damages + current Project liquidated damages) summed for all Projects, else total liquidated damages = sum of all the Project previous liquidated damages
Subcontract	Total amount of all Contract's Subcontracts. Sum of all the Contract's Subcontract amounts.
Total Retainage	Total of all retainage for the Contract. If latest Contract estimate status = paid, then total retainage = (previous partic retainage + current partic retainage + previous non-partic retainage + current non-partic retainage) summed for all Projects + Contract (previous total escrow amt + current escrow amt + previous total securities used amt + current securities used amt), else total retainage = (previous partic retainage + previous non-partic retainage) summed for all Projects + Contract (previous total escrow amt + previous total securities used amt)
Paymnt Retain	Total of all payment (cash) retainage for the Contract. If latest Contract estimate status = paid, then total cash retainage = (previous partic retainage + current partic retainage + previous non-partic retainage + current non-partic retainage) summed for all Projects, else total cash retainage = (previous partic retainage + previous non-partic retainage) summed for all Projects

Field Name	Description
Securities Ret	Total of all securities encumbered for the Contract. If latest Contract estimate status = paid, then total securities retained = Contract (previous total securities used amt + current securities used amt), else total securities retained = Contract previous total securities used amt
Escrow Retain	Total of all escrow retainage for the Contract. If latest Contract estimate status = paid, then total escrow retained = Contract (previous total escrow amt + current escrow amt), else total escrow retained = Contract previous total escrow amt
Current Project Breakdown	
Project ID	Project number for a Contract Project.
Bid Amount	Sum of the Project's Item dollar amounts. Item dollar amount is the item's bid quantity times the unit price. This value is calculated when the Contract is activated.
Approved CO Amt	Sum of the Project's approved Change Order dollar amounts.
Installed Amount	Total dollar amount for all Project Items installed to date.
Pct Cmpl(\$)	The Project's percent completion calculated from dollar amounts. $\text{Installed Amount} / (\text{Bid Amount} + \text{Approved CO Amt})$.

Table 6-22 The Contract Status Report Window Fields Table

6.13.5 Contract Dispute/Claim Report

The Contract Dispute/Claim report lists all of the disputes and claims that are found in the database based on user-selected criteria. This report can be generated for a Contract, Prime Contractor, dispute category, or for all disputes.

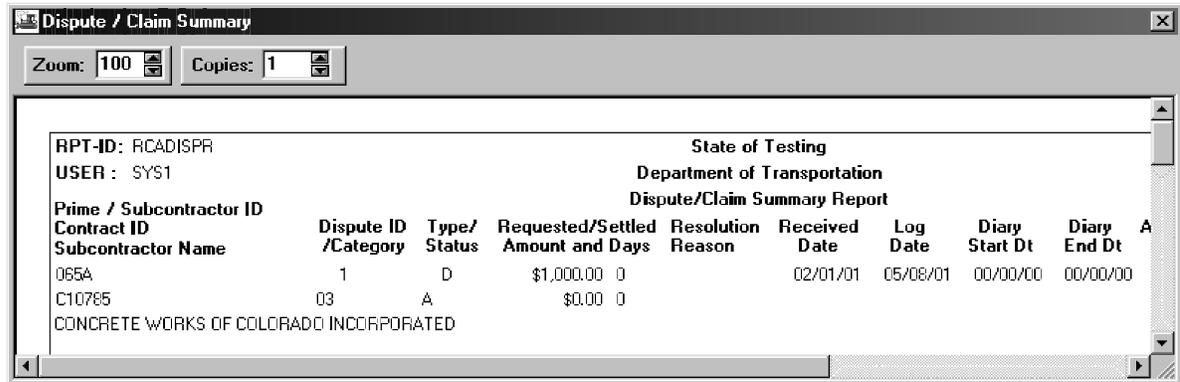


Figure 6-22 The Contract Dispute/Claim Report Window

Field Name	Description
Report Criteria	
Generate Report By	Report selection criteria (i.e., Contract, Prime Contractor, Dispute Category, All Disputes). This is a required field.
Contract ID	Transportation agency-defined ID for the Contract. The user can search this field.
Prime Contractor ID	Transportation agency-defined Vendor ID for the Prime Contractor. This is the Prime Contractor who filed the dispute or claim. The user can search this field.
Dispute Category	Transportation agency-defined category of disputes or claims based on the nature of the dispute or claim (e.g., material, utility, time).
Dispute/Claim Report	
Contract ID	Transportation agency-defined ID for the Contract.

Field Name	Description
Prime Contractor ID	Transportation agency-defined Vendor ID for a Prime Contractor. This is the Prime Contractor who filed the dispute or claim.
Subcontractor ID	Transportation agency-defined Vendor ID for the Subcontractor. This is the Subcontractor where the dispute or claim possibly originated.
Dispute ID	System-generated ID for a specific dispute or claim within a Contract.
Dispute Category	Transportation agency-defined category of disputes or claims based on the nature of the dispute or claim (e.g., material, utility, time).
Type	Identifies whether this is a Dispute (D) or a Claim (C).
Status	Identifies the current status of this dispute or claim record (i.e., Received, Logged, Open, Denied, Rescinded, Resolved, Closed).
Requested Amount	The dollar amount requested by the Contractor.
Settled Amount	Amount settled for the dispute or claim.
Requested Days	Number of days requested by the Contractor.
Settled Days	Number of days settled for the dispute or claim.
Received Date	Date the dispute or claim was received by the transportation agency.
Log Date	Date the dispute or claim was entered into SiteManager.
Accepted Date	Date the resolution was accepted by the Contractor.

Field Name	Description
FHWA Con. Dt	Date the FHWA concurred with the resolution.
Diary Start Dt	Starting date of a range of diaries pertaining to the dispute or claim.
Diary End Dt	Ending date of a range of diaries pertaining to the dispute or claim.
Payment Date	Date the payment was released for this dispute or claim.
Resolved Date	System date the discrepancy was resolved or overridden, or the date a final resolution was reached by the transportation agency.
Resolution Reason	Resolution reason type that identifies how the dispute or claim was resolved. Both the type and the description will be printed on the report.

Table 6-23 The Contract Dispute/Claim Report Fields Table

6.13.6 Item Quantity Report

The Item Quantity Report lists all Contract Item quantities that are found in the database based on user-selected criteria. This report can be generated on all Contract Items (i.e., Original, Change Order, Current, Installed, Paid, Final). The Items are grouped by Item Code and Project Number. An Item cost summary is displayed for each group.

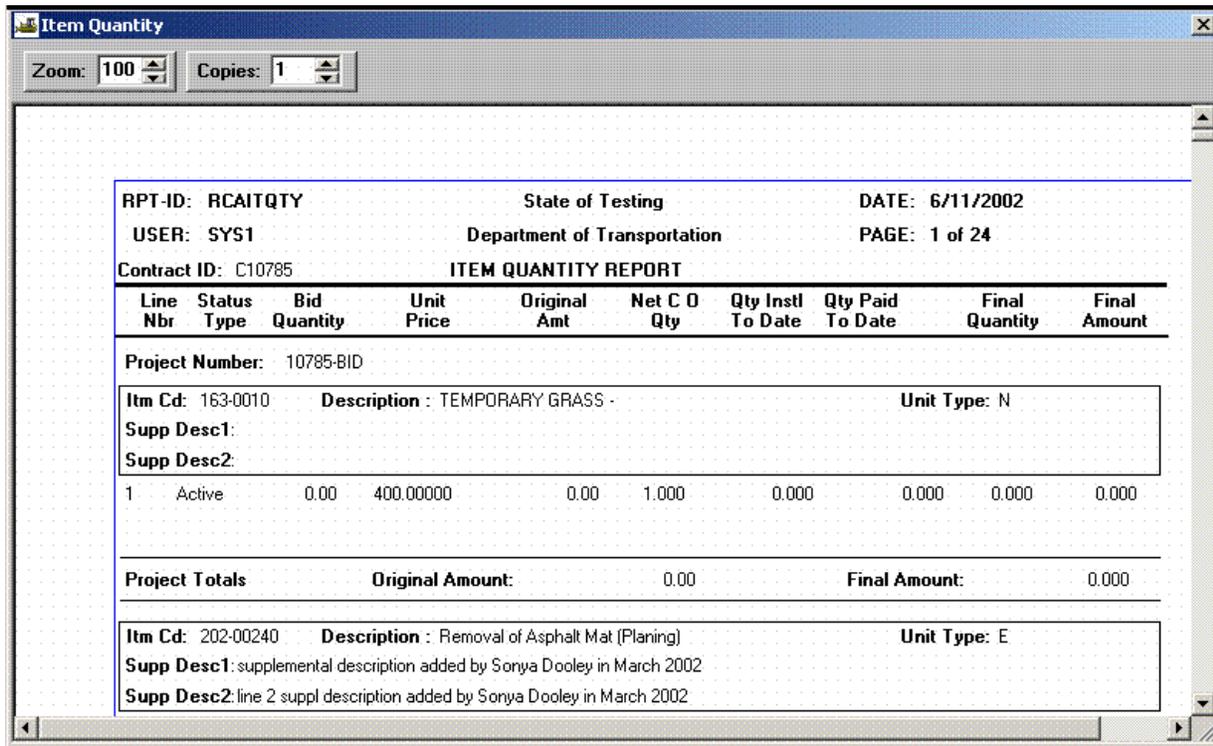


Figure 6-23 The Item Quantity Report Window

Field Name	Description
Report Criteria	
Contract ID	Transportation agency-defined ID for the Contract. The user can search this field.
Status	Identifies the current status of the Contract Item (i.e., Audit, Final, Complete, Pending, None).
All Item Status	Indicates that all Items will be printed on the report regardless of status.

Field Name	Description
Item Quantity Report	
Line Item	The Contract Line Item number that identifies each Item as it appears on the Contract. For all bid Items, the Line Item number is assigned by the Pre-construction function. For all Items added to the Contract after construction begins, the Line Item number is user-entered.
Item Code	Transportation agency-defined code that identifies the Item.
Description	Short description of the Item.
Unit	The unit of measure for the Item (e.g., cubic foot, gallon, square yards, acre).
Unit Price	Unit price of the Item from the invoice.
Status Type	Identifies the current status of the Item (i.e., Audit, Final, Complete, Pending, None).
Bid Qty	The bid quantity on the selected line item.
Original Qty	Quantity of the Item as indicated on the proposal or Contract.
Original Amt	Original Qty multiplied by Unit Price.
Project Nbr	Transportation agency-defined ID for a Project within the Contract.
CO Qty	The net change to the Item quantity from all approved Change Orders.
Current Qty	Sum of Original Qty plus CO Qty.
Installed Qty	Total of all quantities installed for this Item prior to the last paid estimate.

Field Name	Description
Over/under	Installed Qty minus Current Qty.
Paid Qty	Total of all quantities paid for this Item prior to the last paid estimate.
Final Qty	The final quantity for the Item in the Contract.
Final Amt	Final Qty multiplied by Unit Price.
Supp Description 1	This field contains a textual description that is supplemental to the item's description and may be required by the transportation agency.
Supp Description 2	This field contains a secondary textual description that is supplemental to the item's description and may be required by the transportation agency.
Qty Reported to Date	The total of all reported quantities on DWRs, regardless of whether the quantities are authorized or unauthorized and regardless of whether they are included on an estimate.
Qty Authorized to Date	The total of all reported quantities on DWRs that are authorized.
Qty Installed to Date	The total of all reported authorized reported quantities included on estimates (of all statuses).
Qty Paid to Date	The total of all authorized reported quantities included on estimates (of all statuses). This value is always the same as Qty Installed to Date unless the quantity to pay has been adjusted on the Estimate Item Detail window. This window includes a 'Pay This Est' field which can be modified when an estimate is pending. If the quantity in this field is adjusted, the Qty Paid to Date field will reflect the modification, which will cause the value to differ from the Qty Installed to Date.

Table 6-24 The Item Quantity Report Fields Table

6.13.7 Item Work Report

The Item Work Report lists all of the Contract Item work records found in the database based on user-selected criteria. This report displays the original bid quantity, current quantity, and installed quantity of the selected Item. The data is grouped according to the Item Code and Project Number. The bid quantity, current quantity, and installed quantity of Items is summarized for each group.

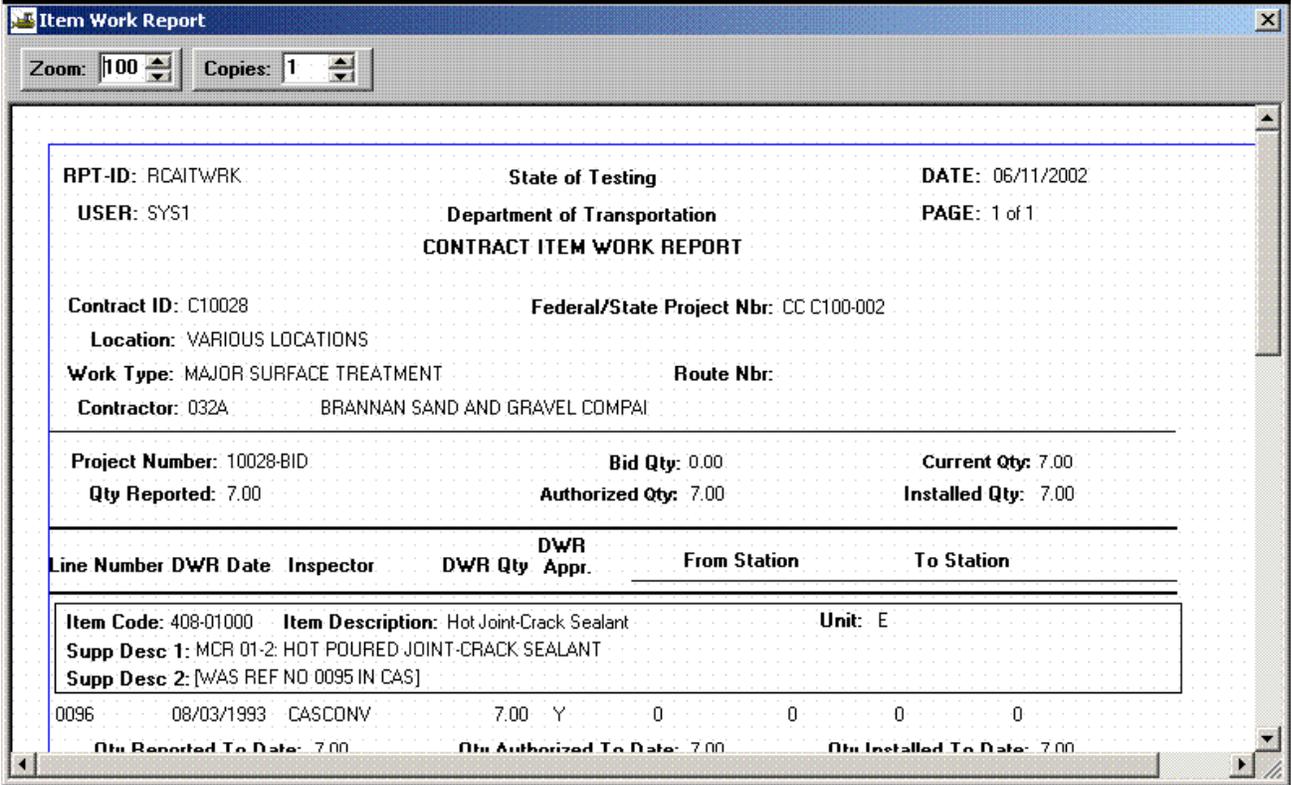


Figure 6-24 The Item Work Report Window

Field Name	Description
Report Criteria	
Contract ID	Transportation agency-defined ID for the Contract. The user can search this field.
Project Nbr	Transportation agency-defined ID for a Project within the Contract.
Item Code	Transportation agency-defined code that identifies the Item.

Field Name	Description
Item Work Report	
Contract ID	Transportation agency-defined ID for the Contract.
Fed/State Project Nbr	The federal or state Project number for the Contract.
Location	Description of the physical location of the Contract work.
Work Type	Transportation agency-defined code that identifies the major type of work (e.g., road, bridge work, beautification).
Route Nbr	The route number of the affected road.
Contractor	Transportation agency-defined Vendor ID for the Contractor.
Item Code	Transportation agency-defined code that identifies the Item.
Item Description	Short description of the Item.
Supp Description 1	This field contains a textual description that is supplemental to the item's description and may be required by the transportation agency.
Supp Description 2	This field contains a secondary textual description that is supplemental to the item's description and may be required by the transportation agency.
Unit	Unit of measure for the Item (e.g., cubic foot, gallon, square yards, acre).
Project Nbr	Transportation agency-defined ID for a Project within the Contract.
Bid Qty	Quantity of the Item as indicated on the proposal or Contract.
Current Qty	Sum of the net approved change order plus the bid quantity

Field Name	Description
Installed Qty	Total of all quantities installed for this Item prior to the last paid estimate.
Line Item Nbr	Contract Line Item number that uniquely identifies each Item as it appears on the Contract. For all bid Items, the number is assigned by the Pre-construction function. For all Items added to the Contract after construction begins, the number is user-entered.
DWR Date	Date the Daily Work Report was created.
Inspector	The user who wrote the Daily Work Report.
DWR Approved	Flag indicating if the DWR or Diary has been approved by the Project Manager.
DWR Qty	The quantity installed on the Daily Work Report date. This quantity should represent what the inspector estimates as being eligible for payment.
From Station	The 'From Station' distance, offset distance, and offset type.
To Station	The 'To Station' distance, offset distance, and offset type.
Reported Qty	The total of all reported quantities on DWRs, regardless of whether the quantities are authorized or unauthorized and regardless of whether they are included on an estimate.
Authorized Qty	The total of all reported quantities on DWRs that are authorized.

Field Name	Description
Qty Paid to Date	The total of all authorized reported quantities included on estimates (of all statuses). This value is always the same as Qty Installed to Date unless the quantity to pay has been adjusted on the Estimate Item Detail window. This window includes a 'Pay This Est' field which can be modified when an estimate is pending. If the quantity in this field is adjusted, the Qty Paid to Date field will reflect the modification, which will cause the value to differ from the Qty Installed to Date.

Table 6-25 The Item Work Report Fields Table

6.13.8 Required Documents Report

The Required Documents report lists the required documents for a Contract. This report can be generated to list the documents that are External (produced by the Contractor), Internal (produced by the transportation agency), or Both (internal and external).

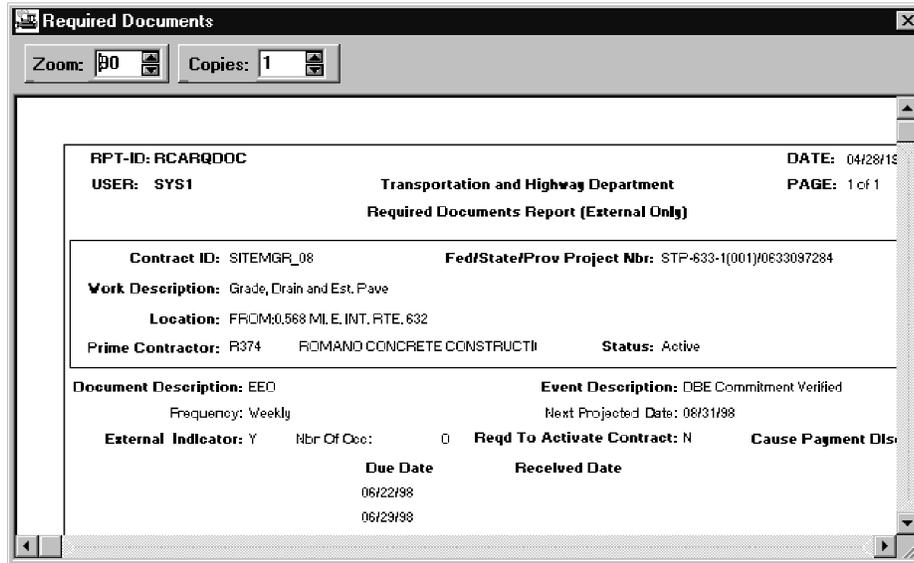


Figure 6-25 The Required Documents Report Window

Field Name	Description
Report Criteria	
Prime Contractor (External)	Documents required from the Prime Contractor (External documents).
Department of Transportation (Internal)	Documents required from the transportation agency (Internal documents).
Both (Internal and External)	Documents required from both the transportation agency (Internal documents) and the Prime Contractor (External documents).
Required Documents Report	

Field Name	Description
Contract ID	Transportation agency-defined ID for the Contract.
Fed/State/Prov Project Nbr	Federal, State or Province Project Number for the Contract, project or category.
Status	Identifies the current status of the Contract Item record. Values can be none, Audit, Final, or Complete.
Description	Description of the Contract.
Location	Description of the physical location of the Contract work.
Contractor	Short name of the Contractor.
Document Description	Description of the document.
Due Date	Due date for submission of the document.
Event Description	Description of the event that is documented.
Frequency	How often the document is required.
Next Projected Date	When the document is due next.
Number of Occurrences	How many times the document has been submitted.
External Indicator	Indicates whether or not the document is External (produced by the Contractor).

Table 6-26 The Required Document Report Fields Table

6.13.9 Contractor Behind Schedule Report

The Contractor Behind Schedule report lists all Contracts that are behind schedule relative to a user-selected percentage. The report can be generated for all Contractors or one Contractor. The system generates the report by reading the Contract Progress Schedule table in descending order by Progress Schedule Day. Only the most recent values are reported.

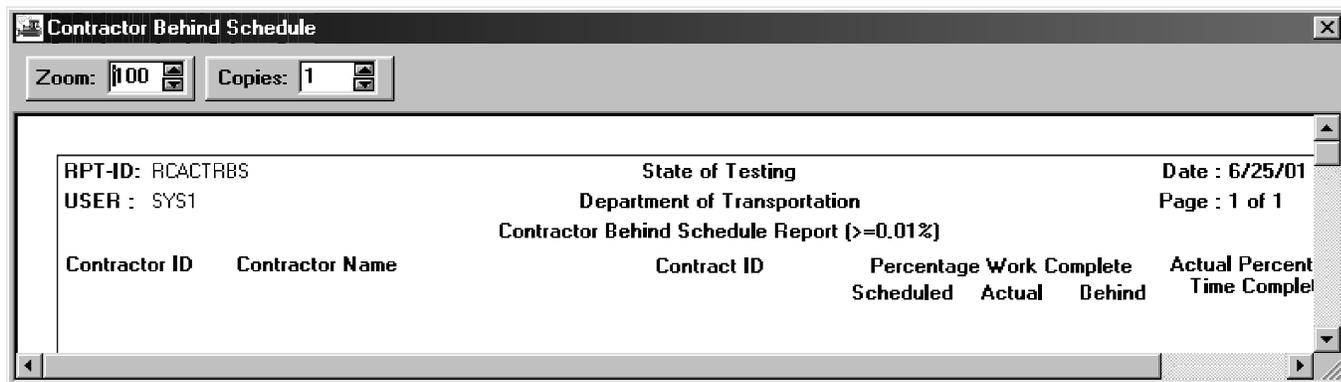


Figure 6-26 The Contractor Behind Schedule Report Window

Field Name	Description
Contractor ID	Transportation agency-defined Vendor ID of a Contractor.
Contract ID	Transportation agency-defined ID of a Contact.
Percent Work Complete	
Scheduled	Anticipated completion percentage of the Contract's dollar amount by the end of the Contract month/year.
Actual	Actual completion percentage of the Contract's dollar amount by the end of the Contract month/year.
Behind	Difference between the Scheduled and Actual percentage of work completed.
Percent Time Complete	Actual completion percentage of the Contract's scheduled time by the end of the Contract month/year.

Table 6-27 The Contractor Behind Schedule Report Fields Table

6.13.10 Past History Reports

The Past History - Work Completion report lists the completed Contracts for a selected Contractor. It also reports the percentage that the Contracts were ahead of or behind schedule at the time of completion. For each Contract ID, the system reads the Contract Critical Date table for the following Critical Date types:

- Estimated Completion Date
- Work Begin Date
- Physical Work Complete Date

If the Physical Work Complete Date has a value, the system lists the Contract and calculates the following values:

- Scheduled days = Number of days between the Estimated Completion Date and the Work Begin Date
- Difference days = Number of days between the Estimated Completion Date and the Physical Work Complete Date
- Percent Ahead/Behind Schedule = (Difference days / Scheduled days) * 100%
- If the percentage is positive, the Contract was ahead of schedule

- If the percentage is negative, the Contract was behind schedule
- If the percentage is zero, the Contract was on schedule

The Past History - Claims report lists the completed Contracts for a selected Contractor that resulted in a claim. It also reports the percentage of Contracts per resolution reason. To generate this report, the system reads the Contract, Contract Critical Date, Contract Dispute, and Contract Vendor tables for records that match the report criteria.

Contract ID	Description	Final Amount	Completion Date	% a
SITEMGR_18	REMOVAL AND REPLACEMENT OF RIGHT OF WAY FENCE	\$.00	11/20/97	
110698-CAL	manhole repair	\$.00	09/07/93	
110698-FIX	Guardrail repair	\$.00	11/05/93	
930308WINP	Dlane's WINP Contract	\$.00	01/01/93	
Number of contracts completed :		4		
Number of contracts completed ahead of schedule :		1		
Number of contracts completed behind schedule :		2		

Figure 6-27 The Past History - Work Completion Report Window

Field Name	Description
Contractor	The transportation agency-defined Vendor ID of a Contractor.
(Contractor Name)	Short name of the Contractor.
Contract ID	Transportation agency-defined ID for the Contract.
Description	Description of the Contract.
Final Amount	The sum of the final amounts for all Contract Items plus any net adjustments.
Completion Date	Physical Work Completion Date for the Contract.

Field Name	Description
Pct Schedule	
Ahead	The percentage the Contract was completed ahead of schedule.
Behind	The percentage the Contract was completed behind schedule.
Summary	
(Number of Contracts completed)	Number of Contracts that were completed within the report's time period.
(Number of Contracts completed ahead of schedule)	Number of Contracts that were completed within the report's time period and were completed ahead of the original schedule.
(Number of Contracts completed behind schedule)	Number of Contracts that were completed within the report's time period and were completed behind the original schedule.

Table 6-28 The Past History - Work Completion Report Fields Table

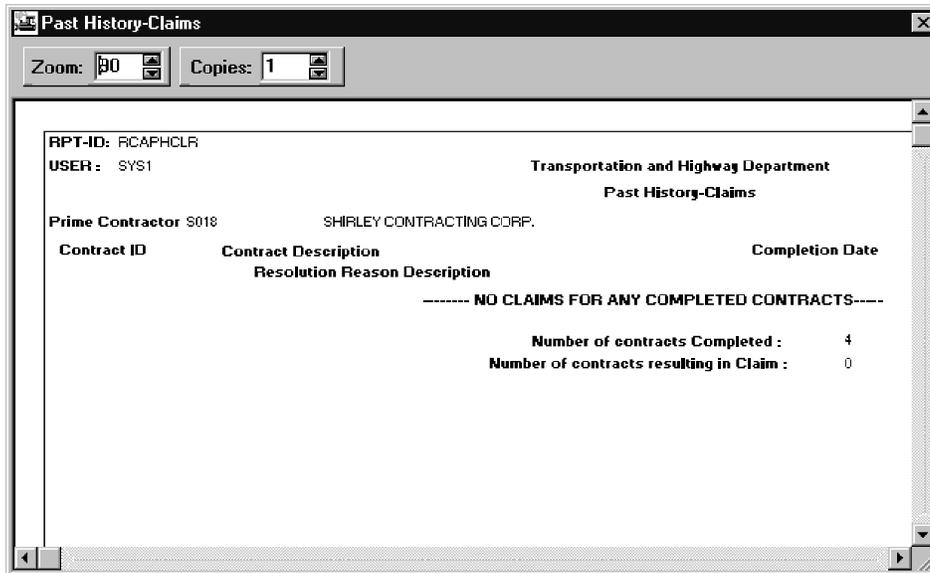


Figure 6-28 The Past History - Claims Report Window

Field Name	Description
Contractor	Transportation agency-defined Vendor ID of the Contractor
(Contractor Name)	Short name of the Contractor.
Contract ID	Transportation agency-defined ID for the Contract.
Description	Description of the Contract.
Contract Completion Date	Physical Work Complete Date for the Contract.
Resolution Reason Type	The reason for the resolution of a dispute.
Claim Date	For disputes, the date the dispute or claim was received by the transportation agency.
Claim Amount	The dollar amount requested by the Contractor.
Claim Time	Number of days requested by the Contractor.
Resolution Date	Date a final resolution of a dispute was reached by the transportation agency.
Resolution Amount	Amount of the resolution.
Resolution Time	Number of days granted.
Number of Contracts completed	Number of Contracts that were completed within the report's time period.
Number of Contracts resulting in a claim	Number of Contracts that were completed within the report's time period and resulted in a claim.
Resolution Reason	Description of the resolution reason.

Field Name	Description
Percentage	The percentage of Contracts that resulted in a claim for each resolution reason.

Table 6-29 The Past History - Claims Report Window Fields Table

6.13.11 Contractor Current Status Report

The Contractor Current Status report lists all Contractors, their Contracts, and Contract status. Status is defined as the progress of the Contract relative to both time and amount. If an office ID is indicated, the Contractors and Contracts in the selected office are listed. If no office ID is indicated, all Contractors and Contracts are listed. The system generates the report by reading the Contract, Contract Vendor, and Contract Progress Schedule tables.

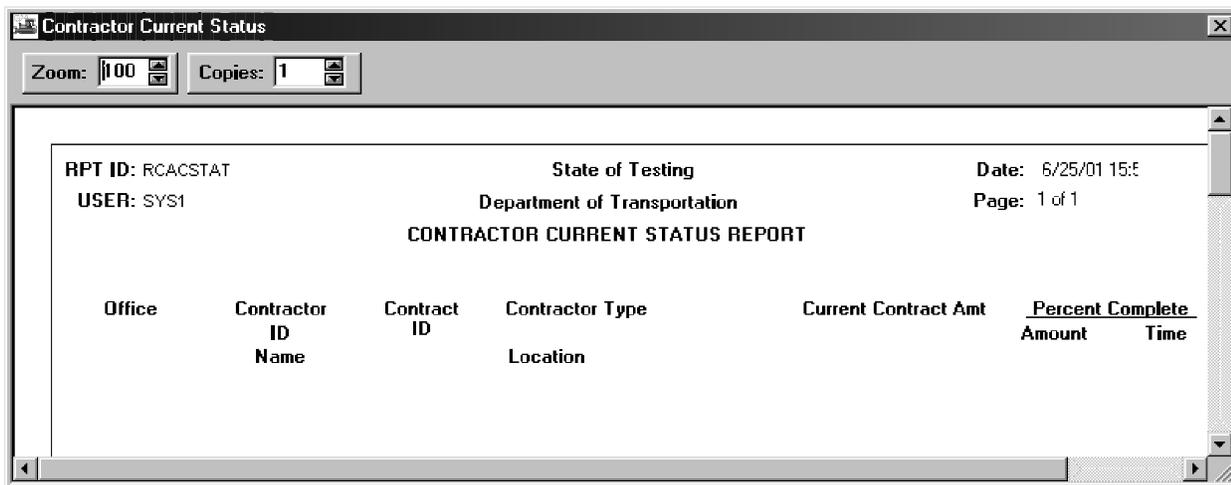


Figure 6-29 The Contractor Current Status Report Window

Field Name	Description
Report Criteria	
Level 2 Office (user-defined label)	Transportation agency-defined ID of a Level 2 office.
Level 3 Office (user-defined label)	Transportation agency-defined ID of a Level 3 office.
Level 4 Office (user-defined label)	Transportation agency-defined ID of a Level 4 office.
Contractor Current Status Report	
Contractor ID	Transportation agency-defined Vendor ID of the Contractor.
Contractor Type	Identifies which type of company the Contractor is.
Contract ID	Transportation agency-defined ID for the Contact.
Current Contract Amount	The sum of Bid Amount and Net Change Order Amount.
Percent Complete Amount	Actual completion percentage of the Contract's dollar amount by the end of the Contract month/year.
Percent Complete Time	Actual completion percentage of the Contract's scheduled time by the end of the Contract month/year.
Location	Description of the physical location of the Contract work (two lines).

Table 6-30 The Contractor Current Status Report Fields Table

6.13.12 Subcontract Value Report

The Subcontract Value report lists the value of Subcontracts for a specific Contract or administrative office. When a Contract is specified, the Contract Line Item data is included in the report.

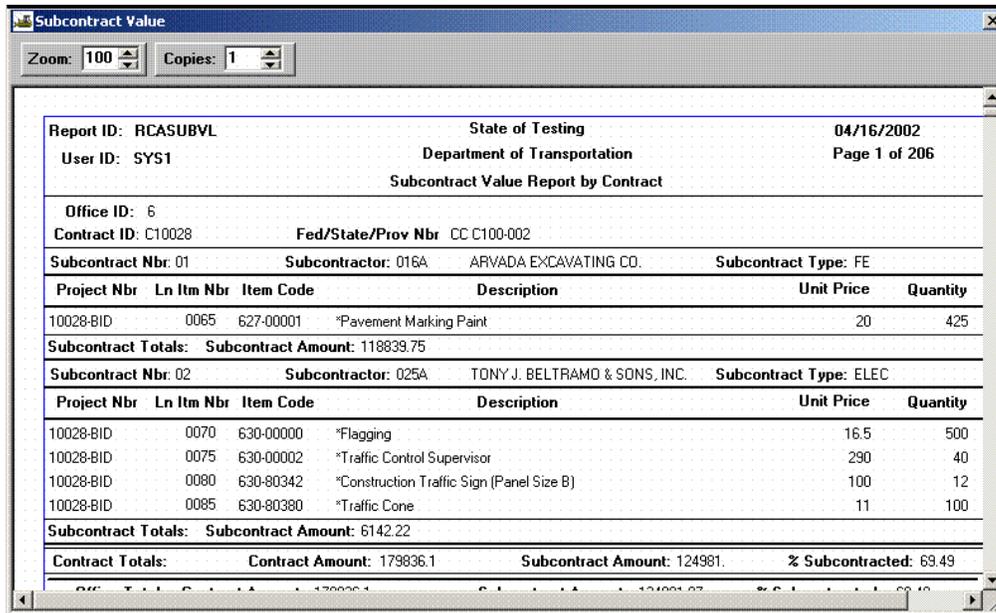


Figure 6-30 The Subcontract Value Report Window

Field Name	Description
Report Criteria	
By Contract	When selected, the office fields will be protected. If By Contract is checked, a Contract ID is required.
By Office	When selected, the Contract ID field will be protected. If By Office is checked, one of the following must be entered: State/Province-wide indicator checked (ON) Level 2 office Level 3 office Level 4 office
Contract ID	Transportation agency-defined ID for the Contract. The user can search this field. Required if By Contract is checked.

Field Name	Description
State/Province-Wide	Indicates that the report is to be generated for all active Contracts within the state or province.
Level 2 Office (user-defined label)	Level 2 office responsible for administering the Contract.
Level 3 Office' (user-defined label)	Level 3 office responsible for administering the Contract. If there are only two office levels, this field will not report.
Level 4 Office (user-defined label)	Level 4 office responsible for administering the Contract. If there are only two or three office levels, this field will not report.
Subcontractor ID	Transportation agency-defined Vendor ID for a Subcontractor. If not entered, all Subcontractors will be included in the report.
Generate Off Line File	Indicates that the report is to be generated off line.
Generate Off Line Print	Indicates that the report is to be printed off line.
Subcontract Value Report	
Date	Date the status report was run.
User ID	User ID of the person running the status report.
Office ID	Office number for the Level 2, Level 3, or Level 4 office responsible for the Contract. If there are only two or three office levels, only the applicable fields will be displayed.
Contract ID	Transportation agency-defined ID for the Contract.
Fed/State Project Nbr	The federal or state project number for the Contract.

Field Name	Description
Subcontract Nbr	user-entered number associated with each Subcontract.
Subcontractor	The Subcontractor's Vendor ID and short name.
Subcontract Type	Identifies the type of Subcontract.
Subcontract Amount	Current value (Bid Amt plus Approved CO Amt) of the Subcontract.
Project Number	Transportation agency-defined ID for a Project within the Contract.
Line Item Nbr	Contract Line Item number that uniquely identifies each Item as it appears on the Contract.
Item Code	Transportation agency-defined code that identifies the Item.
Item Description	Short description of the Item.
Supplemental Description	This field contains a textual description that is supplemental to the item's description and may be required by the transportation agency.
Unit	Unit of measure for the Item (e.g., cubic foot, gallon, square yards, acre).
Unit Price	Price for this Subcontract line Item per unit.
Quantity	The quantity of the line Item Subcontracted to this Subcontract.
Totals	
Contract Amount	Total current value (Bid Amt plus Approved CO Amt) of the Contract, office, or state/province.
Subcontract Amount	Total current value (Bid Amt plus Approved CO Amt) of the Contract, office, or state/province Subcontract amounts

Field Name	Description
% Subcontracted	Subcontract Amount divided by the Contract Amount.

Table 6-31 The Subcontract Value Report Fields Table

6.14 Process List (Contract Administration)

The Process List window lists processes that are available to the authorized user. Available processes depend upon the functional area of the process list, for example, Contractor Payment processes are available by clicking the Process List icon located on the Contractor Payments panel. Processes appearing in Process Lists also depend upon the user security assigned to the individual process.

The Contract Administration Process List contains the following standard process:

- Monitor Contract Status (BMONCONT)
- Pre-Construction Reference Load (BREFLOAD)
- Payroll Upload (BCRPAYRL)
- Payroll Exceptions Batch Job (BCVTPEXP)
- Pre-Construction Contract Load (BPRELOAD)
- Load DSS Data (BCALDSSD)

Processes may be RTF reports, or batch processes. From this window, authorized users may submit processes for batch and background execution.

A process is run from the Process List window by clicking on the named process, and choosing Run Process from the Services menu, or by clicking the named process and clicking the Run Process button or double-clicking the process.

7. Key Dates and Checklist Events

August 2005

7.1 Key Date and Checklist Event Overview

Key Dates and Checklist Events are the SiteManager components that let the user establish and monitor a series of key dates and scheduled events. Key Dates and Checklist Events, although similar in functionality, are independent events.

- **Key Dates** are dates that are important *when they occur*. Therefore, personnel are notified when a Key Date is accomplished. They are also notified when a Key Date is not accomplished by the projected date. A Key Date can be set up to be required either when the Contract is activated or when it is finalized. The user creates the Key Date schedule and records the actual occurrences of Key Dates on the Key Dates window.
- **Checklist Events** are actions that are important *when they do not occur*. Therefore, personnel are notified when a Checklist Event is not accomplished by the projected date. For Checklist Events that occur more than once or at regular intervals (e.g., monthly or weekly), the system tracks each occurrence. A Checklist Event can be set up to be required when the Contract is activated, or to cause a discrepancy when the estimates are generated. The user creates the Checklist Event schedule on the Checklist Scheduled Events window.
- The **Checklist Event Dates** window lets the user view the Checklist Event schedule, including multiple occurrences of each event, and provides a chronological history of the events. The user records the actual occurrences of the Checklist Events on this window or, if the event is a document submitted by an external source, on the Document Submission window.

7.2 Contract and Civil Rights Applicability

Key Dates and Checklist Events enhance the ability of the user to administer the Contract and comply with civil rights provisions. Every Contract includes a default set of Key Dates and Checklist Events, which are defined by the transportation agency. The user can modify these defaults and add other agency-defined Key Date types and Checklist Event types to the Contract schedule.

The date and event types are defined by the transportation agency in the system code tables.

Messaging is an important function of Key Dates and Checklist Events. For each Key Date and Checklist Event, the user selects either a distribution list or a recipient to be notified as required. Note that when Default Key Dates and Default Checklist Events are created, a distribution list and recipient ID are not required. However, once the defaults are added to Contracts, a distribution list or recipient ID will be required on the Key Dates and Checklist Scheduled Events windows. The main differences between Key Dates and Checklist Events are summarized below.

Key Dates

Key Dates can be used to schedule and track key Contract dates, such as testing, final inspection, and ‘closed to traffic’ dates, which need to be reported to Contract personnel when the activity is done. To schedule Key Dates and record the actual dates of Key Dates that have occurred, users access the Key Dates window.

SiteManager sends In-Box messages related to Key Dates as follows:

- When a Key Date’s actual date is recorded, its distribution list or recipient is notified.
- When a Key Date’s projected date expires before the actual date is recorded, the Project Manager is notified.

Checklist Events

Checklist Events are useful for scheduling events that occur more than once or depend on an action or response by external sources and, therefore, can be difficult to track. This includes the documents required for civil rights compliance, such as DBE and EEO reports, and documents required by the Contract, such as material certification. Checklist Events can be associated with Contract milestones.

To schedule the Checklist Events, users access the Checklist Scheduled Event window. To view the scheduled Checklist Events and record the actual dates of Checklist Events, users access the Checklist Event Dates window and the Document Submission window. SiteManager sends In-Box messages related to Checklist Events as follows:

- When a Checklist Event's projected date expires before the actual date is recorded, its distribution list or recipient is notified.

In addition, Checklist Events can cause discrepancies when they do not occur. The user defines which Checklist Events will cause discrepancies. If any of these Checklist Events have not occurred when an estimate is generated, a discrepancy is reported. The estimate process will identify a Checklist Event as a discrepancy if the projected date has expired and the actual date is not recorded. Estimate discrepancies are reported on the Estimate Summary window, and the details are given on the Estimate Discrepancy window.

Tip: Every Contract schedule also includes a default set of Contract Critical Dates. For more information, refer to the Contract Critical Dates topic.

7.3 Key Dates

The Key Dates window lists the Key Dates for the selected Contract in the top data window. The data for the selected Key Date is displayed in the bottom data window. The Key Date Types are pre-defined in the system code tables. SiteManager adds a set of default Key Dates automatically to each new Contract. The user creates the Key Date schedule and records the actual occurrence of Key Dates on this window. The user can add, modify, and delete the Key Dates.

When a Key Date is logged, an In-Box Message is sent to the distribution list or recipient specified, including the specified text and the details of the key date. A recipient ID or distribution list is required for each Key Date. When a Key Date is missed, an In-Box Message with the details is sent to the Project Manager.

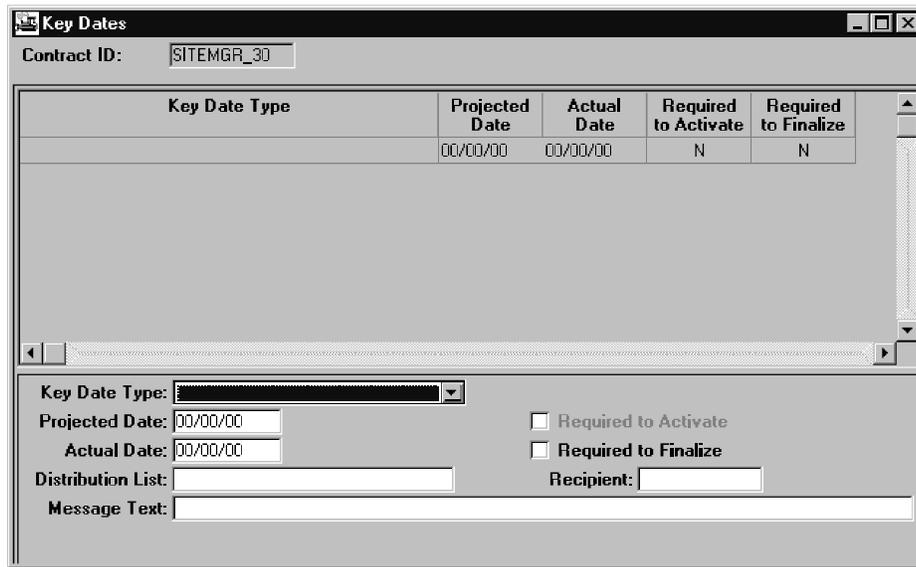


Figure 7-1 The Key Dates Window

Field Name	Description
Contract ID	The transportation agency-defined ID for the Contract.
Key Date Type	Transportation agency-defined type of key date (e.g., Closed to Traffic Date, State Final Inspection Date, Open to Traffic Date). The key date type is a required field and should be unique within the Contract. After the record is saved, this field is protected.
Projected Date	The date the event is targeted to occur.
Actual Date	The date the event actually occurs. When entered, the date must be current or in the past. The Recipient or Distribution List is notified when this date is entered.
Required to Activate	Indicates that a key date must occur before the Contract status can be changed from Pending to Active (e.g., Letting Date, Award Date, Execution Date). A Key Date can not be both Required to Activate and Required to Finalize.
Required to Finalize	Indicates that a key date is part of the Contract finalization process. A Key Date can not be both Required to Activate and Required to Finalize.

Field Name	Description
Distribution List	Group to be notified that the event has occurred. Either a Distribution List or Recipient field must be entered. After a valid entry in either field, the other field is protected.
Recipient	User ID of a person to be notified that the event has occurred. Either a Distribution List or Recipient must be entered. After a valid entry in either field, the other field is protected.
Message Text	Standard message to be sent to the recipient(s).

Table 7-1 The Key Dates Window Fields Table

To schedule a Key Date:

1. In the **Key Dates** list box, scroll to and click the Key Date.
2. In the **Projected Date** field, with the cursor in the first space, type the date the key date event is expected to be completed.
3. Press the **Tab** key.
4. If this Key Date must occur before the Contract status can be changed to Active, click the **Required to Activate** check box (ON).
5. If this Key Date is to be part of the Contract finalization process, click the **Required to Finalize** check box (ON).
6. Press the **Tab** key.
7. In the **Distribution List** field, perform a **Search** and select a Group ID.

OR

8. In the **Recipient** field, perform a **Search** and select a User ID.
9. Press the **Tab** key.
10. In the **Message** field, type a short notice that will be sent to the Distribution List or Recipient when the Actual Date is entered.
11. Click the **Save** button.

Tip: The Key Date Type field can not be modified on a saved record. To change the Key Date Type, delete the old record and add a new one.

Key Dates

To enter the Actual Date of a Key Date:

1. In the **Key Dates** list box, scroll to and click the Key Date.
2. In the **Actual Date** field, with the cursor in the first space, type the date that the event occurred.
3. Click the **Save** button.

To delete a Key Date:

1. In the **Key Dates** list box, scroll to and click the Key Date to delete.
2. Click the **Delete** button.
3. Click the **Yes** button (to confirm deletion).
4. Click the **Save** button.

To add a Key Date:

1. On the **Key Dates** window, click any row in the top datawindow to return focus to that datawindow.
2. Click the **New** button to insert a blank row in the top datawindow for the new Key Date.
3. In the **Key Date Type** drop-down list, click the expand arrow to the right of the current selection and click the Key Date Type.
4. Press the **Tab** key.
5. In the **Projected Date** field, with the cursor in the first space, type the date the key date event is expected to be completed.
6. Press the **Tab** key.
7. If this Key Date must occur before the Contract status can be changed to Active, click the **Required to Activate** check box (ON).
8. If this Key Date is to be part of the Contract finalization process, click the **Required to Finalize** check box (ON).
9. Press the **Tab** key.
10. In the **Distribution List** field, perform a **Search** and select a Group ID.

OR

11. In the **Recipient** field, perform a **Search** and select a User ID.
12. Press the **Tab** key.
13. In the **Message** field, type a short notice that will be sent to the Distribution List or Recipient when the Actual Date is entered.
14. Click the **Save** button.

7.4 Checklist Scheduled Events

The Checklist Scheduled Events window lists the scheduled events for the selected Contract. The data for the event selected in the top datawindow is displayed in the bottom datawindow. The Event Types are pre-defined in the system code tables. SiteManager adds a set of default Checklist Events automatically to each new Contract. The user creates the Checklist Event schedule on this window. The user can add, modify, and delete the Checklist Events. A recipient ID or distribution list is required for each Checklist Scheduled Event.

When an event is scheduled on this window, the Monitor Contract Status process will create records for the projected dates so that the user may record the actual dates of occurrence. These records appear on the Checklist Event Dates window. The user can record the Actual Date of each occurrence of an event on either the Checklist Event Dates window or the Document Submission window, depending on the event. If the Checklist Event is a document supplied by an external source, the Actual Date is recorded on the Document Submission window. The Monitor Contract Status process notifies the recipient(s) when a Checklist Event is overdue.

When an Event Date is missed, an In-Box Message is sent to the distribution list or recipient specified, including the specified text and the details of the event date. When an Event Date is logged, no notification is sent.

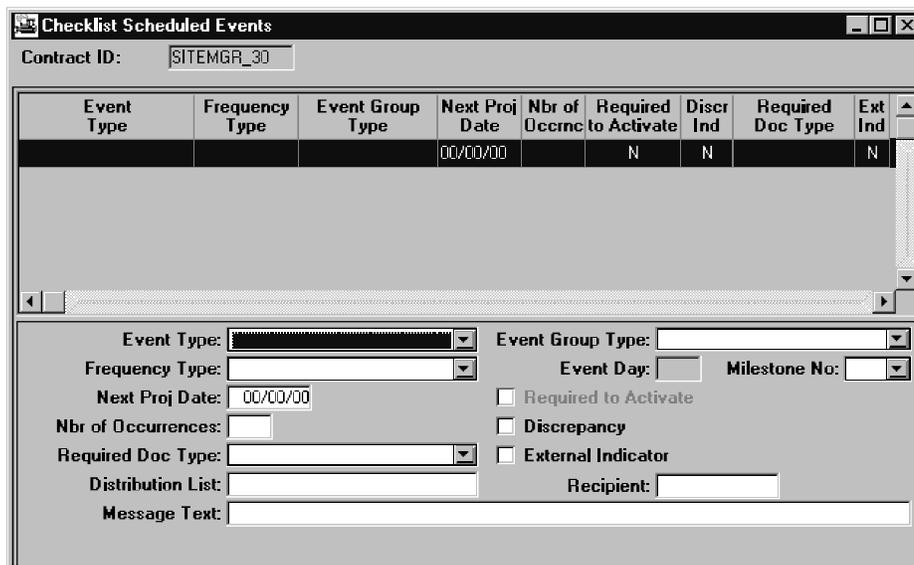


Figure 7-2 The Checklist Scheduled Events Window

Field Name	Description
Contract ID	The transportation agency-defined ID for the Contract.
Event Type	Transportation agency-defined type of event (e.g., bonding verified DBE commitment verified, Final Inspection Completed). The Event Type is a required field and should be unique within the Contract. After the record is saved, this field is protected.
Event Group Type	A grouping of associated event types (e.g., EEO, Training, or Certification). This is a required field.
Frequency Type	For repetitive events, the frequency with which those events occur (i.e., Daily, Weekly, Biweekly, Monthly, Quarterly, Semi-Annually, or Annually). One Time Only is for non-repetitive events. This is a required field.
Event Day	The day of the week or month that these events are to occur. For weekly and bi-weekly events, the day of the week (01-07) the events are to occur. For monthly events, the day of the month (01-30) they are to occur. This field is protected for all other frequency types.
Milestone No.	Identifies a milestone number within the Contract.
Next Proj Date	Next target date for the repetitive event to occur. For a new checklist event, it is the first occurrence date. This is a required field.
Required to Activate	Indicates that the event must occur before the Contract status can be changed from Pending to Active. Only events with a frequency of One Time Only can be Required to Activate. An event type can not be both Required to Activate and associated with a Discrepancy. If one of these fields is checked, the other field is protected. This field is protected if the Contract is already active.
Number of occurrences	Number of times the event is scheduled to occur in the specified frequency type. This is a required field. If the frequency type is 'One Time Only' this field will default to 1.

Field Name	Description
Discrepancy	Indicates that if the event has not occurred by the time of estimate generation, this event is noted as a Discrepancy. An event type can not be both Required to Activate and associated with a Discrepancy. If one of these fields is checked, the other field is protected.
Required Doc Type	Transportation agency-defined codes identifying the type of document when an external document is expected (e.g., Trainee report, EEO report, Material Certification). This is a required field when the External Indicator is checked.
External Indicator	Indicates that a document is expected to be received from an external source. A valid Document Type must be entered when this field is checked.
Distribution List	Group to be notified when the Checklist Event’s projected date expires and the actual date is not entered. Either a Distribution List or Recipient field must be entered. After a valid entry in either field, the other field is protected.
Recipient	user ID of a person to be notified when the Checklist Event’s projected date expires and the actual date is not entered. Either a Distribution List or Recipient field must be entered. After a valid entry in either field, the other field is protected.
Message Text	Standard message to be sent to recipient(s).

Table 7-2 The Checklist Scheduled Events Window Fields Table

To schedule a Checklist Event:

1. On the **Checklist Scheduled Events** window, scroll to and click the scheduled event.
2. In the **Event Group Type** drop-down list, click the expand arrow to the right of the current selection and click the event group type.
3. Press the **Tab** key.
4. In the **Frequency Type** drop-down list, click the expand arrow to the right of the current selection and click the frequency type. If the frequency type is either monthly or weekly, the **Event Day** field is enabled.
5. Press the **Tab** key.

6. If the **Event Day** field is enabled, type the corresponding day of the week (2-6) or day of the month (1-30).
7. Press the **Tab** key.
8. In the **Milestone No.** drop-down list, click the expand arrow to the right of the current selection and click the milestone to associate with this scheduled event.
9. Press the **Tab** key.
10. In the **Next Proj Date** field, with the cursor in the first space, type the next date this scheduled event is expected to occur.
11. Press the **Tab** key.
12. If the event must occur before the Contract status can be changed to Active, click the **Required to Activate** check box (ON).
13. Press the **Tab** key.
14. In the **Number of Occurrences** field, type number of times this scheduled event will occur.
15. Press the **Tab** key.
16. To generate a discrepancy if the event has not occurred by the time of estimate generation, click the **Discrepancy** check box (ON).
17. Press the **Tab** key.
18. If the event is a document, in the **Required Doc Type** drop-down list, click the expand arrow to the right of the current selection and click the required document type.
19. Press the **Tab** key.
20. If the required document is expected from an external source, click the **External Indicator** check box (ON).
21. In the **Distribution List** field, perform a **Search** and select a Group ID to be notified when the Actual Date is overdue.

OR

22. In the **Recipient** field, perform a **Search** and select a user ID to be notified when the Actual Date is overdue.
23. Press the **Tab** key.
24. In the **Message** field, type a short message that is sent to the Distribution List or Recipient when the scheduled event Actual Date is not completed by the Next Projected Date.
25. Click the **Save** button.

To delete a Checklist Scheduled Event:

1. On the **Checklist Scheduled Events** window, scroll to and click the scheduled event.
2. Click the **Delete** button.
3. Click the **Yes** button (to confirm deletion).
4. Click the **Save** button.

Tip: Deleting a Checklist Scheduled Event also deletes:

- Any corresponding Document Submission records, and
- Checklist Event Date records.

To add a Checklist Event:

1. On the **Checklist Scheduled Events** window, click any row in the top datawindow to return focus to that datawindow.
2. Click the **New** button to insert a blank row for the new scheduled event entry.
3. In the **Event Type** drop-down list, click the expand arrow to the right of the current selection and click the event type.
4. Press the **Tab** key.
5. In the **Event Group Type** drop-down list, click the expand arrow to the right of the current selection and click the event group type.
6. Press the **Tab** key.
7. In the **Frequency Type** drop-down list, click the expand arrow to the right of the current selection and click the frequency type. If the frequency type is either monthly or weekly, the **Event Day** field is enabled.
8. Press the **Tab** key.
9. If the **Event Day** field is enabled, type the corresponding day of the week (2-6) or day of the month (1-30).
10. Press the **Tab** key.
11. In the **Milestone No.** drop-down list, click the expand arrow to the right of the current selection and click the milestone to associate with this scheduled event.
12. Press the **Tab** key.
13. In the **Next Proj Date** field, with the cursor in the first space, type the next date this scheduled event is expected to occur.
14. Press the **Tab** key.

15. If the event must occur before the Contract status can be changed to Active, click the **Required to Activate** check box (ON).
16. Press the **Tab** key.
17. In the **Number of Occurrences** field, type number of times this scheduled event will occur.
18. Press the **Tab** key.
19. To generate a discrepancy if the event has not occurred by the time of estimate generation, click the **Discrepancy** check box (ON).
20. Press the **Tab** key.
21. If the event is a document, in the **Required Doc Type** drop-down list, click the expand arrow to the right of the current selection and click the required document type.
22. Press the **Tab** key.
23. If the required document is expected from an external source, click the **External Indicator** check box (ON).
24. In the **Distribution List** field, perform a **Search** and select a Group ID to be notified when the Actual Date is overdue.

OR

25. In the **Recipient** field, perform a **Search** and select a user ID to be notified when the Actual Date is overdue.
26. Press the **Tab** key.
27. In the **Message** field, type a short message that is sent to the Distribution List or Recipient when the scheduled event Actual Date is not completed by the Next Projected Date.
28. Click the **Save** button.

7.5 Checklist Event Dates

The Checklist Event Dates window lists the scheduled events for the selected Contract. The data for the event selected in the top datawindow is displayed in the bottom datawindow. The data shows a chronological history of each occurrence of a repetitive scheduled event, and the Actual Date recorded by the user for each occurrence. This window lets the user record the actual dates of the Checklist Scheduled Events, and add or delete Checklist Event Date records.

One day prior to a scheduled event, the Monitor Contract Status process will automatically write the projected date for the checklist event to this window (if the projected event has not already been added by the user). If the Checklist Event is a document supplied by an external source, the Monitor Contract Status process will also create a corresponding Document Submission record for the event. When the date is recorded on the Document Submission window, the Actual Date field on the Checklist Event Dates window is automatically populated with this date.

Note: If the Checklist Event is an external document and the projected date for the event is entered manually on the Checklist Event Dates window, the system will automatically create a corresponding Document Submission record when the row is entered by the user. This document record should be used to record the actual date of occurrence.

Tip: The user can not modify the Checklist Event schedule (in the top datawindow) on this window. The schedule can only be modified on the Checklist Scheduled Events window.

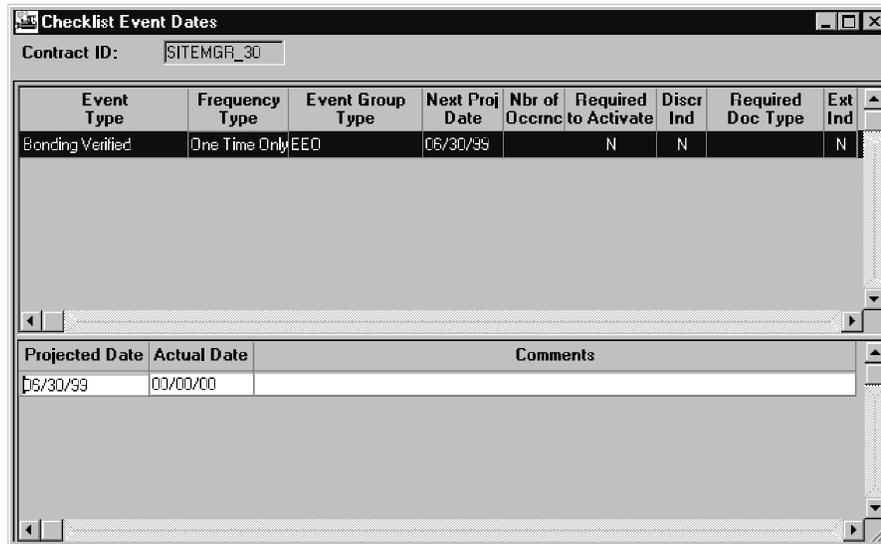


Figure 7-3 The Checklist Event Dates Window

Field Name	Description
Contract ID	The transportation agency-defined ID for the Contract.
Event Type	Transportation agency-defined code representing a type of event (e.g., bonding verified, DBE commitment verified, Final Inspection Completed).
Frequency Type	For repetitive events, the frequency with which those events occur (i.e., Daily, Weekly, Biweekly, Monthly, Quarterly, Semi-Annually, or Annually). One Time Only is for non-repetitive events.
Event Group Type	A grouping of associated event types (e.g., EEO, Training, Certification).
Next Proj Date	Next Projected Date field. The next targeted date for the event to occur.

Field Name	Description
Nbr of Occurnc	Number of times the event is expected to occur
Required to Activate	Indicates that an event must occur before the Contract status can be changed from Pending to Active.
Discr Ind	Discrepancy indicator which indicates that if an event has not occurred by the time of the estimate generation this event needs to be noted on a discrepancy.
Required Doc Type	Required Document Type field. A DOT defined codes identifying each type of document (e.g., Trainee report, EEO report, Material Certification document).
Ext Ind	The external indicator which indicates that a document is expected to be received from an external source.
Projected Date	The date the event is targeted to occur. This field is protected after the record is saved. When entered, the date must be in the future and can not be greater than next projected date. For a new row default to Next Proj Date.
Actual Date	The date the event actually occurs, protected when external indicator is checked. When entered, the date must be current or in the past.
Comments	Comments about this record.

Table 7-3 The Checklist Event Dates Window Fields Table

To record the Actual Date of a Checklist Scheduled Event:

1. On the **Checklist Event Dates** window, scroll to and click the Checklist Event.
2. In the **Actual Date** field, with the cursor in the first space, type the date that the event occurred.
3. Press the **Tab** key.
4. In the **Comments** field, type comments to add to the record.
5. Click the **Save** button.

Tip: If the Checklist Event is a document supplied by an external source, enter the Actual Date on the Document Submission window.

To delete a Checklist Event Date record:

1. On the **Checklist Event Dates** window, scroll to and click the scheduled event.
2. In the bottom datawindow of the **Checklist Event Dates** window, scroll to and click the record to be deleted.
3. Click the **Delete** button.
4. Click the **Yes** button (to confirm deletion).
5. Click the **Save** button.

Tip: If the Checklist Event is a document supplied by an external source, deleting the date record also deletes the associated document submission record.

To add an unscheduled Checklist Event Date record:

1. On the **Checklist Event Dates** window, click any row in the top datawindow to return focus to that datawindow.
2. Click the **New** button to insert a blank row for the new scheduled event entry.
3. In the **Projected Date** field, with the cursor in the first space, type the date for the next occurrence of the scheduled event.
4. Press the **Tab** key.
5. In the **Actual Date** field, with the cursor in the first space, type the date the scheduled event occurred.
6. In the field, type the actual date.
7. Press the **Tab** key.
8. In the **Comments** field, type any comments that apply to this event date occurrence.
9. Click the **Save** button.

Tip: An unscheduled event does not have to occur at the scheduled frequency.

8. Daily Work Reports

August 2005

8.1 General Concepts

Daily Work Reports and Diaries are created to document the work that is done daily on the Contract. The data recorded in a Daily Work Report or Diary is the Contract activity data rather than the Contract plan. The documentation of Contract activity includes daily information about the weather, the personnel who worked at the construction site, the hours worked, and the equipment used. This data is collected in the field by the Project Manager, Project Engineer, and the Inspectors working on the Contract. The Project Manager uploads the Diaries and authorized Daily Work Reports to the SiteManager Server database. This method is used to enter most of the Contract activity data in SiteManager. This information is essential for the administration of the Contract.

The Installed Work Report, located in the Contractor Payments functional area compiles all placed quantities for a contract that have not yet been included in an estimate. See Section 10.3.5 for more details.

The Inspectors record daily information in Daily Work Reports. Typically, for each Contract, each Inspector submits one Daily Work Report per day to the Project Manager. The Project Manager either authorizes a Daily Work Report or sends it back to the Inspector to be modified and resubmitted. The Project Manager creates Daily Diaries. Each Diary is a collection of the Daily Work Reports submitted by all Inspectors working on the Contract. Typically, for each Contract, the Project Manager submits one Daily Diary per day. In the Daily Diary, the Project Manager authorizes the Daily Work Reports and enters the charge information for the day.

Following the general rule that for each contract, only one Daily Work Report (DWR) per day per inspector can be created:

- A message appears if an inspector attempts to create a second DWR for a contract. A second DWR cannot be created for a contract.
- A message appears that the DWR can be opened as “Read Only” (no changes can be made) if the DWR:
 - Has been transferred to the Project Manager
 - Has been authorized by the Project Manager
 - The current user is not the DWR author
- A DWR cannot be deleted. It can be amended the next day or data can be deleted on the Contractor or Contractors Equipment Tabs.

The User accesses the Daily Work Report and Diary functions on the Daily Work Reports panel. This panel has three icons that represent the following functions:

- Daily Work Reports
- Diary
- History

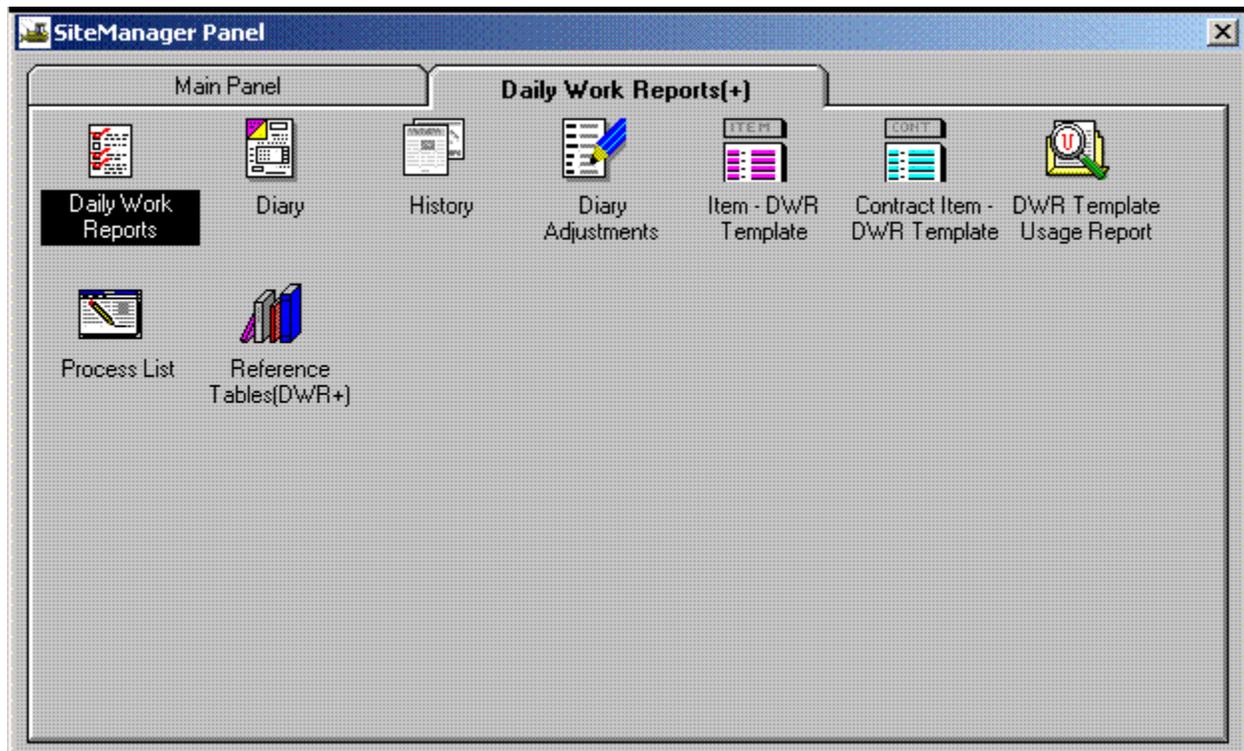


Figure 8-1 The Daily Work Reports Panel

8.1.1 Pipeline

Project Managers and Inspectors use Pipeline to transfer Contract data and Daily Work Reports. Throughout the life of a Contract, the Project Manager uses the pipeline process to download Contract plan data from the Server to the field. Only the Project Manager can download data from the Server. This data is not modified in the field; it is used as a basis for recording Contract activity data.

First, the Project Manager downloads Basic Contract Data to the workstation using the pipeline process. Basic Contract Data includes any Force Accounts or Change Orders for the Contract. The Project Manager then pipes specific Contract data to the Inspector. After the Inspector receives the data, the Inspector can begin recording Contract activity data in the form of Daily Work Reports.

The Inspector pipes all Daily Work Reports and transfers them to the Project Manager for authorization. The Project Manager authorizes the Daily Work Reports and uploads them to the Server using the pipeline process. Unauthorized Daily Work Reports can be piped back to the Inspector for modification. The Project Manager also uploads the Diaries to the Server. If necessary, the Project Manager can download Daily Work Reports and Diaries from the Server for modification. For more information, refer to the Daily Work Report Applicability topic in the Pipeline section of this manual.

8.1.2 Accessing SDMS

The User can access the Survey Data Management System (SDMS) application from the Daily Work Report panels by selecting the SDMS menu option on the Services menu.

8.1.3 Stockpiled Materials Information

The Stockpiled Materials data is entered on the Server and downloaded to the Inspector using Pipeline. The User can view Stockpiled Materials data from the Daily Work Report panels by selecting the Stockpiles menu option on the Services menu. The data includes the invoiced quantities and amounts of a Stockpiled Material, and their usage.

8.1.4 Installed Work Reports

After the Daily Work Reports have been submitted, the User can run a report of Work Items that have installed amounts but are not included on an Estimate. The Inspector and Project Manager can run this report in either environment—Server or Standalone. The report lists only the data in the current system's database. For more information, see the Installed Work Report topic under Contractor Payments in this manual.

8.1.5 Pen-enabled Data Entry

Daily Work Reports supports the use of a pen on pen-enabled workstations. To enter data with a workstation pen, the User double-clicks on the data entry field.

8.2 Data Collection

8.2.1 Daily Work Reports

The Inspector creates daily records of construction activity in Daily Work Reports. SiteManager lets the Inspector create DWRs on the workstation in the field. Before the Inspector can create the first DWR for a Contract, the Project Manager must download the Contract plan data from the SiteManager Server database to the Inspector's workstation. After the Inspector loads the Contract plan data onto the workstation's local database, the Inspector can begin creating reports. Typically, for each Contract, each Inspector submits one Daily Work Report per day to the Project Manager. The Project Manager either authorizes a Daily Work Report or sends it back to the Inspector to be modified and resubmitted.

To create or modify a Daily Work Report, the Inspector double-clicks the DWR icon on the Daily Work Reports panel. This opens the DWR Info folder tab. To access the other Daily Work Report folder tabs, the Inspector must either create or open a DWR. After the Inspector saves each tab in a DWR, the Inspector can modify it until it is transferred to the Project Manager. A Daily Work Report can not be modified if it has been transferred to the Project Manager (checked in and locked on the workstation), authorized by the Project Manager, or opened by a User who is not the author. The Daily Work Reports panel contains the following folder tabs:

Tab Name	Description
DWR Info	The DWR Info folder tab lets the User create a new Daily Work Report and collect information about the day for which the report was created.
Contractors	The Contractors folder tab lets the User enter daily data on the Contractor, supervisor(s), and variable labor (by personnel type).
Contractors Equip	The Contractor Equip folder tab lets the User document the daily presence and use of equipment on the job site for the selected Contractor.
Daily Staff	The Daily Staff folder tab lets the User enter daily information on state employees and consultants. Each entry shows how many hours the staff member worked, the type of work performed, and data on state vehicle usage.
Work Items	The Work Items folder tab lets the User view and add daily usage data for installed Work Items.
Force Accounts	The Force Accounts folder tab in Daily Work Reports lets the User view or add daily information on a Force Account. The Force Accounts are created and maintained in Contract Administration. However, the daily Force Account data is collected by the Inspector in Daily Work Reports.

Table 8-1 The Daily Work Reports Folder Tab Table

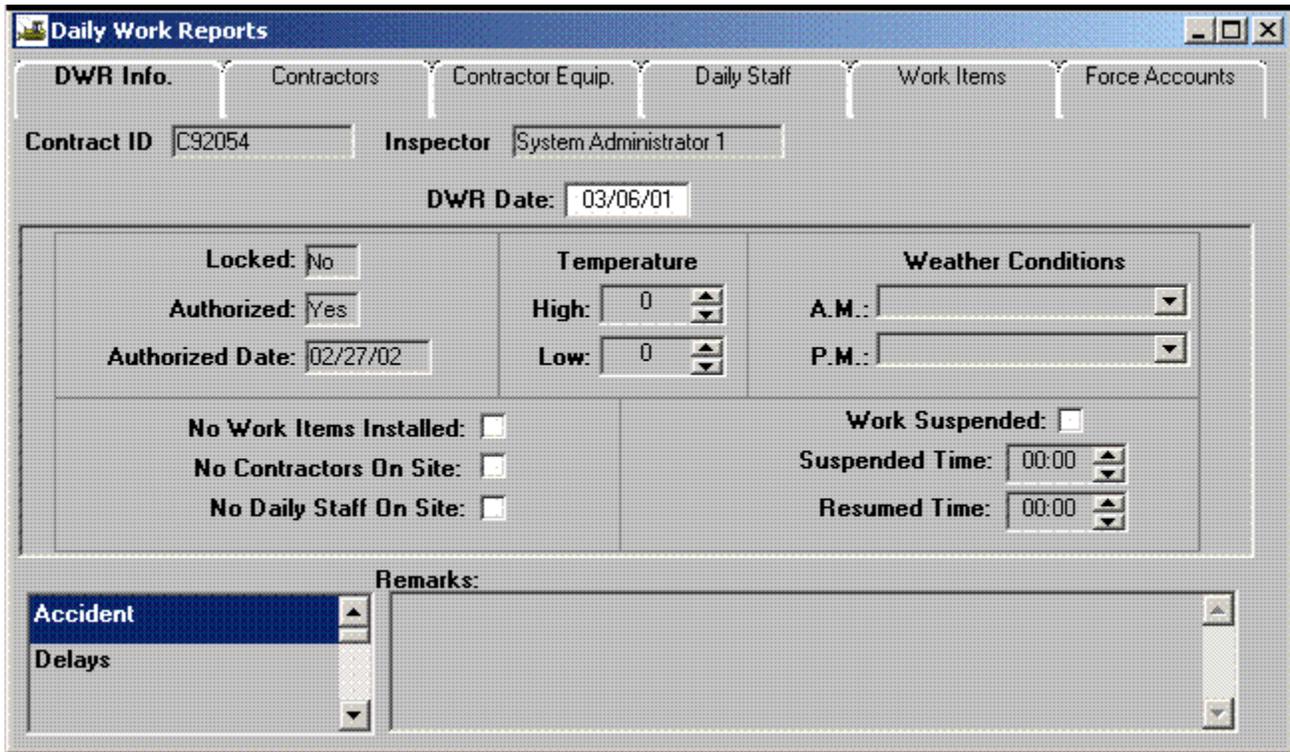


Figure 8-2 The DWR Info Folder Tab

To access the DWR folder tab:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon.

8.2.1.1 Selecting a Daily Work Report

The Daily Work Report Select panel lets the User open a Daily Work Report. The panel lists all of the DWRs stored on the workstation for the selected Contract and the selected User ID. The User can only access the DWRs stored in the local database. The User can open any DWR in the database, but the User can not modify a report the User did not create. The DWR opens as view only if the system finds one of the following:

- Daily Work Report has been transferred to the Project Manager
- Daily Work Report has been authorized
- The current User is not the author of the Daily Work Report

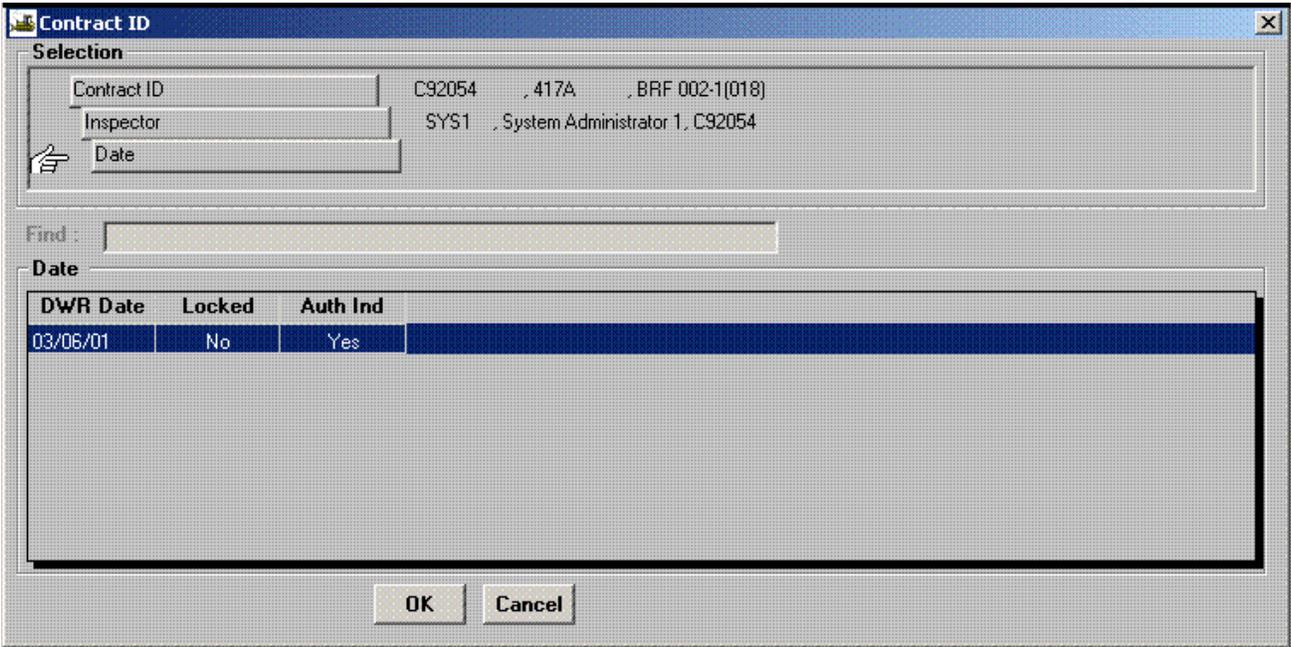


Figure 8-3 The Daily Work Reports Select Panel

To access the Daily Work Report Select panel:

1. On the **SiteManager** main panel, double-click the **DWRs** icon.
2. On the **DWRs** panel, double-click the **DWRs** icon. The DWR Info folder tab opens.
3. Click the **Open** button.

The fields on the DWR Select panel are defined in the following table:

Field Name	Description
DWR Date	Date the DWR was created. This date represents both the DWR date and the Diary date.
Locked	Indicates whether or not the DWR has been transferred to the Project Manager (Yes or No).
Auth Ind	Indicates whether or not the DWR has been authorized by the Project Manager (Yes or No).

Table 8-2 The Daily Work Report Select Panel Fields Table

To select a Daily Work Report:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **DWRs** panel, double-click the DWRs icon. *The DWR Info folder tab opens.*
3. Click the **Open** button.
4. In the Contract list box, scroll to and double-click the desired Contract.
5. In the User list box, scroll to and double-click the User ID of the report's author.
6. In the **DWR** list box, scroll to and click the DWR Date of the report.
7. Click **Ok**.

Tip: The User can open any DWR in the database, but the User can not modify a report the User did not create, a report that has been authorized, or a report that has been sent to the Project Manager.

8.2.1.2 Creating a New Daily Work Report

Daily Work Reports are created as follows:

- When the DWR Info folder tab opens, the system enters the current date and User.
- When creating a new Daily Work Report, the User selects a Contract ID.

The User can click the New button, enter a date, and select a Contract ID.

- The User can open a Daily Work Report and change the date allowing the copy function to copy the contractor and daily staff data recorded on the DWR.

In any case, the system verifies that the DWR is new. If the database already contains a DWR with the selected date, User ID, and Contract ID, the existing DWR will open. When a new DWR is created from an existing DWR, the user chooses whether or not to copy the Contractor information from the existing DWR to the new DWR. (Data must exist for the copy capability to be used.) If the user chooses **Yes**, the information copied includes the Contractor, Contractor equipment, Contractor supervisors, Contractor personnel, daily staff, and all associated data

In DWRs, the User can enter a date by selecting it from a calendar. If the User double-clicks the DWR Date field, a calendar displays where the User can select the date.



Figure 8-4 The Calendar

Tip: The User can not enter a date that is after the current system data.

To create a new Daily Work Report:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the DWRs panel, double-click the **DWRs icon**. The DWR Info folder tab opens by default.
3. Click the Services menu and click the **Choose Keys** choice. The Contract Select panel opens.
4. In the Contract ID list box, scroll to and click the desired Contract.
5. To change the date, double-click the **DWR Date field**. This opens a calendar on which a date prior to the current date can be selected. To select a prior month, click the left arrow. To enter the selected date on the DWR Info panel, click **Ok**.
6. Click the **Save** button.

To create a new Daily Work Report from an existing Daily Work Report:

1. On the SiteManager main panel, double-click the Daily Work Reports icon.
2. On the DWRs panel, double-click the **DWRs icon**. The DWR Info folder tab opens by default.
3. Click the **Open** button. The DWR Select panel opens.
4. Scroll to and click the desired DWR to copy. The DWR displays.

Double-click the **DWR Date field**. This opens a calendar on which a new DWR date can be selected. To enter the selected date on the DWR Info panel, click **Ok**

A message box asks if Contractor information should be copied. To copy the Contractor information from the last DWR for this Contract, click **Yes**. Otherwise, click **No**

8.2.2 DWR Information Tab in Daily Work Reports

The DWR Info folder tab lets the User create a new DWR and collect information about the day for which the DWR was created. For example, the User would enter information regarding the weather conditions and high and low temperatures for the day on this tab. The name of the author of this report is displayed in the Inspector field. The date covered by this report is displayed in the DWR Date field. The Locked and Authorized fields indicate the state of the DWR. If either the Locked or Authorized field displays **Yes**, the User can not modify the DWR.

This folder tab has three check boxes — No Contractors On Site, No Daily Staff On Site, and No Work Items Installed — that indicate there is no data for the subject. These boxes are checked by default. When the User enters data for the subject on another folder tab, the corresponding check box is cleared automatically.

General remarks are also recorded on this folder tab. To record a remark, the User must first select a remark type. If a remark has already been entered for the selected type, as indicated by a check mark next to the type, the remark appears in the Remarks field. A remark does not have a size limit, and can be pasted to and from a word processor. The User can maintain these types of remarks in the transportation agency’s code tables. If work is suspended during the day, the User records the time in the Suspended Time field. Additional suspended times for that day can be recorded in the Remarks field.

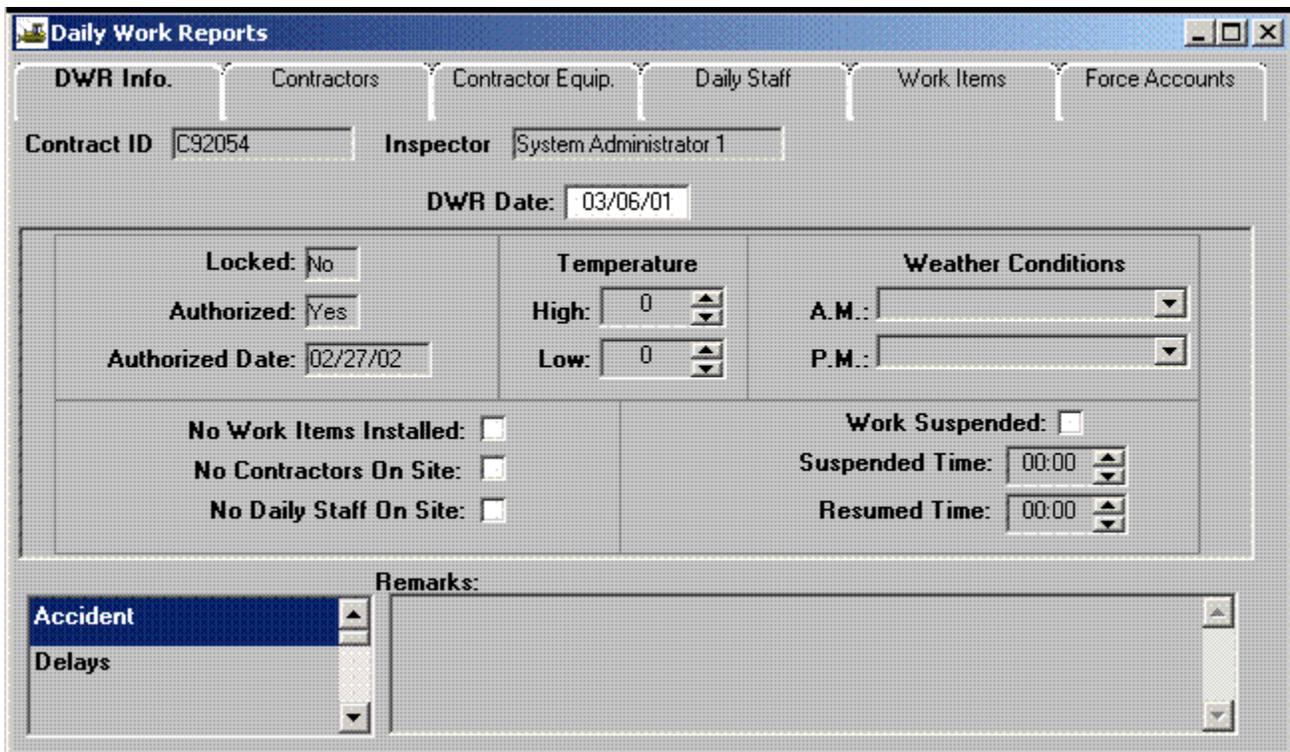


Figure 8-5 The DWR Info Folder Tab

Data Collection

The DWR Info folder tab fields are defined in the following table:

Field Name	Description
Locked	Indicates if the DWR has been sent to the Project Manager for authorization (Yes), if the Project Manager has sent the DWR back to the Inspector for modification (No), or if neither has occurred (the field is blank).
Authorized	Indicates if the DWR has been authorized by the Project Manager (Yes), if the Project Manager did not authorize the DWR (No), or if neither has occurred (the field is blank).
Authorized Date	Date on which the Project Manager authorized the DWR.
Temperature High	The high temperature recorded for the workday. The high temperature must be higher than the low temperature, and is required.
Temperature Low	The low temperature recorded for the workday. The low temperature must be lower than the high temperature, and is required.
Weather Conditions A.M.	A user-defined drop-down list from which the user selects the significant weather condition for the morning (i.e. Rain, Snow, Cloudy, Sunny, etc.). This field is required.
Weather Conditions P.M.	A user-defined drop-down list from which the user selects the significant weather condition for the afternoon. This field is required.
No Work Items Installed	A check in this box indicates that no work items were installed.
No Contractors On Site	A check in this box indicates that no Contractors were present on the work site.
No Daily Staff On Site	A check in this box indicates that no daily staff was present on the work site.
Work Suspended	A check in this box indicates that work was suspended during the day. Payrolls are not required for any payroll period when work is suspended; no workdays are charged to the Contract.

Field Name	Description
Work Suspended Time	The Inspector enters the time of day when work was suspended.
Work Resumed Time	The Inspector enters the time of day when work was resumed. Work can not be resumed unless it has previously been suspended.
Remark Type	Denotes the types of remarks entered in the Remarks field, and lets the User select a remark type to enter or view.
Remarks	General remarks for the current DWR. Each remark is associated with a remark type. The Inspector can enter only one remark for each remark type, but the User can enter multiple remark types on each DWR. Remarks are optional.

Table 8-3 The DWR Info Panel Fields Table

To enter data on the DWR Info folder tab:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **DWRs** panel, double-click the **DWRs** icon. The DWR Info folder tab opens by default.
3. To create a new DWR, click the **Services** menu and click the **Choose Keys** choice. The Contract Select panel opens.
4. In the **Contract ID** list box, scroll to and click the desired Contract.
5. Click **Ok**. A message box asks if Contractor information should be copied.
6. To copy the Contractor information from the last DWR for this Contract, click **Yes**. Otherwise, click **No**.
7. To change the date, double-click the **DWR Date** field. This opens a calendar on which a date prior to the current date can be selected. To select a prior month, click the left arrow. To enter the selected date on the DWR Info panel, click **Ok**.
8. To enter the high temperature for the day, in the **High** field, click the up (or down) spin button until the high temperature appears.
9. To enter the low temperature for the day, in the **Low** field, click the up (or down) spin button until the low temperature appears.
10. To enter the A.M. weather conditions, in the **Weather Conditions A.M.** drop-down list, click the expand arrow and select the prevailing weather condition for the A.M. hours of the work period.
11. To enter the P.M. weather conditions, in the **Weather Conditions P.M.** drop-down list, click the expand arrow and select the prevailing weather condition for the P.M. hours of the work period.
12. If work was suspended during the day, in the **Suspended Time** field, click the up (or down) spin button until the time appears. (If work was resumed, enter the time in the **Resumed Time** field.)
13. To enter a remark, in the **Remark Type** list box, scroll to and click the remark type. Then type the remark in the **Remarks** field.
14. Click the **Save** button.
15. Click **Ok**.

Tip: Every time a temperature value is changed, the values are compared. If the high temperature becomes lower than the low temperature, the system adjusts the values.

8.2.3 Contractors Tab in Daily Work Reports

The Contractors folder tab in Daily Work Reports lets the User enter daily data on the Contractor, supervisor(s), and variable labor (by personnel type). Equipment usage is recorded on the Contractors Equipment folder tab. When the User creates a Daily Work Report, the user can copy the Contractor information from the last opened or saved DWR for the Contract. This includes any recent modifications of the Contractor information. If the user chooses not to copy the Contractor information, the user can select the

Contractor from a drop-down list of Contractors and Subcontractors who are authorized to work on the Contract. The Subcontractor is not available to a DWR prior to that subcontractor's approval date for the contract. The Prime Contractor is always at the top of the drop-down list. The User may also enter remarks for each Contractor.

The user must select a Contractor before entering information related to the Contractor or before recording work items. After selecting a Contractor, the user can select Supervisors and Personnel Types associated with the selected Contractor from the drop-down lists in these fields. The records that appear on the drop-down lists are stored on the Master List. To add a record (supervisor, equipment, etc.) that does not appear on a drop-down list, the record must first be added to the Master List.

The Supervisor list on the Contractors folder tab displays all of the supervisors who worked for the selected Contractor on this date. After selecting a supervisor, the user can record the number of hours worked by the supervisor. The User may also enter remarks for each supervisor. The Personnel Type list displays all of the non-supervisory personnel types who worked for the selected Contractor on this date. This list is also referred to as the *variable labor list*. The user can record the number of workers present for each personnel type. For example, the user can record the number of painters present for the Prime Contractor. After selecting a Personnel Type and number, the user can enter the number of hours worked by each person. The User may also enter remarks for each personnel type used.

Tip: When the user enters Supervisors and Personnel Types, the system updates the Number of Supervisors, Number of Workers, and the Contractor Hours Worked fields.

The screenshot shows the 'Daily Work Reports' application window. At the top, there are tabs for 'DWR Info', 'Contractors', 'Contractor Equip.', 'Daily Staff', 'Work Items', and 'Force Accounts'. The 'Contractors' tab is active. Below the tabs, there are input fields for 'Contract ID: SITEMGR_11', 'Inspector: System Administrator 1', and 'Date: 02/05/99'. The main area contains three data tables:

Contractor	Nbr of Supervisors	Nbr of Workers	Contractor Hrs Worked
D004 DAY CONSTRUCTION COMPANY ** PRIME **	0	0	0

Supervisor/Foreman Name	Hours Worked

Personnel Type	Nbr of Persons	Hours Worked	Total Hours

Figure 8-6 The Daily Contractors Panel

To access the Contractors folder tab:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **DWRs** panel, double-click the **DWRs** icon. The DWR Info folder tab opens.
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired **Contract**.

Data Collection

5. In the **User** list box, scroll to and double-click the **User ID** of the report's author.
6. In the **DWR** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Contractors** folder tab.

The fields on the Contractors folder tab are defined in the following table:

Field Name	Description
Contractor	Drop down list containing the short name for the Contractor who worked on the Contract on this date. <i>Note: Subcontractors associated with the contract will not appear in this drop down list unless an Approval Date for the subcontract has been entered on the Subcontracts window.</i>
Nbr of Supervisors	Number of supervisors present on this date. This field is calculated every time the User records a supervisor as present. The calculation is the total of all the present supervisors. The User can change the value manually.
Nbr of Workers	Number of non-supervisory personnel present on this date. This field is calculated every time the User records a personnel type as present. The calculation is the total of all the present non-supervisory personnel. The User can manually change the value.
Contractor Hrs Worked	Hours worked by the Contractor on this date. This is the system-calculated sum of the Hours Worked fields for Supervisors and Personnel Types. This value must be greater than zero.
Supervisor Name	The Contractor's supervisors who worked on this date.
Supervisor Hours Worked	The number of hours worked by this supervisor. The number of hours worked must be greater than zero.
Personnel Type	The personnel type of non-supervisory workers who worked for the selected Contractor. Personnel Types can be added from the drop-down list.

Field Name	Description
Nbr of Persons	The number of persons of each personnel type who worked on this date for the selected Contractor. The number of persons must be greater than zero.
Hours Worked	Hours worked by this personnel type. Hours can not be recorded until the number of persons is greater than zero.
Total Hours	System-generated total hours worked by this personnel type on this date.

Table 8-4 The Daily Contractors Folder Tab Fields Table

To add a supervisor to a Daily Work Report:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **DWRs** panel, double-click the **DWRs** icon. The DWR Info folder tab opens.
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired Contract.
5. In the **User** list box, scroll to and double-click the User ID of the report's author.
6. In the **DWR** list box, scroll to and click the DWR Date of the report.
7. Click **Ok**.
8. Click the **Contractors** folder tab.
9. If there is more than one Contractor listed, click the **Contractor** who employs the supervisor.
10. Click the **Supervisor** field and click the **New** button. An empty row is added to the list.
11. In the **Supervisor** drop-down list, click the expand arrow and click the desired supervisor.
12. In the **Hours Worked** field, type the number of hours worked by this supervisor on this date.
13. Click the **Save** button.

To add a personnel type to a Daily Work Report:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **DWRs** panel, double-click the **DWRs** icon. The DWR Info folder tab opens.
3. Click the **Open** button.

Data Collection

4. In the **Contract** list box, scroll to and double-click the desired Contract.
5. In the **User** list box, scroll to and double-click the User ID of the report's author.
6. In the **DWR** list box, scroll to and click the DWR Date of the report.
7. Click **Ok**.
8. Click the **Contractors** folder tab.
9. If there is more than one Contractor listed, click the **Contractor** who employs the worker.
10. Click the **Personnel Type** field and click the **New** button. An empty row is added to the list.
11. In the **Personnel Type** drop-down list, click the expand arrow and click the desired personnel type.
12. In the **Nbr of Persons** field, type the number of workers of this Personnel Type who worked on this date.
13. In the **Hours Worked** field, type the number of hours worked by this Personnel Type on this date. The system calculates the value in the Total Hours field.
14. Click the **Save** button.

8.2.4 Contractor Equipment Tab in Daily Work Reports

The Contractor Equipment folder tab lets the User document the presence and use of equipment on the job site for the selected Contractor. The User enters the number of pieces of each equipment-type on the site on this date, the number of pieces used, and the number of hours each equipment-type was used. The User may also enter remarks for each piece of equipment used. The User must select a Contractor before entering equipment information for the Contractor.

After the User selects a Contractor, the User can select Equipment IDs from the drop-down list in the Equipment ID field. The records that appear on the drop-down list are stored in the Master List.

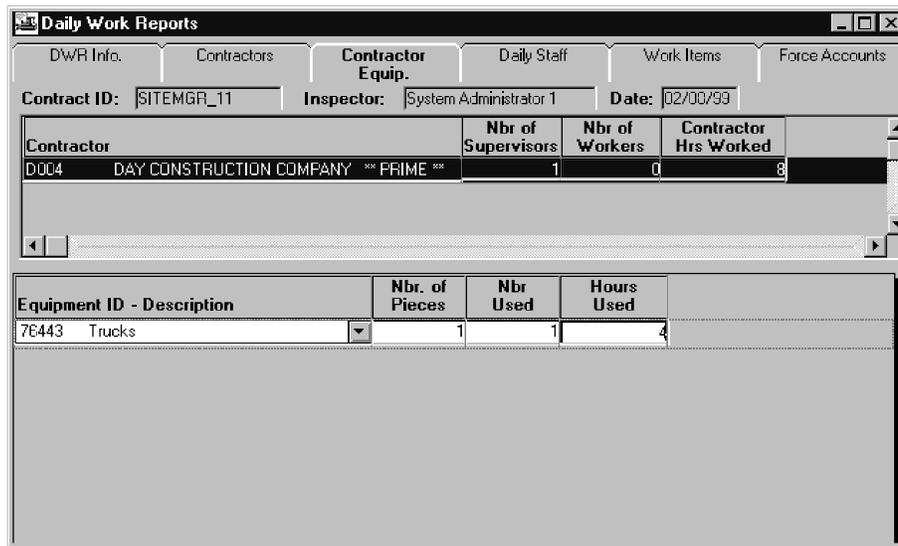


Figure 8-7 The Daily Contractor Equipment Folder Tab

To access the Contractor Equipment folder tab:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **DWRs** panel, double-click the **DWRs** icon. *The DWR Info folder tab opens.*
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired **Contract**.
5. In the **User** list box, scroll to and double-click the **User ID** of the report’s author.
6. In the **DWR** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Contractor Equipment** folder tab.

TIP: The Remarks function is available for each piece of equipment recorded.

The fields on the Contractor Equipment folder tab are defined in the following table:

Field Name	Description
Contractor	Short name for the Contractor who worked on the Contract on this date.
Nbr of Supervisors	Number of supervisors present on this date. This field is calculated every time the User records a supervisor as present. The calculation is the total of all the present supervisors. The User can

Field Name	Description
	change the value manually.
Nbr of Workers	Number of non-supervisory personnel present on this date. This field is calculated every time the User records personnel as present. The calculation is the total of all the present non-supervisory personnel. The User can change the value manually.
Contractor Hrs Worked	Hours worked by the Contractor on this date. This is the system-calculated sum of the Hours Worked fields for Supervisors and Personnel Types. This value must be greater than zero.
Equipment ID - Description	Text description of the piece of equipment. Can be used to describe a type of equipment.
Nbr of Pieces	This field is used to record the quantity of an equipment type. The equipment quantity must be greater than zero, before quantity used can be recorded.
Nbr Used	Identifies how many pieces of the equipment type were used that day. The equipment quantity must be greater than zero, before the quantity used can be recorded. The quantity used can not be greater than the equipment quantity.
Hours Used	Number of hours the vehicle or equipment was used on that day. The equipment quantity used must be greater than zero, before equipment hours can be recorded.

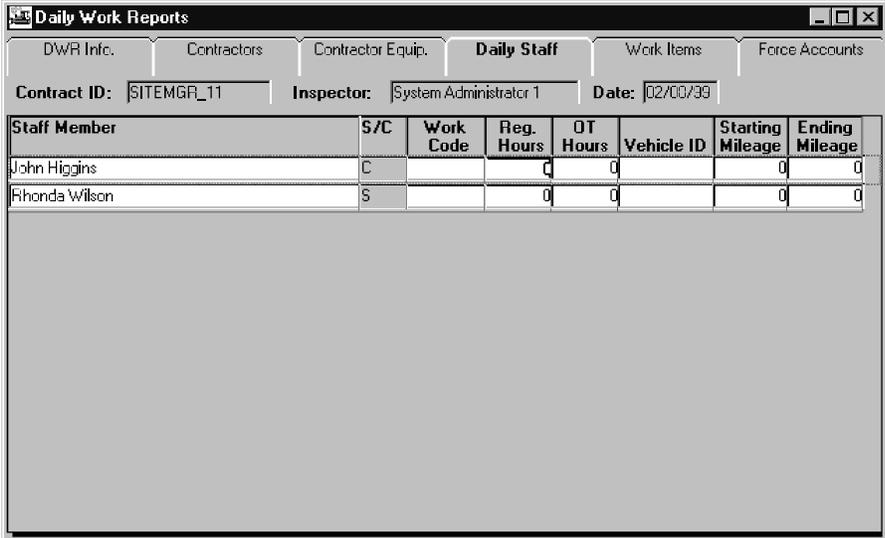
Table 8-5 The Daily Contractor Equipment Folder Tab Fields Table

To add equipment to a Daily Work Report:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon. The DWR Info folder tab opens.
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired Contract.
5. In the **User** list box, scroll to and double-click the User ID of the report's author.
6. In the **DWR** list box, scroll to and click the DWR Date of the report.
7. Click **Ok**.
8. Click the **Contractor Equipment** folder tab.
9. If there is more than one Contractor listed, click the **Contractor** who supplied the equipment.
10. Click the **Equipment ID** field and click the **New** button. An empty row is added to the list.
11. In the **Equipment ID** drop-down list, click the expand arrow and click the desired equipment ID.
12. In the **Nbr of Pieces** field, type the number of pieces of this equipment present on this date.
13. In the **Nbr Used** field, type the number of pieces of this equipment used on this date.
14. In the **Hours Used** field, type the number of hours this equipment was used on this date.
15. Click the **Save** button.

8.2.5 Daily Staff Tab in Daily Work Reports

The Daily Staff folder tab lets the User enter daily information on state employees and consultants. A staff member can be entered more than once per DWR with a different work code. Each entry shows how many hours the staff member worked, the type of work performed, and if a state vehicle was used. If a state vehicle was used, its identification number must be recorded along with its starting and ending miles. The User selects staff members from the drop-down list in the Staff Member field. The User may also enter remarks for each line of Daily Staff recorded. The records that appear on the drop-down list are stored in the Master List. Records that do not appear on the drop-down list must first be added the Master List.



The screenshot shows a software window titled "Daily Work Reports" with several tabs: "DWR Info.", "Contractors", "Contractor Equip.", "Daily Staff", "Work Items", and "Force Accounts". The "Daily Staff" tab is active. Below the tabs, there are input fields for "Contract ID:" (SITEMGR_11), "Inspector:" (System Administrator 1), and "Date:" (02/00/99). Below these fields is a table with the following data:

Staff Member	S/C	Work Code	Reg. Hours	OT Hours	Vehicle ID	Starting Mileage	Ending Mileage
John Higgins	C		0	0		0	0
Rhonda Wilson	S		0	0		0	0

Figure 8-8 The Daily Staff Folder Tab

To access the Daily Staff folder tab:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **DWRs** panel, double-click the **DWRs** icon. The DWR Info folder tab opens.
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired **Contract**.
5. In the **User** list box, scroll to and double-click the **User ID** of the report's author.
6. In the **DWR** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Daily Staff** folder tab.

The Daily Staff folder tab fields are defined in the following table:

Field Name	Description
Staff Member	The name of a state employee or a consultant who worked on the Contract on this date. In the list portion of the screen, this value is display only. Staff members must be added to the Master List before they can be added to the DWR.
Work Code	Transportation agency-defined code that identifies work activities, including sick time and vacation. This field is required if there is more than one entry for the same individual.
S/C	Indicates if the staff member is a consultant or state employee (C=Consultant, S=State Employee).
Reg Hours	The number of regular pay hours worked by the staff member for the time period. This field is required.
OT Hours	The number of overtime pay hours worked by the staff member for the time period. This field is optional.
Vehicle ID	The license number or other ID for a state vehicle used by the staff member. Required if a vehicle was used.
Starting Mileage	The beginning mileage for the vehicle used by this staff member for the day. Required if a vehicle was used. The Starting Mileage should be less than the Ending Mileage.
Ending Mileage	The ending mileage for the vehicle used by this staff member for the day. Required if a vehicle was used. The Ending Mileage should be greater than the Starting Mileage.

Table 8-6 The Daily Staff Folder Tab Fields Table

To add a staff member to a Daily Work Report:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon. *The DWR Info folder tab opens.*
3. Click the **Open** button.

Data Collection

4. In the **Contract** list box, scroll to and double-click the desired Contract.
5. In the **User** list box, scroll to and double-click the User ID of the report's author.
6. In the **DWR** list box, scroll to and click the DWR Date of the report.
7. Click **Ok**.
8. Click the **Daily Staff** folder tab.
9. Click the **Staff Member** field and click the **New** button. *An empty row is added to the list.*
10. In the **Staff Member** drop-down list, click the expand arrow and click the staff member name.
11. In the **Work Code** field, type the code that describes the work done on this date.
12. In the **Reg Hours** field, type the number of hours worked by this staff member on this date.
13. In the **OT Hours** field, type the number of overtime hours worked by this staff member on this date.
14. In the **Vehicle ID** field, type the ID of the state vehicle used by this staff member on this date.
15. In the **Starting Mileage** field, type the starting mileage of the state vehicle used by this staff member on this date.
16. In the **Ending Mileage** field, type the ending mileage of the state vehicle used by this staff member on this date.
17. Click the **Save** button.

Tip: The Social Security Number(or SIN) is not displayed on the Daily Staff folder tab.

8.2.6 Work Items Tab in Daily Work Reports

The Work Items folder tab lets the User view and add daily usage data for installed Work Items. Before entering Work Item data, the Contractor responsible for the Work Item must be entered on the Contractors folder tab. When the User first selects the Work Items folder tab, the Select Work Item list is displayed. The *Record Work Item* and *Select Work Item* buttons let the User toggle between two different versions of the Work Items folder tab. To enter usage data, the User first selects the Work Item and then selects the *Record Work Item* button (or the Record Work Item option on the Edit menu). This displays the Record Work Items folder tab on which the User can view and add daily usage data.



The Record Work Item and Select Work Item Buttons

Figure 8-9 The Record Work Item and Select Work Item Buttons

Tip: For a multi-project contract, the user must generate the items for each project separately.

8.2.6.1 Associating DWR Templates to Items

8.2.6.1.1 Adding DWR Templates to Items

After a DWR Template has been created it must be associated with an item on the Master List and with a contract item in order to record data to it for the Daily Work Report. The DWR Template must first be associated to an Item in the Master List before it can be associated to a Contract Item. This is done on the Item - DWR Template Association panel from the Daily Work Reports panel. This panel displays all of the items on the Master List at the top and all of the templates that have been created and are active on the bottom left in the Templates List window. Templates that are associated to items are moved to the Associated Templates window on the bottom right of the panel.

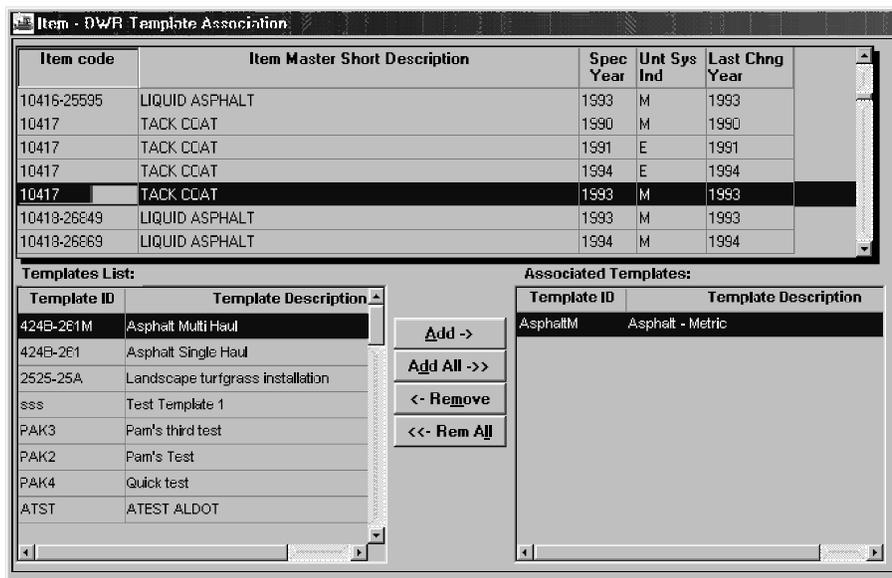


Figure 8-10 Associating a DEW Template to a Master List Item

To Associate a DWR Template to a Master Item:

1. On the **Daily Work Reports** panel double-click the **Item - DWR Template** icon. It will take a few minutes for the Master Item list to load.
2. Select the appropriate Item to associate templates to.
3. From the **Templates List** data window select the template or templates (use the CTRL or SHIFT keys to select multiple templates) to associate with the item.
4. Click the **Add** button, or click the **Add All** button to associate all of the templates to the item. The selected templates will move to the Associated Templates window.
5. Click the **Save** button or select **Save** from the **File** menu.

8.2.6.1.2 Removing DWR Templates From Items

A template may become unnecessary, outdated or obsolete and need to be made unavailable for use with future contracts. Templates can be removed, or disassociated, from the items in the Master List by removing

them from the Associated Templates window. The templates will maintain any existing contract item associations, but will not be available to associate to future contract items. If the template becomes valid again later it can be added back to the Associated Templates window.

If the DWR template will no longer be used with any items or contracts it can be made inactive in the DWR Template panel accessible through the System Administration panel. See the section on *Creating DWR Templates* for more information on this option.

To Remove a DWR Template From an Item:

1. On the **Daily Work Reports** panel double-click the **Item - DWR Template** icon. It will take a few minutes for the Master Item list to load.
2. Select the appropriate Item to associate templates to.
3. From the **Associated Templates** data window select the template or templates (use the CTRL or SHIFT keys to select multiple templates) to disassociate or remove from the item.
4. Click the **Remove** button, or click the **Rem All** button to remove all of the templates from the item. The selected templates will move back to the Templates List window.
5. Click the **Save** button or select **Save** from the **File** menu.

8.2.6.2 Associating DWR Templates to Contract Items

8.2.6.2.1 Adding DWR Templates to Contract Items

After templates are associated with items in the master list they can be associated with items used in a contract. There are several ways to associate templates to the contract items. The System Administrator can globally associate all of the templates associated to all items in the contract, or templates can be associated for each item, either individually or in small groups. This is done on the Contract Item - DWR Template Association panel from the Daily Work Reports panel. Select a Contract and Project ID from the list. All of the items available for the selected contract and project will be displayed in the top portion of the panel. The templates associated with the items will be displayed on the bottom left portion of the panel in the Templates List window. Templates that are associated to contract items are moved to the Associated Templates window on the bottom right of the panel.

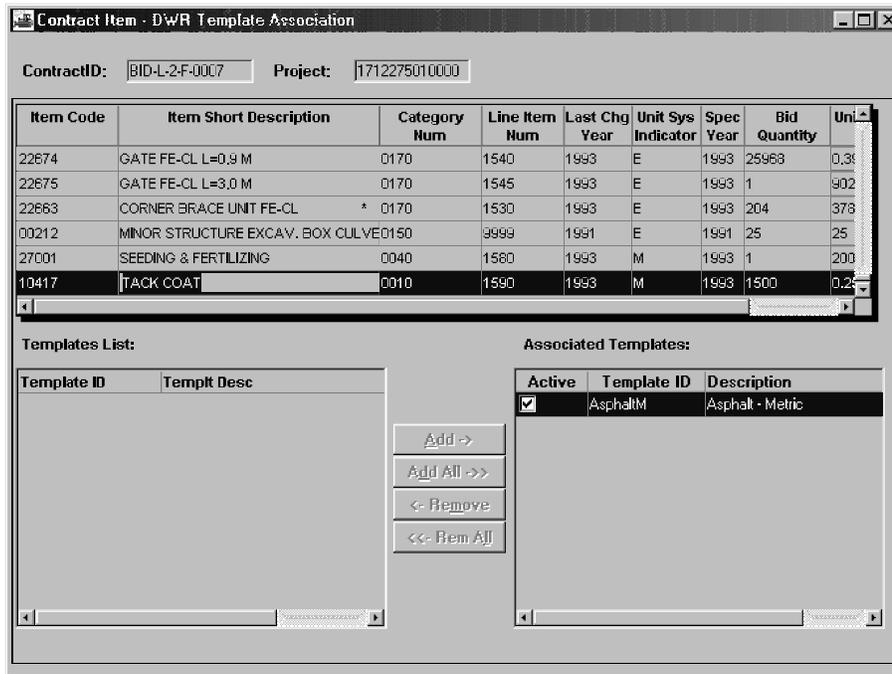


Figure 8-11 Associating a DWR Template to a Contract Item

To Globally Associate DWR Templates to All Contract Items:

1. On the Daily Work Reports panel double-click the Contract Item - DWR Template icon.
2. Double-click on a Contract in the Contract ID window.
3. Select a Project from the Project Nbr window and click Ok.
4. Choose Generate from the Services menu or click the Generate button on the Toolbar. All templates associated to all items used by the contract will be moved to the Associated Templates list and marked as Active.
5. Click the Save button or select Save from the File menu.

To Associate Individual DWR Templates to a Contract Item:

1. On the Daily Work Reports panel double-click the Contract Item - DWR Template icon.
2. Double-click on a Contract in the Contract ID window.
3. Select a Project from the Project Nbr window and click Ok.
4. Select the appropriate contract item to associate templates to.
5. From the Templates List data window select the template or templates (use the CTRL or SHIFT keys to select multiple templates) to associate with the contract item.
6. Click the Add button, or click the Add All button to associate all of the templates to the contract item. The selected templates will move to the Associated Templates window.
7. Click the Save button or select Save from the File menu.

8.2.6.2.2 Removing DWR Templates From Contract Items

A template may become unnecessary, outdated or obsolete and need to be made unavailable for further use. Templates can be removed, or disassociated, from the contract items if no data has been recorded to the template by removing them from the Associated Templates window. If data has been associated to a template that has become outdated, the template can still be made inactive for the contract by deselecting, or unchecking, the Active check box. This way the template can no longer be used in the contract, but the historical data associated with the template in the contract remains intact. If the template becomes valid again later it can be added back to the Associated Templates window.

If the DWR template will no longer be used with any items or contracts it can be made inactive in the DWR Template panel accessible through the System Administration panel. See the section on *Creating DWR Templates* for more information on this option.

To Remove a DWR Template From a Contract Item:

1. On the Daily Work Reports panel double-click the Contract Item - DWR Template icon.
2. Double-click on a Contract in the Contract ID window.
3. Select a Project from the Project Nbr window and click Ok.
4. Select the appropriate Contract Item to remove templates from.
5. To remove templates from the Contract Item, from the Associated Templates data window select the template or templates (use the CTRL or SHIFT keys to select multiple templates) to disassociate or remove from the item.
6. Click the Remove button, or click the Rem All button to remove all of the templates from the item. The selected templates will move back to the Templates List window.

OR

1. To make a template inactive within a contract item, click Off the **Active** box next to the appropriate Template in the **Associated Templates** data window.

- Click the **Save** button or select **Save** from the **File** menu.

8.2.6.3 Selecting a Work Item

The User can toggle between two different versions of the Work Items folder tab. When the User first selects the Work Items folder tab, or when the Select Work Item button is selected, the Select Work Items folder tab lists Work Items for the selected Contract. The Work Items are listed in ascending order by Item Code. The User can find, filter, and sort the list. If an Item has installed quantities for the selected DWR, the Installed check box is checked (ON).

Project Number	Line Item Number	Category Number	Item Code	Description	Installed	Supplemental Instld Description 1
10785-BID	0005	0200	202-00240	Removal of Asphalt Mat (Planning)	<input checked="" type="checkbox"/>	supplemental description 1
10785-BID	0010	0200	202-01000	Removal of Fence	<input type="checkbox"/>	line 1
10785-BID	0015	0200	203-00060	Embankment Material (Complete In Place)	<input type="checkbox"/>	
10785-BID	0020	0200	208-00001	Silt Dike	<input type="checkbox"/>	
10785-BID	0025	0200	208-00100	Sediment Removal and Disposal	<input type="checkbox"/>	
10785-BID	0030	0200	208-00200	Erosion Control Supervisor	<input type="checkbox"/>	
10785-BID	0035	0200	209-00000	Water	<input type="checkbox"/>	
10785-BID	0040	0200	210-00810	Reset Ground Sign	<input type="checkbox"/>	
10785-BID	0045	0200	212-00006	*Seeding (Native)	<input type="checkbox"/>	
10785-BID	0050	0200	212-00047	*Soil Preparation (Special)	<input type="checkbox"/>	
10785-BID	0055	0200	212-00050	*Sod	<input type="checkbox"/>	
10785-BID	0060	0200	213-00003	*Mulching (Weed Free)	<input type="checkbox"/>	
10785-BID	0065	0200	213-00005	*Mulching (Decorative)	<input type="checkbox"/>	
10785-BID	0070	0200	213-00008	*Mulching (Wood Chip)	<input type="checkbox"/>	
10785-BID	0075	0200	213-00061	*Mulch Tackifier	<input type="checkbox"/>	
10785-BID	0080	0200	213-00300	Concrete Landscape Border	<input type="checkbox"/>	
10785-BID	0085	0200	214-00220	*Deciduous Tree (2 Inch Caliper)	<input type="checkbox"/>	

Figure 8-12 The Select Work Items Folder Tab

To access the Select Work Items folder tab:

- On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
- On the **DWRs** panel, double-click the **DWRs** icon. The DWR Info folder tab opens.
- Click the **Open** button.
- In the **Contract** list box, scroll to and double-click the desired **Contract**.
- In the **User** list box, scroll to and double-click the **User ID** of the report's author.

Data Collection

6. In the **DWR** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Work Items** folder tab. The Select Work Items folder tab lists the Work Items for the selected Contract.

The Select Work Items folder tab fields are defined in the following table:

Field Name	Description
Project Number	Project Number in which the Work Item is included.
Line Item Number	Contract Line Item Number of the Work Item.
Category Number	Category Number in which the Work Item is included.
Item Code	Transportation agency-defined code that identifies a particular item.
Description	Short description of the Work Item.
Instld Indicator	Indicates whether or not the Work Item is installed.
Supp Description 1	This field contains a textual description that is supplemental to the item's description and may be required by the transportation agency.
Supp Description 2	This field contains a secondary textual description that is supplemental to the item's description and may be required by the transportation agency.

Table 8-7 The Select Work Items Folder Tab Fields Table

To view daily Work Item usage:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon. The DWR Info folder tab opens.
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired **Contract**.
5. In the **User** list box, scroll to and double-click the **User ID** of the report's author.
6. In the **DWR** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Work Items** folder tab.
9. In the **Work Item** list box, scroll to and click the installed Work Item (note that the Installed Indicator is checked).
10. Click the **Record Work Item** button. *The daily usage records for the selected Work Item are displayed on the Record Work Item folder tab.*
11. Click the **Close** button.

Tip: To list only the installed (or uninstalled) Items, the User can filter the list by the Installed check box entry.

8.2.6.4 Recording a Work Item

The User can toggle between two different versions of the Work Items folder tab. When the Record Work Item button is selected, the Record Work Items folder tab displays usage information on the selected Item for this DWR. The User can enter new usage data on this folder tab. If the Item is installed in multiple locations, the User can enter the quantity installed at each location.

The Material Inspection Details at the bottom of the window displays Material Component, Unit, Expected Quantity, Inspected Quantity, and Installed Quantity. In the case of standalone mode, however, the material details may not be representative of the entire sample population – if any other samples have been logged via any other means than the standalone mode on the current machine.

Data Collection

The screenshot shows a software window titled "Daily Work Reports" with several tabs: "DWR Info.", "Contractors", "Contractor Equip.", "Daily Staff", "Work Items" (selected), and "Force Accounts".

Contract ID: C10786 Inspector: System Administrator 1 Date: 04/26/02

Project Nbr: 10786-BID Line Itm Nbr: 0005 Item Code: 201-00000 Category Nbr: 0200

Item Desc: Clearing and Grubbing Unit Price: \$20,000.00000

Supp Desc 1: Supp Desc 2:

Qty Reported to Date: 3.000 Qty Authorized to Date: 1.000 Units Type: LS

Qty Installed to Date: 1.000 Bid Qty: 1.000 Pay To Plan Qty:

Status: Active Qty Paid to Date: 1.000 Current Contract Qty: 1.000

Loc Seq Nbr	Location Installed	Placed Qty.	Plan Page Number	Templt Used
-------------	--------------------	-------------	------------------	-------------

Figure 8-13 The Record Work Items Folder Tab

To access the Record Work Items folder tab:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon. *The DWR Info folder tab opens.*
3. Click the Open button.
4. In the **Contract** list box, scroll to and double-click the desired **Contract**.
5. In the **User** list box, scroll to and double-click the **User ID** of the report's author.
6. In the **DWR** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Work Items** folder tab. *The Work Item list is displayed.*
9. Click a **Work Item** and click the **Record Work Item** button. *The folder tab fields change to allow usage data entry.*

When the Record Work Item button is selected, the Record Work Items folder tab displays usage data for the selected item. The Record Work Items folder tab also lets the User add new usage data.

Field Name	Description
Placed Qty	Quantity of the Work Item installed on this date.
Bid Qty	The bid quantity on the selected line item.
Current Contract Quantity	Current contract quantity of the Contract line item including any Change Orders. Current Quantity is calculated by the sum of Bid Quantity and the net Change Order quantity.
Contractor	Drop down list containing the name of the Contractor responsible for the Work Item. <i>Note: Subcontractors responsible for a Work Item will not appear in this drop down list unless an Approval Date for the subcontract has been entered on the Subcontracts window.</i>
Plan Page Number	Plan page number on which the Work Item is included.
Loc Seq Nbr	Sequence number for the installation record for the Item

Data Collection

Field Name	Description
Location	Location where the Work Item was installed. An Item can be installed at multiple locations. (This description does <i>not</i> have to be unique for each entry.)
Measured Indicator	Indicates that the installation location of this Work Item was measured.
From Station	Station ID that identifies where the installation of this Work Item starts.
From Station Offset	Offset from the Station ID that identifies where the installation of this Work Item starts.
From Station Distance	Distance of the offset from the Station ID that identifies where the installation of this Work Item starts.
To Station	Station ID that identifies where the installation of this Work Item ends.
To Station Offset	Offset from the Station ID that identifies where the installation of this Work Item ends.
To Station Distance	Distance of the offset from the Station ID that identifies where the installation of this Work Item ends.
Supp Description 1	This field contains a textual description that is supplemental to the item's description and may be required by the transportation agency.
Supp Description 2	This field contains a secondary textual description that is supplemental to the item's description and may be required by the transportation agency.
Qty Reported to Date	The total of all reported quantities on DWRs, regardless of whether the quantities are authorized or unauthorized and regardless of whether they are included on an estimate.
Qty Authorized to Date	The total of all reported quantities on DWRs that are authorized.

Field Name	Description
Qty Installed to Date	The total of all reported authorized reported quantities included on estimates (of all statuses).
Qty Paid to Date	The total of all authorized reported quantities included on estimates (of all statuses). This value is always the same as Qty Installed to Date unless the quantity to pay has been adjusted on the Estimate Item Detail window. This window includes a 'Pay This Est' field which can be modified when an estimate is pending. If the quantity in this field is adjusted, the Qty Paid to Date field will reflect the modification, which will cause the value to differ from the Qty Installed to Date.
Contract Estimated Material Quantity	The Bid Current Quantity (Bid Quantity + change order quantity) of Contract Item times the Conversion Factor
Authorized Represented Material Quantity	The total material quantity reported on the Contract tab of Maintain Sample Window. For the given item from the Contract tabe the Total of all Represented Quantity on authroized samples for the material. Note that in standalone mode, this data only includes those samples logged on the current local database, and therefore may not be representative of the entire contract item.
Reported Material Quantity	The total material installed is calculated based on Installed Quantity of Contract Item times the Conversion Factor.
Material Unit	The Item material unit from the Contract Sampling and Testing Requirements window.

Table 8-8 The Record Work Items Folder Tab Fields Table

Data Collection

To enter new Work Item usage data:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon. *The DWR Info folder tab opens.*
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired **Contract**.
5. In the **User** list box, scroll to and double-click the **User ID** of the report's author.
6. In the **DWR** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Work Items** folder tab. *The Work Item list is displayed.*
9. Click a **Work Item** and click the **Record Work Item** button. *The folder tab fields change to allow usage data entry.*
10. Click the **Location Installed** field and click the **New** button. *An empty row is inserted on the Record Work Item List.*
11. In the **Placed Qty** field, type the quantity of the item installed at this location.
12. Press the **Tab** key.
13. In the **Plan Page Nbr** field, type the page number of a reference to the installed item.
14. To enter another location where this Item was installed, repeat steps 9 through 12.
15. In the **Contractor** drop-down list, click the expand arrow and click the name of the Contractor responsible for the installed item.
16. Press the **Tab** key.
17. In the **Location** field, type the location where the item was installed.
18. If the installed item was measured, click the **Measured Indicator** check box (ON).
19. In the **From Station** field, type the Station ID that identifies where the installation of this Work Item starts.
20. Press the **Tab** key.
21. In the **From Station Offset** field, type the offset from the Station ID that identifies where the installation of this Work Item starts.
22. Press the **Tab** key.
23. In the **From Station Distance** field, type the offset distance from the Station ID that identifies where the installation of this Work Item starts.

24. Press the **Tab** key.
25. In the **To Station** field, type the Station ID that identifies where the installation of this Work Item ends.
26. Press the **Tab** key.
27. In the **To Station Offset** field, type the offset from the Station ID that identifies where the installation of this Work Item ends.
28. Press the **Tab** key.
29. In the **To Station Distance** field, type the offset distance from the Station ID that identifies where the installation of this Work Item ends.
30. Click the **Save** button.

Tip: To associate an external document with a Work Item usage record, click the External Document option on the Services menu (referenced in the General Concepts section).

8.2.6.5 Recording Data to DWR Templates

The User can toggle between two different windows of the Work Items folder tab - the Select Work Item list window and the Record Work Items window. When the User first selects the Work Items folder tab, or when the Select Work Item button is selected, the Select Work Items window lists Work Items for the selected Contract. The Work Items are listed in ascending order by Item Code. The User can find, filter and sort the list. If an Item has installed quantities for the selected DWR the Installed check box is checked (ON).

Project Number	Line Item Number	Category Number	Item Code	Description	Inst.
171211501000	9999	0020	7C2-0030	QUERCUS MICHAUXII	<input type="checkbox"/>
171211501000	0430	0050	22511	GATE FE-G L=5M	<input type="checkbox"/>
171211501000	0435	0050	23041	WATER GATE FE-4 TY.I	<input type="checkbox"/>
171211501000	0500	0050	23042	WATER GATE FE-4 TY.II	<input type="checkbox"/>
171211501000	0505	0050	23060	RESET EXIST. GATE	<input type="checkbox"/>
171211501000	0425	0045	22663	CORNER BRACE UNIT	<input type="checkbox"/>
171211501000	0430	0045	22665	CORNER BRACE UNIT	<input type="checkbox"/>
171211501000	0435	0045	22674	GATE FE-CL L=0.9 M	<input type="checkbox"/>
171211501000	0440	0045	22675	GATE FE-CL L=3.0 M	<input type="checkbox"/>
171211501000	0455	0045	22721	LINE BRACE UNIT FE-R	<input type="checkbox"/>
171211501000	0450	0045	22741	CORNER BRACE UNIT	<input type="checkbox"/>
171211501000	0455	0045	22906	GATE FE-G L=0.9 M	<input type="checkbox"/>
171211501000	0470	0045	22907	GATE FE-G L=3.0 M	<input type="checkbox"/>

Figure 8-14 The Select Work Items Window

When the Record Work Item button is selected the Record Work Items window displays usage information on the selected Item for this DWR. The Record Work Items window allows the User to view existing data for the Work Item or add new usage data. Any DWR Templates associated to the selected Item are also available from this window for viewing or entering data.

Daily Work Reports

DWR Info Contractors Contractor Equip. Daily Staff **Work Items** Force Accounts

Contract ID: C10786 Inspector: System Administrator 1 Date: 04/26/02

Project Nbr: 10786-BID Line Itm Nbr: 0005 Item Code: 201-00000 Category Nbr: 0200

Item Desc: Clearing and Grubbing Unit Price: \$20,000.00000

Supp Desc 1: Supp Desc 2:

Qty Reported to Date: 3.000 Qty Authorized to Date: 1.000 Units Type: LS
 Qty Installed to Date: 1.000 Bid Qty: 1.000 Pay To Plan Qty:
 Status: Active Qty Paid to Date: 1.000 Current Contract Qty: 1.000

Loc Seq Nbr	Location Installed	Placed Qty.	Plan Page Number	Templt Used

Figure 8-15 The Record Work Items Window

To Record Data to the Work Items Tab:

1. From the Daily Work Reports panel click the **Work Items** folder tab. The Select Work Item list window is displayed.
2. Select a **Work Item** and click the **Record Work Item** button or choose **Record Work Item** from the **Services** menu. The Record Work Item window displays.
3. Click the **Location Installed** field and click the **New** button. An empty row is inserted on the Record Work Item list and the cursor moves to the bottom portion of the Record Work Item window for data entry.
4. If the DWR Template Usage Ind function was set to Yes by the System Administrator and the item has an associated template that returns a value, then the Placed Qty field will not be available for manual data entry and will be populated by the return value in the DWR Template. If the DWR Template Usage Ind function was set to No, DWR Templates will return values to the Placed Qty field, but the Placed Qty field can be modified or overwritten by manual entries. If an associated template has no return value, or no template is associated to the item, then the User must enter the quantity of the item installed at this location in the **Placed Qty** field.
5. In the **Contractor** drop-down list click the expand arrow and click the name of the Contractor responsible for the installed item.
6. Click the **Tab** key.
7. In the **Plan Page Nbr** field type the page number of a reference to the installed item.
8. Click the **Tab** key.
9. Click the **Tab** key.

10. In the **Location** field type the location where the item was installed.
11. If the installed item was measured, click the **Measured Indicator** check box (ON).
12. In the **From Station** field type the Station ID that identifies where the installation of this Work Item starts.
13. Click the **Tab** key.
14. In the **From Station Offset** field type the offset from the Station ID that identifies where the installation of this Work Item starts.
15. Click the **Tab** key.
16. In the **From Station Distance** field type the offset distance from the Station ID that identifies where the installation of this Work Item starts.
17. Click the **Tab** key.
18. In the **To Station** field type the Station ID that identifies where the installation of this Work Item ends.
19. Click the **Tab** key.
20. In the **To Station Offset** field type the offset from the Station ID that identifies where the installation of this Work Item ends.
21. Click the **Tab** key.
22. In the **To Station Distance** field type the offset distance from the Station ID that identifies where the installation of this Work Item ends.
23. Click the **Save** button. A message will display indicating that the Quantity field cannot be 0 and that data must be entered in the Template. Click **Ok** to continue.

The DWR Templates panel opens and displays a list of the DWR Templates available for use with this Work Item. The User chooses which DWR Template associated to the selected Item to view or record data to.

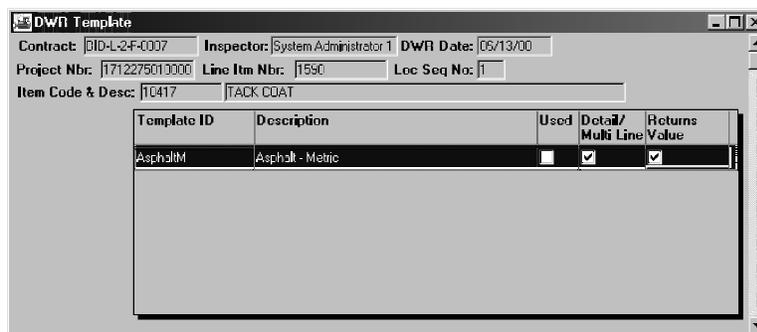


Figure 8-16 The DWR Templates Panel, Template ID Window

The list of associated DWR Templates available for use with this Work Item contains the information shown in the following table. Once the DWR Template has been chosen the User can enter data into the template.

Field	Description
Template ID	The unique, user-defined identifier defined for the Template at its creation.
Description	The template name or title.
Used	Check box indicating whether the template has been used with the selected Work Item and DWR. If the box is checked (On) the template has been used. If the box is unchecked (Off) the template has not been used.
Detail/Multi Line	This check box specifies whether the template is a detail/multi line template or a header (single line) template. The default is a header template with the box unchecked. If this box is checked, the Detail/Multi Line portion of the template must have at least one row containing alphanumeric or numeric data. A header template is also required to contain alphanumeric or numeric data.
Returns Value	Check box indicating whether the template returns a value to the Placed Qty field of the DWR. If the box is checked (On) the template does return a value. If the box is unchecked (Off) the template does not return a value.

Table 8-9 The DWR Template ID Window FieldsTable

The screenshot shows a software window titled "DWR Template - AsphaltM". At the top, there are several input fields: Contract (BID-L-2F-0007), Inspector (System Administrator T), DWR Date (06/13/00), Project Nbr (1712275010000), Line Itm Nbr (1590), Loc Seq No (1), and Item Code & Desc (10417 TACK COAT). Below these are four more input fields: Square Meters (0.000), Rate (kg/sq. Meter), Metric Tons (0.000), and Temperature (0.0 CELSIUS). The bottom section contains a table with columns: Begin Station, End Station, Lane, Length (m), Width (m), Square Meters, and Remarks. The table has one row with values: 1, [empty], [empty], 0.000, 0.000, [empty], [empty]. Below the table is a "Total Square Meters" field with the value 0.000.

Figure 8-17 The DWR Template

To Record Work Item Data to DWR Templates:

1. To invoke the DWR Template window click on the **DWR Template** button or select **Edit/View Work Item Template Data** from the **Services** menu.
2. The DWR Template ID window displays the Templates available for use with the selected Work Item. Choose a DWR Template to record data to and click the **Record Template Data** button or choose **Record Template Data** from the **Services** menu. The DWR Template is displayed.
3. Enter the appropriate data into the fields of the DWR Template.
4. Click the **Save** button or select **Save** from the **File** menu when the data is fully entered into the Template.
5. Click the **Close** button or select **Close** from the **File** menu to return to the Record Work Item window. The **Placed Qty** field is now populated with the value from the DWR Template and the **Templt Used** box is checked.

8.2.7 Daily Force Accounts Tab in Daily Work Reports

The Force Accounts folder tab in DWRs lets the User view or add daily information on a Force Account. The Force Accounts are created and maintained in Contract Administration, and downloaded to the Project Manager and Inspector. However, the daily Force Account data is collected by the Inspector in DWRs. The daily Force Account data can be viewed in Contract Administration after the Project Manager authorizes the DWRs.

When the User first selects the Force Accounts folder tab in DWRs, the folder tab lists the Force Accounts for the selected Contract. The User selects a Force Account on this list, selects the Record button on the toolbar, and then toggles to one of the following three folder tabs:

- Daily Force Account Equipment
- Daily Force Account Labor
- Daily Force Account Materials

The User can add daily Force Account data on these folder tabs. For example, to add equipment data related to a Force Account, the User first selects the Force Account. Then the User selects the Record button and the Equipment button. This opens the Daily Force Account Equipment folder tab.



Figure 8-18 The Daily Force Account Toolbar Buttons

8.2.7.1 Selecting a Daily Force Account

The Force Account Select folder tab lets the User select a Force Account. The folder tab lists all Force Accounts created for the selected Contract. If no Force Accounts have been created, the selection list is empty.

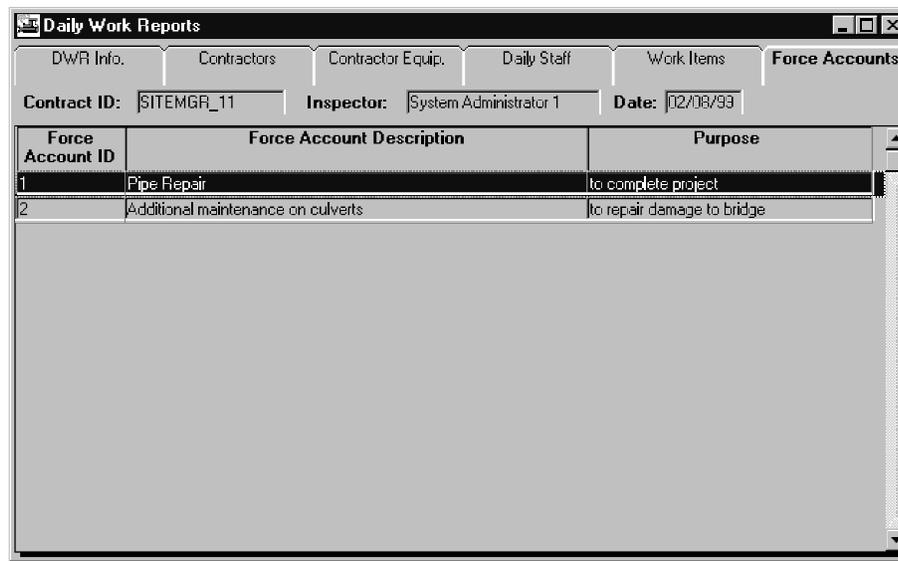


Figure 8-19 The Force Accounts Select Folder Tab

To access the Force Accounts Select folder tab:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon. *The DWR Info folder tab opens.*
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired **Contract**.
5. In the **User** list box, scroll to and double-click the **User ID** of the report's author.
6. In the **DWR** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Force Accounts** folder tab. *The Force Accounts Select folder tab is displayed.*

The Force Accounts Select list has three columns as defined in the following table:

Field Name	Description
Force Account ID	Force Account ID number.
Description	Description of the work the Force Account is intended to cover.
Purpose	Description of the reason for the Force Account.

Table 8-10 The Force Accounts Select Panel Fields Table

To view a daily Force Account:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon. *The DWR Info folder tab opens.*
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired **Contract**.
5. In the **User** list box, scroll to and double-click the **User ID** of the report's author.
6. In the **DWR** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Force Accounts** folder tab. *The Force Accounts Select list is displayed.*
9. In the **Force Account** list box, scroll to and click the Force Account.
10. Click the **Record** button and click either the **Equipment**, **Labor**, or **Materials** button, to view the corresponding daily Force Account data.

Tip: Changes to the Force Account, such as available equipment, must be entered on the Server and downloaded to the Project Manager and Inspector through Pipeline.

8.2.7.2 Force Account Tab, Equipment Window

The Force Account tab, Equipment window lists all of the equipment authorized for the selected Force Account. It also includes the ownership information, the used rate, and the idle rate for each piece of equipment. The User can add the number of hours each piece of equipment was used and the number of hours it was idle.

Force Account	Equip Description	Hrs Used	Used Rate	Hrs Idle	Idle Rate	Ownership
	bulldozer	7	\$150.00	1	\$50.00	Rented and Brought To Site

Figure 8-20 The DWR Force Account Folder Tab - Equipment Window

To access the daily Force Account Equipment folder tab:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **DWRs** panel, double-click the **Daily Work Reports** icon. *The DWR Info folder tab opens.*
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired **Contract**.
5. In the **User** list box, scroll to and double-click the **User ID** of the report's author.
6. In the **Daily Work Report** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Force Accounts** folder tab. *The Force Accounts Select list is displayed.*
9. In the **Force Account** list box, scroll to and click the Force Account.
10. Click the **Record** button and click the **Equipment** button.

The fields on the daily Force Account Equipment folder tab are defined in the following table:

Field Name	Description
Force Account Header	
Description	Description of the work the Force Account is intended to cover.
Purpose	Description of the reason for the Force Account.
Force Account Equipment	
Description	Description of the piece of equipment or a type of equipment.
Hrs Used	Number of hours the equipment was used on the Force Account on this date. The field should be numeric and must not exceed 24 hours. The total of this field and Hrs Idle must not exceed 24 hours.
Used Rate	Used rate for the piece of equipment.
Hrs Idle	Number of hours the equipment was idle on this date. The field should be numeric and must not exceed 24 hours. The total of this field and Hrs Used must not exceed 24 hours.
Idle Rate	Idle rate for the piece of equipment.
Ownership	Description to indicate whether the piece of equipment is owned by the Contractor and was already on the project site, whether it is owned by the Contractor and brought to the site for the Force Account work, or whether it is rented.

Table 8-11 The DWR Force Account Folder Tab - Equipment Fields Table

To record daily Force Account Equipment data:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon. *The DWR Info folder tab opens.*
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired **Contract**.

Data Collection

5. In the **User** list box, scroll to and double-click the **User ID** of the report's author.
6. In the **Daily Work Report** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Force Accounts** folder tab. *The Force Accounts Select list is displayed.*
9. In the **Force Account** list box, scroll to and click the Force Account that was worked on.
10. Click the **Record** button and click the **Equipment** button.
11. In the **Equipment** list box, scroll to the equipment record that needs data added.
12. In the **Hrs Used** field, type the number of hours the equipment was used on the Force Account on this date.
13. Press the **Tab** key.
14. In the **Hrs Idle** field, type the number of hours the equipment was idle on this date.
15. To record data for other equipment, repeat steps 10 through 13.
16. Click the **Save** button.

8.2.7.3 Force Account Tab, Labor Window

The Force Account tab, Labor window lists all the workers authorized for the selected Force Account. It also includes the regular, overtime, and fringe rates for each worker. The User can add the number of regular and overtime hours worked by each worker.

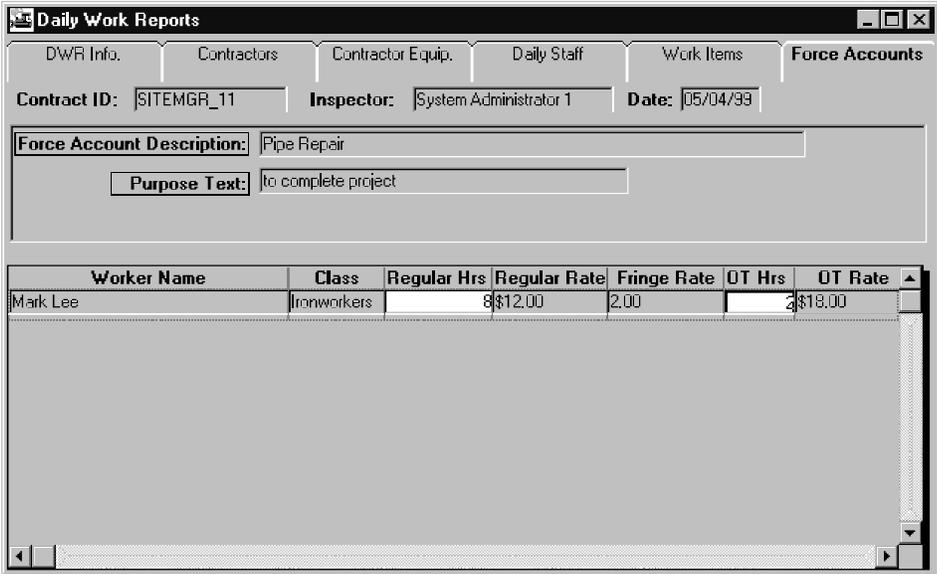


Figure 8-21 The DWR Force Account Tab - Labor Window

To access the daily Force Account Labor folder tab:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon. *The DWR Info folder tab opens.*
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired **Contract**.
5. In the **User** list box, scroll to and double-click the **User ID** of the report's author.
6. In the **Daily Work Report** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Force Accounts** folder tab. *The Force Accounts Select list is displayed.*
9. In the **Force Account** list box, scroll to and click the Force Account.
10. Click the **Record** button and click the **Labor** button.

The fields on the daily Force Account Labor folder tab are defined in the following table:

Field Name	Description
Force Account Header	
Description	Description of the work the Force Account is intended to cover.
Purpose	Description of the reason for the Force Account.
Force Account Labor	
Worker Name	Name of a worker authorized to work on the Force Account.
Class	Job classification of the worker.
Regular Hours	Regular hours worked on the Force Account on this date. The field should be numeric and must not exceed 24 hours. The total of this field and Overtime Hours must not exceed 24 hours.
Regular Wage	Regular hourly rate for the worker.

Field Name	Description
Regular Fringe	The fringe rate that should be applied to the regular hours worked when determining total cost.
Overtime Hours	Overtime hours worked on the Force Account on this date. The field should be numeric and must not exceed 24 hours. The total of this field and Regular Hours must not exceed 24 hours.
Overtime Wage	The overtime hourly rate for the worker.

Table 8-12 The DWR Force Accounts Folder Tab - Labor Fields Table

To add daily Force Account labor data:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon. The DWR Info folder tab opens.
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired **Contract**.
5. In the **User** list box, scroll to and double-click the **User ID** of the report's author.
6. In the **Daily Work Report** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Force Accounts** folder tab. The Force Accounts Select list is displayed.
9. In the **Force Account** list box, scroll to and click the Force Account.
10. Click the **Record** button and click the **Labor** button.
11. In the **Worker Name** list box, scroll to the name of the worker who worked on the Force Account on this date.
12. In the **Regular Hrs** field, type the number of regular hours worked on the Force Account on this date.
13. Press the **Tab** key.
14. In the **OT Hrs** field, type the number of overtime hours worked on the Force Account on this date.
15. To record hours for other workers, repeat steps 10 through 13.
16. Click the **Save** button.

8.2.7.4 Force Account Tab, Materials Window

The DWR Force Account folder tab, Materials window lists all of the materials authorized for the selected Force Account. It also includes the invoice ID, the unit price, and the unit of measurement for each material. The User can add the quantity of each material that was used.

Invoice ID	Cont FA Matl Description	Quantity	Unit Price	Unit of Measure
45996	36" pipe	6.000	\$20.00000	LF

Figure 8-22 The DWR Force Account Tab - Materials Window

To access the daily Force Account Materials folder tab:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon. *The DWR Info folder tab opens.*
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired **Contract**.
5. In the **User** list box, scroll to and double-click the **User ID** of the report's author.
6. In the **Daily Work Report** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Force Accounts** folder tab. *The Force Accounts Select list is displayed.*
9. In the **Force Account** list box, scroll to and click the Force Account.
10. Click the **Record** button and click the **Materials** button.

The fields on the daily Force Account Materials folder tab are defined in the following table:

Field Name	Description
Force Account Header	
Description	Description of the work the Force Account is intended to cover.
Purpose	Description of the reason for the Force Account.
Force Account Labor	
Invoice ID	ID of the invoice for the material.
Cont FA Mtl Description	Contract Force Account Material Description. Describes the material specified for use on the Force Account.
Quantity	Quantity of the material used on the Force Account on this date.
Unit Price	Unit price of the material.
Unit of Measure	Unit in which the material is measured.

Table 8-13 The DWR Force Account Folder Tab - Materials Table

To add daily Force Account materials data:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon. *The DWR Info folder tab opens.*
3. Click the **Open** button.
4. In the **Contract** list box, scroll to and double-click the desired **Contract**.
5. In the **User** list box, scroll to and double-click the **User ID** of the report's author.
6. In the **Daily Work Report** list box, scroll to and click the **DWR Date** of the report.
7. Click **Ok**.
8. Click the **Force Accounts** folder tab. The Force Accounts Select list is displayed.

9. In the **Force Account** list box, scroll to and click the Force Account.
10. Click the **Record** button and click the **Materials** button.
11. In the **Materials** list box, scroll to the material used on the Force Account on this date.
12. In the **Quantity** field, type the amount of the material used on the Force Account on this date.
13. To add quantities for other materials, repeat steps 10 through 11.
14. Click the **Save** button.

8.3 DWR Template Reports

There are 2 reports that provide information regarding DWR Templates. The DWR Template Usage Report lists information about the data recorded to a template for a DWR. The DWR Template Item Master Report provides a list of the Items that have associated DWR Templates and the associated templates titles.

8.3.1 DWR Template Usage Report

The DWR Template Usage Report lists detailed information about the data recorded to a template for a selected DWR. This reports is available either from the Daily Work Reports panel or from the DWR Template panel. The User selects from various criteria to specify how the report is to be generated. The report can be created on and printed from the User’s computer or off-line. If the report is generated off-line it can be accessed from the Accessories folder tab, Process Status Monitor icon.

The DWR Template Usage Report contains information for the selected Contract, DWR Date, Project Number, Line Item Number, Location Sequence Number and Template ID. The contents of the DWR Template Header are listed, showing the value entered in each field. Then, if it is a Detail/Multi Line template, each line of the Detail/Multi Line portion of the template is listed along with the values entered in each field.

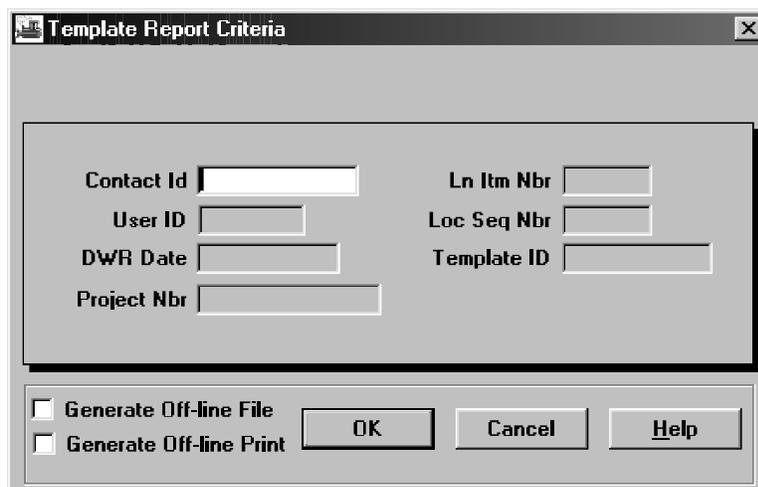


Figure 8-23 The DWR Template Usage Report Criteria Window

DWR Template Reports

To Generate a DWR Template Usage Report from the Daily Work Reports Panel:

1. On the **SiteManager** main panel double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel double-click the **DWR Template Usage Report** icon. The **Template Report Criteria** window will display.
3. Position the cursor over the **Contract ID** field, click the right mouse button and click on **Search**. The Contract ID search window displays all of the contracts.
4. Scroll to and select the appropriate **Contract ID** and click **Ok**.
5. From the **User ID** drop-down list select the appropriate **User ID** for the Daily Work Report's author.
6. From the **DWR Date** drop-down list select the date of the desired Daily Work Report.
7. From the **Project Nbr** drop-down list select the Project Number for which the DWR was created.
8. Select the appropriate Line Item number from the **Ln Itm Nbr** drop-down list.
9. From the **Loc Seq Nbr** drop-down list select the location of the installed Work Item on which to report.
10. Select the **Template ID** from the drop-down list that was used in the selected DWR at the selected location.
11. To generate the report on-line click **Ok**.
12. To print the report click the **Print** button on the toolbar.

Or

13. To generate the report off-line to a file click the **Generate Off-line File** check box (ON).
14. Click **Ok**.

Or

15. To generate and print the report off-line click the **Generate Off-line Print** check box (ON).
16. Click **Ok**.

To Generate a DWR Template Usage Report from the DWR Template panel:

1. From the Daily Work Reports panel follow the steps listed under the section *Recording Data to DWR Templates* to navigate to the DWR Template panel.
2. From the **Template ID** list highlight the desired DWR Template.
3. Click on the **DWR Template Report** button or select **DWR Template Report** from the **Services** menu. The **Template Report Criteria** window will display.
4. Position the cursor over the **Contract ID** field, click the right mouse button and click on **Search**. The Contract ID search window displays all of the contracts.

5. Scroll to and select the appropriate **Contract ID** and click **Ok**.
6. From the **User ID** drop-down list select the appropriate **User ID** for the Daily Work Report's author.
7. From the **DWR Date** drop-down list select the date of the desired Daily Work Report.
8. From the **Project Nbr** drop-down list select the Project Number for which the DWR was created.
9. Select the appropriate Line Item number from the **Ln Itm Nbr** drop-down list.
10. From the **Loc Seq Nbr** drop-down list select the location of the installed Work Item on which to report.
11. Select the **Template ID** from the drop-down list that was used in the selected DWR at the selected location.
12. To generate the report on-line click **Ok**.
13. To print the report click the **Print** button on the toolbar.

Or

14. To generate the report off-line to a file click the **Generate Off-line File** check box (ON).
15. Click **Ok**.

Or

16. To generate and print the report off-line click the **Generate Off-line Print** check box (ON).
17. Click **Ok**.

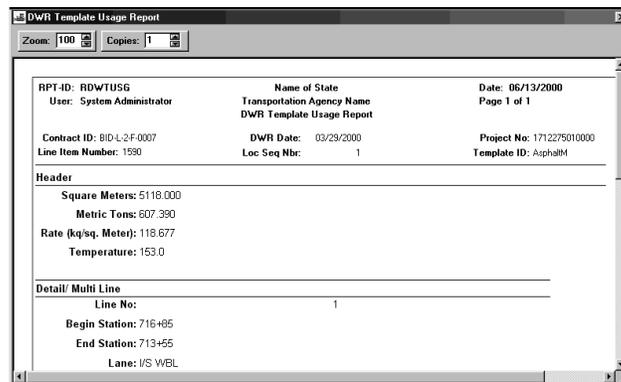


Figure 8-24 The DWR Template Usage Report Panel

8.3.2 DWR Template Item Master Report

The DWR Template Item Master Report provides a list of the selected Items that have associated DWR Templates along with a list of their associated templates. This reports is available from the Item - DWR Template Association panel. The User selects from various criteria to specify how the report is to be generated. The report is created on and printed from the User's computer.

DWR Template Reports

The DWR Template Item Master Report is simply a listing of all of the Master Items within the selected Items and specifications that have DWR Templates associated to them. The report also lists some template identification data for all of the templates associated to the selected Items, such as template ID and description and whether the template is active or not.

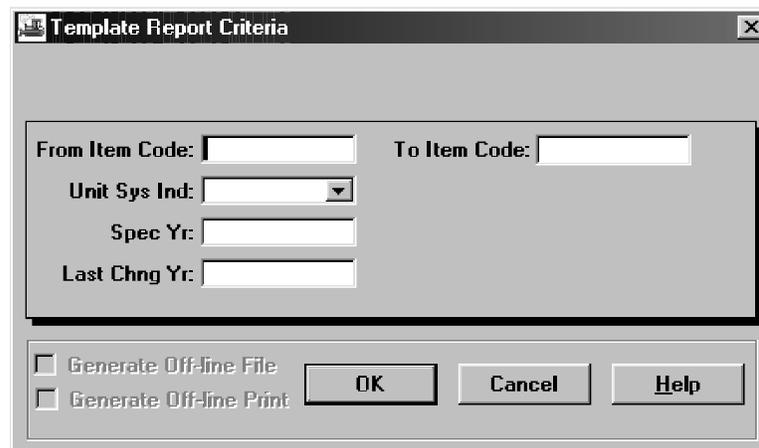


Figure 8-25 The DWR Template Item Master Report Criteria Window

To Generate a DWR Template Item Master Report:

1. On the **SiteManager** main panel double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel double-click the **Item - DWR Template** icon.
3. On the **Item - DWR Template Association** panel click on the **DWR Template Item Report** button or select **DWR Template Item Report** from the **Services** menu.
4. The **Template Report Criteria** window will display.
5. Position the cursor over the **From Item Code** field, click the right mouse button and click on **Search**. The From Item Code search window displays all of the Items that have associated Templates.
6. Scroll to and select the appropriate **From Item Code** and click **Ok**.
7. Position the cursor over the **To Item Code** field, click the right mouse button and click on **Search**. The To Item Code search window displays all of the Items that have associated Templates.
8. Scroll to and select the appropriate **To Item Code** and click **Ok**.
9. From the **Unit Sys Ind** drop-down list select the appropriate unit system indicator/spec year/last change year selection. The **Spec Yr** and **Last Chng Yr** fields will automatically be populated.
10. To generate the report on-line click **Ok**.
11. To print the report click the **Print** button on the toolbar.

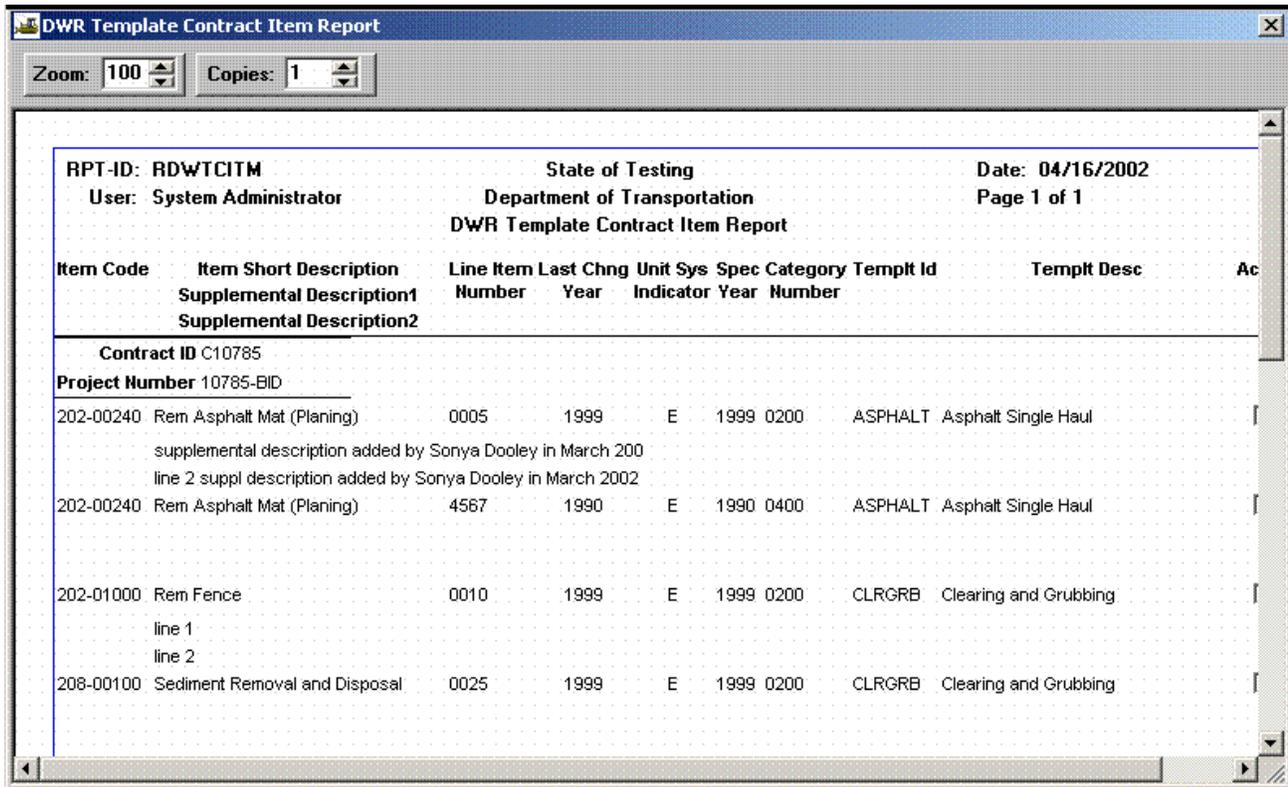


Figure 8-26 The DWR Template Contract Item Report Panel

8.4 Daily Diary

The Project Manager creates Daily Diaries. Each Diary is a daily collection of the authorized Daily Work Reports submitted by all Inspectors working on the Contract. The Project Manager usually submits one Diary per day per Contract. Diaries can also be created for days when no Daily Work Reports are collected. The Diary panel has two folder tabs:

8.4.1 Diary Authorize

The Diary Authorize folder tab lets the Project Manager create a Diary, authorize or unauthorize Daily Work Reports, and add remarks to the Diary. The Project Manager can also view and print Daily Work Report previews.

8.4.2 Diary Charge

On the Diary Charge folder tab, the Project Manager reports the charge for the Contract work for the day— Full Day, Half Day, or No Charge.

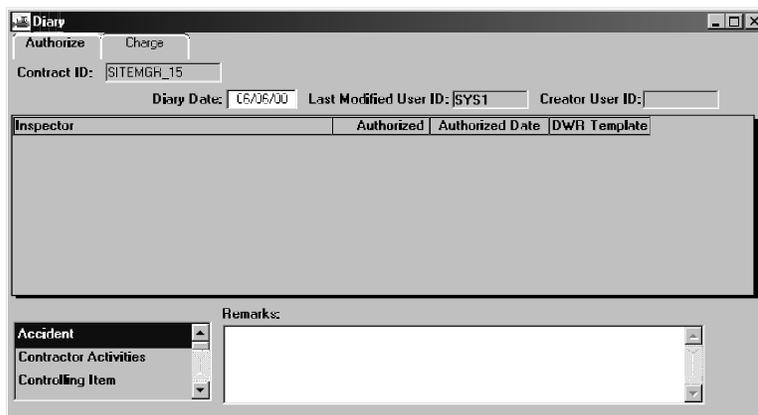


Figure 8-27 The Diary Authorize Folder Tab

8.4.3 Selecting a Diary

The Diary Select window lets an authorized User open a Diary.



Figure 8-28 The Diary Select Panel

To access the Diary Select panel:

1. On the **Daily Work Reports** panel, double-click the **Diaries** icon. The Diary Authorize folder tab opens.
2. Click the **Open** button.

The fields on the Diary Select panel are defined in the following table:

Field Name	Description
DWR Date	The date of the Diary. This date represents both the Diary and the Daily Work Reports that comprise the Diary.
Diary Locked Indicator	Indicates whether or not the Diary has been uploaded to the SiteManager Server (checked in).

Table 8-14 The Diary Select Panel Fields Table

To select a Diary:

1. On the **Daily Work Reports** panel, double-click the **Diaries** icon. *The Diary Authorize folder tab opens.*
2. Click the **Open** button.
3. In the **Contract** list box, scroll to and double-click the desired Contract.
4. In the **Diary** list box, scroll to and click the DWR Date of the Diary. (The DWR Date represents both the Diary and the Daily Work Reports that comprise the Diary.)
5. Click **Ok**.

8.4.4 Creating a New Diary

The Diary Authorize folder tab lets the User create a Diary. The User can create a Diary with or without Daily Work Reports. Typically, the Project Manager creates a Diary from the Daily Work Reports that have been submitted by the Inspectors. To create a Diary, the User selects a Contract first, and then enters the diary's date on the Diary Authorize panel. By entering the date, the User is selecting the Daily Work Reports with this date and creating a Diary with this date. The User can enter a date by selecting it from a calendar. If the User double-clicks the Diary Date field, a calendar is displayed on which the User can select the date.

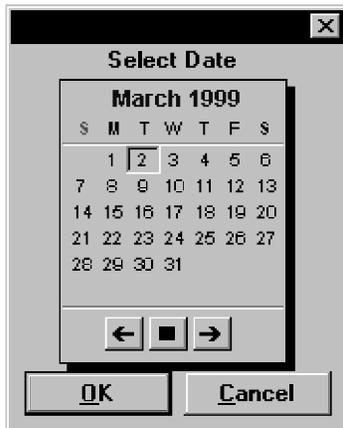


Figure 8-29 The Calendar

Tip: The User cannot enter a date that is after the current system date.

After the User selects a date, the Diary Authorize folder tab lists the Daily Work Reports submitted for the selected date. The reports are listed alphabetically by the name of the Inspector who submitted the report. If a Diary has not already been saved for the selected date, a new Diary is created.

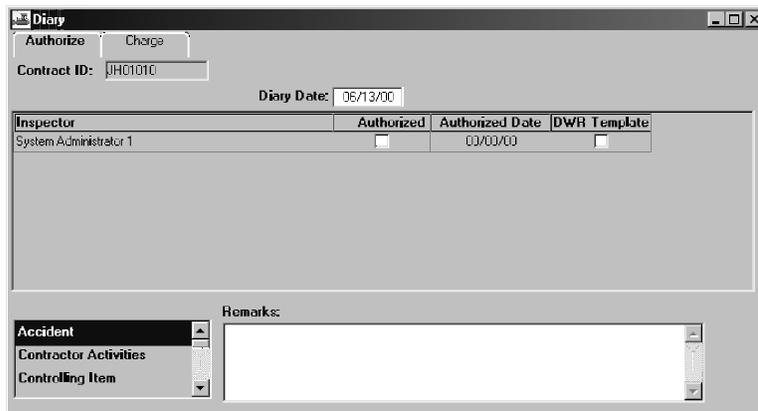


Figure 8-30 The Diary Authorize Folder Tab

The fields on the Diary Authorize folder tab are defined in the following table:

Field Name	Description
Inspector	The name of the Inspector who created the Daily Work Report. The author of a Daily Work Report is the only person who can modify the Daily Work Report.
Authorized	Indicates whether or not the Daily Work Report has been authorized by the Project Manager. A check indicates that the Daily Work Report is authorized. Authorization can be removed.
Authorized Date	The date the Daily Work Report was authorized. When the Project Manager marks the Daily Work Report as authorized, the system enters the current date. If the Project Manager removes authorization, the date is removed.
Preview	The Preview button on the toolbar displays a summary report of the selected Daily Work Report.

Table 8-15 The Diary Authorize Folder Tab Fields Table

To create a new Diary:

1. On the **Daily Work Reports** panel, double-click the **Diaries** icon. *The Diary Authorize folder tab opens.*
2. Click the **Services** menu and click the **Choose Keys** choice.
3. In the **Contract** list box, scroll to and click the desired Contract.
4. Click **Ok**. *The Diary Authorize folder tab lists the Daily Work Reports submitted for the current date.*
5. To change the date, double-click the **Diary Date** field. *This opens a calendar on which a date prior to the current date can be selected.* To select a prior month, click the left arrow. To enter the selected date, click **Ok**.
6. To enter a remark, in the **Remark Type** list box, scroll to and click the remark type. Then, type the remark in the **Remarks** field.
7. Click the **Save** button.
8. Click **Ok**.

8.4.5 Authorizing Daily Work Reports

The Diary Authorize folder tab lets the Project Manager authorize or unauthorize Daily Work Reports. A Daily Work Report with a check in the Authorized check box is considered authorized. When a Daily Work Report is marked as authorized, the system enters the current date in the Authorized Date field. The User can remove authorization (and the authorized date) by removing the check from the Authorized check box. However, if the DWR has been sent to the server previously, the DWR cannot be unauthorized.

If the Project Manager chooses not to authorize a Daily Work Report, the User can transfer the report back to the Inspector for modification using Pipeline. Only the author of the Daily Work Report (the Inspector) can modify the Daily Work Report. The Daily Work Reports must be authorized before they can be uploaded (checked in) to the SiteManager Server database.

To authorize a Daily Work Report:

1. On the **Daily Work Reports** panel, double-click the **Diaries** icon. *The Diary Authorize folder tab opens.*
2. Click the **Open** button.
3. In the **Contract** list box, scroll to and double-click the desired Contract.
4. In the **Diary** list box, scroll to and click the DWR Date of the Diary. (The DWR Date represents both the Daily Work Report Date and the Diary Date.)
5. Click **Ok**. *The Diary Authorize folder tab displays the Daily Work Reports submitted for this date.*
6. In the **Inspector** list box, scroll to the Inspector who submitted the Daily Work Report to be authorized.
7. Click the **Authorized** check box (ON). *The system date is inserted into the Authorized Date field.*
8. Click the **Save** button.

Tip: The User can unauthorize a Daily Work Report by clicking the Authorized check box (OFF). When a Daily Work Report becomes unauthorized, the system removes the authorized date.

8.4.6 Previewing Daily Work Reports and Diaries

The Preview option on the Diary panel lets the User view and print a summary of a Daily Work Report without leaving the Diary panel. Diaries may be printed with either all or with selected Daily Work Reports. The Preview Diary, Preview Diary and All DWR, and Preview Diary and Selected DWR selections appear on the Services menu.

8.4.6.1 Previewing Daily Work Reports

To preview a Daily Work Report:

1. On the **Daily Work Reports** panel, double-click the **Diaries** icon. *The Diary Authorize folder tab opens.*
2. Click the **Open** button.
3. In the **Contract** list box, scroll to and double-click the desired Contract.
4. In the **Diary** list box, scroll to and click the DWR Date of the Diary. (The DWR Date represents both the Daily Work Report Date and the Diary Date.)
5. Click **Ok**. *The Diary Authorize folder tab displays the Daily Work Reports submitted for this date.*
6. In the **Inspector** list box, scroll to and click the Inspector who submitted the Daily Work Report to be previewed.
7. Click the **Preview** button. *A summary report of the selected Daily Work Report is displayed in a print preview window. The User can either review the information on-line or print it.*
8. To close the print preview window, click the **Close** button.



Figure 8-31 The Daily Work Report Preview Button

Tips: The Daily Work Report Preview capability is also available under the Services menu by choosing the Preview DWR choice or the key strokes, Cntrl+Shift+P.

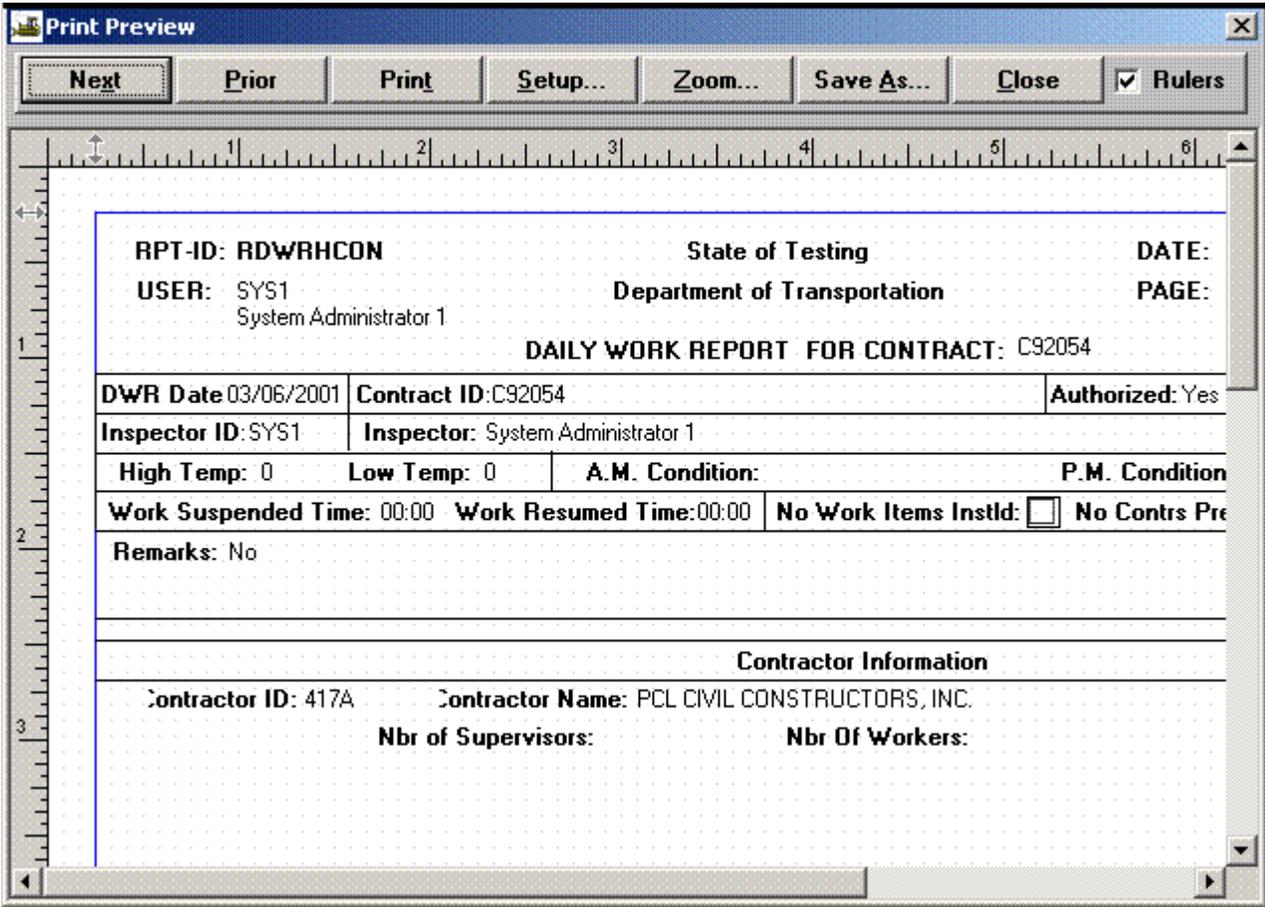


Figure 8-32 The Daily Work Report Preview

The fields on the Daily Work Report Preview are defined in the following table:

Field Name	Description
Contract ID	Transportation agency-defined ID of the Contract.
Authorized	Indicates if the Daily Work Report has been authorized by the Project Manager. Displays Yes if the Daily Work Report has been authorized, No if it has not been authorized, or remains blank if no response has been entered.
Locked	Indicates if the Daily Work Report is currently uploaded (checked in) to the Project Manager. Displays Yes if the Daily Work Report has been checked in, No if the Daily Work Report has been sent back to the Inspector for correction, or remains blank if neither has occurred.

Field Name	Description
Paid	Indicates if the work reported on the Daily Work Report has been paid for (Yes or No).
Inspector ID	ID of the User who created the Daily Work Report.
High Temp.	The high temperature recorded for the work day.
Low Temp.	The low temperature recorded for the work day.
A.M. Condition	The significant weather condition for the morning.
P.M. Condition	The significant weather condition for the afternoon.
Work Items Installed	Tells if no work was completed (no work items installed) for this Daily Work Report (Yes or No).
Contractors On Site	Tells if Contractors were reported present on this Daily Work Report (Yes or No).
Daily Staff On Site	Tells if daily staff were reported present on this Daily Work Report (Yes or No).
Work Suspended Time	The Daily Work Report date is captured when the Project Manager indicates that work is suspended on that day. Payrolls are not required for any payroll period when work is suspended; no work days are charged to the Contract. The Work Suspended Date is added to the Contract Key Dates.
Work Resumed Time	The Daily Work Report date is captured when the Project Manager indicates that work has been resumed on that day. Work cannot be resumed unless it has previously been suspended. The Work Resumed Date is added to the Contract Key Dates.
Remark Type	Denotes the type of remark and also doubles as a search field.

Field Name	Description
Remarks	Remarks entered on the Daily Work Report. Each remark must have a remark type. A remark type can exist only once per Daily Work Report, but multiple remark types can be recorded on each Daily Work Report.
Contractor ID	Transportation agency-defined Vendor ID for the Contractor.
Nbr. Of Supervisors	Number of supervisors reported present on the Daily Work Report.
Nbr. Of Workers	Number of non-supervisory personnel reported present on the Daily Work Report.
Hours Worked	Hours worked by the Contractor reported on the Daily Work Report.
Supervisors Name	Names of the Contractor's supervisors reported on the Daily Work Report.
Supervisor Hrs Worked	Number of hours worked by the supervisor reported on the Daily Work Report.
Personnel Title	Title of workers reported as variable labor on the Daily Work Report.
Variable Labor Qty	The number of workers of each title reported as variable labor on the Daily Work Report.
Variable Labor Hrs Worked	Number of hours worked by each title reported as variable labor on the Daily Work Report.
Equipment Description	Text description of the piece of equipment or a type of equipment reported on the Daily Work Report.
Equipment Qty	Quantity of the equipment reported present on the Daily Work Report.
Equipment Qty Used	Quantity of the equipment reported used on the Daily Work Report.

Field Name	Description
Equipment Hrs Used	Number of hours the equipment was reported used on the Daily Work Report.
Remarks	Remarks entered about the Contractor.
Staff Member	The name of the staff member reported present on the Daily Work Report.
Work Code	Transportation agency-defined code that identifies work activities, including sick time and vacation.
S/C	Indicates if the staff member is a consultant or an employee (C=Consultant or S=State Employee).
Reg Hrs	The number of regular pay hours worked for the time period.
OT Hrs	The number of overtime pay hours worked for the time period.
Vehicle ID	The license number or other identifying number for a state vehicle used by a staff member.
Start M/km	The beginning mileage for the vehicle for the day.
End M/km	The ending mileage for the vehicle for the day.
Line Item Nbr	The Contract Line Item number that identifies each item as it appears on the contract.
Description	A short description of the selected work item.
Supplemental Description	This field contains a textual description that is supplemental to the item's description and may be required by the transportation agency.
Item Code	An agency-defined code used to identify a particular item.
Project Nbr	The unique identifier for the project.

Field Name	Description
Category	A grouping of items assigned during Pre-construction.
Location	The location on the job where the item was installed.
Placed Qty	The quantity installed on the Daily Work Report date. This quantity should represent what the Inspector estimates as being eligible for payment.
Plan Pg Nbr	A reference to a specific plan page.
Measured	Indicates if a work item has been measured or not (Yes or No).

Table 8-16 The Daily Work Report Preview Fields Table

TIP: The Diary Preview DWR Report optionally includes the remarks recorded for DWR Contractor Equipment, Personnel, supervisors, and the Daily Staff.

8.4.6.2 Previewing Diaries

To preview a Diary:

1. On the **Daily Work Reports** panel, double-click the **Diaries** icon. *The Diary Authorize folder tab opens.*
2. Click the **Open** button.
3. In the **Contract** list box, scroll to and double-click the desired Contract.
4. In the **Diary** list box, scroll to and click the DWR Date of the Diary. (The DWR Date represents both the Daily Work Report Date and the Diary Date.)
5. Click **Ok**. *The Diary Authorize folder tab displays the Daily Work Reports submitted for this date.*
6. On the **Services** menu, choose Preview Diary. *The Preview Diary print preview panel opens. The diary report is displayed in a print preview window. The User can either review the information on-line or print it.*
7. To close the print preview window, click the **Close** button.

Tip: The Diary capability is also available with all DWRs or selected DWRs included under the Services menu by choosing the Preview Diary and DWR choice or the Preview Diary and Selected DWR choice.

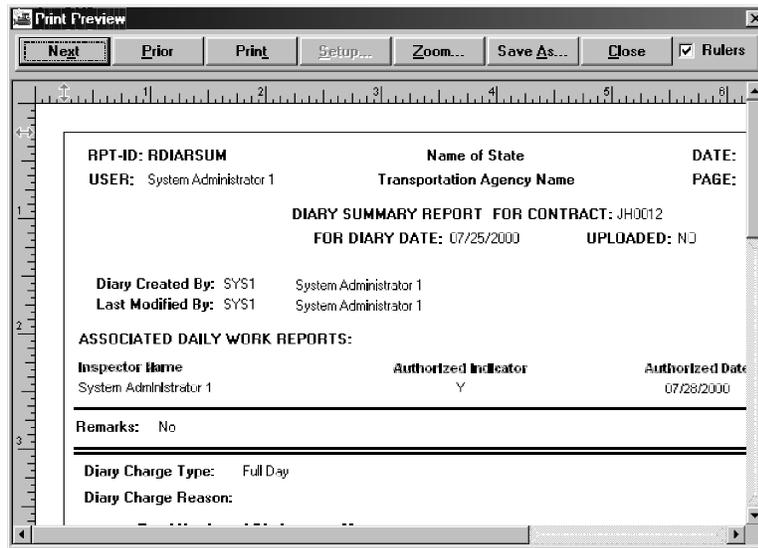


Figure 8-33 The Diary Report Window

8.4.7 Charge Days and No Charge Days

The Diary Charge folder tab lets the User record charge or credit information for the day and enter remarks. The User reviews the Daily Work Reports in the Diary to determine if work was performed on the Contract. If work was performed, a Full Day or Half Day charge can be applied to the Contract end date. A No Charge (credit) day is a day on which no work was performed on the Contract. For No Charge days, no time is applied towards the Contract end date. For Half Days and No Charge days, the User must enter a credit reason to explain why work was not done. The User can also apply charge or credit information to milestones for the Contract. For Half Days and No Charge days applied to a milestone, the User must also enter a credit reason

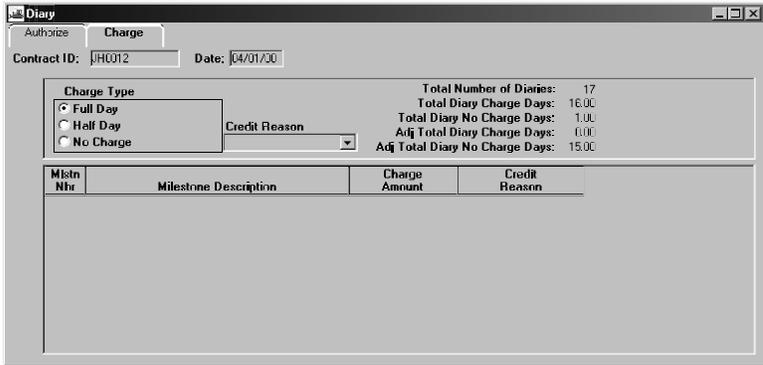


Figure 8-34 The Diary Charge Folder Tab

To access the Diary Charge folder tab:

1. On the **Daily Work Reports** panel, double-click the **Diaries** icon. The Diary Authorize folder tab opens.
2. Click the **Open** button.
3. In the **Contract** list box, scroll to and double-click the desired Contract.
4. In the **Diary** list box, scroll to and click the DWR Date of the Diary. (The DWR Date represents both the Diary and the Daily Work Reports that comprise the Diary.)
5. Click **Ok**. The Diary Authorize folder tab lists the Daily Work Reports submitted for the selected date.
6. Click the **Dairy Charge** folder tab.

The fields are defined in the following table:

Field Name	Description
Charge Type Full Day	Full day charge indicator for the Diary. When checked, a Full Day charge will be applied to the Diary.
Charge Type Half Day	Half day charge indicator for the Diary. When checked, a Half Day charge will be applied to the Diary. If this charge type is selected, a credit reason must be given.
Charge Type No Charge	No Charge day indicator for the Diary. When checked, a No Charge day will be applied to the Diary. If this charge type is selected, a credit reason must be given.

Field Name	Description
Diary Credit Reason	Transportation agency-defined reason for granting a credit day. A credit reason is only required if a charge type other than Full Day is used.
Total Number of Diaries	Total number of diaries that exist for the contract.
Total Diary Charge Days	The Total Diary Charge Days field is the sum of all records that have Charge Type as Full Day or Half Day for the diary..
Total Diary No Charge Days	The Todal Diary No Charge Days field is the sum of all records that have Charge Type as No Charge or Half Day for the diary.
Adj Total Diary Charge Days	The Adj Total Diary Charge Days field is the sum of previous total charge days and current total charge days for the contract.
Adj Total Diary No Charge Days	The Adj Total Diary No Charge Days field is the sum of previous total suspended days and current trotal suspended days for the contract.
Mlstn Nbr	Identifies the number of a milestone for the selected Contract.
Milestone Description	Description of a milestone for the selected Contract.
Milestone Charge Amount	Type of day credited (Full Day, Half Day, No Charge).
Milestone Credit Reason	Transportation agency-defined reason for granting a credit day for the milestone. It is only required if a charge type other than Full Day is used.

Table 8-17 The Diary Charge Folder Tab Fields Table

Diary Adjustment Window

To enter charge data in a Diary:

1. On the **Daily Work Reports** panel, double-click the **Diaries** icon. *The Diary Authorize folder tab opens.*
2. Click the **Open** button.
3. In the **Contract** list box, scroll to and double-click the desired Contract.
4. In the **Diary** list box, scroll to and click the DWR Date of the Diary. (The DWR Date represents both the Diary and the Daily Work Reports that comprise the Diary.)
5. Click **Ok**. *The Diary Authorize folder tab lists the Daily Work Reports submitted for the selected date.*
6. To review a Daily Work Report, in the **Inspector** list box, scroll to and click a Daily Work Report, then click the **Preview** button.
7. To enter charge data, click the **Dairy Charge** folder tab.
8. In the **Charge Type** field, click the radio button of the charge type to apply to the day for the Contract.
9. If the charge type is Half Day or No Charge, in the **Credit Reason** drop-down list, click the expand arrow and click the reason for not charging all or part of the day.
10. To apply all or part of the charge or credit to a milestone, click the **Milestone** field and click the **New** button. An empty row is inserted.
11. In the **Milestone** drop-down list, click the expand arrow and click the milestone to apply the charge or credit to.
12. In the **Charge Amount** drop-down list, click the expand arrow and click Full Day, Half Day, or No Charge.
13. If Half Day or No Charge is entered as the Charge Amount for the milestone, in the **Credit Reason** drop-down list, click the expand arrow and click the reason for a credit.
14. Click the **Save** button.

8.5 Diary Adjustment Window

The Diary Adjustment Window allows charge day adjustments to be applied for a day that has incorrect charge information recorded and applied by an approved estimate. The window is only available on the server. The window is comprised of two tabs. The first tab allows the user to adjust the charge information for a Diary's day charge. The second tab allows the user to adjust the charge information for Diary Milestones.

A Diary must be selected that has been recorded and included on a paid estimate. An existing adjustment can not be deleted or updated. A new adjustment must be created. Since multiple adjustments can be made for a Diary and a Diary Milestone, a sequence number will automatically be assigned to each new adjustment. The

Diary Adjustment Window tracks sequence number, User-ID, Charge Type, Credit Reason, Remarks, Update Date, and Estimate number.

Once an adjustment has been saved, it is ready to be processed by the next estimate which gets generated. If multiple adjustments are made that have not been included on a previous estimate, the last adjustment will be applied to the diary or milestone only on the next estimate. The estimate process will update the Total Charge and the Total No Charge days on the contract, then update the adjustment records with the associated estimate number. Milestone Adjustments will be similarly posted against the Diary Milestone Information that has been recorded for that Diary.

8.5.1 Diary Adjustment Window Diary and Milestone Tab

8.5.1.1 Creating a Diary Adjustment

The Diary Adjustment Window Diary Tab allows adjustments to charge days on a Diary associated with a paid estimate. The top of the window displays the current Diary Charge information. The lower window displays the adjustments that have been made.

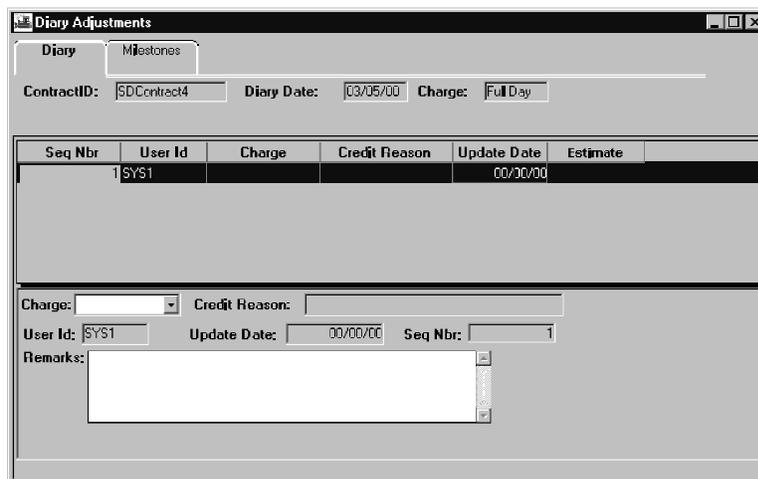


Figure 8-35 The Diary Adjustment Window

The fields are defined in the following table:

Field Name	Description
Contract ID	Transportation agency-defined ID for the Contract associated with the Diary Adjustment.
Diary Date	Date of the Diary being adjusted.

Field Name	Description
Charge	Type of charge associated with the Diary. If work was performed, a Full day or Half day charge can be applied to the contract end date. If No Charge (credit) days is selected, no time is applied to the contract end date.
Seq Nbr	The system-entered sequence number that identifies the Diary Adjustment.
User Id	System-entered user ID of the user who entered the Diary Adjustment.
Credit Reason	Transportation agency-defined reason for granting a Credit day. A credit reason is only required if a charge type other than Full Day is used.
Update Date	The system-entered date the Diary Adjustment was last updated.
Estimate	The system-entered estimate number on which the Diary Adjustment appears.
Remarks	User-entered information about the Diary Adjustment.

To create a new Diary Adjustment:

1. On the Main Panel, double click the Daily Work Reports icon.
2. Double-click the Diary Adjustment icon.
3. In the Contract list box, scroll to and click the desired Contract.
4. In the Diary list box, scroll and click the desired Diary.
5. Click the New button. A sequence number and User-Id will display in the new row.
6. In the Charge drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
7. If the user selects Half Day or No Charge from the drop-down list, the Reason Code must be entered. Click the expand arrow to the right of the current selection and click the desired choice.
8. Fill in the Remark field as appropriate and click Save.

Note: The Charge drop down list will not display the current Diary charge value as a selection.

When the new adjustment is saved, the Charge, Credit Reason and Update Date will be updated. The Estimate field will remain blank until the next estimate gets generated. The estimate process will populate the adjustment records with the associated estimate number.

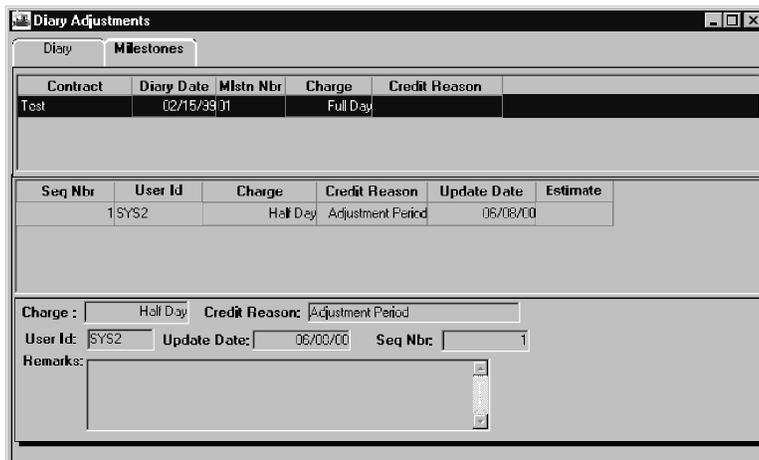


Figure 8-36 The Diary Adjustment Milestone Tab

Field Name	Description
Contract	The transportation agency defined ID of the contract.
Diary Date	Date of the Diary
Charge	Type of charge associated with the diary. If work was performed, a Full day or Half day charge can be applied to the contract end date. If No Charge (credit) days is selected, no time is applied towards the contract end date.
User ID	Identifies the person who created the Adjustment.
Credit Reason	Transportation agency-defined reason for granting a credit day. A credit reason is only required if charge type is half day or no charge.
Update Date	The date upon which the adjustment has been made.
Estimate	This field shows the associated estimate that updated the total charge and total no charge days on the contract.

DWR Reference Tables

To create a new adjustment for Milestone on a Diary:

1. On the **Main-Panel**, double click on the **Daily Work Reports** icon.
2. Double-click the **Diary Adjustment** icon.
3. In the Contract list box, scroll to and click the desired Contact.
4. In the Diary list box, scroll to and click the desired Diary.
5. Click on the **Milestone** tab.
6. Click the **New** button. A sequence number and User-Id will display in the new row.
7. In the **Charge Days** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
8. If the user selects Half Day or No Charge from the drop-down list, the **Reason Code** must be entered. Click the expand arrow to the right of the current selection and click the desired choice.
9. Fill in the **Remark** field as appropriate and click **Save**.

Note: The Charge Days down list will not display the current Charge Reason value as a selection.

After the new Milestone Adjustment is saved, the Charge Days, Charge Reason, and the Update Date will be populated. The Estimate field will remain blank until the next estimate gets generated. The estimate process will populate the adjustment records with the associated estimate number.

8.6 DWR Reference Tables

8.6.1 DWR Master List

During the creation of Daily Work Reports, Contractor Supervisors and Personnel Types are selected from standard drop-down lists on the Contractor folder tab. Contractor Equipment are similarly selected from a standard drop-down list on the Contractor Equipment folder tab. Transportation agency staff members are selected from a standard drop-down lists on the Daily Staff folder tab.

The entries in these drop-down lists are first created on in the Vendor Master List. The entries in the Vendors Master List then have to be associated to specific Contracts.

Staff members are unusual since they are State Transportation agency employee or consultants. They are added, modified and deleted to the *Vendor* Master List in the same way the other Master List entries are performed.

The DWR Master List is composed of two windows, the Vendor Master List and the Contract Master List. The Vendor Master List allows a user to maintain a centralized list of equipment, personnel types, supervisors and agency staff associated to a vendor. The Contract Master List is used to associate the Vendor Master List to specific contracts. A record on the Vendor Master List can be associated to multiple contracts.

The Vendor Master List and the Contract Master List are created and maintained on the server. The Contract Master List is piped down when Basic Contract Data is selected on the Server to PM pipeline screen. The Contract Master List is read only in stand-alone mode. If changes need to be made, the Contract Master List must be corrected on the server and the Basic Contract Data piped down again to update the list on the stand-alone.

8.6.1.1 Vendor Master List

The Vendor Master List allows equipment, personnel types, supervisors, and agency staff members to be associated to a vendor. The top portion of the window displays the vendor ID and allows selection of the lists to modify. The bottom portion of the screen displays the respective data for each list.

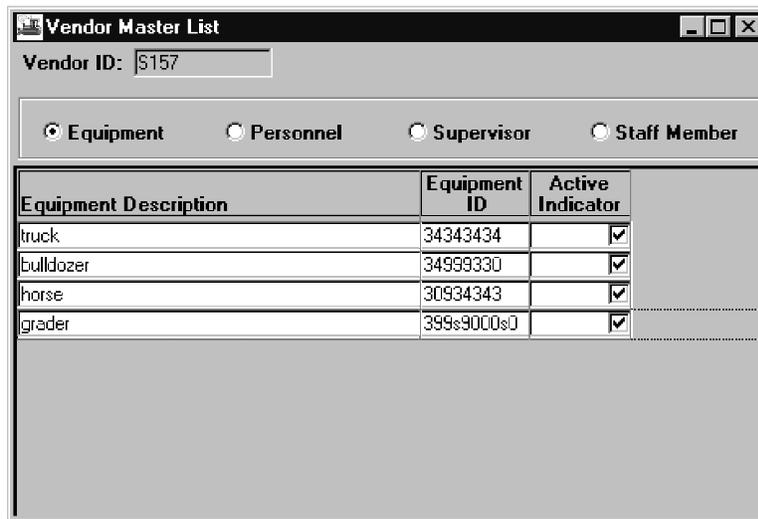


Figure 8-37 The Vendor Master List

The fields on the Vendor Master List panel are defined in the following table:

Field Name	Description
Equipment	Description of a piece of equipment or type of equipment.
Equipment ID	Identification of the equipment.
Active Indicator	Indicates if the record is active or inactive
Personnel Type	Personnel type of non-supervisory workers
Supervisor Name	Name of the Supervisor

Field Name	Description
Staff Member Name	Name of the state employee or consultant
SSN/SIN	Social security number of the state employee or consultant.
S/C	S indicates a state employee. C indicates a consultant.

Figure 8-38 The Vendor Master List Fields Table

If a user deactivates an active record on the Vendor Master List, a warning message will appear. The message warns a user that by deactivating a record on the Vendor Master List, the record will be deactivated for ALL contracts the record is associated to.

If a user activates a record that had been deactivated on the Vendor Master List, the user will have to go to each contract individually on the Contract Master List to mark the record as active.

The Equipment Radio button is the active radio button when you first enter the Vendor Master List. You can add, modify, delete, activate, or deactivate the Vendor Equipment on the Master Lists.

To add equipment to the Equipment Master List:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Reference Tables** icon.
3. On the Reference Tables panel, double-click the **Vendor Master List** icon.
4. On the **Vendor** list box, scroll to and double-click the desired vendor.
5. Click the **Equipment** radio button.
6. Click the **New** button. An empty row is added to the Equipment list.
7. Type the Equipment Description.
8. Press the **Tab** key.
9. Type the Equipment ID.
10. Click the **Active Indicator** check box (ON).
11. Click the **Save** button.

You can add, modify, delete, activate, or deactivate the Vendor Personnel Types on the Master Lists.

To add a personnel type to the Personnel Type Master List:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.

2. On the **Daily Work Reports** panel, double-click the **Reference Tables** icon.
3. On the Reference Tables panel, double-click the **Vendor Master List** icon.
4. On the **Vendor** list box, scroll to and double-click the desired vendor.
5. Click the **Personnel** radio button.
6. Click the **New** button. An empty row is added to the supervisor list.
7. Type the personnel type.
8. Press the **Tab** key.
9. Click the **Active Indicator** check box (ON).
10. Click the **Save** button.
11. Click the **Close** button.

You can add, modify, delete, activate, or deactivate the Vendor Supervisors on the Master Lists.

To add a Contractor supervisor to the Master List:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Reference Tables** icon.
3. On the Reference Tables panel, double-click the **Vendor Master List** icon.
4. On the **Vendor** list box, scroll to and double-click the desired vendor.
5. Click the **Supervisor** radio button.
6. Click the **New** button. An empty row is added to the supervisor list.
7. Type the Supervisor Name..
8. Press the **Tab** key.
9. Click the **Active Indicator** check box (ON).
10. Click the **Save** button.

You can add, modify, delete, activate, or deactivate the Transportation agency Staff Members on the *Vendor* Master List.

Once a Staff Member has been added to a specific Vendor's Master List that Staff Member becomes available for use in the Master List for ALL Vendors

DWR Reference Tables

To add a Staff Member to the Master List:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Reference Tables** icon.
3. On the Reference Tables panel, double-click the **Vendor Master List** icon.
4. On the **Vendor** list box, scroll to and double-click the desired vendor.
5. Click the **Staff Member** radio button.
6. Click the **New** button. An empty row is added to the supervisor list.
7. Type the staff member's name
8. Press the **Tab** key.
9. Type the staff member's identification number
10. Press the **Tab** key.
11. In the **S/C** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
12. Click the **Active Indicator** check box (ON).
13. Click the **Save** button.
14. Click the **Close** button.

8.6.1.2 Contract Master List

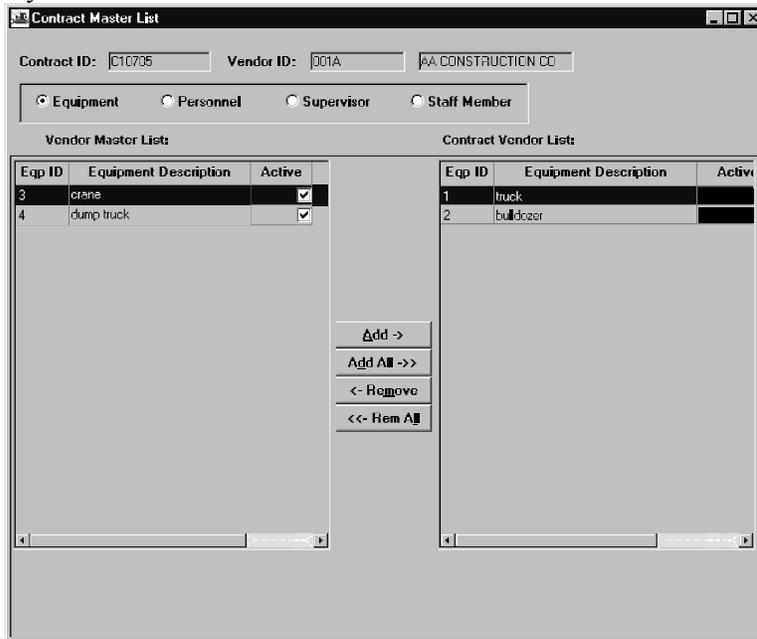
The Contract Master List allows the active Equipment, Personnel Types, and Supervisors on the Vendor's Master List to be associated to specific contract. Each contract can have one or more "approved" vendors. The Vendor Master List data of the prime Contractor and any approved Subcontractors will be available to associate with the Contract.

Only the Active Equipment, Personnel Types, and Supervisor associated with the Vendor will be available to add to the Contract. Staff members associated to any Vendor will be available on ALL contracts.

Contract Master Lists are created on the SiteManager server. For the content to be available in standalone, the Contract must be pipelined before the data will be available in the drop lists for Equipment, Personnel Types, and Supervisors on the DWR. The Contract Master List is piped down with Basic Contract Data. No change to Contract Master List content is permitted in standalone.

The top portion of the Contract Master List displays the contract id and vendor id. Radio buttons allows a user to select the list to modify. The Vendor Master List displays only active records. The Contract Vendor

List displays the records associated with the



contract.

Figure 8-39 The Contract Master List

The fields on the Contract Master List panel are defined in the following table:

Field Name	Description
Contract ID	Transportation agency defined ID for the Contract
Vendor ID	Transportation agency defined ID for the Vendor
Equipment ID	Identifier for the piece of equipment.
Active Indicator	Indicates if the record is active or inactive
Supervisor Name	Name of the Supervisor
Personnel Type	Personnel type of non-supervisory workers
Staff Member Name	Name of the state employee or consultant.
SSN/SIN	Social security number of the state employee or consultant.
S/C	S indicates a state employee. C indicates a consultant.

Table 1-2 The Contract Master List Fields Table

If a user deactivates an active record on the Contract Master List, the record will be inactivated for the specific contract. The deactivated record will not be available to select from a drop down list on a DWR until marked as active and the Basic Contract data is pipelined stand alone.

To associate Equipment, Personnel Types, or Supervisors on a Vendor Master List to a contract:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Reference Tables** icon.
3. On the Reference Tables panel, double-click the **Contract Master List** icon.
4. On the **Contract** list box, scroll to and double-click the desired Contract.
5. On the **Vendor** list box, scroll to and double-click the desired Vendor.
6. Click the **Equipment, Supervisor, Personnel, or Staff Member** radio button.
7. Click the **Add All** button to add all of the Vendor master list data.

Or

8. Click the desired choice.
9. Click the **Add** button to a single choice.
10. Click the **Save** button.
11. Click the **Close** button.

ALL Staff members associated with ANY vendor will be available for addition to the Contract.

To associate Vendor Master List Staff Members to a contract:

1. On the **SiteManager** main panel, double-click the **Daily Work Reports** icon.
2. On the **Daily Work Reports** panel, double-click the **Reference Tables** icon.
3. On the Reference Tables panel, double-click the **Contract Master List** icon.
4. On the **Contract** list box, scroll to and double-click the desired Contract.
5. On the **Vendor** list box, scroll to and double-click the desired Vendor.
6. Click the **Staff Member** radio button.
7. Click the **Add All** button to add all of the Vendor master list data.

Or

8. Click the desired choice.
9. Click the **Add** button to a single choice.
10. Click the **Save** button.
11. Click the **Close** button.

8.7 Daily Work Reports History

The Daily Work Reports History panel lets the User run reports of Daily Work Report records for the selected Contract. To run history reports, the User must select a Contract when the History panel first opens and displays a selection list of contracts. The history reports display all report records for the selected Contract by default. The User can view the reports on-line or print the reports. The History panel has the following folder tabs:

- DWR History
- Work Item History
- Contractor History

To access the Daily Work Reports panel:

1. On the **Daily Work Reports** panel, double-click the **History** icon. *The Select Contract panel opens.*
2. In the **Contract** list box, scroll to and click the Contract ID.
3. Click **Ok**. *The DWR History folder tab is displayed.*

8.7.1 DWR History

The DWR History folder tab displays a history of all of the Daily Work Reports available to the current User. This report groups all the Daily Work Reports by date and inspector, in descending order, from newest to oldest. Weather conditions, temperatures, and work suspended times are examples of the information shown on this report. The User can view the report on-line or print the report.

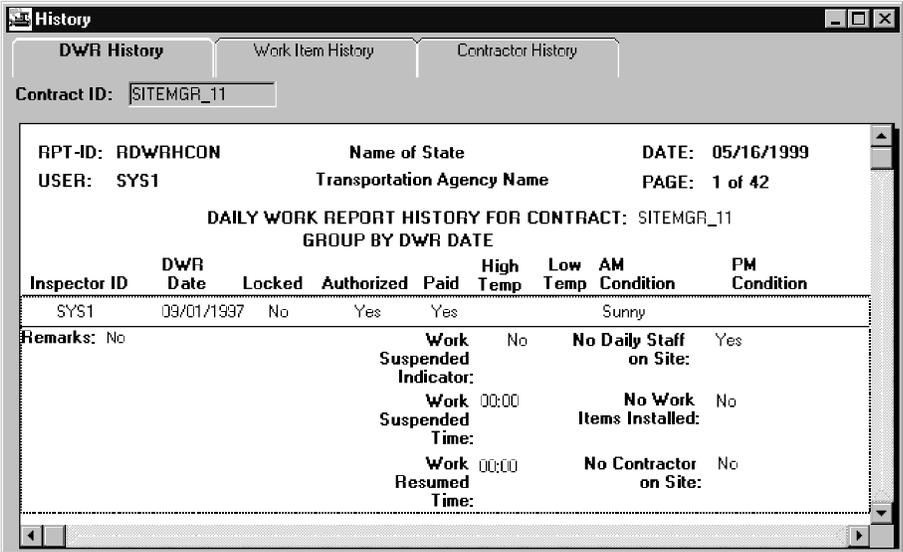


Figure 8-40 The Daily Work Report History

To run a DWR History report:

1. On the **Daily Work Reports** panel, double-click the **History** icon. *The Select Contract panel opens.*
2. In the **Contract** list box, scroll to and click the Contract ID.
3. Click **Ok**. *The DWR History folder tab displays a history of all Daily Work Reports for the selected Contract.*

8.7.2 Work Item History

The Work Item History report displays a history of all work items recorded in the Daily Work Reports for the selected Contract. The Work Items are sorted in descending order, from newest to oldest. The contract must be selected from the contract selection list that appears when the History icon is clicked. The User can view the report on-line or print it.

Line Item Nbr	Project Nbr	Cat Nbr	Item Code	Description	Supplemental Description1	Supplemental Description2	Installed Qty To Date	Bid Qty	Fina
0245	92054-BID	0200	403-00720	*Hot Bituminous Pavement (Patching) (Asphalt)			53.9	465.000	.000

Date	User ID	Location Installed	Contractor ID	Contractor Name	Reported Quantity
03/15/2001	MHAREI	Smith rd detour	032A		-53.9

Figure 8-41 The Work Item History

Daily Work Reports History

To run a Work Item History report:

1. On the **Daily Work Reports** panel, double-click the **History** icon. *The Select Contract panel opens.*
2. In the **Contract** list box, scroll to and click the Contract ID.
3. Click **Ok**. *The DWR History folder tab displays a history of all Daily Work Reports for the selected Contract.*
4. Click the **Work Item History** folder tab. *The folder tab displays a history of all daily work item usage recorded for the selected Contract.*
5. To close the report, click the **Close** button.

8.7.3 Contractor History

The Contractor History folder tab displays three separate reports:

- Equipment History
- Supervisor History
- Variable Labor History

Each type of report can be selected using the appropriate icon or choice(s) under the Services menu.

The reports display the Contractor history from the Daily Work Reports for the selected Contract only. The contract must be selected from the contract selection list that appears when the History icon is clicked. The reports display records for all of the Contractors by default. Data is grouped by Contractor and sorted by DWR date in descending order from newest to oldest. The User can view the reports on-line or print the reports.

The **Contractor Equipment History** report displays the daily equipment usage history for the current Contractor(s), including the equipment description, the quantity present, the quantity used, and the number of hours used.

The **Supervisor History** report displays the supervisor names and the number of hours worked.

The **Variable Labor History** report displays the personnel types of the variable labor workers, the number of workers of each personnel type, and the number of hours worked.

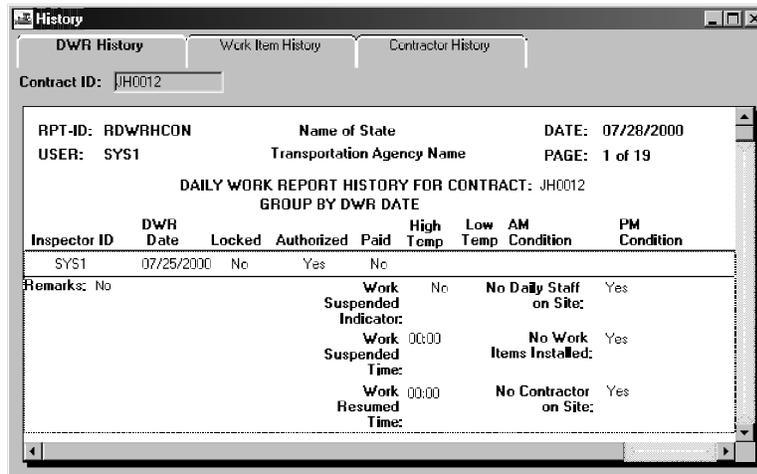


Figure 8-42 The Contractor Equipment History

To run a Contractor History report:

1. On the **Daily Work Reports** panel, double-click the **History** icon. *The Select Contract panel opens.*
2. In the **Contract** list box, scroll to and click the Contract ID.
3. Click **Ok**. The DWR History folder tab displays a history of all Daily Work Reports for the selected Contract.
4. Click the **Contractor History** folder tab. *The Contractor Equipment folder tab displays a history of equipment usage recorded for all Contractors for the selected Contract.*
5. To close the report, click the **Close** button.



Figure 8-43 The Contractor History Toolbar Buttons

The User can toggle between Contractor History reports by clicking the corresponding button on the toolbar. To view the Equipment History report, the User clicks the Equipment button. To view the Supervisor History report, the User clicks the Supervisor button. To view the Variable Labor History report, the User clicks the Variable Labor button. Only one report can be displayed at a time.

The screenshot shows a window titled "History" with three tabs: "DWR History", "Work Item History", and "Contractor History". The "Contractor History" tab is selected. Below the tabs, there is a "Contract ID:" field containing "SITEMGR_11". The main content area displays the following information:

RPT-ID: RDWRHSUP Name of State DATE: 05/16/1999
 USER: SYS1 Transportation Agency Name PAGE: 1 of 2
SUPERVISOR HISTORY FOR CONTRACT: SITEMGR_11
GROUP BY CONTRACTOR/DATE

Contractor: DAY CONSTRUCTION COMPANY

DWR Date: 02/09/1999

DWR Date: 02/08/1999

User ID	Supervisors Name	Hrs Worked
SYS1	Linda Reynolds	8

Figure 8-44 The Contractor Supervisor History

The screenshot shows a window titled "History" with three tabs: "DWR History", "Work Item History", and "Contractor History". The "Contractor History" tab is selected. Below the tabs, there is a "Contract ID:" field containing "SITEMGR_11". The main content area displays the following information:

RPT-ID: RDWRHLBR Name of State DATE: 05/16/1999
 USER: SYS1 Transportation Agency Name PAGE: 5 of 29
VARIABLE LABOR HISTORY FOR CONTRACT: SITEMGR_11
GROUP BY CONTRACTOR/DATE

DWR Date: 02/02/1999

User ID	Personnel Type	Nbr of Persons	Hrs Worked
SYS1	Heavy Construction Laborers I	2	3
SYS1	Truck Drivers	2	3

Figure 8-45 The Contractor Variable Labor History

9. Pipeline

August 2005

9.1 Overview

Pipeline is the process that automates the transfer of data. Pipeline automates the data flow from the:

- Server to the Project Manager
- Project Manager back to the server
- SiteManager standalone version to SitePad
- SitePad to SiteManager standalone version

Pipeline	The pipeline process transfers data files from one database to another. In SiteManager, the Project Manager uses the pipeline process to download data directly from the server's database to the standalone workstation's database, and to upload data directly from the standalone workstation's database to the server's database.
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SiteManager provides the Pipeline process because Contract data must be downloaded and uploaded often during the life of a Contract. In general, the data downloaded from the server is the Contract plan data, which is primarily the Contract specifications. The data uploaded to the server is the Contract activity data, which is the work done on the Contract.

9.1.1 Pipeline Example

To begin working on a Contract, the Project Manager or Inspector selects and downloads (checks out) the Contract plan data from the server’s database to the standalone workstation’s database.

The Project Manager or Inspector records activity data (Daily Work Reports or Sample and Test data) in standalone and then pipelines data to the Server.

The Contract plan data cannot be modified in the field. However, the Project Manager and Inspector must have this data loaded in their standalone databases to generate Daily Work Reports and other Contract activity data. Most Contract activity data is added to the Contract on the server through the Daily Work Report function. Some activity data requires the creation of Force Accounts and Change Orders, which are also added to the Contract on the server. The transportation agency offices may also generate data. For example, new users could be added to the system.

As the Contract data changes, the system notifies the Project Manager who can download the new data to update the standalone databases. The Project Manager can monitor the Contract’s Pipeline activity on the Pipeline Information panel. The Contract remains checked out until the Project Manager releases it back to the server.

9.1.2 Pipeline Panels

When logging on to SiteManager, the user connects to either the standalone database or the server database, depending on which Pipeline function will be used.

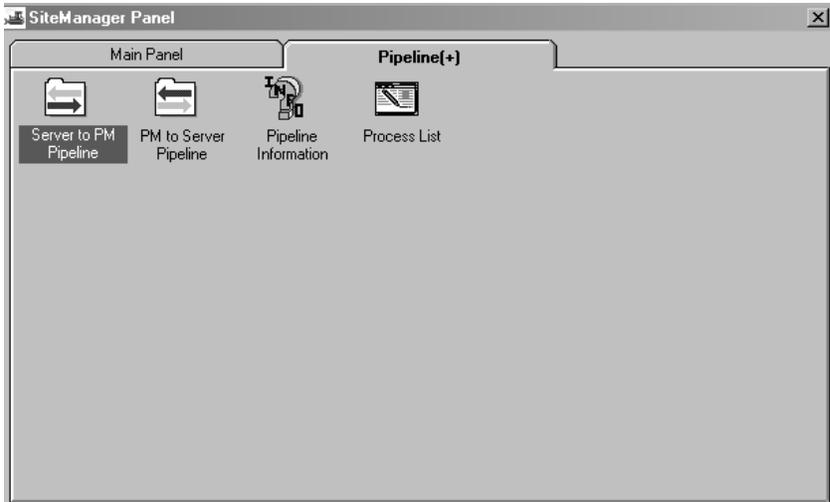


Figure 9-1 Pipeline Panel (PMs server connection)

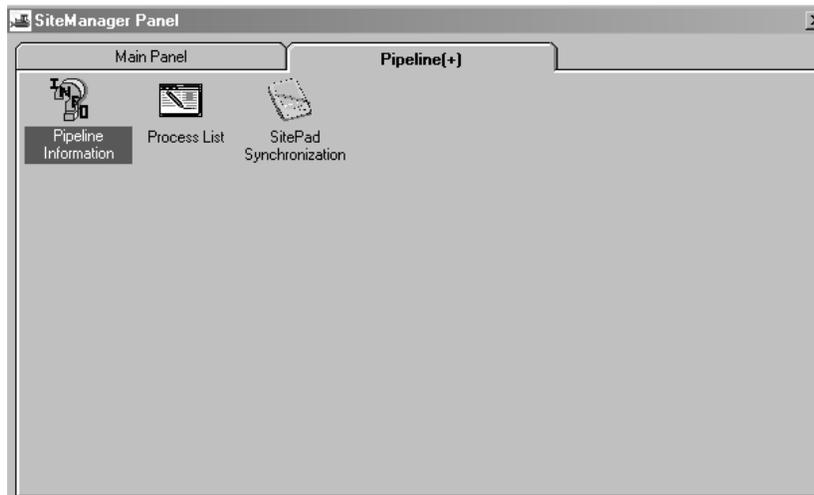


Figure 9-2 The Pipeline Panel (PM’s standalone connection)

The following table shows how the Project Manager and Inspector use the Pipeline panels to transfer Contract data.

Step	Process	Pipeline Panel	Third-party component
1	The Project Manager selects and downloads plan data and user data from the server’s database to the standalone workstation’s database.	Server to PM Pipeline window	--
2	The Project Manager selects and uploads activity data from the standalone workstation to the server.	PM to Server Pipeline window	--
3	The Project Manager can view a history of Pipeline activity.	Pipeline Information window	--

Table 9-1 The Pipeline Process Table

9.2 Server to PM Pipeline

The Server to PM Pipeline window lets the Project Manager or Inspector download (check out) data from the server's database to the standalone workstation's database. Materials data can be downloaded without selecting a Contract. To download Contract data from the server, the Project Manager or Inspector must first select a Contract and then select the data to download—Diaries, Daily Work Reports, Change Orders, or Force Accounts—by clicking a folder tab in the Server to PM Pipeline window. The folder tabs in the Server to PM Pipeline window are as follows:

- Pipeline Summary
- Diary Select
- DWR Select
- Change Order Select
- Force Account Select
- Users Select

To download Basic Contract Data or Materials data, the Project Manager or Inspector must check the Basic Contract Data box or the Materials box on the Server to PM Pipeline window. After the Project Manager has selected the data to download, the pipeline process is triggered by selecting the Pipeline Data menu option on the Services menu. For the data to download, the Contract must be in active status.

9.2.1 Server to PM Pipeline Summary

The Server to PM Pipeline Summary folder tab shows the number of Daily Work Reports, Diaries, Change Orders, and Force Accounts selected. To see which ones are selected, the Project Manager clicks the appropriate folder tab.

The screenshot shows the 'Server To PM Pipeline' window with the 'Pipeline Summary' folder tab selected. The window contains the following elements:

- Contract ID:
- Description:
- Basic Contract Data:
- Materials:
- Diaries:
- Change Orders:
- DWRs:
- Force Accounts:
- Users:
- Pipeline Status:

Figure 9-3 The Server to PM Pipeline Summary Folder Tab

Field Name	Description
Contract ID	This is the Contract ID for which the data is downloaded.
Contract Description	This is the description of the Contract for which the data is downloaded.
Basic Contract Data	This field indicates that the Basic Contract Data is to be downloaded. If the Project Manager checks the Basic Contract Data box, all of the Contract data required to process the Daily Work Reports, including Change Orders and Force Accounts, is downloaded to the Project Manager’s workstation. The Contract is updated on the server with a flag to indicate that the Contract has gone to the field. The Check-In/Check-Out Log table on the server is updated with the Project Manager’s User ID and the check-out date.
Diaries	This field indicates the number of Diaries to be downloaded.
DWRs	This field indicates the number of Daily Work Reports to be downloaded.
Materials	This field indicates whether or not Materials data is to be downloaded. When the Project Manager selects the Materials box, all of the reference data required to enter new Material sampling and testing data is downloaded to the Project Manager’s workstation. Materials data can be downloaded without selecting a Contract.
Change Orders	This field indicates the number of Change Orders to be downloaded.
Force Accounts	This field indicates the number of Force Accounts to be downloaded.
Users	This field indicates the number of users for whom Security and In-Box data is downloaded.
Pipeline Status	Displays messages on the status of a pipeline process in progress.

Table 9-2 The PM to Server Pipeline Summary Fields Table

9.2.2 Diary Select

The Diary Select folder tab lets the Project Manager or Inspector select Diaries to download or upload. This folder tab is available on the following windows:

- Server to PM Pipeline
- PM to Server Pipeline

When the Project Manager clicks the Diary Select folder tab on the Server to PM Pipeline window, a list of Diaries for the selected Contract is displayed. The Project Manager selects one or more Diaries to download. If the Project Manager selects a Diary that is already downloaded, a warning is displayed. If the Project Manager selects a Diary that has been downloaded by another Project Manager, an error message is displayed.

Tip: Checking out a Diary that is included on an estimate whose status is INAP causes the estimate to become invalid.

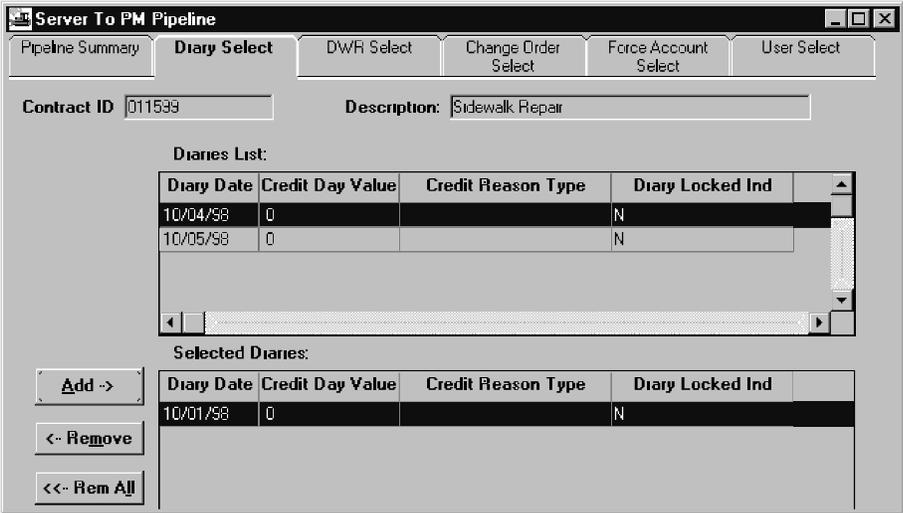


Figure 9-4 The Server to PM Diary Select Folder Tab

Field Name	Description
Contract ID	Transportation agency-defined ID of the Contract
Contract Description	Description of the Contract
DWR Date	Date of the Daily Work Report
Credit Day Value	Number of credit days for the Diary

Field Name	Description
Credit Reason Type	Reason for the credit
Locked	On the Server to PM Pipeline window, this field indicates that the Diary is downloaded from the server (checked out). On the PM to Server Pipeline window, this field indicates that the Diary is uploaded to the server (checked in).

Table 9-3 The Diary Select Folder Tab Fields Table

Add button	Adds the selected Diaries from the top datawindow to the bottom datawindow.
Remove button	Removes the selected Diaries from the bottom datawindow.
Rem All button	Removes all of the Diaries from the bottom datawindow.

Table 9-4 The Diary Select Folder Tab Buttons Table

9.2.3 DWR Select

The DWR Select folder tab lets the user select Daily Work Reports to download or upload. This folder tab is available on the following windows:

- Server to PM Pipeline
- PM to Server Pipeline

When the Project Manager clicks the DWR Select folder tab on the Server to PM Pipeline window, the window displays a list of Daily Work Reports for the selected Contract. The Project Manager selects one or more Daily Work Reports to download.

- If the selected Daily Work Report is included in an approved estimate, the Daily Work Report cannot be downloaded. The Project Manager will get an error message.
- If the selected Daily Work Report is included in an unapproved estimate, the estimate is marked as invalid. The Project Manager needs to generate the estimate again when the Daily Work Report is uploaded.
- If the Project Manager selects a Daily Work Report that is already downloaded, a warning is displayed. If the Project Manager selects a Daily Work Report that another Project Manager has downloaded, an error message is displayed.

When the selected Daily Work Reports are downloaded, the Check-In/Check-Out Log table on the server is updated with the Project Manager’s User ID and the check-out date. The downloaded Daily Work Reports are locked on the server, preventing update on the server.

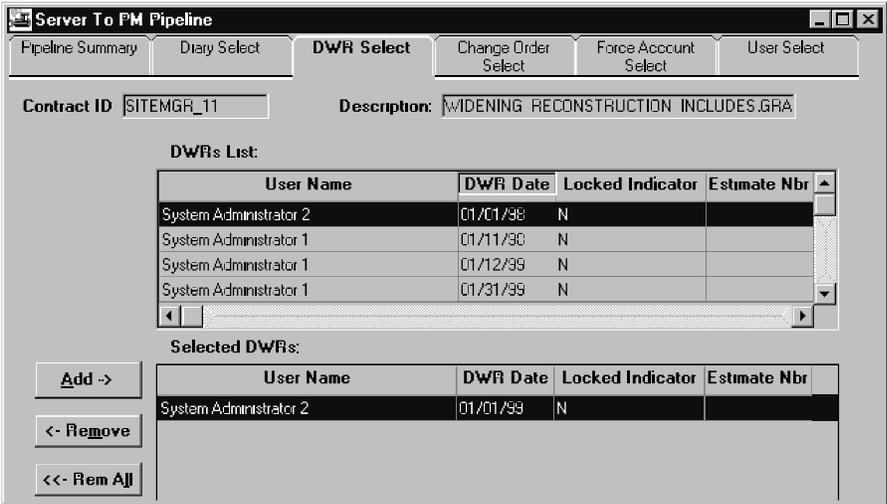


Figure 9-5 The Server to PM DWR Select Folder Tab

Field Name	Description
Contract ID	Contract ID of the Contract
Contract Description	Description of the Contract
user Name	Name of the Inspector who created the Daily Work Report
DWR Date	Date of the Daily Work Report
DWR Locked Ind	Indicates whether or not the Daily Work Report can be modified on this workstation
Estimate Number	Estimate that includes the DWR

Table 9-5 The DWR Select Folder Tab Fields Table

Add button	Adds the selected Daily Work Reports from the top datawindow to the bottom datawindow.
Remove button	Removes the selected Daily Work Reports from the bottom datawindow.
Rem All button	Removes all of the Daily Work Reports from the bottom datawindow.

Table 9-6 The DWR Select Folder Tab Buttons Table

9.2.4 Change Order Select

The Change Order Select folder tab lets the user select Change Orders to download. This folder tab is available on the following windows:

- Server to PM Pipeline

When the Project Manager clicks the Change Order Select folder tab on the Server to PM Pipeline window, a list of Change Orders is displayed. The Project Manager selects one or more Change Orders to download.

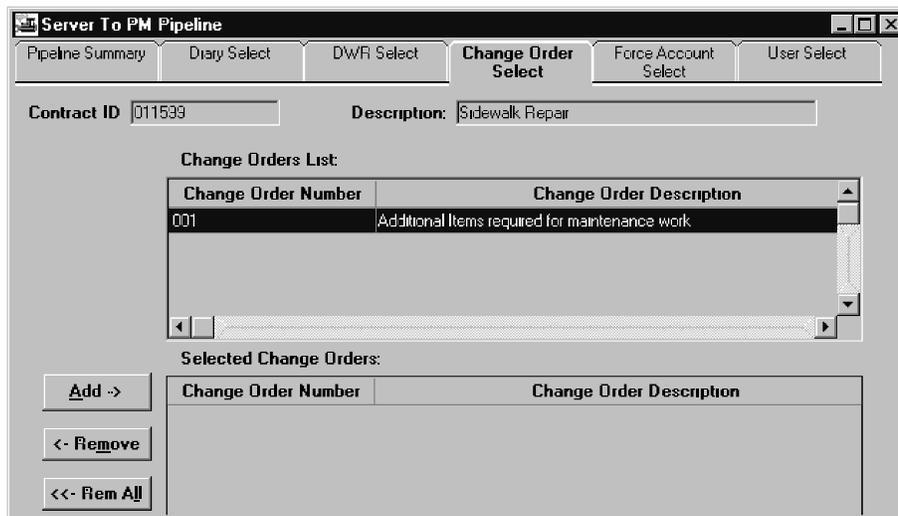


Figure 9-6 The Server to PM Change Order Select Folder Tab

Field Name	Description
Contract ID	This is the Contract ID of the Contract.
Contract Description	This is the description of the Contract.
Change Order ID	This is the Change Order Identification code.
Change Order Description	This is the full description of the Change Order.

Table 9-7 The Change Order Select Folder Tab Fields Table

Add button	Adds selected Change Orders to the bottom datawindow.
Remove button	Removes selected Change Orders from the bottom datawindow.
Rem All button	Removes all Change Orders from the bottom datawindow.

Table 9-8 The Change Order Select Folder Tab Buttons Table

9.2.5 Force Account Select

The Force Account Select folder tab lets the Project Manager select Force Accounts to download. This folder tab is available on the following windows:

- Server to PM Pipeline

When the Project Manager clicks the Force Accounts Select folder tab on the Server to PM Pipeline window, a list of Force Accounts is displayed.

The Project Manager selects the Force Accounts to download.

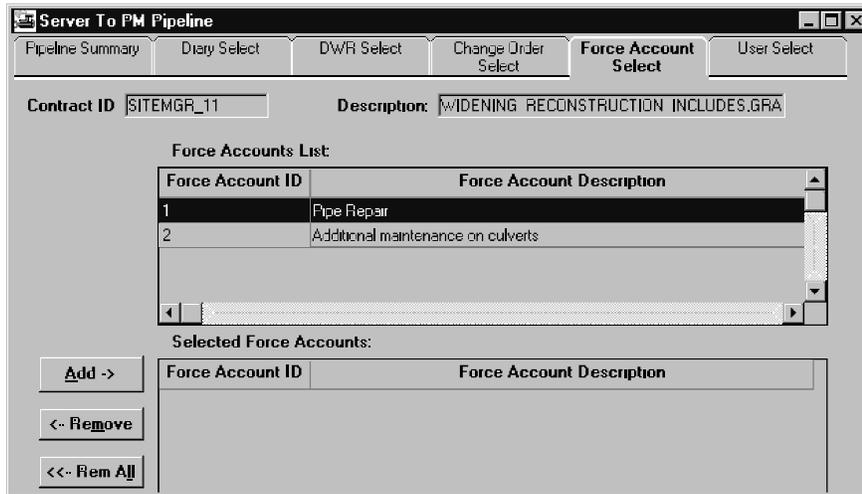


Figure 9-7 The Server to PM Force Account Select Folder Tab

Field Name	Description
Force Account ID	Force Account identification code.
Force Account Description	Description of the Force Account.

Table 9-9 The Force Account Select Folder Tab Fields Table

Add button	Adds the selected Force Accounts from the top datawindow to the bottom datawindow.
Remove button	Removes selected Force Accounts from the bottom datawindow.
Rem All button	Removes all Force Accounts from the bottom datawindow.

Table 9-10 The Force Account Select Folder Tab Buttons Table

9.2.6 Downloading Data from the Server

To download data from the server, the Project Manager uses the Server to PM Pipeline window.

1. When logging on to SiteManager, connect to the server database.

2. On the **SiteManager** main panel, double-click the **Pipeline** icon.
3. On the **Pipeline** panel, double-click the **Server to PM Pipeline** icon. The **Pipeline Summary** folder tab is displayed.
4. To select a Contract, click the **Open** button.
5. In the **Contract ID** list box, scroll to and double-click the Contract.
6. To download Basic Contract Data, click the Basic Contract Data check box (ON).
7. To download Materials data, click the Materials check box (ON).
8. To select Diaries, click the **Diary Select** folder tab.
9. In the **Diaries** list box, shift-click each Diary to be downloaded.
10. Click the **Add** button. The selected Diaries are added to the **Selected Diaries** list.
11. To select Daily Work Reports, click the **DWR Select** folder tab.
12. In the **DWR** list box, shift-click each Daily Work Report to be downloaded.
13. Click the **Add** button. The selected Daily Work Reports are added to the **Selected DWRs** list.
14. To select Change Orders, click the **Change Order Select** folder tab.
15. In the **Change Orders** list box, shift-click each Change Order to be downloaded.
16. Click the **Add** button. The selected Change Orders are added to the **Selected Change Orders** list.
17. To select Force Accounts, click the **Force Account Select** folder tab.
18. In the **Force Accounts** list box, shift-click each Force Account to be downloaded.
19. Click the **Add** button. The selected Force Accounts are added to the **Selected Force Accounts** list.
20. To select users, click the **User Select** folder tab.
21. In the **Users** list box, shift-click each User ID to be downloaded.
22. Click the **Add** button. The selected User IDs are added to the **Selected Users** list.
23. Click the **Pipeline Summary** folder tab. The window displays the total number of Change Orders, Force Accounts, Diaries, Daily Work Reports, and users selected.
24. To download the selected data from the server, click the **Services** menu and click the **Pipeline Data** choice. The progress of the download is shown in the Pipeline Status field.

Tip: While Pipeline processes data, the system displays messages such as ‘checking out data’.

9.3 PM to Server Pipeline

The PM to Server Pipeline panel lets the Project Manager upload (check in) data from the standalone database to the server. When logging on to SiteManager, the Project Manager must connect to the server database. The pipeline process transfers the selected data directly from the Project Manager’s standalone database to the server database.

To upload Contract data to the server, the Project Manager must first select a Contract and then select the data to upload—Diaries, Daily Work Reports, or Sample and Test data. Sample and Test data can also be uploaded without selecting a Contract. The folder tabs in the PM to Server Pipeline panel are as follows:

- Pipeline Summary
- Diary Select
- DWR Select
- Sample and Test Select

To select Basic Contract Data, the Project Manager checks the Basic Contract Data box on the PM to Server Pipeline panel. The Contract must have been previously downloaded (checked out). The Project Manager selects Sample and Test data on the Sample and Test Select folder tab. The Project Manager selects Diaries on the Diary Select folder tab. The selected Diaries must be new or previously downloaded to the Project Manager’s database. The Project Manager selects Daily Work Reports on the DWR Select folder tab. After the Project Manager selects the data to upload, the pipeline process is triggered by selecting the Services menu Pipeline Data option.

9.3.1 Pipeline Summary

The PM to Server Pipeline Summary folder tab shows the number of Daily Work Reports, Diaries, and Samples selected. To see which ones are selected, the Project Manager can view the appropriate folder tabs. When the Project Manager selects the Services menu Pipeline Data option, the selected data is extracted from the standalone workstation.

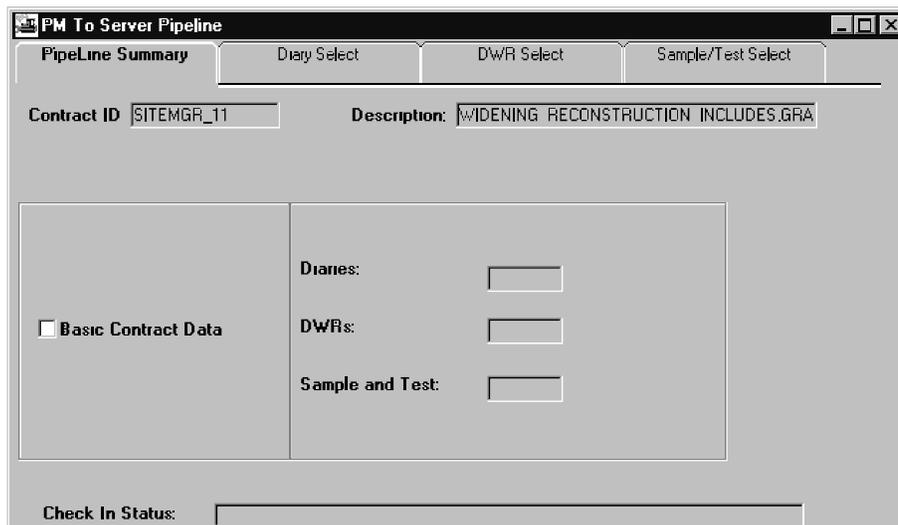


Figure 9-8 The PM to Server Pipeline Summary Folder Tab

Field Name	Description
Contract ID	Contract ID for which the data is uploaded.
Contract Description	Description of the Contract for which the data is uploaded.
Basic Contract Data	Indicates that the Project Manager has released the Contract. The Basic Contract Data is not uploaded to the server, but a flag is uploaded indicating that the Project Manager has released the Contract.
Diaries	Displays the number of Diaries selected for upload.
DWRs	Displays the number of Daily Work Reports selected for upload.
Sample and Test	Displays the number of Samples selected for upload.
Check-Out Status	Displays status messages.

Table 9-11 The PM to Server Pipeline Summary Folder Tab Fields Table

9.3.2 Diary Select

The Diary Select folder tab lets the Project Manager select Diaries to download or upload. This folder tab is available on the following panels:

- Server to PM Pipeline
- PM to Server Pipeline

When the Project Manager clicks the Diary Select folder tab in the PM to Server Pipeline panel, a list of Diaries that have not been uploaded to the server is displayed. The Project Manager selects one or more Diaries to upload.

9.3.3 DWR Select

The DWR Select folder tab lets the user select Daily Work Reports to download or upload. This folder tab is available on the following panels:

- Server to PM Pipeline
- PM to Server Pipeline

When the Project Manager clicks the DWR Select folder tab on the PM to Server Pipeline panel, the panel displays a list of Daily Work Reports that have not been uploaded to the server. The Project Manager selects the Daily Work Reports to upload. When the selected Daily Work Reports are uploaded, the Check-In/Check-Out Log table on the Project Manager's workstation is updated with the Project Manager's User ID and the Check-In date. The uploaded Daily Work Reports are locked in the Project Manager's database, preventing update on the Project Manager's workstation. If there is an OLE document associated with an uploaded Daily Work Report, it is uploaded with the extracted data.

9.3.4 Sample and Test Select

The Sample and Test Select folder tab lets the Project Manager or Inspector select Sample and Test data. This folder tab is available on the following panels:

- PM to Server Pipeline

When the user clicks the Sample and Test Select folder tab, the panel displays a list of Samples that have not been uploaded. The user selects the Samples to be uploaded. The Samples that have already been uploaded are not displayed because they are locked (i.e., the Sample's Lock Indicator is checked). The Show all Samples menu option shows all of the Samples in the workstation including the previously uploaded Samples. This menu option can be used when the Inspector (or the Project Manager) has uploaded the Samples, but the file was lost before reaching the Project Manager (or the server).

9.3.5 Uploading Data to the Server

To upload data to the server, the Project Manager uses the PM to Server Pipeline panel.

- When logging on to SiteManager, connect to the server database.
- On the **SiteManager** main panel, double-click the **Pipeline** icon.
- On the **Pipeline** panel, double-click the **PM to Server Pipeline** icon. The Pipeline Summary folder tab is displayed.
- To select a Contract, click the **Open** button.
- In the **Contract ID** list box, scroll to and double-click the Contract.
- To release the Contract, click the Basic Contract Data check box (ON).
- To select Diaries, click the **Diary Select** folder tab.
- In the **Diaries** list box, shift-click each Diary to be uploaded.

- Click the **Add** button. The selected Diaries are added to the **Selected Diaries** list.
- To select Daily Work Reports, click the **DWR Select** folder tab.
- In the **DWR** list box, shift-click each Daily Work Report to be uploaded.
- Click the **Add** button. The selected Daily Work Reports are added to the **Selected DWRs** list.
- To select Samples, click the **Sample/Test Select** folder tab.
- In the **Samples** list box, shift-click each Sample to be uploaded.
- Click the **Add** button. The selected Samples are added to the **Selected Samples** list.
- Click the **Pipeline Summary** folder tab. The panel displays the total number of Diaries, Daily Work Reports, and Samples selected.
- To upload the selected data to the server, click the **Services** menu and click the **Pipeline Data** choice.

9.4 Pipeline Information

The Pipeline Information panel lets the user view Pipeline information about Daily Work Reports (DWRs), Diaries, Contracts, Change Orders, Force Accounts, and Sample data. The Pipeline Information panel shows a history of Pipeline activity, such as when the data was downloaded and uploaded, and who downloaded or uploaded the data. The folder tabs on the panel are as follows:

- Samples
- Contract
- DWRs
- Diaries
- Change Orders
- Force Accounts

The Pipeline Information panel displays information that applies to the selected Contract, except for the Samples folder tab, which lists all Samples. When the user is connected to the server, the panel shows information on data uploaded and downloaded to and from the server. When the user is connected to the standalone database, the panel shows information on data uploaded and downloaded to and from the workstation.

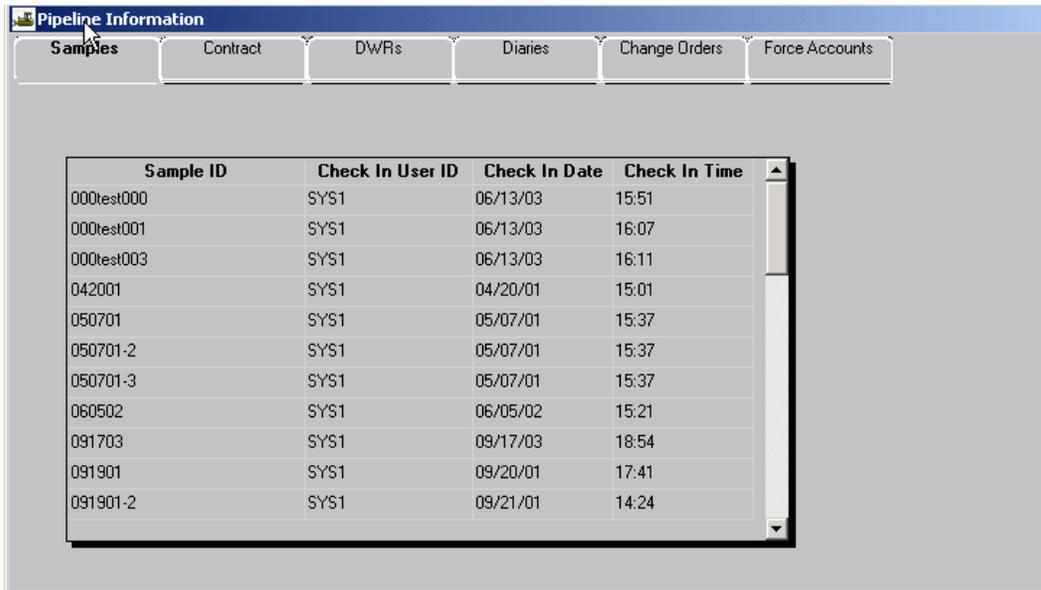


Figure 9-9 The Pipeline Information Panel

Field Name	Description
Contract ID	Contract ID for which Daily Work Reports, Diaries, Change Orders, and Force Accounts are displayed.
Check-Out Date	Date the data was downloaded.
Check-Out Time	Time the data was downloaded.
Check-Out User	User who downloaded the data.
Check-In Date	Date the data was uploaded.
Check-In Time	Time the data was uploaded.
Check-In User	User who uploaded the data.
Sample ID	ID of the sample that was uploaded.
DWR key	Date and User ID of the Daily Work Report that was downloaded/uploaded.

Field Name	Description
Diary Date	Date of the Diary that was downloaded/uploaded.
Change Order No.	Change Order number of the Change Order that was downloaded/uploaded.
Force Account No.	Force Account number of the Force Account that was downloaded/uploaded.

Table 9-12 The Pipeline Information Panel Fields Table

To view a history of Pipeline activity:

1. When logging on to SiteManager, to view information on data transferred to and from the server, connect to the server database. To view information on data transferred to and from the workstation, connect to the standalone database.
2. On the **SiteManager** main panel, double-click the **Pipeline** icon.
3. On the **Pipeline** panel, double-click the **Pipeline Information** icon. The Samples folder tab is displayed.
4. To select a Contract, click the **Open** button.
5. In the **Contract ID** list box, scroll to and double-click the Contract.
6. To view Pipeline information for the selected Contract, click the **Contract** folder tab.
7. To view Pipeline information on Daily Work Reports for the selected Contract, click the **DWRs** folder tab.
8. To view Pipeline information on Diaries for the selected Contract, click the **Diaries** folder tab.
9. To view Pipeline information on Force Accounts for the selected Contract, click the **Force Accounts** folder tab.
10. To view Pipeline information on Change Orders for the selected Contract, click the **Change Orders** folder tab.

9.5 DWR and Material Management Applicability

9.5.1 Daily Work Report Applicability

Daily Work Report data is transferred using Pipeline. To begin working on a Contract, the Project Manager must first download Basic Contract Data from the server. ‘Basic Contract Data’ includes all of the Contract data required to process the Daily Work Reports, including Change Orders and Force Accounts. After Contract work is underway, the Daily Work Reports are uploaded to the server. The Project Manager can download any Daily Work Reports or Diaries that are generated for the Contract

The Project Manager or Inspector uses Pipeline to:

- Download Contract plan data from the server
- Upload Daily Work Reports to the server

The transfer of Daily Work Reports typically proceeds as shown in the following table:

Step	Activity	Process
1	Download Basic Contract Data from the server	Before Daily Work Reports can be generated, the Project Manager or Inspector must download Basic Contract Data from the server using the Server to PM Pipeline panel. The Pipeline process loads the data directly into the User’s standalone database.
2	Project Manager Inspector creates Daily Work Reports	The User creates Daily Work Reports to report the usage of Labor, Equipment, and Materials on the Contract.
3	Upload authorized Daily Work Reports to the server.	The User uploads the Daily Work Reports to the server using the PM to Server Pipeline.
4	Download Change Orders, Force Accounts, Daily Work Reports, Diaries, and new user data as needed	New data is added to the Contract on the server only. The Project Manager or Inspector downloads new Contract data as it becomes available. The new data updates the standalone database in the field. The Project Manager can also download Daily Work Reports and Diaries to make changes to them.

Step	Activity	Process
5	Release the Contract	When the Contract work is done, or when the work is reassigned, the Project Manager or Inspector uses Pipeline to release the Contract back to the server.

Table 9-13 The Daily Work Report Applicability Table

9.5.2 Materials Management Applicability

Materials data and Sample and Test data is transferred using Pipeline. This data may or may not be associated with a specific Contract. Materials data is transferred in one direction only—from the server to the field. Materials data can be transferred from the server to the Project Manager and from the Project Manager to the Inspector. It cannot be uploaded to the server. Sample and Test data is transferred in the opposite direction only—from the field to the server. It cannot be downloaded from the server. To add Sample and Test data to SiteManager, the corresponding Materials data must be downloaded first.

The flow of Materials data and Samples and Test data typically proceeds as shown in the following table:

Step	Activity	Process
1	Download Materials data from the server	The Project Manager or Inspector downloads all Materials data from the server by selecting Materials on the Server to PM Pipeline window. The Materials data can be downloaded without selecting a Contract. The pipeline process loads all Materials data on the User's standalone database.
2	Test Inspector enters test results in SiteManager	The Test Inspector performs Materials testing and enters the test results on SiteManager's Materials Management panels. The Test Inspector enters both sample data and test data on the appropriate Materials Management panels for all Samples. If a Sample is for a Contract, the Test Inspector also enters Sample data on the Materials Management panel that identifies the sample by Contract ID.
3	Upload Sample and Test to the server	The User uploads the Sample and Test data to the server using the PM to Server Pipeline.

Table 9-14 The Materials Management Applicability Table

9.6 SitePad Synchronization

9.6.1 Overview

The SitePad Synchronization window located in the Pipeline functionality of SiteManager's standalone mode allows synchronization between SitePad and SiteManager.

When data is to be transferred to the handheld device, the synchronization process must first be used to create data records in a specific format used by SitePad. The process is completed when the user places the handheld device in the cradle and initializes the SitePad synchronization process. The synchronization process will only download active equipment, supervisors, personnel and items for a contract. DWRs for the selected contract may also be downloaded.

The following table shows how the Project Manager and Inspector use the Pipeline panels to transfer data.

Process	Component	Pipeline Panel
<p>Step 1</p> <p>The Project Manager/Inspector selects and downloads:</p> <ul style="list-style-type: none"> • Contracts • DWR's • User ID's 	SiteManager - Server Mode	Server to PM Pipeline window
<p>Step 2</p> <p>The Project Manager/Inspector selects and synchronizes:</p> <ul style="list-style-type: none"> • Contracts • DWR's • User ID 	SiteManager - Standalone Mode	SitePad Synchronization window
<p>Step 3</p> <p>The Project Manager/Inspector uses the data on the handheld to record data, and checks the DWR for upload.</p>	SitePad	--
<p>Step 4</p> <p>The Project Manager/Inspector synchronizes the data to the SitManager standalone database.</p>	SiteManager - Standalone Mode	SitePad Synchronization window

Process	Component	Pipeline Panel
<p>Step 5</p> <p>The Project Manager/Inspector selects and uploads activity data from the standalone workstation to the server</p>	SiteManager - Server Mode	PM to Server Pipeline window

Table 9-15 The SiteManager to SitePad Synchronization Overview Table

9.6.2 SiteManager to SitePad Synchronization

The process of downloading and uploading data between SiteManager and SitePad has been simplified by the addition of a SitePad Synchronization window, located in the Pipeline panel in standalone mode of SiteManager.

The process has been designed to be as similar to the Pipeline process as possible for ease of use.

It is important to note that it is necessary to perform a Palm Desktop Synchronization before attempting to perform the SiteManager to SitePad Synchronization. Not doing so could result in loss of data.

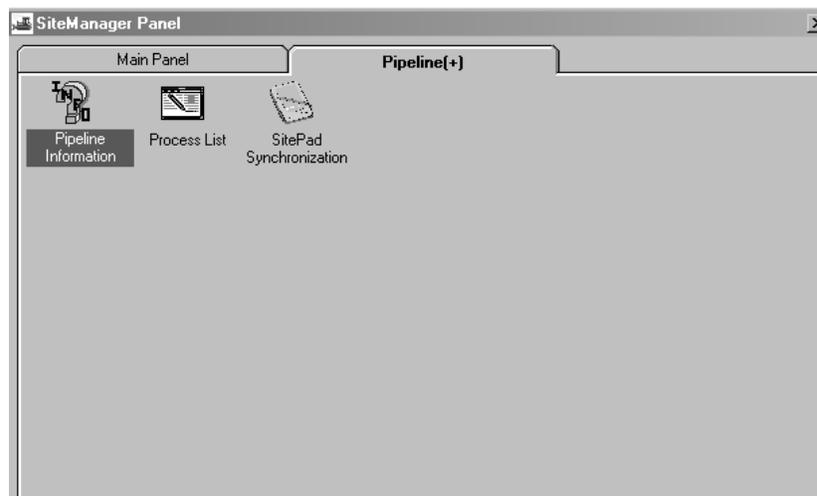


Figure 9-10 The Pipeline Panel (Standalone Mode)

To navigate to the SitePad Synchronization window:

1. From the SiteManager Main Panel, click the **Pipeline** icon, and click the **SitePad Synchronization** icon.

9.6.2.1 Using the SitePad Synchronization Process in SiteManager

The SitePad Synchronization process converts data from the SiteManager database to a format that may be used by the handheld device. In order for SiteManager data files to be downloaded into SitePad, the data must first be chosen by the user and converted to the appropriate SitePad file structure.

Once the files have been converted, the synch status line notifies the user that the database files have been created.

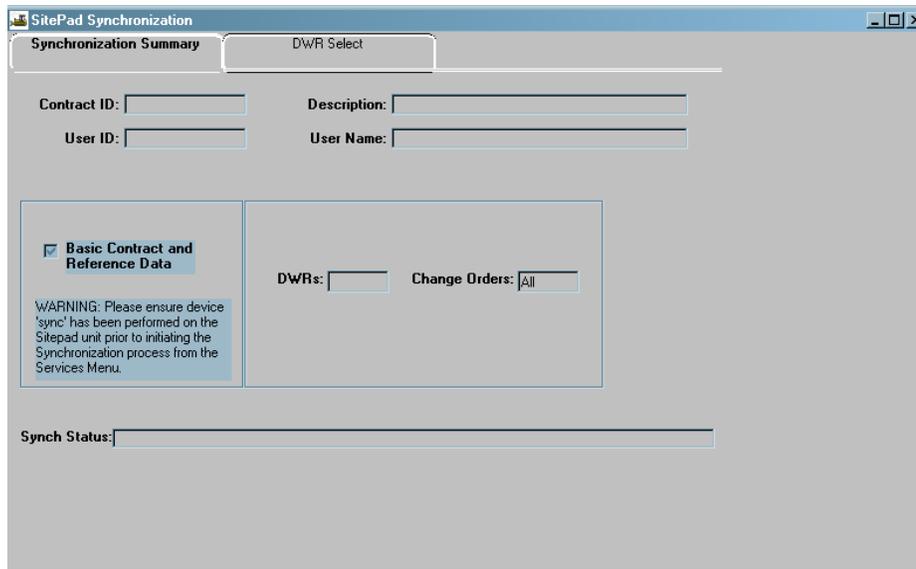


Figure 9-11 The SitePad Synchronization Window Synchronization Summary Tab

The Fields for the SitePad Synchronization Window Synchronization Summary tab are described in the following table:

Field Name	Field Description
Contract ID	Protected. The Contract Identification number to be synchronized
Description	Protected. The Contract Description corresponding to the Contract ID.
User ID	Protected. The user identification string to be synchronized.
User Name	Protected. The User Name corresponding to the User ID.
Basic Contract and Reference Data	If this indicator is checked ON, then existing Contract, Reference, Security and DWR files from the user's folder will be refreshed with the latest data.
DWRs	Protected. This field indicates the number of DWRs being synchronized.
Change Orders	Protected. This field is set to "All" if "Regenerate Basic Contract Data" is checked ON.
Synch Status	Protected. This field gives the user real-time status information during the actual synch process.

Table 9-16 The SitePad Synchronization Window Synchronization Summary Tab Fields Table

SitePad Synchronization

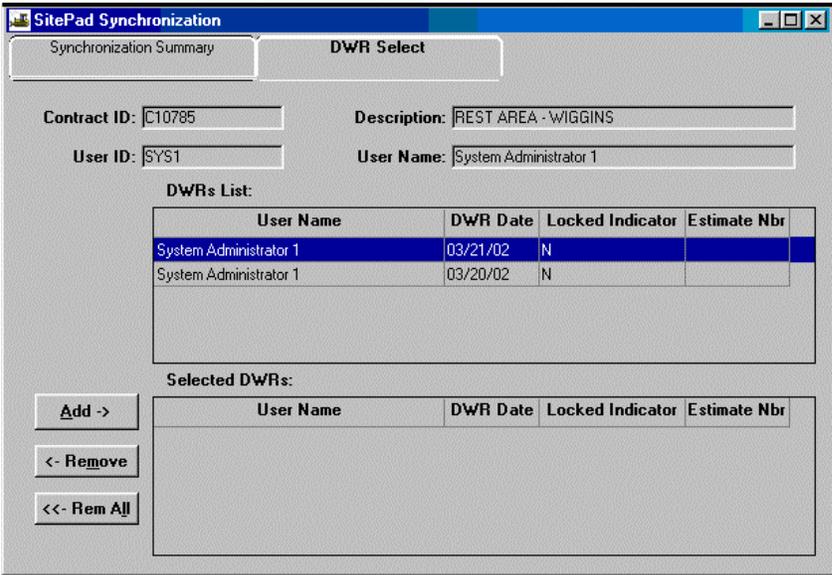


Figure 9-12 The SitePad Synchronization Window DWR Select Tab

The Fields for the SitePad Synchronization Window Synchronization DWR Select tab are described in the following table:

Field Name	Field Description
Contract ID	Protected. The Contract Identification number to be synchronized
Description	Protected. The Contract Description corresponding to the Contract ID.
User ID	Protected. The user identification string to be synchronized.
User Name	Protected. The User Name corresponding to the User ID.
DWR User Name	Protected. The User name for the DWR User ID.
DWR Date	Protected. The DWR date for the listed DWR.
DWR Locked Indicator	Protected. The indicator is ON if the DWR has already been checked out.
Estimate Nbr	Protected. The estimate number (if any) for the listed DWR.
Add (button)	Adds the selected DWRs to the "Selected DWRs" list. The selected DWRs will be synchronized with the SitePad database.
Remove (button)	Removes the selected DWRs from the "Selected DWRs" list. The removed DWRs are transferred to the "DWRs List" list. The removed DWRs are not synchronized with the SitePad database
Remove All (button)	Removes all DWRs from the "Selected DWRs" list. The removed DWRs are transferred to the "DWRs List" list. The removed DWRs are not synchronized with the SitePad database.

To convert SiteManager data to SitePad data:

1. From the SiteManager Main Panel, click the **Pipeline** icon, and click the **SitePad Synchronization** icon.
2. Click the **Open** button and double-click the desired contract from the pick list, then click the desired user.
3. If desired, click the DWR Select folder tab and choose the desired DWRs for use in SitePad, then click the **Add** button.
4. Click the **Synchronization Summary** tab.
5. Click the **Services** menu and click the **SitePad Synchronization** choice.

9.6.2.2 Using the Palm Synchronization Process in the Palm Desktop

Tip: For best results, Palm, Inc. recommends using Palm Desktop version 4.0 or later (available for download at <http://www.palm.com>) when using any Palm-manufactured device.

To upload SiteManager data to SitePad:

1. Place the handheld device in the synchronization cradle.
2. Press the **synch** button on the cradle.

9.6.3 Field Data Collection in SitePad

For more information on collecting DWR information in SitePad, please refer to the SitePad Reference Guide.

9.6.4 SitePad to SiteManager Synchronization

Once data has been collecting in the field and entered into SitePad in the form of Daily Work Reports, the data must then be moved from the device to the SiteManager standalone database and from there to the server database. The following sections detail this process.

9.6.4.1 ing the SitePad Synchronization Process in SiteManager

Once SitePad data has been uploaded to the Palm Desktop, the data must be converted to a data format that may be uploaded to the SiteManager standalone database. This requires that the SitePad Synchronization process be run after the Palm device has been synchronized with the Palm Desktop.

The SitePad to SiteManager synchronization is accomplished through the same window as the SiteManager to SitePad synchronization. When the SitePad to SiteManager synchronization is processed, the basic contract data will be refreshed with any new or updated information, and any changes in active or non-active master list data will be updated.

SitePad Synchronization

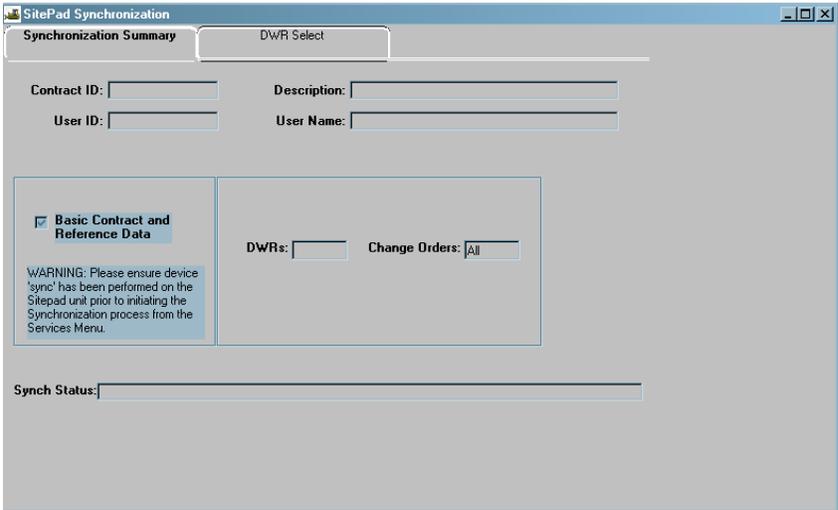


Figure 9-13 The SitePad Synchronization Window Synchronization Summary Tab

The Fields for the SitePad Synchronization Window Synchronization Summary tab are described in the following table:

Field Name	Field Description
Contract ID	Protected. The Contract Identification number to be synchronized
Description	Protected. The Contract Description corresponding to the Contract ID.
User ID	Protected. The user identification string to be synchronized.
User Name	Protected. The User Name corresponding to the User ID.
Basic Contract and Reference Data	If this indicator is checked ON, then existing Contract, Reference, Security and DWR files from the user's folder will be refreshed with the latest data.
DWRs	Protected. This field indicates the number of DWRs being synchronized.
Change Orders	Protected. This field is set to "All" if "Basic Contract and Reference Data" is checked ON.
Synch Status	Protected. This field gives the user real-time status information during the actual synch process.

Table 9-17 The SitePad Synchronization Window Synchronization Summary Tab Fields Table

To synchronize data from SitePad to the SiteManager standalone database:

1. From the SiteManager Main Panel, click the **Pipeline** icon, and click the **SitePad Synchronization** icon.
2. Click the **Open** button and double-click the desired contract from the pick list, then click the desired user.

3. If desired, click the DWR Select folder tab and choose the desired DWRs for use in SitePad, then click the **Add** button.
4. Click the **Synchronization Summary** tab.

10. Contractor Payments

August 2005

10.1 Overview

The Contractor Payments component of SiteManager is one of the most calculation intensive and complex segments of the SiteManager application. The Estimate Generation process performs extensive, complex calculations (more completely documented in Appendix C and D).

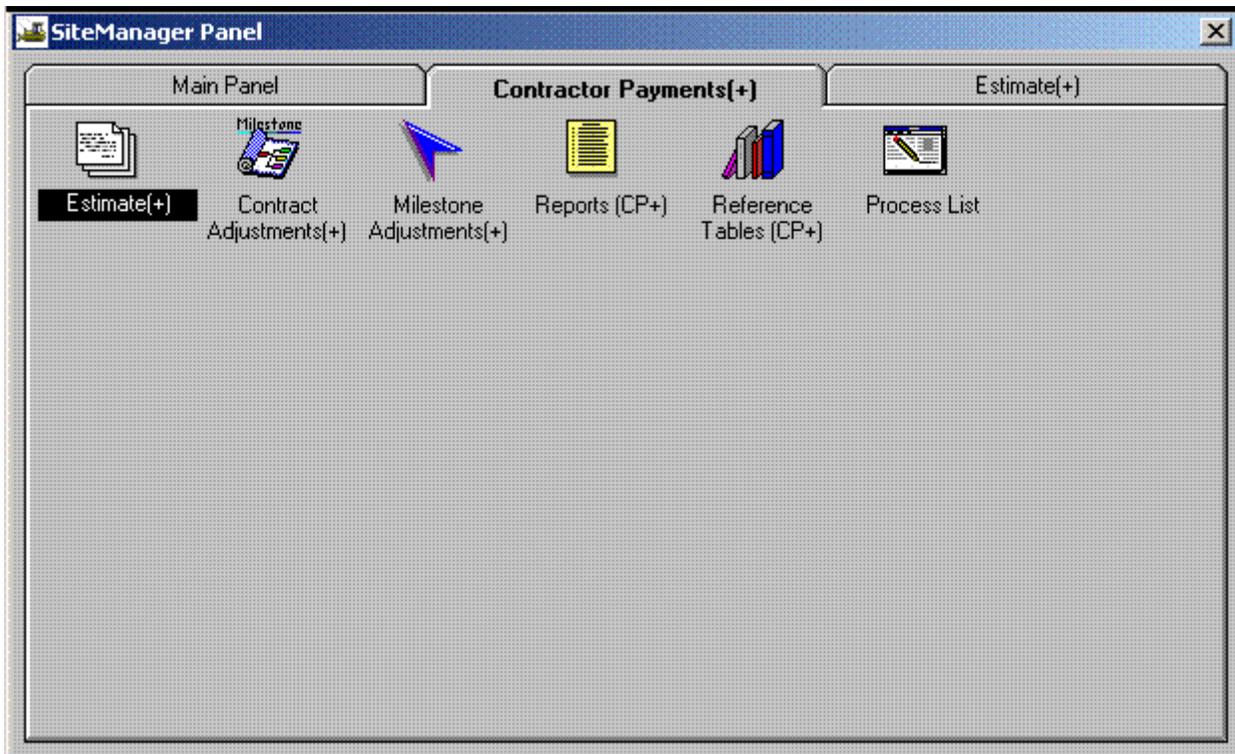


Figure 10-1 The Contractor Payments Panel

To perform Contractor Payment activities:

1. On the **Main Panel**, double-click the **Contractor Payments** icon.
2. Double-click the icon of the desired Contractor Payments component.

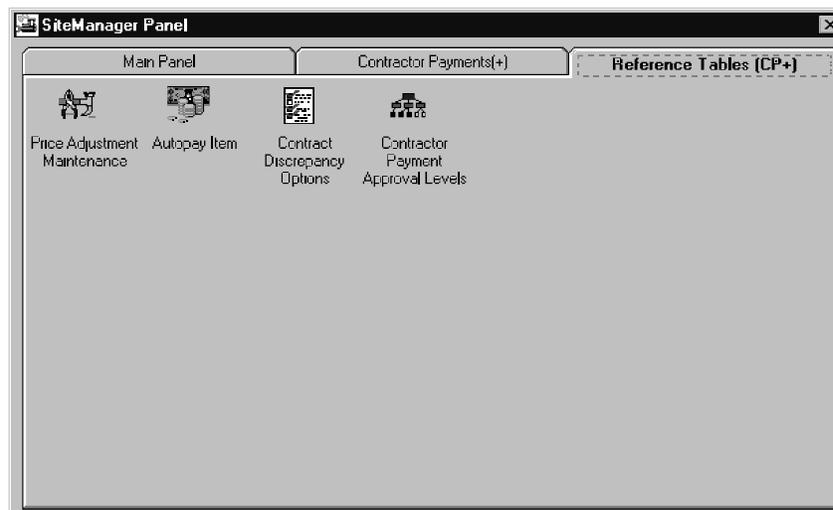


Figure 10-2 The Contractor Payments Reference Table (CP) Panel

10.2 Reference Tables (Contractor Payments)

The Reference Tables for Contractor Payments that must be maintained are:

- Price Index Maintenance,
- Autopay Item,
- Contract Discrepancy Options, and
- Contractor Payment Approval Levels.

To maintain Contractor Payments Reference Tables:

1. On the Contractor Payments panel, double-click the Reference Table (CP) icon.
2. Double-click the icon of the desired Contractor Payments reference table.

10.2.1 Price Index Maintenance

Price Index tables are used in the calculation of line item adjustments (e.g., fuel adjustments) during the Estimate generation process. The methods of calculation used by the system for Price Indexes are detailed in Appendix E. The Price Index components that must be maintained are:

- Description,
- History, and
- Adjustment.

To maintain Price Index:

1. On the Reference Table (CP) panel, double-click the Price Index Maintenance icon.
2. Click the desired folder tab.

Field Name	Description
Price Index	Identifies the specific price index used by an item.
Price Index Description	Text description of the price index.
Unit	Unit of measure used for the index.
Threshold Percent	If the percentage change between the adjustment for the item and the original price of the item is less than or equal to this value, no adjustment is made in the payment process. The percentage difference between the original item cost and the adjusted cost must be greater than this threshold percent to take the index into account. This is a required field. For example, if the Threshold Percent is set to 5.0%, Base Price = \$1.059/gal, Current Price = \$1.179/gal, and the Price Index Record in Item Price Table = 17.0m Index Factor = .17 the Quantity to be paid this estimate period = 4,500.00. The percent of price change = 10.18%
Remarks	Optional Remarks for the record.
Price Index Date	Date the Price Index is valid. (History)
Value This Date	Valid Value for the Price Index. (History)
Spec Year	The year of the specification book in which the item appears. (Adjustment)
Item Code	An agency defined code used to identify a particular item. (Adjustment)
Adjustment Type	Code that is used to identify the type of adjustment being made. (Adjustment)
Item Quantity Percent	The percentage of the quantity of this index in relation to the item. (Adjustment)
Unit Value Quantity	The quantity of this index per unit value, where unit value is set to \$1000. (Adjustment)

Reference Tables (Contractor Payments)

Field Name	Description
Threshold Pct	If the percentage change between the adjustment for the item and the original price of the item is less than or equal to this value, no adjustment is made in the payment process. The percentage difference between the original item cost and the adjusted cost must be greater than this threshold percent to take the index into account. (Adjustment)

Table 10-1 The Price Index Reference Table Fields Table

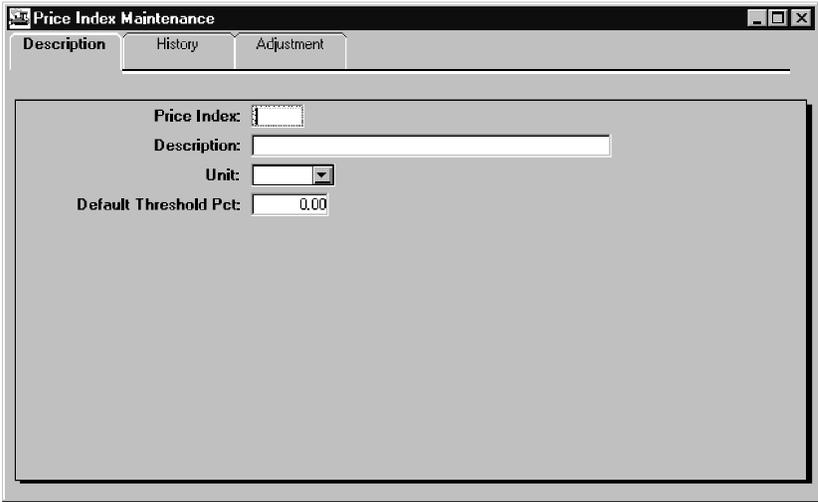


Figure 10-3 The Description Folder Tab

Field Name	Description
Price Index	Identifies the specific index used by an item
Description	Description of index.
Unit	Unit of measure used for the index.
Default Threshold Pct	If the percentage change between the adjustment for the item and the original price of the item is less than or equal to this value, no adjustment is made in the payment process. The percentage difference between the original item cost and the adjusted cost must be greater than this threshold percent to take the index into account.

10.2.1.1 Price Index Maintenance Description Tab

The Description folder tab, the default folder tab for Price Index Maintenance, allows the price index description to be created, accessed, updated, or deleted. Accessing the Price Index Description tab is a necessary step before selecting either of the other two folder tabs of the Price Index Maintenance window. Before a Price Index can be deleted, all of the history and adjustment records for the index must be deleted first.

To add a new price index:

1. Type the price index entry.
2. Press the **Tab** key.
3. Type a description of the item to be assigned a price index.
4. Press the **Tab** key.
5. Type the unit of measure for the index (up to 4 characters).
6. Press the **Tab** key.
7. Type the threshold percent.
8. If Remarks are desired, click the **Remarks** button.
9. Type the remarks for the price index item.
10. Click **Ok**.
11. Click the **Save** button.

To modify an existing price index:

1. On the **Description** folder tab, click the **Open** button.
2. In the **Price Index** list box, scroll to and click the desired choice.
3. Click **Ok**.
4. In the desired field, select the current entry and type the new entry.
5. When completed, click the **Save** button.

To delete an existing price index:

1. Delete all price index history and price index adjustment records.
2. On the **Description** folder tab, click the **Open** button.
3. In the **Price Index** list box, scroll to and click the desired index.
4. Click **Ok**.

Reference Tables (Contractor Payments)

- 5. Click the **Delete** button.
- 6. Click the **Yes** button (to confirm the deletion).

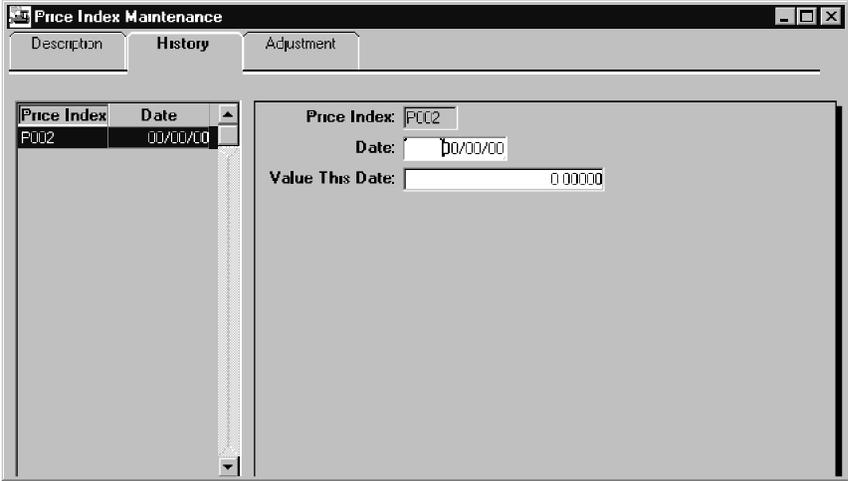


Figure 10-4 The Price Index History Window

Field Name	Description
Price Index	Identifies the specific index used by an item. This is a protected field.
Date	Date the Price Index is valid. This is a required field.
Value This Date	Valid Value for the Price Index. This is a required field.

10.2.1.2 Price Index History

The Price Index History is used to access, add, modify, or delete the history of price indices. Before the History can be accessed, the correct price index record must be selected on the Description folder tab.

To add a new price index history:

- 1. On the **History** folder tab, click the **New** button.
- 2. Type the date.
- 3. Press the **Tab** key.
- 4. Type value as of the date.
- 5. Click the **Save** button.

To modify an existing price index history:

1. On the **History** folder tab in the list box, scroll to and click the desired record.
2. In the desired field, select the current entry and type the new entry.
3. Click the **Save** button.

To delete an existing price index history:

1. On the **History** folder tab in the list box, scroll to and click the desired record.
2. Click the **Delete** button.
3. Click the **Yes** button (to confirm the deletion).

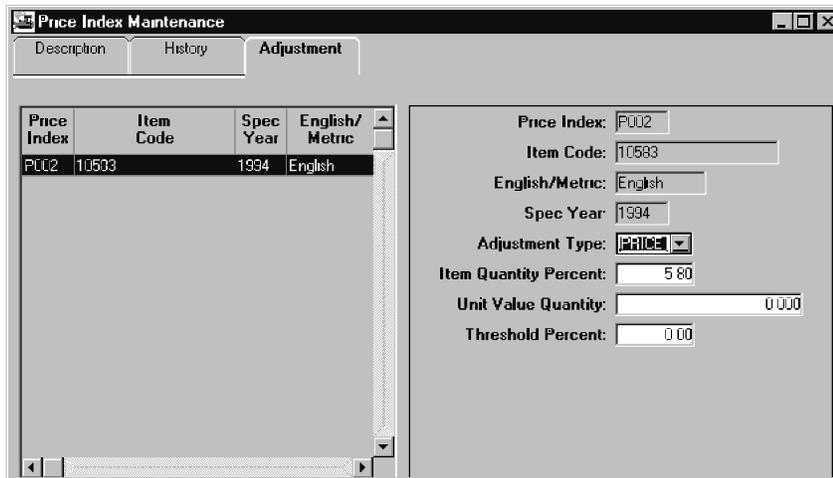


Figure 10-5 The Price Index Adjustment Tab

Field Name	Description
Price Index	Identifies the specific index used by an item.
Item Code	An agency defined code used to identify a particular item.
English/Metric	Indicates whether the item is measured in English or Metric units.
Spec Year	The year of the specification book in which the item appears.
Adjustment Type	Code that is used to identify the type of the adjustment being made.
Item Quantity Percent	The percentage of the quantity of this index in relation to the item.

Field Name	Description
Unit Value Quantity	The quantity of this index per unit value, where unit value is set to \$1000.
Threshold Percent	If the percentage change between the adjustment for the item and the original price of the item is less than or equal to this value, no adjustment is made in the payment process. The percentage difference between the original item cost and the adjusted cost must be greater than this threshold percent to take the index into account

10.2.1.3 Price Index Adjustment Tab

The Price Index Adjustment tab is used to access, add, or modify price adjustments. Before a price adjustment can be accessed, the correct price index record must be selected on the Description folder tab.

To add a new price adjustment, the first four fields are inactive until the correct key is chosen. Once the key is chosen, the additional fields for the price adjustment can be added.

To add a new price adjustment:

1. Using the *right* mouse button, click the **Item Code** field.
2. From the object menu, click the **Search** choice.
3. In the list box, scroll to and click the desired **Item Code**.
4. Press the **Tab** key twice.
5. Using the *right* mouse button, click the **Spec Year** field.
6. From the object menu, click the **Search** choice.
7. In the list box, scroll to and click the desired **Spec Year**.
8. Click **Ok**.
9. In the **Adjustment Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
10. Press the **Tab** key.
11. In the **Item Quantity Percent** field, type the correct percentage.
12. Press the **Tab** key.
13. In the **Unit Value Quantity** field, type desired unit value.
14. Press the **Tab** key.

15. In the **Threshold Percentage** field, type the correct percentage.

16. Click the **Save** button.

To modify an existing price adjustment:

1. On the **Adjustment** folder tab in the list box, scroll to and click the desired record.
2. In the **Adjustment Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
3. Press the **Tab** key.
4. In the **Item Quantity Percent** field, type the correct percentage.
5. Press the **Tab** key.
6. In the **Unit Value Quantity** field, type desired unit value.
7. Press the **Tab** key.
8. In the **Threshold Percentage** field, type the correct percentage.
9. Click the **Save** button.

To delete an existing price adjustment:

1. On the **Adjustment** folder tab in the list box, scroll to and click the desired record.
2. Click the **Delete** button.
3. Click the **Yes** button (to confirm the deletion).
4. Click the **Save** button.

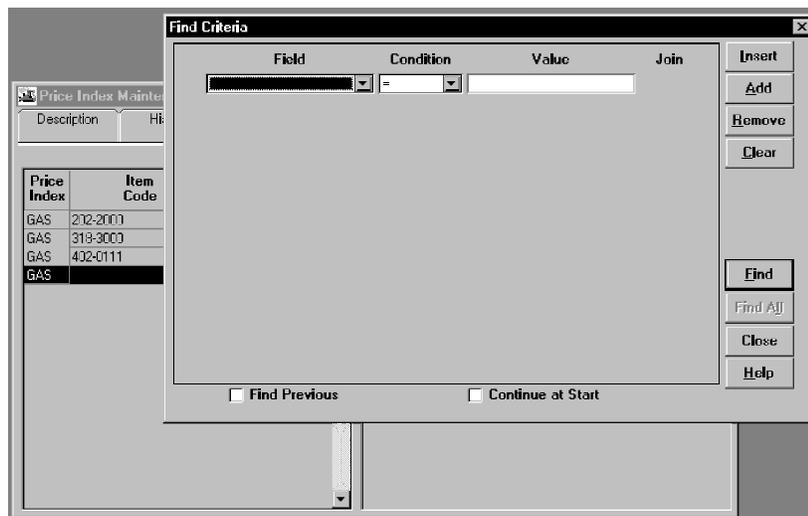


Figure 10-6 The Price Index Adjustment Tab with the Find Dialog

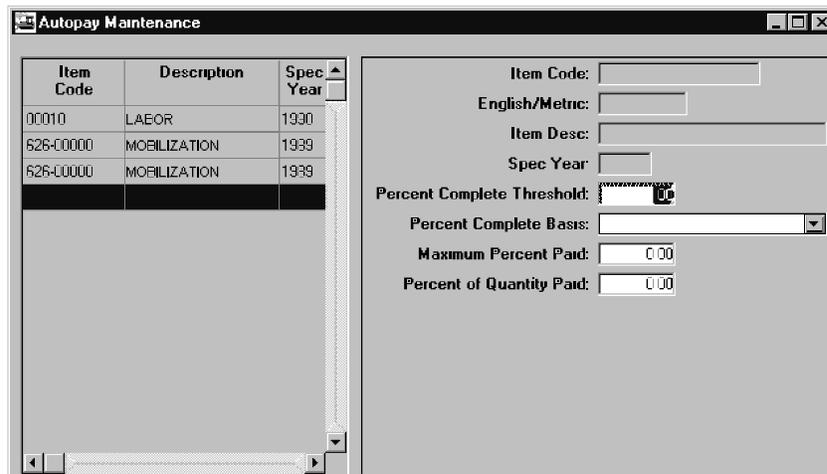


Figure 10-7 The Autopay Item Window

10.2.2 Autopay Maintenance

The Autopay Maintenance window is used to access, add, or modify automatically paid items. The data in the Autopay reference table is used in calculating line item payments during Estimate Generation. When adding a new Autopay item, the keys must be chosen before data may be entered into the first four fields on the left datawindow. The user must have administrator rights to be able to access, add, or modify Autopay items. A series of Autopay parameters may be set up for the same item.

Autopay is calculated by the percentage of all work installed. It covers items that are not normally reported over the life of the contract. In general, Autopay items are generally items such as mobilization and traffic control. Autopay items are usually not reported on Daily Work Reports as installed quantities, but are paid automatically by SiteManager once a pre-determined percentage of installed work has been reached. If part of an Autopay item’s quantity is reported as installed, SiteManager will make up the difference in the total amount paid on the Autopay item once a trigger point has been reached.

Autopay items are listed on the Summary By Project report in the “Other Adjustments” category. The Autopay item appears on the report, but without a dollar value, unless an installed quantity is reported.

Field Name	Description
Item Code	The code used to identify a particular item.
Item Description	The text description of the item.
Spec Year	The year of the specification book in which the item appears.
Percent Complete Threshold	The percent of work completed on an item before the autopay comes into effect. Percent Complete takes into

Field Name	Description
Threshold	account all installed work - DWRs approved and unapproved, authorized or unauthorized. When this percent is reached, it triggers payment of the amount designated in either the Maximum Percent Paid field or Percent of Quantity Paid field - whichever is less. Percent Complete Threshold, Maximum Percent Paid, and Percent of Quantity Paid are all cumulative amounts.
Percent Complete Basis	<p>One of two basis on which to determine the Contract percent complete.</p> <p>1) COXA: Original contract items amount.</p> <p>CCXA: Current Contract amount = original contract items plus change order items.</p> <p>Note that neither of these amounts include Autopay items. The code table from which this field is populated may have additional user-added entries. User added entries will have the default basis of CCXA and cannot be changed.</p>
Percent Of Quantity Paid	The percent of quantity to be paid when the work completed on an item is equal or greater than the Percent Complete Threshold. This amount is calculated as percent * current total paid this far into the contract.
Maximum Contract Amount Paid	The maximum dollar value which was paid for a Contract. This amount is calculated as percent * contract amount.

Table 10-2 The Autopay Reference Table Fields Table

Tip: To have SiteManager always pay the specified amount in the Percentage of Quantity Paid field, enter 100% in the Maximum Percent Paid field.

To modify an existing autopay item:

1. On the **Reference Table (CP)** panel, double-click the **Autopay Item** icon.
2. Scroll to and click the desired record.
3. In the **Percent Complete Threshold** field, type the correct percentage.
4. Press the **Tab** key.
5. In the **Percent Complete Basis** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.

Reference Tables (Contractor Payments)

6. Press the **Tab** key.
7. In the **Maximum Percent Paid** field, type the correct percentage.
8. Press the **Tab** key.
9. In the **Percent of Quantity** field, type correct percentage.
10. Click the **Save** button.

To add an autopay item:

1. On the **Reference Table (CP)** panel, double-click the **Autopay Item** icon.
2. Click the **New** button.
3. Click the **Services** menu and click the **Choose Keys** choice.
4. In the **Item** list box, scroll to and double-click the desired Item Code.
5. In the **Spec Year** list box, scroll to and click the desired spec year.
6. Click **Ok**.
7. In the **Percent Complete Threshold** field, type the correct percentage.
8. Press the **Tab** key.
9. In the **Percent Complete Basis** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
10. Press the **Tab** key.
11. In the **Maximum Percent Paid** field, type the correct percentage.
12. Press the **Tab** key.
13. In the **Percent of Quantity** field, type correct percentage.
14. Click the **Save** button.

To delete an existing autopay item:

1. On the **Reference Table (CP)** panel, double-click the **Autopay Item** icon.
2. Scroll to and click the desired record.

Or

3. Perform a **Find** using the object menu (referenced in the Getting Started section).
4. Click the **Delete** button.
5. Click the **Yes** button (to confirm the deletion).

6. Click the **Save** button.

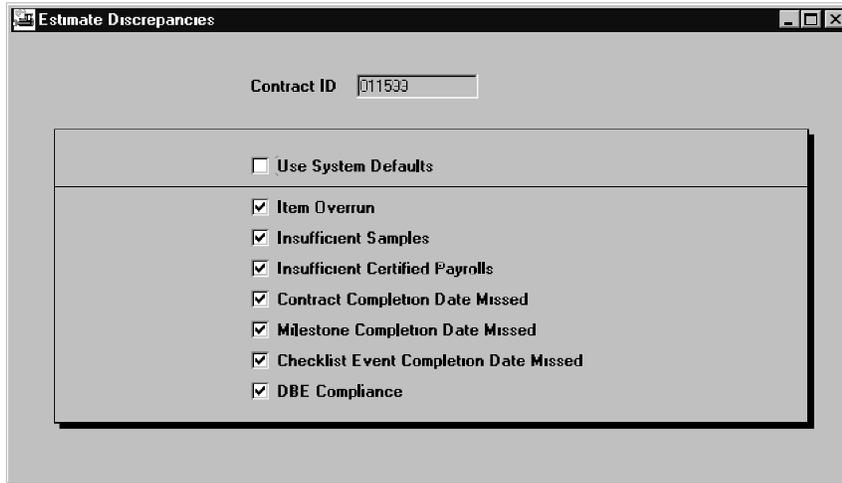


Figure 10-8 The Contract Discrepancies Window

10.2.3 Contract Discrepancy Options

The Contract Discrepancy Options allows default discrepancy options to be modified for individual Contracts. These are the options that will produce discrepancies when their criteria are not met at Estimate generation time.

For a new Contract, the system defaults are used. If a Contract uses system defaults initially, but the system defaults change, the Contract’s discrepancy options will NOT change. However, all NEW Contracts will use the new system defaults. If a Contract’s discrepancy options are changed to deviate from the system defaults, they can be reset to current system defaults merely by clicking the Use System Defaults checkbox.

Field Name	Description
Item Overrun	Indicates if Item Overrun will produce a Estimate discrepancy.
Insufficient Samples	Indicates if Insufficient Sample will produce a Estimate discrepancy.
Insufficient Certified Payrolls	Indicates if Insufficient Certified Payroll will produce a Estimate discrepancy.
Contract Completion Date Missed	Indicates if Contract Completion Date Missed will produce a Estimate discrepancy.
Milestone Completion Date	Indicates if Milestone Completion Date Missed will

Reference Tables (Contractor Payments)

Field Name	Description
Missed	produce a Estimate discrepancy.
Checklist Event Completion Date Missed	Indicates if Checklist Event Completion Date will produce a Estimate discrepancy.
DBE Compliance	Indicates if DBE Compliance will produce a Estimate discrepancy.

Table 10-3 The Contract Discrepancy Reference Table Fields Table

To modify a Contract’s discrepancy options:

1. On the Reference Table (CP) panel, double-click the Contract Discrepancy Options icon.
2. Scroll to and click the desired Contract.
3. Click Ok.
4. Click the Use System Defaults check box (ON).

Or

5. Click the discrepancy option check boxes on or off as desired.
6. Click the Save button.

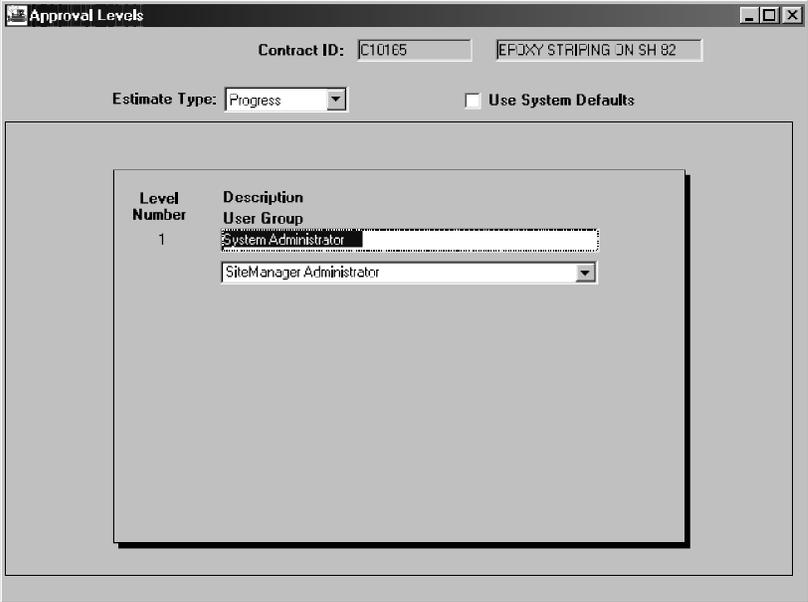


Figure 10-9 The Contractor Payment Approval Levels Window

10.2.4 Contractor Payment Approval Levels

The Contractor Payment Approval Levels reference table allows approval authority to be modified for individual Contracts. The actual setting up of the user groups (up to five) and the definition of what users are in each group is addressed by the System Administration function. The Contractor Payment Approval Levels merely allows the assignment of approval levels within the predefined groups for a specific Contract.

For a new Contract, the system defaults approval levels are used. If a Contract uses system defaults initially, but the system defaults change, the Contract’s approval levels will NOT change. However, all NEW Contracts will use the new system defaults. If a Contract’s approval levels are changed to deviate from the system defaults, they can be reset to current system defaults merely by clicking the Use System Defaults checkbox.

Field Name	Description
Estimate Type	A drop-down list which allows the user to select from Progress, Final, or Supplemental estimate types.
Level Number	The hierarchical number of the approval level - the higher the number the higher the approval authority
Description	Description of the approval level
User Group	Group ID identified for the approval level

Table 10-4 The Contractor Payment Approval Levels Fields Table

To modify a Contract’s approval levels:

1. On the Reference Table (CP) panel, double-click the Contractor Payment Approval Levels icon.
2. Scroll to and click the desired Contract.
3. Click Ok.
4. Click the Use System Defaults check box (ON).

Or

5. In the Description field for a level, select the current entry and type the desired text description.
6. In the User Group drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
7. Repeat steps 4-5 for each level that needs to be defined.
8. Click the Save button.

Estimate Generation

To delete the current highest approval level:

1. On the Reference Table (CP) panel, double-click the Contractor Payment Approval Levels icon.
2. Scroll to and click the desired Contract.
3. Click Ok.
4. In the Description field for a level, select the current entry.
5. Press the Delete key.
6. Click the Save button.

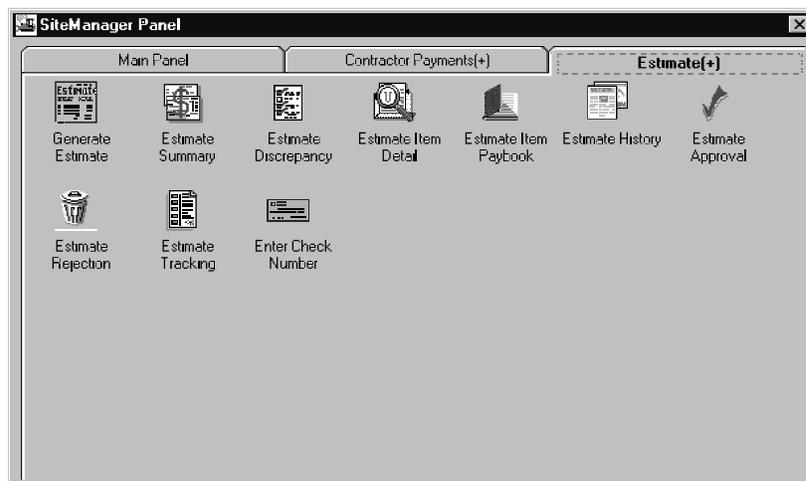


Figure 10-10 The Estimate Panel

10.3 Estimate Generation

The Estimate Generation process manages the Estimate functionality from the generation of an Estimate through the creation of the extract file for the transportation agency's financial system. The functionality is divided into the following processing areas:

- Generation of the Estimate,
- Resolution of Estimate discrepancies,
- Review of Estimate information,
- Review of Estimate item details,
- Approve or reject Estimate,
- Tracking of Estimate status,
- Log Payment Of Estimate

To perform Estimate Activities:

1. On the **Contractor Payments** panel, double-click the **Estimate** icon.
2. Double-click the icon of the desired Estimate function.

The Estimate generation process allows the user to generate an Estimate that is coming due for the Contract. The user selects to generate a progress or a final Estimate from the Contractor Payments component. The system then performs a background process which performs the following activities:

Delete pending Estimate. This activity deletes any previous pending Estimate which has been calculated but not approved. The deletion will remove only details tied to the previous pending Estimate.

Determine quantities for payment. This activity will determine the quantity to be paid for each line item on the Contract which has items installed for the Estimate period.

Calculate stockpiled materials. This activity will determine if an installed item has stockpiled materials. If it does, the process will use a stockpiled materials conversion factor to add a new line item adjustment to adjust the amount of payment which is to be made for the line item.

Determine training items. This activity will determine if training has taken place and, if so, how is the training units to be applied to the payment. If training time has been made as a line item, then no special action is required. Otherwise, the system will calculate the training amount based on work units and the Contract training price. A Contract adjustment is then created for the calculated training amount.

Identify discrepancies. This activity checks for and reports 'discrepancies' for the work being performed by defined rules and conditions, e.g., physical completion dates for milestones with projected end dates during the Estimate period. This activity provides a window with discrepancy details for the Project Manager so that proactive steps can be taken for various project issues. The edits performed during the progress Estimate are a subset of the edits performed during the final Estimate.

Calculate required price adjustments. This activity automatically determines price adjustments, i.e., Fuel and bituminous adjustments, for line items which have installed units for the Estimate period. The system monitors the thresholds and price indices for the installed item and automatically calculates and creates a line item adjustment when the threshold is exceeded (positively or negatively).

Determine incentive/disincentive and liquidated damages. This activity automatically determines incentive/disincentive payments for milestones and liquidated damages for contract end date. When a incentive/disincentive or liquidated damage is appropriate, the system calculates and creates a Contract adjustment for the Estimate period.

Calculate retainage. This activity automatically calculates the amount of retainage for the Estimate period based upon the method identified for the Contract. The calculated or gross retainage amount is dispensed among the various retainage accounts. If securities exist, a portion may be encumbered. When escrow accounts exist a portion may be distributed to the account. Any remaining will be distributed to a cash retainage contract account. Escrow balances are maintain separately.

Determine Funding Amounts. This activity will calculate the funding amount for the different funding sources based upon the funding given for the Contract, project , category or item.

10.3.1 Types of Estimates

SiteManager produces three types of Estimates:

- Progress (both First and Intermediate)
- Final
- Supplemental - Review

The Generate Estimate window can be accessed within the Contractor Payments component or by direct access from the In-Box. The standard Estimate type choice is the Progress radio button. Estimate types will be generated in the background unless the Delay Generation check box is selected.

When the Generate Estimate is initiated by clicking the OK button, SiteManager will verify that a prior Estimate does not exist for an overlapping period of time (only one Estimate is valid for a period of time). If one does exist, the user will be prompted with a window to confirm the deletion of the prior Estimate. If the deletion is confirmed, the generation process will delete the prior Estimate and initiate the generation of the new Estimate as a background process. Otherwise, the generation will be halted leaving the prior Estimate intact.

Once the Estimate has been submitted, an In-Box message will confirm whether or not the Estimate generated successfully. Regardless of whether Estimate generation is performed in the background or through delayed generation, the status of the Estimate generation will be checked through the In-Box message.

After opening the In-Box message,

1. If the Estimate generation was successful and the request was for a progress or final Estimate, the Estimate Summary window will be displayed.
2. If the Estimate generation was successful and the request was for a supplemental Estimate, the Contract Adjustments window will be displayed.
3. If the Estimate generation was unsuccessful, then the Estimate Activity Log report will be displayed.

Field Name	Description
Begin	The Estimate Period Begin Date field defines the beginning date for the Estimate generation period.
End	The Estimate Period End Date field defines the ending date for the Estimate generation period. The End Date cannot contain a date greater than the current date or less than the Estimate Generation Period Begin Date.
Type(Generation)	The Estimate Generation Type field defines whether Site a Progress, Final, or Supplemental Estimate is generated.
Amt	The Supplemental Payment Amount field records the amount of payment being made for a supplemental Estimate. This value is

Field Name	Description
	used to generate a Contract adjustment for the given Estimate.
Delay Generation	The Delay Generation check box is used to indicate whether the Estimate should be generated in a later scheduled cycle.

Table 10-5 The Estimate Generation Fields Table

10.3.1.1 Delay Generation Checkbox

With any of the three Estimate Generation types, the Estimate will be generated in the background unless the Delay Generation check box is selected (resulting in an overnight batch generation of the estimate).

To delay generation:

1. In the **Generate Estimate** window, click the **Delay Generation** check box (ON).

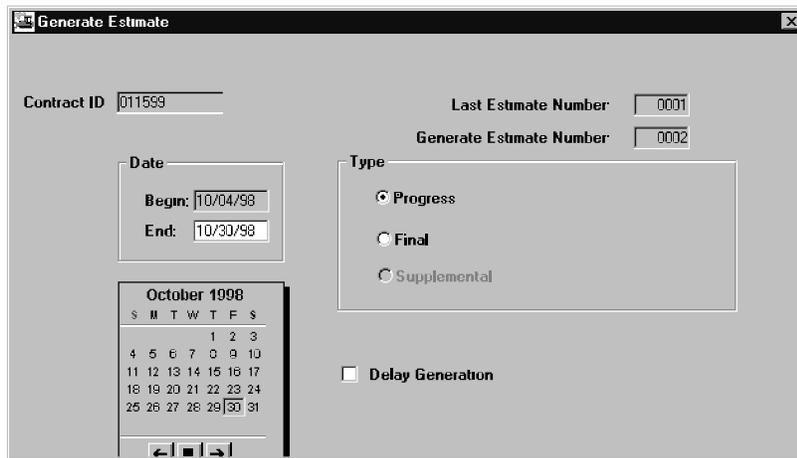


Figure 10-11 The Generate Estimate Window

10.3.1.2 Progress Estimates

The first and all subsequent Estimates leading up to the Final Estimate are Progress Estimates. The progress Estimate is the system default (standard choice).

Either the Service menu's Generate Estimate choice or the Toolbar's Generate Estimate button can be used to generate an estimate.

Estimate Generation

To generate a progress Estimate:

1. On the **Estimate** panel, double-click the **Generate Estimate** icon.
2. Scroll to and click the desired Contract.
3. Click **Ok**.
4. On the calendar, click the end date if desired.
5. Click the **Generate Estimate** button.
6. Click **Ok**.

10.3.1.3 Final Estimates

The Final Estimate option is selected when it is time to generate the Final Estimate,. After selecting the Contract, the Estimate period start date defaults to the day after the end date of the previous progress Estimate and the Estimate period end date defaults to the current date.

Based on this information, SiteManager automatically generates a draft Final Estimate in the background or overnight batch. Once completed, SiteManager displays the Estimate Summary for the newly generated Estimate for review. During the process of generating a draft Final Estimate, SiteManager performs the same edits, validations, calculations and activities as the progress Estimate generation.

For the Final Estimate, an additional edit is included in the Identify Discrepancies function. This edit creates a discrepancy when the prime Contractor has not matched their overall Contract DBE commitment. Where they do not, SiteManager will identify the specific DBE Subcontractors which did not match their commitments. SiteManager will also flag which DBE Subcontractor's total verified payment amounts do not at least match the prime Contractor commitment to them.

Once a Final Estimate has been approved, *no additional Progress Estimates may be generated.*

To generate a final Estimate:

1. On the **Estimate** panel, double-click the **Generate Estimate** icon.
2. Scroll to and click the desired Contract.
3. Click **Ok**.
4. Click the **Final** radio button.
5. On the calendar, click the end date if desired.
6. Click the **Generate Estimate** button.
7. Click **Ok**.

10.3.1.4 Supplemental Estimates

A Supplemental Estimate requires the entry of a Supplemental Payment Amount. When the Supplemental button is selected the Amount field is activated. This field collects the amount of payment being made for a supplemental Estimate. This value is used to generate a Contract adjustment for the given Estimate.

To generate a supplemental Estimate:

1. On the **Estimate** panel, double-click the **Generate Estimate** icon.
2. Scroll to and click the desired Contract.
3. Click **Ok**.
4. Click the **Supplementary** radio button.
5. Type the supplementary amount.
6. On the calendar, click the end date if desired.
7. Click the **Generate Estimate** button.
8. Click **Ok**.

10.3.2 Estimate Generation Parameters

The parameters used for Contractor Payments are determined by the System Operational Parameters that were set up in the installation of SiteManager and are maintained in the System Operational Tables. Many of these system parameters can be overridden for a specific Contract using the Contractor Payment Reference tables such as Contract Discrepancy Options and Contractor Payment Approval Levels.

10.3.2.1 Contractor Payments System Operational Defaults

The following are the defaults settings related to Contractor Payments. For more information on how your installation of SiteManager varies from these defaults, contact your SiteManager System Administrator.

Default	Description
Initial Contract Retainage Percentage	This default value is used by the Estimate Generation process in the determination of a retainage adjustment. This is the percentage of the payment that is withheld for retainage. This value can be overridden by a Contract specific retainage percentage. Default is 0.
Default Work Complete Base Type	This field is used by the Estimate Generation process in calculating retainage. This field indicates the type of retainage calculation to perform. This field will have three possible values, WINP (Work In Place), WREM (Work Remaining) or WPER (Work Per Period). The default value for this field is WINP.

Default	Description
Contract Maximum Retainage Percentage	This default value is used by the Estimate Generation process to check to ensure that the total amount retainage does not exceed this percentage of the Contract value. Default is 0.
Item Overrun Indicator	This indicator is used by the Estimate Generation process to determine whether a discrepancy should be checked and flagged in regards to a Contract item overrun.. Valid values are 'Y' or 'N'. A value of 'Y' means that the discrepancy should be determined/ flagged and value of 'N' means that this discrepancy will not be checked or flagged. This value can be overridden by a Contract specific indicator located on the Contract Discrepancy Options window.. Default is 'Y'.
Insufficient Samples Indicator	This indicator is used by the Estimate Generation process to determine whether a discrepancy should be checked and flagged in regards to insufficient samples being taken. Valid values are 'Y' or 'N'. A value of 'Y' means that the discrepancy should be determined/flagged and value of 'N' means that this discrepancy will not be checked or flagged. This value can be overridden on a contract-by-contract basis using indicator located on the Contract Discrepancy Options window. Default is 'Y'.
Insufficient Certified Payroll Indicator	This indicator is used by the Estimate Generation process to determine whether a discrepancy should be checked and flagged in regards to insufficient certified payrolls. Valid values are 'Y' or 'N'. A value of 'Y' means that the discrepancy should be determined/flagged and value of 'N' means that this discrepancy will not be checked or flagged. This value can be overridden by a Contract specific indicator. Default is 'Y'.
Contract Completion Date Missed Indicator	This indicator is used by the Estimate Generation process to determine whether a discrepancy should be checked and flagged for a missed Contract Completion Date. Valid values are 'Y' or 'N'. A value of 'Y' means that the discrepancy should be determined/flagged and value of 'N' means that this discrepancy will not be checked or flagged. This value can be overridden by an individual Contract indicator. Default is 'Y'.
Contract Milestone Completion Date Missed Indicator	This indicator is used by the Estimate Generation process to determine whether a discrepancy should be checked and flagged for a missed Contract Milestone Completion Date . Valid values are 'Y' or 'N'. A value of 'Y' means that the discrepancy should be determined/flagged and value of 'N' means that this discrepancy will not be checked or flagged. This value can be overridden by a Contract specific indicator. Default is 'Y'.

Default	Description
Checklist Event Completion Date Missed Indicator	This indicator is used by the Estimate Generation process to determine whether a discrepancy should be checked and flagged for a missed Checklist Event Completion Date . Valid values are 'Y' or 'N'. A value of 'Y' means that the discrepancy should be determined/flagged and value of 'N' means that this discrepancy will not be checked or flagged. This value can be overridden by a Contract specific indicator. Default is 'Y'.
DBE Non-Compliance Indicator	This indicator is used by the Estimate Generation process to determine whether a discrepancy should be checked and flagged in regards to the transportation agency compliance with the DBE Goals. Valid values are 'Y' or 'N'. A value of 'Y' means that the discrepancy should be determined/flagged and value of 'N' means that this discrepancy will not be checked or flagged. This value can be overridden by a Contract specific indicator. Default is 'Y'.
Default Contract Retainage Base Amount Type	This field is used by the Estimate Generation process in calculating Retainage. This field indicates whether to use the Current Contract Amount(C) or the Bid Contract Amount(B) as the base amount in calculating the retainage. The default value in this field is "B".
Retainage Trigger Amount Base	This field is used by the Estimate Generation process in calculating Retainage. This field indicates whether to use the Current Contract Amount(C) or the Bid Contract Amount(B) as the base amount for the retainage trigger percent in calculating the retainage. The default value in this field is "B".
Liquidated Damage Calculation Determination Date type	This field is used by the Estimate Generation process in calculating the liquidated damages for a Contract. Valid values are 'SWCM' or 'WKCM'. A value of 'SWCM' means that the Substantial Completion Date is used to determine the amount of a liquidated damage adjustment. A Value of 'WKCM' means that the Physical Completion Date is used to determine the amount of a liquidated damage adjustment. Default is '???'.
Payroll Discrepancy Lag Days	This field is used by the Estimate Generation process in determination of the insufficient certified payroll's discrepancy. This field indicates the number of lag days before which the payroll must have been verified for no payroll discrepancy to be generated. Default is 14 days.
Retainage Trigger Percentage	The percentage of work completed on the Contract in which time a retainage will be applied. The work completed will depend on the value entered in 'Trigger Amount Base'. The trigger amount base is

Default	Description
	either 'C'(current) or 'B'(Bid).
Material Discrepancy Payment Calculation	This flag indicates whether or not to calculate the materials discrepancy line item adjustments during estimate processing.
Material Discrepancy Payment Calculation Item Default	This flag tells the system how to default contract items' flags when the item is created. When this flag is set to 'Y', SiteManager will default each new contract item to have discrepancy adjustments turned on. Authorized users may still toggle an individual item's adjustments on or off during the course of a contract.

Table 10-6 The Contractor Payments System Operational Defaults Table

10.3.3 Stockpiled Materials

This component's purpose is to determine those stockpiled materials that have not had their full invoice payments made. This process will add a Contract line item adjustment to adjust the item cost for those that need payment.

10.3.3.1 Determine Initial Stockpile Payment

This process creates a positive adjustment to the associated Contract line item for any initial payment, designated by the Contractor, for an invoiced stockpiled material. (The initial payment amount is recorded on the Maintain Stockpiled Materials window.) The initial payment to the Contractor is added to the total earnings for the Estimate. This process is performed prior to the Calculate Stockpiled Materials process to ensure proper payment for stockpiled materials.

This process also adds a new Line Item Adjustment record in Contract Line Item Adjustment table for any stockpiled material records which have not paid out their initial invoice payment amount. The adjustment amount is equal to the value entered in 'Initial Invoice Payment' field on the Maintain Stockpiled Materials window. The Contract line item number used in this process is taken from the Stockpile Record created for the associated invoice.

Note: When the user closes out a stockpile and generates an estimate, this process adds a new Line Item Adjustment record. This adjustment retains any remaining part of the initial payment amount which has not been recouped during the use of the stockpile.

10.3.3.2 Calculate Stockpiled Materials

Calculation of stockpiled materials determines the quantity of materials used for installed quantities of a line item in a Contract from the stockpile during Estimate generation. This process is invoked only if a line item has a stockpiled material record in the Contract Stockpile Material table, that has an open status. The system creates a Line Item Adjustment to reflect stockpiled materials which apply to Contract items with installed quantities for the current Contract and Estimate period. When this process is executed, the quantity of the stockpile is adjusted and an adjustment for the line item earnings is generated. The Estimate generation

process calculates stockpiled materials and their associated Replenishment stockpiles, in sequence, to fulfill the installed amounts for each associated item.

Note: When the user deletes an estimate, all calculations applied to Stockpiled Materials and Replenishment Stockpiles are reversed accordingly.

The information used in this process is recorded on the Maintain Stockpiled Materials window. For additional documentation on these calculations, see Appendix C - Estimate Generation Calculations.

10.3.4 Other Processes

Estimate Generation also includes other calculations and processes:

Calculate Contract Adjustments	Determine Quantity to be Paid
Calculate Price Adjustments	Determine Training Items
Calculate Retainage	Determine Funding Amounts
Delete Pending Estimates	Calculate Autopay Item

These calculations and processes are described below and documented in more detail in Appendix C - Estimate Generation Calculations and Appendix D - Retainage Calculation.

10.3.4.1 Calculate Contract Adjustments

This process calculates liquidated damages applied to a Contract and incentives or disincentives applied to a milestone. In SiteManager, These type of Contract adjustments are referred to as system-defined adjustments. The Contract adjustment amounts calculated by this process (i.e. liquidated damages, incentives/disincentives) will be applied to the prime project in a Contract. The prime project is define as the project within the Contract that comprises the most amount in the bid amount of the Contract. For additional documentation on these calculations, see Appendix C - Estimate Generation Calculations.

10.3.4.2 Calculate Price Adjustments

This process determines if a price adjustment (e.g. fuel adjustment, asphalt adjustment) is required for a line item in a Contract. The calculation of price adjustment is performed after the calculation of installed quantity. An item is a candidate for price adjustment, if a record exist in the Project Adjustment table for the project and the item with which it is associated. A price adjustment to an item is a modification (positive or negative) to the 'To Be Paid Amount' for the item in the Estimate. For additional documentation on these calculations, see Appendix C - Estimate Generation Calculations.

10.3.4.3 Calculating Retainage

This process will calculate retainage as well as release retainage for the project(s) in a Contract as appropriate. In SiteManager, retainage will be calculated separately for participating and non-participating at the item level earnings, but will be rolled up to the project level for display and reporting. Three types of retainage calculation methods will be used within the system (See table below).

Calculation Method	Description
Work In Place(WINP)	Based on the total amount of work that is in place.
Work Per Period(WPER)	Based on the amount of work that is reported for the current Estimate period.
Work Remaining(WREM)	Based on the total amount of work remaining.

Table 10-7 The Retainage Calculation Methods Table

From the three methods of calculation above, Work In Place and Work Remaining are cumulative (based on total amounts), which offers the capability of mixing these methods in the lifetime of the same Contract. But Work Per Period is incremental, which is mutually exclusive to the cumulative Work In Place and Work Remaining methods. When Work Per Period is used, it must be used through the life of the Contract. This process will utilize the retainage record from the 'Contract Retainage' table, that is effective during the Estimate generation.

In this process, the first step is to calculate the retainage amount against the item earnings (not including items which are exempt from retainage) for the Estimate. Once the retainage amount has been calculated against the item earnings, the actual amount retain by the transportation agency depends on the amount of calculated retainage that is applied to the security in lieu of retainage and escrow account. A more detailed description on the actual amount retained by the transportation agency is covered in the 'Special Processing' of this document.

A release of retainage will be calculated automatically in this process, whenever the criteria for 'release retainage' are met (see examples in Appendix D - Retainage Calculation). This process supports the releasing of retainage at a project level whenever the 'release retainage indicator' is set to 'Y' in 'Contract Project' window. When the Estimate process releases retainage (retainage indicator is set to 'Y') for a project, this amount is passed to the accounting system and the accounting system has the option to pay or not pay the released retainage to the final Estimate amount. This process releases cash and encumbered securities for amount encumbered.

Once the retainage has been calculated for the project(s) in a Contract, securities can be applied in lieu of retainage if the Contract has an associated securities account(s). If the Contract has multiple security accounts, SiteManager will apply security in lieu of retainage against one of the accounts, until the account's funds is exhausted. Once the account is exhausted, SiteManager will utilize another account that has available funds until all of the accounts have no funds available.

If a Contract is associated with an escrow agent and a retainage amount still exists even after applying the securities in lieu of retainage, then the remaining retainage amount will be applied to the escrow account up to the maximum escrow amount and any remaining retainage above the maximum amount is retained as Cash Retainage.(See examples in Appendix D - Retainage Calculation).

10.3.4.4 Delete Pending Estimate

This process is initiated by one of the following two reasons:

- User requests a delete of a pending Estimate from the Estimate History window, or
- The Initiate Estimate process detects that a pending Estimate exists which needs to be deleted before a new Estimate can be generated and the user confirms the desire to delete the current Estimate.

The process performs the sequential tasks in the following order. At the end of all the tasks, it return control to the Estimate History window.

- Selects the payroll rows which were included in the Estimate and initializes the Estimate number to zero for all the selected Payrolls.
- Selects all the rows from the DWR table for the Estimate. Initializes the Estimate number to zero so that the DWRs will be included in the next generation.
- Deletes all the rows from the Contract Liquidated Damages for the Estimate.
- All Securities encumbered are maintained on the Security table and Retainage information for the Estimate is stored in the Estimate and Estimate Project tables. Thus, the encumbered amount has to backed out from the Security table, but the retainage information does not.
- Deletes all the Contract Estimate Adjustments for the Estimate.
- Deletes all the rows from the Contract Line Item Adjustments for the Estimate.
- Deletes all the rows from the Contract Estimate approval for the Estimate.
- Deletes all the rows from the Contract Estimate Discrepancy for the Estimate.
- Deletes all the rows from the Contract Estimate Item Discrepancy table for the Estimate.
- Deletes all the rows from the Contract Estimate Project table for the Estimate.
- Deletes all the rows from the Contract Estimate Item Funding table for the Estimate.
- Backs out Funding Totals stored on Contract Funding tables.
- Deletes all the rows from the Contract Estimate Item table.
- Deletes the Contract Estimate row for the Estimate number.

The above deletions and initializations are prerequisites for the regeneration of the Estimate. At this point, the Contract will revert to the status before the Estimate was generated.

Estimate Generation

To delete a pending Estimate:

1. On the **Estimate** panel, double-click the **Estimate History** icon.
2. Click the desired contract.
3. Click **Ok**.
4. Click the desired estimate.
5. Click the **Delete** button.
6. Click the **Yes** button.

10.3.4.5 Determine Quantity To Be Paid

This process calculates quantities to be paid using three quantities for the line item:

- Installed Quantity,
- Payable Quantity (to date), and
- Paid Quantity (up to previous Estimate)

(up to and including the previous Estimate where this line item was included). These quantities are defined as follows:

1. The **Installed Quantity** is the sum total of all the daily work report's (DWR) Item Reported Quantity since the last Estimate.

Example for how Installed Quantity will be calculated:

For example suppose we have a Contract, Contract 1, with only one Estimate paid on 01/05/97. The Estimate was generated on 01/01/97 with the following DWRs (assume that there is only one Inspector and one item associated with the Contract.):

DWR for 12/25/96

DWR for 12/26/96

Both these DWRs are paid in Estimate 1.

You now want to calculate quantities to be paid using this module on 01/06/97. There are four more DWRs that are authorized and waiting to be included in the next Estimate. They are as follows:

DWR for 12/27/96

DWR for 12/28/96

DWR for 01/04/97

DWR for 01/05/97

The calculation process will include the quantities in these four DWRs to calculate the **Installed Quantity**. Suppose there is one more DWR for 12/29/96 that is not yet authorized. This will not be

included in the quantity calculation. Once the 12/29/96 DWR is authorized it will be included in the next calculation.

2. **Paid Quantity** is the total quantity paid in all the previous Estimates up to and including the latest paid Estimate where this line item was included. This information is stored in the **Quantity Paid To Date** field of the **Contract Item** table .
3. The **Payable Quantity** is the minimum of:

(Contract Item.Bid Quantity + Contract Item.Net Change Order Quantity + Contract Item.Overrun Quantity, if any, - Paid Quantity), and

Installed Quantity (calculated in the first step).

The process reads all authorized DWRs that are not checked-out from the Server and not paid in any of the previous Estimates. For these DWRs, the associated work items are accessed and quantities are accumulated for each Estimate line item. When quantities for all the unprocessed DWRs are accumulated, the line number, project number, and accumulated quantities are returned to the initiating process. Once included in the estimate, all of the DWRs that were successfully accumulated are updated with the Estimate number and the quantities are updated to the database.

For additional documentation on these calculations, see Appendix C - Estimate Generation Calculations.

10.3.4.6 Determine Training Items

This process determines whether a training payment needs to be included in the current Estimate for the Contract and whether a Contract Adjustment or an Estimate Line Item needs to be created for paying the eligible training hours. The Determine Training Items process will be called by the Estimate Generation window. Depending on the System options, the process will either add a new Contract Adjustment or an Estimate Line Item if there are eligible training hours for the Estimate period. The process will call a function 'Determine Training Line Item' detailed in Accrue Training Experience function. This process will give the unit price and Contract Line Item Number associated with the training activity. If the function 'Determine Training Line Item' does not return the Line Item Number, this process will add a new Contract Adjustment for the eligible training hours to be paid. There are four steps involved in this process. There are as follows:

From the Contract table, the training hours accrued during the Estimate period will be retrieved. The field will be incremented by the Accrue Training Experience function and will be initialized when the Estimate is approved and paid.

It will also determine whether the training hours should be an Estimate Line Item or a Contract Adjustment. This will depend on the return values from the 'Determine Training Line Item' function.

It will determine if the eligible training hours are to be paid as an Estimate Line Item Adjustment. This will be controlled by Contract setup when the user directs the system to calculate the training hours as a line item by setting up a line item or as an adjustment by not setting up the line item. The Estimate Line Item will be created using the training hours field from the Contract table and Unit Price and Line Number fields from the returned values of the 'Determine Training Item' function.

It will also determine if the eligible training hours are to be paid as a Contract Adjustment. This will be controlled by Contract setup when the user will directs the system to calculate the training hours as a line item

by setting up a line item or as an adjustment by NOT setting up the line item. A Contract Adjustment row will be created using the Training Unit Price and Eligible Training Hours from the Contract table.

For additional documentation on these calculations, see Appendix C - Estimate Generation Calculations.

10.3.4.7 Determine Funding Amounts

The Determine Fund Accounts process calculates the funding amounts for an Estimate and updates the Estimate Project table with Total Participating and Non Participating Line Item Amounts. Funding can be at different levels — Contract, Project, Category or Item level. At each of these levels there can be two types of funding — participating and non-participating. Each type of funding can have one or more sources of funding. Each source can have one or more funding rows.

The Determine Fund Accounts process first retrieves the rows for the Contract from the Contract Funding Table for the Contract ID. The first row (if exists in the database and satisfies all the selection conditions) will represent the Contract (with no Project Number, Category, and no Line Item Number). The Contract Limit Amount (limit amounts are the high caps of amount that can be used from a funding source.) and the Contract Participating Percentage will be saved as temporary variables. The subsequent rows will represent, Project level limits and Participating Percentages, or Category level Limits and Participating Percentage or Line Item level Limits and Participating Percentages. These values also will be saved in sets of temporary variables, called arrays. Consequently, there will be four sets of temporary variables. For additional documentation on these calculations, see Appendix C - Estimate Generation Calculations.

10.3.4.8 Calculate Autopay Items

The Calculate Autopay Items process calculates payments to be made for an Autopay item. Autopay items are paid depending on the total approved work done at the Contract level in lieu of the work done at the item level. The parameters to calculate the payments are defined on the Autopay Table. If the Estimate generation was successful and the request was for a progress or final Estimate, the Estimate Summary window will be displayed.

1. If the Estimate generation was successful and the request was for a supplemental Estimate, the Contract Adjustments window will be displayed.
2. If the Estimate generation was unsuccessful, then the Estimate Activity Log report will be displayed.

Using these parameters and the Paid Quantities for all the items in the Contract (Calculated by Determine Quantities To Be Paid) the Autopay Item Payable Quantities are calculated.

There are two methods of autopay calculation:

COXA: The total amounts and earnings are based on Contract bid items (original items) excluding the autopay items.

CCXA: The total amounts and earnings are based on all current items (original items + change order items) excluding the autopay items.

For additional documentation on these calculations, see Appendix C - Estimate Generation Calculations.

10.3.5 Estimate History and Summary

SiteManager allows Estimates to be tracked using:

- Estimate History, and
- Estimate Summary.

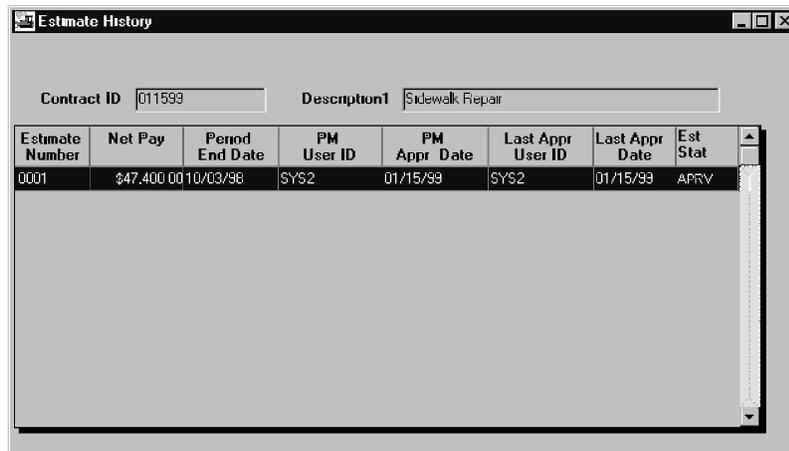


Figure 10-12 The Estimate History Window

10.3.5.1 Estimate History

The Estimate History window allows the selection and display of all Estimates for a Contract. Pending estimates can be deleted. Selecting the Open button displays the Estimate number or the Period end date of the Estimate entered to define the starting row. The Estimates will display from most recent to the oldest Estimate.

Field Name	Description
Contract ID	A valid Contract ID for which Estimates need to be displayed.
Estimate Number	The starting Estimate number on the first row.
Period End Date	End Date of the Estimate period.
Estimate Date	If entered, the rows will be filtered to display the Estimates with dates equal or greater than the entered date.
Net Pay	Net payment for this Estimate

Field Name	Description
PM Appr. Date	Date on which the Project Manager approved the Estimate
PM User ID	PM's User ID
Last Appr. Date	Last Approval Date
Last Appr. User ID	Last Approval User ID
Est Stat	The current status of the Estimate (either Pend or Apprv).

Table 10-8 The Estimate Summary Field Table

To open an Estimate history:

1. On the **Estimate** panel, double-click the **Estimate History** icon.
2. In the list box, scroll to and click the desired Contract.
3. Click **Ok**.
4. When through, click the **Close** button.

To delete a pending Estimate:

1. On the **Estimate** panel, double-click the **Estimate History** icon.
2. In the list box, scroll to and click the desired Contract.
3. Click **Ok**.
4. Click the desired estimate.
5. Click the **Delete** button.
6. Click the **Yes** button.

The Estimate History window can also be used to navigate to the Estimate Summary and Estimate Discrepancy windows for an Estimate using the Services menu.

To navigate to the Estimate Summary or Discrepancy from Estimate History:

1. On the **Estimate** panel, double-click the **Estimate History** icon.
2. In the list box, scroll to and double-click the desired Contract.
3. Click **Ok**.
4. Click the desired estimate.
5. Click the **Services** menu and click the **Summary** or **Discrepancy** choice.
6. When through, click the **Close** button.

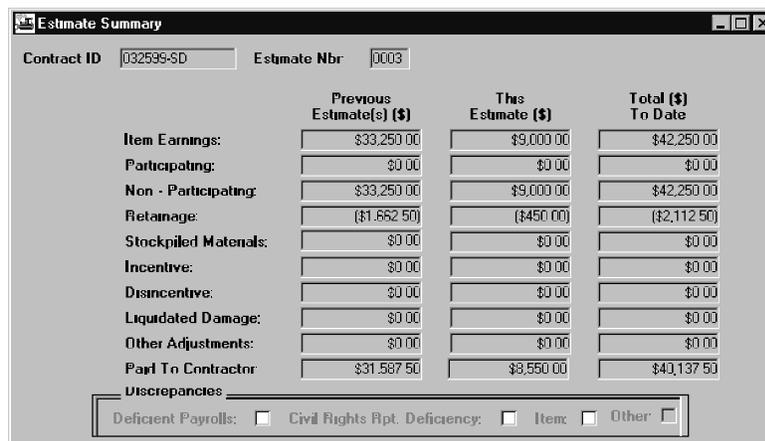


Figure 10-13 The Estimate Summary Window

10.3.5.2 Estimate Summary

The Estimate Summary window allows the user to view calculated Estimates Summary information for the Contract and project level. The window shows three sets of totals:

- Current Estimate,
- Combined totals for previous Estimate(s), and
- Totals to date.

Estimate Generation

The totals displayed include the following for each set:

- Item total
- Participating
- Non-Participating
- Retainage
- Liquidated damages
- Incentives
- Disincentives
- Stockpiled materials
- Other adjustments.
- Paid to Contractor

If the Contract is broken into several projects, the user can select the option to view the Estimate totals for each of the projects associated to the Contract. The user may select a project through the Project List window, which is activated via the Services menu. The above totals will then be given for a project.

At the Contract Estimate level, the user is notified via several flags displayed on the screen that there are discrepancies associated with the current Estimate. The flags include Deficient Payrolls, Civil Rights Reporting Deficiency, Item, and Other discrepancies. The user may view the Estimate Discrepancies by selecting the option from the Services menu.

Additional functionality available on the Estimate Summary window includes:

- Entry of a remark using the standard remark function, for the Contract Estimate.
- Access to the Stockpiled Materials maintenance screen to view further details concerning the stockpiled materials for the Contract.

Field Name	Description
Item Total	The total dollar amount of the work items which have been installed and included in an Estimate.
Participating	The dollar amount that is federally funded for all the items which are included in an Estimate.
Non-Participating	The dollar amount that is not federally funded for all the items which are included in an Estimate.

Field Name	Description
Retainage	The dollar amount that has been retained for the Contract.
Liqd. Damages	The dollar amount of the liquidated damages which have been assessed on the Contract.
Incentives	The dollar amount of the incentives which have been assessed.
Disincentives	The dollar amount of the disincentives which have been assessed.
Stockpiled Materials	The dollar amount of installed stockpile materials.
Other Adjustments	The dollar amount of adjustments other than liquidated damage and retainage which have been assessed including Contract adjustments and any line item adjustments (e.g., line item price adjustments).
Paid To Contractor	The dollar amount which has been paid out to the Contractor which is a computation of item total, retainage, liquidated damages, stockpiled materials, and other adjustment totals.
Deficient Payrolls	Indicates that a deficient payroll exists for the current Estimate.
Civil Rights Rpt. Deficiency	Indicates that a Civil Rights Report Deficiency exists for the current Estimate.
Item Discrepancies	Indicate that an item/material discrepancies exist for the current Estimate.

Table 10-9 The Estimate Summary Fields Table

To open an Estimate summary:

1. On the **Estimate** panel, double-click the **Estimate Summary** icon.
2. In the list box, scroll to and double-click the desired Contract.
3. In the list box, scroll to and click the desired Estimate.
4. Click **Ok**.
5. When through, click the **Close** button.

Estimate Generation

To view the Estimate by Contract and Project:

1. On the **Estimate** panel, double-click the **Estimate Summary** icon.
2. In the list box, scroll to and double-click the desired Contract.
3. In the list box, scroll to and click the desired Estimate.
4. Click **Ok**.
5. Click the **Services** menu and click the **Select Project** choice.
6. In the list box, scroll to and click the desired Project.
7. Click **Ok**.
8. To return to the Estimate, click the **Services** menu and click the **Select Estimate** choice.

To view the Stockpiled Materials:

1. On the **Estimate** panel, double-click the **Estimate Summary** icon.
2. In the list box, scroll to and double-click the desired Contract.
3. In the list box, scroll to and click the desired Estimate.
4. Click **Ok**.
5. Click the **Services** menu and click the **Stockpiled Materials** choice.
6. To return to the Estimate, click the **Close** button.

To view the Estimate Discrepancies:

1. On the **Estimate** panel, double-click the **Summary** icon.
2. In the list box, scroll to and double-click the desired Contract.
3. In the list box, scroll to and double-click the desired Estimate.
4. Click **Ok**.
5. Click the **Services** menu and click the **Discrepancy** choice.
6. To return to the Estimate, click the **Close** button.

10.3.6 Estimate Discrepancies

SiteManager identifies the discrepancies associated with an Estimate. The discrepancies are of two levels; discrepancies at Estimate level and discrepancies at item level. For instance, if DBE requirements are not met or payrolls are not certified the discrepancies are associated to the Estimate. Or, if there is a deficiency in testing requirements or overrun situations the discrepancies are associated with the line item.

10.3.6.1 Types of Discrepancies

There are six types of discrepancies and each will be identified using different criteria. These six discrepancies are as follows:

- Overrun Discrepancy,
- Material Test Discrepancy,
- Payroll Certification Discrepancy,
- Milestone and Contract Completion Discrepancy,
- Checklist Event Discrepancy, and
- DBE Compliance Discrepancy.

For additional documentation on these calculations, see Appendix C - Estimate Generation Calculations.

10.3.6.2 Estimate Discrepancy Resolution

After the generation of an Estimate, the Estimate History or Estimate Summary windows can be used to navigate to the Estimate Discrepancy window as well as direct navigation to the window.

10.3.6.2.1 Estimate Discrepancy

The Estimate Discrepancy window displays all the discrepancies associated with an Estimate. Discrepancies can be associated to an Estimate or to a Estimate item (Contract item with installed quantities for the Estimate period). The Estimate discrepancies will be listed at the top of the window and item discrepancies will be listed after them. The Status field values will be either 'Unresolved' or 'Override'. When Identify Discrepancy function is requested by Refresh choice (or by Generate Estimate process), the discrepancy is re-determined.

The user has the following three options to resolve the discrepancy(s):

- a. They can override the discrepancies and use the update function to update the override information,
- b. They can correct the individual discrepancy input information using the correct SiteManager component and request for a refresh, or
- c. Combination of both a) and b).

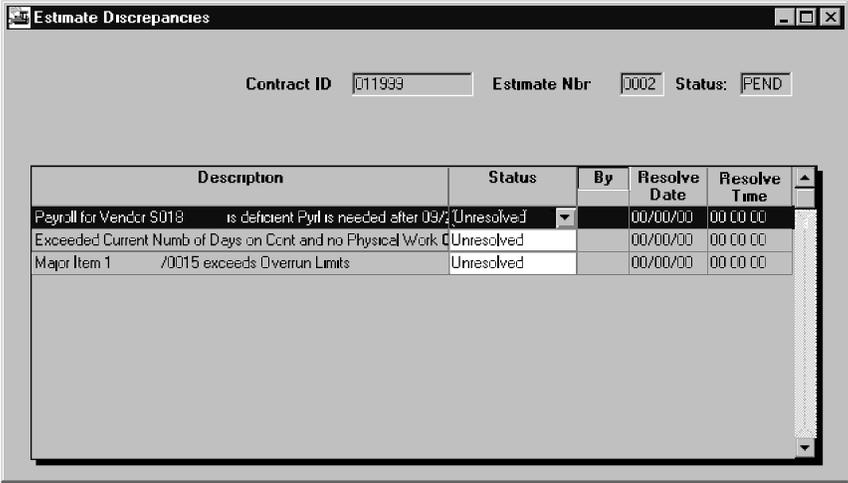
Any override must be supplemented with a remark. An override will update the User ID and Date and Time on the associated database record. The Refresh function is available on this window which will reevaluate the discrepancies for the Estimate and display them on the window.

Discrepancies for progress and supplemental Estimates can be overridden, but final Estimates can NOT.

Field Name	Description
------------	-------------

Field Name	Description
Description	Discrepancy description
Status	Status of the discrepancy Valid Values - Override, Unresolved
By	User ID of the person overriding the discrepancy
Date	Date the Discrepancy was overridden
Time	Time the Discrepancy was overridden

Table 10-10 The Estimate Discrepancies Fields Table



The Estimate Discrepancy Window

Figure 10-14



The Navigate
Figure 10-15

To open an Estimate discrepancy:

1. On the **Estimate** panel, double-click the **Estimate Discrepancy** icon.
2. In the list box, scroll to and double-click the desired Contract.
3. In the list box, scroll to and click the desired Estimate.
4. Click **Ok**.

To override an Estimate discrepancy:

1. On the **Estimate** panel, double-click the **Estimate Discrepancy** icon.
2. In the list box, scroll to and double-click the desired Contract.
3. In the list box, scroll to and click the desired Estimate.
4. Click **Ok**.
5. Click the discrepancy to be overridden.
6. In the **Status** drop-down list, click the expand arrow to the right of the current selection and click the **Override** choice.
7. Any override must be supplemented with a remark. Click the **Remarks** button and type the remarks for the override.
8. Continue steps 6-8 to override additional discrepancies.
9. When through, click the **Save** button.

To navigate to the correct window to resolve the discrepancy:

1. On the **Estimate** panel, double-click the **Estimate Discrepancy** icon.
2. In the list box, scroll to and double-click the desired Contract.
3. In the list box, scroll to and click the desired Estimate.
4. Click **Ok**.
5. Click the discrepancy to be resolved.
6. Click the **Navigate** button.
7. When you have completed resolving the discrepancy, click the **Save** button.
8. Click the **Close** button.

To recalculate discrepancies after resolution:

1. Click the **Services** menu and click the **Recalculate Discrepancies** choice.



Figure 10-16 The Contract Adjustments Panel

10.3.7 Adjustments

SiteManager allows Adjustments to be made to either a Contract or to an Item for a pending unapproved Estimate. *Only First Level Approvers can make adjustments that require an unapproved (in pending or reject status) estimate.* These adjustments are:

- Contract Adjustments (and Project Distribution)
- Liquidated Damages
- Incentives
- Disincentives
- Line Item Adjustments
- Estimate Item

Anyone with the correct Contract authority and window security access can make adjustments that do NOT require an unapproved (in pending or reject status) estimate. These adjustments are:

- Contract Time Adjustments
- Milestone Time Adjustments

10.3.7.1 Contract Adjustments

The Contract Adjustments window lists all the different types of Contract adjustments and the associated detail information for a Contract or an Estimate. While in this window, the user has the capability of accessing Contract adjustments from other Estimates within the same Contract or selecting a new Contract. The Contract Adjustment types are determined by:

- **System Defined Codes** — Liquidated Damages, Retainage and Training Adjustments

or

Transportation Agency Defined Codes

And

System-Generated Records

or

User Entered Records

In this window, the user may add, modify, or delete Contract Adjustments that are not System-Generated. Transportation agency-defined Contract adjustment descriptions are entered into the system at system setup.

To access Contract adjustments:

1. On the Contractor Payments panel, double-click the Contract Adjustments icon.
2. Double-click the desired adjustments icon.

10.3.7.1.1 Liquidated Damages as a Contract Adjustment

For instance, Liquidated Damages are a System-Defined Contract Adjustment. The Adjustments window would allow a user to view and modify the Liquidated Damages that have been applied to a Contract. The window displays a list of all Liquidated Damages that have been automatically calculated or manually added. In the Adjustments window, Contract Adjustment would be limited to modifying only the Liquidated Damage records that are associated with an unapproved Estimate. Liquidated Damages from an approved Estimate can be viewed, but not modified or deleted. Adding and deleting a Liquidated Damage record is only allowed on the main Liquidated Damage window. The following fields may be modified when an Liquidated Damage record has been selected in Contract Adjustment:

- **Begin Date** — Date the Liquidated Damage charges started,
- **End Date** — Date the Liquidated Damage charges ended, and
- **Nbr of Charged Units**— Number of days Liquidated Damage is applied to a Contract.

10.3.7.1.2 Retainage

SiteManager will list all system calculated Retainage and user entered Contract Adjustments as Retainage (i.e., add or release of Retainage) in the Contract Adjustments window.

Estimate Generation

For system calculated Retainage only the Remarks field can be modified.

Any transaction that is associated to a retainage (i.e., release of retainage) must be applied as a user entered Contract Adjustment. Release of retainage can be accomplished through this window, by creating a User-Defined Contract Adjustment using the New button, choosing an Adjustment Description of Retainage, and *entering a positive amount in the Adjustment Amount field*. If additional retainage has to applied, then the user must add a new User-Defined Contract Adjustment using the New button, choosing an Adjustment Description of Retainage, and *enter a negative amount on the Adjustment Amount field*.

Field Name	Description
Estimate Nbr	The Estimate number associated with the Contract adjustment record.
Entered Date	Date the Contract adjustment was entered.
Adjustment Description	The description (i.e., Retainage, Liquidated Damages, Incentives) of the Adjustment made to the Contract.
Remarks	The icon will be displayed if Adjustment has a remark.
Adjustment Amount	Adjustment amount for the particular Contract adjustment.
User ID	User ID of the person that entered the User-Defined Contract Adjustment. A System-Define Contract Adjustment Contract Adjustment will not have a User ID associated with it.
Nbr of Units	The number of units used when a Liquidated Damage is charged against a Contract.
(Date) Begin	Date the liquidated damage started for the Contract. Note: This field is required, if it's a 'calendar day' or 'fixed completion date' Contract, otherwise it's optional for 'working day' Contract. The date entered must be earlier or equal to than the 'End' date field.
(Date) End	Date the Liquidated Damage ended for the Contract. Note: This field is required, if it's a 'calendar day' or 'fixed completion date' Contract, otherwise it's optional for 'working day' Contract. The date entered must be later or equal to than the 'Begin' date field.

Field Name	Description
Rate Unit Type	The time unit associated with a Liquidated Damage for a Contract.
Rate Per Unit	The standard amount assessed per time unit for Liquidated Damages. The value defaults to a amount based on Contract size and type of time charge (work or calendar days) defined by your transportation agency’s setup of SiteManager.
Adjmnt Amount	The amount of adjustment charged against a Contract when a Liquidated Damage has been applied. Formula: Nbr Of Units * Rate Per Unit
Date Created	Date the Liquidated Damage record was entered or date the Liquidated Damages were automatically calculated.
Bid Days	The original number of days for the Contract.
Adjmnt Days	The number of days the Contract has been extended/reduced through change orders. Can be either work days or calendar days, depending on the type of time charges for the Contract.
Tot Charged Days	Number of days the Contractor worked, as noted in approved Daily Work Reports. Can be either work days or calendar days, depending on the type of time charges for the Contract.
Current Days	Number of days remaining on the Contract before it is completed. Formula: Bid Days + Adjmnt Days - Tot Charged Days
Remarks	The remarks attached to the Contract Adjustment record.

Table 10-11 The Contract Adjustments Fields Table

Estimate Nbr	Entered Date	Adjustment Description	Rmk	User ID	Adjustment Amount
0001	01/15/99	Cash Retainage Withheld		SYSTEM	-\$2,600.00

Figure 10-17 The Contract Adjustments Description Folder Tab

NOTE: CONTRACT ADJUSTMENTS MAY ONLY BE MADE TO CONTRACTS WITH AN ESTIMATE IN PENDING OR REJECT STATUS.

To add a new user-defined Contract adjustment:

1. On the **Contract Payments** panel, double-click the **Contract Adjustments** icon.
2. On the **Contract Adjustments (+)** panel, double-click the **Contract Adjustments** icon.
3. In the list box, scroll to and click the desired Contract.
4. Click **Ok**.
5. Click the **New** button.
6. In the **Adjustment Description** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
7. In the **Adjustment Amount** field, select the current entry and type the adjustment amount.
8. Press the **Tab** key twice.
9. In the **Remarks** field, type a remark.
10. When complete, click the **Save** button.

To modify a Contract adjustment:

1. On the **Contract Payments** panel, double-click the **Contract Adjustments** icon.
2. On the **Contract Adjustments (+)** panel, double-click the **Contract Adjustments** icon.
3. In the list box, scroll to and click the desired Contract.
4. Click **Ok**.

5. In the list box, scroll to and click the desired Contract adjustment.
6. In the desired field, change the current entry and to the desired entry. 
7. Repeat steps 5 until all modifications have been made.
8. When complete, click the **Save** button.

To add a new user-defined Contract adjustment for a release of retainage:

1. On the Contract Adjustments panel, double-click the Contract Adjustments icon.
2. In the list box, scroll to and click the desired Contract.
3. Click Ok.
4. Click the New button.
5. In the Adjustment Description drop-down list, click the expand arrow to the right of the current selection and click the Retainage choice.
6. Press the Tab key.
7. In the Adjustment Amount field, select the current entry and type the adjustment amount as a negative number.
8. Press the Tab key twice.
9. In the Remarks field, type a remark.
10. When complete, click the Save button.

To add a new user-defined Contract adjustment for an additional retainage:

1. On the Contract Adjustments panel, double-click the Contract Adjustments icon.
2. In the list box, scroll to and click the desired Contract.
3. Click Ok.
4. Click the New button.
5. In the Adjustment Description drop-down list, click the expand arrow to the right of the current selection and click the Retainage choice.
6. Press the Tab key.
7. In the Adjustment Amount field, select the current entry and type the adjustment amount as a positive number.



The fields that will be available for modification will depend on whether the Contract Adjustment is User-Generated or System-Generated.

Estimate Generation

8. Press the Tab key twice.
9. In the Remarks field, type a remark.
10. When complete, click the Save button.

To delete a user-defined Contract adjustment:

1. On the Contract Adjustments panel, double-click the Contract Adjustments icon.
2. In the list box, scroll to and click the desired Contract.
3. Click Ok.
4. Scroll to and Click the desired adjustment.
5. Click the Delete button.

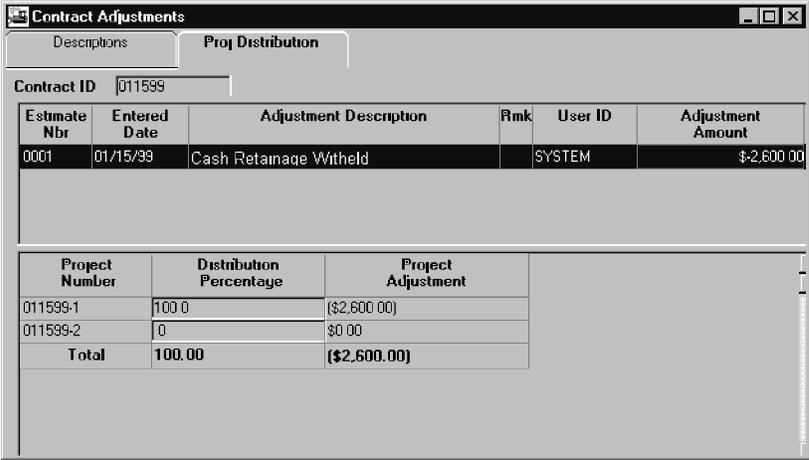


Figure 10-18 The Contract Adjustment Project Distribution Folder Tab

10.3.7.1.3 Training Adjustment

If a contract has a training plan and the plan is not tracked by the use of a Training Line Item, on-the-job training reimbursements will display on the Contract Adjustments window.

When an estimate is generated the system will compare the number of training hours used to date and the training hours paid to date (these values are stored on the contract). When the system finds a discrepancy between the hours used and the hours paid previously, and adjustment will be made to the estimate. The training hours are accrued from certified payrolls that include trainee data. The training hour data is updated each time the 'Payroll Exceptions Batch Job' is run on the batch/background server. (This batch process accrues the training experience for trainees.)

Typically, a training reimbursement will be a positive amount (the vendor is being paid for providing on-the-job training). However, if the accrued hours for a Trainee are decreased, a negative training reimbursement can be applied to an estimate.

Note: The ‘Payroll Exceptions Batch Job’ must be run prior to the Estimate Generation process in order for trainee hours on certified payrolls to be reimbursed.

10.3.7.1.4 Project Distribution

The Project Distribution folder tab lists all contract adjustments for an Estimate or a Contract and the project distribution for each adjustment in a selection list. The selection list displays all of the adjustments either for a selected Estimate or the Contract. The Project Distribution folder tab displays the project distribution of the total adjustment amount for the adjustment highlighted of the selected Estimate or the Contract. As a default, any Contract adjustment will be distributed 100% to the primary project of a Contract.

The user can distribute a particular Contract adjustment amount to any project in the Contract. The distribution of the adjustment for a project is entered as a percentage of the amount of the Contract adjustment. If an adjustment is distributed to more than one project, the sum total percentage distributed to the projects must equal 100%. As a default, this window will display all projects for a given Contract.

Field Name	Description
Project Nbr	Number that identifies a project within a Contract
Distribute Percentage	This is the percentage value of the adjustment amount given to Project Nbr. The value in this field cannot exceed 100 %
Distribute Amount	The adjustment amount distributed to the project. The value in this field is calculated, by multiplying the distribute percentage with the adjustment amount for the Contract.
Total (Percentage)	This is the summation of all percentage distributed to the project(s) this total percentage cannot exceed 100%.
Total(Amount)	This is the adjustment amount for the Contract.

Table 10-12 The Project Distribution Fields Table

To modify a Contract adjustment’s project distribution:

1. On the Contract Adjustments panel, double-click the Contract Adjustments icon.
2. In the list box, scroll to and click the desired Contract.
3. Click Ok.
4. In the list box, scroll to and click the desired Contract adjustment.
5. Click the Proj Distribution folder tab.
6. In the list box, scroll to and click the desired project.

Estimate Generation

7. In the Distribute Percentage field, select the current entry and type desired percentage.
8. Modify the percentage of the other projects for a total of 100%.
9. When complete, click the Save button.

Example Project Distribution Adjustment

The following example below will further illustrate the distribution of a Contract adjustment to a project or projects using the ‘Distribute Percentage’ field

Contract 1 has 3 Projects. Project A, B, C (w/ Project A as the prime project)

Contract Adj = \$10,000.00

By default the detail section of the window will display the following data:

Project Nbr	Distribute Percentage	Distribute Amount
A	100.00	10,000.00
B	0.00	0.00
C	0.00	0.00
Total	100.00	10,000.00

If the user wants to distribute 20% to A , 30 % to B, 50 % to C , then the detail section of the window will display the following data:

Project Nbr	Distribute Percentage	Distribute Amount
A	20.00	2,000.00
B	30.00	3,000.00
C	50.00	5,000.00
Total	100.00	10,000.00

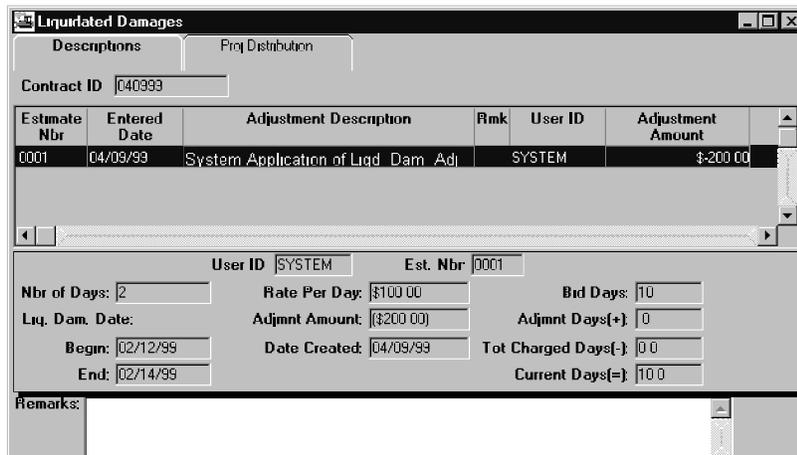


Figure 10-19 The Liquidated Damages Window

10.3.7.1.5 Liquidated Damages for a Contract

The Liquidated Damage window allows the user complete maintenance capabilities for Liquidated Damages to be applied to a Contract. In this window, Liquidated Damage records that are associated with an unapproved Estimate may be adjusted. A user cannot modify or delete the system-defined Liquidated Damages amount, *but* the user may adjust the amount by adding a new record. A user cannot modify any fields associated to a system-defined Liquidated Damages record except Remarks (and only prior to the estimates approval).

The deletion of Liquidated Damage records is allowed only to those that are user-entered and associated with an unapproved Estimate. Liquidated Damages from an approved Estimate will have view-only functionality.

A new liquidated damage to a Contract record can be created using the New button. The user may add the following Liquidated Damage information:

- Begin Date (the date the liquidated damage charges started),
- End Date (the date the liquidated damage charges ended),
- Nbr of Charged Units (the number of days liquidated damage is applied to a Contract)

These fields can also be modified when a user-defined Liquidated Damage record associated with an unapproved Estimate has been selected.

Field Name	Description
Estimate Nbr	The Estimate number associated with the Contract adjustment record.
Entered Date	Date on which the liquidated damage data was entered, or on which the automatic liquidated damages were calculated.

Field Name	Description
Adjustment Description	A description indicating that the adjustment is a Liquidated Damages Adjustment.
Rmk	Indicator as to whether a remark is attached to the adjustment record.
User ID	User ID of the person that entered the user-defined Contract adjustment. A system-define Contract adjustment record will not have a User ID associated with it.
Adjustment Amt	The amount of adjustment charged against a Contract when a liquidated damage has been applied. Formula: Nbr Of Days * Rate Per Day
Nbr Of Days	The number of days used when a liquidated damage is charged against a Contract.
Rate Per Day	The standard amount assessed per day for liquidated damages. Defaults to a transportation agency-defined amount based on Contract size and type of time charge (work or calendar days).
Bid Days	The original number of days for the Contract.
(Date) Begin	The date that the liquidated damage started for the Contract. If it's a 'calendar day' or 'fixed completion date' Contract, otherwise it's optional for 'working day' Contract. The date entered must be earlier or equal to than the 'End' date field.
(Date) End	The date in which the liquidated damage ended for the Contract. If it's a 'calendar day' or 'fixed completion date' Contract, otherwise it's optional for 'working day' Contract. The date entered must be later or equal to than the 'Begin' date field.
Adjmnt Amount	The amount of adjustment charged against a Contract when a liquidated damage has been applied. This field is protected and displayed on the detail part of the window. Formula: Nbr Of Days * Rate Per Day

Field Name	Description
Date Created	Date on which the liquidated damage data was entered, or on which the automatic liquidated damages were calculated.
Adjmnt Days	The number of days the Contract has been extended/reduced through change orders. Can be either work days or calendar days, depending on the type of time charges for the Contract.
Tot Charged Days	Number of days the Contractor worked, as noted in approved dailies. Work days or calendar days, depending on the type of time charges for the Contract.
Current Days	The number of days remaining for the Contract before it is completed. Formula: Bid Days + Adjmnt Days - Tot Charged Days
Remarks	The remarks attached to the adjustment record.

Table 10-13 The Liquidated Damages Fields Table

NOTE: CONTRACT ADJUSTMENTS MAY ONLY BE MADE TO CONTRACTS WITH AN ESTIMATE IN PENDING OR REJECT STATUS.

To add liquidated damages for a Contract:

1. On the **Contract Adjustments** folder tab, double-click the **Liquidated Damages** icon.
2. In the list box, scroll to and select a Contract.
3. Click the **New** button.
4. In the **Nbr of Days** field, type the number of days for which damages should be applied.
5. Press the **Tab** key.
6. In the **Begin Date** field, type the correct beginning date.
7. Press the **Tab** key.
8. In the **End Date** field, type the correct ending date.
9. Press the **Tab** key.
10. In the **Remarks** field, type your comment.
11. When complete, click the **Save** button.

Estimate Generation

To modify liquidated damages for a Contract:

1. On the **Contract Adjustments** panel, double-click the **Liquidated Damages** icon.
2. In the list box, scroll to and click the desired Contract.
3. Click **Ok**.
4. In the list box, scroll to and click the desired liquidated damage.
5. In the **Nbr of Days** field, type the correct number of days.
6. Press the **Tab** key.
7. In the **Begin Date** field, type the correct beginning date.
8. Press the **Tab** key.
9. In the **End Date** field, type the correct ending date.
10. Press the **Tab** key.
11. In the **Remarks** field, enter or modify your remarks.
12. When complete, click the **Save** button.

To delete a liquidated damages for a Contract:

1. On the **Contract Adjustments** panel, double-click the **Liquidated Damages** icon.
2. In the list box, scroll to and click the desired Contract.
3. Click **Ok**.
4. In the list box, scroll to and click the desired liquidated damage.
5. Click the **Delete** button.
6. Click **Ok**.

Tip: Only user-defined Liquidated Damage records tied to an unapproved estimate may be modified or deleted.

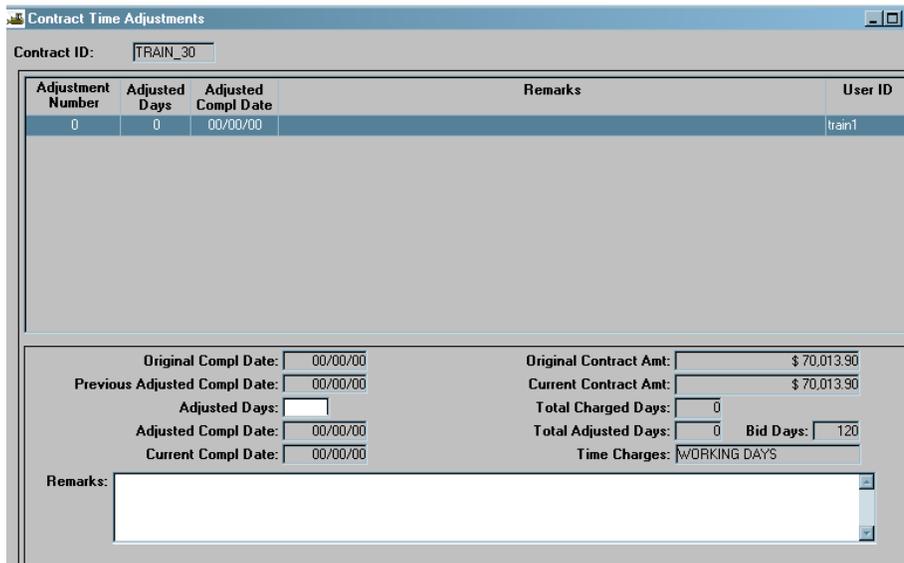


Figure 10-20 The Contract Time Adjustments Window

10.3.7.1.6 Contract Time Adjustments

The Contract Time Adjustments windows permits the maintenance of time extensions and reductions for a specific Contract during the Estimate period, in lieu of making adjustments by way of a change order.

For an selected Contract, the user can add a new time extension/reduction adjustment or modify an existing time adjustment. For a Contract the following fields may be modified:

- Number of Days Allowed,
- Adjusted Completion Date, and
- Remarks

During installation, the installer must include time extension processing for this window to be added to the Contractor Payments component.

Field Name	Description
Original Completion Date	The date the Contract was Estimated to be completed.
Current Completion Date	The revised completion date of the Milestone/Contract.
Previous Adjusted Completion Date	The revised adjusted completion date of milestone/contract must not be equal to current completion date or the adjusted complete date.

Field Name	Description
Remarks	The remark associated with the Time Adjustment table.
User ID	The user id of the person adding this record.
Charge Type	How time charges are assessed for the Contract. Can not change during the life of the Contract. AD = Available Work Days, CD = Calendar Days, or DT = Fixed Completion Date
Original Contract Amount	The amount of the bid of the Contractor awarded the job.
Current Contract Amount	The difference between Original Contract Amount and Net Change Order Amount.
Total Charged Days	The total number of days charged to the Contract or milestone to date. Can be work days or calendar days, depending on the type of time charges for the Contract. No value if fixed completion date Contract.
Total Adjustment Days	Total number of days extended (or reduced) by change orders that include time extension (or reduction). Can be either work days or calendar days, depending on the type of time charges for the Contract.
Bid Days	The original number of days for the Contract.
Number Of Days Allowed	Number of Days/Hours the Milestone/Contract is extended.
Revised Completion Date	The revised completion date of the Milestone/Contract. Must not be equal to Current Completion Date

Table 10-14 Time Adjustments Fields Table for Contracts and Milestones

To get the value for Total Adjustment Days field, the Contract CO table is read for all records for the particular Contract ID where Approval Date is greater than zeros and Milestone Number is equal to spaces. The Change Order Adjustment Days values are then totaled.

To get the values for the Work Suspended Date and the Work Resumed Date fields, the processing will as follows:

The Diary table is read for the particular Contract ID in descending DWR Date order. The Credit Day Value field of the first record read is checked.

If it is “0” (full day charged), reading of the table is continued until Credit Day Value changes.

If the current Credit Day Value is “1” (full day credit), the DWR Date of the previous record will be the Work Resumed Date. Reading of the table is continued until Credit Day Value changes again. The DWR Date of the previous record will be the Work Suspended Date.

If the current Credit Day Value is “1/2” (half-day charged/half-day credit), The DWR Date of the previous record will be the Work Resumed Date. The DWR Date of the current record will be the Work Suspended Date.

If it is “1”, reading of the table is continued until Credit Day Value changes.

If the current Credit Day Value is “0”, the DWR Date of the previous record will be the Work Suspended Date. Reading of the table is continued until Credit Day Value changes again. The DWR Date of the previous record will be the Work Resumed Date.

If the current Credit Day Value is “1/2”, The DWR Date of the previous record will be the Work Suspended Date. The DWR Date of the current record will be the Work Resumed Date.

If it is “1/2”, the DWR Date of the current record will be the Work Resumed Date and the Work Suspended Date.

To add time extension or reduction for a Contract:

1. On the Contract Adjustments panel, double-click the Contract Time Adjustments icon.
2. In the list box, scroll to and click the desired Contract.
3. Click Ok.
4. In the Number of Days Allowed field, type the correct value.
5. Press the Tab key.
6. In the Adjusted Completion Date field, type the correct date.
7. Press the Tab key.
8. Click the Remarks button.
9. Type your comment.
10. Click Ok.
11. When complete, click the Save button.

To modify a time extension or reduction for a Contract:

Estimate Generation

1. On the Contract Adjustments panel, double-click the Contract Time Adjustments icon.
2. In the list box, scroll to and click the desired Contract.
3. Click Ok.
4. In the list box, scroll to and click the desired Contract Time adjustment record.
5. In the Number of Days Allowed field, type the correct value.
6. Press the Tab key.
7. In the Adjusted Completion Date field, type the correct date.
8. Press the Tab key.
9. Press the Tab key.
10. Click the Remarks button.
11. Type your comment.
12. Click Ok.
13. When complete, click the Save button.



Figure 10-21 The Milestone Adjustments Panel

10.3.7.2 Milestone Adjustments

Like the Contract Adjustments panel, the Milestone Adjustments panel permits the maintenance of time extensions and reductions for a specific milestone and the incentives and disincentives during the Estimate period, in lieu of making adjustments by way of a change order.

To access Milestone adjustments:

1. On the Contractor Payments panel, double-click the Milestone Adjustments icon.

2. Double-click the desired adjustments icon.

10.3.7.2.1 Milestone Time Adjustments

Like the Contract Time Extensions/Reductions window, the Milestone Time Adjustments window permits the maintenance of time extensions and reductions for a specific milestone during the Estimate period, in lieu of making adjustments by way of a change order.

For an selected milestone, the user can add a new time extension/reduction adjustment or modify an existing time adjustment. For a milestone, the following fields may be modified:

- Number of Days Allowed,
- Adjusted Completion Date, and
- Remarks

During installation, the installer must include time extension processing for this window to be added to the Contractor Payments component as with the Contract Extensions/Reductions window.

The fields of this window are identical to the fields for the Contract Extension/Reductions window.

To get the values for the Work Suspended Date and the Work Resumed Date fields, the following processing occurs:

- The Diary Milestone Credit table is read for the particular Contract ID and Milestone Number in descending DWR Date order. The Credit Day Value field of the first record read is checked.
- If it is “0” (full day charged), reading of the table is continued until Credit Day Value changes.
- If the current Credit Day Value is “1” (full day credit), the DWR Date of the previous record will be the Work Resumed Date. Reading of the table is continued until Credit Day Value changes again. The DWR Date of the previous record will be the Work Suspended Date.
- If the current Credit Day Value is “1/2” (half-day charged/half-day credit), The DWR Date of the previous record will be the Work Resumed Date. The DWR Date of the current record will be the Work Suspended Date.
- If it is “1”, reading of the table is continued until Credit Day Value changes.
- If the current Credit Day Value is “0”, the DWR Date of the previous record will be the Work Suspended Date. Reading of the table is continued until Credit Day Value changes again. The DWR Date of the previous record will be the Work Resumed Date.
- If the current Credit Day Value is “1/2”, The DWR Date of the previous record will be the Work Suspended Date. The DWR Date of the current record will be the Work Resumed Date.
- If it is “1/2”, the DWR Date of the current record will be the Work Resumed Date and the Work Suspended Date.

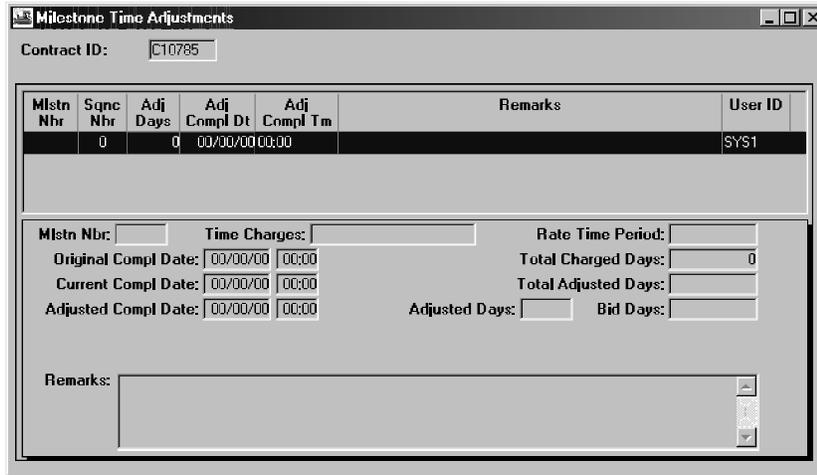


Figure 10-22 The Milestone Time Adjustments Window

Field Name	Description
Remarks	Description of a remark associated with the Time Adjustment table.
User ID	The user id of the person adding this record.
Time Charges	How time charges are assessed for the contract. Can be AD = Available Work Days, CD = Calendar Days, or DT = Fixed Completion Date. Can not change during the life of the contract.
Original Compl Date	The date the milestone was specified to be complete.
Current Compl Date	The revised completion date of the milestone/Contract.
Adjusted Compl Date	The revised completion date of the milestone/Contract.
Total Charged Days	The total number of days charged to the contract or milestone to date. Can be work days or calendar days, depending on the type of time charges for the contract. No value if fixed completion date contract.
Total Adjusted Days	Total daily work report charge days for a milestone.

Field Name	Description
Adjusted Days	Number of Days/Hours the milestone/Contract is extended.
Bid Days	The original number of days for the contract.

Table 10-15 Milestone Time Adjustments Fields Table

To add a time extension or reduction for a milestone:

1. On the Milestone Adjustments panel, double-click the Milestone Time Adjustments icon.
2. In the list box, scroll to and click the desired Contract.
3. Click Ok.
4. In the Milestone drop-down list, click the expand arrow to the right of the current selection and click the milestone.
5. Press the Tab key.
6. In the selected field, type the desired value.
7. Press the Tab key.
8. Repeat steps 6-7 until all fields are entered./
9. When complete, click the Save button.

To modify time extension or reduction for a milestone:

1. On the Milestone Adjustments panel, double-click the Milestone Time Adjustments icon.
2. In the list box, scroll to and click the desired Contract.
3. Click Ok.
4. Click the Open button.
5. In the list box, scroll to and click the desired record.
6. Modify the milestone as appropriate.
7. When complete, click the Save button.

10.3.7.2.2 Incentives/Disincentives for Milestones

SiteManager allows the maintenance of Incentives or Disincentives to be applied to a Milestone. All Contract milestones and their associated Incentives or Disincentives to a may be displayed for selection. Once a milestone with has been selected, all the Incentives or Disincentives details, automatically calculated or manually added, will display. *Modification is limited to the Incentives or Disincentives that are associated*

with an unapproved Estimate. Incentives or Disincentives from an approved Estimate may only be viewed. Deletion is allowed only to those Incentives or Disincentives records that are user entered and associated with an unapproved Estimate and are entered through this window.

For an selected milestone, the user can add a new or modify an existing incentive or disincentive (with the qualifications in the preceding paragraph). The following fields may be modified:

- Begin Date (the date the Incentive or Disincentive charges started),
- End Time (the time the Incentive or Disincentive charges started for 'hour' type milestones),
- End Date (the date the Incentive or Disincentive charges ended),
- End Time (the date the Incentive or Disincentive charges ended for 'hour' type milestones)
- Nbr of Charged Units (the number of days/hours Incentives or Disincentives is applied to a Contract)

These fields may be modified with the following qualifications.

- When entering 'Begin' and 'End' dates, the dates must be after the 'Current' milestone completion date.
- When entering 'Begin' and 'End' time, the times must be after the 'Current' milestone completion time.
- Addition of Incentive or Disincentive is allowed for a milestone only when a physical completion date has been entered to SiteManager.

Field Name	Description
Estimate Nbr	The Estimate number associated with the Incentive or Disincentive record.
Nbr Of Units	The number of units used (e.g., days, hours) when a Incentive or Disincentive is charge against a Contract.
Rate Per Unit	The standard amount assessed per time unit (e.g., day, hour) for Incentive or Disincentive. Defaults to a transportation agency-defined amount based on the type of time charge (days or hours).
Adjustment Amt	The amount of adjustment charged against a Contract when a Incentive or Disincentive has been applied. Formula: Nbr Of Units * Rate Per Unit
User ID	User ID of the person that entered the Incentive or Disincentive. A system calculated Incentive or Disincentive record will not have a

Field Name	Description
	User ID associated with it and will have a value of 'System'.
Nbr of Units	The number of units used (e.g., days or hours) when an Incentives or Disincentives is charged against a Contract.
(Date) Begin	This is the date that the Incentive or Disincentive started for the milestone. This field is required. The date entered must be earlier or equal to than the 'End' date field.
(Time) Begin	This is the time that the Incentive or Disincentive started for the milestone. This field is required, if it's an hour type milestone. The time entered must be earlier than the 'End' time field.
(Date) End	This is the date that the Incentive or Disincentive ended for the Contract. This field is required. The date entered must be later or equal to than the 'Begin' date field.
(Time) End	This is the time that the Incentive or Disincentive started for the milestone. This field is required, if it's an hour type milestone. The time entered must be later than the 'End' time field.
Rate Unit Type	The time unit (e.g., days, hours) associated with an Incentive or Disincentive for a milestone.
Rate Per Unit	The standard amount assessed per time unit (e.g., day or hours) for Incentive or Disincentive. Defaults to a transportation agency-defined amount based on the type of time charge (days or hours).
Adjmnt Amount	The amount of Incentive or Disincentive charged against a milestone. Formula: Nbr Of Units * Rate Per Unit
Date Created	The date on which the Incentives or Disincentives data was entered, or on which the automatic Incentives or Disincentives were calculated.
(Bid) Days	The original number of days for the milestone. This field only applies to 'day' type milestones..

Field Name	Description
(Bid) Hours	The original number of hours for the milestone. This field only applies to 'hour' type milestones.
(Adjmnt) Days	The number of days the milestone has been extended or reduced through change orders.
(Adjmnt) Hours	These are the number of hours the milestone has been extended or reduced through change orders.
(Tot Charged) Days	Number of days the Contractor worked on a milestone, as noted in approved dailies. This field only applies to 'day' milestones.
(Tot Charged) Hours	Number of hours the Contractor worked on a milestone, as noted in approved dailies. This field only applies to 'hour' milestones.
(Current) Days	This is the number of days remaining for the milestone before it is completed. This field only applies to 'day' milestones. Formula: Bid Days + Adjmnt Days - Tot Charged Days
(Current) Hours	This is the number of hours remaining for the milestone before it is completed. This field only applies to 'hour' milestones. Formula: Bid Hours + Adjmnt Hours - Tot Charged Hours
Remarks	The full remark attached to the Incentive or Disincentive record..

Table 10-16 The Milestone Incentive/Disincentive Fields Table

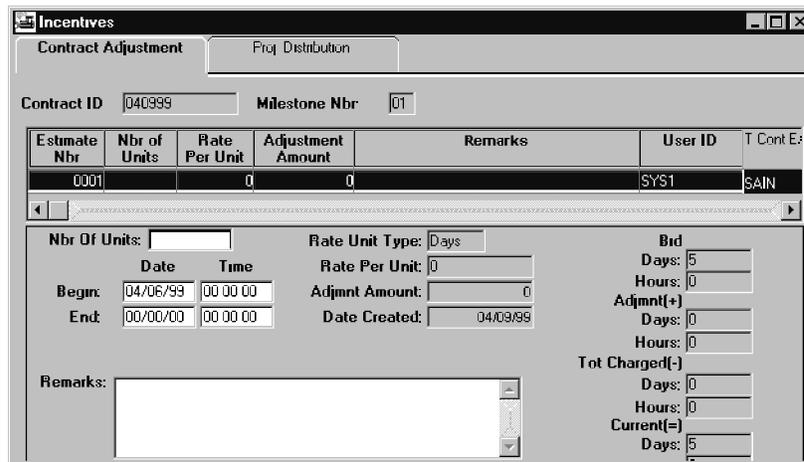


Figure 10-23 The Incentive Window’s Contract Adjustments Folder Tab

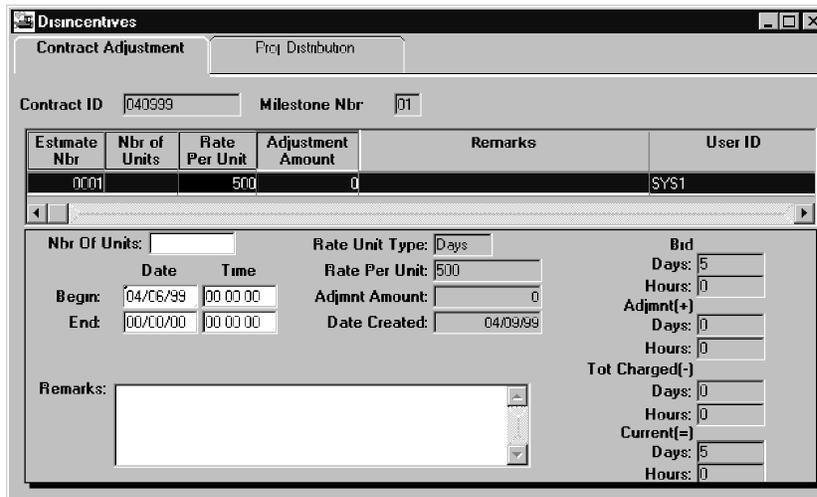


Figure 10-24 The Disincentives Window Contract Adjustments Folder Tab

To modify an incentive or disincentive for a contract adjustment milestone:

1. On the Milestone Adjustments panel, double-click the Incentives or Disincentives icon.
2. In the list box, scroll to and double-click the desired Contract.
3. In the list box, scroll to and click the desired Milestone.
4. Click Ok.
5. In the list box, scroll to and click the desired record.
6. Click the Proj Distribution folder tab.
7. Modify the incentive or disincentive as appropriate.
8. When complete, click the Save button.

To add an incentive or disincentive for a contract adjustment milestone:

1. On the **Milestone Adjustments** panel, double-click the **Incentives** or **Disincentives** icon.
2. In the list box, scroll to and double-click the desired Contract.
3. In the list box, scroll to and click the desired Milestone.
4. Click **Ok**.
5. Click the **New** button.
6. In the **Nbr of Units** field, type the correct value.
7. Press the **Tab** key.
8. In the **Begin Date** field, type the correct value.
9. Press the **Tab** key.
10. If an hourly milestone unit in the **Begin Time** field, type the correct value.
11. Press the **Tab** key.
12. In the **End Date** field, type the correct value.
13. Press the **Tab** key.
14. If an hourly milestone unit in the **End Time** field, type the correct value.
15. Click the **Remarks** button.
16. Type your comment.
17. Click **Ok**.
18. When complete, click the **Save** button.
19. When complete, click the **Save** button.

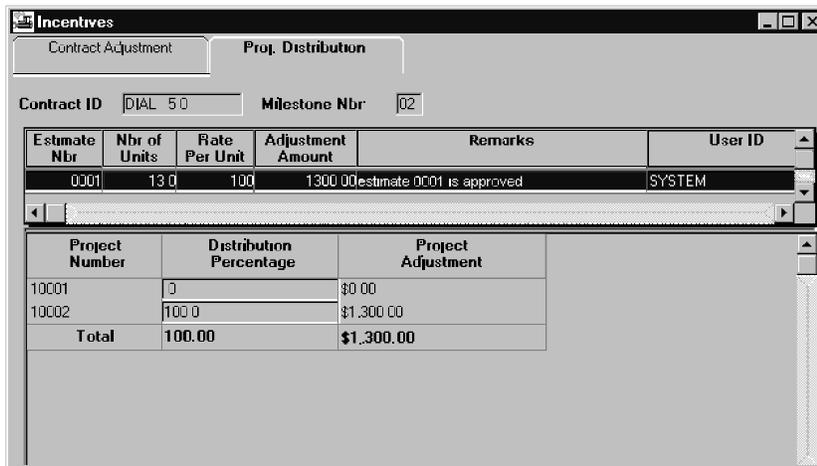


Figure 10-25 The Incentive Window's Project Distribution Folder Tab

Contract Adjustment	Proj. Distribution									
Contract ID: <input type="text" value="CENT-B"/> Milestone Nbr: <input type="text" value="02"/>										
<table border="1"><thead><tr><th>Estimate Nbr</th><th>Nbr of Units</th><th>Rate Per Unit</th><th>Adjustment Amount</th><th>Remarks</th><th>User ID</th></tr></thead><tbody></tbody></table>	Estimate Nbr	Nbr of Units	Rate Per Unit	Adjustment Amount	Remarks	User ID	<table border="1"><thead><tr><th>Project Number</th><th>Distribution Percentage</th><th>Project Adjustment</th></tr></thead><tbody></tbody></table>	Project Number	Distribution Percentage	Project Adjustment
Estimate Nbr	Nbr of Units	Rate Per Unit	Adjustment Amount	Remarks	User ID					
Project Number	Distribution Percentage	Project Adjustment								

Figure 10-26 The Disincentives Window's Project Distribution Folder Tab

To modify the project distribution of an incentive or disincentive for a milestone:

1. On the Milestone Adjustments panel, double-click the Incentives or Disincentives icon.
2. In the list box, scroll to and double-click the desired Contract.
3. In the list box, scroll to and click the desired Milestone.
4. Click Ok.
5. In the list box, scroll to and click the desired record.
6. Click the Proj Distribution folder tab.
7. Modify the project distribution of the incentive or disincentive as appropriate.
8. When complete, click the Save button.

To add an incentive or disincentive for a contract adjustment milestone:

1. On the Milestone Adjustments panel, double-click the Incentives or Disincentives icon.
2. In the list box, scroll to and double-click the desired Contract.
3. In the list box, scroll to and click the desired Milestone.
4. Click Ok.
5. In the list box, scroll to and click the desired record.
6. Click the Proj Distribution folder tab.
7. Modify the project distribution of the incentive or disincentive as appropriate.
8. When complete, click the Save button.

10.3.7.3 Item Adjustments

SiteManager allows item adjustments to Contract Line Items that will be reflected in the final payable amount for the estimate.

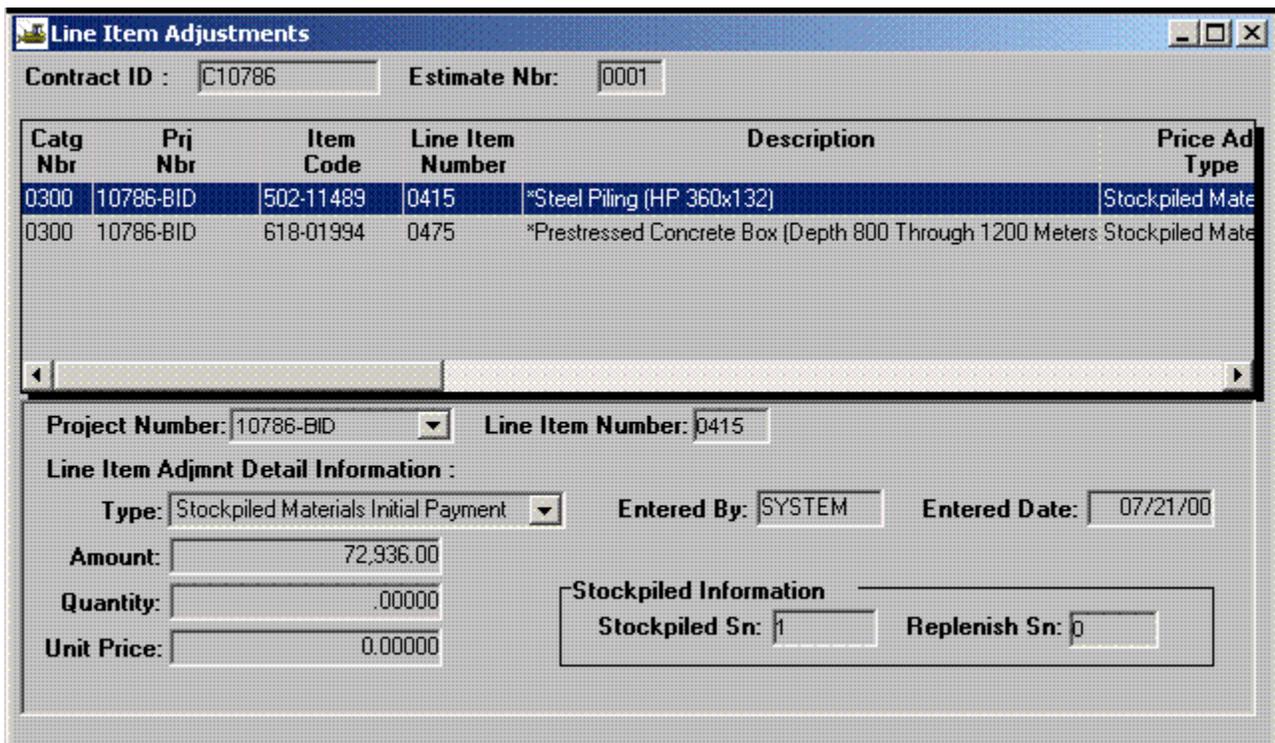


Figure 10-27 The Line Item Adjustments Window

10.3.7.3.1 Line Item Adjustments

The Line Item Adjustments window allows the user to add, modify or inquire about the Line Item Adjustments for an Estimate. The top portion of the window displays all the Estimate Line Items for existing adjustments. The bottom portion of the window displays associated adjustment information. As with Contract Adjustments, the user can add modify, or delete manually entered Line Item Adjustments, but can only view system-generated adjustments.

The Contract Line Item Adjustment Amount is entered only when unit price and quantity are both blank. A cross edit verifies the either Unit Price and Quantity are entered or the Adjustment Amount is entered, but not both sets of fields. The default Line Item Adjustment Date is the current date. The user can only change the date to a past date.

Withholding Payment as a Line Item Adjustment

The Materials Sampling and Testing Requirements function of SiteManager defines the frequency at which samples of a line item's material must be taken. If a deficiency in samples is calculated, there will be a system-generated line item adjustment reducing the paid quantity to match the authorized (not Fail or Void) Sample/Contract Item quantity.

For example: For Pay Period 1 – Authorized DWR Work Item 123-1234 quantity = 100 units, Authorized Sample/Contract Item 123-1234 quantity = 60 units. Line Item Adjustment for item 123-1234 would equal – 40 units * contract price).

Releasing Retained Payment as a Line Item Adjustment

If there was a previous line item adjustment reducing payable quantity and there are now sufficient authorized Sample quantities, there will be a system-generated line item adjustment returning the previously withheld amount, up to the total authorized Sample/Contract Item quantity.

For example: For Pay Period 2 – Authorized DWR Work Item 123-1234 quantity = 10 units (total to date = 110). Authorized Sample/Contract Item 123-1234 quantity = 60 units (total to date = 120) Line item adjustment for item 123-1234 = +40 units * contract price (balance = 0) OR Authorized DWR Work Item 123-1234 quantity = 10 units (total to date = 110) Authorized Sample/Contract Item 123-1234 quantity = 40 units (total to date = 100) Line item adjustment for item 123-1234 = +30 units * contract price (balance = -10)

If the option to make adjustments on items is unchecked subsequent estimate generation will effectively release withheld amounts by countering any negative amount with an adjustment to bring the withheld payments to zero.

Field Name	Description
Category	Project Category
Project Nbr	Project number of the Line Item Adjustment.
Item Code	Item code for the Line Item

Field Name	Description
Line Item Nbr	Line Item Number for the Item within the Project.
Description	Short Description of the Item.
Supp Description 1	This field contains a textual description that is supplemental to the item's description and may be required by the transportation agency.
Supp Description 2	This field contains a secondary textual description that is supplemental to the item's description and may be required by the transportation agency.
Price Adj. Type	Type of Price Adjustment applicable for the Line Item.
Line Item Adjustment Detail Information	
Type	Type Of Line Item Adjustment. Required field.
Amount	Amount that the line item is being adjusted.
Quantity	Quantity of the item adjusted.
Unit Price	Unit price of the line item.
Entered By	User ID of the person entering or modifying the Line Item Adjustment.
Entered Date	Date on which this adjustment was entered or modified. Required field.
Stockpiled Information	
Stockpile Sn	The stockpile material sequence number that SiteManager assigns to stockpiled material records on the Maintain Stockpiled Materials window. This

Field Name	Description
	is a protected field.
Replenish Sn	The replenishment sequence number that SiteManager assigns to Replenishment stockpile records on the Maintain Stockpiled Materials window. This is a protected field.

Table 10-17 The Line Item Adjustment Fields Table

To add a line item adjustment:

1. On the Contractor Payments panel, double-click the Contract Adjustments icon.
2. Double-click the Line Item Adjustments icon.
3. In the list box, scroll to and double-click the desired Contract.
4. In the list box, scroll to and click the desired Estimate.
5. Click Ok.
6. If appropriate In the Project Number drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
7. In the Line Item Adjustment Type drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
8. Press the Tab key.
9. In the Contract Line Item Adjmnt Amt field, type the correct value. 
10. Press the Tab key.
11. In the Line Item Adjmnt Entered Date field, type the correct value. 
12. Press the Tab key.
13. In the Adjustment Quantity field, type the correct value.
14. Press the **Tab** key.

 The Contract Line Item Adjmnt Amount can be entered only when Unit Price and Quantity both are blank. There will be a cross edit to check that either Unit Price and Quantity are entered or Contract Line Item Adjmnt Amount is entered, not both the sets of fields.

 The Line Item Adjmnt Entered Date will default to the current date. It can only be changed to a past date if required.

15. In the **Unit Price** field, type the correct value.

16. Press the **Tab** key.

17. When complete, click the **Save** button.

To modify a line item adjustment:

1. On the Contractor Payments panel, double-click the Contract Adjustments icon.
2. Double-click the Line Item Adjustments icon.
3. In the list box, scroll to and double-click the desired Contract.
4. In the list box, scroll to and click the desired Estimate.
5. Click Ok.
6. In the list box, scroll to and click the desired Line Item record.
7. Modify the line item as appropriate.
8. When complete, click the Save button.

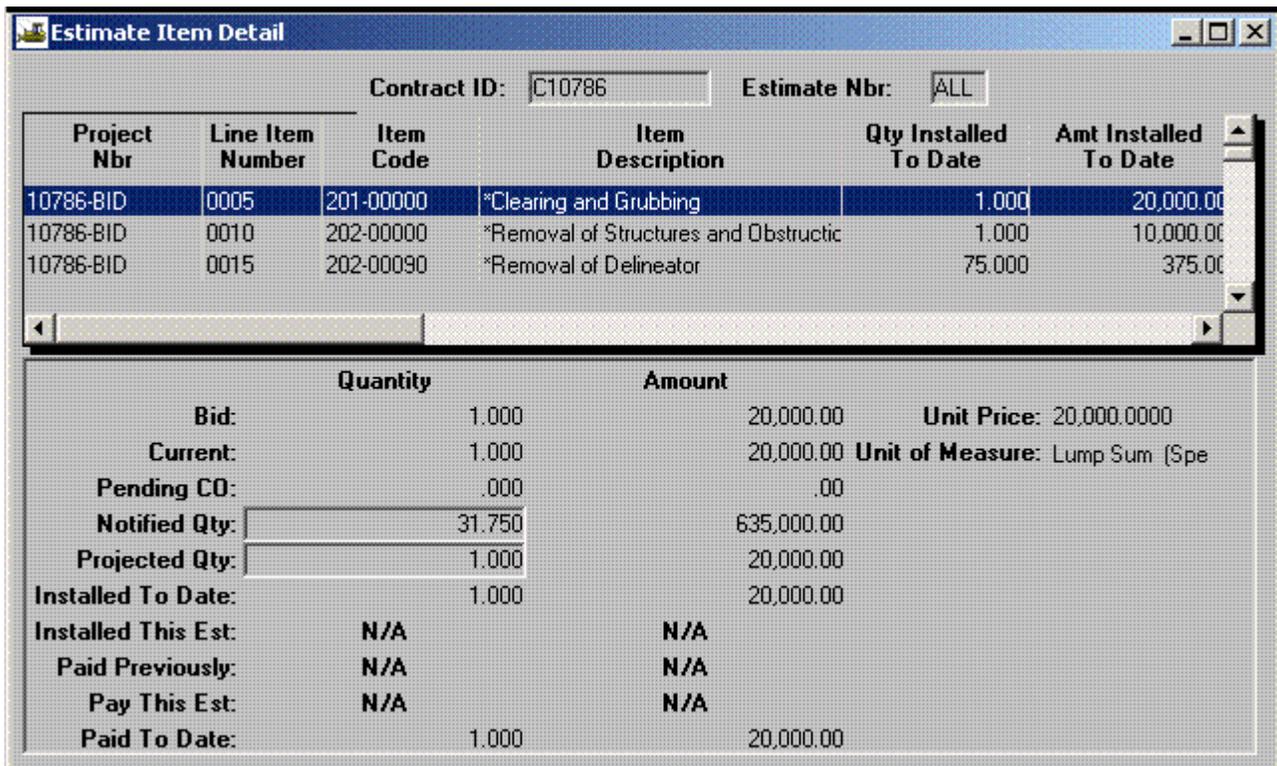


Figure 10-28 The Estimate Item Detail Window

10.3.7.3.2 Estimate Item Detail

The Estimate Item window displays the Item quantities from approved Daily Work Reports. For the current unapproved Estimate, this window allows the adjustment of selected Item quantity fields.

This Estimate Item window provides for the current status of Estimate Items and update capability in adjusting the payment of an item and specific installed quantity notification. The user may add the following Estimate Item information:

- Notified Qty,
- Projected Qty, and
- Pay This Est.

If a Pay This Est. amount is modified, a Line Item Adjustment will be created for the difference in the payable amount. While in this window, the user navigates to the Estimate Item's Paybook by selecting the Service menu's Paybook choice which would display all the Item's payment history.

Field Name	Description
Line Item Nbr	The Contract Line Item number that identifies each Item as it appears on the Contract for both all bid Items assigned by the pre-construction function and for all Items added to the Contract after construction begins by the user.
Item Code	An transportation agency-defined code used to identify a particular Item.
Item Description	The short description for the Item Code.
Supplemental Description 1	This field contains a textual description that is supplemental to the item's description and may be required by the transportation agency.
Supplemental Description 2	This field contains a secondary textual description that is supplemental to the item's description and may be required by the transportation agency.
Quantity Installed This Est.	Installed quantity for the selected Line Item Nbr for the current open Estimate .
Quantity Paid This Est.	The amount paid for the installed quantity for the current open Estimate. Formula: Qty Paid This Est = Item Unit Price * Installed Qty This Est

Field Name	Description
Bid (Quantity)	The bid quantity for the selected Line Item.
Bid (Amount)	The bid amount for the selected Line Item. Formula: Bid Amount = Item Unit Price * Bid Quantity
Current (Quantity)	The quantity resulting from the addition of the Bid Quantity plus the Net Change Order Quantity for the Line Item selected.
Current (Amount)	The current dollar value of the calculated Current Quantity. Formula: Current Amount = Item Unit Price * Current Qty
Pending CO (Quantity)	The Net Pending Quantity for the Line Item selected from the unapproved Change Orders.
Pending CO (Amount)	The current dollar value of the calculated Pending Quantity. Formula: Pending Amount = Item Unit Price * Pending Qty
Notified Qty (Quantity)	Notification Quantity threshold. If the installed Quantity is equal or greater than 'Notified Qty', then the project manager is notified
Notified Qty (Amount)	The dollar value for the notified quantity. Formula: Notified Amount = Item Unit Price * Notified Qty
Projected Qty (Quantity)	The anticipated number of units installed at the completion of the Contract. Formula: Proj. Qty = Current Qty + Pending Qty
Projected Qty (Amount)	The dollar value for the notified quantity from above. Formula: Proj. Amount = Item Unit Price * Projected Qty
Material Discrepancy	Indicates a material management deficiency exists for the item.

Field Name	Description
Installed To Date (Quantity)	The total units installed for the Line Item to date. This quantity includes the units installed for the current open Estimate.
Installed To Date (Amount)	The dollar value for the Installed To Date Quantity. Formula: Inst To Date Amount = Item Unit Price * Installed To Date Qty
Installed This Est (Quantity)	This is the total units installed for the Line Item for the current open Estimate. When viewing all Items for the Contract this field is not applicable.
Installed This Est (Amount)	The dollar value for the Installed This Est. Quantity. When viewing all Items for the Contract this field is not applicable. Formula: Ins This Est Amount = Item Unit Price * Ins This Est Qty
Paid Previously (Quantity)	The total units installed that have been paid for the line item. When viewing all items for the Contract this field is not applicable.
Paid Previously (Amount)	The dollar value for the Paid Previously Quantity. When viewing all Items for the Contract this field is not applicable. Formula: Paid Prev Amount = Item Unit Price * Paid Prev Qty
Pay This Est (Quantity)	The number of units installed for the Line Item on the current open Estimate to be paid. The default value for this field is the installed quantity during the current open Estimate period. When viewing all Items for the Contract this field is not applicable.
Pay This Est (Amount)	The dollar value for the Pay This Est. Quantity. When viewing all Items for the Contract this field is not applicable. Formula: Pay This Est Amount = Item Unit Price * Pay This Est Qty
Paid To Date (Quantity)	The total number units that has been paid to date for the Line Item.
Paid To Date (Amount)	The dollar value for the Paid To Date Quantity. Formula: Paid To Date Amount = Item Unit Price * Pay To Date Qty

Field Name	Description
Quantity Authorized to Date	The total of all reported quantities on DWRs that are authorized. Installed Quantity from t_cont_item table + sum of all installed quantity for which there are authorized date values but not an estimate number
Quantity Reported to Date	The total number of units reported as installed to date for the Line Item.

Table 10-18 The Estimate Item Fields Table

To modify an Estimate item:

1. On the **Estimate** panel, double-click the **Estimate Item Detail** icon.
2. In the list box, scroll to and click the desired Contract.
3. Click **Ok**.
4. Click the **Service** menu and click the **View Estimate** choice.
5. In the **Notified Quantity** field, type the correct value. 
6. Press the **Tab** key.
7. In the **Projected Quantify** field, type the correct value. 
8. Press the **Tab** key.
9. In the **Pay This Est** field, type the correct value. 
10. When complete, click the **Save** button.

10.3.7.3.3 Estimate Item Paybook — Inquiry

This Estimate Item Paybook is an inquiry only window showing the payment history for a Contract Item. The Item payment history displays in reverse chronological order meaning the current Estimate Item displays on the first row. Thus, it is possible that the first row is not yet paid. Whether the first row is paid or not can be

-
-  The Notified Quantity field’s default value is equal to the Current Quantity. When updated, the valid value for this field must be at least greater than the installed quantity.
 -  The Projected Quantity field’s default value is the Current Qty + Pending Qty. This field can be updated to zero quantity if no quantity has been installed for the line item.
 -  The Pay This Est field may be any numeric value that is less than the quantity installed for the Estimate. If this is modified, a Line Item adjustment record will be created for the quantity adjustment.

Estimate Generation

determined by the Reviewer User ID. If the Reviewer User ID is the final reviewer, then the Item is sent in the current Estimate for payment.

Field Name	Description
Category	Project Category
Project Number	Project number of the Line Item Adjustment
Item Code	Item code for the Line Item
Supp Description 1	This field contains a textual description that is supplemental to the item's description and may be required by the transportation agency.
Supp Description 2	This field contains a secondary textual description that is supplemental to the item's description and may be required by the transportation agency.
Line Item Nbr	Line Item Number for the Item within the Project
Unit Price	Unit price of the Line Item
Unit Type	Unit type for the Item
Bid Quantity	Bid Quantity for the Item
Bid Quantity	Bid Quantity for the Item
Current Quantity	Total quantity for the Item Formula Bid Quantity + Change Order Quantity
Estimate Number	Project number of the Line Item Adjustment
Period End Date	Period End Date for the Estimate
Reviewer User ID	User ID of the last reviewer of the Estimate

Field Name	Description
Approval Date	Date the last approval took place
Total Amount	Total amount for the Item in the Estimate
Adjmnt (+)	Sum of Positive adjustment amounts for the Line Item
Adjmnt (-)	Sum of Negative adjustment amounts for the Line Item

Table 10-19 The Estimate Item Paybook Fields Table

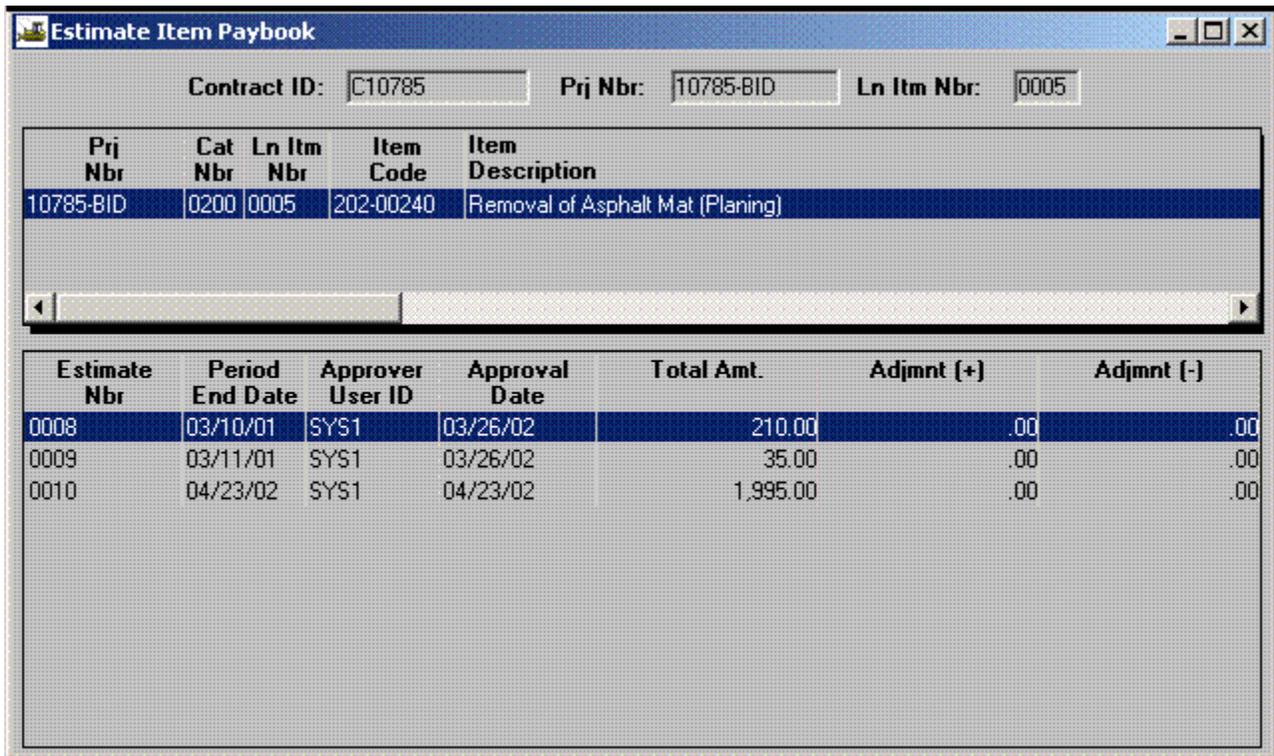


Figure 10-29 The Estimate Item Paybook Window

Estimate Generation

To access the payment history of a Contract item:

1. On the **Contractor Payments (+)** panel, double-click the **Estimate (+)** icon.
2. On the **Estimate (+)** panel, double-click the **Estimate Item Paybook** icon.
3. In the list box, scroll to and double-click the desired Contract.
4. In the list box, scroll to and click the desired Line Item.
5. Click **Ok**.

10.3.8 Estimate Approval, Rejection, and Tracking

SiteManager allows the user to approve, reject, and track Estimates.

10.3.8.1 Estimate Approval

This Estimate Approval window allows the authorized reviewers to approve all Estimate types —progress, final, or supplemental. The approval process provides an audit trail and prepares the Estimate for the creation of the extract file that can be used by the transportation agency's financial system. The approval process is conducted by a chain of approvals established during SiteManager installation or at Contract setup. Each approval level corresponds to a user group within SiteManager. The Estimate is approved starting with the first level, the Project Manager, and completing with the last reviewer who indicates that the Estimate is ready for payment.[☑] Once the last approval level has approved the Estimate, a generic file layout will be created which contains all payment information required by the transportation agency's financial system and available on SiteManager.

The approval of an Estimate has three major stages during its life cycle:

Initial Approval Level

During this approval level, the Estimate can only be approved by a limited group of users; more specifically, the person who generated the Estimate or a person from the same user group as the owner of the Estimate with equivalent Contract rights. Additionally, the process will perform the following discrepancy logic:

- 1) If the user is approving a progress Estimate, then any remaining discrepancies must be in an override status. Otherwise, they will receive an In-Box message indicating that unresolved discrepancies exist. At this time the user can choose to continue with the approval or terminate the process.
- 2) If the user is approving a final Estimate and discrepancies exist (in either an overridden or unresolved status), then the user will receive an error message and the approval process will terminate.
- 3) If the user is approving a supplemental Estimate, then discrepancies will not exist.

If approval is given at this stage, all information regarding this Estimate is frozen and an In-Box message is sent to all the reviewers in the next approval level (indicating the need for another approval). Estimate status is cleared from pending approval to initial approval.

[☑] SiteManager allows a maximum of 5 levels of approval with the fifth level as the last approval level.

Intermediate Approval Level(s)

During this approval level, no edits are done to the Estimate information, only the approval of the reviewer from this level is necessary. Once an approval is made at this stage an In-Box message is sent to all the reviewers of the next approval level. The reviewer can reject the Estimate at this stage using the Estimate Rejection window. Estimate status remain as initial approval.

Final Approval Level

During this approval level the following processes are executed:

- 1) Quantity Totals, Estimate to Approved for Payment Status, Daily Work Report's Paid Indicator, Estimate Total Amounts, Training information, and other Estimate specific information are updated.
- 2) An ASCII sequential extract file is generated/updated that contains Estimate information records to be used by the transportation agency's accounting system.
- 3) At this stage, the reviewer can also reject the Estimate using the Estimate Rejection window.

While in this window, only the 'Approved' field accepts entry to indicate approval. If the user is not the initiator of the Estimate and wishes to approve all level between them and the initiators level, they must mark the levels all inclusive. Once the user saves the data, the system will perform the approvals for all the approved levels.

Discrepancy Processing

During the process of Estimate approval, SiteManager evaluates the status of all discrepancies during the first level of approval. The following topics describe how discrepancies are processed:

Progress Estimate

During the first level of approval, SiteManager will check if discrepancies exist for a progress Estimate. If unresolved discrepancies are found, the user is shown a message box giving them the option on whether they wish to continue the approval or not. If the user chooses to continue, then the approval process will continue; otherwise, it is terminated.

Final Estimate:

During the first level of approval, SiteManager will check if discrepancies exist for a final Estimate. If unresolved or overridden discrepancies are found, the user is shown a message box stating that the system cannot continue until all discrepancies have been resolved. The approval process is terminated.

Information regarding an Estimate is updated only if the Estimate has not been approved by any of the approval levels. The first level of approval is allowed only by the user who generated the Estimate or a user that belongs to the same group as the user who generated the Estimate as long as they have Contract update authority. If a user belongs to a user group that is designated for one of the Estimate approval levels, then that user can approve any unapproved levels that are of a lower level up to the user's group level (excluding the first level). See following example.

Example Levels of approval: 5 levels (1 to 5 with 1 being the first level of Estimate approval)

The screenshot shows a window titled "Estimate Approve". At the top, there are fields for "Contract ID" (040999), "Estimate Nbr" (0001), "Generated By" (SYS1), "On" (04/09/99), a time field (09 44 26 13000), and "Type" (PRD G). Below this is a section titled "Approval Levels" containing two rows:

Approval Level	Checked	Date	Time	User
Project Manager	<input checked="" type="checkbox"/>	04/09/99	17 32 11	SYS1
District Con. Engineer	<input type="checkbox"/>	00/00/00	00 00 00	

Figure 10-30 Approval Example

A user with an Auditor, District Manager, or Central Office Manager rights is allowed to approve the next level, level 2, as long as the user has update capability on the Contract. Therefore, any user that belongs to a group from any of the unapproved levels can approve the next available approval level.

Since level one has been approved by the Project Manager, any user with Project Manager rights that has update capability cannot *unapprove* the level 1 approval. NOTE: An approved Estimate, no matter the approval level given, is not available for update; only viewing is allowed.

In the Example:

- a) If a user has Director rights, then that user can approve levels 3, 4, and 5 (their own level).
- b) If a user has a Central Office Manager rights, then that user can only approve levels 3 and 4 (their own level).
- c) If a user has a District Manager rights, then that user can only approve level 3 (only their own level).

Therefore, a user who belongs to an approval level group can approve any level lower than their own approval level; except for the first level.

Once the Estimate has been approved by the user, a In-Box message is automatically sent to the next level of reviewer(s) stating that the Estimate is ready for the next level of approval.

If an Estimate has final approval, the following information is updated:

1. The Estimate status is updated to *paid* in Contract Estimate Table.
2. Quantity Paid To Date and Quantity Installed To Date are updated in Contract Item.
3. Current Paid Amount and Quantity are updated in Contract Estimate Item.
4. Paid indicator is updated to 'paid' in DWR
5. Total and Previous Training Hours Paid are updated in Contract.

If an Estimate has been given final approval, the following logic performed.

If the Estimate is the first Estimate, a sequential ASCII file containing information regarding the Estimate is created. The information in this file is used by the individual transportation agency’s using SiteManager as an input to their accounting system. This file is generic and does not adhere to any particular transportation agency’s accounting system. The process of extracting records from this file is the responsibility of each transportation agency.

NOTE: If a financial file already exists, the information will be appended to the existing file.

The sequential file created during final approval contains three different record types. [Ⓜ] The fields in a record are separated by a comma (comma delimited) for all record types. The layouts of the files are documented in the following tables:

Field Name	Type	Length	Description
RECORD_TYPE	A	2	The type of the record. [Ⓜ]
CONT_ID	A	15	The ID for the Contract.
EST_NBR	A	4	System-generated, sequential number assigned to each draft Estimate during the Estimate generation process.
VENDOR_ID	A	14	The ID for the Vendor
CO_NM	A	50	Name identifier of company.
ADDR_LN1	A	40	Identifies the first line of an address.
ADDR_LN2	A	40	Identifies a second line of an address.
ADDR_LN3	A	40	Identifies a third line of an address.
CITY_NM	A	40	Identifies the city for an address.
ST_PRVCE	A	2	Identifies the state or province of an address.

[Ⓜ] Record Types : ES = Estimate, PJ = Project, and LI = Line Item.

[Ⓜ] Record Types : ES = Estimate, PJ = Project, and LI = Line Item.

Estimate Generation

Field Name	Type	Length	Description
POSTAL_CD	A	10	Identifies the postal code of an address.
CNTRY_NM_T	A	20	Identifies the country of an address.
PH_NBR	A	13	Identifies the telephone number of the address.
PH_EXT	A	5	Identifies an telephone extension of an address.
FAX_NBR	A	13	Identifies the FAX number of an address.
ESCROW_AGENT	A	50	Full name of the Escrow Agent.
SURETY_CO	A	50	Full name of the Surety CO.
BID_CONT_AMT	N	13	The amount of the bid of the Contractor awarded the job.
CUR_CONT_AMT	N	13	The total of BID_CONT_AMT * NET Change C.O.
PCT_CONT_CMPLT	N	13	The percent of the Contract completed. Total amount installed divided by CUR_CONT_AMT.
CONT_FUNDS_AVAIL	N	13	The amount of funds available to the Contract. Calculated by CUR_CONT_AMT - Total Amount Installed.
CUR_AMT_PD	N	13	Amount paid for this Estimate.
CUR_ESCR_AMT	N	13	Escrow amount for this Estimate.

Field Name	Type	Length	Description
CUR_SECUR_USED	N	13	Securities used for this Estimate.
CUR_CONT_ADJ_AMT	N	13	Contract adjustment amount for this Estimate.
PREV_TOT_AMT_PD	N	13	Total amounts paid for this line item previous to the current Estimate.
PREV_TOT_ESCR_AMT	N	13	Escrow amount previous to the current Estimate.
PREV_TOT_SECUR_USED	N	13	Securities used previous to date.
PREV_TOT_CONT_ADJ_AMT	N	13	Total Contract adjustment amount previous to the current Estimate.
PRD_BEG_DT	D	8	The begin date for the Estimate period. (mm/dd/yy)
PRD_END_DT	D	8	The end date for the Estimate period. (mm/dd/yy)

Table 10-20 The Estimate Record Field Details Table

Field Name	Type	Length	Description
RECORD_TYPE	A	2	The type of the record. [Ⓜ]
CONT_ID	A	15	The ID for the Contract.
EST_NBR	A	4	System-generated, sequential number assigned to each draft Estimate during the Estimate generation process.

[Ⓜ] Record Types : ES = Estimate, PJ = Project, and LI = Line Item.

Field Name	Type	Length	Description
PRJ_NBR	A	13	The unique identifier for the Project.
CUR_DISINC	N	13	Disincentives for this Estimate.
CUR_INC	N	13	Incentives for this Estimate.
CUR_LIQ_DAM	N	13	Liquidated damage amount for this Estimate.
CUR_NP_RETAIN	N	13	The amount of retainage, in this Estimate that is 'non-participating'.
CUR_OTH_ADJ	N	13	Other adjustments for this Estimate. These adjustments are line item adjustments.
CUR_PARTIC_RETAIN	N	13	The amount of retainage, in this Estimate that is 'participating'.
CUR_RETAIN_RLSE	N	13	The amount of retainage release by the system in this Estimate
CUR_PARTIC_AMT	N	13	The total amount installed in this Estimate that is 'participating'.
CUR_NP_AMT	N	13	The total amount installed in this Estimate that is 'non-participating'.
PREV_TOT_DISINC	N	13	Disincentives previous to this Estimate number.

Field Name	Type	Length	Description
PREV_TOT_INCENT	N	13	Incentives previous to this Estimate number.
PREV_TOT_LIQ_DAM	N	13	Liquidated damage amount previous to this Estimate.
PREV_TOT_NP_RETAIN	N	13	The amount of retainage, previous to this Estimate that is 'non-participating'.
PREV_TOT_OTH_ADJ	N	13	Other adjustments previous to this Estimate. These adjustments are line item adjustments.
PREV_TOT_P_RETAIN	N	13	The amount of retainage, previous to this Estimate that is 'participating'.
PREV_TOT_RETAIN_RLSE	N	13	The amount of retainage release by the system previous to this Estimate.
PREV_TOT_PARTIC_AMT	N	13	The total amount installed previous to this Estimate that is 'participating'.
PREV_TOT_NP_AMT	N	13	The total amount installed previous to this Estimate that is 'non-participating'.
FED_ST_PRJ_NBR	A	30	The federal or state project number for the Contract, project or category.

Table 10-21 The Project Record Field Details Table

Field Name	Type	Length	Description
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Estimate Generation

Field Name	Type	Length	Description
RECORD_TYPE	A	2	The type of the record. [Ⓜ]
CONT_ID	A	15	The ID for the Contract.
EST_NBR	A	4	System-generated, sequential number assigned to each draft Estimate during the Estimate generation process.
PRJ_NBR	A	13	The unique identifier for the project.
CATG_NBR	A	4	
LN_ITM_NBR	A	4	The Contract line item number which uniquely identifies each item as it appears on the Contract. For all bid items, assigned by the pre-construction function. For all items added to the Contract after construction begins, user entered.
ITEM_CD	A	13	A grouping of items assigned during pre-construction. Items can be grouped within categories for various reasons, primarily for funding.
CUR_INSTL_QTY	N	12	Installed quantity for this Estimate.
CUR_PD_AMT	N	13	The quantity of the item to be paid times the unit price of the item.
CUR_PD_QTY	N	12	The quantity of the item to be paid.

[Ⓜ] Record Types : ES = Estimate, PJ = Project, and LI = Line Item.

Field Name	Type	Length	Description
CUR_PARTIC_AMT	N	13	Amount allocated to this fund (participating) for this item in this Estimate period.
PREV_TOT_INSTL_QTY	N	12	Total installed quantities previous to this Estimate.
PREV_TOT_PAID_QTY	N	12	Total paid quantities previous to this Estimate
PREV_TOT_PAID_AMT	N	13	Total paid amount previous to this Estimate.
CUR_NP_AMT	N		Amount allocated to this fund (non-participating) for this itme in this estimate period.

Field Name	Type	Length	Description
FUND_SRC_CODE	A	6	Identifies a particular source of funding.
FUND_ACCTG_FUND_CD	A	9	An accounting department defined fund code.
FUND_DESC	A	40	Fund Code description.
FUND_PREFIX	A	10	An alternate name for the fund.
FUND_GROUP	A	6	Allows the ability to associate several different funds with the same fund group code.
FUND_CUR_AMT_USED	N	13	Amount used from this funding in this Estimate.

Field Name	Type	Length	Description
FUND_PREV_TOT_AMT_USED	N	13	Total amount used from this funding up to the previous Estimate.
FUND_CUR_LMT_AMT	N	13	The current dollar limit on funds for a Contract.
FUND_ORIG_LMT_AMT	N	13	The original dollar limit on funds for a Contract.
FUND_SRC_PARTIC_PCT	N	5	The percent of total amount in the project/category which will be provided by the funding source. (For example, many federal aid funding sources provide 80% of the funding for the project/category.)
FUND_ST_ACCTG_CD	C	10	transportation agency-defined code needed by financial system.
FUND_ST_FUND_CD	C	10	transportation agency-defined code needed by financial system.

Table 10-22 The Line Item Type Record Field Details Table

Field Name	Description
Generated By:	The User ID of the user that generated the selected Estimate number .
Generated On:	The date and time the selected Estimate number was generated.
Approved	The check-box field for each approval level.

Field Name	Description
Date	The date the reviewer for the corresponding approval level approved the Estimate. This field will have a value whenever the corresponding 'Approve' check box is checked by the authorized reviewer.
Time	The time the reviewer for the corresponding approval level approved the Estimate. This field will have a value whenever the corresponding 'Approve' check box is checked by the authorized reviewer.
User ID	The User ID of the reviewer that approved the corresponding approval level. This field will have a value whenever the corresponding 'Approve' check box is checked by the authorized reviewer.

Table 10-23 The Estimate Approval Fields Table



Figure 10-31 The Estimate Approval Window

To approve an Estimate:

1. On the **Estimate** panel, double-click the **Estimate Approval** icon.
2. In the list box, scroll to and double-click the desired Contract.
3. In the list box, scroll to and click the desired Estimate.
4. Click **Ok**.

Estimate Generation

5. Click the **Approved** check box (ON) for your level.
6. Click **Ok**.
7. Click the **Save** button.

10.3.8.2 Estimate Rejection

The **Estimate Rejection** window allows the authorized **Estimate reviewers to reject any Estimate type — progress, final, or supplemental**. The Estimate Rejection window provides the Estimate reviewers an option to disapprove an Estimate for whatever reason they see fit with the requirement of attaching a Remark documenting the reason for rejecting the Estimate. This Remark is attached to the Estimate and can be viewed through the Estimate Summary window. This Estimate Rejection window is accessible to only the reviewers whose level has not yet been approved and there exists a previous approval. Once the Estimate has been rejected by an reviewer, an In-Box message with the remarks attached is sent to all the previous approvers and all approval data — User ID, date and time, is deleted. At this point, the information regarding the Estimate is may be modified only by the first level reviewer, the Project Manager, or a user with equivalent rights. Once updates are completed, the Estimate must again go through the chain of approval levels starting with the first level up to the last level. Once an Estimate has been approved by the final reviewer the Estimate is frozen and cannot be rejected. Also, when the latest Estimate has not been approved by the first level of approval, the contract will not be available for selection. The first level of approval cannot reject an Estimate and an Estimate cannot be rejected until approved by the first level.

Figure 10-32 The Estimate Rejection Window

When the Save button is selected in the ‘Reject’ window, the following steps are executed:

- 1) An In-Box message with the remarks describing the reason for rejecting the Estimate is sent to all the previous reviewer(s) of the Estimate.
- 2) The Estimate status is updated to ‘Active’.
- 3) All Estimate approval information is deleted.

Once an Estimate approval level has approved an Estimate, that approval level cannot reject the Estimate. In the preceding example, the Auditor cannot reject the Estimate. Only users from level 3 (District Manager) and above (Central Office and Director) are allowed to reject the Estimate.

In the preceding example, if the Estimate has been approved by the Director (level 5), then the Estimate cannot be rejected. Thus, only Estimate without final approval can be rejected.

Field Name	Description
Generated By:	The ID of the user that generated the selected Estimate.
Generated On:	The date and time the selected Estimate was generated.
Approved	The check-box field that corresponds to each approval level. If a check-box is checked, it indicates that the corresponding approval has been approved.
Date	The date the reviewer for the corresponding approval level approved the Estimate. This field will have a value whenever the corresponding 'Approve' check box is checked by the authorized reviewer.
Time	The time the reviewer for the corresponding approval level approved the Estimate. This field will have a value whenever the corresponding 'Approve' check box is checked by the authorized reviewer.
User ID	The User ID of the reviewer that approved the corresponding approval level. This field will have a value whenever the corresponding 'Approve' check box is checked by the authorized reviewer.
Remarks	Documents the reason(s) that the Estimate is being rejected. The Remarks are attached to the In-Box message sent to the previous reviewers.

Table 10-24 The Estimate Rejection Fields Table

Estimate Generation

To reject an Estimate:

1. On the **Estimate** panel, Double-click the **Estimate Rejection** icon.
2. In the list box, scroll to and double-click the desired Contract.
3. In the list box, scroll to and click the desired Estimate.
4. Click **Ok**.
5. Type the reason for the rejection.
6. Click the **Save** button.
7. When complete, click the **Close** button.

10.3.8.3 Estimate Tracking

The Estimate Tracking window is an inquiry only window that allow the tracking of an Estimate generation, approval, and rejection.

Field Name	Description
(Generated) Date	The date when the Estimate was generated.
(Generated) Time	The time when the Estimate was generated.
(Generated) User ID	The User ID of the person that generated the Estimate.
(Level 1) Date	The date when the Estimate was approved by the corresponding level.
(Level 1) Time	The time when the Estimate was approved by the corresponding level.
(Level 1) User ID	The User ID of the reviewer of the corresponding level.
(Level 2) Date	The date when the Estimate was approved by the corresponding level.
(Level 2) Time	The time when the Estimate was approved by the corresponding level.

Field Name	Description
(Level 2) User ID	The User ID of the reviewer of the corresponding level.
(Level 3) Date	The date when the Estimate was approved by the corresponding level.
(Level 3) Time	The time when the Estimate was approved by the corresponding level.
(Level 3) User ID	The User ID of the reviewer of the corresponding level.
(Level 4) Date	The date when the Estimate was approved by the corresponding level.
(Level 4) Time	The time when the Estimate was approved by the corresponding level.
(Level 4) User ID	The User ID of the reviewer of the corresponding level.
(Level 5) Date	The date when the Estimate was approved by the corresponding level.
(Level 5) Time	The time when the Estimate was approved by the corresponding level.
(Level 5) User ID	The User ID of the reviewer of the corresponding level.

Table 10-25 The Estimate Tracking Fields Table

Note: The levels of Estimate approval given in the table are for four levels of Estimate approval. SiteManager requires at least one level of approval and allows a maximum of five levels. Thus, this window and associated data fields are dynamically adjusted to the number of required Estimate approvals of a Contract which is set up in the Contract or the installation of SiteManager.

The screenshot shows a window titled "Estimate Tracking". At the top, there are two input fields: "Contract ID:" with the value "BID-S-1-F-0145" and "Estimate Nbr:" with the value "0001". Below these fields is a table with three columns: "Date", "Time", and "User ID". The table contains two rows of data:

	Date	Time	User ID
Generated	04/29/99	11:31:08	\$SYS1
Project Manager	04/29/99	12:37:35	\$SYS1

Figure 10-33 The Estimate Tracking Window

To track an Estimate:

1. On the main panel, double-click the **Contractor Payments** icon.
2. On the **Contractor Payments** panel, double click the **Estimates** icon.
3. On the **Estimate** panel, double-click the **Estimate Tracking** icon.
4. In the list box, scroll to and double-click the desired Contract.
5. In the list box, scroll to and click the desired Estimate.
6. Click **Ok**.

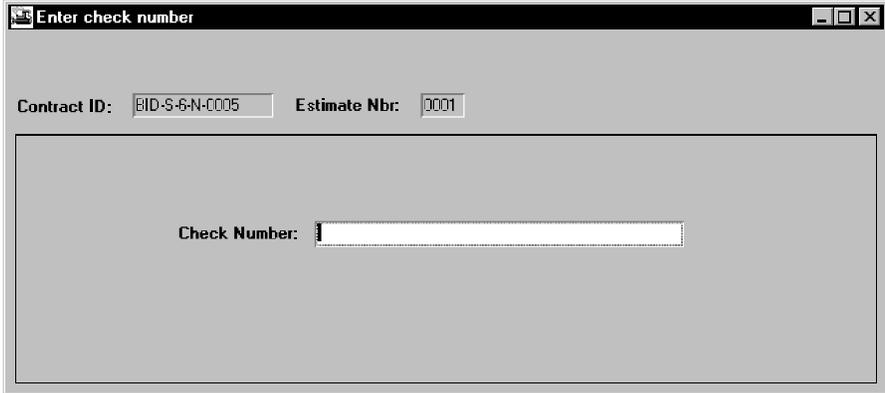
To select a new contract and estimate in the Estimate Tracking window

1. Click the **Open** button and select a different contract and estimate.

10.3.8.4 Enter Check Number

This Enter Check Number enables the user to enter the check number for a specific Contract Estimate. The Check Number can be entered, modified, and removed only when all of the following conditions are satisfied:

- 1) The Global option to enter Check Number is present and
- 2) The Estimate for which the check number to be entered has passed the final approval.



The screenshot shows a window titled "Enter check number". At the top, there are two input fields: "Contract ID:" containing the text "BID-S-6-N-0005" and "Estimate Nbr:" containing the text "0001". Below these fields is a larger, empty input field labeled "Check Number:".

Figure 10-34 The Enter Check Number Window

To enter a check number:

1. On the main panel, double-click the **Contractor Payments** icon.
2. On the **Contractor Payments** panel, double click the **Estimates** icon.
3. On the **Estimate** panel, double-click the **Enter Check Number** icon.
4. In the list box, scroll to and double-click the desired Contract.
5. In the list box, scroll to and click the desired Estimate.
6. Click **Ok**.
7. Type the check number.
8. Click the **Save** button.

10.3.8.5 Contractor Payment Approval Levels

The Contractor Payment Approval Levels reference table allows approval authority to be modified for individual Contracts. The actual setting up of the user groups (up to five) and the definition of what users are in each group is addressed by the System Administration function. The Contractor Payment Approval Levels merely allows the assignment of approval levels within the predefined groups for a specific Contract.

10.4 Reports (Contractor Payments)

The Reports (CP) panel generates commonly used Contractor Payments reports. The following report topics are available on this panel:

- Summary by Project,
- Summary by Funding,
- Estimate Activity Log,
- Installed Work Report
- Work Suspend/Resume Times, and
- View Saved Reports (PSR)

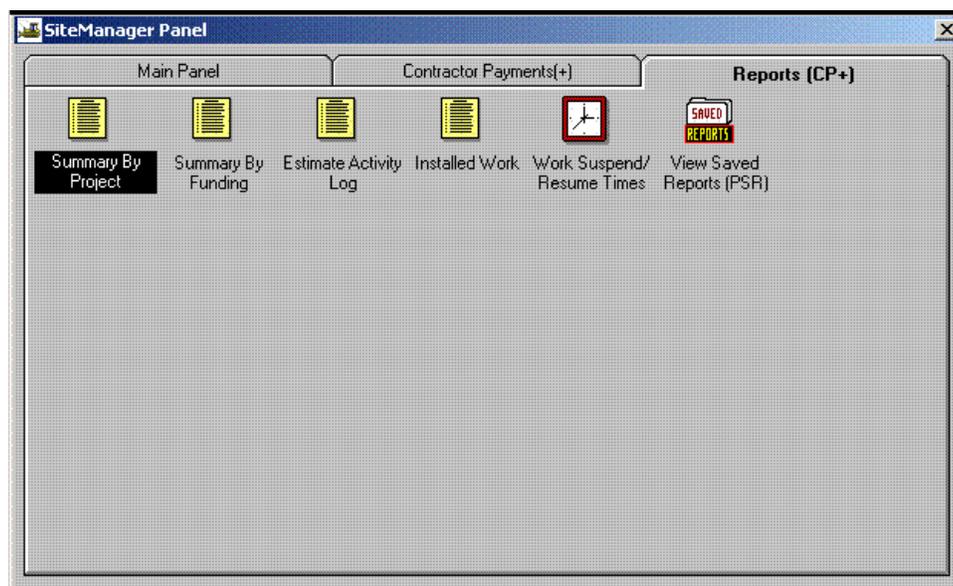


Figure 10-35 The Reports (CP) Panel

To access Contractor Payment Reports:

1. On the **Contractor Payments** panel, double-click the **Reports (CP)** icon.
2. Double-click the icon for the desired report.

To generate a Contractor Payment Report: 

1. Double-click the desired report icon.
2. Select the desired report criteria (contract, estimate number, etc.).
3. Click **Ok**.

To generate a Contractor Payment Report to an off-line file: 

1. Double-click the desired report icon.
2. Select the desired report criteria (contract, estimate number, etc.).
3. Click the **Generate Off-line File** check box (ON).
4. Click **Ok**.

OR,

To generate and print the report off-line, click the **Generate Off-line Print** check box (ON).

1. Click **Ok**.

The Summary by Project Report is unique in that multiple reports may be generated in a batch print process.

To select reports to be printed:

1. On the Report Criteria window, click the **Generate Off-line Print** check box (ON).
2. To select multiple report criteria, highlight the desired criteria by holding down the shift and/or control keys and clicking the desired report criteria. The shift key allows an entire block of criteria to be selected, while the control key allows individual rows of criteria to be selected.
3. Click **Ok**.



Except where otherwise noted.



Except where otherwise noted.

10.4.1 Report Options

The report options are available as toolbar buttons or menu options for reports that have been generated online.

Components	Description
Close button	Closes the report preview.
Save button	In a simple report (see Save Reports section) invokes the Save dialog allowing the report to be saved in a .PSR file format.
Print button	Prints the report.
Prior button	Displays the prior page of a multi-page selection.
Next button	Displays the next page of a multi-page selection.
Zoom box	Magnifies or reduces the display of the report preview.
Copies box	Allows more than one copy of the report to be printed.

Table 10-26 The Report Components Table

10.4.2 Saving and Exporting Simple Reports

There are two types of reports in SiteManager — simple reports and complex reports. Simple report can be saved and exported, but complex reports cannot. It is easy to identify a simple report — the File menu's Save choice (or the Save button) and the Service menu's Export choice will be active for a simple report. They will not be active for a complex report.

For procedures on saving, opening, and exporting a report, please refer to the General Concepts section.

10.4.3 View Saved Reports (PSR)

A saved simple report can be viewed using the View Saved Reports (PSR) icon. For procedures on opening and viewing a saved report, please refer to the General Concepts section.

10.4.4 Summary by Project Report

The Summary by Project Report is a multi-page report generated for those who require Estimate Summary and details at the project level. It summarizes detailed information for all projects within an Estimate. Included in the report are an itemized description of quantities and amounts by projects.

The report consists of three page types. The first page summarizes the Contract information on an Estimate. The second page summarizes the payment information for each Project within the Contract. The third page type summarizes the quantities and amounts of items used for each Project for this Estimate.

To produce the report, the Contract ID and Estimate Number are required. If Estimate Number is not known at the time of request, the correct Estimate may be selected from a selection list. This report may be printed for multiple estimates by clicking the Generate Off Line Print check box and selecting multiple estimates from the selection list.

The Summary By Project Report is unique in that multiple reports may be generated in a batch print process. To select multiple reports, simply select multiple records using basic Windows functionality - clicking the selected rows while holding down either the Control or the Shift key.

To select reports to be printed:

1. On the Report Criteria window, click the **Generate Off-line Print** check box (ON).
2. To select multiple report criteria, highlight the desired criteria by holding down the shift and/or control keys and clicking the desired report criteria. The shift key allows an entire block of criteria to be selected, while the control key allows individual rows of criteria to be selected.
3. Click **Ok**.

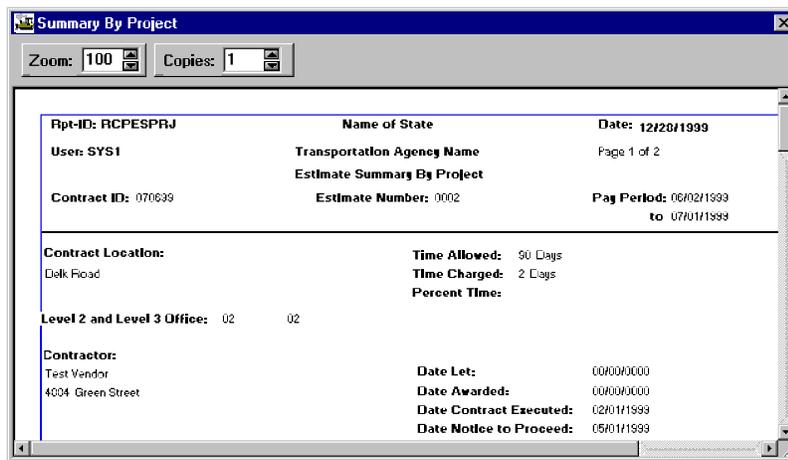


Figure 10-36 The Summary by Project Report (Page 1)

Field Name	Description
Contract ID	The ID for the contact.

Field Name	Description
Estimate Number	The system-generated sequential number assigned to each draft Estimate during the Estimate generation process.
Pay Period	The day following the Period End Date of the previous Estimate. If first Estimate, it will be the Notice To Proceed Date. The Pay Period includes the first and last days of the current estimate's payment period.
To (End Date)	The last day of the current estimate's payment period.
Contract Location	The description of the physical location of the Contract.
Time Allowed	For Available or Calendar day charge type contracts, this is the current number of days for the contract (original bid days, plus the total adjusted days [+/-]). For Fixed Date charge type contracts, this is the total number of days from the Notice to proceed date to the current estimate's Pay Period end date.
Time Charged	The number of days charged based on Diaries for the estimate's time period. If Diaries are adjusted, the charge days are adjusted accordingly. If a Diary is added late (i.e. the time period including the Diary date has already been covered by an estimate) the Diary charge is reflected in the next report.
Percent Time	The percentage of time charged.
Level 2 and Level 3 Office	Identifies the first (Level 2) and second (Level 3) level offices below the department's central or state headquarters office.
Contractor	The full name and complete address of the Contract's primary vendor.
Phone	The telephone number of the Contractor's address.
Date Let	The date the Contract was let.

Field Name	Description
Date Awarded	The date the Contract was awarded.
Date Contract Executed	The date the Contract went into execution.
Date Notice To Proceed	The date the notice to proceed was received.
Date Work Began	The date construction began.
Date Time Stopped	The date time charges stopped.
Date Accepted	The date the Contract was accepted.
Escrow Agent	The full name of the Contractor's escrow agent.
Surety Co	The full name of the Contractor's surety company.
Counties	The counties involved in the Contract.
Current Contract Amt	The amount of the Contract for the current requested Estimate.
Original Contract Amt	The amount of the Contract awarded.
Funds Available	The amount remaining in the Contract.
Percent Complete	The percentage of the Contract amount paid through the end date of the current Estimate.
Project Number	The unique identifier for the Project, and a short description of the Project.
Federal State Project Number	The unique Federal/State identifier for the Contract.
Total To Date	The total project amount of all Estimates through the current requested Estimate.

Field Name	Description
Previous To Date	The total project amount of all Estimates prior to the current requested Estimate.
This Estimate	The total project amount of the current requested Estimate.
Participating	The Estimate amount for the project for items that have known funding sources.
Non-Participating	The Estimate amount for the project for items that have not been funded.
Total Earnings	The total of the participating and non-participating Estimate amounts for the project.
Stockpiled Materials	The Estimate amount for the project for stockpiled materials that have been installed.
Gross Earnings	The total of total earnings and stockpiled materials Estimate amounts for the project
Payment Adjustment 1	The Total to Date, Previous to Date and Current Estimate amounts for fuel adjustments made on the contract .
Payment Adjustment 2	The Total to Date, Previous to Date and Current Estimate amounts for bituminous adjustments made on the contract.
Payment Adjustment 3	The Total to Date, Previous to Date and Current Estimate amounts for Autopay adjustments made on the contract.
Other Adjustments	The Estimate amount of other adjustments made on the project
Retainage	The Total to Date, Previous to Date and Current Estimate amount of cash withheld from (-) or released to (+) the contractor, per contract retainage obligations, for the project.

Field Name	Description
Escrow Amount	The Total to Date, Previous to Date and Current Estimate amount of escrow withheld from (-) or released to (+) the contractor, per contract retainage obligations, for the project.
Securities Encumbered	The Total to Date, Previous to Date and Current Estimate amount of contractor securities frozen (encumbered;-) or unfrozen (unencumbered;+) the contractor, per contract retainage obligations, for the project.
Total	The Total to Date and Previous to Date total amount of the Gross Earnings and adjustments for the project.
Total Payable	The total amount of the project's Gross Earnings and adjustments for the current estimate.

Table 10-27 The Summary by Project Report Fields (Page 1) Table

The report fields are calculated as follows:

Percent Time = (Time Charged / Time Allowed) * 100

Current Contract Amount = Total Bid Amount - Total Change Order Amount Where Total-Change-Order-Amount is the sum of the values of the Change Order Amount field from all the records from the Contract CO table whose Contract ID is equal to the passed parameter and Approval Date is not later than the Pay Period reported on.

Funds Available = Total Bid Amount - Net Pay To Date

Percent Complete = (Net Pay To Date / Total Bid Amount) * 100

Total To Date are amounts from the first Estimate to the current Estimate reported on. For example if the current Estimate reported on is Estimate Nbr. 3, Total To Date amounts will be from Estimate Nbr. 1 to Estimate Nbr. 3, although the latest Estimate may be Estimate Nbr. 5.) Or,

Total-To-Date = Previous-To-Date + This-Estimate.

Previous To Date are amounts from the first Estimate to the Estimate prior to the current one reported on. For example if the current Estimate reported on is Estimate Nbr. 3, Previous To Date amounts will be from Estimate Nbr. 1 to Estimate Nbr. 2, although the latest Estimate may be Estimate Nbr. 5.)

Total Earnings = Participating + Non-Participating

Gross Earnings = Total-Earnings + Stockpiled-Materials

Total = Gross Earnings + Payment Adjustment-1 + Payment Adjustment-2 + Payment Adjustment-3 + Other-Adjustments

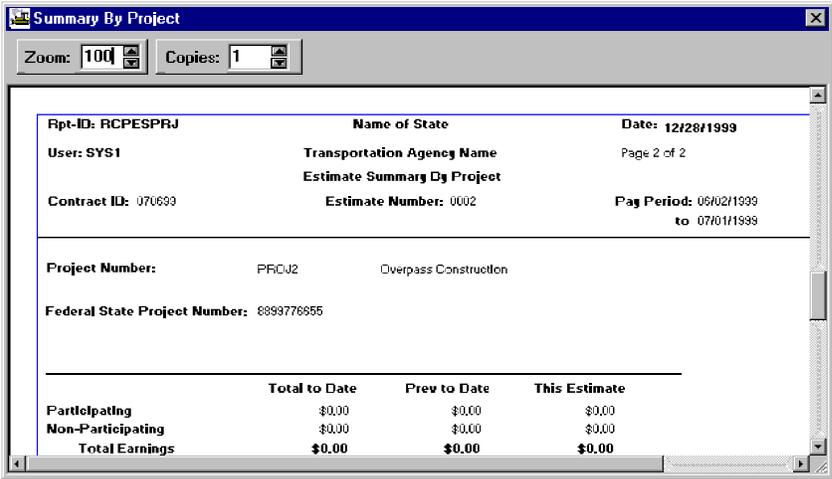


Figure 10-37 The Summary by Project Report (Page 2)

Field Name	Description
Contract ID	The ID for the contact.
Estimate Number	The system-generated sequential number assigned to each draft Estimate during the Estimate generation process.
Pay Period	The day following the Period End Date of the previous Estimate. If first Estimate, it will be the Notice To Proceed Date. The Pay Period includes the first and last days of the current estimate's payment period.
to (End Date)	The last day of the current estimate's payment period.
End Date	The last day of the Estimate period.
Project Nbr	The unique identifier for the project.
LIN	The Contract line item number which uniquely identifies each item as it appears on the Contract.

Field Name	Description
Category Number	The identifier for and description of a grouping of items assigned during pre-construction. Items can be grouped within categories for various reasons, primarily for funding.
Description	The description of the item.
Supplemental Description	Additional description of the item.
Auth Qty	The contract bid quantity plus the approved change order quantity.
Units	The unit of measure for the item.
Unit Price	The unit price of the item identified on the invoice.
Prev Qty	The total quantity of the project category item on all Estimates prior to the current requested Estimate.
Qty This Period	The quantity of the project category item on the current requested Estimate.
Qty To Date	The total quantity of the project category item on all Estimates through the current requested Estimate.
Amount This Period	The Estimate amount of the item for the current requested Estimate.
Cumulative Amount	The total Estimate amount of the project category item through the current requested Estimate.
Category Amount	The total amounts for the project category items for the current Estimate and all other Estimates related to the contract.
Project Total Amount	The total amounts for the project items for the current Estimate and all other Estimates related to the contract.

Table 10-28 The Estimate Summary by Project Report Fields (Page 2) Table

Reports (Contractor Payments)

The report fields are calculated as follows:

Cumulative Amount = Unit Price * Quantity of participating (funded) items

10.4.5 Summary by Funding Report

The Summary by Funding report is intended for those who require information on funding source and associated payments and adjustments for a given project in a Contract. It summarizes all project totals for the Estimates and funding for a project within a Contract.

The report consists of two pages. This first page summarizes the Payments and Adjustments made to an Project and Estimate. This second page summarizes the different funding for a Project in a Contract.

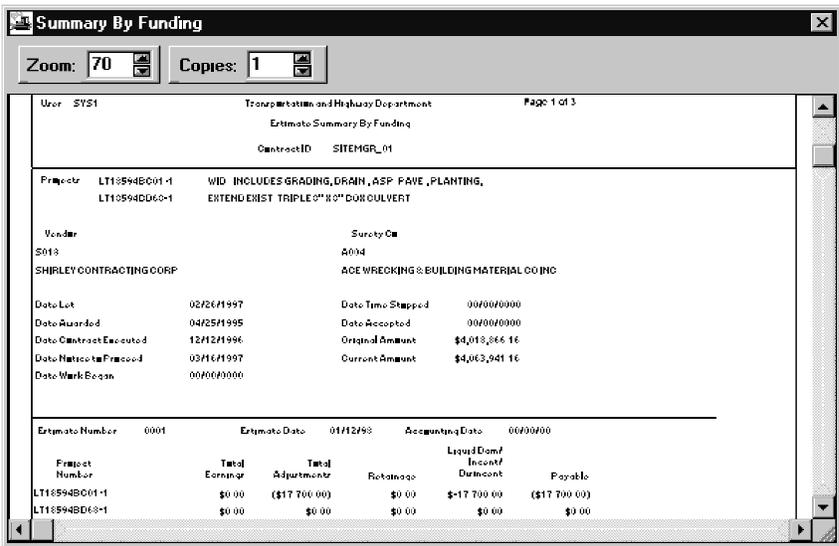


Figure 10-38 The Summary by Funding Report (Page1)

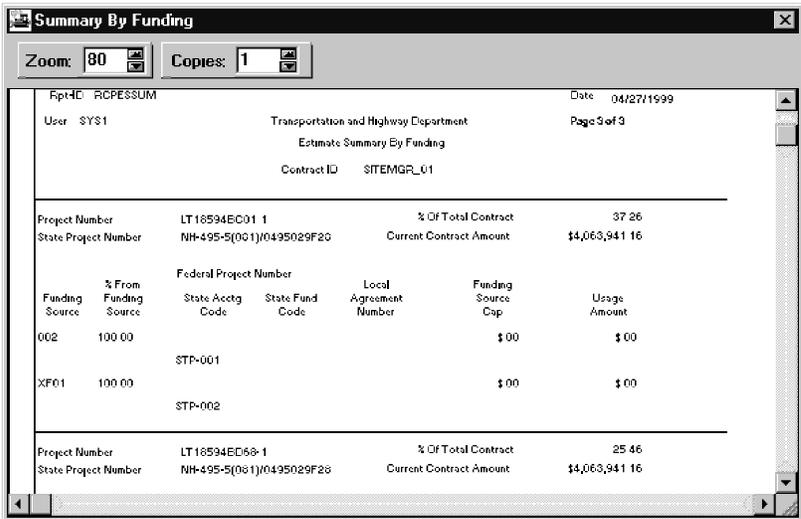


Figure 10-39 The Summary by Funding Report (Page 2)

Field Name	Description
Contract ID	The ID for the contact.
Projects	The Contract's Projects.
Project Number	The unique identifier for the Project.
Project Description	Textual description.
Vendor	The unique identifier of the vendor/Contractor.
Vendor Full Name	The full name of the primary vendor of the Contract.
Surety Co.	The unique identifier of the Contractor's surety company.
Surety Co. Full Name	The full name of the Contractor's surety company.
Date Let	The date the Contract was let.
Date Awarded	The date the Contract was awarded.
Date Contract Executed	The date the Contract went into execution.
Date Notice To Proceed	The date the notice to proceed was received.
Date Work Began	The date construction began.
Date Time Stopped	The date time charges stopped.
Date Accepted	The date the Contract was accepted.
Original Amount	The amount of the Contract awarded.
Current Amount	The amount of the Contract for the current requested Estimate.

Field Name	Description
Est Nbr	The system-generated sequential number assigned to each draft Estimate during the Estimate generation process.
Estimate Date	The last day of the Estimate period.
Acctg Date	The date the Estimate was passed to Accounting or Financial system via the interface.
Total Earnings	The total of the participating and non-participating project amounts and the Estimate amount for stockpiled materials that have been installed.
Total Adjustments	The total amount of the line item adjustments and Contract adjustments for a Project (not including retainage, liquidated damages, or incentives/disincentives).
Retainage	The project amount for retainage withheld.
Liquidated Damages	The Project amount of the liquidated damages assessed and incentives and disincentives incurred.
Payable	The total amount to be paid to the Contractor on the Project.
Total For Contract	The total amounts for all Projects and Estimates.

Table 10-29 The Summary by Funding Fields (Page 1) Table

Total Earnings is calculated as the total amounts for participating and non-participating items and the amount for stockpiled materials installed.

Current Amount is calculated as the difference of the Total Bid Amount and all Change Order Amounts.

Field Name	Description
Contract ID	The ID for the contact.
Project Number	The unique identifier for the Project.

Field Name	Description
State Project Nbr	The state project number for the Contract, project or category.
% Of Total Contract	The percentage of the Contract the project accounts for.
Current Contract Amount	The total amount of the Contract.
Funding Source	The source of funding for the project.
% From Funding Source	The percentage of the cost that will be paid by the funding source.
Federal Project Number	The number used to identify the federal project covering the work being done.
State Acctg Code	The transportation agency-defined code needed by the financial system.
State Fund Code	The transportation agency-defined code needed by the financial system.
Local Agreement Number	The number used to identify an agreement between a local authority and the transportation agency.
Funding Source Cap	The dollar limit on funds which can be provided by a funding source.
Usage Amount	Amount used from this funding as of the current Estimate.

Table 10-30 The Summary by Funding Fields (Page 2) Table

The report fields are calculated as follows:

% Of Total Contract = (Project-Amount / Total-Bid-Amount) * 100

Where Project-Amount is the sum of the values of the Amount This Period field of records from the Contract Estimate Item table for all items within the project for all Estimates.

Current Contract Amount = Total-Bid-Amount - Total-Change-Order-Amount

Reports (Contractor Payments)

Where Total-Change-Order-Amount is the sum of the values of the Change Order Amount field of records from the Contract CO table whose Contract ID is equal to the passed parameter.

10.4.6 Estimate Activity Log

The Estimate Activity Report displays the activity messages issued during the various processes in the Estimate process — Estimate generation, approval, and rejection.

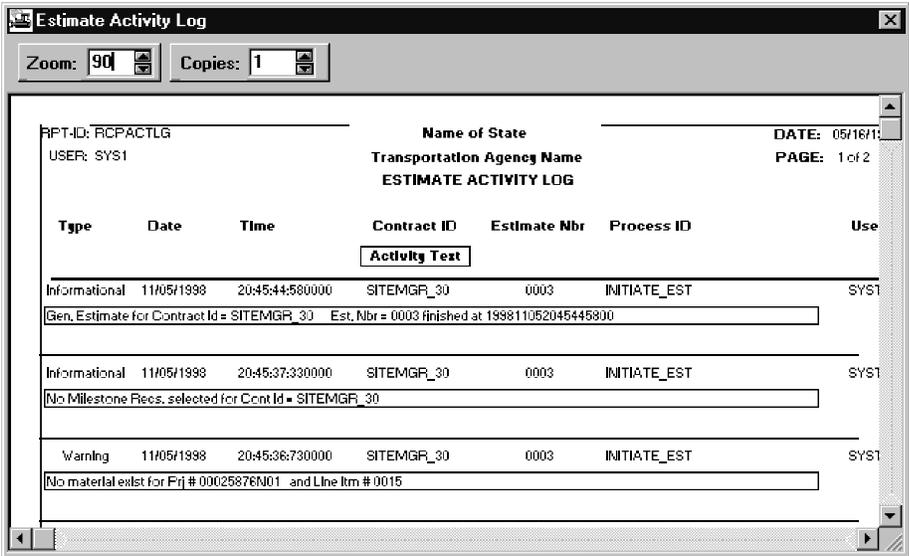


Figure 10-40 The Estimate Activity Log

Field Name	Description
Type	The type of the generated message. Valid values are E - Error, I - Informational, and W - Warning.
Date	The date the message was generated.
Time	The time the message was generated.
Contract ID	The primary identifier for the Contract.
Estimate Nbr	System-generated, sequential number assigned to each Estimate during the Estimate generation process.
Process ID	The name of the process that generated the message.

Field Name	Description
User ID	The unique identifier for the user that accessed the process that generated the message.
Message	The text of the message.

Table 10-31 The Estimate Activity Log Fields Table

10.4.7 Installed Work Report

This Installed Work Report displays the amounts for all items installed in a Contract (from both unauthorized and authorized Daily Work Reports) that are not included on an Estimate.

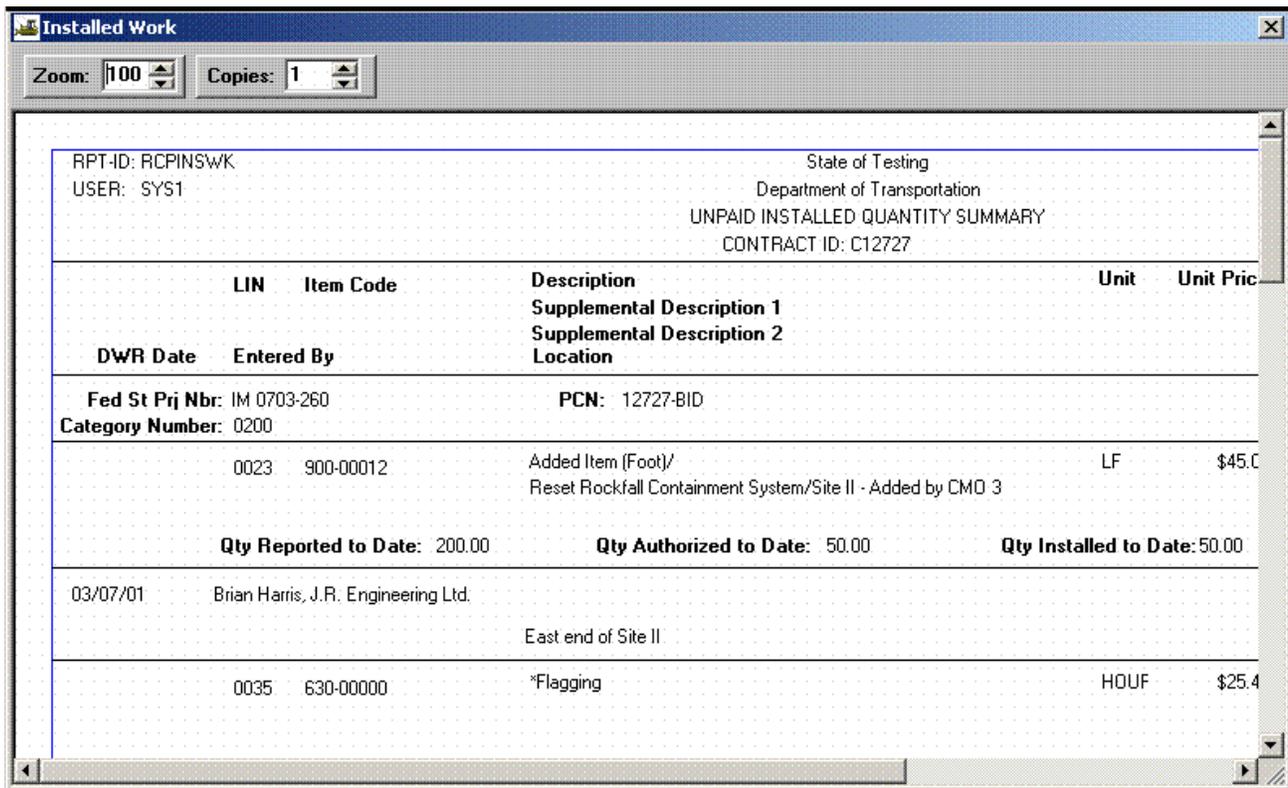


Figure 10-41 The Installed Work Report

Tip: Once an estimate has been generated, all authorized quantities for that estimate’s pay period will no longer appear on the Installed Work Report. This Report only contains *current* unauthorized quantities.

Field Name	Description
Project Number	The Fed St Prj Nbr, the unique identifier for the project. Can be multiples per Contract.
PCN	Primary Control Number/Primary Project Number for the contracts. For contracts with multiple projects, this is the primary identifying project for the contract.
Cat Nbr	A grouping of items assigned during pre-construction. Items can be grouped within categories for various reasons, primarily for funding.
Entered by	The name of the inspector who recorded the installed quantity on the Daily Work Report.
DWR Date	The date of the Daily Work Report on which the installed quantity is reported.
LIN	The Contract line item number which uniquely identifies each item as it appears on the Contract. For all bid items, assigned by the pre-construction function. For all items added to the Contract after construction begins, user entered.
Item Code	An agency defined code used to identify a particular item.
Description	Short textual definition for the item code.
Suppl Description 1	Additional description of the item.
Suppl Description 2	Secondary additional description of the item.
Location	The location where the item was installed, as described on the Daily Work Report.

Field Name	Description
Unit	The code that identifies the unit of measure that describes the item's installed quantity (i.e: EA-each, CUYD-cubic yard, SQFT-square foot, etc.)
Installed Quantity	The sum total of all the Daily Work Report's Item Reported Quantity.
Auth	A check box which indicates whether or not the installed quantity has been authorized by qualified personnel.
Unit Price	Unit price of the item.
Installed Amount	The product of Installed Quantity and Unit Price.
Total For Project	The total installed amount for a specific project.
Total Amount For All Items	The sum total of Installed Amount.
Qty Reported to Date	The total of all reported quantities in DWRs, regardless of whether the quantities are authorized or unauthorized and regardless of whether or not they are included on an estimate.
Qty Authorized to Date	The total of all reported quantities on DWRs that are authorized
Qty Installed to Date	The total of all reported authorized reported quantities included on estimates (of all statuses).

Field Name	Description
Qty Paid to Date	The total of all authorized reported quantities included on estimates (of all statuses). This value is always the same as Qty Installed to Date unless the quantity to pay has been adjusted on the Estimate Item Detail window. This window includes a 'Pay This Est' field which can be modified when an estimate is pending. If the quantity in this field is adjusted, the Qty Paid to Date field will reflect the modification, which will cause the value to differ from the Qty Installed to Date.

Table 10-32 The Installed Work Report Fields Table

10.4.8 Work Suspend/Resume Times Report

The Work Suspend/Resume Times Report displays suspension activity details for a contract or a particular milestone completion.

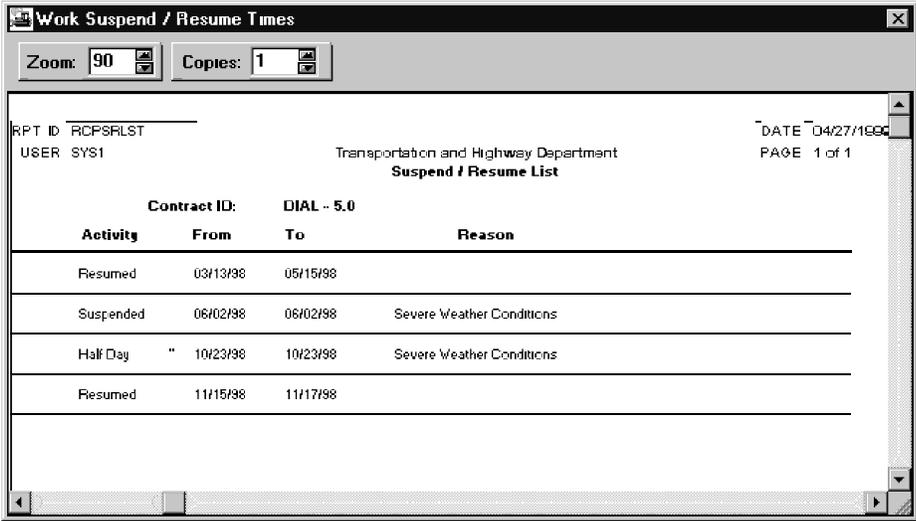


Figure 10-42 The Work Suspend/Resume Times Report

Field Name	Description
Begin Date	The start date of the period indicated for the report. Date cannot be a future date.
End Date	The end date of the period indicated for the report. Date cannot be a future date.

Field Name	Description
	be a future date.
Activity	Either “Suspended” or “Resumed”.
From	The date the activity started.
To	The date the activity ended.
Reason	Description of the transportation agency-defined reasons for granting a credit day.

Table 10-33 The Work Suspend/Resume Times Report Fields Table

10.5 Process List (Contractor Payments)

The Process List window lists processes that are available to the authorized user. Available processes depend upon the functional area of the process list, for example, Contractor Payment processes are available by clicking the Process List icon located on the Contractor Payments panel. Processes appearing in Process Lists also depend upon the user security assigned to the individual process.

The Contractor Payments Process List contains the following standard processes:

- Summary to Contractor Report (RCPCSUM1)
- Estimate Financial File Extraction (CCPESTAP)

Processes may be RTF reports, SiteManager PowerBuilder reports, or batch processes. From this window, authorized users may submit processes for batch and background execution.

A process is run from the Process List window by clicking on the named process, and choosing Run Process from the Services menu, or by clicking the named process and clicking the Run Process button or double-clicking the process.

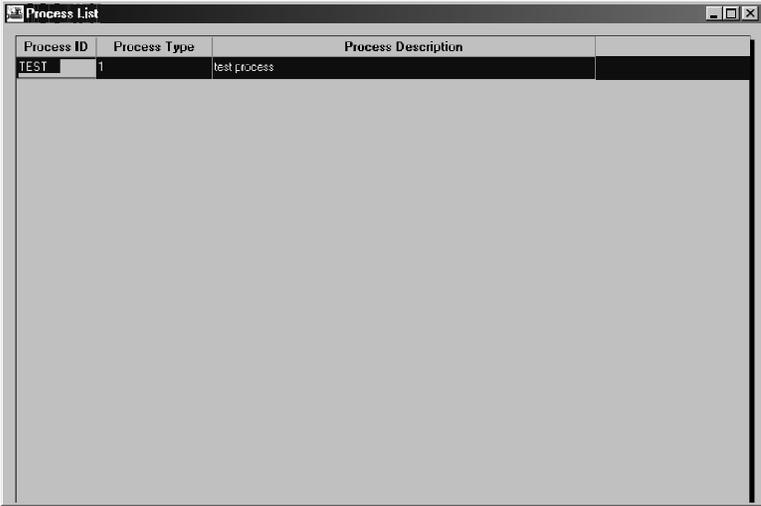


Figure 10-43 The Process List Window

Field Name	Description
Process ID	The name of the process.
Process Description	Short textual description of the process.
Process Type	Denotes whether the process is a standard process or custom process.

Table 10-34 The Process List Window Field Descriptions Table

To display the Process List window:

1. From the **Main panel**, double click the icon for the desired functional area.
2. Double click the **Process List** icon.

10.5.1.1 Submitting a Process

In addition to the parameters that may be specified while defining a process, there are runtime parameters that may be specified by the user at the time the process is executed. Processes may also be scheduled to run continuously on a specific day, week, or month. If there are any parameters associated to the process during its definition, a window will display when the process is run requesting the specified information from the user.

The Confirm Process Submission window allows users to choose to continue submission directly, cancel submission immediately, or navigate to a runtime parameters window before queuing the job for execution. The Confirm Process Submission window is accessed when the user selects/highlights a process row then selects Run from the Services menu or when the user double clicks on the process row. If any process-specific parameters have been associated to the process, a process parameter window will display, and the options to submit, cancel or specify parameters are available. The Confirm Process Submission window has three buttons, which are described in the table below.

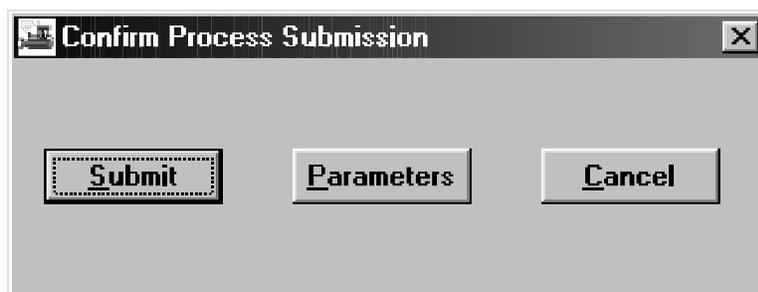


Figure 10-44 The Confirm Process Submission Window

Process List (Contractor Payments)

Button Name	Description
Submit	Submits the selected process for execution.
Parameters	Displays the Process Submission Parameters window
Cancel	Exits the window without submitting the selected process for execution.

Table 10-35 The Confirm Process Submission Button Description Table

To submit a process:

1. From the **Main panel**, double click the icon for the desired functional area.
2. Double click the **Process List** icon.
3. Double click the desired process.
4. If the process has any runtime parameters associated, a screen will display requesting values from the user. Enter the requested values as desired.
5. If the process does not have any runtime parameters associated with it, the Confirm Process Submission window will display.
6. Click the **Submit** button.

10.5.1.2 Setting Process Submission Parameters

The Parameters button on the Confirm Process Submission window navigates the user to the Process Submission Parameters window. This window allows the user to declare certain runtime parameters for each process as it is selected for execution.

Standard SiteManager reports may utilize the Parameters window to schedule the execution of reports off-line.

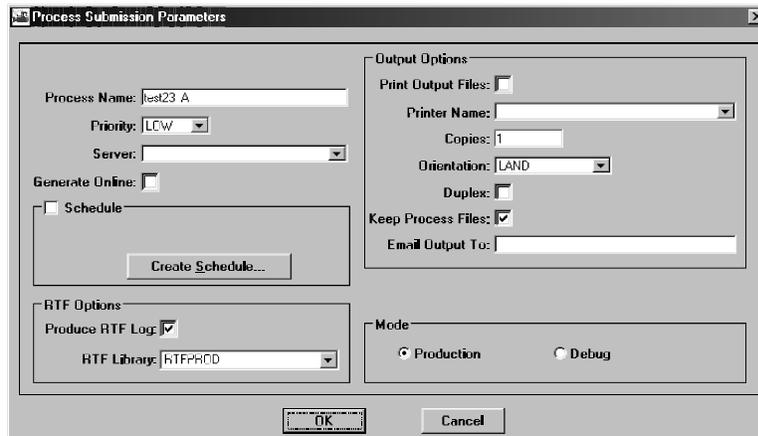


Figure 10-45 The Process Submission Parameters Window

Field Name	Description
Process Name	System-populated from the selected row on the Process List window.
Priority	Specifies the priority (the level of importance) of the process. Available priority levels are high, medium, or low.
Server	Displays the IP address of the application server.
Generate Online	If checked on, indicates that the report should be generated online in the client machine and not submitted for application server batch processing.
Schedule	If checked on, indicates the process has a previously-defined schedule for processing. This box may not be check on/off manually.
Create Schedule (Button)	Clicking this button begins the Create Schedule process.
RTF Options	
Produce RTF Log	If selected, this field indicates that RTF log files such as job control and error processing should be generated and included in the output files. The default value for this field is ON.

Field Name	Description
RTF Library	This field indicates from which report template repository directory the job should obtain its template files. Valid values are test, production, and base (RTFTEST, RTFPROD, RTFBASE). The default is RTFBASE. This access heirarchy applies to all templates used within a custom report. The user CANNOT indicated one template from production and another from test. Regardless of which the user indicates, if the template file is not found where indicated, all jobs will then search for the template in the following heirachical sequence: base, production, test. The default RTF library is specified on the User Security window for the User ID.
Output Options	
Print Output Files	If checked, the user has chosen to send the executed process's output directly to a printer.
Printer Name	This is the printer name of the printers available to the application server
Copies	This field declares the number of copies the user wants to print. Default value is one.
Orientation	Indicates the orientation of the report. Valid values are LAND-landscape and PORT-portrait.
Duplex	If checked, this indicates that the user has chosen to print the report double-sided. Regardless of whether checked, this is overridden by the selected printer's print duplex documents configuration and setting. If the selected printer is not set to print duplex it will not.
Keep Process Files	If checked, the user has chosen to send the executed process's output to electronic files accessible through the Process Status window. This holds the output to be viewed or printed at a later time.
Email Output To	This is the e-mail address to which the user wants to send the output.
Mode	
Production	If selected, this radio button indicates the process is to be run normally.

Field Name	Description
Debug	If selected, this radio button indicates the process is to be run in debug mode. Do not select this mode unless instructed to do so by the system manager. This mode generates a detailed log of the batch program for problem determination and resolution.

Table 10-36 The Process Submission Parameters Window Field Description Table

To modify the Process Submission parameters of a process:

1. From the **Main** panel, click the icon for the desired functional area.
2. Double click the **Process List** icon.
3. Double click the desired process.
4. If the process has any runtime parameters associated, a screen will display requesting values from the user. Enter the requested values as desired.
5. Click the **Parameters** button.
6. On the **Process Submission Parameters** window, click the arrow to the right of the **Priority** field to display the drop down list.
7. Click the desired priority level.
8. Click the arrow to the right of the **Server** field to display the drop down list, and click the desired server. If any application server may execute the process, it is not necessary to select a specific server.
9. If desired, click the **Generate Online** check box on.
10. If desired, click the **Create Schedule** button.
11. If an RTF Log file is desired, click the **Produce RTF Log** check box on.
12. Click the arrow to the right of the **RTF Library** field to display the drop down list, and click the desired RTF Library.
13. If desired, click the **Print Output Files** check box on.
14. If the Print Output Files check box is clicked on, click the arrow to the right of the **Printer Name** field to display the drop down list. Click the desired printer.
15. If the Print Output Files check box is clicked on, click the **Copies** field and enter the desired number of copies.
16. If the Print Output Files check box is clicked on, click the arrow to the right of the **Orientation** field to display the drop down list. Click the desired page orientation.

Process List (Contractor Payments)

- 17. If the Print Output Files check box is clicked on, click the **Duplex** check box on if desired.
- 18. If desired, click the **Keep Process Files** check box on.
- 19. If desired, click the **Email To** field and enter an email address.
- 20. Click the **Production** mode radio button or the **Debug** mode radio button.
- 21. Click the **OK** button.
- 22. On the **Confirm Process Submission** window, click the **Submit** button.

10.5.1.3 Creating a Process Schedule

The Create Process Schedule window allows users to create a scheduled submission and frequency for a process. A process may be scheduled to run Once, Daily, Weekly, or Monthly. Depending upon the frequency (once, daily, weekly, or monthly), different fields will be presented on the Schedule window.

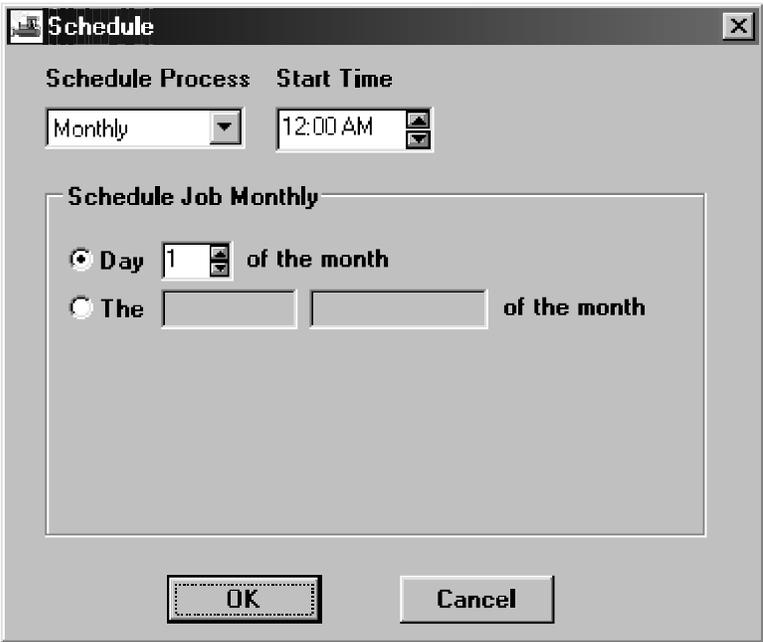


Figure 10-46 The Schedule Monthly Window

Field Name	Description
Schedule Process	The process schedule’s frequency type. Option is Monthly. Selected from drop-down box.
Start Time	Time of day the process is scheduled to execute.

Field Name	Description
Day	Indicates that the monthly schedule is a numerical day of the month. This radio button enables the day spin box and disables the radio button.
Of the month	Identifies the scheduled numerical day of the month. Values are 1 through 28.
The	Indicates that the monthly schedule is a regular day of the month. For example, third Monday and last Friday. This radio button enables the Of the month boxes and disables the day radio button.
Of the month (first box)	Identifies which regular occurrence of a month's day is scheduled. Values are First through Fourth and Last.
Of the month (second box)	Identifies which day is scheduled. Values are Monday through Sunday.

Table 10-37 Schedule Job Monthly Window Field Descriptions

To schedule a process to execute monthly:

1. From the **Main** panel, click the icon for the desired functional area.
2. Double click the **Process List** icon.
3. Double click the desired process.
4. If the process has any runtime parameters associated, a screen will display requesting values from the user. Enter the requested values as desired, and click the **Parameters** button.
5. Click the **Create Schedule** button. The Schedule window appears.
6. Click the arrow to the right of the **Schedule Process** field to display the drop down list, and click the **Monthly** choice.
7. Click the up or down arrow to the right of the **Start Time** field to display the desired start time.
8. If an exact date is desired, click the radio button beside the **Day of the Month** choice and use the up or down arrow to display the desired day of the month.
9. If a day of the week is desired, click the radio button beside the **Day of the Month** choice.
10. Click the arrow to the right of the first blank field to display the frequency choices. Choose the desired frequency.
11. Click the arrow to the right of the second blank field to display the day choices. Choose the desired day of the week.

12. Click the **OK** button.



Figure 10-47 The Schedule Weekly Window

Field Name	Description
Schedule Process	The process schedule’s frequency type. Option is Weekly. Selected from drop-down box.
Start Time	Time of day the process is scheduled to execute.
Every	The frequency number of the schedule week. Values are 1 through 104.
On	Day of the week the weekly job is scheduled to run. Values are Monday through Sunday.

Table 10-38 Schedule Job Weekly Window Field Descriptions

To schedule a process to execute weekly:

1. From the **Main** panel, click the icon for the desired functional area.
2. Double click the **Process List** icon.
3. Double click the desired process.

4. If the process has any runtime parameters associated, a screen will display requesting values from the user. Enter the requested values as desired, and click the **Parameter** button.
5. Click the **Create Schedule** button. The Schedule window appears.
6. Click the arrow to the right of the **Schedule Process** field to display the drop down list, and click the **Weekly** choice.
7. Click the up or down arrow to the right of the **Start Time** field to display the desired start time.
8. Click the up or down arrow to the right of the **Every** field to display the desired frequency in weeks.
9. Click the check box(es) beside the desired day(s) of the week.
10. Click the **OK** button.

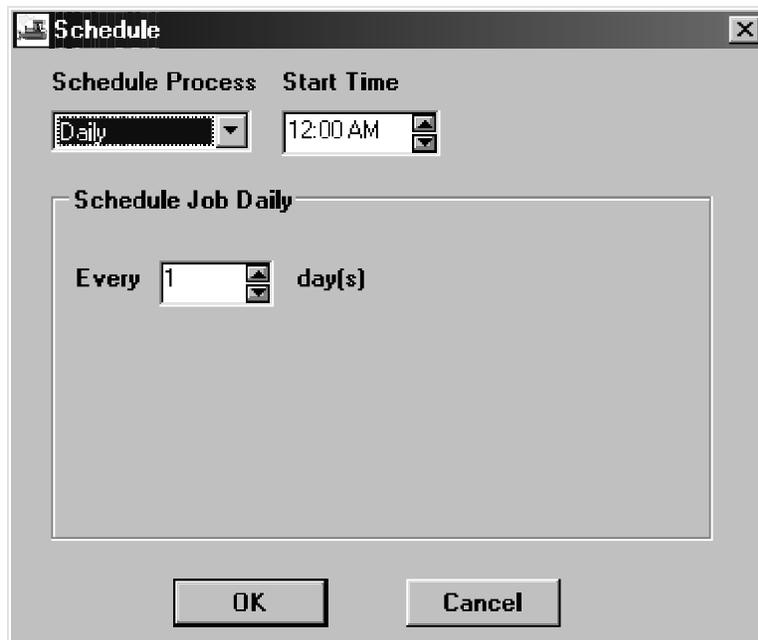


Figure 10-48 The Schedule Process Daily Window

Field Name	Description
Schedule Process	The process schedule’s frequency type. Option is Daily. Selected from drop-down box.
Start Time	Time of day the process is scheduled to execute.
Every	The day frequency of the daily job. Every day equals one (1). Quarterly equals 91.

Table 10-39 Schedule Job Daily Window Field Descriptions

Process List (Contractor Payments)

To schedule a process to execute daily:

1. From the **Main** panel, click the icon for the desired functional area.
2. Double click the **Process List** icon.
3. Double click the desired process.
4. If the process has any runtime parameters associated, a screen will display requesting values from the user. Enter the requested values as desired, and click the **Parameter** button.
5. Click the **Create Schedule** button. The Schedule window appears.
6. Click the arrow to the right of the **Schedule Process** field to display the drop down list, and click the **Daily** choice.
7. Click the up or down arrow to the right of the **Start Time** field to display the desired start time.
8. Click the up or down arrow to the right of the **Every** field to display the desired frequency in days.
9. Click the **OK** button.



Figure 10-49 The Schedule Process Once Window

Field Name	Description
Schedule Process	The process schedule’s frequency type, selected from a drop-down list. Option is Once.

Start Time	Time of day the process is scheduled to execute.
Run On: Month	The month the one-time process is scheduled to execute, selected from a drop-down box.
Run On: Year	The year the one-time process is schedule dto execute, selected from a drop-down box.
Run On: Day	The day and date the one-time process is scheduled to execute, selected from a calendar.

Table 10-40 Schedule Job Once Window Field Descriptions

To schedule a process to execute once:

1. From the **Main** panel, click the icon for the desired functional area.
2. Double click the **Process List** icon.
3. Double click the desired process.
4. If the process has any runtime parameters associated, a screen will display requesting values from the user. Enter the requested values as desired, and click the **Parameter** button.
5. Click the **Create Schedule** button. The Schedule window appears.
6. Click the arrow to the right of the **Schedule Process** field to display the drop down list, and click the **Once** choice.
7. Click the up or down arrow to the right of the **Start Time** field to display the desired start time.
8. Click the **OK** button.

10.5.2 Summary to Contractor Report

The Summary to Contractor Report is intended for the Contractor and displays the relevant data on the amounts being paid for in an Estimate. The report summarizes previous payments made to a Contractor and the current status of the Contract when an Estimate is generated. An itemized description of quantities and amounts on all items in every project contained in an Estimate is also given.

Once the process has completed, the process files may be viewed and printed from the Process Status window. The Process Status icon is located on the Accessories panel.

To select reports to be printed:

1. On the Process List window, click the **Summary to Contractor** process, and click the **Run** button.

- 2. To select multiple reports to be generated, highlight the desired criteria by holding down the shift and/or control keys and clicking the desired report criteria. The shift key allows an entire block of criteria to be selected, while the control key allows individual rows of criteria to be selected.
- 3. Click **Submit**.

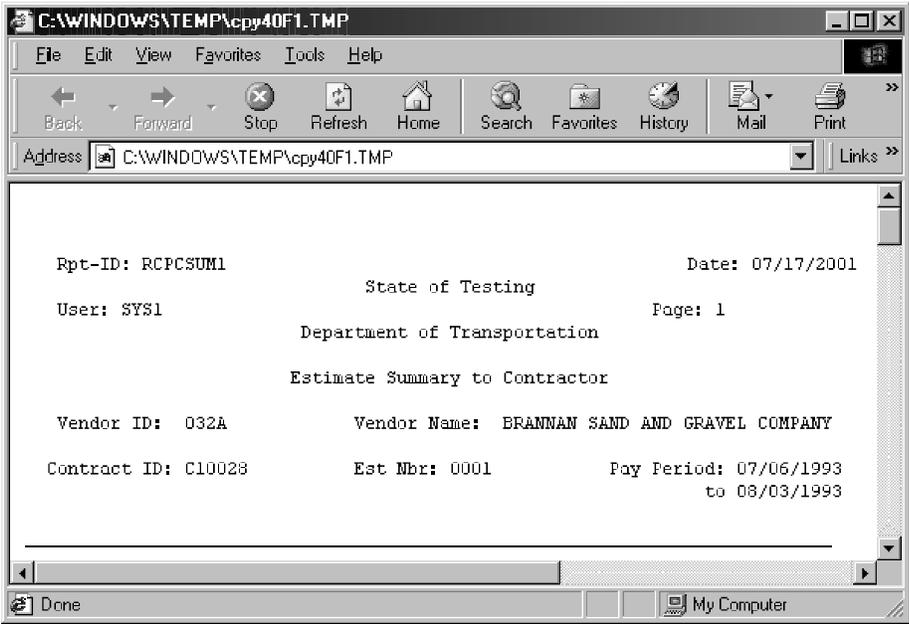


Figure 10-50 The Summary to Contractor Report (Page 1)

The report consists of two pages. The first page summarizes the Contract information on an Estimate. The second page lists the quantities and amounts of all the items in every project in the Contract. It also includes the total amounts for each project and the Contract. To produce the report, the Contract ID and Estimate Number are required. If the Estimate Number is not known at the time of request, the user may choose the correct Estimate from a selection list.

Field Name	Description
Vendor ID	The ID of the vendor/Contractor.
Contract ID	The ID for the contact.
Estimate Nbr	The system-generated sequential number assigned to each draft Estimate during the Estimate generation process.
Pay Period (Start Date)	The day following the Period End Date of the previous Estimate (If first Estimate, it will be the Notice To Proceed Date.)

Field Name	Description
Pay Period - "to"	The last day of the Estimate period.
Start Date	The next day of the Period End Date of the previous Estimate. If first Estimate, it will be the Notice To Proceed Date.
End Date	The last day of the Estimate period.
Contract Location	The description of the physical location of the Contract.
Time Allowed	The original number of days for the Contract.
Time Charged	The total number of days charged to the Contract to date.
Percent Time	The percentage of time charged.
Contractor	The full name of the primary vendor of the Contract.
Contractor Address Line 1	The first line of the Contractor's address.
Contractor Address Line 2	The second line of the Contractor's address.
Contractor Address Line 3	The third line of the Contractor's address.
Contractor City Name	The city of the Contractor's address.
Contractor State Province	The state or province of the Contractor's address.
Contractor Postal Code	The postal code of the Contractor's address.
Phone	The telephone number of the Contractor's address.
Date Let	The date the Contract was let.
Date Awarded	The date the Contract was awarded.

Field Name	Description
Date Contract Executed	The date the Contract went into execution.
Date Notice To Proceed	The date the notice to proceed was received.
Date Work Began	The date construction began.
Date Time Stopped	The date time charges stopped.
Date Accepted	The date the Contract was accepted.
Escrow Agent	The full name of the Contractor's escrow agent.
Surety Co	The full name of the Contractor's surety company.
Counties	The counties involved in the Contract.
Projects	The projects in the Contract.
Nbr	The unique identifier for the project.
Pct	The percentage of the Contract for the project.
Federal/State Project Number	The federal or state project number for the Contract, project or category.
Description	The description of the project.
Current Contract Amount	The amount of the Contract for the current requested Estimate.
Original Contract Amount	The amount of the Contract awarded.
Percent Complete	The percentage of the Contract amount paid through the end date of the current requested Estimate.

Field Name	Description
Total To Date	The total amount of all Estimates through the current requested Estimate.
Previous To Date	The total amount of all Estimates prior to the current requested Estimate.
This Estimate	The total amount of the current requested Estimate.
Participating	The Estimate amount for items that have known funding sources.
Non-Participating	The Estimate amount for items that have not been funded.
Total Earnings	The total of the participating and non-participating Estimate amounts.
Stockpiled Materials	The Estimate amount for stockpiled materials that have been installed.
Gross Earnings	The total of total earnings and stockpiled materials Estimate amounts.
Retainage	The Estimate amount for retainage withheld.
Securities Encumbered	The Estimate amount of securities encumbered in lieu of withholding retainage.
Net Earnings	The total of the securities encumbered and the difference between gross earnings and retainage Estimate amounts.
Liquidated Damages	The Estimate amount of the liquidated damages assessed and incentives and disincentives incurred.
Payment Adjustment 1	The Estimate amount of the first type of adjustment made on the Contract.

Field Name	Description
Payment Adjustment 2	The Estimate amount of the second type of adjustment made on the Contract.
Payment Adjustment 3	The Estimate amount of the third type of adjustment made on the Contract.
Amount Due	The difference between net earnings and the total of liquidated damages and payment adjustment Estimate amounts.
Other Adjustments	The Estimate amount of other adjustments.
Payment	The difference between amount due and other adjustments.

Table 10-41 The Summary to Contractor Report (Page 1) Fields Table

The report fields are calculated as follows:

Percent-Time = (Time-Charged / Time-Allowed) * 100

Current-Contract-Amount = Total-Bid-Amount - Total-Change-Order-Amount Where Total-Change-Order-Amount is the sum of the values of the Change Order Amount field from all the records from the Contract CO table whose Contract ID is equal to the passed parameter and Approval Date is not later than the Pay Period reported on.

Funds-Available = Total-Bid-Amount - Net-Pay-To-Date

Percent-Complete = (Net-Pay-To-Date / Total-Bid-Amount) * 100

Total-To-Date are amounts from the first Estimate to the current Estimate reported on. (For example, if the current Estimate reported on is Estimate Nbr. 3, total-to-date amounts will be from Estimate Nbr. 1 to Estimate Nbr. 3, although the latest Estimate may be Estimate Nbr. 5.) Or, Total-To-Date = Previous-To-Date + This-Estimate.

Previous-To-Date are amounts from the first Estimate to the Estimate prior to the current one reported on. (For example, if the current Estimate reported on is Estimate Nbr. 3, previous-to-date amounts will be from Estimate Nbr. 1 to Estimate Nbr. 2, although the latest Estimate may be Estimate Nbr. 5.)

Total-Earnings = Participating + Non-Participating

Gross-Earnings = Total-Earnings + Stockpiled-Materials

Net-Earnings = Gross-Earnings - Retainage + Securities-Encumbered

Amount-Due = Net-Earnings - Liquidated-Damages + Incentives - Disincentives + Payment-Adjustment-1 + Payment-Adjustment-2 + Payment-Adjustment-3

Payment = Amount-Due + Other-Adjustments

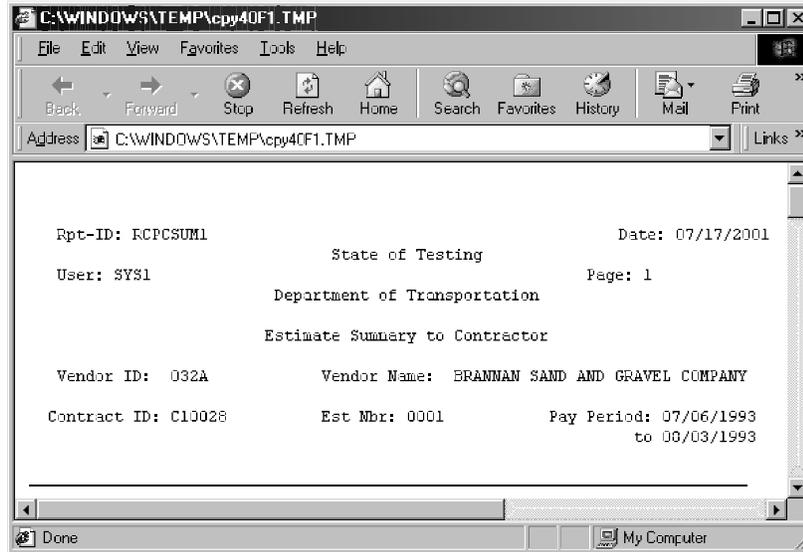


Figure 10-51 The Summary to Contractor Report (Page 2)

Field Name	Description
Contract ID	The primary identifier for the contact.
Estimate Nbr	The system-generated sequential number assigned to each draft Estimate during the Estimate generation process.
Pay Period (Start Date)	The day following the Period End Date of the previous Estimate (If first Estimate, it will be the Notice To Proceed Date.)
Pay Period - "to"	The last day of the Estimate period.
Project Nbr	The unique identifier for the project.
Line Item Nbr	The Contract line item number which uniquely identifies each item as it appears on the Contract.
Category Number	A grouping of items assigned during pre-construction. Items can be grouped within categories for various reasons, primarily for funding.
Item Code	The unique identifier for the Item.

Process List (Contractor Payments)

Field Name	Description
Item Description	The description of the item.
Unit Price	The unit price of the item identified on the invoice.
Qty This Estimate	The quantity of the item to be paid.
Units	The unit of measure for the item.
Quantity Paid	The quantity of the item to be paid times the unit price of the item. The amount to be paid plus any amount paid for stockpiled material must be less than the bid amount plus the change order amount plus the allowed overrun amount.
Cumulative Amount	The amount of the quantity paid to date for the item.
Project Current Amount	The total quantities and amounts for the project.
Contract Current Amount	The total quantities and amounts for the Contract.

Table 10-42 The Estimate Summary to Contractor Report (Page 2) Fields Table

The report fields are calculated as follows:

Cumulative Amount = Unit Price * Quantity Paid To Date for the item

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11. Change Orders

August 2005

11.1 Change Orders General Concepts

The change order process allows legal changes to be made to a contract by creating, approving, and tracking changes.

Contract Change Orders may include:

- Quantity adjustments for existing items
- Adding new items of work to the contract
- Time Extensions on milestones or revisions to a contract completion date
- Adding items of work to the contract per a Force Account
- Zero Dollar adjustments to a contract
- Final Quantity

New projects may also be authorized as part of the Change Order planning process, but a new project must be added via the Project window, and a Category and Funding Source must be associated to the new project prior to creating the Change Order Items. The reason for the new Project (such as additional work requested and funded by the County) should be included in the Change Order Explanation.

Except for the Zero Dollar and Final Quantity functions, users can specify more than one function to make up a change order. The Zero Dollar function is only used to make contract adjustments that will not affect the dollar amount of the contract. The final quantity function is used only when setting the final status and quantities for existing contract items. Before a change order is saved, edits are performed to ensure that its components are reconciled with its selected functions. Messages advise the user if information has not been entered for a selected function.

Before the user can select a specific window in the Change Order (CO) function, a specific contract must be selected from a pick list containing valid contracts, and associated, existing COs. A specific contract must be selected from the pick list to create a new change order.

The CO activities are grouped on three panels (Icons) as follows:

Panel (Icon) Name	Description
Change Order Maintenance Panel	The Change Order Maintenance Panel contains the functions used to add, maintain, manage and monitor the Change Order process. This panel also contains functions that allow the user to view, add, and modify Change Orders associated with a selected Contract. Other functions allow the user to submit the CO for review and approval and control legal documents related to the Contract modification. The Tracking function allows the user to view the tracking records associated with a Change Order. An on-line signature page is available.

Panel (Icon) Name	Description
Reports Panel	The Reports Panel contains a group of CO-specific documents and reports to help the user manage and control the change order process. These reports include summaries of all change orders associated with a contract and their status, an aging report of unapproved change orders, an analysis of change order reasons, and a summary Time Extension Report granted on a contract. There is also the ability to save a simple report.
Reference Tables Panel	The Reference Table Panel contains sources of standards and data for Change Orders. The reference tables supply the CO defaults, information about approval groups, approval rules, and standard explanations for change order reasons.

Table 11-1 The Change Order Panel Table

11.1.1 Change Order Life Cycle

The life cycle of contract change orders is reflected in the change order functions in SiteManager.

1. Creation of a New Change Order

A CO can only be created by a user with specific authority to create new change orders. A change order must be associated with an existing contract. Specific information about the change order must be recorded using the Change Order Header window, the Change Order Items window, the Time Extension window, and/or the Change Order Explanations window.

2. Maintaining Change Orders

Once a CO has been created, updates to the CO information may be required. Change Order Header information, items, time frames, and explanations may be modified in update mode on the appropriate windows.

3. Review and Approval of Change Orders

After it is created, a draft CO can be forwarded via in-box notification for parallel review. Parallel review is concurrent review by more than one reviewer at a time.

The writer of the CO can also place the change order into Pending status and submit it for a hierarchical approval, skipping the review process.

Users involved in reviewing a Draft CO or approving a pending CO can record their decisions about proposed changes to the contract on-line, using the Review/Approve window. Reviewers/Approvers receive an In-Box message from the author requesting an action, review or approval for the CO. The In-Box message specifies the contract and change order number.

All Change orders on a contract must be either Approved or Disapproved in order for the Physical Work Complete Date to be entered in Contract Administration, as part of the contract completion process. (Change Orders may not be in a Draft or Pending status for the contract completion process.) Refer to the Contract completion process section of these learning guides.

4. Tracking the Change Order

At any time, the writer of the CO may view the status of a change order in the review or approval cycle by opening the Tracking window. The Tracking window for a CO is a view-only window and displays:

- The date a request for recommendation was sent to a reviewer or approver
- The reviewer or approver's name
- The action requested - review or approve
- The date the reviewer or approver makes a recommendation
- The recommendation - Approved or Denied
- Any Remarks the reviewer or approver has made

Authorized users may also display details about current and historic contract items on-line using the Item Summary window.

5. Reports

Once approved, change order data may be analyzed to help manage the change order process. The Change Order Reports function allows users to produce reports that gather information about trends in contract changes.

11.1.2 Change Order Conditions

There are three conditions that affect how the Change Order process works in SiteManager. These are the :

- Type of contract
- Function(s) associated with the change order
- Status of the change order

11.1.2.1 Change Order Types

There are six types of change orders:

- Overrun/Underrun
- Extra Work
- Time Adjustment
- Force Account
- Zero Dollar
- Final Quantity

A change order may be a combination of types, unless it is either a Zero Dollar or Final Quantity change order (a singular change order required for contract completion).

11.1.2.2 Change Order Functions

Users define the purpose of the change order by selecting among the different functions. Except for the Zero Dollar and Final Quantity functions, users can specify more than one function to make up a change order. The functions available on a change order are:

Overruns or Underruns: when the quantities associated with the contract items are either exceeded or not needed to complete the contract or work item

Extra Work: when additional work items are required to complete the contract

Time Adjustments: when the timeframes need to be adjusted to reflect the completion period for a milestone or contract

Force Account: when the parties agree that a change is required but there is not yet an agreement on the cost of that change. A force account occurs when there is emergency work on a contract. A force account CO requires adding a new line item to the contract. **Zero Dollar:** used only for contract adjustments that will not affect the dollar amount of the contract (example: changing the location of a project).

Final Quantity: used only when setting the final status and quantities for existing contract items. None of the other functions may be combined with a Final Quantity Change Order.

11.1.2.3 Change Order Status

The following table contains the allowable change order Status types:

Style Type	Description
Draft	The status of a CO that the user is in the process of creating or editing.
Pending	The status of a CO this is undergoing the review or approval process by the appropriate. <i>The user cannot modify a change order while it is in Pending status.</i>
Denied	The status of a CO when it is not approved. When a change order is Denied on the Change Order Review/Approve window, the change order is then returned Draft status. Changes may then be made, and the change order may be sent through the Review process again.

Style Type	Description
Approved	The status of a change order that has been approved by the final level approver. Once approved, a change order cannot be altered. Adjustments affected by an approved change order may only be altered by creating a new change order.

Table 11-2 The Change Order Approval Status Table

When the CO is created and saved to the database, the status is checked. The Header Window options, Approved or Denied, are not available for selection by the user until the approval/denial process is complete. Change Order status is changed manually by the author. All Change orders must be in the Approved or Denied status on the Change Order Header window in order for the contract to be completed.

SiteManager processes perform a series of actions determined by:

- pre-defined Change Order approval levels and associated rules;
- the Change Order function;
- the type of status change;
- the results of edits and verifications applied to the change order;
- other reference points associated with the Change Order (i.e., disputes, reference documents, etc.); and
- Reviewer/Approver responses to messages.

11.1.3 Change Order Panel

The Change Order panel provides the user with the ability to navigate to all the different windows within Contract Change Order function. The Change Order Panel has three icons that represent the Change Order Maintenance panel, the Reports panel, and Reference Tables panel.

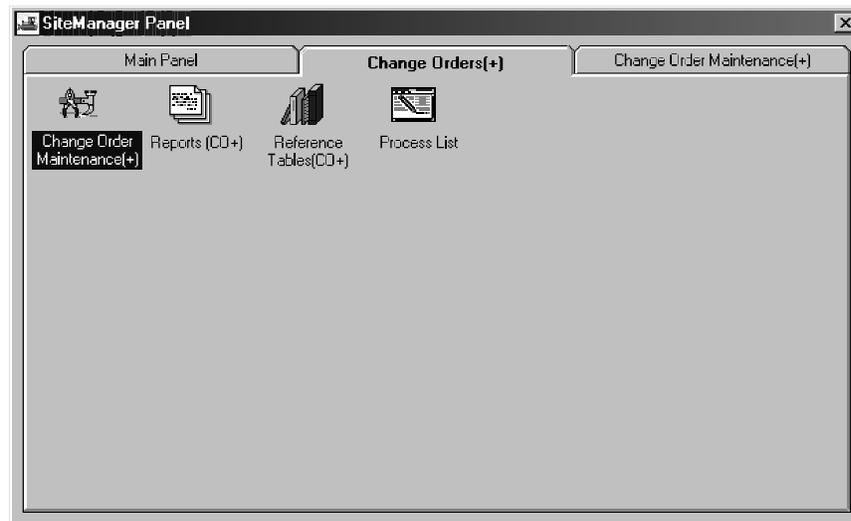


Figure 11-1 The Change Order Panel

11.2 Reference Tables (Change Orders)

The Reference Table Panel contains sources of standards and data for Change Orders. The reference tables supply the default values, information about approval groups, approval rules or levels, and standard explanations for change order reasons. There are three icons on the Change Order Reference Table panel that provide access to change order reference table windows:

- Change Order Approval Groups
- Change Order Approval Rules
- Standard Explanations

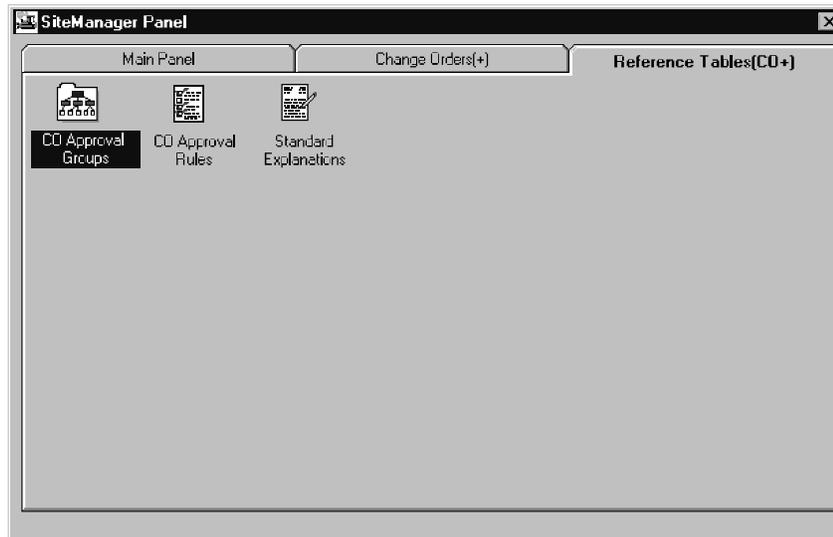


Figure 11-2 The Change Order Reference Table Panel

11.2.1 Change Order Approval Groups

A contract change order must go through a hierarchy of approvals before any changes can be made to the contract. This window, combined with the Approval Rules window, defines each contract's hierarchy of approvals. The hierarchy, or approvals order, consists of one or more SiteManager users belonging to User Groups who are authorized to approve contract change orders.

Note: Approval level groups and user groups must be established before any change orders are written in SiteManager. In addition, if the Transportation Agency would like option to process negative change orders (change orders with final dollar amounts less than zero), then the System Administrator, or other authorized user, should verify that the Change Order Absolute Value Approval indicator (on the Contract Administration tab of the System Operational Parameters window) is set to 'Yes' (which is the indicator's default setting). When the indicator is set to 'Yes', the system will apply the existing Change Order Approval Rules to negative dollar CO's as if they have positive dollar values. For example, If the indicator is set to 'Yes', and a change order has a value of -\$1,000, the system will use the same approval rules applied to a change order worth \$1,000.

The screenshot shows a window titled "CD Approval Groups" with a table for "Departmental User Group" and a section for "Non-departmental User Group".

Approval Level	Departmental User Group
1	Project Supervisor
2	Project Engineer
3	Project Manager
4	District Construction Engineer

Below the table is the "Non-departmental User Group" section with three dropdown menus:

- Contractor: Contractor CO Approvers
- Federal: Federal
- Local: Local

Figure 11-3 The Change Order Approval Groups Window

11.2.1.1 Change Order Approval Groups - Creating and Maintaining

The Change Order Approval Groups window allows authorized personnel to establish and maintain a reference table that defines the Departmental and Non-departmental User Groups required to approve change orders. It also allows the user to define where those User Groups fit in the approval hierarchy.

SiteManager defines the hierarchical sequence in which at least one member of a User Group approves change orders. The sequence is:

- Contractor approval
- Local approval, if there is local oversight of the contract
- Any Departmental approval, (for example, Project Engineer, Construction Engineer, etc.)
- Federal approval, if there is federal oversight of the contract

The default values for the number and type of approval levels, the sequence of those levels, and the users associated with each level are defined by the Transportation Agency when SiteManager is initially setup, but *before* any change orders are written. Changes in department hierarchy may affect the levels of change orders sent for approval. SiteManager allows the system parameters to be changed as a part of the System Administration function.

Any authorized user may then apply these system parameters in the Change Order function to add new Departmental approval levels or delete approval levels from the contract change order approval process.

Field Name	Description
Departmental	Department of Transportation defined
Approval Level	The hierarchy, or order in sequence, of user groups in the Departmental approval process. This field is display only. Sequential numbers are added as approval groups are added.
User Group	The unique identifier for a group of approving users. At least one group must be selected.
Non-Departmental User Group	
Contractor:	User group assigned to approve when Non-departmental contractor approval of a change order is required. A selection for this group is mandatory.
Federal:	User group assigned to approve when Non-departmental federal approval of a change order is required on federal oversight contracts. A selection for this group is not mandatory for change orders involving federal oversight. This field must have been entered to secure approval for the change order if it is associated with a contract requiring federal oversight.
Local:	User group assigned to approve when Non-departmental local approval of change order is required on local oversight contracts. A selection for this group is not mandatory, but this field must have been entered to secure approval for the change orders if it is associated with a local oversight contract.

Table 11-3 The Change Order Approval Groups Window Fields Table

To add a new Departmental approval level to the table:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Reference Tables** icon.
3. On the **Reference Tables** panel, double-click the **CO Approval Groups** icon.
4. On the **CO Approval Groups window**, in the **Departmental User Group** upper data window, click any choice.

5. Click the **New** button on the tool bar to insert a blank line at the end of the Departmental User Group approval level table. This new table entry displays the next sequential level number and a blank user group field.
6. On the **Blank** line, in the **Departmental User Group** data window, click the desired choice.
7. Click the **Save** button.

To delete a Departmental approval level from the table:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Reference Tables** icon.
3. On the **Reference Tables** panel, double-click the **CO Approval Groups** icon.
4. In the **Departmental User Group** list box, scroll to and highlight the user group for the level to be deleted.
5. Click the **Delete** button on the tool bar on the lowest approval level first. (**See Tip**).
6. Click the **Save** button.

Tip: Approval Groups must be deleted in descending order. The user must delete the last approval group first and continue, if required, until the lowest level is deleted. There is no confirmation of the deletion. A message appears if the approval level selected for deletion is not the lowest level (or next in the hierarchy).

Also, Approval Groups cannot be deleted if they are referenced in other tables. Specifically, an Approval Group can not be deleted if it has been used for a Change Order's approval before.



Figure 11-4 The Change Order Approval Groups Delete Message

11.2.2 Change Order Approval Rules

The level at which a change order is approved depends on rules established by the Transportation Agency. There are different approval levels depending on:

- The type of contract
- The functions included in a change order
- The amount of money a change order increases the contract
- The addition of a new item to the contract

The Change Order Approval window allows authorized users to

- Define the set of rules that apply to each contract type and change order function combination
- View established rules for the contract types and change order functions.

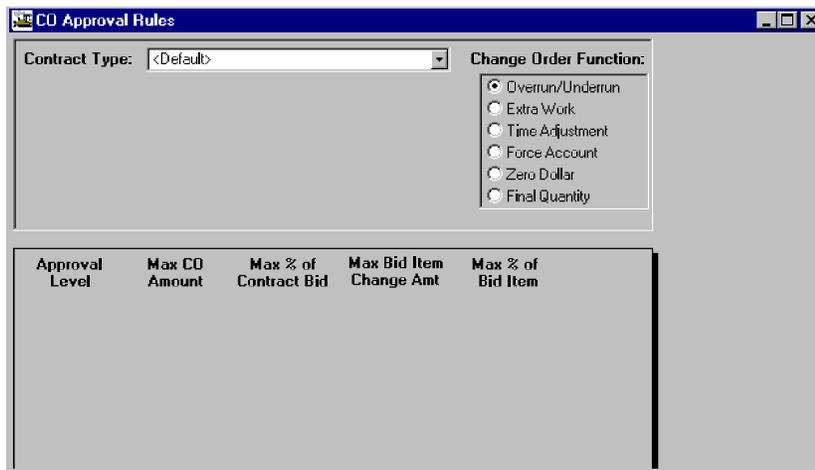


Figure 11-5 The Change Order Approval Rules Window

The Change Order Approval Rules window has two data windows. The top data window allows the user to select the Contract Type and the Change Order Function(s) for which they wish to define or view rules. The lower data window displays blank lines for entry of new rules or displays the existing rules for the selected Contract Type and Change Order Function, depending on the window authority of the user.

During system setup, and before any change orders are written, the Transportation Agency *must* establish the maximum dollar amounts for one or more approval levels for the different change order types associated with each type of contract. The following conditions apply when creating new rules using the Change Order Approval window:

- Before any rules can be established, the approval levels for the Contract Type and Change Order Function must be established using the Change Order Approval Groups window.

If the rules are not established prior to creation of change orders for a particular Contract Type and Change Order Function, SiteManager assumes the change order function requires the highest level of approval and applies those rules when the change order is edited for compliance with the rules.

No rules may be specified for the highest approval level. Therefore, if there is only one approval level, no rules may be entered.

If the rules for a lower approval level are entered as zero's, this level is ignored in the approval hierarchy.

Rules may only be added within the range of previous and subsequent rules (that is, within the hierarchy).

Rules may only be deleted beginning with the last rule, as the lowest approval level and working up the hierarchy.

If any one criteria is left blank, the Change Order will automatically go to the next approval level. If a Change Order is to stop at an approval level (for certain criteria) a value must be put in each of the fields. If

there are certain criteria which would not be important to the transportation agency's Change Order processing (for example, Max % of Bid Item), then some unrealistic value that will never be reached should be entered (for example, 999.99%).

To create Change Order Approval Rules:

1. On the **Main** panel, double-click the **Change Order** icon.
2. Double-click the **Reference Tables** icon.
3. On the **Reference Tables** panel, double-click the **Change Order Approval Rules** icon.
4. On the **Change Order Approval** window, in the **Contract Type** drop-down list, click the desired choice.
5. Click the **Change Order Function** radio button for the desired function.
6. Change focus to the lower datawindow by clicking anywhere in the lower datawindow.
7. Click the **New** icon. This action displays the appropriate rule categories in the lower data window and a blank line for entry of rule values.
8. In the **Approval Level** drop-down list, click the desired choice (a number). 
- Tip:** Only the approval levels for which the user may define rules display in the drop-down list.
9. In the **Approval Rule Values** fields, type the appropriate limits for the approval level.
10. Press the **Tab** key to advance through the fields. (see the Change Order Approval Rule Values fields table referenced in this section)
11. Verify that amounts do not overlap for different levels.
12. Click **Save**.

11.2.2.1 Approval Rules: Amounts and Percentage Fields by Change Order Function Type

The fields available for defining the approval rule values depends on the Contract Type and the Change Order Function selected in the top data window. The fields that apply for each change order function are described in the following table (with exception of the Zero Dollar CO function):



The Zero Dollar function allows selection of only *one* approval rule level. Therefore, the users should choose the highest level required by their state's Transportation Agency for approval of a Zero Dollar CO.

Change Order Function	Maximum Days	Maximum Change Order Amount	Maximum Percentage of Contract Bid Amount	Maximum of Bid or New Item Amount	Maximum Percentage of Bid Item
Overrun/Underrun		X	X	Bid	X
Extra Work		X	X	New	
Time Adjustment	X				
Force Account		X	X		
Final Quantity		X	X	Bid	X

Table 11-4 The Change Order Function Approval Rules - Available Fields Table

To delete a Change Order Approval Rule:

1. On the **Main** panel, double-click the **Change Order** icon.
2. Double-click the **Reference Tables** icon.
3. On the **Reference Tables** panel, double-click the **Change Order Approval Rules** icon.
4. On the **Change Order Approval Rules** window, in the **Contract Type** drop-down list, click the desired choice.
5. Click the **Change Order Function** radio button for the desired function. This action displays the highest existing approval level and the associated rules in the lower data window and a blank line for entry of rule values.
6. Change focus to the lower datawindow by clicking anywhere in the lower datawindow.
7. In the **Approval Level** drop-down list, click the desired level.
8. Click the **Delete** icon.
9. Click the **Yes** button to confirm the deletion.
10. When complete, click the **Save**.
11. Click the **Close**.

Tip: The last approval rule in the sequence of rules may be deleted. The deleted approval level and its associated rules are deleted from the database.

11.2.2.2 Applying Change Order Approval Rules

When the status of a Change Order is changed from Draft to Pending or from Pending to Approved, SiteManager automatically applies the existing approval rules for the Contract Type Change Order Function(s) and Change Order values. The **Change Order Status Table** referenced in the Change Order General Information section describes the results of edits that are passed versus failed with each type of status change.

Field Name	Description
Contract Type	A Transportation Agency-defined code used to classify contracts. This field defaults to Regular contract type. Selecting another contract type triggers edits on approval levels. It also triggers the redisplay of levels for the selected contract type.
Change Order Function	Functions that can comprise a change order. This field is a radio button list displaying all change order functions in SiteManager. The types are: Overrun/Underrun, Extra Work, Time Adjustment, Force Account, Zero Dollar and Final Quantity. The default selection is Overrun/Underrun. Selecting another change order function triggers edits on approval levels. It also triggers the redisplay of level rules for the selected change order function.
Approval Level	The hierarchy, or order in sequence, of user groups in the approval process. This field is mandatory. Levels are chosen from those established in the Change Order Approval Groups process. At least one maximum amount, either the percentage or days rule, must be entered for each level selected. The selected level must be higher than the previous rules' levels.
Max C.O. Amount	The amount by which the change order modifies the total contract amount. This is the maximum change order amount the selected approval level may approve. Higher amounts may only be approved by one of the higher levels. This field is optional, but at least one maximum amount, either the percentage or days rule, must be entered for each approval level selected.

Field Name	Description
Max % of Bid Amt	The percentage change to a contract’s bid amount that the change order modifies the total contract amount. This is the maximum amount the selected approval level may approve. Higher percentages may only be approved by one of the higher levels. This field is optional, but at least one maximum amount, either the percentage or days rule, must be entered for each level selected.
Max Bid Item Amt	The dollar amount limits a change order modifying an individual existing contract item. This amount includes previously (accumulated) approved changes. This is the maximum amount a selected approval level may approve. Higher amounts may only be approved by one of the higher levels. This field is optional but, at least one maximum amount or percentage rule must be entered for each approval level entered.
Max % of Bid Item	The percentage change limitation to an existing contract item’s bid amount that a change order may modify a total contract amount. This percentage includes previously approved changes. This is the maximum amount a selected approval level may approve. Higher percentages may only be approved by one of the higher levels. This field is optional but, at least one maximum amount or percentage rule must be entered for each approval level entered.
Max New Item Amt	The dollar amount limit of a new contract item on a change order. This is the maximum amount a selected approval level may approve. Higher amounts may only be approved by one of the higher levels. This field is optional but, at least one maximum amount or percentage rule must be entered for each approval level entered.
Max Days	Maximum number of adjusted days a selected approval level may approve. More days adjusted may only be approved by one of the higher levels. This field is required when defining time adjustment rules.

Table 11-5 The Change Order Approval Rules Window Fields Table

11.2.3 Change Order Explanations

When a contract change order is being written, users must enter explanations to document reasons or descriptions of contract changes included in a change order. Using the Change Order Explanations window, a user may:

- Use pre-written standard explanations defined by the Transportation Agency before any change orders are created and displayed for selection on the Change Order Explanations window (Search and Select a Standard explanation),

OR

- Write new text to explain a change order, creating a non-standard Explanation, using the Change Order Explanations window's lower datawindow. (Create a new, non-Standard explanation.)

Standard Explanations are established before any contract change orders are written using the Change Orders Explanations window. Using the CO function, users can also define their own explanations and their own Explanation IDs.

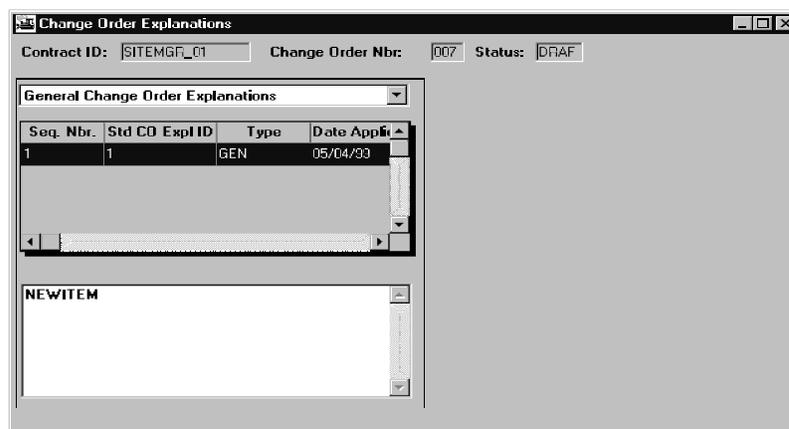


Figure 11-6 The Change Order Standard Explanations Window

The CO Standard Explanations window contains two data windows:

- The top data window displays the Explanation ID and explanation text for pre-defined standard explanations.
- The lower data window displays any saved remarks related to the explanation highlighted in the top data window.

The following table defines the fields found on the CO Standard Explanations window:

Field Name	Description
Explanation ID	This is a transportation agency defined identifier that identifies a standard change order explanation. This field is only editable when creating a new explanation. The Explanation ID must be unique in the database.
Explanation Text	Transportation Agency defined text that describes the CO Standard Explanation. This field is only editable for new and unused standard explanations.

Table 11-6 The Change Order Standard Explanations Window Fields Table

11.2.3.1 Retrieving and Viewing Standard Explanations

When the CO Standard Explanation window is retrieved, the rows in the top data window are protected and cannot be edited. The user may scroll the list of Explanations or use Filter or Find options to make a selection.

The initial retrieval of the Standard Explanations window retrieves up to 100 change order explanation rows in the top data window. If there are more than 100 rows in the database, the user is warned with a message notifying them to use the Find - Filter capabilities to limit the number of rows displayed.

11.2.3.2 Adding Standard Explanations

The Standard Explanations process also allows authorized Transportation Agency personnel to create and maintain standard change order explanations. Each standard explanation has an Explanation ID defined by the Transportation Agency.

To create a new standard explanation:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Reference Tables** icon.
3. On the **Reference Tables** panel, double-click the **Standard Explanations** icon.
4. On the **Standard Explanation** window, highlight and click any row in the top data window to return focus to the top data window.
5. Click the **New** button on the tool bar to insert a blank row in the top data window.
6. In the **Explanation ID** field, type an ID for the new standard explanation.
7. In the **Explanation Text** field, type a brief the description a for the new standard explanation.
8. Press the **Tab** key to move to the lower data window.

9. In the **Enter/Edit Explanation** field, type the non-standard reason for this change order.
10. Click **Save**.

Tip: Explanation ID's must be unique to be added to the database. The **Save** process edits new Explanation ID's to ensure that each is unique before adding them to the database.

- If the Explanation ID *is not* a duplicate, the new Explanation ID and Explanation Text are added to the database and focus is returned to the unprotected column on the top data window.
- If the Explanation ID *is* a duplicate, the user is prompted with a message box and focus is returned to the Explanation ID field where the user may type a new, unique Explanation ID.

11.2.3.3 Maintaining Standard Explanations

Once entered and saved, standard change order explanations may be modified or deleted with the following limitations:

- Explanation text may be modified if the explanation has not yet been used in any change order in the database.
- Standard Explanation ID's cannot be modified, but may be deleted, if the explanation has not yet been used in any change order in the database.
- A Standard Explanation may be deleted if the explanation has not yet been used in any change order in the database.

To change Explanation Text for an existing, but unused Explanation:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Reference Tables** icon.
3. On the **Reference Tables** panel, double-click the **Standard Explanations** icon.
4. On the **Standard Explanations** window, in the **top** data window, click the **Explanation ID and Text** row.
5. Press the **Tab** key to access the lower data window and enable the multi-line-edit capability.
6. In the **Enter/Edit Explanation** field, type a modified entry.
7. Click the **Save** button on the tool bar.

To change a Standard Explanation ID:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Reference Tables** icon.
3. On the **Reference Tables** panel, double-click the **Standard Explanations** icon.
4. Perform the **Delete Explanation** procedure for the standard explanation with the incorrect Explanation ID.

5. Click the **Save** button on the tool bar.
6. Perform the **Add Explanation** procedure (referenced in this Section) and enter corrected Explanation ID.
7. Click the **Save** button on the tool bar.

To delete a standard explanation:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Reference Tables** icon.
3. On the **Reference Tables** panel, double-click the **Standard Explanations** icon.
4. On the **Standard Explanations** window, in the **top** data window, click the **Explanation ID** and **Text** choice.
5. Click the **Delete** button on the tool bar.
6. Click the **Yes** button (to confirm the delete).
7. Click the **Save** button on the tool bar.

Note: The user cannot modify or delete CO Standard Explanations or Remarks unless the change order associated with it is in Draft status and the explanation has not been used on a previous change order.

11.3 Change Orders - Creating and Maintaining

The user must have specific authority to create and maintain Change Orders in SiteManager.

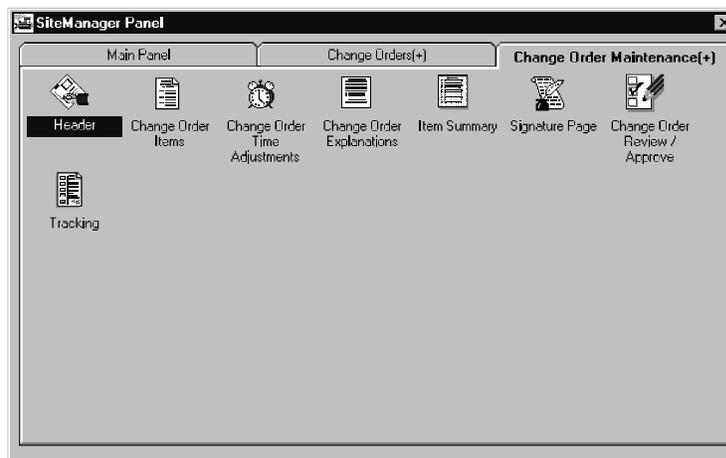


Figure 11-7 The Change Order Maintenance Panel

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.

The change order function determines the entries that must be made and the windows that must be accessed to create and maintain a change order. With the exception of the Final Quantity change orders, multiple functions can be checked. Zero Dollar change orders must be segregated as well. Messages appear prompting users to complete required fields.

The following entries must be made on the referenced windows to comply with the change order function edits in SiteManager:

Overrun/Underrun

When the quantities of existing items must be changed through a change order, this qualifies as an overrun or an underrun of the contract quantities.

On the Header Window:

The Overrun/Underrun Change Order Function must be selected on the Header window to define the purpose of the change order.

On the Change Order Items Window:

The item quantities associated with the contract must be modified.

Tip: The user may then access the Change Order Items window directly from the Change Order Header window using the Services menu.

Extra Work

When new items are added to a contract as a result of a change order, this is classified as extra work.

On the Header Window:

The Extra Work Function must be selected on the Header window to define the purpose of the change order.

On the Change Order Items Window:

At least one new item must be added to the contract using the New Item Tab on this window.

Tip: The user may then access the Change Order Items window directly from the Change Order Header window using the Services menu.

Time Adjustments/Extension

If there is a change to the contract completion date or to any milestones associated with the contract, this qualifies as a Time Adjustment Change Order.

On the Header Window:

The Time Adjustments Function must be selected on the Header window to define the purpose of the change order.

On the Time Adjustments Window:

At least one adjustment must be made to the contract completion date or a milestone using this window.

Multiple time adjustments may be made to milestones.

Only one change to the contract completion date is allowed per change order.

The net results of Change Order revisions to the Contract Completion Date are reflected in the Contract Administration, Contract Records, Contracts window, Critical Dates Tab.

The net results of Change Order revisions to Contract Milestone Dates are reflected in the Contract Administration, Contract Records, Milestones.

Force Account

When the CO involves an overrun/underrun, and/or extra work, and/or an adjustment in time but there is no agreement on the amounts associated with the change, this CO qualifies as a force account situation.

The Force Account is created by the Transportation Agency office in the Force Account Summary panel. Actual costs for equipment, labor and materials are adjusted using DWR information recorded by an inspector. This information is combined to prepare a Force Account Change Order. Once the Force Account CO is approved, an Inspector records actual or usage numbers in a Daily Work Reports. The installed items are then included in Estimates and paid along with other contract items.

A Force Account Change Order requires adding a new line item to the contract.

On the Header Window:

The Force Account Function must be selected on the Header window to define the purpose of the change order.

The *Reference to:* field for Force Account (Dispute:, Force Account:, Reference Doc:) should also be completed.

On the Change Order Items Window:

The quantities and/or values of the new or modified items may be incomplete.

On the Time Extension Window:

The time adjustment entries may be imprecise.

Zero Dollar

Occasionally, a contract will require changes that do not affect the actual dollar amount of the contract.

Final Quantity

Users may exercises the option of generating a final quantity change order on any contract. This change order records the final modifications (if any) to the item quantities for the contract. In some cases, this may be the only change order associated with a contract.

On the Header Window:

The Final Quantity Function must be selected on the Header window to define the purpose of the change order. No other type of change order may be indicated if this is a Final Quantity Change Order.

On the Change Order Items Window:

The ending quantities and/or values of the contract items are recorded on this window one item at a time. This information is required to compute the final payment on the contract.

The net results of a Final Quantity Change Order are reflected in the Contract Administration, Items window

Note: During the contract finalization process, the system will automatically assign final quantities for all items on the contract when final quantities have not all ready been assigned via a change order. The system will automatically change the item status to Final.

11.3.1 Change Order Header

The Change Order Header window allows an authorized user to:

- Create a new change order by entering enter new descriptive information for a change order, or
- Maintain the current descriptive information about an existing change order as the status of the change order progresses from Draft through Pending.
- Change the status of a change order permanently to Approved or Disapproved.

Change orders must be associated with existing contracts. The Change Order Header is used to select the contract for which the change order or the contract and change order number to be modified. The user may click **Services/Choose Keys** or Open icon to select the appropriate contract and/or change order in the database.

The screenshot shows the 'Header' window with the following fields and values:

- Contract ID: C11985
- CO Number: 003
- Tentative Verbal Approval Dates: Federal: 00/00/00, Local: 00/00/00
- CO Created by: System Administrator 1
- On: 06/22/01
- Status: Draft
- Approval Level: [Empty]
- Description: [Redacted]
- Reason Code: [Dropdown]
- CO Type: [Dropdown]
- Override Approval Rules:
- Emergency Work:
- Functions:
 - Overrun/Underur:
 - Force Account:
 - Extra Work:
 - Zero Dollar:
 - Time Adjustment:
 - Final Quantity:
- Bid Contract Amt: \$7,093,260.32
- Current Contract Amt: \$7,647,060.32
- CO Amount: \$0.00
- Reference to:
 - Dispute: [Input]
 - Force Account: [Input]

Figure 11-8 The Change Order Header Window

To access the Change Order Header window:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Header** icon.

A blank Change Order Header window displays, if the user has not previously specified a contract and/or change order on another window prior to accessing the Header window.

To choose the keys to select the contract associated with this change order:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Header** icon.
4. On the blank **Header** window, click the **Services** menu and click the **Choose Keys** choice or press **Ctrl K**.
5. On the **Select Contract**, in the **Contract ID** data window, double click the **Desired Contract** choice or click the **Ok** button.
6. On the Change Order picklist window, highlight the desired change order or click the **Ok** button.

This action redisplay the Change Order Header window with the identifying information for the selected Contract in the display-only fields.

To select a different contract to create a new Change Order Header:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Header** icon.
4. On the **Header** window, click the **New** button.
5. On the **Header message** window, click the **Yes** or **No** button, to confirm the save of any changes to the existing change order header data.
6. On the blank **Header** window, click the **Services** menu and click the **Choose Keys** choice or press **Cntl K**.
7. On the **Select Contract and Change Order** window, in the **Contract ID** data window, double click the **Desired Contract** choice or click the **Ok** button. *The Change Order Header window is redisplayed with the identifying information for the selected contract in the display-only fields. It also automatically increments the change order numbering and displays the next change order number for this contract in the CO Number field.*

Field Name	Description
CO Created by	This is user name (from the User ID table) for the SiteManager user that created the change order and the date it was created. This is a display only field. It is populated the first time the new change order is saved.
On	This is the date the change order was created. This is a display only field. It is populated the first time the new change order is saved.
Status	Stage in the life of the change order. Available status codes include: Draft, Pending, Approved, and Disapproved. Changing the Status to Disapproved in this window permanently changes the status, and the Change Order is then read-only.
Approval Level	This field displays the level comprising the step needed to approve different change orders. The values displayed in this field are derived based on the matrix of change order criteria defined when the DOT established the change order approval levels and associated approval rules.
Description	A short narrative description of the referenced change order. This field is a mandatory field.

Field Name	Description
Reason Code	Transportation Agency defined reasons for change orders. This information is used for management reporting.
CO Type	Change order types define the purpose of the change order.
Override Approval Rules	A check box that indicates that the established Approval Rules do not apply to the change order. When this indicator is selected for a change order, the user is allowed to specify a sequence of approval groups which will only apply to the <i>current</i> change order.
Functions	
Overrun/Underrun	A check box that indicates that the quantities associated with at least one item have been modified as a result of the change order.
Extra Work	A check box that indicates that there is extra work or at least one new item included on the change order.
Time Adjustments	A check box that indicates that at least one of the timeframes associated with the contract is modified as a result of the change order.
Force Account	A check box that indicates that there is a force account associated with the contract that affects the change order.
Zero Dollar	A check box that indicates that the change order does not affect the dollar amount of the contract. Zero Dollar change orders <i>cannot</i> include any other functions.
Final Quantity	A check box that indicates that the final item quantity for all items on the contract is included in the change order. Final quantity change orders <i>cannot</i> include any other functions.

Field Name	Description
Emergency Work	An informational check box that indicates that the change order is for emergency work. In order to expedite the CO Review/Approval process, the author can select this indicator which is linked to an 'Emergency' indicator on the CO Review/Approval window. The Emergency indicator alerts approvers that the change order is for emergency work.
Bid Amount	The original bid amount of the contract. This is a display-only field.
Current Contract Amount	The current amount of the contract. This is a display-only field.
CO Amount	The amount of the change order derived from all contract items modified by the change order. This is a display-only field.
Reference to:	
Dispute	This field is a key for any disputes associated with the change order.
Force Account	This field identifies an associated force account. This field is only used for force account change orders.
Tentative Verbal Approval Dates:	
Federal	The date on which a federal agency gives its tentative verbal approval of the change order. This is an optional field.
Local	The date on which a local agency gives its tentative verbal approval of the change order. This is an optional field.

Table 11-7 The Change Order Header Window Fields Table

To create a new change order:

1. In the **Description** field, type a description of the change order
2. Press the **Tab** key.
3. In the **Reason Code** drop-down list, click the desired **Change Order Reason** choice.
4. Press the **Tab** key.
5. In the **CO Type** drop-down list, click the desired **Change Order Type** choice.
6. Press the **Tab** key.
7. In the **Functions** data box, click the desired Function radio button.
8. Press the **Tab** key.
9. Click the **Emergency Work** check box (ON), if this change order involves emergency work.
10. Press the **Tab** key.
11. Complete **Reference to** options as required.
12. In the **Dispute** field, use the Search Lens to find and select a **Dispute Identifier**, if there is a Dispute related to this change order.
13. Press the **Tab** key.
14. In the **Force Account** field, use the Search Lens to find and select the Force Account Identifier, if there is a Force Account related to this change order.
15. Click the **Reference Doc** spin button and select a Reference Document related to this change order.
16. Click the **Save** button. *The cursor is automatically returned to the **Status** field.*
17. In the **Status** drop-down list, click the desired **Change Order Status** choice. (***Draft** - the CO can be forwarded for review. **Pending** - the CO can be forwarded for Approval.*)
18. Press the **Tab** key.
19. If a Federal Agency has given its tentative approval to this change order, type the **Date** of that approval in the **Federal** field.
20. Press the **Tab** key.
21. If a Local Agency has given its tentative approval to this change order, type the **Date** of that approval in the **Local** field.
22. Press the **Tab** key.
23. Click the **Save** button.

24. Continue the creation of the new change order by completing any entries required to the contract items, time frames, or explanations using the instructions referenced in this section. Use the **Services** menu item to navigate to required windows.

Tip: If there is a Reference Document entry for this new Change Order, the user may associate a copy of the Document with the change order record using the procedures outlined in the Contract Administration - Maintenance section, under the Document Submission topic.

11.3.1.1 Special Approval Change Orders

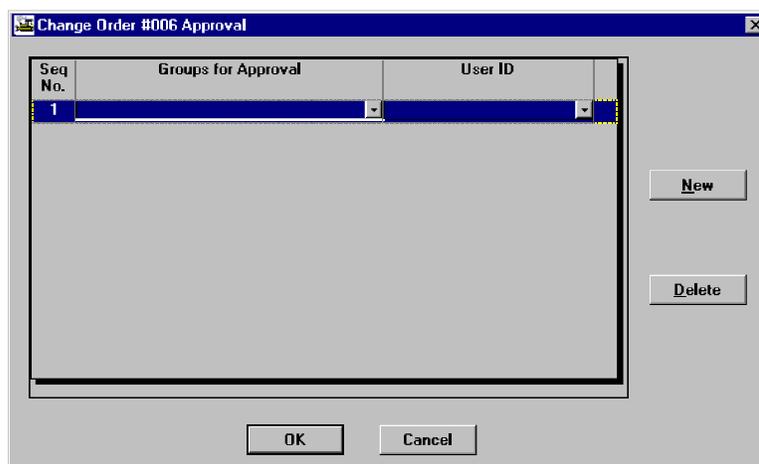


Figure 11-9 The Special Approval CO Approval Window

When a Transportation Agency needs to process a CO that requires different approval rules than the standard rules previously established (i.e. Specification Work), authorized users can override the standard approval rules by selecting the Override Approval Rules indicator, on the Change Order Header window. Once the user selects the indicator, changes the CO status to Pending and saves the change order, the user can then select the number of approval levels and designate User Groups/IDs on the Special Approval CO Approval window. This function looks much like the CO Review/Approve window, accept it allows the user to select the User Groups *and* User IDs on a single window.

Field Name	Description
Seq No.	The number which designates the sequential order of the User Groups/IDs in the approval process.
Groups for Approval	A drop down list containing the list of User Groups that are authorized to approve change orders. This is a required field.
User ID	A drop down list containing the list of users in the selected Approval Group, for the current approval level. This is a required field.

Table 11-8 The Special Approval CO Approval Window Fields Table

The following restrictions apply when creating or maintaining a Special Approval Change Order:

- The user must choose an approval group and User ID for each approval level.
- Once the approval process has begun, the user may add additional approval levels.
- Once the change order has been approved by a user, the user’s ID appears as a protected field in the Special Approval CO Approval window and *cannot* be deleted from the.
- The approval level and User ID that follows the last level that *approved* the change order, cannot be deleted from the Special Approval CO/Forward To window.
- When a Special Approval CO is in Pending status, the user can delete every approval level *except* the first one. If the user wishes to delete the first approval level, the CO’s status must be changed back to Draft.

Note: The Change Order Tracking window will reflect *any* changes made on the Special Approval CO/Forward To window.

11.3.1.2 Maintaining Change Order Header Information

Maintaining existing change order header information involves:

- Accessing the correct contract and Change Order Header window
- Updating the editable fields appropriate for the change order status
- Updating the appropriate contract and change order items, time adjustments and explanations to complete the maintenance process

Access existing change order information for the same or another contract following the same procedures described for accessing a change order.

Maintain existing change order header information for a Draft change order using the same procedures described in creating a change order.

The status for a Pending change order may be changed back to Draft for revision. A Pending CO that has been Denied on the Change Order Review/Approve window is automatically changed back to Pending, and may be changed back to Draft Status by the author. The CO may then be revised, have it's status changed to Pending and be re-submitted for approval.

Once a change order has been approved on the Change Order Review/Approve window by the final approver, the system automatically changes the CO's status to Approved on the Change Order Header window. If the status on the CO Header window is changed to Denied, then saved, any further modifications to data on the CO header and its related windows are prevented.

11.3.1.3 Navigation to Other Change Order Functions

Depending on the Status and the Contents of a CO header, the user may directly access other change order functions from the Header window.

From the CO header window under the Services menu option, users may select:

- the Change Order Items window
- the Change Order Time Adjustments window
- the Tracking window

These windows must be closed to return to the Change Order Header window.

11.3.1.4 Forwarding the Change Order for Review or Approval:

Draft change orders may be forwarded for *review* from the Header window. Pending change orders may be forwarded for *approval* from the Header window.

Draft Change Orders: During the life of the contract change order, the author of the change order is responsible for forwarding the change order to identified SiteManager users for review. If the change order is in Draft status, the *author* has the option whether to submit the draft change order for review and which SiteManager users should review the change order.

Pending Change Orders: During the life of the contract change order, the author of the change order is responsible for forwarding the change order to identified approval level SiteManager users for approval. When the change order is in Pending status, the *system* defines approval levels and approval rules according to the Contract Administration tab on the System Operational Parameters window and the CO Reference Tables . Except for Zero Dollar CO's, which only require one approval level, the author must select at least one approver from each approval level.

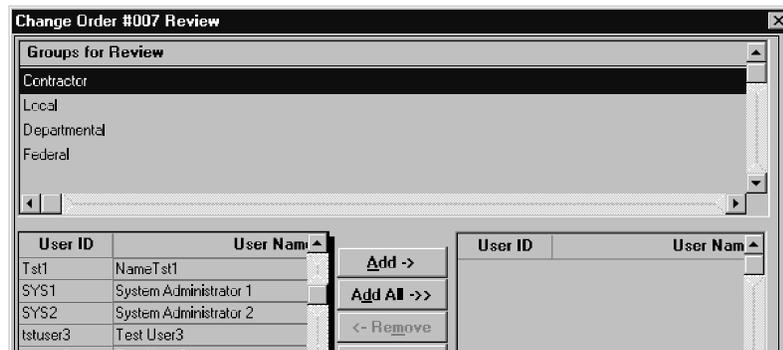


Figure 11-10 The CO Groups for Review Window

To forward a Draft change order for review:

1. On the **Header** window, click the **Services** menu and click the **Forward To** choice. The Groups for Review window appears.

To forward a Pending change order for review:

1. On the **Header** window, click the **Services** menu and click the **Forward To** choice. The Groups for Approval window appears.

To select Reviewers or Approvers for the change order:

1. In the Groups for Review or Groups for Approval window, select the top group level name. (Contractor, in the example.) The ID and name of all members of this group appear in the lower left datawindow.
2. Select (Highlight) the name of at least one group member.
3. Click the **Add** button. The selected name appears in the lower right datawindow. Select and add names as desired.
4. Select the next level group name. (Local in the example) The ID and name of all members of this group appear in the lower left datawindow.
5. Select (Highlight) the name of at least one group member.
6. Click the **Add** button. The selected name appears in the lower right datawindow. Select and add names as desired.
7. Continue these procedures through each group listed in the upper datawindow until at least one user has been selected and added for each group level.
8. Authors may use the **Add All** button to add members of a group to the Reviewer or Approver list or use the **Remove**, or **Rem All** buttons to remove group members. These buttons apply only to the current level group. For example, **Rem All** does not remove every selection made in the window, only in the currently selected group.
9. Complete adding Reviewers or Approvers until at least one user has been selected and added for each group level.

10. Click the **Save** icon. Respond to any messages.
11. Click **Yes** on the Mail is Sent Message
12. Review the Change Order Tracking window for this contract and Change Order.

Tip: While the change order remains in a Draft or Pending status, this option is accessible from the Change Order Header Services menu. When the status is changed to *Approved* or *Disapproved* the *Forward to* option on the Services menu of the Header window is not enabled.

11.3.1.5 Calculating the Change Order

After the full change order creation or maintenance activities are complete, including entries or updates to the change order items, time adjustments and explanations windows, the user may re-calculate the display only values on the Change Order Header window.

To calculate the change order values:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Header** icon.
4. On the **Header** window, click the **Services** menu and click the **Calculate Change Order** choice.
5. Click the **Save** icon.

Tip: If the Change Order maintenance activities (e.g., adding new change order items, making time adjustments) are performed via the Services menu on the Change Order Header window, a Save must be performed before Calculate Change Order may be selected from the Services menu. Prior to performing the Save, the Calculate Change Order option is disabled.

11.3.2 Change Order Items

The Change Order Items window allows the user to:

- Select an existing item on the contract for inclusion in the change order
- Add a new item to the contract by including it in the change order
- Select and modify an existing item in the contract and already associated with the change order
- Delete an item from a change order

Whenever the change order function is an overrun/underrun and/or extra work, the Change Order Items window must be used to make the corresponding entries and/or modifications to the change order items. To access the Change Order Items window:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.

3. On the **Change Order** Maintenance panel, double-click the **Change Order Item** icon.

OR

To access the Change Order Items window from the Change Order Header window:

1. On the **Header** window, confirm that the Change Order functions radio button for **Overrun/Underrun** and/or **Extra Work** are selected (ON).
2. Click the **Services** menu, click the **CO Items** choice.

11.3.2.1 Selecting a Contract and Change Order Number

If the user has not previously specified a contract number and change order number in other windows, the first action required to access this window is to choose the contract and change order keys.

To choose the keys to display data on the Change Order Item window

1. On the **Change Order Item** window, click the **Services** menu and click the **Choose Keys** choice.
2. On the **Select Change Order Item** window, in the **Contract ID** data window, double-click the desired **Contract** choice.
3. On the **Select Change Order Item** window, in the **Change Order** data window, highlight the desired **Change Order** choice. This action displays the Change Order Item window with the selected contract and change order information displayed in the appropriate fields.

11.3.2.2 Change Order Items Window Tabs

Change Order Item Tab:

The Change Order Item tab shows detailed information about items included in the change order. On the Change Order Item tab of the Change Order Items window the user may:

- Select an existing item in the contract and add it to the change order,
- Select an existing item in the current change order for modification; and/or
- Complete the entry of change order information required for a new contract item (created on the New Contract Item tab).

Change Order Items

Change Order Item **New Contract Item**

Contract ID: TRAIN_30 Change Order Nbr: 001

Project Nbr: [] Category Nbr: [] Line Item Nbr: []

Item Code: [] Units Type: [] Spec Year: []

Description: []

Major Item: Specialty: Status Type: []

Unit Price: [] \$0.00000

Proposal Line Nbr: [] Related Item: []

Critical: Pay Plan Qty: Suppl Desc Req'd: Material Discrepancy Adj:

Supplemental Descriptions:

[]

[]

Figure 11-11 The Change Order Items Window - Change Order Item Tab (1)

New Contract Item Tab

When the contract does not already contain the item to be included in the current change order, the user must first *create* the new contract item using the New Contract Item tab *and* then add it as a change order item using the Change Order Item tab. The new contract item must be created through the change order process, including approval of the change order, before it can be officially added to the contract and to the database.

The **New Contract Item** tab is only enabled when a new contract item is added and then associated with the Change Order as a change order item. On the New Contract Item the user may:

- Create a new item to be added to the contract through this change order; or
- Update new contract item information included in this change order.

Tip: After the new contract item data is created using the New Contract Item tab and associated and saved with the change order using the Change Order Item tab, updates to the data may continue to be made on *both* the New Contract Item and the Change Order Item tabs as long as the change order is in a Draft status.

Refer to the CO Force Account topic in this manual.

Tip: If the Obsolete Item Indicator setting may prevent some Item Master records from being displayed or selected.

Change Order Items

Change Order Item **New Contract Item**

Contract ID: C11581 Change Order Nbr: 011

Line Item Nbr: 0600 Category Nbr: 0500 Project Nbr: 11581-BID

Item Code: 504-03341 Units Type: Lump Sum (Sp) Spec Year: 1999

Description: Retaining Wall (31)(Alternative Systems)

Major Item: Specialty: Status Type: Pending

Unit Price: \$12,000.00000

Proposal Line Nbr: 0600 Related Item:

Critical: Pay Plan Qty: Suppl Desc Req'd: Material Discrepancy Adj:

Supplemental Descriptions:

Figure 11-12 The Change Order Items Window - New Contract Item Tab (2)

11.3.2.3 Adding an Existing Contract Item to the Change Order

To add an existing **Contract** item to the current change order:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order** Maintenance panel, double-click the **Change Order Item** icon.
4. On the Change Order Item tab, click the Services menu and click the New CO Item choice. This action displays a pick list of all the items in the contract not associated with a change order.
5. On the **Select Contract Item** window, in the **Contract Items** data window, use the scroll bar to the right of the current selection to locate the desired Contract Item.
6. Double-click the highlighted Contract Item choice or click the **Ok** button. This action re-displays the Change Order Item tab with the display only fields showing the current contract values for the selected contract item.
7. Type the **Change Order Description**.
8. Press the **Tab** key.

9. Type the **Quantity**.
10. Click the **Save** button.

To add more existing **Contract** items to the current change order:

1. Click the **New** button.
2. Click the **Services** menu and click the **New CO Item** choice.
3. Repeat steps 5 through 9 from above.

11.3.2.4 Adding a New Item to the Contract through the Change Order Process

New items may only be added to an existing contract through the change order process. New items may be:

- selected from the Transportation Agency's previously defined Item Master listing, or
- When a new item is added to a contract, the user must select the Project and Category, then enter a unit price and any agency-required Supplemental Description of the Item on the New Contract Item tab. The quantity of the item must be entered on the New Item tab of the Change Order Item window before the new Item may be saved.

To add a new contract line item from the Item Master List:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Change Order Item** icon.
4. On the **Change Order Item** window, click the **New** button on the menu bar to refresh the window and put it in *new* mode.
5. Click the **New Contract Item** folder tab.
6. The cursor appears in the **Item Code** field. Click the Search lens.
7. Scroll the Item Master list of existing items. Select the existing item desired. The Units Type:, Spec Year:, Description:, and Unit Price: Fields populate with data.
8. Move the cursor to the **Line Item Number** field and type the Line Item Number.
9. Press the **Tab** key. (The **Category Nbr** field remains gray:)
10. In the **Project Number** drop-down list, click the desired **Project Number** choice.
11. Press the **Tab** key.
12. Click the **Major Item** check box (ON) if this is a major item in the contract.
13. Press the **Tab** key.

14. Click the **Specialty** check box (ON) if this is a specialty item for this contact. The Status Type: field remains gray.
15. Press the **Tab** key.
16. Type the new **Unit Price** of the item.
17. Press the **Tab** key. (The **Proposal Line Nbr** field remains gray.)
18. In the **Related Item** drop-down list, click the Related Item choice.
19. Press the **Tab** key.
20. Click the **Critical** check box (ON) if this is a critical item in terms of scheduling.
21. Press the **Tab** key.
22. Click the **Pay Plan Qty** check box (ON) if the item is paid to plan quantity, that is, no overruns are allowed.
23. Press the **Tab** key.
24. Type a Supplemental Description for the new item.
25. Click the Change Order Item folder tab. This re-displays the new contract item information in the Change Order Item tab where it can be modified and added/saved to the change order.
26. Type the Change Order Item Description.
27. Press the **Tab** key.
28. Type the **Quantity** of the item required.
29. Press the **Tab** key.
30. Click the **Force Account** check box (ON) if the new contract item is for a force account.
31. Click the **Save** button.

Tip: When a new item is added to the contract through this process, the information about a new line item is not saved to the database until it is completed and save on the Change Order Item tab. The New Contract Item tab performs all edits and passes all new item data to the Change Order Item tab where both the new item and change order information is saved. The contract item list *is not* updated with the new item until the change order is approved.

To add remarks associated with the new contract item:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Change Order Item** icon.
4. On the **Change Order Items** window, click on the **New Contract Item** tab.

5. Click the **Remarks** button.
6. In the **Remarks** field, type any comment associated with the change order item.
7. Click the **Save** button.

Tip: The remarks are associated only with the new contract item information displayed on the New Contract Item tab. That information may only be accessed and updated on that tab.

Tip: A supplemental description may be required by turning on the Require Supp Desc indicator.

Maintaining Change Order Item Information

New contract items added through the change order process must be maintained using both tabs on the Change Order Item window. The new item is not added to the contract until the change order is approved, so the new item data can be maintained is within the Change Order Item window. The new line item may be modified or deleted while the Change order is in Draft status.

Name	Description
Cont ID	Transportation agency-defined ID for the Contract. Corresponds to the Contract ID assigned by Trns-port™ or another pre-construction system. This is a required field.
Co Nbr	Sequential number assigned to all change orders for the contract.
Project Nbr	Identifies the project to which the item is associated. Can be multiples per contract.
Line Item Nbr	The contract line item number that uniquely identifies each item as it appears on the project. For all bid items, this item is assigned by the pre-construction function. When entered, this value must be unique within the contract. Once saved, this value is protected from modification. Items created with wrong line item numbers must be deleted first, then recreated to correct.
Item Code	An agency defined code used to identify a particular item. This field has a search lens.
Unit	The positive or negative line item quantity added or removed. This value is passed from Change Order Item program when

Name	Description
	the item is added to the contract through a change order .
Unit Price	Unit price of the item. This price is identified on the invoice. These fields are display only.
Item and Supplemental Descriptions	This is a display field which populates when the Item is selected.
Change Order Item Description	This is an additional change order description for items not sufficiently described in the Item Master. This field is optional. It is modifiable only when the change order is in Draft status.
Contract Bid Quantity	The quantity of the line item, as indicated on the proposal or contract. This field is display only.
Contract Bid Amount	The quantity of the line item, as indicated on the proposal or contract, multiplied by unit price. This field is display only.
Approved Change Order Quantity	The net change to the item quantity from all approved change orders.
Approved Change Order Amount	The net change to the item quantity from all approved change orders, multiplied by unit price. This field is display only.
Current Contract Quantity	Bid contract plus approved quantities. This field is display only.
Current Contract Amount	Bid contract plus approved quantities, multiplied by unit price. This field is display only.
Pending Change Order Quantity	The net change to the item quantity from all unapproved change orders. This field is display only.
Pending Change Order Amount	The net change to the item quantity from all unapproved change orders, multiplied by unit price. This field is display only.

Name	Description
This Change Order Quantity	The positive or negative line item quantity added or changed on this change order. This is a mandatory entry field. It is modifiable only when the change order is Draft status.
This Change Order Amount	The positive or negative line item quantity added or changed on this change order, multiplied by unit price. This field is display only.
Force Account	Check-box indicating that the new item is for the force account associated with the change order. This box may be checked for only a new item and for only one new item per force account change order.

Table 11-9 The Change Order Item Tab Fields Table

Field Name	Description
Contract ID	The primary identifier for the contract. This identifier is the primary contract identifier for a proposal generated from a pre-construction system if the department is not using the Trns●port™ product.
Change Order Nbr	Sequential number assigned to all change orders for the contract.
Line Item Nbr	The contract line item number that uniquely identifies each item as it appears on the project. For all bid items, this item is assigned by the pre-construction function. When entered, this value must be unique within the contract. Once saved, this value is protected from modification. Items created with wrong line item numbers must be deleted first, then recreated to correct.
Category	A grouping of items assigned during pre-construction. Items can be grouped within categories for various reasons, such as for funding. This field defaults to the value stored in global parameter area. This value may be either a valid project category number or spaces. The field is protected from modification. Items created for wrong categories must be deleted first, then recreated to correct.

Field Name	Description
Project Nbr	The unique identifier for the project associated with this item. Can be multiples per contract.
Item Code	An agency defined code used to identify a particular item. This field has a search lens.
Unit Type	The unit of measure for this item. This is display field only.
Spec Year	The Specification year as stated in the Item Master. This field populates automatically after Item Code selection.
Description	A field which contains a textual description of the item as stored on item master list. This field populates automatically after Item Code selection.
Major Item	A check box indicating the line item is a major item. If not checked the item is a minor item.
Specialty	<p>Indicates whether the line item is a specialty item. Specialty items are excluded from the calculation to determine the amount of the contract which can be sublet. This field is protected from modification if any of the following conditions apply:</p> <ul style="list-style-type: none"> there is an associated change order; there is an associated dispute; there is an associated plan discrepancy (through change order); there is an associated stockpiled materials; or the contract has an associated estimate.

Field Name	Description
Status Type	<p>Code indicating the current status of an Item.</p> <p>Pending. Status defaults to pending when the Item is added.</p> <p>Active. When a Contract's status is changed to active, the status of all of the Contract's Items is changed to active. An active Item can not be deleted.</p> <p>Final. When a Final Item Quantity Change Order is approved, the status of all of the Change Order's Items is changed to Final.</p> <p>Audited. When an Item has been approved or accepted through an audit, the user must indicate its status as Audited.</p> <p>Complete. When a Contract's status is changed to complete, the status of all of the Contract's Items is changed to complete.</p>
Unit Price	<p>Unit price of the item. This price is identified on the invoice. This field is display only.</p>
Proposal Line Nbr	<p>The line number which identifies the item as it appears on the proposal. This is a protected, and display only field. The value for this field is derived from information in the pre-construction system.</p>

Field Name	Description
<p>Related Item</p>	<p>Allows grouping of line items (e.g., all traffic control items or all items for a structure) for reporting and funding purposes.</p> <p>If a state/province wants to report items together they may: create a related item code (e.g., RPT1 - Report #1) develop a report which selects and groups these items together.</p> <p>If a state/province wants to fund a group of items the same but does not want to place them within the same category they may: create a related item code (e.g., FND1 - Funding Source #1) select those items with this code in the funding process thereby funding all these items with the same source and participation percentages.</p> <p>This field is a protected from modification if any of the following conditions apply: there is an associated change order; there is an associated dispute; there is an associated plan discrepancy (through change order); there is an associated stockpiled materials; or the contract has an associated estimate.</p>
<p>Critical</p>	<p>If checked, indicates that an Item is considered critical. Used for tracking the progress of Contracts with the “Critical Items Installed” progress schedule type. Non-critical items such as landscaping are not included in progress tracking.</p>

Field Name	Description
Pay Plan Qty	<p>This check box indicates if the line item is paid to plan quantity; no overruns are allowed. This field is a protected from modification if any of the following conditions apply:</p> <p>there is an associated change order;</p> <p>there is an associated dispute;</p> <p>there is an associated plan discrepancy (through change order);</p> <p>there is an associated stockpiled materials; or</p> <p>the contract has an associated estimate.</p>
Supplemental Descriptions	<p>This field contains a two line, textual description that is supplemental to the item's description.</p>
Material Discrepancy Adjustment	<p>When an authorized user adds contract items online in SiteManager, the item's adjustment flag will be set according to the settings in System Operational Parameters. This flag's checkbox will default to 'On' if system-wide discrepancy adjustments flag is checked on and if the default calculation for all items flag is turned on. The default setting for the item may be changed at any time during the course of a contract. The item's checkbox will be disabled if the system setting for the discrepancy adjustments flag is checked off.</p>

Table 11-10 The New Contract Item Tab Fields Table

11.3.3 Change Order Time Adjustments

The Time Adjustments window allows the authorized users to enter one or more time adjustments for a change order. At least one adjustment must be recorded using this window if the Time Adjustment function applies to the change order.

11.3.3.1 Restrictions on Time Adjustment entries

Time adjustments may be related to:

- the contract completion date
- milestone(s) on the contract, or
- both the contract completion date and milestone(s) associated with the contract

The Charge Type for the contract determine which timing components of the contract and its associated milestones may be entered and modified. There are three charge types for contracts. The editable fields and required fields on the Time Adjustment Window are determined by the contract's charge type are as follows:

Available Days (AD) Charge Type: computes time periods based on the working days charged to the contract and/or to each milestone. Only the **number of days adjusted** may be entered in the Time Adjustment Window. No completion date applies to this charge type.

Fixed Date (DT) Charge Type: has a specific fixed end date for the contract or for milestones within the contract. Only the **completion date** field is entered. The system computes the number of days adjusted.

Calendar Days (CD) Charge Type: computes the end date for the contract and for milestones based on the number of calendar days allocated for the work. The number of days adjusted is entered. The system then computes the completion date.

Additional limitations apply to entries on the Time Adjustments window as follows:

- Only one adjustment to the contract completion date *may* be entered per change order.
- Multiple contract milestone adjustments *may* be entered for a single change order.
- Each milestone may only be included in one change order, but that change order time adjustment may be maintained (updated or deleted) subsequently.
- Text explaining reasons for the time adjustment *may* be entered.
- The status of the associated change order determines whether the fields on this window are display only or may be modified by the user
- Time adjustments may only be entered while a change order is in Draft status.
- Change orders in a Draft status allow the following fields to be entered or updated: time adjustment days, adjusted completion date, milestone/contract completion status (radio button), and milestone.
- Changes orders in a Pending, Approved, or Disapproved status do not allow update to these fields.

Adjusted Contract or Milestone	Adjustment Days	Adjustment Date	Explanation
00		00/00/00	

Time Adjustment Days: 0 Adjusted Completion Date: 00/00/00

For Milestone: 00 or Contract Completion

Explanation:

Figure 11-13 Change Order Time Adjustments Window

When the Time Adjustment window displays initially, it lists all of the time adjustments associated with the selected contract and change order. The user is prompted with a pick list to select a contract number. If a contract number is already in the key from previous work in another window, the pick list prompts the user to select the change order number for the time adjustment.

To choose the keys to display data on the Time Extension window:

1. On the **Time Extension** window, click the **Services** menu and click the **Choose Keys** choice.
2. On the **Select Change Order Item** window, in the **Contract ID** data window, double-click the desired **Contract** choice.
3. On the **Select Change Order Item** window, in the **Change Order** data window, double-click the desired **Change Order** choice. This action displays the Time Adjustment window containing the adjustments associated with the selected contract and change order number.

If a contract number is already in the key from previous work in another window, the user may select a different contract to display contract and milestone time adjustments in associated change orders.

To select a different contract at any time:

1. On the **Time Adjustment** window, click the **Open** button. This redisplay the **Select Contract** window where the user may select a different contract and change order number for display of time adjustment data.

To add a new Time Adjustment to a contract change order:

1. On the **Time Adjustments** window, click the **New** button. This action creates a blank line in the top data window where the entries for the new time adjustment are displayed after the window is saved.
2. Click either the **for Milestone** or the **or Contract Completion** radio button (ON) to indicate whether this adjustment is for a milestone or for the contract.
3. For a **Contract Completion** adjustment with the **Contract Completion** radio button (ON), in the **Time Adjustment Days** field, type the number of days the contract is adjusted.
4. Press the **Tab** key.
5. The **Adjusted Completion Date** field automatically displays the adjusted date of the contract.
6. For a Milestone adjustment with the Milestone radio button (ON), click the down-arrow button and make a selection from the user-defined drop list.
7. Press the **Tab** key.
8. Type an explanation for either the milestone or the Contract Completion adjustment.
9. Click the **Save** button. The adjustment information appears in the upper datawindow in the previously blank line.

To modify an existing time adjustment to a contract or milestone:

1. On the **Time Adjustments** window, click the **Open** button.

2. In the top data window, highlight the desired **Contract** or **Milestone** adjustment choice.
3. If enabled, in the **Time Adjustment Days** field, type the modified number of days the contract or a milestone is adjusted.
4. Press the **Tab** key.
5. If enabled, in the **Adjusted Completion Date** field, type the modified completion date of the contract or a milestone.
6. Press the **Tab** key.
7. Click either the **for Milestone** or the **or Contract Completion** radio button (ON) to indicate whether this is a modification of a previous milestone or a contract adjustment
8. Press the **Tab** key.
9. Modify the **Explanation** for the new time adjustment if desired.
10. Click the **Save** button.

Tip: Only one adjustment may be modified at a time. The user must save the changes to one adjustment before making other modifications to the data for the change order time adjustments.

To delete a time adjustment from the selected change order and from the database:

1. On the **Time Adjustments** window, in the top data window, highlight the desired Contract or Milestone adjustment choice.
2. Click the **Delete** button.
3. Click the **Yes** button (to confirm the deletion).
4. Click the **Save** button.

Field Name	Description
Contract ID	The primary identifier for the contract. This identifier is the primary contract identifier for a proposal generated from a pre-construction system if the department is not using the Trns•port™ product.
Change Order Nbr	Sequential number assigned to all change orders for the contract.
Adjusted Contract or Milestone:	List of contract and/or milestones adjustments associated with this change order.

Field Name	Description
Adjustment Days	Number of days the contract or a milestone is to be adjusted. This field is a mandatory entry for all time Available Days and Calendar Days charge type contract or milestone adjustments.
Adjusted Completion Date	The new completion date of the contract or a milestone to be adjusted.
For Milestone:	Radio button indicating that the time adjustment is for a milestone rather than for the contract's completion. List of contract milestones. Either the <i>For Milestone</i> button or the <i>or Contract</i> button must be selected for each record.
or Contract Completion	Radio button indicating that the time adjustment is for the contract's completion rather than for a milestone. Either the <i>for Milestone</i> button or the <i>or Contract</i> button must be selected for each record.
Explanation	Text describing reasons for the time adjustment. This field is optional. The first line of the text appears in the upper datawindow Explanation field after a Save.

Table 11-11 The Time Adjustments Window Fields Table

11.3.4 Change Order Explanations

The Change Order Explanation window is used to document the reasons for contract changes.

This window allows the author of the change order to record the reason for changes in the contract included in the change order. It also allows reviewers and approvers to view the change order reasons.

There are two types of explanations that may be associated with a contract change order:

- One or more explanations pertaining to *items* on a Change Order, and
- Explanations describing the necessity of a Change Order as a whole.

To access the **Change Order Explanations** window to maintain change order explanations window:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Change Order Explanation** icon.

When the Change Order Explanations window displays initially the user is prompted with a picklist to select a contract number. If a contract number and change order number are already in the key from previous work in another window, the user need only search in the **Pick Stand Exp. ID or Enter Text below** field.

If a contract number is already in the key from previous work in another window, the user may select a different contract and/or change order number to display explanations.

To select a new contract and/or change order at any time:

1. On the Change Order Explanations window, click the **Open** button. This redisplay the picklist where the user may select a new contract or a different change order for the same contract.

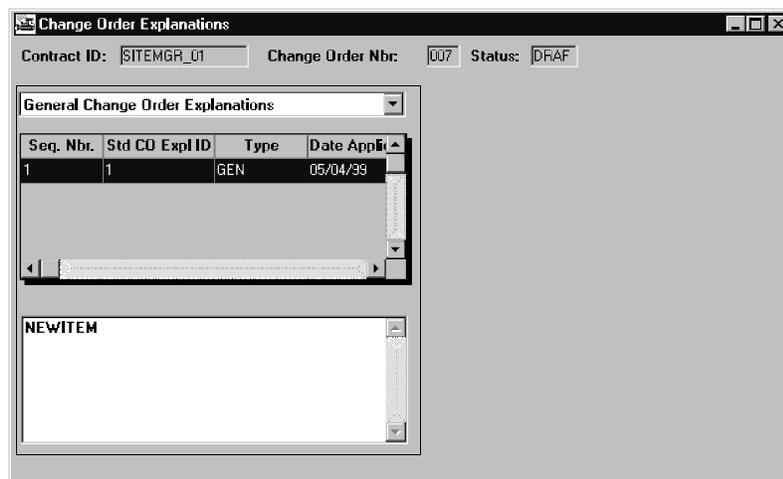


Figure 11-14 The Change Order Explanation Window - Default Mode

Field Name	Description
Seq Nbr	The system-assigned sequence number of the Change Order Explanation.
Std CO Expl ID	The ID for the standard Change Order Explanation.
Type	The Type of explanation, Selected from a standard set of defined types.
Date Applied	The date the explanation was applied to the Change Order.

Table 11-12 The Change Order Explanation Window Fields Table

The window heading displays the Contract Number, Change Order Number, and Change Order Status. The status of the selected change order determines whether changes may be made to the explanations or whether they may only be viewed on this window.

If the status is Draft, the user may:

- Apply new explanations to the change order
- Remove explanations from the change order
- Apply/Un-apply explanations to line items of the change order

Tip: The user must first associate CO items with this change order to enable all three explanation type options for the Explanation Type field. When the window first opens, it defaults to General Change Order Explanations. If there are no change order items associated with this change order, this is the *only* option that displays in the drop-down list of Explanation Types.

11.3.4.1 Adding New Explanations to an Existing Change Order

With the CO is in Draft Status and the window is in new mode, the user may use the lower data window to:

- Display and search the picklist of standard explanations for this contract type, or
- Type a non-standard explanation description in the multi-line edit text field.

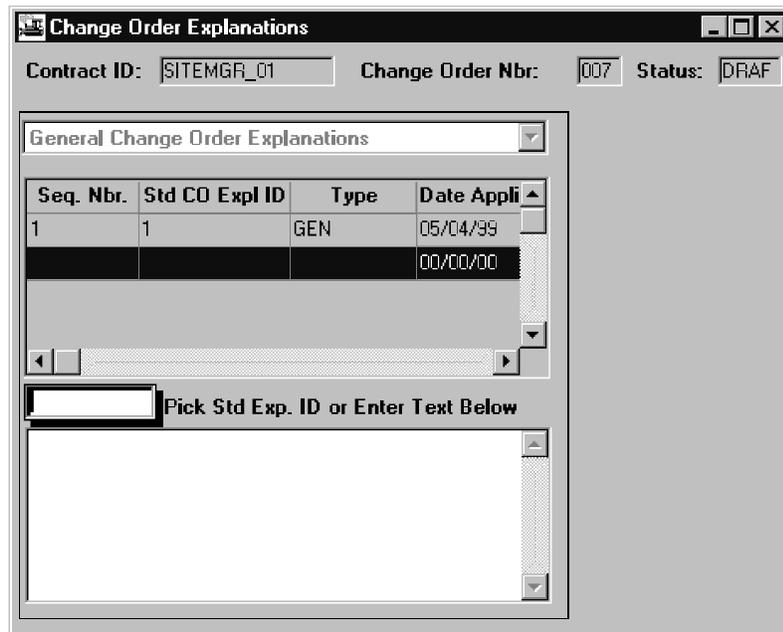


Figure 11-15 The Change Order Explanations Window - New Mode

The preceding figure shows the Change Order Explanation window in a new mode. If there are no explanations present for the selected change order and selected explanation type the Change Order Explanation window defaults to the new mode.

To select a standard explanation: **Error! Bookmark not defined.**

1. On the **Change Order Explanations**, click the **New** icon on the menu bar. Click Yes to the Save Changes message. This causes a blank row to appear in the upper data window.
2. In the **Pick Std Exp. ID** field, click the **Right** mouse button to perform a Search.
3. Scroll the List of explanations, highlight the desired explanation and click **Ok**.
4. Click the **Save** button on the tool bar. This action causes the blank row for a new explanation in the upper datawindow to populate with explanations data.

To create a non-standard explanation:

1. On the **Change Order Explanations** window, click the **New** icon on the menu bar. Click Yes to the Save Changes message. This causes a blank row to appear in the upper data window.
2. Click the lower **Text** field, to change focus to that multi-line edit box.
3. Type the non-standard explanation in the **Text** field.
4. Click the **Save** button on the tool bar. This action causes the blank row for a new explanation in the upper datawindow to populate with explanation data.

11.3.4.2 Applying New Explanations to Line Items Explanations

If the Explanation Type is Explanations Applied to Specific Line Items, the user may add a new explanation to the change order and also apply the new explanation to specific line items before saving the new entry.

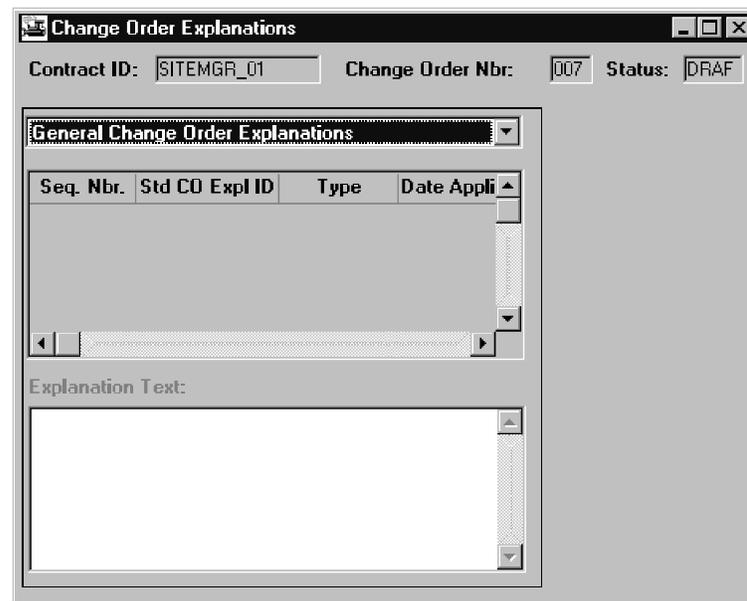


Figure 11-16 The Change Order Explanations window with Dropdown List

To concurrently add a new explanation and apply explanations to line items:

1. On the **Change Order Explanations**, click the **New** icon on the menu bar.
2. In the **Pick Std Exp. ID** field, click the **Right** mouse button and perform a **Search**
3. Click the **Desired** change order explanation displayed in the Search Window.
4. Click the **Save** button on the tool bar.
5. Respond **Yes** to the Change Order Explanations dialog window (to confirm associating explanations with line items in the change order). (A **Yes** response abandons the **Save** process and allows the user to continue working on the window. A **No** respond completes the **Save** process and exits the new mode of the window.)
6. Click the **Change Order Line Item** data window to change focus to that window.
7. Highlight and double-click the **Desired** change order line item row to display the bitmap  icon (ON).
8. Click the **Save** button.
9. Respond **Yes** to the Change Order Explanations dialog window (to confirm applying the new explanation to the change order). This action causes the window to exit the new mode and return to the default mode.

Tip: If the user does not choose to apply explanations to line items at the same time that the change order explanation is added, line item explanations may be applied at a later time, but before the change order is approved.

To exit the *new* mode version of the Change Order Explanations window:

1. On the **Change Order Explanations** window in new mode, click the **Save** button on the tool bar.

OR

1. On the **Change Order Explanations** window in *new* mode, click the **Delete** button on the tool bar.

11.3.4.3 Applying Existing Explanations to Line Items

Once change order items are associated with the change order, the user may use the Change Order Explanation window to record item explanations:

- for each separate line item in the change order or
- for all of the line items in the change order.

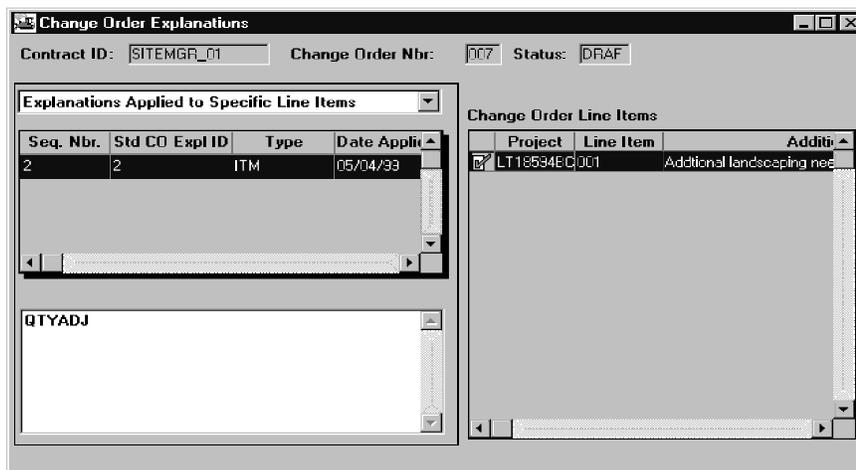


Figure 11-17 The Change Order Explanations Window - Three Data Windows

In the Change Order Explanations window, when **Change Orders Applied to Specific Line Items** has been chosen, the data window lists the line items at the right. The user may apply/un-apply the selected explanation here.

When change order explanations are applied to line items in the change order there are three data windows in the Change Order Explanations Window

The **top data window** shows the type(s) of explanation(s) that apply to the change order and the specific explanations in each category that apply to this active change order. The types of change orders include:

- General Change Order Explanations (type GEN);
- Explanations applied to specific line items (type ITM) or
- Explanations applied to all line items (type ALL)

The **lower data window** displays any non-standard explanation text associated with the explanation highlighted in the top data window.

The **right data window** displays the explanations for each line in the active change order. If the user selects Explanations Applied to Specific Line Items, in the Explanation Type field in the top data window. A  on the left column of this data window indicates that the currently selected explanation has been applied to the line item highlighted in the top data window.

To select a Change Order Line Item explanation and associate it with the unapproved change order:

1. On the **Change Order Line Items** data window, double-click the **Desired** explanation line item row.

Deleting, Replacing or Disassociating Explanations

The user may delete an explanation associated with an unapproved change order or delete an explanation associated with a change order line item.

To delete an explanation associated with a change order when the window is in new or default mode:

1. On the Change Order Explanations window, in the top data window, highlight the **Desired** explanation row in the top data window.
2. Click the **Delete** button.
3. Click the **Save** button.

To remove a Change Order Line Item explanation for an unapproved change order:

1. On the **Change Order Line Items** data window, double-click the  icon for the selected line item.
2. Click the **Save** button.

Tip: If a user wants to replace a non-standard explanation with a standard explanation, the corresponding non-standard explanation must first be deleted from the Change Order and Contract ID. Then a non-standard explanation is added to the Change Order.

11.3.5 Item Summary Window

The Contract Change Order Item Summary Window allows users (including the author of the change order, the reviewer, or the approver) to view the details of an item on a change order in any status.

Item Summary

Contract ID: C10785 Prj Nbr: 10785-BID Line Itm Nbr: 0005

Item Code: 202-00240 Unit: SY Unit Price: 35

Item Description: Rem Asphalt Mat (Planing)

Supp Desc1: supplemental description added by Sonya Dooley in March 2002

Supp Desc2: line 2 suppl description added by Sonya Dooley in March 2002

	Quantity	Amount
Contract Bid:	144	\$5,040.00
Approved Change Order:	0	\$0.00
Current Contract:	144	\$5,040.00
Pending Change Order:	10	\$350.00

% Change To Date: 0

CO Nbr	Quantity	Amount	Status
005	10	\$35.00	PEND

Figure 11-18 The Item Summary Window

Field Name	Description
Item Code	An agency defined code used to identify a particular item. This field is display only.
Unit	The unit of measure for this item. This field is display only.
Unit Price	Unit price of the item; identified on the invoice. This field is display only.
Item Description	Textual description of the item as stored on item master list.
Supp Description 1	A textual description that is supplemental to the item's description.
Supp Description 2	A secondary textual description that is supplemental to the item's description.

Field Name	Description
Contract Bid Quantity	The quantity of the line item, as indicated on the proposal or contract. This field is display only.
Contract Bid Amount	The quantity of the line item, as indicated on the proposal or contract, multiplied by unit price. This field is display only.
Approved Change Order Quantity	The net change to the item quantity from all approved change orders. This field is display only.
Approved Change Order Amount	The net change to the item quantity from all approved change orders, multiplied by unit price. This field is display only.
Current Contract Quantity	Bid contract plus approved quantities. This field is display only.
Current Contract Amount	Bid contract plus approved quantities, multiplied by unit price. This field is display only.
Pending Change Order Quantity	The net change to the item quantity from all unapproved change orders. This field is display only.
Pending Change Order Amount	The net change to the item quantity from all unapproved change orders, multiplied by unit price. This field is display only.

Table 11-13 Item Summary Window Fields Table

The Item Summary window is a display-only window with two data windows:

- The top data window displays the selected change order item the description and original, current, and pending contract item quantities and corresponding amounts.
- The lower data window displays a list of the change orders associated with the selected change order item, the Quantity , the dollar amount and the Status of the Change Order.

Selecting the Contract and Change Order:

When the Item Summary window displays initially, the user is prompted with a picklist to select a contract number. If a contract number is already in the key from previous work in another window, the user is prompted to choose only the change order item number.

To select a Change Order item :

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Item Summary** icon.
4. On the **Item Summary** window, click the Open menu.
5. On the **Select Change Order Item** window, highlight the desired **Item** choice. Click **Ok** . This action displays the Item Summary window with the selected contract, change order, and item information displayed in the appropriate, view-only fields.

If a contract number or change order item number is already in the key from previous work in another window, the user may select a different contract and/or change order item number to display item summary information on this window.

To select a new contract and/or change order item at any time:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Item Summary** icon.
4. On the **Item Summary** window, click the **Open** button, on the menu bar. This redisplay the picklist where the user may select a new contract or a different change order for the same contract.

11.3.5.1 Navigation to Other Windows from the Item Summary Window:

After viewing a particular item in the change order, the user may wish to modify the item. The Item Summary window allows the user direct access to Change Order Item. Items may be modified as follows:

Select and add an existing contract item to the current change order.

Select a new contract item (from the Item Master List) to be added to a change order and added to the contract after approval.

To access the CO Item window from the Item Summary window:

1. On the Item Summary window, click the **Services** menu.
2. In the **Services** drop-down menu, click **CO Item** choice.

11.3.6 Change Orders Review / Approve

Before a change order is finalized:

It may be subjected to an on-line parallel review by interested parties.

It must be approved by each of the Approval Levels and members of the User Group(s) defined in the Change Order Approval Rules.

It may require the prime contractor to sign a legal document regarding the modification.

CO Review and Approval Sequence

There are six SiteManager windows that facilitate this on-line review and approval process. These are:

- The Forward Change Order For Review window;
- The Forward Change Order For Approval window;
- The Change Order Review window
- The Change Order Approval window
- The Signature Page window
- The Change Order Tracking window

The sequence of events in the change order review and approval process are as follows:

1. When the change order is still in Draft status, the user may forward the draft change order for parallel review using the Forward To For Review Window. (This review may be eliminated and the Status changed immediately to Pending to begin a approval process.)
2. Reviewers record their comments using the Change Order Review window.
3. When the change order is changed to Pending status, the user is prompted to submit the change order for approval using the Forward To For Approval window.
4. Approvers record their decisions using the Change Order Approval window.
5. Optionally, the user may record the prime contractor's signing of a legal document associated with an approved contract change order on the Signature Page window.
6. At any time during the review and approval process, the status of reviews and approvals may be viewed on-line using the Change Order Tracking window using procedures referenced elsewhere in this Section.
7. The author forwards a signature page to Approvers after the Change Order has been approved.

Multiple Review and Approval Cycles

If a change order is placed in a Draft status from a Pending status, to allow updates to the change order, any approvals secured while in Pending status are automatically deleted. In order for the change order to be approved, it must be placed in Pending status again and forwarded for approval.

11.3.6.1 Change Order Review Process

Optionally, the author of the Change Order may designate reviewers for the Change Order while it is still in a Draft status. The author has the option of using the existing reviewer list or updating/modifying the reviewer list each time the change order is submitted for review. The Change Order may be reviewed on-line by those designated by the author. It may be accessed and reviewed by multiple reviewers concurrently. Reviewers may provide their comments and recommendations to the author on-line.

11.3.6.2 Forwarding for Review (CO)

During the life of the contract change order, the author is responsible for forwarding it to identified SiteManager users for review.

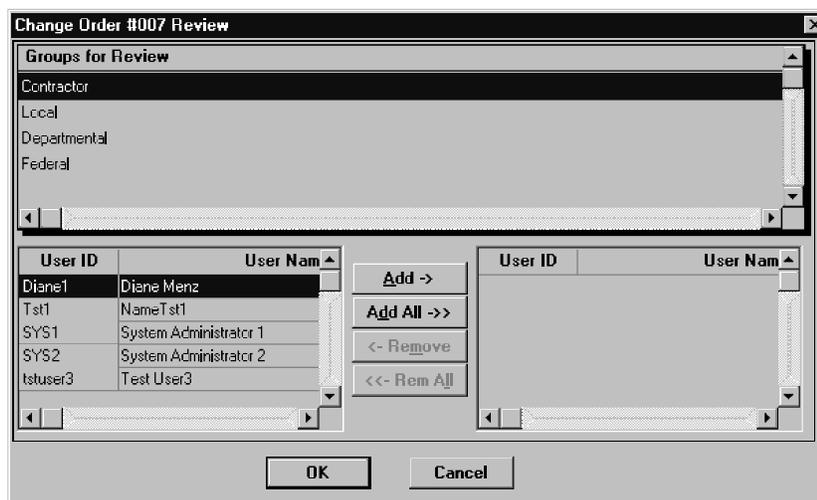


Figure 11-19 The Forward Change Order For Review Window

This window is accessible to the author of the Change Order, and other users authorized to view the Change Order details. Also, Approvers have access to this window in order to select a replacement or proxy if they are unavailable.

To access the Forward Change Order For Review window for a Draft Change Order:

1. On the **Change Order Header** window, click the **Services** menu and click the **Forward To** choice. The Groups for Approval window appears.

Note: If the author changes the status to Pending (to skip the review process) and Saves the change order, the Forward to option on the Services menu is disabled. The Groups for Approval window appears as a result of saving the change order. The author then selects at least one approver from each approval level.

The **Forward Change Order for Review** window includes the selected Contract ID and Change Order number in the window title when the window displays. This window contains three data windows:

1. The Groups For Review data window displays a list of categories from which the change order reviewers may be selected including:

Departmental

Contractor

Local

Federal

2. The **User ID / User Name** data window lists the Names and User IDs of those included in the User Group for the selected category of reviewers.
3. The **Add, Add All, Remove and Rem All buttons** allow the user to pick names from the **User ID / User Name** window and designate these Users for review of this draft change order.

As long as the change order remains in a Draft status the **Forward Change Order for Review** window:

Displays the current list of reviewers

Allows additions, deletions, and updates to the list of reviewers;

11.3.6.3 Selecting or Deleting Reviewers for the Change Order:

The authorized user may select one or more reviewers for the change order. The user may use the existing list of reviewers or select and add new reviewers and delete reviewers in the existing list.

The User ID / User Name list varies depending on whether the Group for Review is a Departmental group or a Non-departmental group.

Departmental Reviewers are the SiteManager users who have an associated SiteManager User ID and name for the current contract.

Non-departmental Reviewers may be either:

SiteManager users responsible for forwarding Change Orders and receiving comments from Non departmental reviewers,

OR

SiteManager users who have an associated SiteManager User ID and name for the current contract and are members of the Non-departmental user category.

Refer to the CO Reference Tables, CO Approval Groups for establishing groups and group membership.

To view and select Non-departmental Reviewers (that is, Contractor, Local, or Federal Reviewers) on the Forward Change Order for Review window:

To select reviewers:

1. On the Forward Change Order for Review window, in the Groups for Review window, click a desired Group for Review choice.
2. In the User ID / User Name data window, scroll to and highlight the desired reviewer name and User ID.
3. Click the Add button to add the person to the Selected Names data window.

OR

1. If all the individuals are to be selected from the **Available Names** data window, click the **Add All** button.
2. Click the **Save** button.
3. Click **Ok** on the message that *Mail has been Sent*.

To delete a reviewer:

1. On the Forward Change Order for Review window, in the Groups for Review data window, click desired Group for Review choice.
2. In the User ID / User Name data window, scroll to and highlight the desired reviewer name and User ID to be deleted.
3. Click the Remove button to return the name to the list box containing Available Names.

OR

4. If all the individuals are to be removed from the Selected Names data window, click the Rem All button.
5. Click the Save button on the tool bar.
6. Click Ok on the message that “Mail has been Sent.”

Tip: A reviewer *cannot* be removed if the reviewer has already made a recommendation on the change order.

Note: The tracking records for the reviewers are created after the data is saved. Also, if the author selects new reviewers for a Change Order only tracking records corresponding to the new selections are created. These tracking records allow the user to monitor progress of the review using the Change Order Tracking window.

Notice to Reviewers:

When a user is selected to review a change order, this process creates an in-box notification for the designated reviewers at the time of the selection. When a reviewer is deleted from the selected names list, this creates another in-box message informing the user of the deletion. A message appears stating that Mail has been Sent after the author has completed the selection of reviewers.

11.3.6.4 Change Orders - On-line Review

The Change Order Review window allows the user who receives an in-box message to review a draft change order to:

- Access the change order information
- View the contract and change order information on-line
- Document their recommendation to approve or deny the Draft change order
- Record Remarks related to their recommendation. Remarks are optional.

Throughout the review process, the change order remains in Draft status. The author may modify or delete the Change Order at any time during this review process.

Figure 11-20 The Change Order Review Window

Field Name	Description
Approver ID	The user ID of the person approving the Change Order.
Approval Date	The date upon which the user approved the Change Order.
Name	The full name of the reviewer.
Emergency	If checked, indicates a Change Order covers emergency work and should therefore be reviewed as quickly as possible.
Recommendation	The approver's approval or disapproval of the Change Order.

Table 11-14 The Change Order Review Window Fields Table

Accessing the Change Order Review Window:

The Change Order Review window is accessible to the author of the Change Order and the Users who have been selected to Review this Change Order. The Contract ID and Change Order number are selected before this window is displayed.

To access the **Change Order Review** window:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Change Order Review /Approval** icon.

To view contract and change order information when other Change Order has been previously accessed (previously selected in another window):

1. Click the **Change Order Review** icon. The approval window appears with the contract and change order number present.

To select and view contract and change order information:

1. On the **Change Order Review** window, click the **Services** menu and click the desired **Contract** and **Change Order** choice.

Recording Review Recommendations:

Reviewers are invited (by an in-box message) to record their views about a Draft change order on the Change Order Review window. When a reviewer accesses the Change Order Review window, and selects the Contract ID and Change Order Number for review, the window displays the reviewer's User ID and name. If the user is not a selected reviewer for this Change Order access is denied to this window.

The reviewer may recommend that the change order be Approved or Denied. The reviewer may also record specific Remarks about the change order and recommendation.

To record a review recommendation:

1. In the Recommendation data window, click *either* the **Approved or Denied** radio button.
2. Click the **Save** button on the tool bar.
3. Click the **Yes** button on the confirm the recommendation message.
4. Click **Yes** to save changes.

To record a specific remark about the reviewer's recommendation:

1. On the **Change Order Review** window, click the **Remarks** icon to display the Remarks window.
2. Add **Remarks** using procedures referenced in the General Concepts section.
3. OR
4. Click **Services** and choose **Remarks**. Type remarks in the Remarks text box.
5. Click the **Remarks icon** to close the Remarks text box or click just outside the Remarks box.
6. Click the **Save** button on the tool bar.
7. Click the **Close** button to move to another window.

Tracking Review Status and Results:

Change Order review is executed and tracked on-line, with notification being sent to the appropriate personnel at each step. The tracking records for the reviewers are created after the data is saved.

The reviewer is notified and a tracking record created when the change order is forwarded for review.

If the reviewer has not yet reviewed the document, and the status is changed from Draft to Pending, the reviewer is advised when they open the review window that they are no longer a valid reviewer.

Tip: When a Draft change order is disapproved, all the approval records and the corresponding remarks entered remain in the tracking window.

Notices to Selected Reviewers:

The following notices are generated by SiteManager to selected approvers:

When a Change Order is forwarded for review, SiteManager sends an in-box message to the first person in the review level hierarchy.

When an reviewer replacement is made, SiteManager sends an in box message to the new reviewer and to the previous reviewer informing them.

11.3.6.5 Forwarding for Approval (CO)

During the life of the contract CO, the author of the change order is responsible for forwarding it to identified approval level SiteManager users. If the change order is in Pending status, the system defines the process based on approval levels and rules established in the CO, Reference Tables, Approval Groups and Rules tables.

When the change order status is changed from Draft to Pending, the Forward Change Order for Approval window automatically displays. This window is also accessible on the Change Order Header window in Services menu.

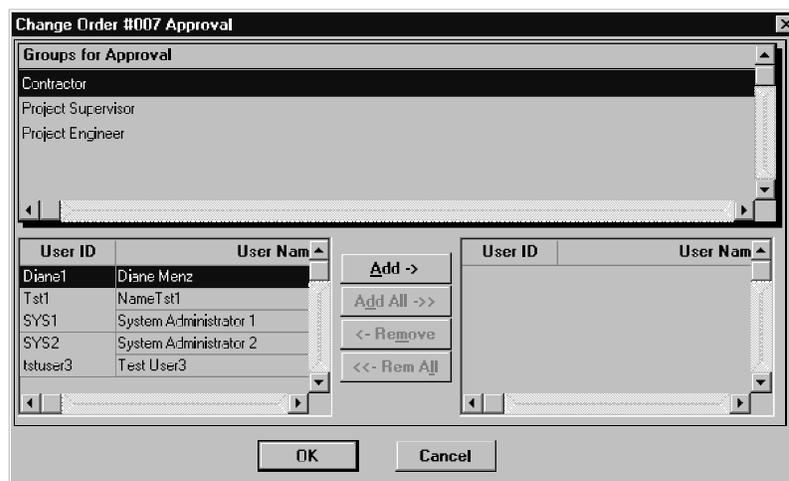


Figure 11-21 The Forward Change Order for Approval Window

The Forward Change Order for Approval window includes the selected Contract ID and Change Order number in the window title.

The Groups For Approval data window displays:

The different approval levels for SiteManager categories

The names of the Non-SiteManager categories authorized for approval of this contract (that is, the Federal, Local, and Contractor categories).

The User ID / User Name window lists the Names and User IDs of valid approvers for the selected approval level or category.

The User ID / User Name window allows the user to pick names of Users for approval of a Pending change order

This window is accessible to the author of the CO, and other users authorized to view the Change Order details. Designated change order approvers have access to this window to select a replacement or proxy if they are unavailable to complete their approval duties

To access the Forward Change Order for Approval window for a Pending change order:

1. On the **Change Order Header** window, in the **Status** drop-down list, click **Pending** choice.

OR

2. On the **Change Order Header** window, click the **Services** menu and click the **Forward To** choice.

Tip: The *Forward To* option on the Services menu is disabled when the change order's status has is changed to Approved or Disapproved.

Selecting Approvers:

At least one approver must be selected for each approval level required by the approval rules for this Contract and Change Order type.

To select Approvers:

3. On the Forward Change Order for Review window, in the Groups for Approval data window, click desired Approval Level or Person choice.
4. In the User ID / User Name data window, scroll to and highlight the desired approver Name and User ID.
5. Click the Add button to add the approver to the Selected Names data window.

OR

6. If all the individuals are to be selected from the User ID / User Name data window, click the Add All button.
7. Click the Save button on the tool bar.
8. Click Ok on the message "Mail Has been Sent".

Tips: All the approvers for all of the valid approval levels must to be selected simultaneously. This window *does not* allow the user to add an approver to a previously established list.

The *Mail has been sent.* message confirms that notice has been sent to the first level approver specifying the contract and change order plus the action required.

Replacing Approvers:

If the approver is unavailable, the approver, has the option of re-selecting another approver or authorizing someone on the approver's behalf (by giving the logon password information) for the approval of the CO. In this situation, the record corresponding to the previous approver is deleted from the tracking records, and a record for the new approver is added. If the previous approver tries to approve/disapprove the Change Order, a message notifies the person that this user is no longer a valid approver.

A previously selected approver may be replaced if unavailable within the following limitations:

Only the unavailable approver may make the replacement on-line.

The unavailable approver may designate another member to the User Group to act on their behalf.

An approver *may not* be replaced after approving a Change Order (when the Tracking record is frozen).

If a selected person is unavailable to serve as an approver, there are two ways replacement can be accomplished:

If an approver is temporarily unavailable, they may forward all the change orders received to other authorized approvers to act on their behalf.

If an authorized approver is unavailable for an extended period, the approver should:

- request that the system administrator replace them in the user group (to allow an alternate to be selected for approval of subsequent change orders), and
- authorize their replacement to act on their behalf on all pending approvals.

To authorize another approver to act on behalf on an unavailable approver, only the selected approver may:

1. On the **Forward Change Order for Approval** window, in the **Selected Names** data window, click the name of the approver to be replaced.
2. This action automatically selects the corresponding approval level in the **Groups for Review** data window and displays the remaining **Available Names** for approvers in this approval level group.
3. Click the **Remove** button.
4. In the **Available Names** data window, click the name of the replacement approver.
5. Click **Save**.

Tip: The tracking records for the approvers are created after their selection and saving of the data using the Forward Change Order for Approval window. Also, if the designated approver selects a replacement approver for a Change Order, only tracking records corresponding to the new approver are created. These tracking records allow the user to monitor progress of the approval process using the Change Order Tracking window.

11.3.6.6 On-line Approval

The Change Order Approval window allows the authorized user who receives an in-box message to approve a Pending change order to:

- view the contract and change order information;
- document their recommendation to approve or disapprove the Pending change order; and
- record remarks related to their recommendation (an option)

Figure 11-22 The Change Order Approval Window

Accessing the Change Order Approval Window:

The Change Order Approval window is accessible to the author of the change order and SiteManager users who have authority to review or approve of this change order. The Contract ID and Change Order number must be selected before this window displays.

To access the **Change Order Approval** window:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Change Order Review /Approval** icon.

To view contract and change order information when other Change Order function windows were previously accessed:

1. On the **Change Order Approval** window, click the **Window** menu and click the desired **Change Order Window** choice displayed.

To view contract and change order information when other Change Order function windows were previously accessed:

2. On the **Change Order Approval** window, click the **Services** menu and click the desired **Change Order** choice.
3. On the **Change Order Header** window, click the **Services** menu and click the desired **CO Items** choice.
4. On the **Change Order Items** window, click the **Services** menu and click the desired **Contract** choice.

Recording Approval Recommendations:

Authorized Approvers are invited (by an in-box message) to record their decisions about a Pending change order on the Change Order Approval window. When an authorized approver accesses the Change Order Approval window, and selects the Contract ID and Change Order Number, the window displays the approver's User ID and name. If the user is not an authorized approver for this Change Order, access is denied to this window.

On this window, the authorized approver may recommend that the change order be Approved or Denied. The approver may also record specific Remarks about the change order and their recommendation.

To record an approve/deny recommendation:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Change Order Review /Approval** icon.
4. On the **Change Order Approval** window, in the Recommendation data window, click *either* the **Approved** or **Denied** radio button.
5. Click the **Save** button on the tool bar.
6. Click the **Yes** button to confirm the recommendation message.
7. If the approver is not the last level of Approver, a message appears the Mail has been sent. Click OK. (The last approver in the process does not receive this message.)

To record a specific remark about the reviewer's recommendation:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Change Order Review /Approval** icon.
4. On the **Change Order Approval** window, click the **Remarks** icon or Services, Remarks to display the Remarks window.
5. Add **Remarks** using procedures referenced in the General Concepts section.
6. Click the Remarks icon or click just outside the remarks text box to close remarks.
7. Click the **Save** button on the tool bar.

Notices to Designated Approvers:

SiteManager manages the approval process by notifying each approval level in sequence. The system notifies the next level when the preceding level has completed their review and recommended approval of the change order. This prevents higher levels in the hierarchy from the review process until lower levels concur that approval is appropriate. The order of approvals is:

- Contractor approval
- Local approval (if local oversight applies to this contract); and
- Federal approval (if federal oversight applies to this contract).

SiteManager sends the following notices under the following conditions to manage the approvals process:

When all authorized approvers at a lower level have recommended approval of the change order, the next person in the approval level hierarchy is informed.

When the next person on the approval level is a non-SiteManager user (also referred to as a verbal approver), the change order author is informed to record this approver's recommendation and remarks.

Tracking Review Status and Results:

Change order approvals are executed and tracked on-line, with notification being sent to the appropriate personnel at each step. The tracking records for the approvers are created when the data is saved.

The approver is notified and a tracking record created when the change order is forwarded for review.

If the designated approver selects a replacement approver for a Change Order, SiteManager creates tracking records only for the new approver. Replacement approvers are notified when the new selection occurs.

If an approver has not yet recorded a recommendation, the status of the change order cannot be changed to Approved or Disapproved.

When the status changes from Pending back to Draft any associated tracking records and approval recommendations are deleted and the approval process must be repeated.

11.3.7 Signature Page

After a contract change order has gone through its on-line approval process, a Transportation Agency may require that the prime contractor sign a legal document regarding the modification. This legal document is written using a non-SiteManager related word-processor.

The Change Order Signature Page window allows Transportation Agency personnel to:

- Export important data about a change order to an ASCII or text file;
- Using a word-processor that has mail-merging capabilities, they can merge the data with the pre-written legal document;
- Once printed, they can attach this document to the Change Order Report; and
- Require a signature the contract's prime vendor acknowledging the modification to the contract.



Figure 11-23 The Change Order Signature Page Window

Field Name	Description
State	The state’s name
Agency Name	The transportation agency’s name
Prime Contractor Name	The name of the Contract’s Prime Contractor
Change Order Amount	The amount of the Change Order.

Table 11-15 The Change Order Signature Page Window Fields Table

To access the **Change Order Signature Page** window:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Signature Page** icon.

If a Contract ID and Change Order Number was not previously specified, the first window to display is the **Select Contract and Change Order** window.

To export the selected change order data to a word processing document file:

1. On the **Signature Page** window, click the **Save** button on the tool bar to display the **Generate Tab Delimited ASCII File**, a word processing Save Dialog box.
2. In the **Save Dialog** box, specify the name and location of the word processing file to be save.

3. Click the **Ok** button to save the named file and close the dialog window.

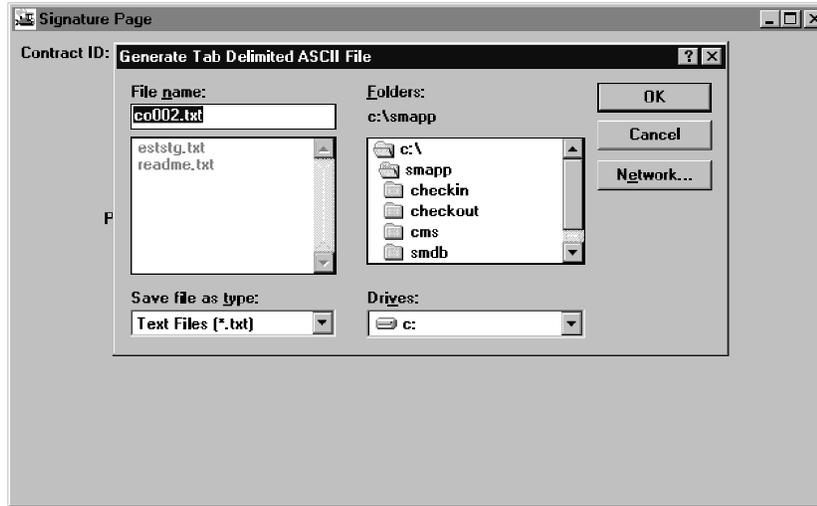


Figure 11-24 The Signature Page Save window

11.3.8 Tracking

The change order author can view the status of the review and approval cycle. The Change Order Tracking window lists all users to whom the change order was forwarded and shows the status of their review and approval actions.

A tracking record is a summary record for each reviewer and each approver of the change order. The Track Change Order window is a display-only window and does not allow records to be added, deleted, or updated. Those functions are performed on other windows, as follows:

- On the **Change Order Header** window, identifying information that displays in the tracking record may be added, updated, or deleted.
- On the **Forward Change Order to User** window, tracking records may be created or deleted.
- On the **Review/Approve Change Order** window, tracking records may be updated indicating the action to be taken (that is, reviewed or approved/disapproved).

Once the change order is approved, tracking records are saved. Thereafter, the tracking records can only be viewed and cannot be added to, deleted, or modified from any window.

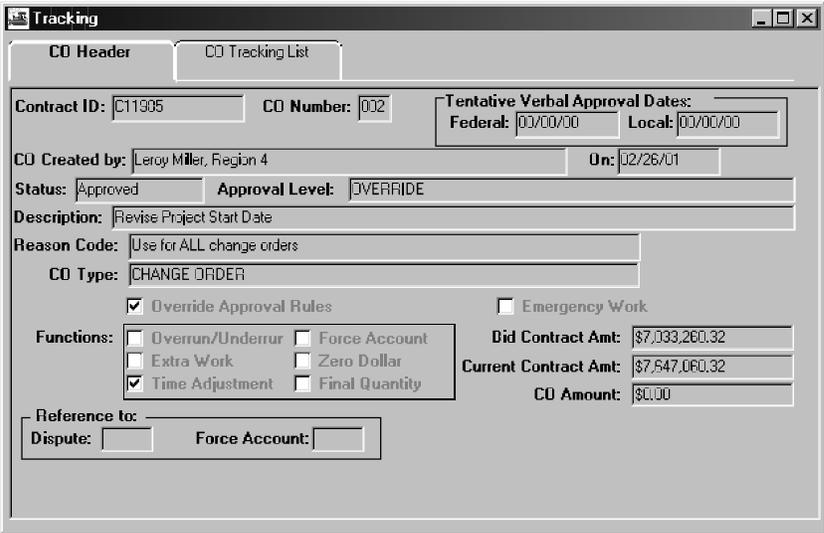


Figure 11-25 The Change Order Tracking Window - CO Header Tab

Field Name	Description
Tentative Verbal Approval Dates: Federal and Local	Date a federal or local agency gives its tentative verbal approval. These fields are optional.
CO created by, on	This is user’s ID who created the Change Order and the date it was created. These fields are display only.
Status	Stage in the life of the Change Order. Available status codes are Draft, Pending, Approved, and Disapproved.
Approval Level	Displays the highest level needed to Approve different Change Orders. This is based on the Change Order criteria defined by the transportation agency.
Description	Short description of the entered Change Order
Reason Code	Transportation agency-defined reasons for Change Orders. Used for management reporting.
CO Type	Change Order types defining the purpose of the Change Order
Emergency Work	Check-box indicating whether the Change Order is for an emergency

Field Name	Description
	emergency
Functions	Check boxes allowing users to select the functions comprising a change order. Possible functions are: Overrun/underrun, Extra work, Time adjustment, Force account, and Final quantity. At least one box must be checked. Multiple functions are allowed except for final quantity. Final quantity change orders may include no other functions. During change order verification, a function's matching components must be included in change order to proceed.
CO Amount	Amount of the Change Order derived from any contract items to be modified by the Change Order.
Dispute	Key for any disputes associated with the Change Order
Force Account	The identifier of an associated force account. Only for force account type Change Orders

Table 11-16 The Change Order Tracking Window Fields Table

When the Change Order Tracking window opens, it displays two tabs:

The CO Header tab displays the change order header. It contains display-only fields. Header information may not be added, updated, or deleted here.

The CO Tracking List tab displays all the individual tracking records for the change order. These records are scrollable. They show the Reviewer and Approver details including the date sent, the person responsible, the action taken and the date, and any recommendations (Remarks) from the reviewer or approver.

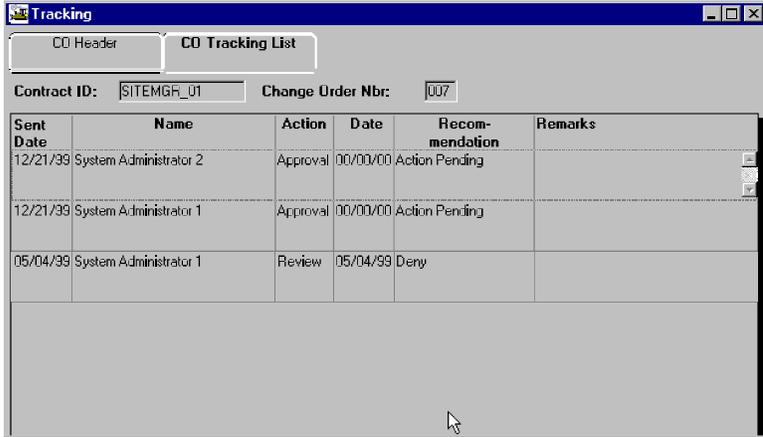


Figure 11-26 The Change Order Tracking Window - CO Tracking List Tab

Field Name	Description
Sent Date	The date the user was sent the document for review or approval.
Name	Name of the reviewer/approver.
Action	The action being taken by the reviewer/approver.
Date	Date of the review/approval of the Change Order
Recommendation	The recommendation given by the reviewer/approver.

Table 11-17 The Change Order Tracking Window - CO Tracking List Tab Fields Table

To access the Change Order Tracking window and view tracking records for a different Contract ID or a different Change Order within the selected contract:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Maintenance** icon.
3. On the **Change Order Maintenance** panel, double-click the **Tracking** icon.
4. Click the **Open** button on the tool bar to display the Change Order Tracking Select window.
5. On the **Change Order Tracking Select** window, in the **Contract ID** data window, double-click the desired **Contract ID**.

6. On the **Change Order Tracking Select** window, in the **Change Orders** data window, double-click the desired **Change Order** or highlight and click the **Ok** button. *The CO Header tab of the Tracking window is displayed.*
7. To view the Change Order Tracking List, click the **CO Tracking List** tab.
8. To close the window, click the **CO Header** tab, and then click the **Close** icon.

11.4 Reports (Change Order)

The Change Order Reports(CO) panel generates commonly used trends in contract changes reports. The following report topics are available on this panel:

Change Order Report

Change Order/Reason Code Breakdown

Unapproved Change Order Aging Report

Time Extension Granted Report

- View Saved Reports (PSR)

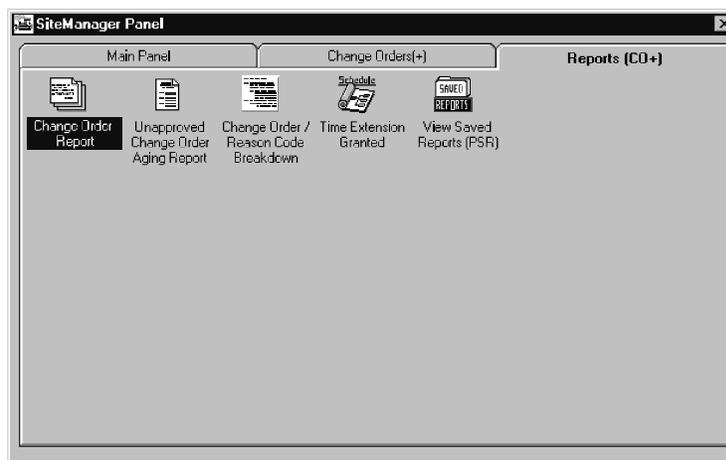


Figure 11-27 The Change Order (CO) Reports Panel

To generate a CO report:

1. Double-click the desired report icon.
2. Select the criteria.
3. To generate the report on-line, click **Ok**.

Or

To generate the report off-line to a file, click the **Generate Off-line File** check box (ON).

1. Click **Ok**.

Report Options

Or

To generate and print the report off-line, click the **Generate Off-line Print** check box (ON).

1. Click **Ok**.

To make selections in the **Report Criteria** dialog:

1. Click the desired radio button to select the desired format.

For Example:

By Summary selects all items

By Criteria (field name) selects an individual field

In a **By Criteria (field name)** format:

1. Using the *right* mouse button, click the field.
2. Perform a **Search** using the object menu (referenced in the Getting Started section).
3. Click **OK**.

11.5 Report Options

The report options are available as toolbar buttons or menu options for reports that have been generated on-line.

Components	Description
Close button	Closes the report preview.
Save button	In a simple report (see Save Reports section) invokes the Save dialog allowing the report to be saved in a .PSR file format.
Print button	Prints the report.
Prior button	Displays the prior page of a multi-page selection.
Next button	Displays the next page of a multi-page selection.
Zoom spin button	Magnifies or reduces the display of the report preview.

Copies spin button	Allows more than one copy of the report to be printed.
--------------------	--

Table 11-18 The Report Components Table

11.5.1 Saving and Exporting Simple Reports

There are two types of reports in SiteManager — simple reports and complex reports. Simple report can be saved and exported, but complex reports cannot. It is easy to identify a simple report — the File menu’s Save choice (or the Save button) and the Service menu’s Export choice will be active for a simple report. They will not be active for a complex report.

For procedures on saving, opening, and exporting a report, please refer to the General Concepts section.

11.5.2 View Saved Reports (PSR)

A saved simple report can be viewed using the View Saved Reports (PSR) icon. For procedures on opening and viewing a saved report, please refer to the General Concepts section.

11.5.3 Change Order Report

This is a two (2) page report window. The second page displays only if there are Time Extension associated with the change order selected for this report. This report is used primarily by the contractor.

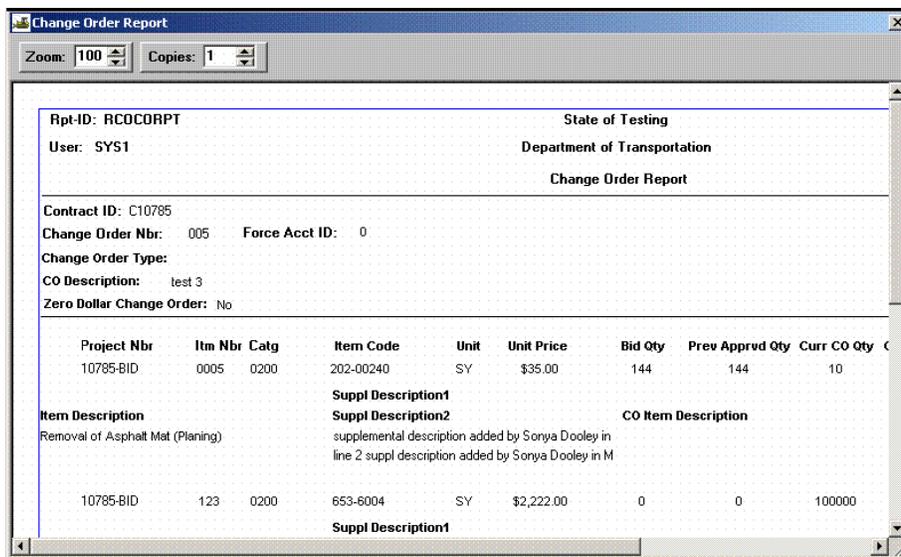


Figure 11-28 The Change Order Report Window

Note: The Zero Dollar Change Order indicator, located in the header section of the report, alerts the user as to whether or not the CO is a Zero Dollar Change Order.

To access the **Change Order Report** window and select the report criteria

1. On the **Main** panel, double-click the **Change Order** icon.

Report Options

2. On the **Change Order** panel, double-click the **Change Order Reports** icon.
3. On the **Change Order Reports** panel, double-click the **Change Order Report** icon.
4. Search and select the contract.
5. Search and select the desired Change Order
6. Generate the report on the user's PC or select to generate and/ or print off-line.
7. Click **Ok**.

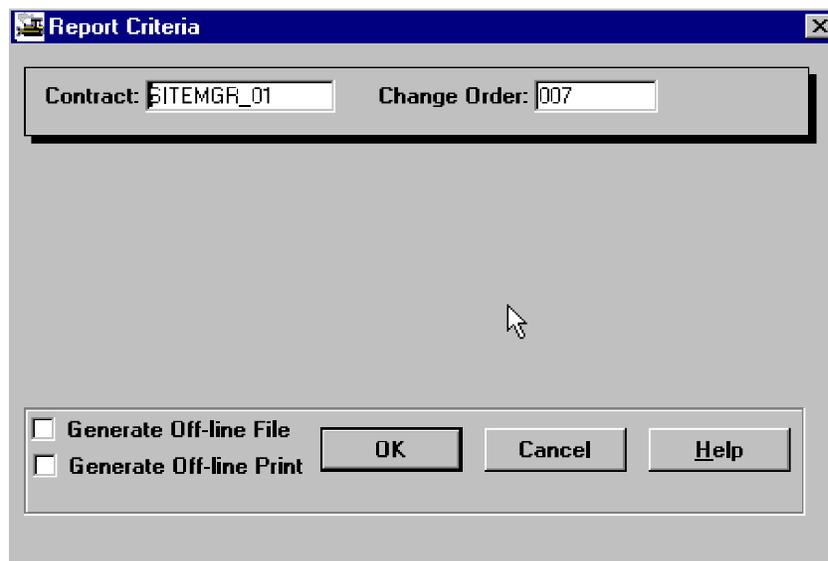


Figure 11-29 The Change Order Report - Report Criteria Window

The computation formulas for the computed fields are included in the Change Order Report Fields Table.

At the end of the Items Detail Information section a **total line** displays the Total Value for this Change Order.

11.5.4 Unapproved Change Order Aging Report

Information regarding all Change Orders associated with a Contract that are not yet approved are displayed on this report. This report listing can be grouped by district or contract

To access the Unapproved Change Order Aging Report window:

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Reports** icon.
3. On the **Change Order Reports** panel, double-click the unapproved **Change Order Aging Report** icon.

To select the report criteria:

1. On the Report Criteria window, click the radio button for the desired grouping.
2. Generate the report on the user's PC or select to generate and/ or print off-line.
3. Click Ok.



Figure 11-30 The Unapproved Change Order Aging Report Criteria Window

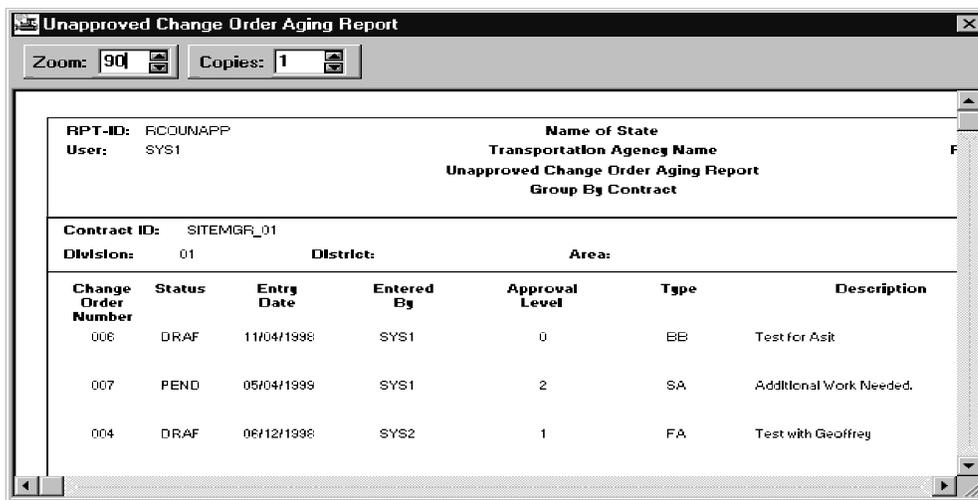


Figure 11-31 The Unapproved Change Order Aging Report Window

11.5.5 Change Order/Reason Code Breakdown Report

This is a report window displays the Change Order/Reason Code Breakdown details indicating trends in contract changes..

To access the **Change Order/Reason Code Breakdown Report** window and select the report criteria:

Report Options

1. On the **Main** panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the **Change Order Reports** icon.
3. On the **Change Order Reports** panel, double-click the **Change Order/Reason Code Breakdown Report** icon.
4. On the Report Criteria window, click the radio button for the desired grouping.
5. Click the radio button for desired Additional Break Criteria.
6. Generate the report on the user's PC or select to generate and/ or print off-line.
7. Click **Ok**.

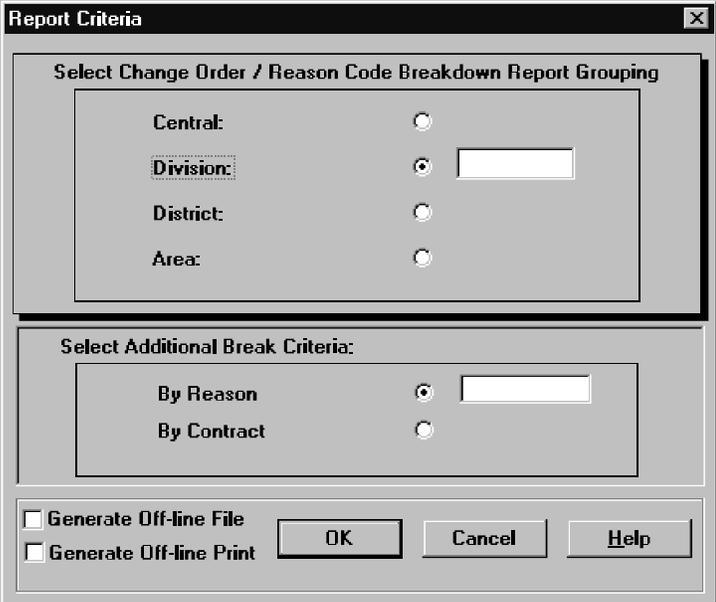


Figure 11-32 The Change Order/Reason Code Breakdown Report - Report Criteria Window

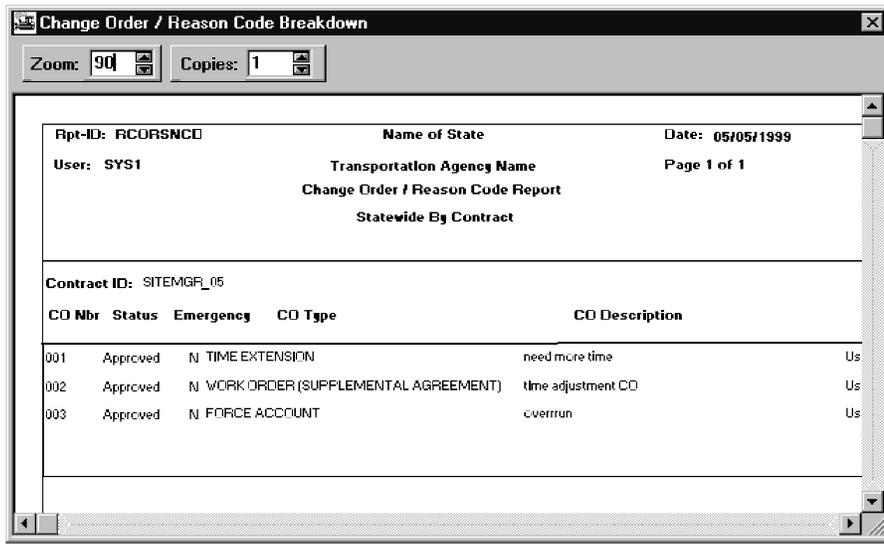


Figure 11-33 The Change Order/Reason Code Breakdown Report Window

11.5.6 Time Extension Granted Report (CO)

This report lists all approved change orders that relates to time adjustments for a particular contract.

To access the Time Extension Granted Report window:

1. On the Main panel, double-click the **Change Order** icon.
2. On the **Change Order** panel, double-click the Change Order Reports icon.
3. On the **Change Order Reports** panel, double-click **Time Extension Granted Report** icon.

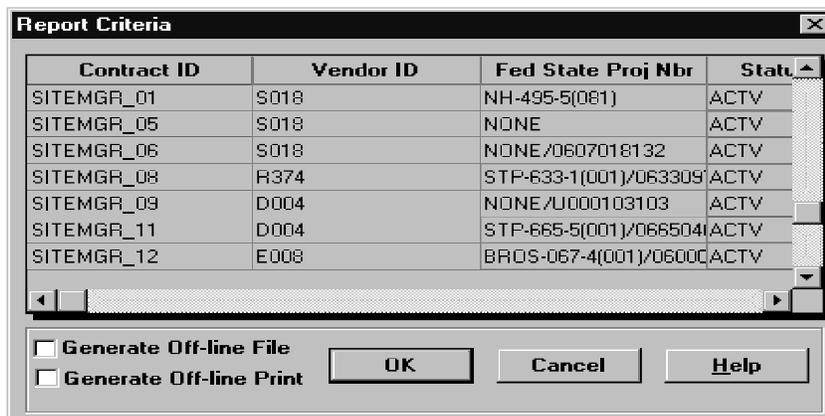


Figure 11-34 The Time Extension Granted Report - Report Criteria Window

Zoom: 90 Copies: 1

RPT-ID: R00TIMEX Name of State Date: 05
User: SYS1 Transportation Agency Name Page 1 of 1

**Time Extensions Granted Report
By Contract**

Contract ID: SITEM6R_11 Vendor ID: 0004 DAY CONSTRUCTION COMPANY

CO Nbr	Milestone Description	Original Days/Date	Extended Days/Date	Approved Date
001		199710/13 151	0000/00/00 1	199710/03
003		199710/13 151	0000/00/00 2	1998/02/20

Figure 11-35 The Time Extension Granted Report Window

12. Civil Rights

August 2005

12.1 Reference Tables

The Reference Tables store the default data and the transportation agency-defined standards that are added to a Contract either by SiteManager or by an authorized User. An authorized User accesses the following list of panels:

Wage Decisions Panels

To modify (create a new decision or copy and rename an existing decision) on the Description folder tab and save the changes to database

To add, update, view, or delete the Job Classification information associated with the wage decision on the Job Classification folder tab

To add, update, view, or delete wage decision associated with counties on the Counties folder tab

Training Programs Panels

To maintain training programs with the recommended wage rate adjustments and goals in hours for mid-level requirements and graduation requirements

System User Type Mapping Panel

To add, update, view or delete associations between User-defined code tables(Work Class, Job Class, DBE Type, and Ethnic Group) and system-defined code tables that are used for federal reports.

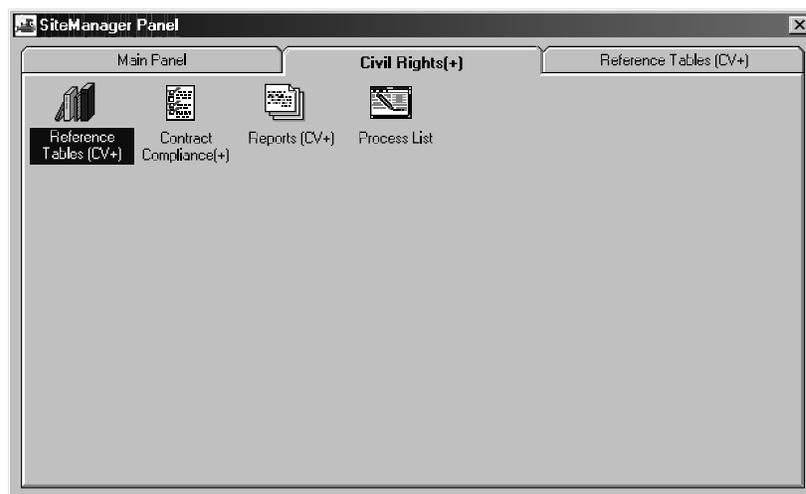


Figure 12-1 The Civil Rights Reference Tables Folder Tab

12.1.1 Wage Decisions

This folder tab control window allows easy access to all the Wage Decision related information. Each folder tab represents one component of wage decision information. A wage decision ID may be selected in the Description or Job Classification Tabs but not in the Counties tab. The Wage Decision Reference Table is

created in these three tabs and is accessed in a Wage Decision picklist by users creating a contract in Contract Records, Contract window on the Description tab.

To navigate to the Wage Decisions panel:

1. Double-click the Civil Rights icon on the Main menu.
2. Double-click the Reference Table icon on the Civil Rights folder tab.
3. Double-click the Wage Decisions icon on the Reference Tables folder tab.

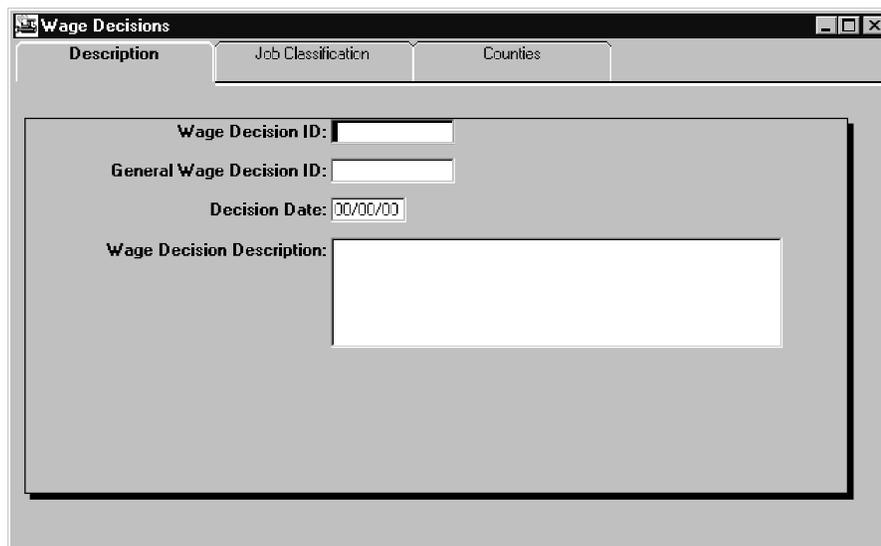


Figure 12-2 The Wage Decisions Descriptions Tab Window

The three folder tabs in the window associated with wage decision information are:

Description folder tab

The Description tab displays the wage decision information that can be added, updated or viewed. Users can modify (create a new decision or copy and rename an existing decision) and save the changes to database.

Job Classification folder tab

The Job Classification tab displays the list of wage rates for specific job classes for the current wage decision. Users can add, update, view, or delete the Job Classification information associated with the wage decision.

Counties folder tab

The Counties tab displays the Counties that are associated to the current wage decision. Users can add, update, view, or delete counties associated with the wage decision.

Initially, the Description screen opens as New with no data displayed, ready to enter a new decision or to select an existing decision. This window will also open presenting the last wage decision worked on by the User. Selecting the Open icon activates the Select Wage Decision pick list window. If an existing Wage

Reference Tables

Decision ID is selected, all the fields in all three Wage Decision folder tabs populate with data for the selected Wage Decision ID.

To create a New Wage Decision:

1. Double-click the **Civil Rights** icon on the main panel.
2. Double-click the **Reference Table** icon.
3. Double-click the **Wage Decisions** icon
4. Type the new Wage decision Number.
5. Press the **Tab** key.
6. Type the General Wage Decision.
7. Press the **Tab** key.
8. Type the Decision date.
9. Press the **Tab** key.
10. Type the Wage Decision Description.
11. Click the **Save** button.
12. Click **Ok** on the message “At least one job classification must be associated for every wage decision”.
13. Proceed with required entries on the Job Classification and Counties Tabs to complete the new Wage Decision.

12.1.1.1 Copying an Existing Wage Decision

A SiteManager User may also copy existing wage decision and rename it as a new wage decision. The user may then use it “as is” or modify the decision without recreating/typing all the original data.

Field Name	Description
Wage Decision ID	Unique transportation agency-defined ID for wage decision
General Wage Decision ID	General Wage Decision ID
Decision Date	Date of Decision
Wage Decision Description	Description of wage decision. (First 55 characters)

Table 12-1 The Wage Decisions Fields Table

To copy an existing Wage Decision to a new Wage Decision:

1. Double-click the **Civil Rights** icon on the main panel.
2. Double-click the **Reference Table** icon.
3. Double-click the **Wage Decisions** icon
4. On the **Description Tab**, select the desired existing Wage Decision. All fields populate on all tabs.
5. Click the **Services** menu and select **Copy Wage Decision**. A message appears requesting a new ID.
6. Click **Ok** on the message
7. Type the Wage Decision ID.
8. Click the **Save** button.
9. Click **Yes** to Save Changes message.

12.1.1.2 Modifying Wage Decision Information

The Wage Decision Description folder tab is used to add, update or view wage decision information. The information is retrieved for the Wage ID selected from the Select Wage Decision pick list and displayed in all folder tabs. The User can modify the displayed information in each tab and save the changes.

Field Name	Description
Wage Decision ID	Unique transportation agency-defined ID for an wage decision The column is protected for existing wage decisions Is a Required field
General Wage Decision ID	General Wage Decision ID
Decision Date	Date of decision
Wage Decision Description	Description of wage decision

Table 12-2 The Wage Decisions Fields Table

To modify an Existing Wage Decision:

1. Double-click the **Civil Rights** icon on the main panel.
2. Double-click the **Reference Table** icon.
3. Double-click the **Wage Decisions** icon
4. On the **Description** Tab, select the desired Wage Decision ID.
5. Press the **Tab** key to move from field to field when updating, modifying or deleting data.
6. Type or copy or delete information in the desired field.
7. Click the **Save** button.
8. Click the **Close** button.

Or

9. Click the **Cancel** button to cancel changes.
10. Continue the modification of the Wage Decision in the Job Classification and Counties Tabs

Or

11. Select another Wage Decision for modification.

12.1.1.3 Modifying a Wage Decision Job Classification

The Job Classification folder tab is used to add, update, view or delete the Job Classifications associated with the selected wage decision. When the Job Classification folder tab is selected, the information is retrieved and displayed for the selected wage decision.

The Job Classifications folder tab displays the list of wage rates for specific job classes for the current wage decision. The User may add, update, view or delete the information on each job classification.

At least one job classification must exist for every wage decision.

The Job Classification folder tab opens with the last worked-on Wage Decision number displayed. For a New Wage Decision, the user selects the New icon to display a new row for the User to enter a new job classification(s).

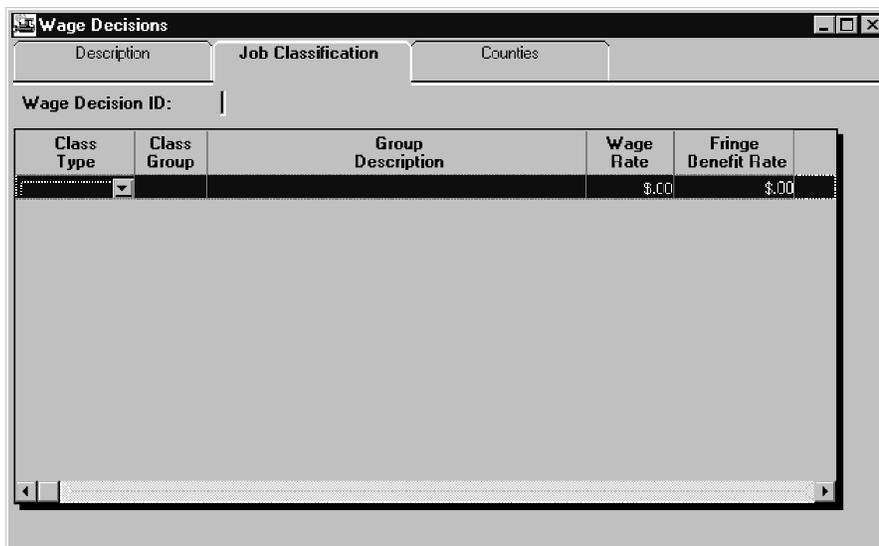


Figure 12-3 The Wage Decisions Job Classification Tab Window

Field Name	Description
Class Type	The transportation agency-defined ID for a job classification such as Carpenter, Electrician, Blaster, Laborer, etc. At least one row (i.e., job classification) must exist for every wage decision and is a Required Field
Class Group	Defines the subgroup within the job classification

Field Name	Description
Group Description	Describes the group
Wage Rate	Specifies the recommended wage rate for job classification by the Department of Labor and is a Required Field
Fringe Benefit Rate	Employee fringe benefit rate Is a Required Field

Table 12-3 The Wage Decisions Job Classification Fields Table

To modify a Job Classification for a Wage Decision ID

1. Double-click the **Civil Rights icon** on the Main panel.
2. Double-click the **Reference Tables icon**.
3. Double-click the **Wage Decisions icon**.
4. Click the **Open icon**.
5. Select the Job Classification Tab.
6. Double-click the desired Wage Description ID. All data related to the ID appears.
7. Select the desired Job Classification row.
8. In the **Class Type Column**, click the expand (down arrow) button to see the drop-down list
9. Highlight the desired job title. The job title appears in the **Class Type** field.
10. Tab to the **Class Group** column of the row.
11. Type the **Class Group** number(s).
12. Press the **Tab** key.
13. Type or copy the **Group Description** text.
14. Press the **Tab** key.
15. Type the dollar amount of the Wage Rate. The dollar sign and the decimal are supplied by the system. The system does not allow symbols or letters in this field.
16. Press the **Tab** key.

17. Type the dollar amount of the **Fringe Benefit** rate. The dollar sign and the decimal are supplied by the system. The system does not allow symbols or letters in this field.
18. Click the **Save** button or click the **Cancel** button to not save this action.
19. Click the **Counties** folder tab to complete the wage decision.

12.1.1.4 Adding and Modifying Wage Decision Counties

The Counties folder tab is used to add, view or delete the Wage Decision Counties for the selected wage decision. The Wage Decision ID must be selected in the Description or Job Classification Tabs. It cannot be selected in the Counties tab. The Counties folder tab displays the list of current wage decision counties from a reference table and the list of counties already associated with the Wage Decision ID. The User may add and remove counties in the selected wage decision.

When the User selects the Counties folder tab, the available counties not currently associated with the wage decision are retrieved and displayed in the Available Counties datawindow.

The Wage Decision Counties datawindow displays all the counties currently associated with the wage decision.

Association Buttons

Prior to pressing the Add or Remove buttons, multiple counties can be deselected by holding control key, and clicking the County names.

The **Add** button:

Is disabled if all available counties have already been associated with the wage decision

Is disabled if not a single county is selected from the Available Counties datawindow

Only those counties that are selected in the Available Counties window are added to the Wage Decision Counties window.

The **Remove** button:

Is disabled if no counties are associated with wage decision

Is disabled if not a single county is selected from the Available Counties datawindow

Counties selected by the User in Wage Decision Counties window are removed. There is no message to confirm the removal.

The **Add All** Button selects *all* the counties in the Available Counties window and adds them to the the Wage Decision datawindow. If no county names are displayed in the current datawindow, this menu option is disabled.

The **Rem All** button removes all counties from the Wage Decision datawindow and they appear in the Available Counties datawindow.

Messages appear requesting a confirmation to add all or remove all.

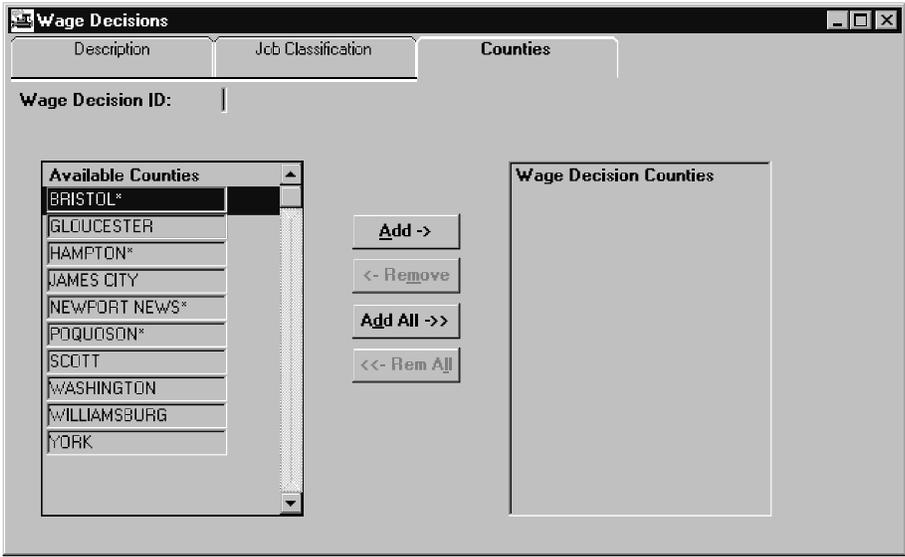


Figure 12-4 The Wage Decisions Counties Tab Window

Field Name	Description
Available Counties	The list of counties from a User-defined reference table available to associate with the Wage Decision User may select multiple Available Counties at one time.
Wage Decision Counties	The list of counties that are already associated with the wage decision. User is allowed to select multiple Wage Decision Counties at one time. At least one county must be associated to every wage decision.

Table 12-4 The Wage Decisions Counties Tab Fields Table

To view, add or delete counties to/from the Wage Decision:

1. Double-click the **Civil Rights** icon on the main panel.
2. Double-click the **Reference Tables** icon.
3. Double-click the **Wage Decisions** icon.
4. Click the **Open** icon in either the Description or Classification Tab.
5. Double-click the desired **Wage Description ID**. All data related to the ID appears.
6. Click the **Counties** Tab. All Counties currently selected for the Wage decision ID are visible in the Wage Decision Counties Scroll List.

To add one county to the Wage Decision Counties list:

1. Scroll the Available Counties list.
2. Click/Highlight the desired county.
3. Click the **Add** button.
4. Click the **Save** button or click the **Cancel** button to not save this action.

To add many counties to the Wage Decision Counties list:

1. Hold the **Control** key down.
2. Click the desired Counties.
3. Click the **Add** button.
4. Click the **Save** button or click the **Cancel** button to not save this action.

To add all available counties to the Wage Decision Counties list:

1. Click the **Add All** button.
2. Click the **Save** button or click the **Cancel** button to not save this action.

To delete one county from the Wage Decision Counties list:

1. Scroll the Available Counties list.
2. Highlight the desired county.
3. Click the **Remove** button.
4. Click the **Save** button or click the **Cancel** button to not save this action.

To delete many counties from the Wage Decision Counties list:

1. Hold the **Control** key down.
2. Scroll the Available Counties list.
3. Click/highlight the desired counties.
4. Click the **Remove** button.
5. Click the **Save** button or click the **Cancel** button to not save this action.

To delete all available counties to the Wage Decision Counties list:

1. Click the **Remove All** button.
2. Click the **Save** button or click the **Cancel** button to not save this action.
3. Click the **Save** icon.

12.1.2 Training Programs

The Training Programs window allows SiteManager Users to maintain training programs, with recommended wage rate adjustments and the recommended goals in hours for intermediate level and program graduation. Each training program is defined by a Program Name, a Classification, a Classification Group and it's wage rate adjustment in percent. The same combination of Program, Class and Group can be maintained for a different wage rate adjustment.

The Training Program window is accessible within the Civil Rights Contracts Compliance function by selecting the Training Program menu item. The User has the Find, Filter and Sort facilities from right mouse button within the datawindow.

Note: When the status of the Job Program is changed to Inactive, it cannot be assigned to a trainee as a new program. An Inactive Job Program will not be displayed in the list of programs available for selection.

A User-defined filter is used to retrieve the list of training programs. If the number of rows being retrieved from the database exceeds the User-specified value, a message is displayed containing the number of rows about to be retrieved.

A User may choose to retrieve the data or cancel the retrieval and apply a filter. If the User chooses to retrieve, the datawindow displays the list of wage decisions. The first wage decision record is highlighted. If the User chooses to cancel the retrieval, an empty datawindow appears allowing the User to start the Filter.

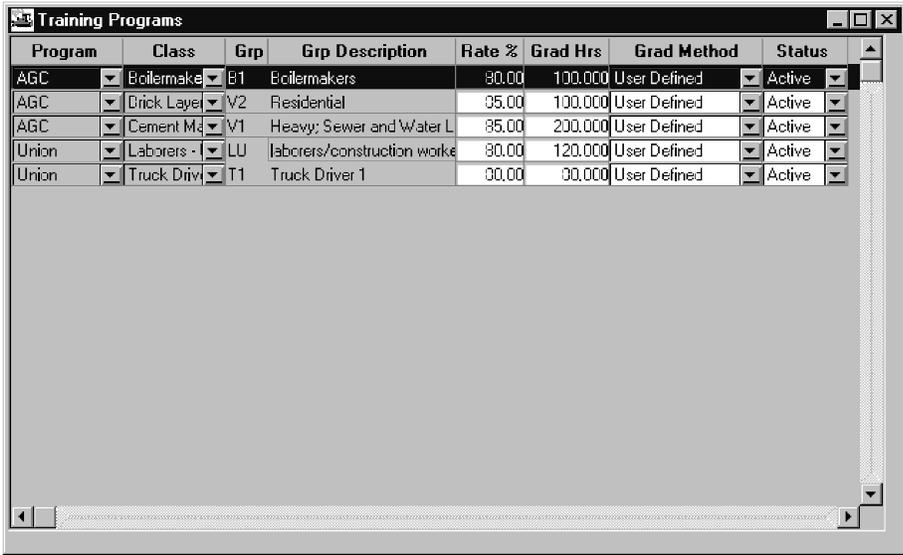


Figure 12-5 The Training Programs Window

Field Name	Description
Program	A User-defined training program. For Example, AGC, union, journeyman, etc. Is a Required Field

Field Name	Description
Class	<p>A User-defined Job Classification. Examples include carpenter, electrician, blaster, laborer, etc.</p> <p>Job Classification and Group combination must exist in the “WAGE DECISION JOB CLASS” table</p> <p>Is a Required Field</p>
Group	<p>Defines the subgroup within the job classification</p> <p>Group and Job Classification combination must exist in the “WAGE DECISION JOB CLASS” table</p>
Group Description	<p>Describes the classification group selected</p> <p>Is a Display-only field</p>
Rate %	<p>States the percentage of the journeyman's rate of pay for the classification and level based on the program type</p> <p>Is a Required Field</p>
Grad Hrs	<p>The cumulative hours a trainee must achieve to be considered for graduation from the level or from the program</p> <p>Is a Required Field</p>
Grad Method	<p>Specifies the Graduation Method Type for trainees, defined by DOT-code, such as Hours of experience, a Competency Test or a Peer Review</p>
Usage Status	<p>Specifies the Status of the Program with a classification such as Active or Inactive</p> <p>Defaults to “Active”</p> <p>Is a Required Field</p>

Table 12-5 The Training Programs Window Fields Table

Reference Tables

To maintain Training Programs:

1. Double-click the **Training Programs** icon. The Trainee Programs Window appears. The cursor appears in the Grad Hrs column, an editable field.

To view, add, modify or delete Training Programs to/from the list of Training Programs:

1. Scroll the list of programs and click the desired Program row.

Or

2. To find a specific Training Program, perform a **Filter**, **Find** or **Sort** using the *Right* mouse options (referenced in the getting started section).
3. Click the Row of the desired program.

To add one or more new Training Programs to the list:

1. Click the **File** menu and click the **New** choice. A new row appears at the bottom of the list.
2. Place the cursor in the Program Column.
3. Click the expand button and select the Program title.
4. Place the cursor in the Class Column.
5. Click the expand button and select the Job Classification.
6. Place the cursor in the Grp Column.
7. Type the Grp letter-number.
8. Press the **Tab** key. (Tab skips the Grp Description column.)
9. In the Rate % column, type the percentage numbers of the journeyman's rate of pay.
10. Press the **Tab** key.
11. In the Grad Hrs column, type the number of hours required for graduation.
12. Press the **Tab** key.
13. In the Grad Method column, click the expand button and select the required graduation method.
14. Press the **Tab** key.
15. In the Status column, click the expand button and select the status of the program.
16. Click the **Save** button or click the **Cancel** button to not save this action.
17. Respond to the Duplicate Record message or any other error message.
18. Correct the errors.

19. Click the **Save** button. The **Grp Description** text appears automatically when the save button is clicked.

To add another Program

1. Click the **File** menu and click the **New** choice. *A new row appears at the bottom of the list.*
2. Repeat steps 1. through 16. Users can add single or multiple new programs (Up to 3 new programs) at one time.

To create a **Grp Description** if the Grp Description does not appear after Clicking **Save**.

1. Return to the Job Classification Tab in Wage Decisions in the Reference Tables.
2. Click the **Exit** button to exit the Trainee Programs screen.
3. Click the main panel button.
4. Click the **Civil Rights** icon.
5. Click the **Reference Tables** icon.
6. Click the **Job Classification** Tab.
7. Scroll to find the **Class Type** and **Class Group** used for the new trainee Program.

Or

8. Perform a **Find** using the object menu (referenced in the General Concepts section).
9. Type the **Grp Description**.
10. Click the **Save** button.
11. Click the **Exit** button.
12. Click the main panel to return to the Trainee Programs screen.
13. Double-click the **Civil Rights** icon on the main panel.
14. Double-click the **Training Programs** icon. *The Trainee Programs Window appears.*
15. Highlight the **New Program Row** and repeat any required entries.
16. Click the **Save** button. The **Grp Description** appears automatically.

To modify a Training Program

1. Find the desired Training Program.
2. To highlight the Program row, click the column in the row requiring modification.
3. Type or copy the correction or make the desired selection with the expand button.
4. Click the **Save** button or click the **Cancel** button to not save this action.

Reference Tables

To delete one Training Program at a time from the list:

1. Find the desired Training Program.
2. Click on the row of the program to highlight it. (Do not click an expand button column.)
3. Click the **Delete** button.
4. Click the **Save** button or click the **Cancel** button to not save this action.

To exit this screen:

1. To exit the SiteManager system, click the **Exit** button.

To exit this screen and return to the main panel, click the main panel button.

Tip: Trainee Programs can be sorted (using Right Mouse Options) by program name, by Class or by Group to solve and correct error messages.

12.1.3 System User Type Mapping

The System/User Type Mapping window is used to add, update, view or delete associations between User-defined code tables and system-defined code tables that are used for federal reports. The associations are made with the following code types:

- Work Class
- Job Class
- DBE Type
- Ethnic Group

The System/User Type Mapping window is accessible within the Civil Right Reference Table function by selecting System/User Type Mapping menu item. This window appears when the User selects System/User Type Mapping from the menu bar. When the User makes a valid code selection, the corresponding datawindows appear on the main window.

All controls in the window are invisible except Open.

The User selects a table-type option from the list. The window first determines if any modification has made on the current type and not been saved. If the data has not been saved, the User is prompted with a message to either save the data or to continue without saving. If the User chooses to save, the data is saved.

A new set of datawindows appears on the window corresponding to the type the User selected. All system-defined types are retrieved and displayed as a picklist on the top datawindow. The first row in the top datawindow is highlighted.

The available User-types that are not currently associated with any system-type are retrieved and displayed in the Available Type datawindow.

The Associated Type datawindow displays all the User-types already associated with the highlighted system-type.

Association Buttons

The Add button:

- Is disabled if All User-types have been associated with the Reference SYSTEM-Type
- Is disabled if No User-type is selected from the Available User-Type datawindow

The Remove button:

- Is disabled if No User-types are associated with Reference SYSTEM-Type
- Is disabled if No User-type is selected from the Associated User-Type datawindow

The Remove All button:

- Is disabled if No User-types are associated with the Reference SYSTEM-Type

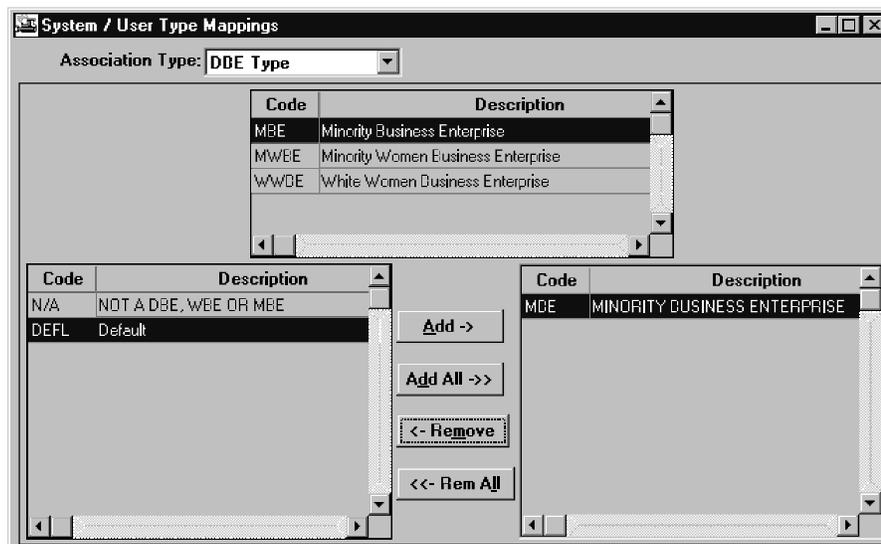


Figure 12-6 The System/User Type Mapping Window

Field Name	Description
Description	Textual description
System Job Class	Is a System-defined code that identifies each Job Class Type uniquely such as Officials, Supervisors, Foremen/Women, Clerical, Equipment Operators, Mechanics, Truck Drivers, Ironworkers, Carpenters, Cement Masons, Electricians, Pipefitters & Plumbers, Painters,

Field Name	Description
	Laborers (Semi-skilled), Laborers (Unskilled), Apprentices and On-the-Job-Trainees
User Job Class	Is a User-defined code that identifies each Job Class Type uniquely such as Form Setter, Mason, Pipelayer, Drill Operator, etc.
System Work Class	Is a System-defined code that identifies each Work Class Type uniquely such as Grading & Drainage, Paving, Structures/Buildings, Materials, Equipment, Trucking, Traffic Control, Landscaping and Others
User Work Class	Is a User-defined code that identifies each Work Class Type uniquely such as Bridge, Freeway, etc.
System DBE Type	Is a System-defined code that identifies each DBE Type uniquely such as MBE, MWBE, WWBE
User DBE Type	User-defined code that identifies each DBE Type uniquely such as SBE, WBE, etc.
System Ethnic Group	Is a System-defined code that identifies each Ethnic Group uniquely such as Black American, Hispanic American, Native American, Asian-Indian American, Asian-Pacific American, Other Minority, Non-Minority
User Ethnic Group	Is a User-defined code that identifies each Ethnic Group uniquely such as Appalachian, etc.

Table 12-6 The System/User Type Mappings Window Fields Table

To associate code types:

1. In the **Association Type**: field, click the down spin button until the desired choice appears - DBE Type, Ethnic Group, Job Class or Work Class. The code and the code descriptions appear in the scrollable top Code-Description box.
2. Make or remove code associations using the appropriate button - **Add**, **Add All**, **Remove** or **Rem All**. These buttons are grayed if the function cannot be executed.

12.2 Contract Compliance

The Contract Compliance folder tab is reached by selecting the Civil Rights icon on the main panel.

This folder tab is used to define and track state (provincial) DBE goals for both the prime contractor DBE and the subcontractor DBE. For example, if the prime contractor is a DBE, 100% of the contract is committed to the DBE goals for the state.

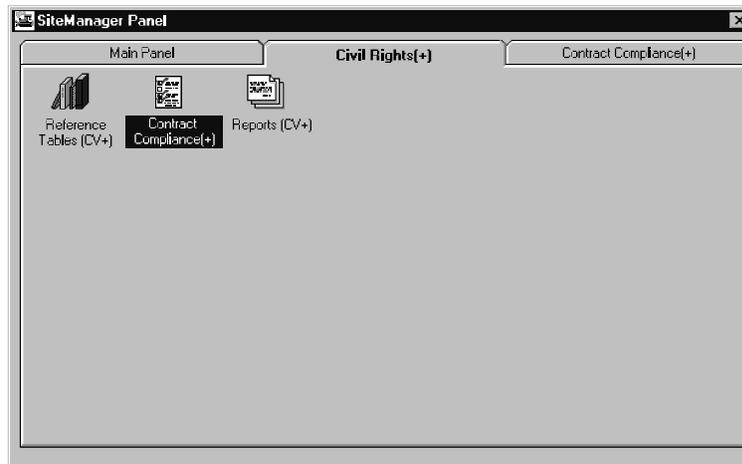


Figure 12-7 The Contract Compliance Icon on the Civil Rights Tab

The Civil Rights, Contract Compliance folder tab displays the following icons:

Contracts - described in the Contracts Administration section of this manual and also accessible in the Contracts Administration main panel icon

Subcontracts - described in the Contracts Administration section of this manual and also accessible in the Contracts Administration main panel icon

Trainees - described in this section of the manual and only accessible through the Civil Rights, Contract Compliance icon

Key Dates - described in the Key Dates and Checklist Events section of this manual and also accessible in the Contract Administration, Reference Tables folder tab

Checklist Scheduled Events - described in the Key Dates and Checklist Events section of this manual and also accessible in the Contract Administration, Reference Tables folder tab

Checklist Events Dates - - described in the Key Dates and Checklist Events section of this manual and also accessible in the Contract Administration, Reference Tables folder tab.

Document Submission - - described in the Contracts Maintenance section of this manual and also accessible in the Contract Administration, Contract Management folder tab.

Contractor Payrolls - described in the Contracts Maintenance section of this manual and also accessible in the Contracts Maintenance, Contractor Payrolls icon.

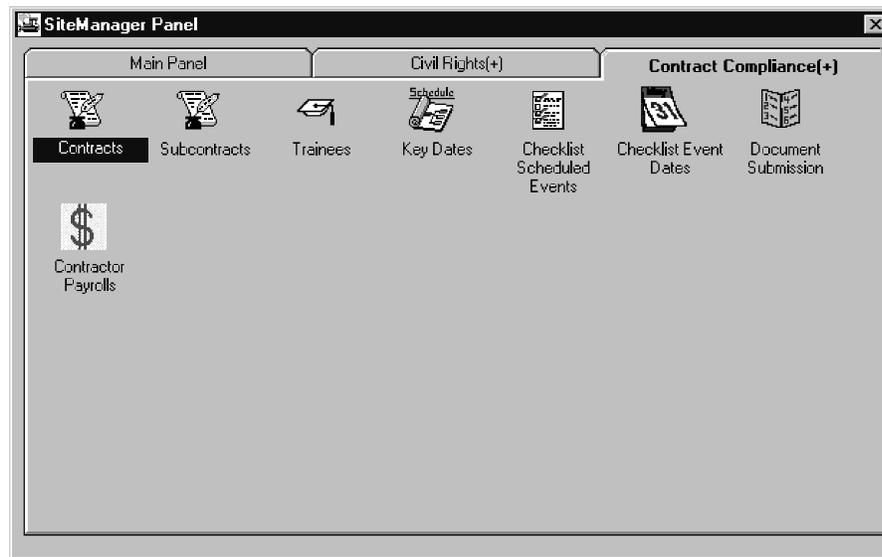


Figure 12-8 The Civil Rights, Contract Compliance Tab Window

12.2.1 DBE Commitments

The DBE Commitments folder tab is described completely in the Contracts Administration section of this manual.

The DBE Commitments folder tab in the Civil Rights panel lets SiteManager Users with specific authority view and update the DBE goal and commitments for a contract. If the contract data is passed over to SiteManager from a preconstruction system, the DBE goal percentage and original commitment amount are computed during the download process. In SiteManager on-line contracts, the original commitment amount and the DBE goal percentage are entered by a User with the appropriate authority.

To Access DBE Commitments in Civil Rights:

1. On the main panel, double-click the **Civil Rights** icon.
2. Double-click the **Contract Compliance** icon to record and track.
3. Double-click the **Contracts** icon.
4. On the **Contracts** Window, Click the **DBE Commit** Folder tab.

Or

To access the DBE Commitments folder tab via **Contract Administration** on the main panel:

1. On the main panel double-click the **Contract Administration** tab.
2. On the **Contract Records(+)** tab, double-click the **Contracts** icon.
3. On the Contracts Window, Click the **DBE Commit** Folders tab.

The contract ID is selected in the Contracts Description folder tab and passed to the DBE Commitments folder tab, retrieving all the DBE information.

The following processing is performed by SiteManager according to the source of contract:

- If the contract was passed from the preconstruction system, all of the fields are protected. The contract is in a View-Only status and cannot be modified.
- If the contract was added in SiteManager, the DBE Goal Percentage and the DBE Commitment Original Amount are updatable.

Remarks, a toolbar button, allows the User to maintain the contract DBE remarks. The Remarks toolbar icon is displayed indicating that DBE Remarks text exists for a contract. The icon is not displayed if Remarks text does not exist.

To view Remarks:

1. Click the **Remarks** button. *A remarks screen appears.*
2. A check symbol appears next to the most recently added Remarks topic and can be viewed.
3. Click the topic with a check mark. *Existing Remarks text appears in the Remarks box.*
4. To close this screen, click the **Remarks** button.

To add Remarks:

1. Click the **Remarks** button. A remarks screen appears.

Or

2. On the **Services** menu item, choose **Remarks**.
3. Select a topic, Comments, Prime Contractor, Description or General.
4. Type or copy text in the Remarks text box.
5. To close this screen, click the **Remarks** button.

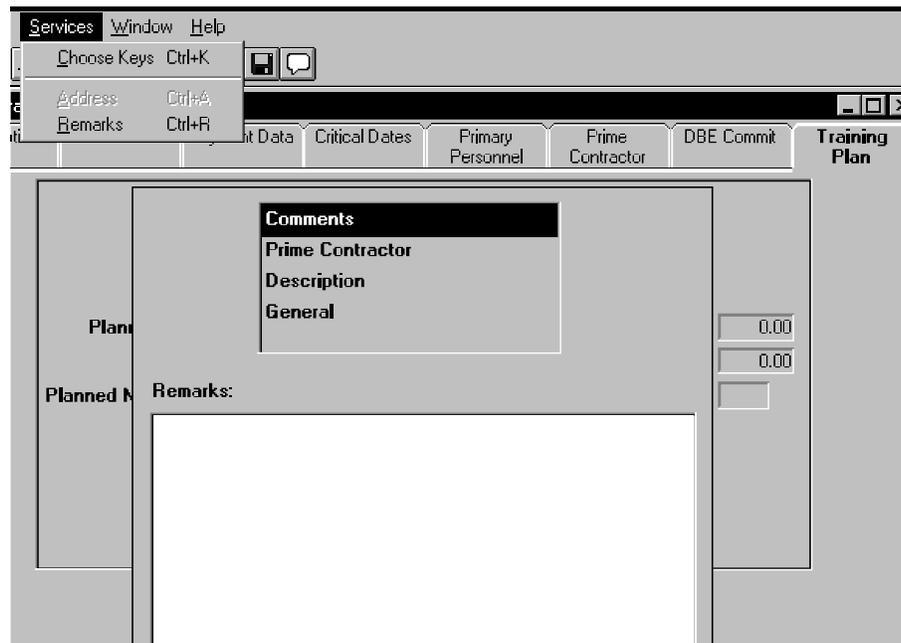


Figure 12-9 The DBE Commitments Remarks Window

12.3 Training

The Training Plan is accessed and maintained via the associated contract in Contract Administration while trainees and their training programs are accessed and maintained in the Civil Rights portion of SiteManager.

12.3.1 Contract Training Plan

The Contract Training Plan is described in the Contracts Administration section of this manual.

The Training Plan folder tab lets the User view, add and modify the prime contractor's on-the-job-training commitments for a contract. The User identifies the prime contractor's On-the-Job-Training contract commitment used during *estimate generation* to perform automated reimbursement. If the contract contains a training line-item (identified on the Civil Rights tab of the System Parameters window), the system enters the training plan automatically from the corresponding line-item code. If the contract does not have a training line item, an authorized User can enter the plan.

If the contract training plan is tracked by a training line item, reimbursements for on-the-job training will be managed via the line item. In other words, the number of training hours accrued will be attributed to the training line item as the quantity installed, and the quantity will be paid on an estimate. If the contract training plan is manually entered, reimbursements for on-the-job training will appear as Contract Adjustments.

The training plan consists of:

- The total training hours for the contract
- The hourly (unit) price for contract reimbursement
- The approximate number of trainees

Trainees identified for the contract are maintained via the Contract Trainee process in the Civil Rights section of the system. Refer to the Trainees Section in this manual.

Note: If the system enters the training plan the data cannot be modified. The User has view-only privileges of the plan. SiteManager Users must allocate only one line-item on each contract using the corresponding training item code. This panel retrieves only the first item code of the type (metric or English) specified in the System Operational Parameter table.

If the SiteManager User uses a contract line-item for the training plan, this system opens the window with data using the line-item. It protects all fields from modification, and disables the Save menu item. Otherwise, all fields open directly from the database and are enabled for update as displayed.

To add a new Training Plan refer to the Contracts Administration section of this manual.

To view Remarks:

1. Click the **Remarks** button. A remarks screen appears.
2. A check symbol appears next to the most recently added Remarks topic and can be viewed.
3. Click the topic with a check mark. Existing Remarks text appears in the Remarks box.
4. To close this screen, click the **Remarks** button.

To add Remarks:

1. Click the **Remarks** button. A remarks screen appears.
2. Select a topic, Comments, Prime Contractor, Description or General.
3. Type text in the Remarks text box.
4. To close this screen, click the **Remarks** button.

To add Remarks if the Remarks box is present on the window:

1. Place the cursor in the Remarks box.
2. Type the desired text.
3. Click the next tab to save and close the current tab.

Or

4. Click the **Close** button.

12.3.2 Trainee Maintenance

The Training Plan is maintained in the Training Plan folder tab of Contract Administration.

Training Programs are maintained in the Reference Tables of Civil Rights

Trainee(s) are maintained through the Civil Rights main panel icon, Contract Compliance folder tab in the Trainee icon.

12.3.2.1 Trainees

The Trainees window is a three tab control window allowing easy access to all the trainee-related information. Each folder tab represents one component of trainee-related information. The information displayed on the folder tab corresponds to the trainee ID number selected on the Select Trainee window.

The Trainees window allows the User to identify contractor personnel designated to receive On-the-Job Training for an active contract. The User tracks trainee hours by contract and cumulative hours achieved towards craft or skill goal. A trainee may be enrolled in more than one training program, but must graduate from the first before starting the next one. A trainee may have Active status in only one program at a time. If a trainee transfers from one contract to another, his or her current training hours can be applied to the next contract.

The three folder tab controls in the Trainee window are:

- Description - Trainee's personal information

- Program Experience -Trainee's program and status

- Contract Experience - Trainee's related contract and status

Description Tab - This folder tab is used to add, update, or view trainee information.. The trainee description is retrieved by the trainee ID. Personal information about the trainee such as Name, Social Security Number, SIN, Ethnic Group and Gender Type are maintained in this window. Selecting Open produces the Select Trainee picklist. Selecting New produces a blank window to create a new trainee. Both Services/Address and Generic Fields options are available only in this tab.

Program Experience Tab- This folder tab is used to add, update, view, or delete the trainee Program Experience.. The trainee's program experience is retrieved by the trainee ID. Program Experience displays the trainee's enrollment and activity status in training programs. The list (the upper data window) is for selection only, while the detail (the lower datawindow) allows program information to be added, updated, or deleted. The Group designation of the trainee, DOT Hours, Non-DOT Hours, and Current Program Status of the trainee are maintained. Selecting New produces the Training Program Picklist. Selecting Open produces the Select Trainee picklist.

Contract Experience Tab -This folder tab is used to add, update, view, or delete the Trainee Contract Experience. The trainee contract information is retrieved by the trainee ID. The Contract Experience folder tab displays the contracts for which the trainee has had or will have experience. The list (the upper datawindow) is for selection only, while the detail (the lower datawindow) allows contract information to be added, updated, or deleted, including DOT Hours, Training Status and Contract Status. Selecting New produces a new row in the lower datawindow to select a new contract. Selecting Open produces the Select Trainee picklist.

The Open button or File/Open in any of the tabs opens Select Trainee pick list and allows the User to open the record of a different, existing trainee. In the Select Trainee pick list, the User selects a trainee ID. The data in each folder tab then corresponds to the selected trainee ID and can be edited. Each tab must be saved when editing is complete. If the User selects New in the Description tab to create a new trainee, all tabs display empty datawindows. All three tabs must be completed for a new trainee and saved when all are completed.

12.3.2.2 Select Trainees

The Select Trainee window is used to display the list of trainees and to select a trainee for further User actions. The Select Trainee picklist displays when the User clicks the Open icon or File/Open.

Selecting Cancel allows the User to close the window any time without selecting a Trainee. The window closes without displaying a warning message.

Field Name	Description
Trainee Name	Unique transportation agency-defined ID for an individual
SSN	The Trainee's Social Security Number or SIN.
Pgm	Is a User-defined code for a training program. Examples include AGC, union, journeyman, etc.
Class	Is a User-defined code for a job classification. Examples include carpenter, electrician, blaster, laborer, etc.
Grp	Defines the subgroup within the job classification
Status	Is the status of the trainee's training for this contract. This status information is available from a User-defined list. Examples of status include Graduated, Terminated, Active, etc.
Vendor ID	Unique transportation agency-defined ID for a vendor Generally the company's Federal Tax ID. This field has Search Lens capability.
Contract ID	The transportation agency-defined ID for the contract. The ID corresponds to the contract ID assigned in pre-construction/LAS TM or is generally the contract transportation agency-defined ID for a proposal generated from a pre-construction system.

Table 12-7 The Contract Training Plan Maintenance Fields Table

12.3.2.3 Trainee Description

The Trainee Description tab is used to create, update, or view the trainee personnel information. The information is retrieved for the given Trainee ID selected from the Select Trainee pick list and displayed in the folder tab. The User may modify the displayed information and save the changes to database.

The User begins by selecting trainee ID or selecting New to create a new trainee.

If an existing Trainee ID was selected on the Select Trainee pick list, the related information for that Trainee ID is displayed in the folder tab. If the User creates a new trainee, all fields in the Description tab are empty.

The window enables functions according to the source of the trainee as follows:

For a New Trainee, all of the fields are editable.

For a trainee active in any program or on any contract, the Delete menu item is disabled and the Trainee cannot be deleted.

For a Trainee with any transportation agency experience (hours) logged, the Delete menu item is disabled and the Trainee cannot be deleted.

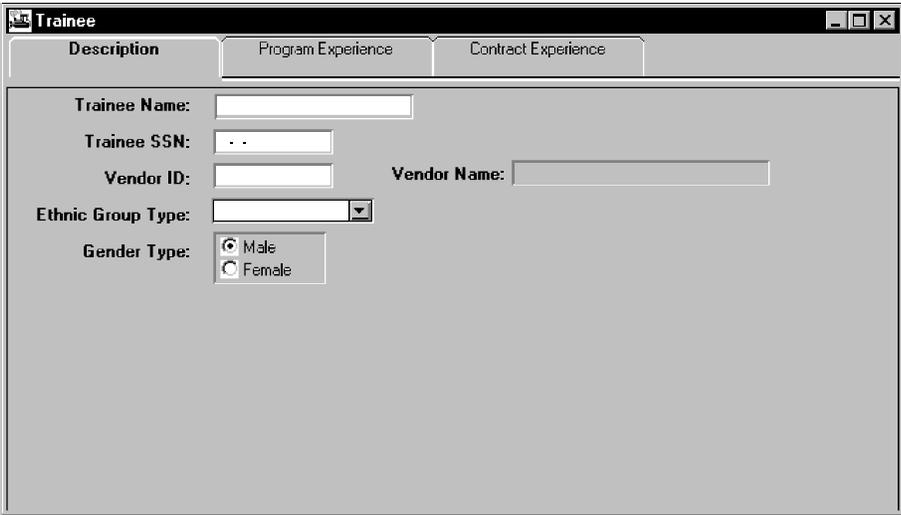


Figure 12-10 The Trainee Description Tab

Field Name	Description
Trainee Name	Is the Trainee’s Name typed last name first
Trainee Name	Is a Required Field
Trainee SSN	Is the Trainee’s Social Security Number or SIN Must be unique

Field Name	Description
	Is a Required field
Vendor ID	Is a Unique transportation agency-defined ID for a vendor Generally, the ID is the company's Federal Tax ID. Is a Required field Has Search Lens capability
Vendor Name	Vendor Personnel Name Populates when Vendor ID is selected
Ethnic Group Type	Is a DOT-defined code identifying a person's ethnic background (e.g., Black American, Hispanic American, Native American, etc.) Is a Required field
Gender Type	Indicates an individual's gender (e.g., M = male or F = female). Is a Radio Button selected for each trainee Is a Required field

Table 12-8 The Trainee Description Tab Table

To select an existing trainee (in all Trainee window tabs):

5. Double-click the **Civil Rights** icon, the **Contract Compliance** icon and the **Trainees** icon.
6. On any **Trainee** tab, click the **Open** button. The **Select Trainee** picklist appears.
7. Scroll the list and highlight the **Trainee Name and ID**.
8. Click **Ok**. The fields in all the tabs display related data.

To create a new trainee in the Trainee Description tab:

1. Double-click the **Civil Rights** icon, the **Contract Compliance** icon and the **Trainees** icon.
2. On the **Trainee** window Description tab, click the **New** button. All fields in the Description tab appear blank.
3. Type the Trainee's name.
4. Press the **Tab** key.

5. Type the Trainee's Social Security Number or CIN.
6. Press the **Tab** key.
7. Use the Search Lens in the Vendor ID field to select the Vendor ID and Vendor Name. The search window for **Vendor Name:** and **Vendor ID:** appears.
8. Scroll the list of Vendors.
9. Highlight the appropriate **Vendor Name:** and **Vendor ID:** row, and click **Ok**. The **Vendor Name:** and **Vendor ID** appear in the appropriate fields of the Trainee tab.
10. In the **Ethnic Group Type:** spin button, click the up (or down) spin button until the correct choice appears.
11. Click the appropriate **Gender Type:** radio button and select Male or Female.
12. Click the **Program Experience Tab** to continue entering new Trainee data.

Or

13. When modifying an existing trainee's data, click Save.

To add address(s) information for a trainee:

1. On the Description tab, click **Services/ Address**. The address window appears. The procedure for completing a trainee address(s) is described in detail in the Getting Started section of this manual.

To use Generic Fields for a trainee's records:

1. On the Description tab, click **Services/Generic Fields**. The Generic Fields window appears. The procedure for completing a Generic field is described in detail in the Getting Started section of this manual.

12.3.2.4 Program Experience

The Program Experience folder tab allows the SiteManager User to add, view or delete the trainee's Program Experience. Trainee Program Experience is retrieved by trainee ID. The Program Experience folder tab displays the trainee's program enrollment and the experience (hours) in those programs. All fields appear blank for a new trainee. The User may add and delete training programs in the current training program list and update the corresponding details of a selected program. A Remarks box is available to enter details about a trainee's program(s) and graduation status.

When the Program Experience tab opens, the Trainee Name: field displays the name of the trainee selected or created in the Description folder tab. By default, the first row of the Program Experience list is highlighted in the upper data window. Corresponding details of the highlighted program are displayed in the detail (lower) datawindow. Since a trainee may have experience in multiple programs, the User highlights the desired program in the upper datawindow and changes focus to the lower datawindow to view or edit program details.

Program experience can be modified, for example, by adding Remarks or changing the trainee's status or adding Non-DOT hours. New allows the User to select and add a training program from the Training

Program picklist. Open allows the user to select a different existing trainee record and make modifications without returning to the Description tab.

The DOT Accrued Hours are protected, but they can be modified on the Contract Experience tab.

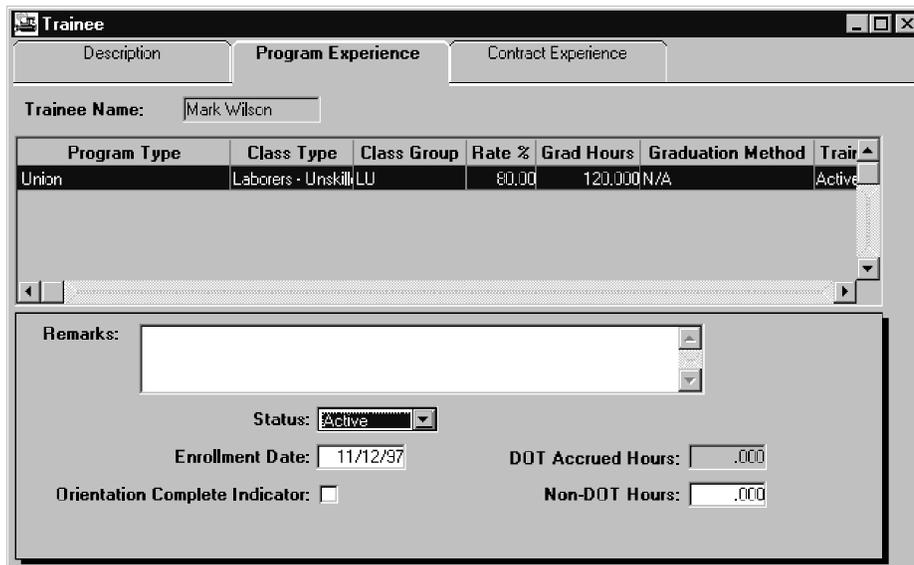


Figure 12-11 The Trainee Program Experience Tab Window

Field Name	Description
Program	A User-defined Training Program such as AGC, union, journeyman, etc.
Class	A User-defined Job Classification such as carpenter, electrician, blaster, laborer, etc.
Group	Defines the subgroup within the job classification.
Group Description	Description of the classification group.
Rate %	The percentage of the journeyman's rate of pay for the classification and level based on the program type.
Grad Hrs	The cumulative hours a trainee must achieve in order to be considered for graduation to the next level or from the program (classification group).

Field Name	Description
Grad Method	Specifies the Graduation Method Type for trainees, defined by DOT-code, such as Hours of experience, a Competency Test or a Peer Review.
Status	Specifies the status of the trainee by a classification such as Active or Inactive, Graduated or Terminated.

Table 12-9 The Trainee Program Experience Window Table

To add Program Experience for a new trainee:

2. Double-click the **Civil Rights** icon, the **Contract Compliance** icon and the **Trainees** icon.
3. On the **Trainee** window Program Experience tab, click the **New** button. The Training Program picklist appears.
4. Scroll the picklist and highlight a training program.
5. Click **Ok**. The selected Training program appears in the upper datawindow. The cursor appears in the lower datawindow in the Remarks box.
6. Type **Remarks**.
7. In the **Status:** spin button, click the up (or down) spin button until the appropriate choice appears. Choices are Active, Graduated Inactive or Terminated.
8. Press the **Tab** key.
9. Type the six number of a new date.
10. Press the **Tab** key.
11. Click the **Orientation Complete Indicator** check box. (Complete = X, Not Complete or Not Applicable = blank.)
12. Press the **Tab** key.
13. In the **Non DOT Hours: field**, type the number of hours or leave blank.
14. Click the **Contract Experience** Tab.

To modify Program Experience for an existing trainee:

1. Double-click the **Civil Rights** icon, the **Contract Compliance** icon and the **Trainees** icon.
2. On the **Trainee** window Program Experience tab, click the **New** button. Highlight the **Program Type** row in the upper data window.

3. Change focus to the lower datawindow by clicking in it.
4. Place the cursor in the Remarks box, and type remarks.
5. In the **Status:** spin button, click the up (or down) spin button until the appropriate choice appears. Choices are Active, Graduated Inactive or Terminated.
6. Press the **Tab** key.
7. Type the six number of a new date.
8. Press the **Tab** key.
9. Click the **Orientation Complete Indicator** check box. (Complete = X, Not Complete or Not Applicable = blank.)
10. Press the **Tab** key.
11. In the **Non DOT Hours: field**, type the number of hours.
12. Click the **Contract Experience Tab**.

Or

13. Click the **Save** button if no other modification will be made to this trainee's record.

12.3.2.5 Select Training Program Picklist

The Select Training Program picklist is used to display the list of training programs and to select a training program for further User actions. The Select Training Program picklist displays when the User clicks the New button in the Program Experience folder tab.

Field Name	Description
Program	A User defined Training Program such as AGC, union, journeyman, etc.
Class	A User defined Job Classification such as carpenter, electrician, blaster, laborer, etc.
Group	Defines the subgroup within the job classification.
Group Description	Description of the classification group.
Rate %	The percentage of the journeyman's rate of pay for the classification and level based on the program type.

Field Name	Description
Grad Hrs	The cumulative hours a trainee must achieve to be considered for graduation to the next level or from the program (classification group).
Grad Method	Specifies the Graduation Method Type for trainees, defined by DOT-code, such as Hours of experience, a Competency Test or a Peer Review.
Status	Specifies the status of the trainee by a classification such as Active or Inactive.

Table 12-10 The Select Training Program Fields Table

To select a Training Program:

1. Double-click the **Civil Rights** icon, the **Contract Compliance** icon and the **Trainees** icon.
2. On the **Trainee** window Program Experience tab, click the **New** button. The Select Training Program picklist appears.
3. Scroll the list.
4. Click the desired **Training Program** row, highlighting it.
5. Click the **Ok**.

To add a new Training Program for a trainee

1. Double-click the **Civil Rights** icon, the **Contract Compliance** icon and the **Trainees** icon.
2. On the **Trainee** window Program Experience tab, click the **New** button. The Select Training Program picklist appears.
3. Choose a new program by highlighting it.
4. Click **Ok**. A new Training Program appears under the trainee's listing of programs in the upper datawindow.
5. Complete fields in the lower datawindow.

12.3.2.6 Trainee Contract Experience

This window allows the SiteManager User to add, view or delete the Trainee Contract Experience. The trainee contract information is retrieved for the selected Trainee ID. The Contract Experience tab displays the detailed contract experience of the trainee. The User clicks one of the trainee programs listed in the upper datawindow and assigns new contract information or updates and deletes corresponding contract information in the lower datawindow. Only active contracts may be associated to a trainee. The trainee may have only one Active status within all contracts for a program. The Trainee may not be Active in two contracts for different programs simultaneously.

The trainee ID and program(s) display in the Contract Experience tab. By default, the first row is selected (highlighted) in the upper datawindow. The corresponding contract experience details display in the lower datawindow. The User adds Contract Experience by selecting New. A new row is inserted in the lower datawindow. The User selects a contract and types new information.

The User removes a contract or deletes experience by highlighting the program in the upper datawindow, refocus to the lower datawindow, and deletes the contract row. The User cannot remove the contract association if the trainee is active on the contract, or if the trainee has any DOT experience (Hours) logged. When a Contract Experience is deleted, the next Contract Experience in the list is automatically highlighted.

The DOT Hours can be manually entered or the hours can be automatically updated by the system when certified payrolls including trainee data are processed via the Payroll Exceptions Batch Job. Changes to the number of DOT hours accrued affects the number of training hours used to date field that is displayed on the Contract’s Training Plan folder tab. The accrual of these hours is what drives the on-the-job training reimbursements. When an estimate is generated the system will check to see if there is a difference in the number of training hours used and the hours paid previously, and adjustment will be applied to the estimate.

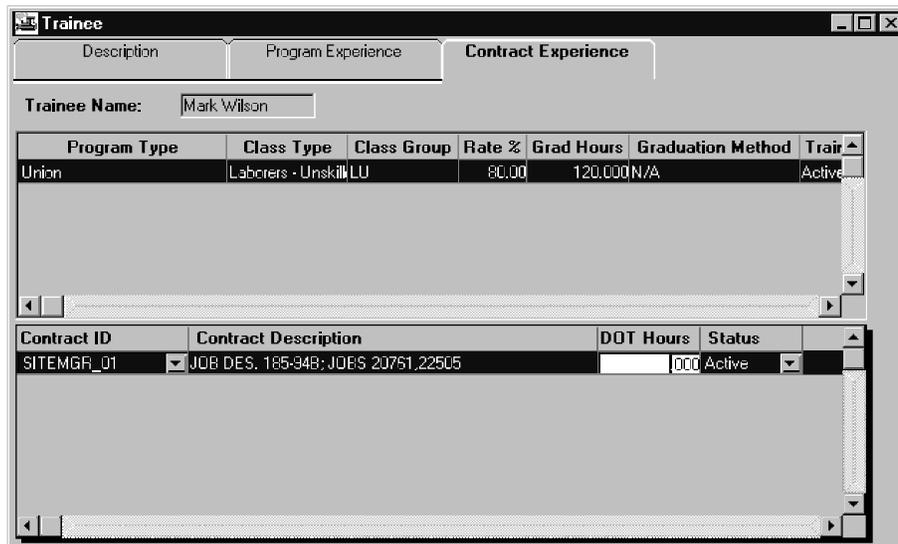


Figure 12-12 The Trainee Contract Experience Window

Field Name	Description
Program Type	The transportation agency-defined ID for a training program
Class Type	The craft or skill the trainee is currently training for on the contract
Class Group	Defines the subgroup within the job classification
Rate %	The percentage of the journeyman's rate of pay for the classification and level based on the program type
Graduation Hours	Specifies the cumulative hours a trainee must achieve in order to be considered for graduation to the next level or from the program (i.e., classification group)
Graduation Method	Specifies the Graduation Method Type for the trainees by DOT-defined code (e.g., Hourly, Competency Test, Peer Review, etc.)
Contract ID	<p>The transportation agency-defined ID for the contract corresponds to the contract ID assigned in pre-construction/LAS TM or is the contract transportation agency-defined ID for a proposal generated from a pre-construction system.</p> <p>Must be unique within the currently selected training program</p> <p>Is a required Field</p>
Contract Description	<p>Textual description of the contract</p> <p>Display only field</p>
DOT Hours	<p>Specifies the current total hours the trainee has worked towards completing the skill on this agency contract</p> <p>The amount of hours normally accrues automatically by SiteManager from the Contractor Payrolls, but may be updated manually by the User. This capability is especially useful when hours are not automatically updated because of payroll exceptions.</p>

Field Name	Description
Status	<p>The status of the trainee's training for this contract such as Active or Inactive</p> <p>The trainee can only be Active on one training program at a time. The trainee can be Active on multiple contracts for the same program. If the status on a contract is changed to Active, SiteManager ensures that the corresponding training program is set to Active.</p>

Table 12-11 The Trainee Contract Experience Fields Table

To modify existing Contract Experience for a trainee:

1. Double-click the **Civil Rights** icon, the **Contract Compliance** icon and the **Trainees** icon.
2. In the upper data window, highlight the desired program. The Contract ID, Contract Description and DOT Hours and Status for the highlighted for contracts display in the lower portion of the window.
3. The cursor appears in the DOT Hours field.
4. Type the new number of hours .
5. Press the **Tab** key.
6. In the **Status** spin button, click the up (or down) spin button until the desired choice (Active or Inactive) appears.
7. Respond to any error messages. The Trainee may now have Active status in more than one program. Change the Status in the non-active program using the Status spin button.
8. Click the Save Button.

To add a new contract to the Trainees Contract Experience:

1. Double-click the **Civil Rights** icon, the **Contract Compliance** icon and the **Trainees** icon.
2. On the **Trainee** window, Contract Experience tab, Highlight the desired program in the upper datawindow
3. Click the **New** button. A new row appears in the lower portion of the window.
4. In the **Contract ID** spin button, click the up (or down) spin button until the correct Contract ID number choice appears. The Contract Description appears and DOT hours appear as 0.00.
5. Press the **Tab** key.
6. Type the number of DOT hours.
7. Press the **Tab** key.

8. In the **Status** spin button, click the down spin button until the Active choice appears.
9. Respond to any error messages. The Trainee may now have Active status in more than one program. Change the Status in the non-active program using the Status spin button.
10. Click the Save Button.

12.4 Key Dates and Checklist Events

Key Dates and Checklist Events allow the user to establish, monitor, and maintain a series of key dates and scheduled events specifically related to the administration of the Contract. The messages and discrepancy tracking associated with Key Dates and Checklist Events enhance the ability of the user to administer the Contract. For more information, refer to the Key Dates, Checklist Scheduled Events, and Checklist Event Dates topics.

Discrepancies

For more complete coverage of this topic, refer to the Key Dates and Checklist Events section in this manual.

The User may also indicate when a discrepancy exists associated with a Checklist event. For those Checklist Events associated with a discrepancy, the actual date must be displayed before the projected date expires, or the User is notified of a discrepancy when an estimate is generated for the contract.

Accessing Key Dates and Checklist Events Windows

For more complete coverage of this topic, refer to the Key Dates and Checklist Events section in this manual.

To access the Key Dates window, the Scheduled Checklist Events window, or the Checklist Event Dates window from the Contract Administration Panel:

On the SiteManager main panel, double-click the **Civil Rights** icon.

On the **Civil Rights** panel, double-click the **Contract Compliance** icon.

On the **Contract Compliance** panel, double-click the desired icon for either **Key Dates**, **Checklist Scheduled Events**, or **Checklist Events**.

12.4.1 Select Contract

For more complete coverage of this topic, refer to the Key Dates and Checklist Events section in this manual.

The Key Date, Checklist Scheduled Event, or Checklist Event Dates information is retrieved for the Contract ID selected by the User on the Select Contract window. There are two selection methods that can be used on this window. The User may either select:

- a contract from the displayed default data as or
- search the picklist using the Find - Filter - Sort options on the object menu.

To select a contract and access its Key Dates, Scheduled Checklist Events, or Checklist Event Dates:

1. Perform a **Select** using the Select and Add Contract procedure referenced in the Contract Administration Procedure.

To search the contract picklist and select a contract to access its Key Dates, Schedule Checklist Events, or Checklist Event Dates:

1. Perform a **Search** using the Object Menu and procedure referenced in the General Concepts section.

Or

2. Perform a **Find**, **Filter**, or **Sort** using the Object Menu and procedures described in the General Concepts section.

Or

3. Perform a **Select** using the Select and Add Contract procedure referenced in the Contract Administration Procedure.

12.4.2 Key Dates

For more complete coverage of this topic, use the glossary to find the topic in this manual or refer to the Key Dates and Checklist Events section in this manual.

The Key Dates window displays the Key Dates associated with the specified contract in the top or list datawindow for viewing and selection only. The Key Dates window displays the Key Date Detail information for the selected Key Date in the bottom or detail datawindow. The Key Date detail datawindow allows the User to complete add, update and delete choices for Key Dates.

To view and select or to add, update or delete Key Dates:

1. Access the Key Dates window by selecting the Key Dates icon on the Contract Administration panel.
2. Perform the selected procedure using the procedures referenced in the Key Dates section.

12.4.3 Checklist Scheduled Events

For more complete coverage of this topic, refer to the Key Dates and Checklist Events section in this manual.

The Checklist Scheduled Events window displays the scheduled event list associated with the selected contract in the top or list datawindow for viewing and selection only. The Checklist Scheduled Events window displays the scheduled event detail information for the selected event in the bottom or detail datawindow. The Checklist Scheduled Event detail datawindow allows the User to add, update and delete information for a scheduled event.

To view and select or to add, update or delete checklist events:

1. Access the Checklist Scheduled Events window by selecting the Checklist Scheduled Events icon on the Contract Administration panel.
2. Perform the selected procedure using the procedures referenced in the Checklist Scheduled Events section.

12.4.4 Checklist Event Dates

The **Checklist Event Dates** window displays the pre-scheduled events list associated with the selected contract in the top or list datawindow for viewing and selection only. It displays the detail information for the selected pre-scheduled event in the bottom or detail datawindow. The detail shows a chronological history of each occurrence of a repetitive scheduled event. The next projected date displayed last in the series. It also shows the actual date recorded by the User for each occurrence of a repetitive event. The detailed datawindow allows the User to add additional occurrences of scheduled events, update exiting occurrence detail data, and delete occurrence entries for a Scheduled Checklist Event.

To view and select or to add, update or delete checklist event dates:

1. Access the Checklist Event Dates window by selecting the Checklist Event Dates icon on the Contract Administration panel.
2. Perform the selected procedure using the procedures referenced in the Checklist Event Dates section.

12.4.5 Document Submission

Refer to the Document Submission section of this manual for a complete description of this topic and its procedures.

The Document Submission processes support the Civil Rights components of SiteManager by allowing the User to establish, monitor, and maintain a series of key dates and scheduled events specifically related to the administration of the contract.

The Document Submission panel supports the Civil Rights component of SiteManager by allowing the User to add, modify, and delete records of documents submitted for a selected Contract. Many Contract documents must be submitted for approval or resolution (e.g., shop drawings, catalog cuts, changes to traffic control plans, and complaints from the public). Users who can submit documents for review are designated by the transportation agency during security setup.

On the Document Submission panel, the User can enter or view the document type, document Category, submission date, name of the submitter, and document description. The User can modify and delete a document submission record only if he has not assigned reviewers. The User can track the document review (reviewer name, review date, recommendation, and remarks) in the lower part of the Document Submission panel, which is view only.

To begin the review process, the User selects one or more reviewers on the Forward to Selected Users panel. The reviewers can be selected simultaneously or sequentially. The selected reviewer receives an In-Box notification that the document is ready for review. After reviewing the document, the reviewer adds recommendations on the Review Submitted Document panel. A recommendation can not be modified after it is saved, but a reviewer can add another recommendation. A new tracking record is created for every new recommendation.

Some document submissions are events on the Contractors Checklist. When such a Document is submitted, the system updates this event on the checklist. If the Checklist Event ID and Event Projected Date are entered, the system adds the document submission date to the Event Actual Date on the Contractors Checklist.

12.4.5.1 Selecting a Submitted Document

Refer to the Document Submission section of this manual for a complete description of this topic and its procedures.

The Selecting Submitted Select window supports the Civil Rights component of SiteManager by listing the details of the documents related to the selected Contract. The first document on the list is highlighted. The User can find, filter, and sort the list.

12.4.5.2 Reviewing Submitted Documents

Refer to the Document Submission section of this manual for a complete description of this topic and its procedures.

The Review Submitted Document panel supports the Civil Rights component of SiteManager by allowing the User to enter recommendations for a submitted Contract document. To access this panel, the User must be one of the reviewers assigned to review the document. When a submitted document is forwarded for review, the system notifies all reviewers by In-Box message that the document is ready for review.

The upper part of the Review Submitted Document panel displays the document type, document Category, submission date, name of the submitter, and document description. The reviewer adds a recommendation in the lower part of the window. The three valid choices are Approved, Approved as Noted, and Denied. The reviewer can add comments in the Remarks field. A recommendation cannot be changed or deleted after it is saved, but the reviewer can add another recommendation. A new record is created for each new recommendation.

12.5 Contractor Payrolls

Refer to the Contract Maintenance section of this manual for a complete description of this topic and its procedures.

Contractor Payroll information and functionality supports the Civil Rights component of SiteManager by allowing Users to maintain trainees (verify accrued training hours and wage rates) and to verify labor and wage rate compliance.

The Contractor Payrolls panel lets the User view and modify Contractor Payroll information and related employee information. The payroll information is submitted to the transportation agency by Prime Contractors and Subcontractors who employ at least one non-supervisory employee. Before a payroll can be selected and displayed on the Contractor Payrolls panel, the payroll file must be uploaded to the SiteManager database. The system uses the payroll data for Contractor Payments. The Contractor Payrolls panel has three folder tabs as follows:

Payroll Information	The Payroll Information folder tab displays the payroll dates and whether or not the payroll is certified.
Employee Information	The Employee Information folder tab displays a list of employees for the selected payroll and details for the employee

Information	selected on the list.
Employee Daily Information	The Employee Daily Information folder tab displays the daily records for each employee during a payroll period.

Table 12-12 The Contractor Payrolls Panel Folder Tabs Table

12.5.1 Selecting a Contractor Payroll

Refer to the Contract Maintenance section of this manual for a complete description of this topic and its procedures.

The Select Payroll for Vendor panel supports the Civil Rights component of SiteManager by allowing the User to select a Contract, a Prime Contractor or Subcontractor, and a payroll. The User can find, filter, and sort the lists.

12.5.2 Payroll Information

Refer to the Contract Maintenance section of this manual for a complete description of this topic and its procedures.

The Payroll Information folder tab supports the Civil Rights component of SiteManager by letting the User view and modify Contractor Payroll information. This information is received from the Prime Contractor or Subcontractor and uploaded to the SiteManager database. The User can modify uncertified payroll information until payments are made for that payroll. If there is no employee data, the No Employees for Period indicator is checked. If a payroll with employee hours is selected, the User can view employee data on the Employee Information and Employee Daily Information folder tabs. The User can add payroll remarks only when the Payroll Information folder tab is selected. The data on this panel includes the following:

- Payroll Received date
- For Period Ending date
- Certified payroll indicator
- No Employees Hours for Period indicator

12.5.2.1 Employee Information

Refer to the Contract Maintenance section of this manual for a complete description of this topic and its procedures.

The Employee Information folder tab supports the Civil Rights components of SiteManager by displaying a list of employees for the selected payroll and details for the employee selected on the list. If the selected payroll is not certified, the User can modify payroll information until payments are made for that payroll. This includes adding and deleting employees or payroll dates for employees.

12.5.2.2 Employee Daily Information

Refer to the Contract Maintenance section of this manual for a complete description of this topic and its procedures.

The Employee Daily Information folder tab supports the Civil Rights components of SiteManager by showing the daily records for each employee during a payroll period.

12.5.2.3 Upload Payroll Files

Refer to Sub-section 6.7 of Section 6 (Contract Administration-Maintenance, in this manual) for a complete description of this topic and its procedures.

12.6 Reports (Civil Rights)

On the Civil Rights Reports folder tab, each report is displayed with an icon. Each report presents a criteria window for the User to specify the type of report to be generated. Additionally, the User may choose to create the report off-line and to print the report off-line. The User may check the status of a report generated off-line in the Jobs Monitor.

The following reports are available on this panel:

- DBE Status
- DBE Breakdown
- Commitments by Contractor
- Quarterly DBE Commitments
- Trainee Affirmative Action
- Annual EEO
- Wage Survey
- View Saved Reports

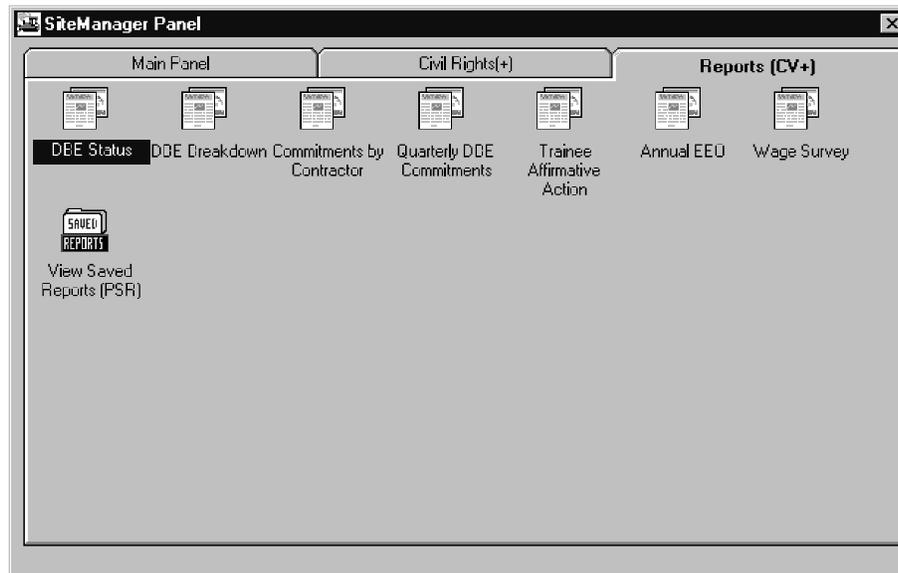


Figure 12-13 The Civil Rights Reports Panel

To generate a CV report:

1. Double-click the desired report icon.
2. Select the criteria.
3. To generate the report on-line, click **Ok**.

Or

To generate the report off-line to a file, click the **Generate Off-line File** check box (ON).

1. Click **Ok**.

Or

To generate and print the report off-line, click the **Generate Off-line Print** check box (ON).

1. Click **Ok**.

To make selections in the **Report Criteria** dialog:

1. Click the desired radio button to select the desired format.

For Example:

By Summary selects all items

By Criteria (field name) selects an individual field

In a **By Criteria (field name)** format:

1. Using the *right* mouse button, click the field.

2. Perform a **Search** using the object menu (referenced in the Getting Started section).
3. Click **OK**.

12.6.1 Report Options

The report options are available as toolbar buttons or menu options for reports that have been generated on-line.

Components	Description
Close button	Closes the report preview.
Save button	In a simple report (see Save Reports section) invokes the Save dialog allowing the report to be saved in a .PSR file format.
Print button	Prints the report.
Prior button	Displays the prior page of a multi-page selection.
Next button	Displays the next page of a multi-page selection.
Zoom spin button	Magnifies or reduces the display of the report preview.
Copies spin button	Allows more than one copy of the report to be printed.

Table 12-13 The Report Components Table

12.6.2 Saving and Exporting Simple Reports

There are two types of reports in SiteManager — simple reports and complex reports. Simple report can be saved and exported, but complex reports cannot. It is easy to identify a simple report — the File menu's Save choice (or the Save button) and the Service menu's Export choice will be active for a simple report. They will not be active for a complex report.

For procedures on saving, opening, and exporting a report, please refer to the General Concepts section.

12.6.3 View Saved Reports (PSR)

A saved simple report can be viewed using the View Saved Reports (PSR) icon. For procedures on opening and viewing a saved report, please refer to the General Concepts section.

12.6.4 DBE Status Report

The DBE Status Report window allows the User to generate a report on the DBE goal and participation of the state or of a contract. The report is presented in two formats - Summary and By Contract. The Summary format is a summary of the statewide DBE goal and participation listing totals by transportation agency level two office. The other format, By Contract, lists the DBE goal and participation for an individual contract.

A Report Criteria window appears where the User selects the format of the report desired. If the second option (By Contract) is selected, a Contract ID must be indicated.

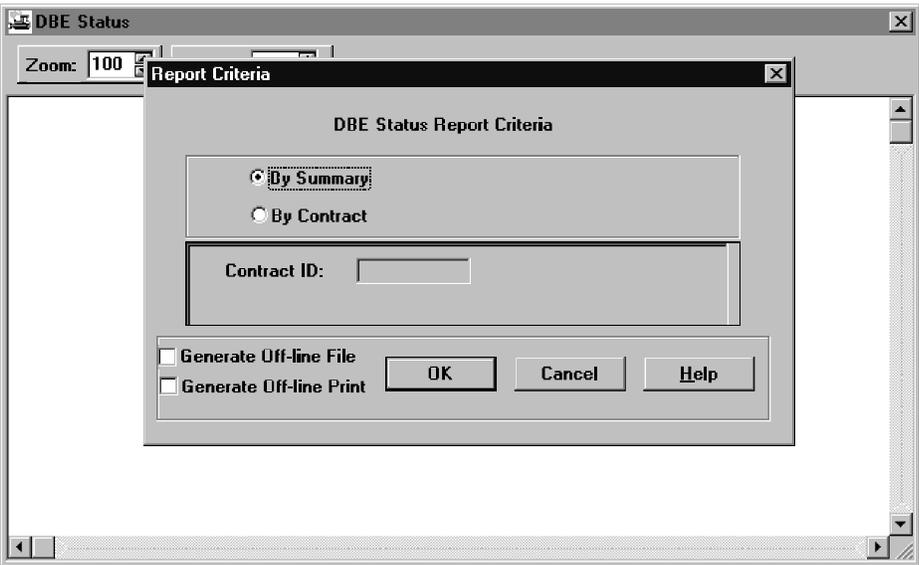


Figure 12-14 The Report Criteria Window

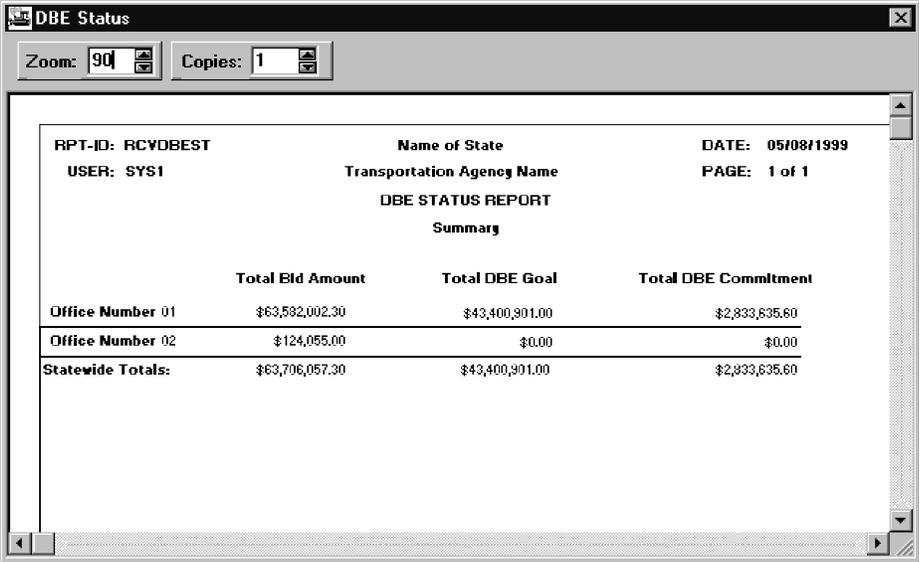


Figure 12-15 The DBE Status Report - Statewide Summary of DBE Goals and Commitment Totals Format

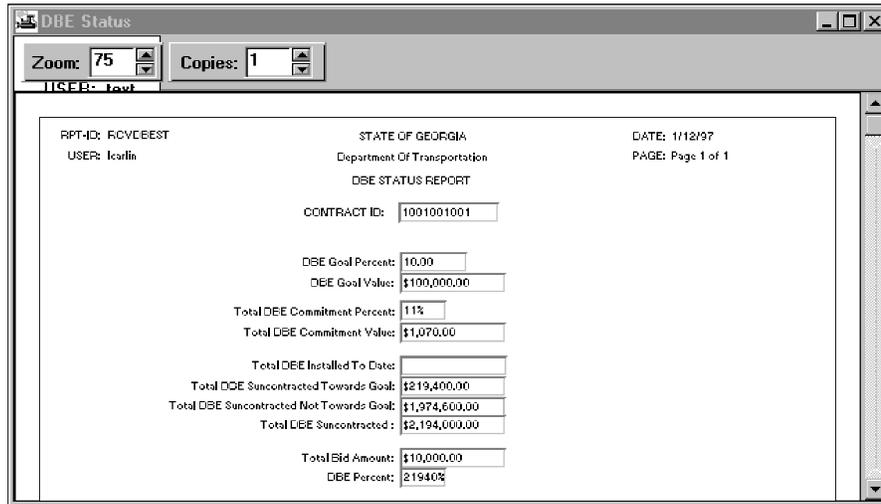


Figure 12-16 The DBE Status Report - Individual Contract Format Window

Field Name	Description
By Contract	
Contract ID	The transportation agency-defined ID for the contact
DBE Goal Percent	The percentage DBE goal assigned to the contract
DBE Goal Value	The part of the contract’s bid amount earmarked for the DBE goal
Total DBE Commitment Percent	The percentage of the sum of the commitment amount of all subcontracts within the contract in relation to the bid amount of the contract
Total DBE Commitment Value	The sum of the commitment amount of all subcontracts within the contract
Total DBE Installed To Date	The current quantity of all subcontract items that were installed
Total DBE Subcontracted Towards Goal	The dollar amount of the subcontract items credited towards the DBE goal

Field Name	Description
Total DBE Subcontracted Not Towards Goal	The dollar amount of the subcontract items not credited towards the DBE goal
Total DBE Subcontracted	The quantity times the line-item unit price for all subcontract items.
Total Bid Amount	The amount of the contractor's bid awarded the job
DBE Percent	The percentage of Total DBE Subcontracted in relation to Total Bid Amount
Summary	
Office Nbr	Identifies the number of the level two office of the transportation agency
Total Bid Amount	The sum of the Total Bid Amount of all contracts within the office

Table 12-14 The DBE Status Report Fields Table

In the DBE Status Report:

To make selections in the Report Criteria Window

1. Click the radio button to select the desired format.

By Summary selects all contracts

By Contract selects an individual contract

In a By Summary format:

1. Click the **Ok** button. The Summary Report appears.

Tip: Reduce the Zoom to 80 to view the entire page of the report.

In a By Contract format:

1. Perform a **Search** by clicking the right mouse button.
2. Click on the desired Contract ID row.
3. Click **Ok**. The Contract ID appears in the Report Criteria ID field. The Search screen disappears.

4. Click **Ok** to generate the report on the Users screen.
5. Click the **Generate Off-line File** check box (ON) to generate the report off-line.
6. Click the **Generate Off-line Print** check box (ON) to print the report off-line.

12.6.5 DBE Breakdown Report

This window generates a report on the DBE subcontracts by DBE type. The report is presented in two formats - Summary and By Contract. The first format, Summary, is a summary of the subcontract amounts listing totals by DBE type. The By Contract format lists the subcontract amounts by DBE type in an individual contract.

The User selects the desired format of the report in the report criteria window. If the By Contract option is selected, a contract ID must be typed or found.

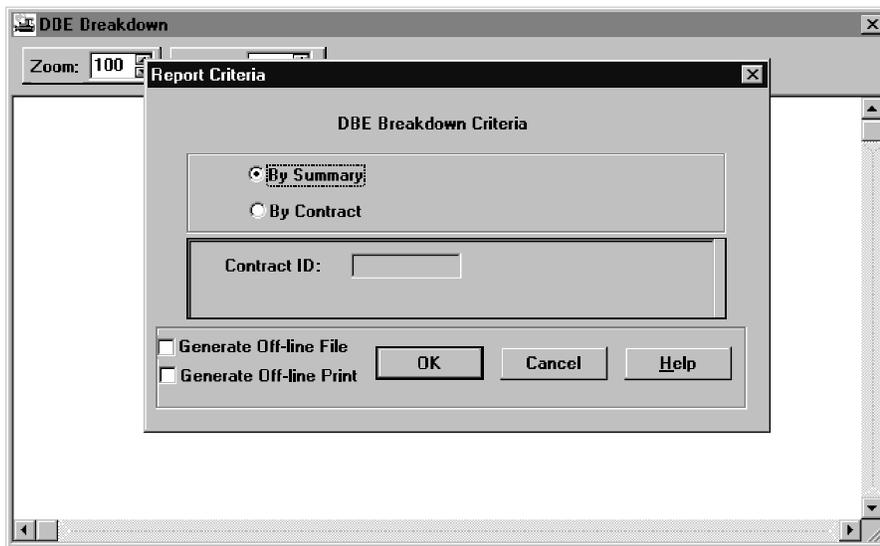


Figure 12-17 The DBE Breakdown Report Criteria Window

DBE Type	Total Subcontract Amount	Percent Of Total Contract Amount
BOTH	\$56,169.36	0.01%
DBE	\$307,840.00	0.12%
DEFL	\$17,000.00	56.67%
F2	\$625.00	0.01%
MBE	\$19,400.00	0.46%
N/A	\$21,001.00	6.81%
NONE	\$0.00	0.00%
WBE	\$148,975.60	0.07%

Figure 12-18 The DBE Breakdown Report Summary Format Window

DBE Type	SubContract Amount	Original Commitment Amount	Percent Comp
BOTH	\$1,933.36	\$5,000.00	0.00%

Figure 12-19 The DBE Breakdown Report By Contract Format Window

Field Name	Description
By Contract	
Contract ID	The transportation agency-defined ID for the contact

Field Name	Description
DBE Type	A transportation agency-defined code indicating that the company has certification as a disadvantaged business enterprise or as some other historically disadvantaged group. Examples are DBE, MBE, WBE, or other.
Subcontract Amount	Generally, the quantity times line-item unit price for all subcontract items.
Original Commitment Amount	The original dollar amount committed by the prime contractor for the subcontractor
Percent Complete	The percentage of the installed line item quantities in relation to the subcontract item quantities.
Summary	
DBE Type	A Transportation agency-defined code to indicate that the company has certification as a disadvantaged business enterprise or as some other historically disadvantaged group. Examples are DBE, MBE, WBE, or other.
Total Subcontract Amount	The sum of the DBE subcontract amounts
Percent of Contract Amount	The percentage of the sum of the DBE subcontract amounts in relation to the sum of the contract amounts

Table 12-15 The DBE Breakdown Fields Table

In the **DBE Breakdown Report:**

To make selections in the Report Criteria Window

1. Click the radio button to select the desired format.

By Summary selects all contracts

By Contract selects an individual contract

In a **By Summary** format:

1. Click the **Ok** button. The Summary Report appears.

Tip: Reduce the Zoom to 80 to view the entire page of the report.

In a **By Contract** format:

2. Type the Contract ID.

Or

3. Perform a **Search** (referenced in the General Concepts section).
4. Click on the desired Contract ID row.
5. Click **Ok**. The Contract ID appears in the Report Criteria Contract ID field. The Search screen disappears.
6. Click **Ok** to generate the report on the Users screen.
7. Click the **Generate Off-line File** check box (ON) to generate the report off-line.
8. Click the **Generate Off-line Print** check box (ON) to print the report off-line.

12.6.6 Commitments by Contractor

The Commitments by Contractor window generates a report on the subcontract commitments of a contractor. The report presents all the contractor's DBE contracts and subcontracts.

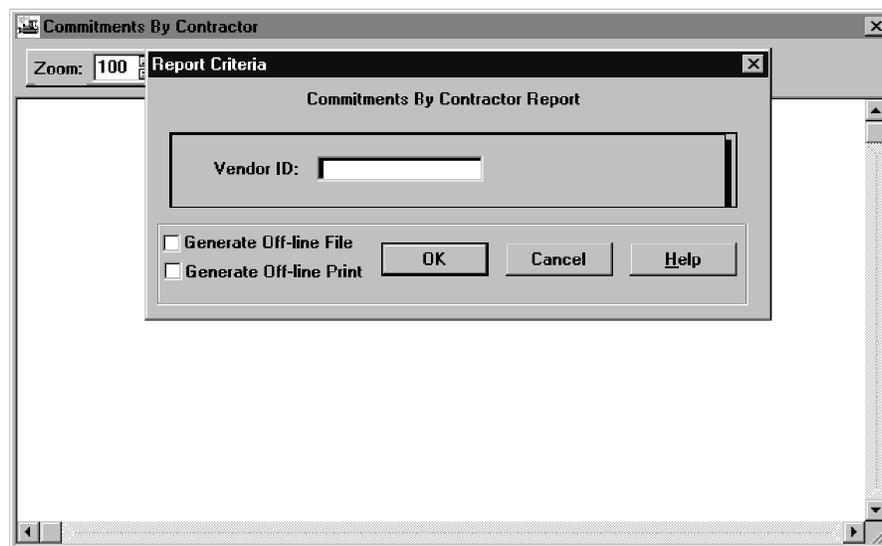


Figure 12-20 The Commitments by Contractor Report Criteria Window

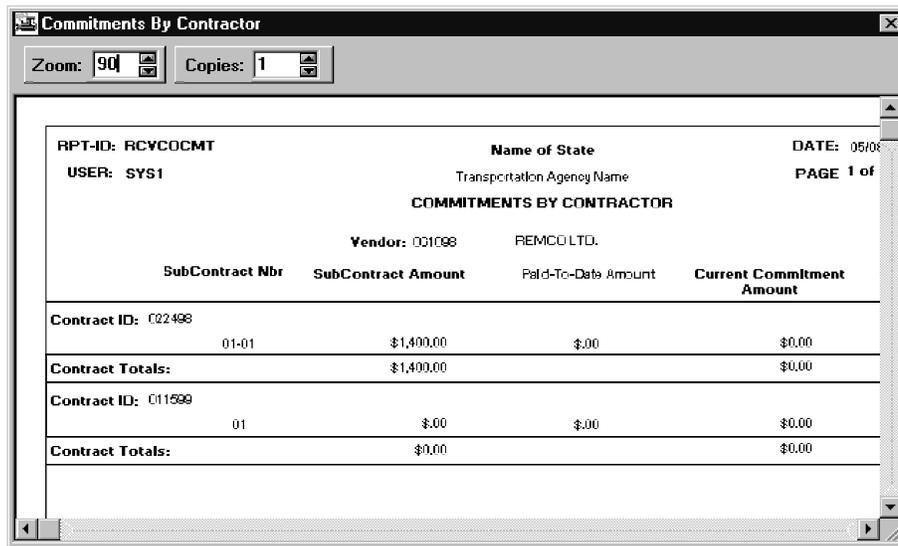


Figure 12-21 The Commitments by Contractor Report Window

Field Name	Description
Vendor ID	Unique identifier for a vendor. Generally the company's Federal Tax ID.
Contract ID	The primary identifier for the contact.
SubContract Number	User entered number associated with each subcontract.
SubContract Amount	Generally, the Quantity times line item unit price for all subcontract items.
Paid-To-Date Amount	The total verified amount that has been paid to the subcontractor.
Current Commitment Amount	The current DBE commitment amount that has been committed by the prime contractor for the subcontractor.
Original Commitment Amount	The original DBE commitment amount committed by the prime contractor for the subcontractor.

Table 12-16 The Commitments by Contractor Report Fields Table

In the **Commitments by Contractor Report**:

To make selections in the Report Criteria Window

1. Click the radio button to select the desired format.

By Summary selects all contracts

By Contract selects an individual contract

Reports (Civil Rights)

In a **By Summary** format:

1. Click the **Ok** button. The Summary Report appears.

Tip: Reduce the Zoom to 80 to view the entire page of the report.

In a **By Contract** format:

1. Type the Contract ID.

Or

2. Perform a **Search** (referenced in the General Concepts section).
3. Click on the desired Contract ID row.
4. Click **Ok**. The Contract ID appears in the Report Criteria Vendor ID field. The Search screen disappears.
5. Click **Ok** to generate the report on the Users screen.
6. Click the **Generate Off-line File** check box (ON) to generate the report off-line.
7. Click the **Generate Off-line Print** check box (ON) to print the report off-line.

12.6.7 Quarterly DBE Commitments Report

A User may generate a quarterly report to the Federal Highway Association (FHWA) that lists the number and value of DBE prime contracts and subcontracts. The report also lists the number and dollar value of DBE prime contracts and subcontracts by ethnic group and type of work.

If the second format, By Contract, is selected, a Contract ID must be typed or selected.

A criteria window appears and the User must select the dates (fiscal year and quarter) of the report desired.

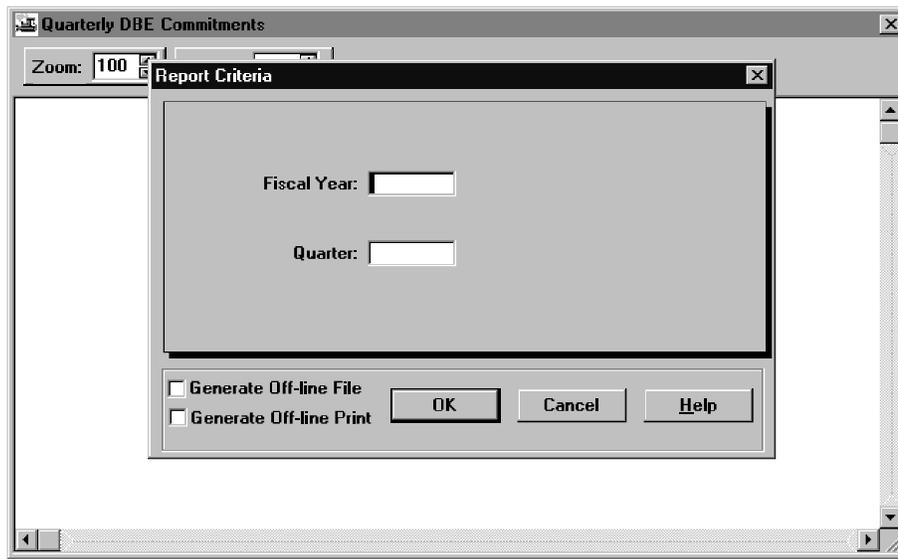


Figure 12-22 The Quarterly DBE Commitments Report Criteria

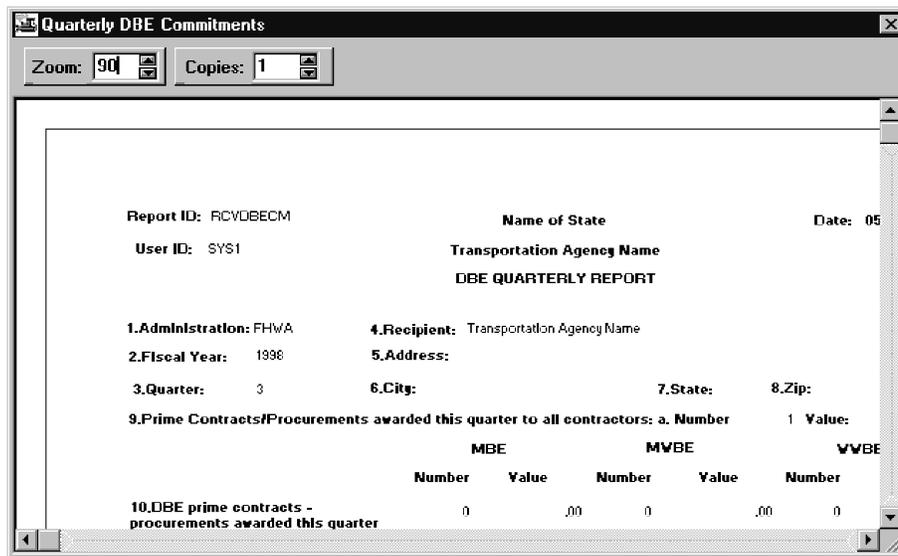


Figure 12-23 The Quarterly DBE Commitments Report By Summary Format

Field Name	Description
Administration	The transportation agency administration group responsible for the specific program
Fiscal Year	The federal fiscal year, beginning October 1 and ending September 30

Field Name	Description
Quarter	<p>The quarter of the federal fiscal year for which the report is being submitted</p> <p>The choices for are:</p> <p>1st October 1 - December 31</p> <p>2nd January 1 - March 31</p> <p>3rd April 1 - September 30</p> <p>4th July 1 - September 30</p>
Name of Recipient	The name of the primary program recipient such as the transportation agency
Address	The street address or post office box number of the primary recipient
City/State/Zip	<p>The city of the primary recipient</p> <p>The state or province of the primary recipient</p> <p>The zip code of the primary recipient</p>
Total prime contracts/procurements awarded this quarter to all contractors	<p>(a) Number</p> <p>The total number of federally supported prime contracts/procurements awarded during the reporting period</p> <p>(b) \$ Value</p> <p>The total dollar amount of federal share of all prime contracts/procurements reported in item (a)</p>
DBE prime contracts-procurements awarded this quarter	<p>The number of the prime contracts/procurements awarded during the reporting period to MBE's/MWBE's/WWBE's</p> <p>The federal share of the prime contracts/procurements awarded during the reporting period to MBE's/MWBE's/WWBE's</p>

Field Name	Description
DBE subcontracts-procurements awarded this quarter	<p>The number of subcontracts/procurements executed during the reporting period by MBE's/MWBE's/WWBE's</p> <p>The federal share of subcontracts/procurements executed during the reporting period by MBE's/MWBE's/WWBE's</p>
Subcontracting-procurement commitments to DBE's this quarter	<p>The number of subcontracting commitments to the MBE's/MWBE's/WWBE's during the reporting period</p> <p>The federal share of subcontracting commitments to the MBE's/MWBE's/WWBE's during the reporting period</p>
MBE-DBE prime and subcontract-procurement awards by ethnic group	<p>The breakdown by ethnic group of the number of all MBE-DBE prime contracts-procurements plus all executed MBE-DBE subcontracts-procurements.</p> <p>The breakdown by ethnic group of the number of all MBE-DBE prime contracts-procurements plus all executed MBE-DBE subcontracts-procurements.</p>
Number of DBE prime and subcontract-awards by type of work	<p>The number of awards by type of work performed by MBE's/MWBE's/WWBE's for the prime contracts-procurements and the executed subcontracts-procurements during the reporting period.</p>

Table 12-17 The Quarterly DBE Commitments Report Fields Table

In the **Quarterly DBE Commitments Report:**

To make selections in the Report Criteria Window

1. Click the radio button to select the desired format.

By Summary selects all contracts

By Contract selects an individual contract

In a **By Summary** format:

1. Click the **Ok** button. The Summary Report appears.

Tip: Reduce the Zoom to 80 to view the entire page of the report.

In a **By Contract** format:

1. Perform a **Search** by clicking the right mouse button or type the Contract ID
2. Click on the desired Contract ID row in the picklist.
3. Click **Ok**. The Contract ID appears in the Report Criteria Contract ID field.
4. Click **Ok** to generate the report on the Users screen.
5. Click the **Generate Off-line File** check box (ON) to generate the report off-line.
6. Click the **Generate Off-line Print** check box (ON) to print the report off-line.

12.6.8 Trainee Affirmative Action Report

A SiteManager User may generate the Trainee Affirmative Action report for a specified criteria - Contract, Contractor or for Over All (i.e., program and classification), within a Start Date and End Date. Report details include Status and Ethnic breakdown (minority or non-minority) of trainees.

The report criteria window displays, where the User clicks the criteria for the report. The User can make a selection to generate report for a Contract, Contractor or for Overall. The fields Contract ID, Contractor ID are protected or unprotected depending on the report selection. For Contract and Contractor fields, search lens functionality is available to select a valid ID. If an Individual Contractor or Contract ID are not entered, all records are included in the report. Otherwise, only the individual record of the type is included.

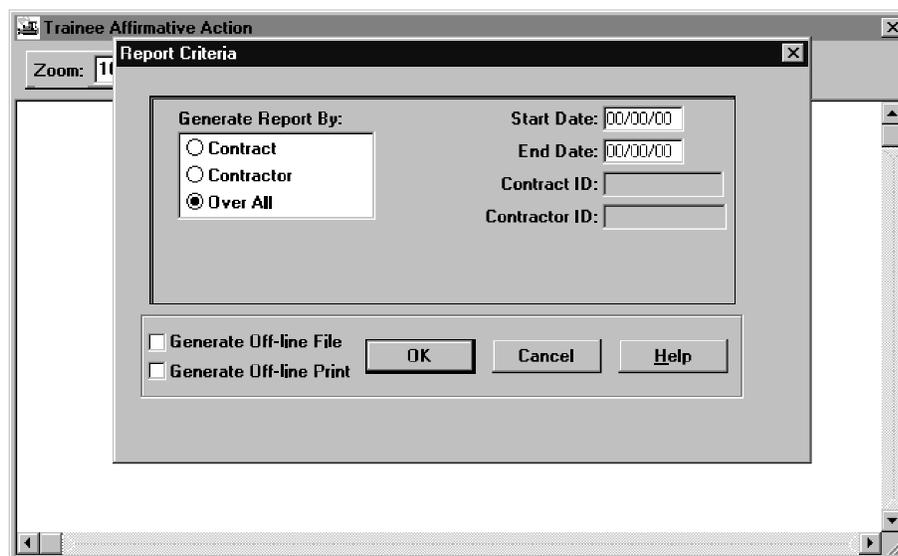


Figure 12-24 The Trainee Affirmative Action Report Criteria Window

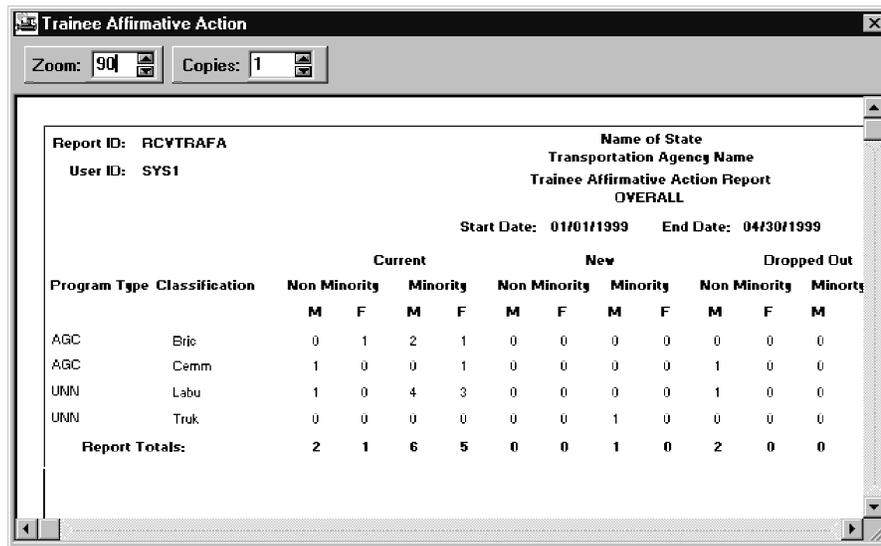


Figure 12-25 The Trainee Affirmative Action Report

Field Name	Description
Report Criteria Window	
Generate Report By	Report selection criteria such as Contract, Contractor, Over All This is a Required Field. Default selection criteria is Over All
Start Date	Start Date should not be later than End Date This is a Required Field.
End Date	End Date for the report End Date should not be earlier than Start Date This is a Required Field
Contract ID	The transportation agency-defined ID for the contract Corresponds to the contract ID assigned in pre-construction/LAS TM or is the contract transportation agency-defined ID for a proposal generated from a pre-construction

Field Name	Description
	system. The User can use Search in this field.
Contractor ID	Unique transportation agency-defined ID for a vendor Generally, the company's Federal Tax ID The User can use Search in this field.
Trainee Affirmative Action Report Window	
XXXXXXXXXX	This is a dynamic label. It displays the value of Contract ID or Contractor ID or nothing, depending upon the User-selected option in the report criteria window.
YYYYYYYYYYYYYYYY Y	This is a dynamic label. It displays if the report was generated by Contract, Contractor, or Over All.
Program	The transportation agency-defined ID for a training program
Classification	The craft or skill the trainee is currently training for on the contract
Total Planned Trainees	Total number of trainees planned for the contract
Total No. of Hours Planned	Total number of training hours planned for the contract.
Total Hours Used	Total number of hours used to date
Current/Non-Minority/M	The total number of Non-Minority Males is the number of males that belong to non-minority Ethnic Group (e.g., White American Males, Not Black American, Hispanic American etc.) Current/Non-Minority/Males have the same Enrollment Date as the Start Date given at the report criteria window for the

Field Name	Description
	program classification.
Current/Non-Minority/F	<p>The total number of Non-Minority Females is the number of females that belong to a non-minority Ethnic Group; For Example - White American Females, Not Black American, Hispanic American, etc.</p> <p>Current/Non-Minority/Females have the same Enrollment Date as the Start Date given at the report criteria window for the program classification.</p>
Current/Minority/M	<p>The total number of Minority Males belonging to a Minority Ethnic Group; For Example - Black American, Hispanic American, etc.</p> <p>Current/Minority/Males have the same Enrollment Date as the Start Date given at the report criteria window for the program classification.</p>
Current/Minority/F	The total number of Minority Females belonging to a Minority Ethnic Group that have the Enrollment Date same as Start Date given at the report criteria window for the program classification.
New/Non-Minority/M	The total number of Non-Minority Males belongs to a non-minority Ethnic Group that have the Enrollment Date between the Start Date and the End Date given at the report criteria window for the program classification
New/Non-Minority/F	The total number of Non-Minority Females belonging to a non-minority Ethnic Group that have the Enrollment Date between the Start Date and the End Date given at the report criteria window for the program classification
New/Minority/M	The total number of Minority Males belonging to a Minority Ethnic Group that have the Enrollment Date between the Start Date and the End Date given at the report criteria window for the program classification
New/Minority/F	The total number of Minority Females belonging to a Minority Ethnic Group that have the Enrollment Date between the Start

Field Name	Description
	Date and the End Date given at the report criteria window for the program classification.
Dropped Out/Non-Minority/M	The total number of Non-Minority Males belonging to a Non-Minority Ethnic Group that have the Program Status Date between the Start Date and the End Date given at the report criteria window and have Program status as Terminated for the program classification
Dropped Out/Non-Minority/F	The total number of Non-Minority Females belonging to a Non-Minority Ethnic Group that have the Program Status Date between the Start Date and the End Date given at the report criteria window and have Program status as Terminated for the program classification
Dropped Out/Minority/M	The total number of Minority Males belongs to Minority Ethnic Group that have the Program Status Date between the Start Date and End Date given at the report criteria window and have Program Status as Terminated for the program classification
Dropped Out/Minority/F	The total number of Minority Females belongs to Minority Ethnic Group that have the Program Status Date between the Start Date and the End Date given at the report criteria window and have Program Status as Terminated for the program classification.
Graduated/Non-Minority/M	The total number of Non-Minority Males belongs to Non-Minority Ethnic Group that have the Program Status Date between the Start Date and End Date given at the report criteria window and have Program Status as Graduated for the program classification
Graduated/Non-Minority/F	The total number of Non-Minority Females belongs to Non-Minority Ethnic Group that have the Program Status Date between the Start Date and End Date given at the report criteria window and have Program Status as Graduated for the program classification.

Figure 12-26

Field Name	Description
Graduated/Minority/M	The total number of Minority Males belongs to Minority Ethnic Group that have the Program Status Date between the Start Date and End Date given at the report criteria window and have Program Status as Graduated for the program classification.
Graduated/Minority/F	The total number of Minority Females belongs to Minority Ethnic Group that have a Program Status Date between the Start Date and End Date given at the report criteria window and have a Program Status as Graduated for the program classification
Remaining/Non-Minority/M	<p>This trainee number is calculated by adding the Current/Non-Minority/M plus the New/Non-Minority/M and subtracting the number of Dropped Out/Non-Minority/M and the number of Graduated/Non-Minority/M.</p> <p>For Example;</p> $\text{Current/Non-Minority/M} + \text{New/Non-Minority/M} = \text{NNN}$ $\text{Dropped Out/Non-Minority/M} + \text{Graduated/Non-Minority/M} = \text{nnn}$ $\text{NNN} - \text{nnn} = \text{Remaining/Non-Minority/M}$
Remaining/Non-Minority/F	This trainee number is calculated by adding the Current/Non-Minority/F plus New/Non-Minority/F and subtracting the number of Dropped Out/Non-Minority/F plus the number of Graduated/Non-Minority/F.
Remaining/Minority/M	This trainee number is calculated by adding the Current/Minority/M plus the New/Minority/M and subtracting the number of Dropped Out/Minority/M plus the number of Graduated/Minority/M)
Remaining/Minority/F	This trainee number is calculated by adding the Current/Minority/F plus the New/Minority/F and subtracting the number of Dropped Out/Minority/F plus the number of Graduated/Minority/F.

Table 12-18 The Trainee Affirmative Action Report Fields Table

In the Trainee Affirmative Action Report:

To make selections in the Report Criteria Window

1. Click the radio button to select the desired format.
 - By Summary** selects all contracts
 - By Contract** selects an individual contract
 - By Contractor** selects all contracts for a specific vendor

In a **By Summary** format:

2. Click the **Ok** button. The Summary Report appears.

Tip: Reduce the Zoom to 80 to view the entire page of the report.

In a **By Contract** format:

3. Type the Contract ID.

Or

4. Perform a **Search** (referenced in the General Concepts section).
5. Click on the desired Contract ID row.
6. Click **Ok**. The Contract ID appears in the Report Criteria Contract ID field. The Search screen disappears.
7. Click **Ok** to generate the report on the Users screen.

In a **By Contractor** format:

1. Perform a **Search** (referenced in the General Concepts section).
2. Click on the desired Vendor ID and Vendor Name row.
3. Click **Ok**. The Vendor ID appears in the Report Criteria Vendor ID field. The Search screen disappears.
4. Click **Ok** to generate the report on the Users screen.
5. Click the **Generate Off-line File** check box (ON) to generate the report off-line.
6. Click the **Generate Off-line Print** check box (ON) to print the report off-line.

12.6.9 Annual EEO Report

A SiteManager User may generate the Annual EEO Report by selecting the Annual EEO Report icon.

The User can define the scope of the report:

- by starting and ending dates

- to include all department contracts OR
- to include federal-aid contracts only

The User can further define the report by responsibility:

- by Contract
- by Contractor or
- by Area of Responsibility

The report detail includes Job Classification breakdown for each federally defined ethnic group type.

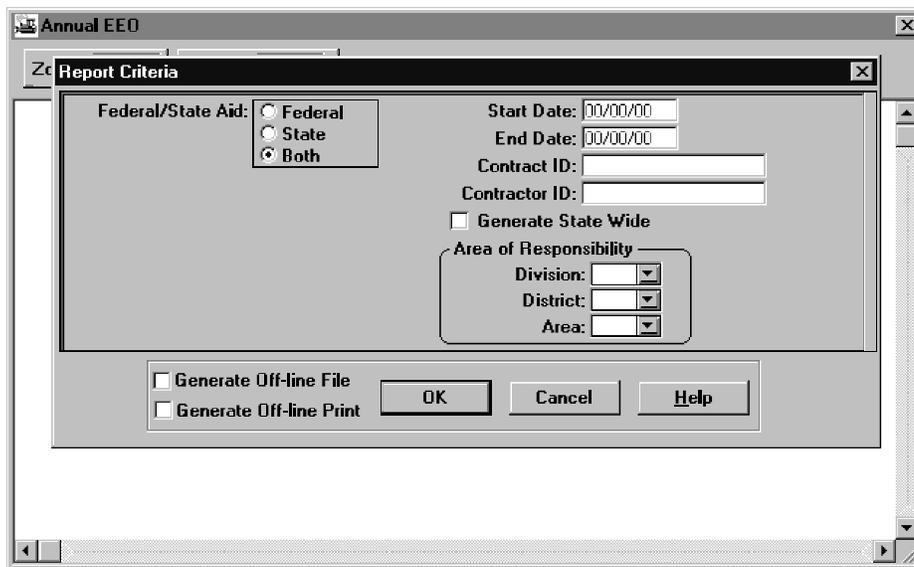


Figure 12-27 The Report Criteria Window for the Annual EEO Report

On the report criteria window, the User to select the criteria for the report choosing to generate report for a Contract, Contractor, Area of Responsibility, or for State Wide.

The fields, Contract ID, Contractor ID and Area of Responsibility, are protected or unprotected depending on the report selection.

For Contract and Contractor fields, search lens functionality is available to select a valid ID. When an individual Contract ID or Contractor ID is not entered, all records of that type are included on the report. Otherwise, only the individual record of the type entered is included.

The file name extension is always .PSR.

The selections received from the Report Criteria window are used to generate the Annual EEO report. The transportation agency-specific header details are retrieved and displayed for the report.

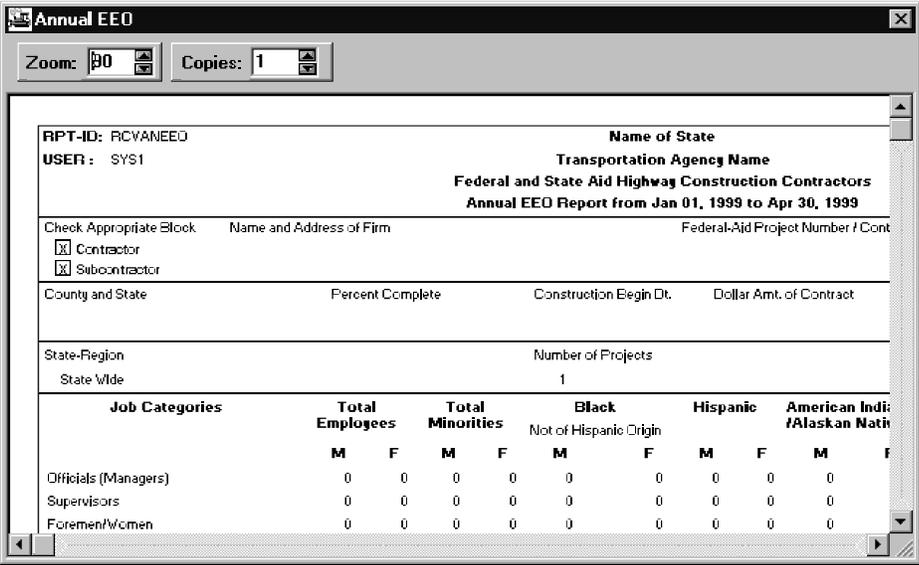


Figure 12-28 The Annual EEO Report Window

Field Name	Description
Report Criteria Window	
Start Date	Starting Payroll Date Start date is a required field
End Date	Ending Payroll Date End date is a required field and should be greater than Start date
Contract ID	When a valid Contract ID is entered, Contractor ID and Area of Responsibility are protected and cannot be edited. The User can Search in this field.

Field Name	Description
Contractor ID	<p>Unique transportation agency-defined ID for a vendor</p> <p>Generally the company's Federal Tax ID</p> <p>If a vendor ID is not entered for this field, all contractors are included in the report.</p> <p>When a valid Contractor ID is entered, Contract ID and Area of Responsibility will be protected.</p> <p>The User can Search in this field.</p>
xxxxxxxxxxxx Level 2 (see installation specific instructions)	<p>The office number for the states level 2 office responsible for administering the contract. Level 1 office is the Central or Dept. Of Transportation. Level 2 is typically the District Office, but can be any User-defined organizational level such as Division, Region, Section, etc.</p>
xxxxxxxxxxxx Level 3 (see installation specific instructions)	<p>The office number for the states level 3 office responsible for administering the contract. Level 1 office is the Central or Dept. Of Transportation. Level 3 is typically the Area Office, but can be any User-defined organizational level such as District, Unit, etc.</p> <p>For states with only two administration levels (e.g., central and district only) this field and its label will not display</p>
xxxxxxxxxxxx Level 4 (see installation specific instructions)	<p>The office number for the states level 4 office responsible for administering the contract. Level 1 office is the Central or Dept. Of Transportation. Level 4 is typically the Area Office, but can be any User-defined organizational level such as Unit, etc.</p> <p>For states with only two or three administration levels (e.g., central and district only or central, district, and area) this field will not display</p>
Federal/State Aid	<p>Generate EEO report for contracts funded by Federal, State or Both</p> <p>Default to Both</p>

Field Name	Description
Generate State Wide	When checked, Contract ID, Contractor ID and Area of Responsibility are protected.
Annual EEO Report Window	
Check Appropriate Block	Contractor or Subcontractor
Name and Address of Firm	Contractor name and address
Federal-Aid Project Number	DOT-defined project number for each contract
Type of Construction	A DOT-defined code that can be used to identify the major type of works (e.g., road, bridge work, beautification).
County and State	County and State location where the major type of work being performed on the contract
Percent Complete	Percentage of work being completed
Construction Begin Dt.	The date that construction work began

Table 12-19 The Annual EEO Report Fields Table

In the **Annual EEO Report**:

To make selections in the Report Criteria Window

1. Click the radio button to select the desired **Start and End Dates**.
2. Click the radio button to select the desired format type.
 - By Summary** selects all contracts
 - By Contract** selects an individual contract
 - By Federal-Aid Contract only** selects
3. Click the radio button to select the desired area of responsibility.

- by Contract
- by Contractor
- by Area of Responsibility

In a By Summary format:

4. Click the **Ok** button. The Summary Report appears.

Tip: Reduce the Zoom to 80 to view the entire page of the report.

In a **By Contract** format:

5. Type the Contract ID.

Or

6. Perform a **Search** using the object menu (referenced in the General Concepts section).
7. Click on the desired Contract ID row.
8. Click **Ok**. The Contract ID appears in the Report Criteria Contract ID field. The Search screen disappears.
9. Click **Ok** to generate the report on the Users screen.
10. Click the **Generate Off-line File** check box (ON) to generate the report off-line.
11. Click the **Generate Off-line Print** check box (ON) to print the report off-line.

12.6.10 Wage Survey Report

A SiteManager User may generate a report to list average wage rates for job classifications. The report also displays the lowest and highest wage rates for each corresponding Job Classification /Job Group. The report details breakdown according to the contractor. The User accesses this report by selecting Wage Survey Report icon.

The Report Criteria window is displayed to specify the report parameters.

A User may elect to generate the report for a Contractor, Job Class, or Overall.

For the Contractor field, search lens functionality is available to select a valid ID.

Only the individual record of the type is included when an individual Contractor, Job Class or Class Group is entered. Otherwise, all records of a type are included in the report.

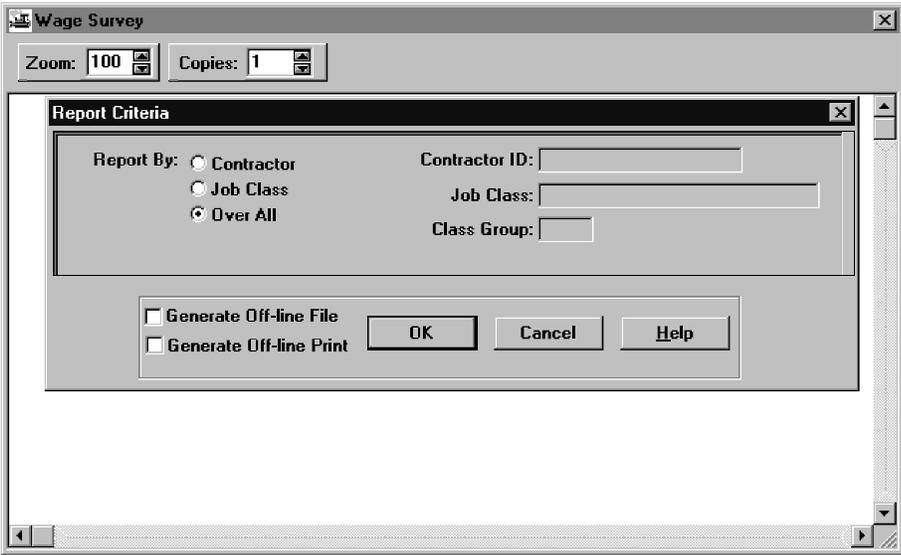


Figure 12-29 The Wage Survey Report Sort Criteria Window

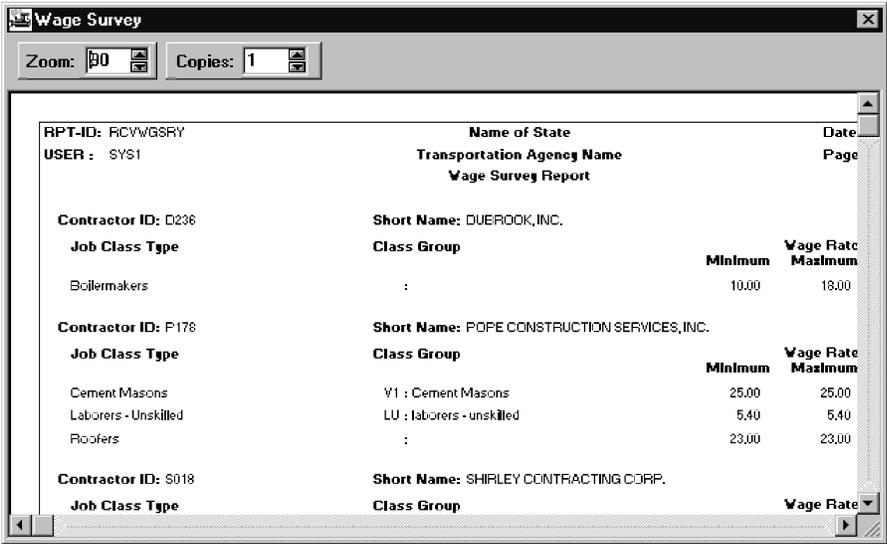


Figure 12-30 The Overall Wage Survey Report Window

Field Name	Description
Report Criteria Window	
Generate Report By	Report selection criteria such as Contractor, Over All Over All is the Default selection

Field Name	Description
	This is a required field
Contractor ID	Unique transportation agency-defined ID for a vendor Generally the company's Federal Tax ID If an ID is not entered for “Contractor”, all contractors are included in the report. User has Search capability in this field.
Short Name	Abbreviated Vendor Name
Job Class	The transportation agency-defined ID for a Job Classification such as Carpenter, Electrician, Blister, Laborer, etc. If a Job Class is not entered, all Job Classes are included in the report.
Class Group	Specifies the Group within the classification. If a Class Group is not entered for “Class Group”, all Class Groups are included in the report.
Wage Survey Report Window	
Contractor ID	Unique transportation agency-defined ID for a vendor Generally the company's Federal Tax ID
Job Classification	The transportation agency-defined ID for a Job Classification such as Carpenter, Electrician, Blister, Laborer, etc.
Class Group	Defines the subgroup within the Job Classification
Average Wage Rate	Specifies the Average Wage Rate (rounded up to the nearest penny) of the Job Classification for the Contractor or for the Wage Decision County
Highest Wage Rate	Specifies the Highest Wage Rate (rounded up to the nearest penny) of the Job Classification for the Contractor or for the

Field Name	Description
	Wage Decision County
Lowest Wage Rate	Specifies the Lowest Wage Rate (rounded up to the nearest penny) of the Job Classification for the Contractor or for the Wage Decision County

Table 12-20 The Wage Survey Report Table

In the **Wage Survey Report**:

To make selections in the Report Criteria Window

1. Click the radio button to select the desired format.

By Summary selects all contracts

By Contractor selects contracts for a specific vendor

By Job Class selects a specific Job Classification

In a **By Summary** format:

2. Click the **Ok** button. The Summary Report appears.

Tip: Reduce the Zoom to 80 to view the entire page of the report.

In a **By Contractor** format:

3. Type the Contractor ID.

Or

4. Perform a **Search** using the object menu (referenced in the General Concepts section).
5. Click on the desired Contract ID row.
6. Click **Ok**. The Contract ID appears in the Report Criteria Contract ID field. The Search screen disappears.
7. Click **Ok** to generate the report on the Users screen.
8. Click the **Generate Off-line File** check box (ON) to generate the report off-line.
9. Click the **Generate Off-line Print** check box (ON) to print the report off-line.

In a **By Job Class** format:

1. Type the Job Class name.
2. Click **Ok**.

3. Follow the procedures described in Contractor format using the Job Class Name.

Note: Only the individual record of the type is included when an individual Contractor, Job Class or Class Group is entered. Otherwise, all records of a type are included in the report.

12.6.11 View Saved Reports

View Saved Reports is a User-defined archive for reports. SiteManager saves reports using a .PSR extension and a User provides the report name and designates the storage drive. The User may select a saved-report to view, copy or print.

12.6.12 Trainee Accrual Exceptions Report

The Accrue Training Experience report accrues contract trainee hours from Contractor Payrolls. After the contractor payroll has successfully been uploaded to the server or added manually to the database, this report is automatically queued for execution on the batch server. The report is processed as part of the 'Payroll Exceptions Batch Job'.

The report highlights any on-the-job training deficiencies including:

- Person is not currently registered as a trainee
- Trainee is not enrolled in specified program
- Trainee is attempting to accrue experience after graduation or termination
- Trainee status is currently Inactive for this contract
- Trainee is not included in specified contract's training plan
- Trainee has potentially graduated from specified program/level
- Trainee has exceeded the planned contract training hours by a specified number of hours

Note: Accrual takes place ONLY when the trainee is actively training in the program on the contract specified in the payroll. Also, the trainee data (name, SSN/SIN, ethnicity, gender type, class type, class group, and program type) must match the payroll employee data exactly.

The exception report is generated by the system. Each exception includes the Contract ID, Vendor ID, SSN/SIN, Trainee Name, Program Type, Classification, Classification Group, Ethnic Group, Gender Type, DOT Accrued Hours, Graduation Hours and Exception Text.

The **Trainee Accrual Exceptions Report** is a system-generated report. The report will be saved to the drive specified in the LANPATH code table for batch processing.

Field Name	Description
Vendor ID	Unique transportation agency-defined ID for a vendor Generally, the company's Federal Tax ID.
Contract ID	The transportation agency-defined ID for the contract

Field Name	Description
	Corresponds to the contract ID assigned in pre-construction/LAS TM or is the contract transportation agency-defined ID for a proposal generated from a pre-construction system.
Period End Date	The Payroll process date
Trainee Name	Trainee Name
SSN/SIN	The Social Security Number or transportation agency-defined ID for the individual
Program	The transportation agency-defined ID for a training program. Examples include AGC, Union, Journeyman, etc.
Class	The transportation agency-defined ID for a job classification. Examples include Carpenter, Electrician, Blaster, Laborer, etc.
Group	Specifies the subgroup within the job classification.
Rate %	The percentage of the journeyman's rate of pay for the classification and level based on the program type.
Ethnic Group	DOT-defined code identifying a person's ethnic background. Examples include Black American, Hispanic American, Native American, etc.
Gender Type	Indicates an individual's gender For example, M = male or F = female
Accrued Hours	The current total hours the trainee has worked towards completing the skill on this transportation agency contract.
Grad Hours	The cumulative hours a trainee must achieve in order to be considered for graduation to the next level, or from the program.

Field Name	Description
<i>Exception Text</i>	Exception error text

Table 12-21 The Accrue Training Experience Fields Table

12.6.13 Wage Rate Exceptions

The Potential Wage Rate Variance window reports any potential wage rate variances found in the Contractor Payrolls. After the contractor payroll has successfully been uploaded to the server, this report is automatically queued for execution. The system highlights any potential wage rate deficiencies in an exception report. The report uses the applicable Contract Wage Decisions specified at contract setup. The payroll rate is compared with the value defined in the wage decision table for each matching classification.

If multiple wage decisions are associated to the contract, the comparison is made using the greatest wage rate. If a Payroll rate is found to be less than a Wage Decision rate, the applicable data is added to an exception report. Classifications that do not exist in the contracts associated Wage Decision(s) are also reported on the exception report.

This report selects records for the latest payroll date in contractor payroll, and checks the validity of the contractor payroll record (i.e., Contract ID, Vendor ID, SSN). The report includes the following exceptions:

- Wage plus Fringe Rate is less than Wage Decision Wage Rate
- Overtime Rate is less than 1.5 times the Wage Decision Wage Rate
- Job Classification/Group is not found in Contracts associated Wage Decisions

The exception report is generated and saved as a .PSR file. Each exception includes the Contract ID, Vendor ID, SSN/SIN, Employee Name, Program Type, Classification, Classification Group, Wage Decision ID, Wage Decision County Minimum Wage/Fringe Rate, Payroll Wage/Fringe Rate, Straight Hours, Overtime Rate, and Exception Text. Users receive an in-box message that the report is available.

The **Wage Rate Exceptions Report** is system-generated and in view-only mode.

Field Name	Description
Contract ID	The transportation agency-defined ID for the contract Corresponds to the Contract ID assigned in pre-construction/LAS TM or is, generally, the contract transportation agency-defined ID for a proposal generated from a pre-construction system.
Vendor ID	Unique transportation agency-defined ID for a Vendor Generally the company's Federal Tax ID

Field Name	Description
Period End Date	The Payroll process date
SSN/SIN	The Social Security Number or transportation agency-defined ID for the individual
Employee Name	Employee Name
Program Class	Examples include AGC, Union, Journeyman, etc. The transportation agency-defined ID for a job classification Examples include Carpenter, Electrician, Blaster, Laborer, etc.
Group	Specifies the subgroup within the job classification
Wage Decision ID	Wage Decision ID
Wage Decision/ County	Identifies the County for this wage decision
Wage Decision/Rate	Recommended Wage Rate for job classification by the Department of Labor; Specified in the Wage Decision
Wage Decision/Fringe Rate	Employee fringe benefit rate Specified in the Wage Decision
Payroll / Rate	Recommended wage rate for job classification by the Department of Labor; Specified in the Payroll
Payroll / Fringe Rate	Employee fringe benefit rate; Specified in the Payroll
Regular Hours	The number of regular pay hours worked for the time period
Overtime Hours	The number of overtime pay hours worked for the time period
Overtime Rate	Overtime wage rate

Field Name	Description
<i>Exception Text</i>	Exception error text

13. Materials Management

August 2005

13.1 Overview

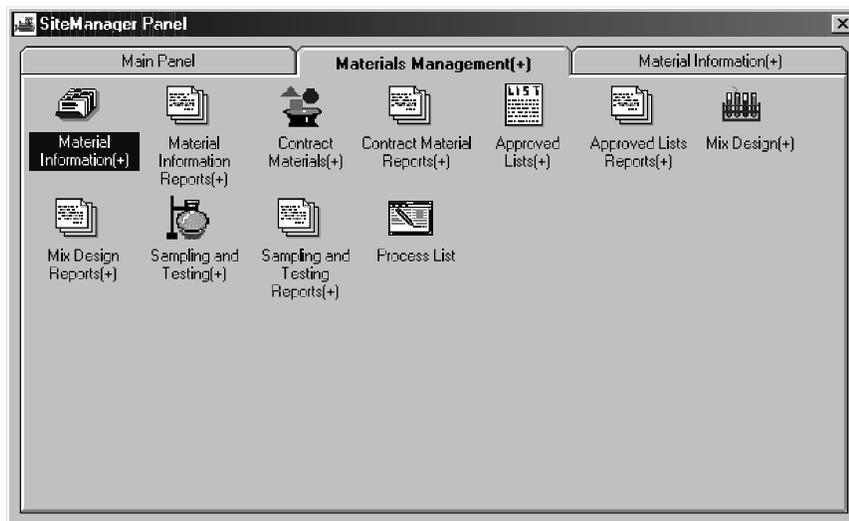


Figure 13-1 The Materials Management Panel

To perform Materials Management activities:

1. On the **Main Panel**, double-click the **Materials Management** icon.
2. Double-click the icon of the desired Materials Management component.

13.2 Materials

Materials and their associated sampling and testing requirements are maintained using the components of the Materials information panel.

To access the Material Information panel:

1. On the Materials Management panel, double-click the Material Information icon.

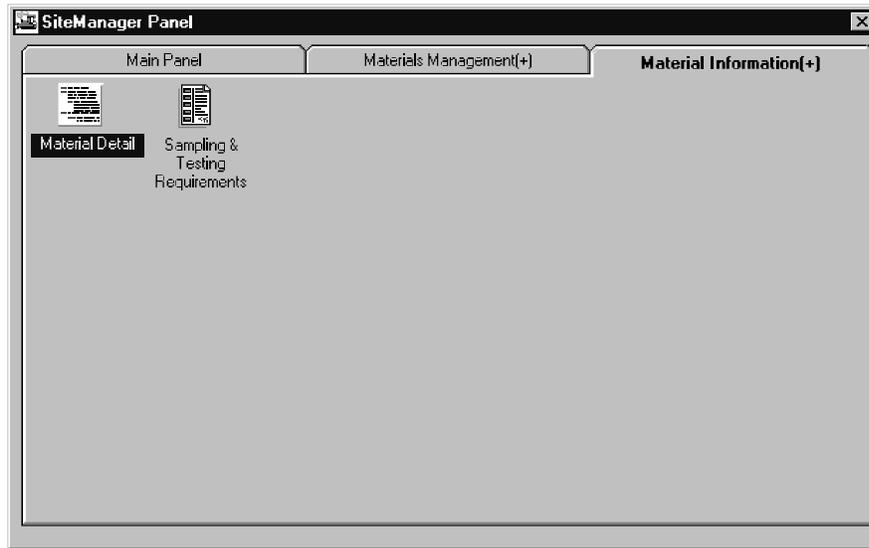


Figure 13-2 The Material Information Panel

13.2.1 Materials Inventory

Material inventory is maintained using the Material Detail icon.

To maintain material inventory:

1. On the **Material Information** panel, double-click the **Material Detail** icon.

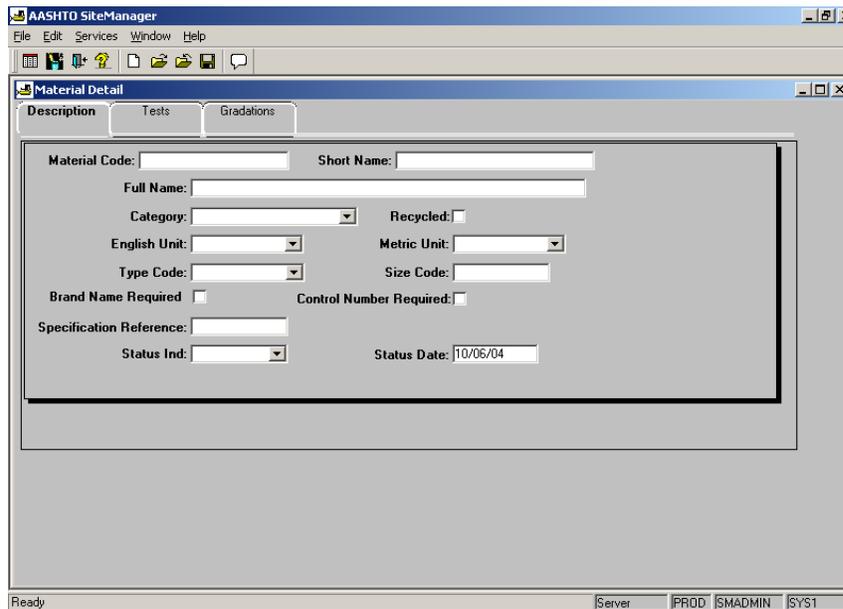


Figure 13-3 The Material Detail Window - Description Folder Tab

13.2.1.1 Material Description Folder Tab

The Material Description tab allows for the addition and modification of standard material inventory information. It captures all of the base material information. The information on this tab is used for material validations throughout other portions of SiteManager, including approved lists, mix designs, and sampling and testing.

Note: the Default Unit and Optional Unit on the Material table to correspond to the name changes done during the Trns•port SiteManager Sampling and Testing Requirement Enhancement project (English Unit and Metric Unit correspondingly).

Field Name	Description
Material Code	The material's unique identifier. This field is required.
Short Name	Abbreviated description of a material. This field is required.
Full Name	Full description of a material. This field is required.
Category	Classification type of the material (e.g., Aggregates, Admixtures, Reinforcing Steel, etc.). This field is required.
Recycled	Indicates if the material is recycled.
English Unit	The default unit of measure for the material (e.g., feet, inches, or yards). This field is required.
Metric Unit	The optional unit of measure for the material (e.g., feet, inches, or yards).
Type Code	Freeform field for the further definition of the material.
Size Code	Freeform field for the further definition of the material.
Brand Name Required	Indicates if a brand name must be supplied when sampling the material.
Control Number Required	Indicates if a control number must be supplied when sampling the material.

Field Name	Description
Specification Reference	The material test specification number.
Status Ind	Indicates if the material is active or inactive. Inactive indicates the material is no longer in use. Defaults to Active.
Status Date	System captured date when the status was last changed. Defaults to current date for new records.

Table 13-1 The Material Description Fields Table

To add a new material description:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. On the **Description** folder tab in the **Material Code** field, type the unique identifier for the material.
3. Press the **Tab** key.
4. In the **Short Name** field, type the short name for the material.
5. Press the **Tab** key.
6. In the **Full Name** field, type the full name for the material.
7. Press the **Tab** key.
8. In the **Category** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
9. Press the **Tab** key.
10. If recycled, click the **Recycled** check box (ON).
11. In the **Default Unit** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
12. In the **Optional Unit** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
13. In the **Type Code** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
14. Press the **Tab** key.
15. In the **Size Code** field, type the size code.

16. Press the **Tab** key.
17. If brand name is required, click the **Brand Name Required** check box (ON).
18. If a control number is required, click the **Control Number Required** check box (ON).
19. Press the **Tab** key.
20. In the **Specification Reference** field, type the material test specification number, if applicable.
21. In the **Status Ind** drop-down list, click the expand arrow to the right of the current selection and click the **Active** or **Inactive**.
22. Press the **Tab** key.
23. In the **Status Date** field, type the date the material becomes effective.
24. When complete, click the **Save** button.

To modify a material description:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Click the **Open** button.
3. In the list box, scroll to and click the desired material code.
4. Click **Ok**.
5. Press the **Tab** key to advance to the field to be modified.
6. Enter the desired changes.
7. When complete, click the **Save** button.

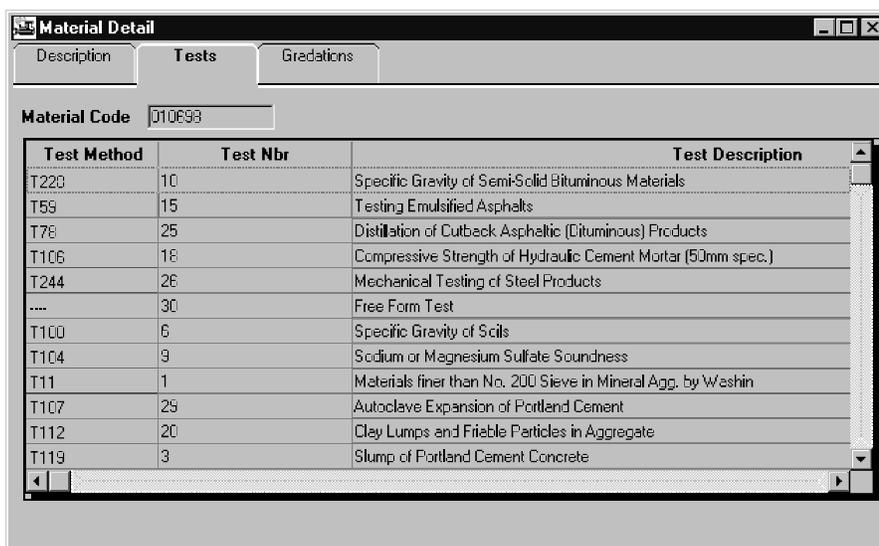


Figure 13-4 The Material Detail Window - Test Folder Tab

13.2.1.2 Material Tests Folder Tab

The Materials Test tab allows the user to add, modify, and delete specific tests that can be performed on a material. Identification of the tests is completed by selecting from a list of tests defined by the department. This information is used to provide a list of valid tests for a material when performing the Sampling and Testing processes.

Field Name	Description
Test Method	The AASHTO unique ID of a test. This field is required.
Test Number	The SiteManager number used to identify the test window on which the test result information is recorded.
Test Description	The AASHTO description of the test.

Table 13-2 The Tests Folder Tab Fields Table

To add a new material test:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Add a material description.
3. Click the **Tests** folder tab.
4. Click the **New** button.
5. In the list box, scroll to and click the desired material test.
6. Click **Ok**.
7. Repeat steps 2-4 until all tests are added
8. When complete, click the **Save** button.

To delete a material test:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Open a material description.
3. Click the **Tests** folder tab.
4. Click the desired material test.
5. Click the **Delete** button.
6. Click the **Yes** button.

7. Click the **Save** button.

If a user attempts to delete a test that has material specifications, the user will receive a delete confirmation message. If the deletion is confirmed, the specifications will be deleted with the test method.



Figure 13-5 The Test Method Delete Confirmation Message

If a user attempts to delete a test that has sampling and testing requirements and/or contract sampling and testing requirements, the test can not be deleted until all the associated requirements are deleted.



Figure 13-6 The Test Method Delete Warning Message

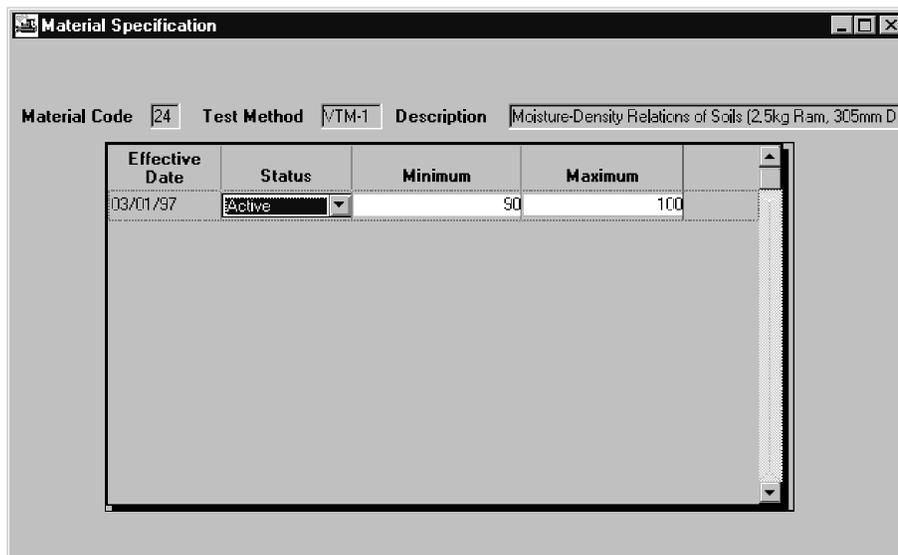


Figure 13-7 The Generic Material Test Specification Window

13.2.1.2.1 Material Test Specifications

The Material Test Specifications window allows for the addition and modification of material test specifications. These specifications may be either numeric or alphanumeric and have no validation performed

against them. This information gives detail limits to values acceptable by the individual tests specified for a material. Since this material specification can change over time, the specification is maintained by effective date. The data from this window is used during the sampling and testing processes to compare tests results. A material can have one set of test specifications *per effective date*. However, a separate material code could be created for a different mix. There are thirty standardized test specifications and one free form described in the following table. All test methods may have specifications *except* for the Free Form Test.

The SiteManager System Administrator has a material template that can be used to define test specifications unique to your transportation agency. If you find a test method not listed in this table, it has probably been defined by the SiteManager System Administrator for your transportation agency.

Field Name	Description
Test Method	Method used for testing the material.
Test Description	Text description of the test.
Effective Date	The date the test specification becomes effective.
Minimum	Beginning value for the specification limit.
Maximum	Ending value for the specification limit.
Status	Indicates if the material or source is active or inactive. Indicates if the material is active or inactive. Defaults to Active.

Table 13-3 The Generic Material Test Specification Table

Test Method(s)	Test Number	Test Name
T11, T27	1	Sieve Analysis of Aggregates
T84, T85	2	Specific Gravity of Coarse and Fine Aggregates
T22, T119, T121, T152, T196	3	Portland Cement Concrete Tests
T269, T287, T164, T283, T246, T245	4	HBP Mix Testing

Test Method(s)	Test Number	Test Name
T88	5	Particle Size Analysis of Soils
T100	6	Specific Gravity of Soils
T96	7	Los Angeles Machine Testing
T99, T180	8	Moisture-Density Relations of Soils
T104	9	Sodium or Magnesium Sulfate Soundness
T44, T48, T49, T49A, T179, T201, T202, T228, T304	10	AASHTO M226 Binder Specification
T176, D4791, D5821	11	Sand Equivalent
T255	12	Total Moisture Content of Aggregate by Drying
T265	13	Moisture Content
T19	14	Unit Weight and Voids
T59, T59H	15	Testing Emulsified Asphalt
T208	16	Unconfined Compression Strength
D2487, T89, T90, M145	17	ASTM Soil Classification
T106, T137, T153	18	Portland Cement Physical Tests
D4867	19	Moisture Damage to Bituminous Mixes
T112	20	Clay Lumps and Friable Particles in Aggregate

Test Method(s)	Test Number	Test Name
T155	21	Water Retention by Concrete Curing Materials
T51	22	Ductility of Bituminous Materials
T238, T239	23	Nuclear Density Test
T267	24	Organic Content in Soils
T78	25	Distillation of Cutback Asphalt Products
T244	26	Reinforcing Steel
T161	27	PCC Freeze-Thaw Cycling
T190	28	R-Value and Expansion Pressure of Compacted Soils
T107, T129, T154	29	Hydraulic Cement Test
N/A	30	Free Form Test
T166, T209, T269A	31	Core Density
T30	32	Mechanical Analysis of Extracted Aggregate
T228PG, T240, T48PG, TP1, TP5, TP48	33	Performance Grade Asphalt

Table 13-4 The Standardized Material Test Specifications Table

To add a new material test specification using the generic specification:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Add or open a material description.

3. Click the **Tests** folder tab.
4. Click the **New** button.
5. In the list box, scroll to and click the desired material test.
6. Click **Ok**.
7. Click the **Save** button.
8. Click the **Services** menu and click the **Material Specifications** choice.
9. Click the **New** button.
10. In the **Effective Date** field, type the effective date of the test specification if different than the current date.
11. In the **Status** drop-down list, click the expand arrow to the right of the current selection and click the **Active** or **Inactive**.
12. Press the **Tab** key.
13. In the **Minimum** field, type the minimum value.
14. Press the **Tab** key.
15. In the **Maximum** field, type the maximum value.
16. When complete, click the **Save** button.

To modify a material test specification that used the generic specification:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Open a material description.
3. Click the **Tests** folder tab.
4. Click the desired test (except one of the standardized tests).
5. Click the **Services** menu and click the **Material Specifications** choice.
6. Press the **Tab** key to advance to the field to be modified.
7. Enter the desired change.
8. When complete, click the **Save** button.

Tip: If a user attempts to delete a material's test method that has specifications, the user will receive a delete confirmation message. If the deletion is confirmed, the specifications will be deleted with the test method.

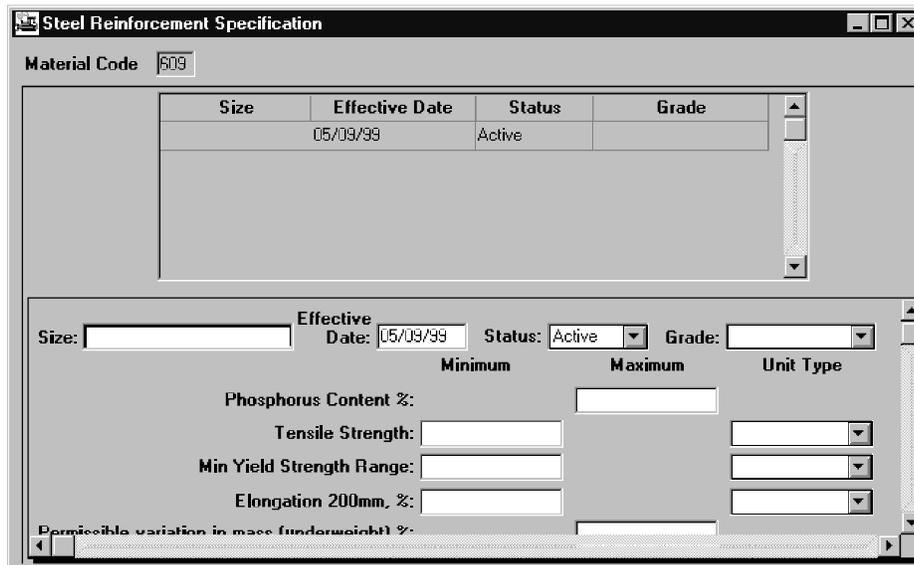


Figure 13-8 The Steel Reinforcement Specification

13.2.1.2.2 Steel Reinforcement Test Specification

The Steel Reinforcement Specification window allows the attachment of Steel Reinforcement test specifications to a material and the entry of acceptable values for a material.

Field Name	Description
Size	The size of the reinforcing steel.
Effective Date	The date the test specification becomes effective.
Status	Indicates if the test is active or inactive. Indicates if the material is active or inactive. Status defaults to active.
Grade	Indicates the current grade of the reinforcing steel
Phosphorus Content, % Maximum	Maximum value for the specification limit of Phosphorus Content Percent.
Tensile Strength Minimum	Minimum value for the specification limit of Tensile Strength.

Field Name	Description
Tensile Strength Unit Type	The units in which Tensile Strength is measured (e.g., min, PSI, or min, Mpa).
Yield Strength - Minimum	Minimum value for the specification limit of Yield Strength.
Yield Strength Unit Type	The units in which Yield Strength is measured (e.g., min, PSI, or min, Mpa).
Elongation in 200mm, % - Minimum	Minimum value for the specification limit of Elongation Percent.
Elongation Unit Type	The units in which Elongation is measured (e.g., 8 inches, min, % or 200 mm, min, %).
Permissible variation in mass (underweight) % - Maximum	Maximum value for the specification limit of Actual Weight

Table 13-5 The Steel Reinforcement Specification Fields Table

To add a new test specification using the steel reinforcement specification:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Add or open a material description.
3. Click the **Tests** folder tab.
4. Click the **New** button.
5. In the list box, scroll to and click the **T244** test method.
6. Click **Ok**.
7. Click the **Save** button.
8. Click the **Services** menu and click the **Material Specifications** choice.
9. Click the **New** button.
10. In the **Size** field, type the size entry.
11. Press the **Tab** key.
12. The **Effective Date** defaults to the current date.

13. In the **Status** drop-down list, click the expand arrow to the right of the current selection and click the **Active** or **Inactive**.
14. Press the **Tab** key.
15. In the **Grade** field, type the grade entry.
16. Press the **Tab** key.
17. In the **Phosphorus Content, % Maximum** field, type the maximum value.
18. Press the **Tab** key.
19. In the **Tensile Strength Minimum** field, type the minimum value.
20. In the **Unit Type** drop-down list, click the expand arrow to the right of the current selection and click the desired entry.
21. Press the **Tab** key.
22. In the **Yield Strength - Minimum** field, type the minimum value.
23. Press the **Tab** key.
24. In the **Unit Type** drop-down list, click the expand arrow to the right of the current selection and click the desired entry.
25. Press the **Tab** key.
26. In the **Elongation in 200mm, % - Minimum** field, type the minimum value.
27. In the **Unit Type** drop-down list, click the expand arrow to the right of the current selection and click the desired entry.
28. Press the **Tab** key.
29. In the **Permissible variation in mass (underweight) % - Maximum** field, type the maximum value.
30. Click the **Save** button.

To modify a test specification:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Open a material description.
3. Click the **Tests** folder tab.
4. Click the **T244** test.
5. Click the **Services** menu and click the **Material Specifications** choice.
6. Press the **Tab** key to advance to the field to be modified.

7. Enter the desired change.
8. When complete, click the **Save** button.

13.2.1.2.3 Portland Cement Physical Test Specifications

The test specifications for Portland Cement, Test T106, T137, and T153, have three folder tabs for the entry of the test specifications. The three folder tabs allows for attachment of Portland Cement specification to a material and the entry of acceptable values. The three folder tabs are:

- Blaine Specific Surface
- Comprehensive Strength
- Air Content



Figure 13-9 The Portland Cement Blaine Specific Surface Specification Folder Tab

Field Name	Description
Cement Type	The type of cement (e.g., Type I, Type II, etc).
Effective Date	The date the test specification becomes effective.
Status	Indicates if the test is active or inactive.
Minimum	Beginning value for the specification limit. Enter "N/A" if not applicable.
Maximum	Ending value for the specification limit. Enter "N/A" if not applicable.

Table 13-6 The Portland Cement Blaine Specific Surface Specification Fields Table

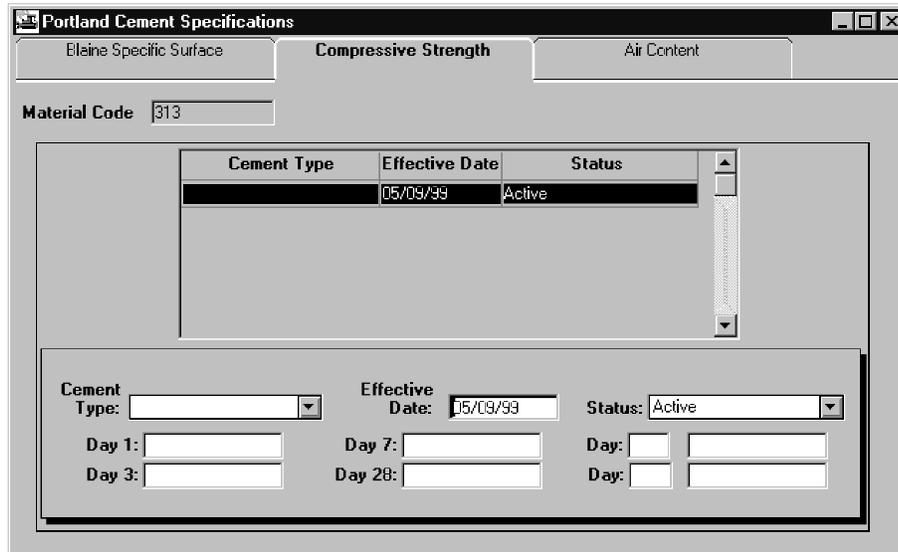


Figure 13-10 The Portland Cement Compressive Strength Specification Folder Tab

Field Name	Description
Cement Type	The type of cement (e.g., Type I, Type II, etc.).
Effective Date	The date the test specification becomes effective.
Status	Indicates if the specification is active or inactive.
1 Day	Specification basis for the 1 day test value.
3 Day	Specification basis for the 3 day test value.
7 Day	Specification basis for the 7 day test value.
28 Day	Specification basis for the 28 day test value.
Day	Additional day test value entered by the user.
	Specification basis for the additional day test value entered by the user.

Field Name	Description
Day	Additional day test value entered by the user.
	Specification basis for the additional day test value entered by the user.

Table 13-7 The Portland Cement Compressive Strength Specification Fields Table



Figure 13-11 The Portland Cement Air Content Specification Window

Field Name	Description
Effective Date	The date the test specification becomes effective.
Status	Indicates if the test is active or inactive. Indicates if the material is active or inactive.
Maximum	The maximum allowable percentage for this test.

Table 13-8 The Portland Cement Air Content Specification Fields Table

To add a new test specification using the Portland Cement Physical test specification:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Add or open a material description.

3. Click the **Tests** folder tab.
4. Click the **New** button.
5. In the list box, scroll to and click the **T153**, **T137**, or **T106** test.
6. Click **Ok**.
7. Click the **Save** button.
8. Click the **Services** menu and click the **Material Specifications** choice.
9. On the **Blaine Specific Surface** folder tab, click the **New** button.
10. In the **Cement Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
11. Press the **Tab** key.
12. In the **Effective Date** field, type the effective date if appropriate.
13. In the **Status** drop-down list, click the expand arrow to the right of the current selection and click the **Active** or **Inactive**.
14. Press the **Tab** key.
15. In the **Minimum** field, type the minimum value or N/A.
16. Press the **Tab** key.
17. In the **Maximum** field, type the maximum value or N/A.
18. Click the **Save** button.
19. Click the **Compressive Strength** folder tab.
20. Click the **New** button.
21. In the **Cement Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
22. Press the **Tab** key.
23. The **Effective Date** defaults to the current date. Change the value if applicable.
24. Press the **Tab** key.
25. In the **Status** drop down list, click the expand arrow to the right of the current selection and click the **Active** or **Inactive**.
26. Press the **Tab** key.
27. In the **1 Day** field, type the value.
28. Press the **Tab** key.

29. In the **3 Day** field, type the value.
30. Press the **Tab** key.
31. In the **7 Day** field, type the value.
32. Press the **Tab** key.
33. In the **28 Day** field, type the value.
34. Press the **Tab** key.
35. In the **Day** field, type an additional day value.
36. Press the **Tab** key.
37. In the value field, type value for the preceding additional.
38. Press the **Tab** key.
39. In the **Day** field, type an additional day value.
40. Press the **Tab** key.
41. In the value field, type value for the preceding additional.
42. Press the **Tab** key.
43. Click the **Save** button.
44. Click the **Air Content** folder tab.
45. Click the **New** button.
46. The **Effective Date** defaults to the current date. Change the value if applicable.
47. Press the **Tab** key.
48. In the **Status** drop down list, click the expand arrow to the right of the current selection and click the **Active** or **Inactive**.
49. Press the **Tab** key.
50. In the **Maximum** field, type the maximum value.
51. Click the **Save** button.

To modify a test specification:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Open a material description.
3. Click the **Tests** folder tab.
4. Click the **T153**, **T137**, or **T106** test.

5. Click the **Services** menu and click the **Material Specifications** choice.
6. Click the appropriate folder tab.
7. Press the **Tab** key to advance to the field to be modified.
8. Enter the desired change.
9. When complete, click the **Save** button.

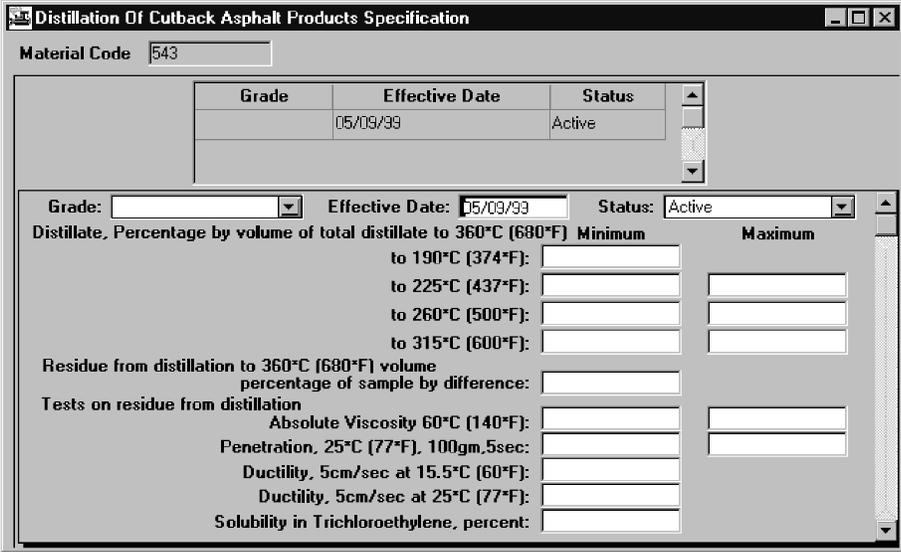


Figure 13-12 The Distillation Cutback Asphalt Products Window

13.2.1.2.4 Distillation Cutback Asphalt Products Specification

The Distillation Cutback Asphalt Products allows for attachment of new Distillation of Cutback Asphalt Products specification to a material and entry of acceptable values.

Field Name	Description
Grade	The Grade classification.
Effective Date	The date the specification becomes effective.
Status	Identifies the current status of this contract item record (e.g., active or inactive). Status defaults to active.

Field Name	Description
Distillate, percentage by volume of total distillate to 360°C (680°F) - to 190°C (374°F) Minimum	Beginning value for the specification limit of Distillate Percentage, by volume of total distillate to 360°C -- to 190°C minimum range.
Distillate, percentage by volume of total distillate to 360°C (680°F) - to 225°C (437°F) Minimum	Beginning value for the specification limit of Distillate Percentage, by volume of total distillate to 360°C -- to 225°C minimum range.
Distillate, percentage by volume of total distillate to 360°C (680°F) - to 225°C (437°F) Maximum	Ending value for the specification limit of Distillate Percentage, by volume of total distillate to 360°C -- to 225°C maximum range.
Distillate, percentage by volume of total distillate to 360°C (680°F) - to 260°C (500°F) Minimum	Beginning value for the specification limit of Distillate Percentage, by volume of total distillate to 360°C -- to 260°C minimum range.
Distillate, percentage by volume of total distillate to 360°C (680°F) - to 260°C (500°F) Maximum	Ending value for the specification limit of Distillate Percentage, by volume of total distillate to 360°C -- to 260°C maximum range.
Distillate, percentage by volume of total distillate to 360°C (680°F) - to 315°C (600°F) Minimum	Beginning value for the specification limit of Distillate Percentage, by volume of total distillate to 360°C -- to 315°C minimum range.
Distillate, percentage by volume of total distillate to 360°C (680°F) - to 315°C (600°F) Maximum	Ending value for the specification limit of Distillate Percentage, by volume of total distillate to 360°C -- to 315°C maximum range.
Residue from distillation to 360°C(680°F) volume percentage of sample by difference - Minimum	Beginning value for the specification limit of Residue from distillation to 360°C volume percentage of sample by difference minimum range.
Tests on residue from distillation - Absolute viscosity at 60°C (140°F) Minimum	Beginning value for the specification limit of test on residue from distillation Absolute viscosity at 60°C minimum range.
Tests on residue from distillation - Absolute viscosity at 60°C (140°F) Maximum	Ending value for the specification limit of test on residue from distillation Absolute viscosity at 60°C maximum range.

Field Name	Description
Tests on residue from distillation - Penetration, 25°C (77°F), 100gm, 5sec Minimum	Beginning value for the specification limit of test on residue from distillation Penetration, 25°C (77°F), 100gm, 5sec minimum range.
Tests on residue from distillation - Penetration, 25°C (77°F), 100gm, 5sec Maximum	Ending value for the specification limit of test on residue from distillation Penetration, 25°C (77°F), 100gm, 5sec maximum range.
Tests on residue from distillation - Ductility, 5cm/min at 25°C (77°F) Minimum	Beginning value for the specification limit of test on residue from distillation Ductility at 25°C minimum range.
Solubility in Trichloroethylene, percent - Minimum	Beginning value for the specification limit of test on residue from distillation Solubility in Trichloroethylene minimum range.

Table 13-9 The Distillation Cutback Asphalt Products Specification Fields Table

To add a new test specification using the Distillation of Cutback Asphalt Products specification:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Add or open a material description.
3. Click the **Tests** folder tab.
4. Click the **New** button.
5. In the list box, scroll to and click the **T78** test.
6. Click **Ok**.
7. Click the **Save** button.
8. Click the **Services** menu and click the **Material Specifications** choice.
9. Click the **New** button.
10. In the **Grade** field, type grade classification.
11. Press the **Tab** key.
12. The **Effective Date** field defaults to the current date. Change the date, if applicable.
13. Press the **Tab** key.

14. In the **Status** drop-down list, click the expand arrow to the right of the current selection and click the **Active** or **Inactive**.
15. Press the **Tab** key.
16. In the minimum or maximum field, type appropriate value.
17. Press the **Tab** key.
18. Repeat steps 10 and 11 until all specification values are complete.
19. When complete, click the **Save** button.

To modify a test specification:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Open a material description.
3. Click the **Tests** folder tab.
4. Click the **T78** test.
5. Click the **Services** menu and click the **Material Specifications** choice.
6. Press the **Tab** key to advance to the field to be modified.
7. Enter the desired change.
8. When complete, click the **Save** button.

The screenshot shows a software window titled "Emulsified Asphalts Specifications" with three tabs: "Emulsions", "Residue", and "Coating". The "Emulsions" tab is active. Below the tabs, there is a "Material Code" field containing "VT704.02HFMS1". A main panel contains several fields: "Grade:" (a dropdown menu), "Effective Date:" (a date field showing "15/09/99"), and "Status:" (a dropdown menu showing "Active"). Below these are two columns of test specifications: "Test on emulsions" and "Minimum" and "Maximum" values. The tests listed are: Viscosity Saybolt Furol at 25°C (77°F), s; Viscosity Saybolt Furol at 50°C (122°F), s; Sieve Test, %; Storage stability test, 24 h, %; Demulsibility, 50mL, 0.1 N CaCl2, %; Demulsibility, 35mL, 0.02 N CaCl2, %; Demulsibility, 35mL, 0.8% sodium dioctyl sulfosuccinate, %; Oil Distillate by volume of emulsion, %; Residue by Distillation, %; Cement Mixing Percent; and Residue by Evaporation %.

Figure 13-13 The Emulsions Folder Tab of the Emulsified Asphalt Test Specification Window

13.2.1.2.5 Emulsified Asphalt Specification

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This three folder tabs of this window allow a new Emulsified Asphalt specification to be attached to a material and the entry of acceptable values. The three folder tabs are:

- Emulsions
- Residue
- Coating

Figure 13-14 The Residue Folder Tab

Figure 13-15 The Coating Folder Tab

Field Name	Description
Type	The type of cement.
Grade	The Grade Classification.
Effective Date	The date the specification becomes effective.
Status	Identifies the current status of this contract item record (e.g., active or inactive). Status defaults to active.
Viscosity, Saybolt Furol at 25°C (77°F), s. Minimum	Beginning value for the specification limit of Viscosity, Saybolt Furol at 25°C (77°F), s.
Viscosity, Saybolt Furol at 25°C (77°F), s. Maximum	Ending value for the specification limit of Viscosity, Saybolt Furol at 25°C (77°F), s.
Viscosity, Saybolt Furol at 50°C (122°F), s. Minimum	Beginning value for the specification limit of Viscosity, Saybolt Furol at 50°C (122°F), s.
Viscosity, Saybolt Furol at 50°C (122°F), s. Maximum	Ending value for the specification limit of Viscosity, Saybolt Furol at 50°C (122°F), s.
Sieve test, % Maximun	Ending value for the specification limit of Sieve test
Storage stability test, 24 h %. Maximun	Ending value for the specification limit of Storage stability test, 24 h, %.
Cement mixing test, % Maximun	Ending value for the specification limit of Cement mixing test.
Demulsibility, 35mL, 0.02 N Cacl ₂ , % Minimum	Beginning value for the specification limit of Demulsibility, 35mL, 0.02 N Cacl ₂ .
Demulsibility, 35mL, 0.8% sodium dioctyl sulfosuccinate, % Minimum	Beginning value for the specification limit of Demulsibility, 35mL, 0.8% sodium dioctyl sulfosuccinate.

Field Name	Description
Oil distillate, by volume of emulsion, % Maximum	Ending value for the specification limit of Oil distillate, by volume of emulsion.
Residue by distillation, % Minimum	Beginning value for the specification limit of Residue by distillation.
Tests on residue from distillation tests - Penetration, 25°C (77°F), 100 g, 5 s Minimum	Beginning value for the specification limit of distillation residue penetration, 25°C (77°F), 100 g, 5 s.
Tests on residue from distillation tests - Penetration, 25°C (77°F), 100 g, 5 s Maximum	Ending value for the specification limit of distillation residue penetration, 25°C (77°F), 100 g, 5 s.
Tests on residue from distillation tests - Ductility, 25°C (77°F), 50 mm/min, mm Minimum	This is the minimum allowable value of the ductility residue from distillation, 25°C, 50 mm/min, mm.
Tests on residue from distillation tests - Solubility in trichlorethylene, % Minimum	Beginning value for the specification limit of distillation residue Solubility in Trichlorethylene.
Float Test, 60°C (140°F), s Minimum	Beginning value for the specification limit of Float Test 60°C (140°F).
Float Test, 60°C (140°F), s Maximum	Beginning value for the specification limit of Float Test 60°C (140°F).
Coating ability and water resistance - coating, dry aggregate	Value for the specification limit of Coating ability and water resistance, coating, dry aggregate.
Coating ability and water resistance - coating, after spraying	Value for the specification limit of Coating ability and water resistance, coating, dry aggregate after spraying.
Coating ability and water resistance - coating, wet aggregate	Value for the specification limit of Coating ability and water resistance, coating, wet aggregate.

Field Name	Description
Coating ability and water resistance - coating, after spraying	Value for the specification limit of Coating ability and water resistance, coating, wet aggregate after spraying.
Particle charge test	The kind of charge is present.

Table 13-10 The Emulsified Asphalt Specification Fields Table

To add a new test specification using the Emulsified Asphalt specification:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Add or open a material description.
3. Click the **Tests** folder tab.
4. Click the **New** button.
5. In the list box, scroll to and click the **T59** test.
6. Click **Ok**.
7. Click the **Save** button.
8. Click the **Services** menu and click the **Material Specifications** choice.
9. Click the **New** button.
10. In the **Grade** field, type grade classification.
11. Press the **Tab** key.
12. The **Effective Date** field defaults to the current date. Change the value, if applicable.
13. Press the **Tab** key.
14. In the **Status** drop-down list, click the expand arrow to the right of the current selection and click the **Active** or **Inactive**.
15. Press the **Tab** key.
16. In the minimum or maximum field, type the appropriate value.
17. Press the **Tab** key.
18. Repeat steps 14-15 until all specification values are complete.

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19. Click the **Save** button. 
20. Click the **Residue** folder tab.
21. In the minimum or maximum field, type the appropriate value.
22. Press the **Tab** key.
23. Repeat steps 18-19 until all specification values are complete.
24. Click the **Save** button.
25. Click the **Coating** folder tab.
26. In the drop-down list, click the expand arrow to the right of the current selection and click the desired choice
27. Repeat steps 23 until all specification values are complete.
28. Click the **Save** button.

To modify a test specification:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Open a material description.
3. Click the **Tests** folder tab.
4. On the **Test** folder tab, click the **T59** test.
5. Click the **Services** menu and click the **Material Specifications** choice.
6. Click the correct test specification.
7. Click **Ok**.
8. Press the **Tab** key to advance to the field to be modified.
9. Enter the desired change.
10. When complete, click the **Save** button.

 Unlike many folder tabs that REQUIRE the tab's information to be saved before navigating to the next tab, each tab does not require that the information to be saved, but it is a good habit to do so anyway.

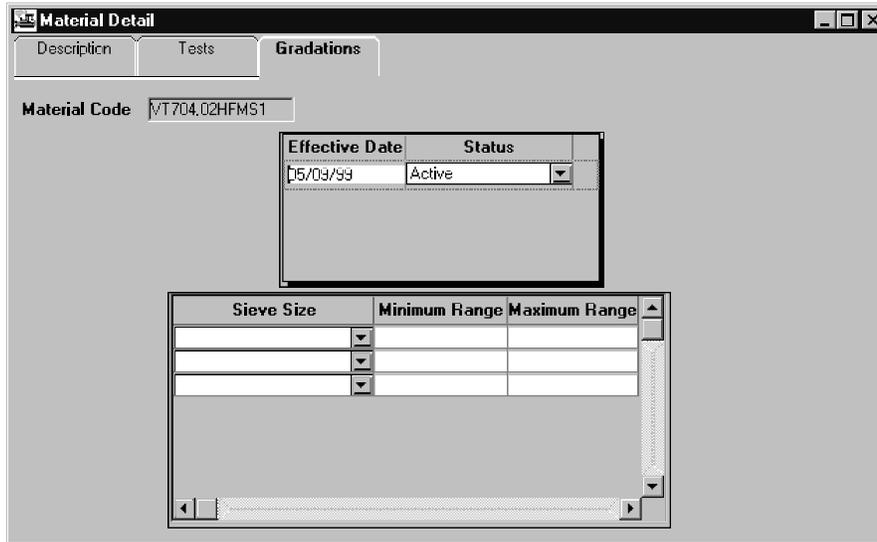


Figure 13-16 The Materials Gradations Folder Tab

13.2.1.3 Material Gradations Folder Tab

The Material Gradations window is used to add, copy, or modify material gradations. Since the material gradations can change over time, the gradations are maintained by effective date. This window details the gradations limits of passing percentages for a material through a sieve window. The gradations may be either numeric or alphanumeric. This data from this window is used for validation and information by the Mix Design and Sampling and Testing functions of SiteManager.

Field Name	Description
Effective Date	The date the gradation becomes effective. Defaults to current date when a new set of material gradations are created or copied
Status	Identifies the current status of this contract item record (e.g., active or inactive). Status defaults to active.
Sieve Size	AASHTO and ASTM standard sieve sizes (i.e., 1/2, # 4, etc.) Sieve size required when Minimum or Maximum entered.
Minimum Range	Beginning value for the gradation limit.
Maximum Range	Ending value for the gradation limit (must be greater than minimum range value).

Table 13-11 The Material Gradations Fields Table

For material gradations:

1. A maximum of 25 sieve sizes can exist for a material.
2. At least one sieve size row must exist for an effective date.
3. More than one set of material gradations can have an active status.
4. Sieve sizes will be displayed in the order in which they are entered. For each sieve size row, MATL_GRDN_SN will correspond to the line number on the window.
5. An entire set of material gradations cannot be deleted. The status of the gradation should be changed to Inactive to reflect that the gradation is not longer being used.

To add a new set of material gradations:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Add a material description.
3. Click the **Gradations** folder tab.
4. Click the upper data window.
5. Click the **New** button.
6. The **Effective Date** field defaults to the current date.
7. The **Status** field defaults to **Active**.
8. Click the lower data window.
9. Click the **New** button.
10. In the **Sieve Size** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
11. Press the **Tab** key.
12. In the **Minimum Range** field, type appropriate value.
13. Press the **Tab** key.
14. In the **Maximum Range** field, type appropriate value.
15. Click the **Save** button..
16. Repeat steps 6-13 until all gradations are defined.

To modify a material gradation:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Open a material description.

3. Click the **Gradations** folder tab.
4. In the upper data window, click the correct material gradation effective date.
5. Click a sieve size row.
6. Enter the desired changes.
7. Click the **Save** button.

To add a sieve size:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Open a material description.
3. Click the **Gradations** folder tab.
4. Select the correct material gradation effective date.

Click on the sieve sizes portion of the record.

1. Click the **New** button.
2. In the **Sieve Size** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
3. Press the **Tab** key.
4. In the **Minimum Range** field, type appropriate value.
5. Press the **Tab** key.
6. In the **Maximum Range** field, type appropriate value.
7. Click the **Save** button.

To delete a sieve size:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Open a material description.
3. Click the **Gradations** folder tab.
4. In the upper data window, click the correct material gradation effective date.
5. Click a sieve size row.
6. Click the **Delete** button.
7. Click the **Yes** button.
8. When complete, click the **Save** button.

To copy a material gradation:

1. On the **Material Information** panel, double-click the **Material Detail** icon.
2. Open a material description.
3. Click the **Gradations** folder tab.
4. Select the correct material gradation effective date to copy from.
5. Click the **Services** menu and click the **Copy Gradations** choice.
6. The **Effective Date** field defaults to the current date.
7. The **Status** field defaults to **Active**.
8. Modify any of the fields appropriately.
9. When complete, click the **Save** button.

13.2.2 Sampling and Testing Requirements

The Sampling and Testing Requirements window can be accessed from two panels:

Material Information or
Sampling and Testing.

The Sampling and Testing Requirements window allows the identification of materials for a bid item and the specification of a minimum sampling and testing requirements guide. It is used to identify the minimum frequency, responsibilities, sample size, and/or unit for the sampling and testing of a material for a bid item. SiteManager uses this data as a guideline for the entry of new contracts.

13.2.2.1 Material Folder Tab

The Material folder tab allows the specification of the conversion factor and approved source required indicator for a selected material on a bid item. If necessary, the Material can also be viewed from this window.

Field Name	Description
Item	Code for the bid item (from the Item Master).
Spec Year	Spec Year for the bid item.
Item System Unit	This field indicates whether the units of measure are English or Metric.

Field Name	Description
Item Unit	The item's units of measure.
Material Code	The ID for a material.
Conversion Factor	This is used by the required samples calculation to convert current quantity to required quantity.
Approved Source Indicator	This indicates whether or not an approved source must be used here.
Special Instructions	This is the special instruction for the material on the contract. The value, if any, will be passed from the Material Sampling and Testing Requirements window.

Table 13-12 The Materials Window Fields Table

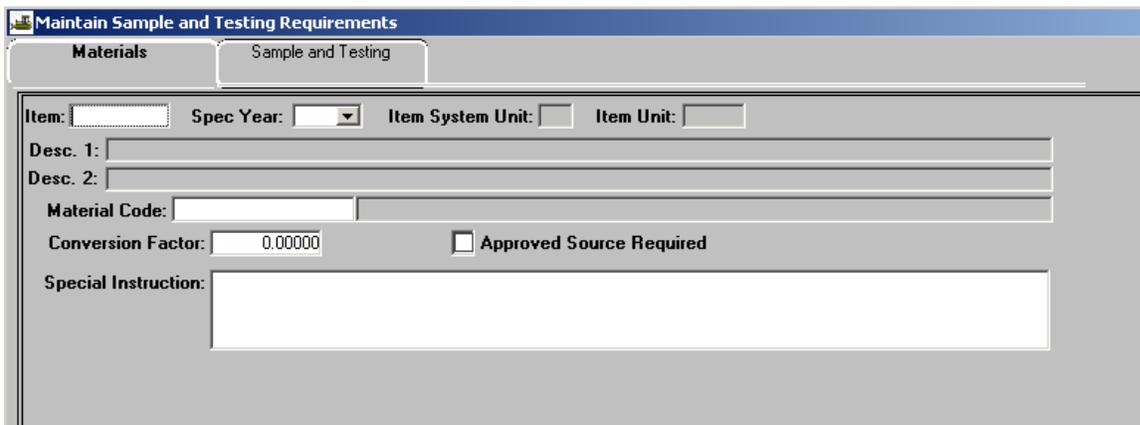


Figure 13-17 The Material Folder Tab

To add material code for a bid item:

1. On the Materials Information or Sampling and Testing panel, double-click the Sampling and Testing Requirements icon.
2. Click the Item field and perform a Search.
3. Scroll to and click the desired item.
4. Click Ok.
5. Click the expand arrow to the right of the Spec Year field and in the drop-down list, click the desired choice.

6. Using the *right* mouse button, click the Material Code field.
7. Perform a Search using the object menu (referenced in the Getting Started section).
8. Click Ok.
9. Press the Tab key.
10. In the Conversion Factor field, enter desired value.
11. If desired, click the Approved Source Require check box (ON).
12. If desired, click the Special Instruction field and enter desired data.
13. Click the Save button.

To modify a material code for a bid item:

1. On the Materials Information or Sampling and Testing panel, double-click the Sampling and Testing Requirements icon.
2. Click the Open button.
3. In the Item list box, scroll to and double-click the desired choice.
4. In the Material list box, scroll to and click the desired choice.
5. Click Ok.
6. In the **Conversion Factor** field, type desired value.
7. If desired, click the **Approved Source Require** check box (ON).
8. If desired, click the **Special Instruction** field and enter desired data.
9. Click the **Save** button.

To view the material:

1. On the Materials Information or Sampling and Testing panel, double-click the Sampling and Testing Requirements icon.
2. Open a material.
3. Click the Services menu and click the View Material choice.
4. When complete, click the Close button.

13.2.2.1.1 Materials Copy Capabilities

The Materials folder tab has two unusual copy capabilities. The Service menu's Copy Records choice allows the user to copy the sampling and testing requirements of an item's material to a new material for the same item, but only if the sampling and testing requirements are applicable for the material. Also, the sampling and

testing requirements of an item’s material cannot be copied to another material that is already associated to the bid item.

The Service menu’s Copy Item Records capability allows the user to copy the materials of an item (and their sampling and testing requirements) to another item.

To copy the material records:

1. On the Materials Information or Sampling and Testing panel, double-click the Sampling and Testing Requirements icon.
2. Open the item’s material.
3. Click the Services menu and click the Copy Records choice.
4. Using the *right* mouse button, click the Material field.
5. In the list box, scroll to and click the desired material
6. Click Ok.

To copy the material item records:

1. On the Materials Information or Sampling and Testing panel, double-click the Sampling and Testing Requirements icon.
2. Open a material.
3. Click the Services menu and click the Copy Item Records choice.
4. In the list box, scroll to and click the item choice.
5. Click Ok.

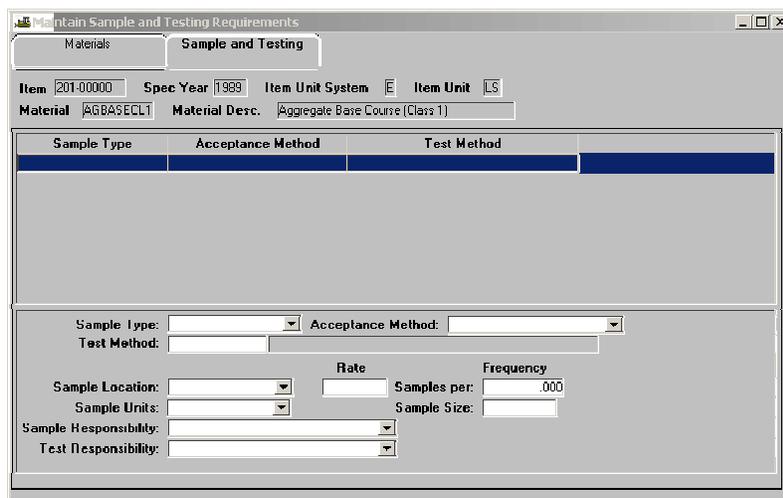


Figure 13-18 The Sampling and Testing Folder Tab

13.2.2.2 Sampling and Testing Folder Tab

The Sampling and Testing tab allows the modification of a materials sample and testing information for a given bid item.

Field Name	Description
Producer/Supplier Name	The name of the producer/supplier.
Sample Type	Identifies the type of the test begin performed (e.g., acceptance, job control, manufacturers, certification, visual, etc.) This field may be optional, based on System Operational Parameters.
Acceptance Method	Identifies how the material will be accepted on the contract (e.g., manufacturer certification, brand name, etc.) This field may be optional, based on System Operational Parameters.
Test Method	Method used for testing the material (e.g., T11, T27, T84, etc.) This field may be optional, based on System Operational Parameters.
Producer/Supplier Code	The Producer/Supplier ID
Sample Location	The area from which to collect the sample (e.g., roadside, plant, truck, stockpile, etc.)
Sample Frequency	The rate at which a sample must be collected.
Sample Size	The size of the sample.
Sample Unit	The unit of measure for a sample (e.g., mm, feet, yards, inches)
Sample Responsibility	A Transportation agency-defined value identifying the level responsible for taking the sample (e.g., project engineer, inspector, central test lab, etc.)

Field Name	Description
Test Responsibility	A Transportation agency-defined value identifying the entity responsible for processing the test (e.g., local test lab, central test lab, etc.)

Table 13-13 The Sampling and Testing Fields Table

To add sampling and testing requirements to the material for a bid item:

1. On the Materials Information or Sampling and Testing panel, double-click the Sampling and Testing Requirements icon.
2. On the Material folder tab, add a material for a bid item.
3. Click the Sample and Testing folder tab.
4. In the Sample Type drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
5. In the Acceptance Method drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
6. Using the *right* mouse button, click the Test Method item.
7. From the object menu, click the Search choice.
8. In the list box, scroll to and click the desired test method.
9. Click Ok.
10. In the Sample Location drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
11. Press the Tab key.
12. In the Sample Frequency field, type the desired value.
13. Press the Tab key.
14. In the Samples per field, type the desired value.
15. In the Sample Units drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
16. Press the Tab key.
17. In the Sample Size field, type the desired value.
18. In the Sample Responsibility drop-down list, click the expand arrow to the right of the current selection and click the desired choice.

19. In the Test Responsibility drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
20. Click the Save button.

To modify sampling and testing requirements of the material for a bid item:

1. On the Materials Information or Sampling and Testing panel, double-click the Sampling and Testing Requirements icon.
2. On the Material folder tab, open or add a material for a bid item.
3. Click the Sample and Testing folder tab.
4. In the select list at the top, click the sampling and testing requirement record.
5. Press the Tab key to advance to the field to be modified.
6. Enter the desired change.
7. Click the Save button.

13.3 Material Information Reports

The Material Information Reports panel generates commonly used material information reports. Also note that Sampling and Testing Requirements reports can be accessed from the Sampling and Testing Reports panel. The following report topics are available on this panel:

View Saved Reports (PSR).

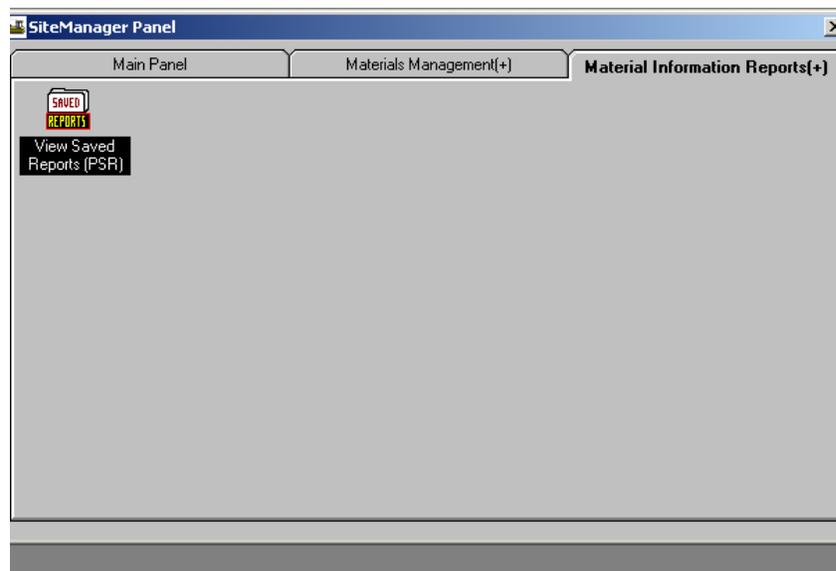


Figure 13-19 The Material Information Reports Panel

To access Material Information Reports:

1. On the Material Management panel, double-click the Material Information icon.
2. Double-click the icon for the desired report.

To generate a Material Information report:

1. Double-click the desired report icon.
2. Select the criteria.
3. To generate the report on-line, click **Ok**.

Or

To generate the report off-line to a file, click the **Generate Off-line File** check box (ON).

4. Click **Ok**.

Or

To generate and print the report off-line, click the **Generate Off-line Print** check box (ON).

5. Click **Ok**.

To make selections in the **Report Criteria** dialog:

1. Click the desired radio button to select the desired format.
 - By Summary** selects all items
 - By Criteria (field name)** selects an individual field

In a **By Criteria (field name)** format:

2. Using the *right* mouse button, click the field.
3. Perform a **Search** using the object menu (referenced in the Getting Started section).
4. Click **OK**.

13.3.1 Report Options

The report options are available as toolbar buttons or menu options for reports that have been generated on-line.

Components	Description
Close button	Closes the report preview.

Save button	In a simple report (see Save Reports section) invokes the Save dialog allowing the report to be saved in a .PSR file format.
Print button	Prints the report.
Prior button	Displays the prior page of a multi-page selection.
Next button	Displays the next page of a multi-page selection.
Zoom spin button	Magnifies or reduces the display of the report preview.
Copies spin button	Allows more than one copy of the report to be printed.

Table 13-14 The Report Components Table

13.3.2 Saving and Exporting Simple Reports

There are two types of reports in SiteManager — simple reports and complex reports. Simple report can be saved and exported, but complex reports cannot. It is easy to identify a simple report — the File menu's Save choice (or the Save button) and the Service menu's Export choice will be active for a simple report. They will not be active for a complex report.

For procedures on saving, opening, and exporting a report, please refer to the General Concepts section.

13.3.3 View Saved Reports (PSR)

A saved simple report can be viewed using the View Saved Reports (PSR) icon. For procedures on opening and viewing a saved report, please refer to the General Concepts section.

13.4 Approved Lists

The Approved Lists icon, the closet equivalent to Reference Tables for Materials Management, allows access to all approved list related windows. These include:

- Approved Materials,
- Producer/Supplier,
- Producer/Supplier Materials,
- Sampler Qualifications,
- Qualified Labs,
- Welders,
- Tester Qualifications,

Material User,
Calibrated Equipment, and
Tests and Fees Schedule.

The Calibrated Equipment, Qualified Labs, Welders and Test and Fee Schedule windows have a parallel report. A separate icon, the Approved List Reports icon, allows access to the related reports.

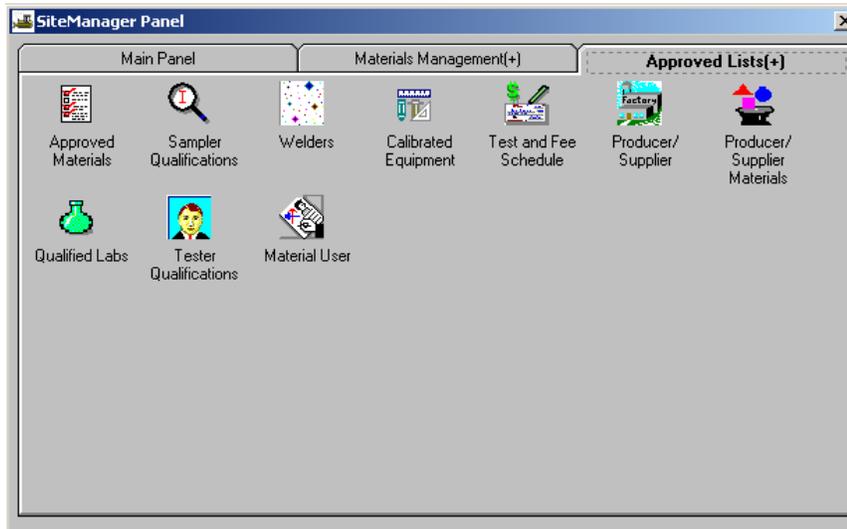


Figure 13-20 The Approved Lists Panel

To access the Approved Lists panel:

1. On the **Materials Management** panel, double-click the **Approved Lists** icon.

13.4.1 Approved Materials

The Approved Materials window is used to add and modify the transportation agency-defined list of materials. The approved materials information is used for validation when sample data is entered. A selected material code will display all approved products. An approved product can also have Remarks attached to it.

The Approved Materials window can be accessed from Approved List navigation panel.

The new Filter-Search lens capability has been added to the Manufacturer Name field and will allow selection of the producer/supplier from the Producer/Supplier Material table. The search lens will only show producer/suppliers whose status is active in the Producer/Supplier table. The search will be performed based on the producer/supplier name field (not the code). The producer/supplier code selected will be displayed adjacent to the Manufacturer Name field.

The Manufacturer Name will be a required field and the label will be changed to just "P/S". The only producer/supplier displayed for selection must be actively producing the approved material.

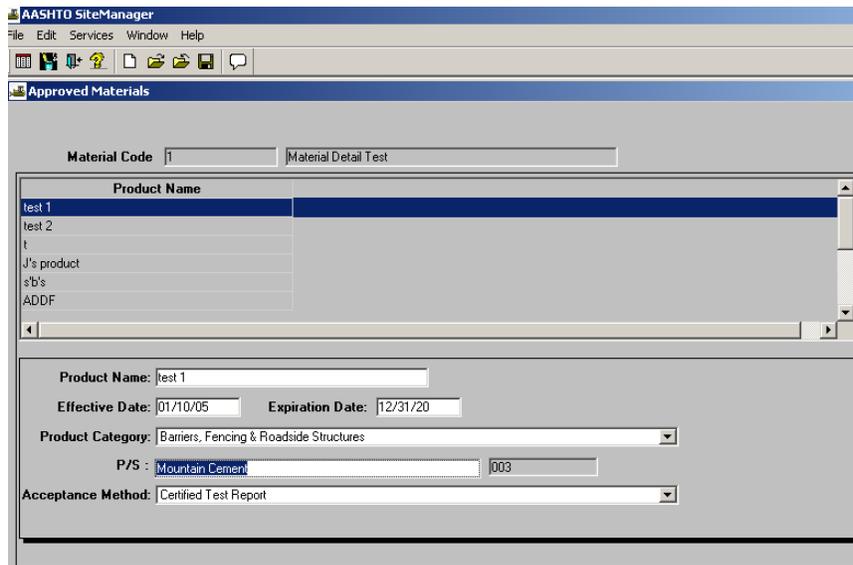


Figure 13-21 The Approved Materials Window

Field Name	Description
Material Code	The ID for a material. Material Code is required and must have an active status.
Full Name	Full description of material.
Product Name	Identifies the product brand of the material. Product Name is required and must be unique for Material Code.
Effective Date	Effective date the material became approved. Effective Date must be less than Expiration Date (if entered). Default to current date when a new product is added.
Expiration Date	Expiration date of the approved product. Expiration Date must be greater than the Effective Date.
Product Category Type	Identifies the category of the product (e.g., steel, admixtures, etc.)
Producer/Supplier	The Manufacturer Name will be a required field. If Manufacturer field is empty then error message will be displayed. The standard search lens will display the

Field Name	Description
	Producer/Supplier Name for the selected material. Only active producer/suppliers from the Producer/Supplier table will be shown.
Producer/Supplier Code	The producer/supplier code selected will be displayed adjacent to the P/S field on the window without label.
	This field will be protected.
Acceptance Method Type	The method by which the product is being accepted (e.g. visual, manufacturers certification, etc.)

Table 13-15 The Approved Materials Fields Table

To modify an existing approved product:

1. On the **Approved List** panel, double-click the **Approved Materials** icon.
2. Click the desired material.
3. Click **Ok**.
4. In the select list at the top, click the desired approved material.
5. Press the **Tab** key to advance to the field to be modified.
6. Enter the desired change.
7. Click the **Save** button.

To add a new approved product:

1. On the **Approved List** panel, click the **Approved Materials** icon.
2. Click a material.
3. Click **Ok**.
4. Click the **New** button.
5. In the **Product** field, type the name of the product.
6. Press the **Tab** key.

7. The **Effective Date** field defaults to the current date. Change the effective date of the product, if necessary.
8. Press the **Tab** key.
9. In the **Expiration Date** field, type the expiration date of the product.
10. In the **Product Category Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
11. Press the **Tab** key.
12. Using the *right* mouse button, click the **P/S field**.
13. From the object menu, click **Search**.
14. In the **Search** window, click the desired Producer/Supplier.
15. Click **Ok**.
16. In the **Acceptance Method Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
17. Click the **Save** button.

13.4.2 Filter-Search Len & Open –Search Len

The ‘Search’ window feature is available for the data entry fields in a data window that have the potential to retrieve a long list. The availability of this feature is indicated by a magnifying glass instead of an arrow when the mouse pointer moves to that data entry field. This window is invoked by a right mouse button click when magnifying glass is shown and selecting a search option from the popup menu.

The Filter-Search menu option and the specific fields, and will now display the Filter-Search selection pointer  for fields where this is enabled. The Filter-Search lens has the option of opening the Window Key record with search lens facility on specific windows. The current SiteManager standard only allows opening the Window Key record with the File Open menu option or toolbar icon and displays the pick-list for selection.

13.4.3 Material User

The Material User window allows an authorized user to create, update or delete a Material User’s information. A Material User can be a Sampler or a Tester. Samplers and Testers are created and maintained in the Material User window. Specific sampler qualifications are created and maintained in the Sampler Qualifications window, while SiteManager Users will continue to be created and maintained in the User Security window. Specific Tester Qualifications, including test methods, are created and maintained in the Tester Qualifications window. A person designated as a Global Tester on this window may be designated as a tester for any test, regardless of the qualifications specified on the Tester Qualifications window.

Note: A Material User can be **defined** as one or more of three classes i.e., SiteManager User (having a User security profile), Sampler/Inspector and/or Testing Personnel.

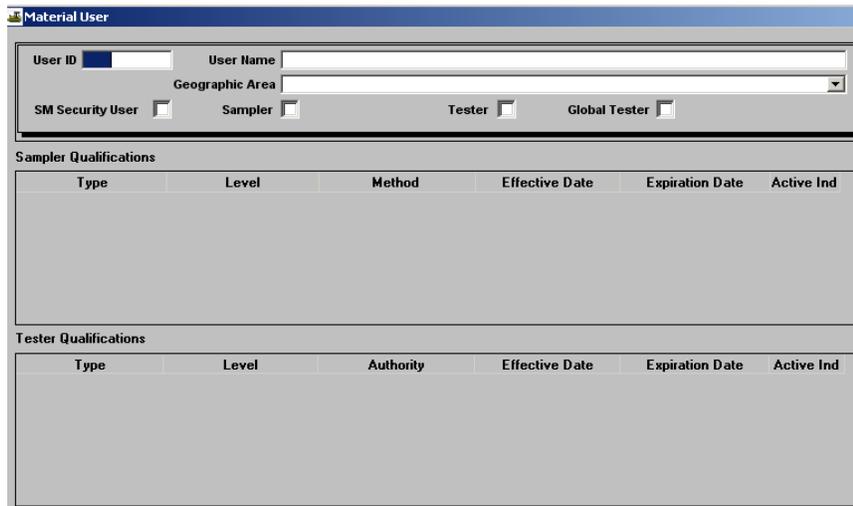


Figure 13-22 The Material User Window

The File menu, Open option, displays a pick list for selecting a user. The User ID field will also have the search lens functionality to open and display the detailed information of that selected user.

The standard functionality of Remarks, Address and Generic Fields has been added to the Material User window. Any changes made to the Address and Remarks will be propagated to the respective classes.

Deletion of a Material User profile will be allowed if the user has not been defined as SiteManager User and the user does not have any respective (Sampler or Tester) qualifications defined or if the sampler and tester have not been assigned to a sample record.

Field Name	Description
User ID 	This column is editable and standard search lens feature is provided to select from the list of available users. The list will display user ID, Name, SM user indicator, matl user active indicator, Tester indicator and sampler indicator in the data window.
	This column is editable and user can enter the partial user ID and use the search or filter search facility.
	Once the user ID is accepted, the user information is retrieved, the user id field will become protected and populate the global key structure. The field can be cleared for new selection by clicking the new menu icon.
	The user id once opened will be used to reopen the same window upon reentry to the window.
Name	Full name of the user ID that was selected by user.
Geographic Area	Transportation agency-defined geographical unit where the material user is located.
SM User	Indicator to specify whether the user is a SiteManager user or not.
	The column will have a default value of N.

Field Name	Description
Tester	Indicator to specify whether the user is a Tester or not.
	The column will have a default value of N.
Sampler	Indicator to specify whether the user is a Sampler or not.
	The column will have a default value of N.
Global Tester	Indicator to specify whether the user is a Global Tester or not. This global access will give the Material User access to any test and override the Testing Qualifications defined for the individual.
	This column is enabled only if Tester indicator is checked.
	The column will have a default value of N.

Table 13-16 The Material User Field Table

To create a Material User record:

1. On the **Approved Lists** panel, double-click the **Material User** icon.
 2. Click the top datawindow to change the focus.
 3. Click the **New** button.
 4. In the **User ID** field, right click to search for the user ID of the material user.
 5. Select the User and click **OK**.
- Or
6. In the **User ID** field, type the user ID of material user.
 7. In the **User Name** field, type the name of the material user.
 8. In the **Geographic Area** drop-down list, click the expand arrow to the right of the current selection click the desired choice.
 9. Click the desired checkbox of the user: SM Security User, Sampler, Tester, and/or Global Tester.
 10. Click the **Save** button.

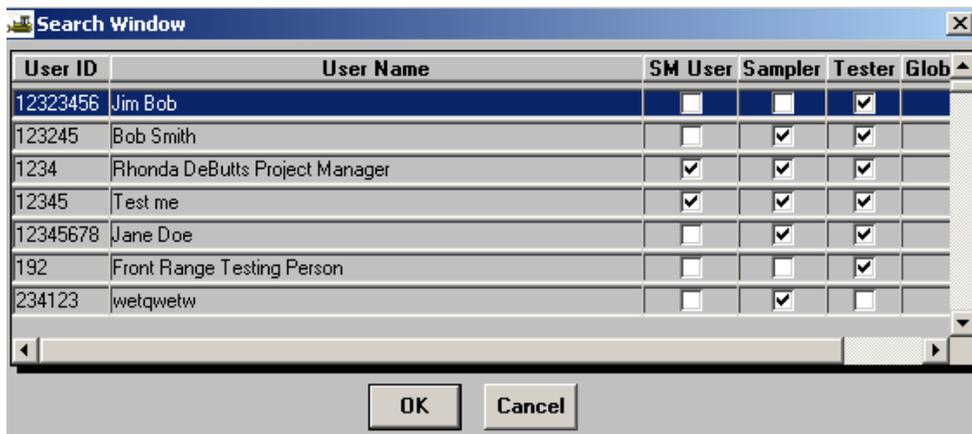


Figure 13-23 Search Window – Material User

To modify an existing material user:

1. On the **Approved List** panel, double-click the **Material User** icon.
2. Right click on the **User ID** field.
3. Click the **Search** choice.
4. In the list box, scroll to and click the desired user.
5. Press the **Tab** key to advance to the field to be modified.
6. Enter the desired change.
7. Click the **Save** button.

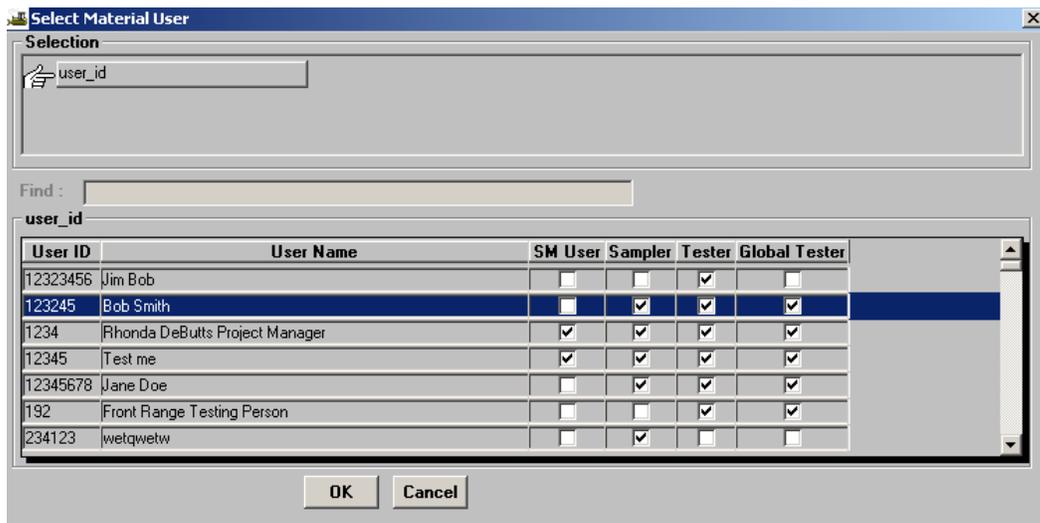


Figure 13-24 File Open – Material User Pick List

To review the Remarks of an existing user:

1. Click the **Services** menu and click the **Remarks** choice.

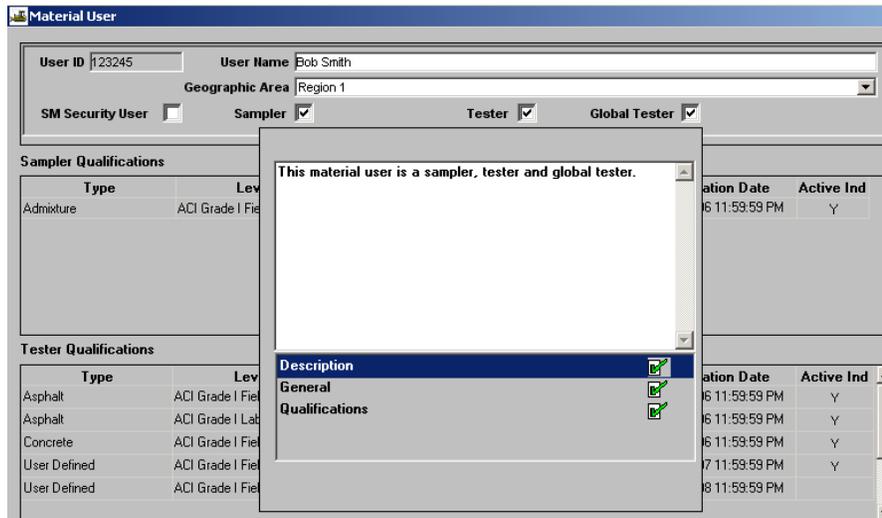


Figure 13-27 The Material User – Remarks

13.4.4 Sampler Qualifications

The Sampler Qualifications window can be accessed from the Approved List navigation panel. Inside the window, there is a menu and toolbar item to access Generic Fields, Address and Remarks.

A service menu option and a tool bar icon allow navigation to the Material User window directly from the Sampler Qualifications window. A new service menu option allows the copy of the selected qualification record to a new record.

A qualification is considered active when the Expiration Date is greater than or equal to the current system date/time. The Active Indicator field for each qualification record displays whether the qualification is active or not.

To open the Sampler Qualifications window:

1. On the **Approved Lists** panel, double-click the **Sampler Qualifications** icon.

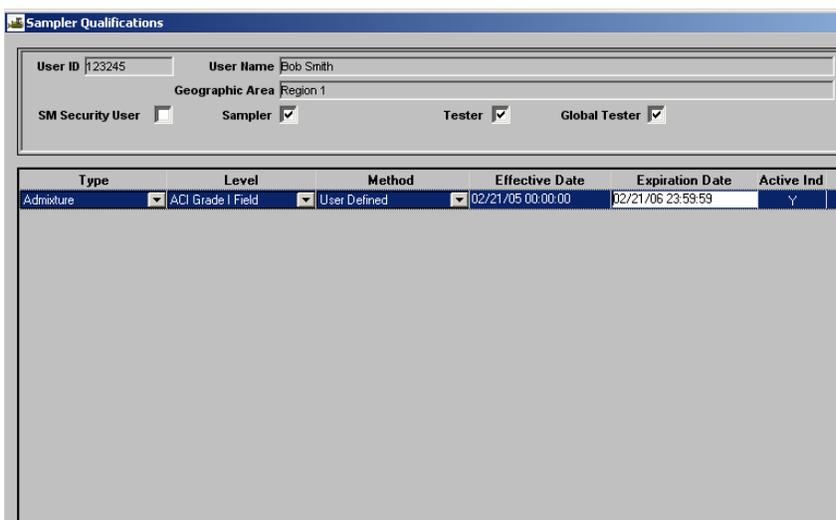


Figure 13-28 The Sampler Qualifications Window

Field Name	Description
User ID	The Transportation agency–defined ID for the Sampler. The UserID is not editable.
Name	Full name of the user ID that was selected by user. The name is not editable.
Geographic Area	Transportation agency-defined geographical unit where the Sampler is located. This column is not editable.
SM User	Indicator to specify whether the user is a SiteManager user or not.
Tester	Indicator to specify whether the user is a Tester or not.
Sampler	Indicator to specify whether the user is a Sampler or not.
Global Tester	Indicator to specify whether the user is a Global Tester or not
Active Indicator	Indicator to specify whether a qualification is active or not. This is a display only field. The value is not stored in the database. An empty space (' ') will be used for a 'pending active' qualification which means, the effective date is in the future.
Effective Date	Effective date for the qualification. On a new qualification row, the date will default to the current date.
Expiration Date	Expiration date for the qualification. This is a required field.

Table 13-17 The Sampler Qualification Fields Table

To add a new sampler qualification:

1. On the **Approval List** panel, double-click the **Sampler Qualifications** icon.
2. Click the **New** button.
3. In the **Qualification Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.

4. In the **Qualification Level** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
5. In the **Qualification Method** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
6. Press the **Tab** key.
7. The **Effective Date** field defaults to today's date. Type the effective date of the qualification if appropriate.
8. Press the **Tab** key.
9. In the **Expiration Date** field, type the expiration date of the qualification.
10. If appropriate, repeat steps 6-13 for additional qualifications.
11. Click the **Save** button.
12. Click **Ok**.

When the user clicks on menu item or tool bar item 'File Open', a list of users to choose from is displayed. The users displayed on this list must meet the following criteria – (1) The user is currently marked as a Sampler on the Material User window, OR (2) If a Sampler Qualification exists for the user, OR (3) If the user has been used ever as a sampler for any sample.

To add sampler qualification for an existing Sampler:

1. On the **Approved List** panel, double-click the **Sampler Qualifications** icon.
2. Click the **Open** button.
3. Click the desired inspector record.
4. Click **OK**.
5. In the lower half of the window, click to change the focus.
6. Click the **New** button.
7. In the **Qualification Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
8. In the **Qualification Level** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
9. In the **Qualification Method** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
10. Press the **Tab** key.
11. The **Effective Date** field defaults to today's date. Type the effective date of the qualification if appropriate.

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12. Press the **Tab** key.
13. In the **Expiration Date** field, type the expiration date of the qualification.
14. If appropriate, repeat steps 6-13 for additional qualifications.
15. Click the **Save** button.

A new service menu option allows the copy of the selected qualification record to a new record. The Effective Date of the copied record defaults to the current system date-time unless the row it originated from is active, in which case it will default to the originating record's Expiration date-time.

To copy a qualification record to a new record:

1. On the **Approved List** panel, double-click the **Sampler Qualifications** icon.
2. Click the **Open** button.
3. Click the desired inspector record.
4. Click **OK**.
5. Click the **Services** menu and click the **Copy Record**.

To review Generic Fields for Sampler Qualifications:

1. Click the **Services** menu and click the **Generic Fields** choice.

The screenshot shows a software window titled "Sampler Qualifications". At the top, there are input fields for "User ID" (containing "f123245") and "User Name" (containing "Bob Smith"). Below these is a "Geographic Area" dropdown menu set to "Region 1". A row of checkboxes includes "SM Security User" (unchecked), "Sampler" (checked), "Tester" (checked), and "Global Tester" (checked). A central panel, outlined in black, is titled "Generic Fields" and contains the following fields:

- Generic Number 1: [0.00]
- Generic Number 2: [0.00]
- Generic Number 3: [0.00]
- Generic Date 1: [00/00/00 00:00:00]
- Generic Date 2: [00/00/00 00:00:00]
- Generic Date 3: [00/00/00 00:00:00]
- Generic Indicator 1: []
- Generic Indicator 2: []
- Generic Indicator 3: []
- Generic Type 1: []
- Generic Type 2: []
- Generic Type 3: []
- Generic Short String 1: []
- Generic Short String 2: []
- Generic Short String 3: []
- Generic Long String 1: []
- Generic Long String 2: []
- Generic Long String 3: []

Figure 13-29 Sampler Qualifications – Generic Fields

To review Address from Sampler Qualifications:

1. Click the **Services** menu and click the **Address** choice.

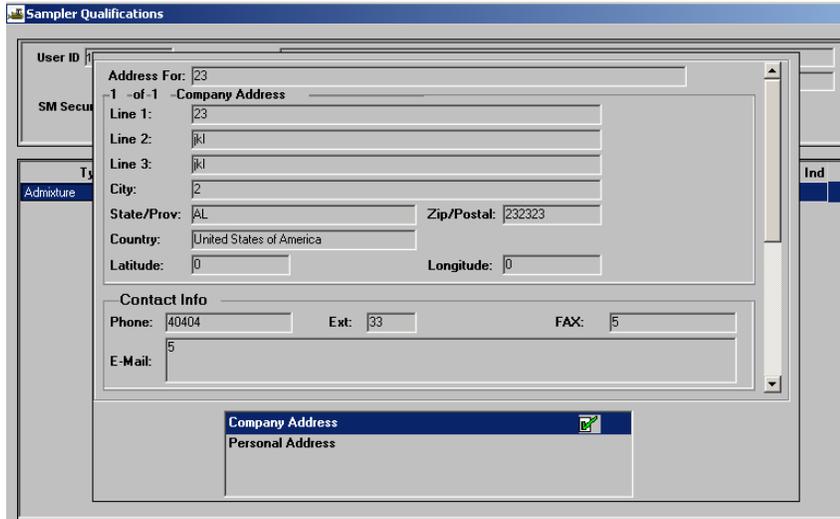


Figure 13-30 Sampler Qualifications – Address

To review **Remarks** for Sampler Qualifications:

1. Click the **Services** menu and click the **Remarks** choice.

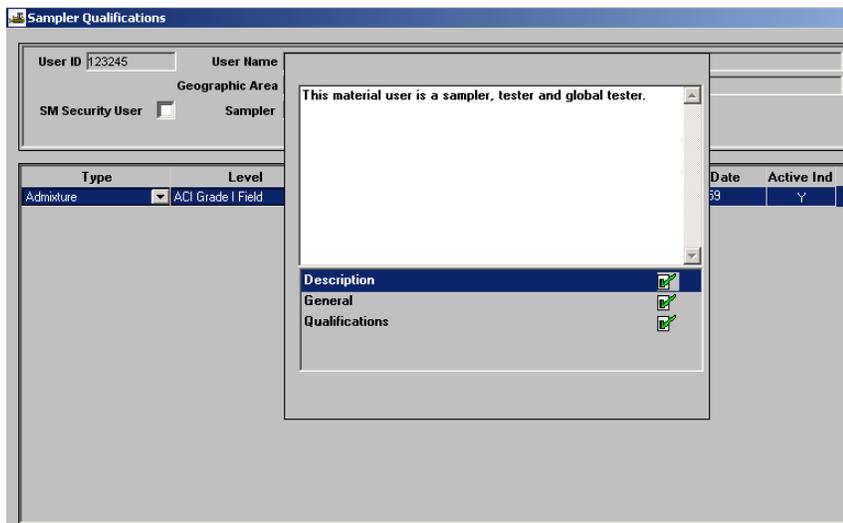


Figure 13-31 Sampler Qualifications – Remarks

13.4.5 Welders

The Welders window allows the addition and modification of welder personnel and their qualifications.

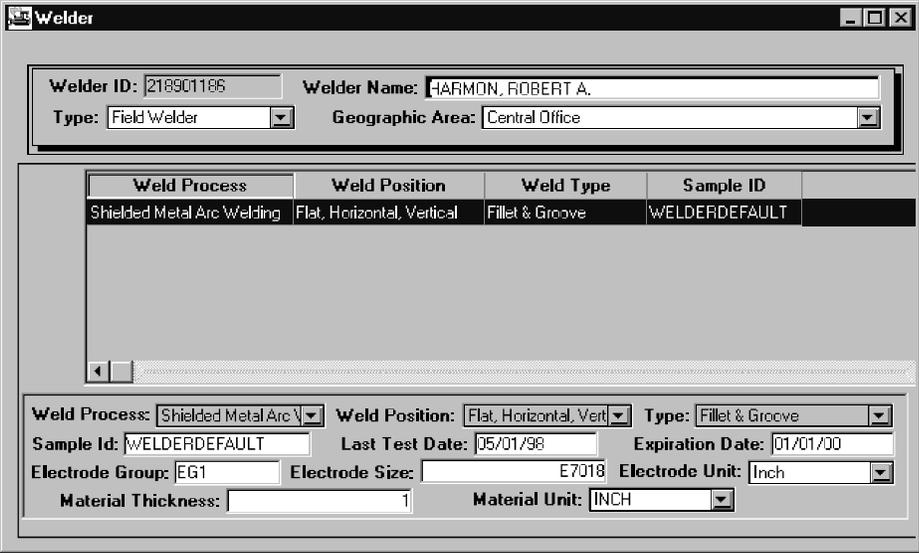


Figure 13-32 The Welders Window

Field Name	Description
Welder ID	The Transportation agency-defined ID of the welder .
Welder Name	The name of the Welder.
Type	The type of welder (e.g., Field, Shop, etc.)
Geographic Area	Transportation agency-defined geographical unit where the welder is located.
Weld Process	The process that the welder is qualified to perform.
Weld Position	The position the welder is qualified to perform on the given process.
Weld Type	The type of welding the welder is qualified to perform.

Field Name	Description
Last Test Date	The date when the Welder was last tested.
Sample ID	The sample on which the welder qualified.
Expiration Date	The date that the qualification expires.
Electrode Group	The group of electrodes upon which the qualification was done.
Electrode Size	The size of the electrode used for qualification
Electrode Size (Unit)	The unit of measure of the electrode.
Matl Thickness	The Thickness of the material on which qualification was done.
Matl Thickness (Unit)	The unit of measure of the Matl Thickness.

Table 13-18 The Welder Fields Table

To add a new welder:

1. On the **Approved List** panel, double-click the **Welder** icon.
2. In the **Welder ID** field, type the welder's ID.
3. Press the **Tab** key.
4. In the **Name** field, type the welder's name.
5. In the **Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
6. In the **Geographic Area** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
7. In the lower half of the window, click to change the focus.
8. Click the **New** button.
9. In the **Process** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.

10. In the **Position** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
11. In the **Weld Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
12. Press the **Tab** key.
13. Using the *right* mouse button, click the **Sample ID** field.
14. From the object menu, click the **Search** choice.
15. In the list box, scroll to and click the desired sample.
16. Click **Ok**.
17. Press the **Tab** key.
18. In the **Last Test Date** field, type the date of the last test.
19. Press the **Tab** key.
20. In the **Expiration Date** field, type the expiration date of the qualification.
21. Press the **Tab** key.
22. In the **Electrode Group** field, type the electrode group.
23. Press the **Tab** key.
24. In the **Electrode Size** field, type the electrode size.
25. In the **Electrode Size Unit** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
26. Press the **Tab** key.
27. In the **Material Thickness** field, type the thickness of the material.
28. In the **Material Thickness Unit** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
29. Repeat steps 8-28 for additional qualifications.
30. Click the **Save** button.

To modify an existing welder:

1. On the **Approved List** panel, double-click the **Welder** icon.
2. Click the **Open** button.
3. Click the desired welder record.

4. Click **OK**.
5. Press the **Tab** key to advance to the field to be modified.
6. Enter the desired change.
7. Click the **Save** button.

To add a new qualification for an existing welder:

1. On the **Approved List** panel, double-click the **Welder** icon.
2. Click the **Open** button.
3. Click the desired welder record.
4. Click **OK**.
5. In the lower half of the window, click to change the focus.
6. Click the **New** button.
7. In the **Process** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
8. In the **Position** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
9. In the **Weld Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
10. Press the **Tab** key.
11. Using the *right* mouse button, click the **Sample ID** field.
12. From the object menu, click the **Search** choice.
13. In the list box, scroll to and click the desired sample.
14. Click **Ok**.
15. Press the **Tab** key.
16. In the **Last Test Date** field, type the date of the last test.
17. Press the **Tab** key.
18. In the **Expiration Date** field, type the expiration date of the qualification.
19. Press the **Tab** key.
20. In the **Electrode Group** field, type the electrode group.
21. Press the **Tab** key.

22. In the **Electrode Size** field, type the electrode size.
23. In the **Electrode Size Unit** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
24. Press the **Tab** key.
25. In the **Material Thickness** field, type the thickness of the material.
26. In the **Material Thickness Unit** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
27. Repeat steps 6-26 for additional qualifications.
28. Click the **Save** button.

To delete a qualification for a welder:

1. On the **Approved List** panel, double-click the **Welder** icon.
2. Click the **Open** button.
3. Select the welders ID.
4. Click **OK**.
5. Click the qualification to be deleted.
6. Click the **Delete** button.
7. Click the **Yes** button.
8. Click the **Save** button.

13.4.6 Calibrated Equipment

The Calibrated Equipment window allows the addition and modification of calibration information for laboratory equipment.

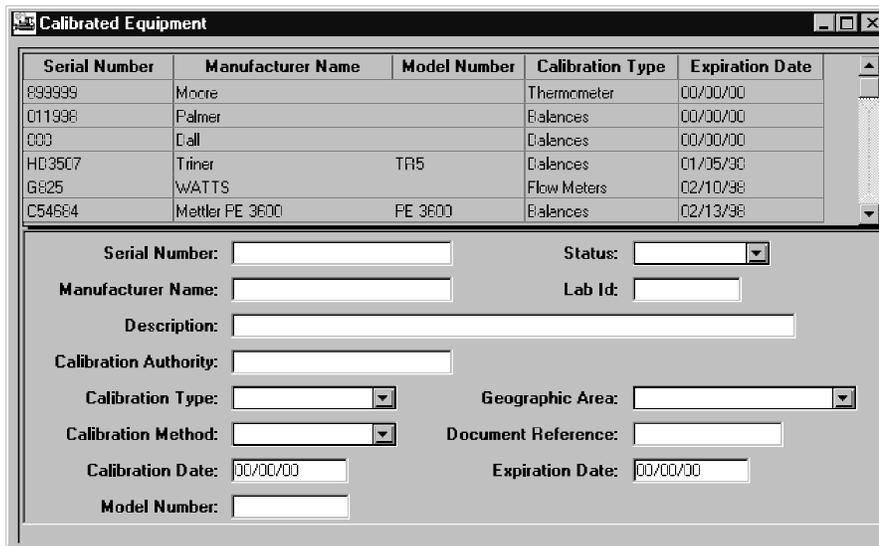


Figure 13-33 The Calibrated Equipment Window

Field Name	Description
Serial Number	Serial Number ID for the calibrated equipment.
Status	Indicates the status of the calibrated equipment (e.g., in use, available, surplus, etc.)
Manufacturer Name	Manufacturer of the equipment.
Lab ID	Transportation agency-defined ID the testing laboratory of the equipment.
Description	Description of the calibrated equipment.
Calibration Authority	This calibrating authority of the equipment.
Calibration Type	Identifies the type of calibration.
Geographic Area	Transportation agency-defined geographical unit where the lab is located.
Calibration Method	Method of calibration.

Field Name	Description
Document Reference	Identifies the document containing detail information.
Calibration Date	The date the equipment was calibrated.
Expiration Date	Expiration date of the equipment calibration.
Model Number	Model of the equipment.

Table 13-19 The Calibration Equipment Fields Table

To modify an existing calibrated equipment:

1. On the **Approved List** panel, double-click the **Calibrated Equipment** icon.
2. In the select list at the top, scroll to and click the desired calibrated equipment.
3. Press the **Tab** key to advance to the field to be modified.
4. Enter the desired change.
5. Click the **Save** button.

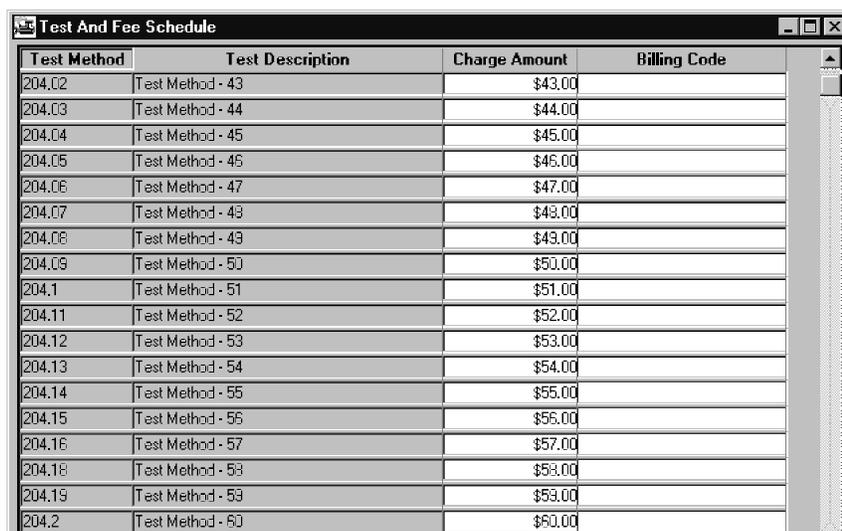
To add a new calibrated equipment:

1. On the **Approved List** panel, double-click the **Calibrated Equipment** icon.
2. Click the **New** button.
3. In the **Serial Number** field, type the serial number.
4. In the **Status** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
5. Press the **Tab** key.
6. In the **Manufacturer Name** field, type the name of the company that built the equipment.
7. Press the **Tab** key.
8. In the **Lab ID** field, type the ID of the lab where the equipment is located.
9. Press the **Tab** key.
10. In the **Description** field, type a description of the equipment.
11. Press the **Tab** key.

12. In the **Calibration Authority** field, type the description of the calibration authority.
13. In the **Calibration Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
14. In the **Geographic Area** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
15. In the **Calibration Method** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
16. Press the **Tab** key.
17. In the **Reference Document** field, type the reference document.
18. Press the **Tab** key.
19. In the **Calibration Date** field, type the date of the equipment calibration.
20. Press the **Tab** key.
21. In the **Expiration Date** field, type the expiration date of the calibration.
22. Press the **Tab** key.
23. In the **Model Number** field, type the model number of the equipment.
24. Click the **Save** button.

13.4.7 Test and Fee Schedule

The Test and Fee Schedule window allows the maintenance of testing fee information.



Test Method	Test Description	Charge Amount	Billing Code
204.02	Test Method - 43	\$43.00	
204.03	Test Method - 44	\$44.00	
204.04	Test Method - 45	\$45.00	
204.05	Test Method - 46	\$46.00	
204.06	Test Method - 47	\$47.00	
204.07	Test Method - 48	\$48.00	
204.08	Test Method - 49	\$49.00	
204.09	Test Method - 50	\$50.00	
204.1	Test Method - 51	\$51.00	
204.11	Test Method - 52	\$52.00	
204.12	Test Method - 53	\$53.00	
204.13	Test Method - 54	\$54.00	
204.14	Test Method - 55	\$55.00	
204.15	Test Method - 56	\$56.00	
204.16	Test Method - 57	\$57.00	
204.18	Test Method - 58	\$58.00	
204.19	Test Method - 59	\$59.00	
204.2	Test Method - 60	\$60.00	

Figure 13-34 The Testing and Fee Schedule Window

Field Name	Description
Test Method	The Transportation agency-defined ID for a test.
Test Description	The description of the test.
Charge Amount	The amount (positive number) charged to perform the test
Billing Code	The Transportation agency-defined billing code.

Table 13-20 The Testing and Fee Schedule Fields Table

To modify testing fee information:

1. On the **Approved List** panel, double-click the **Test and Fee Schedule** icon.
2. In the list box, scroll to and click the desired record.
3. Click the field to be modified.
4. Enter the desired change.
5. Click the **Save** button.

13.4.8 Producer/Supplier, Plants, and Materials

The Producer/Supplier icon allows the addition and modification of information on any organization that produces or supplies materials used by a transportation agency. This data is used for validation when entering sample data and material sources. Also, a producer/supplier is necessary for a material's sampling and testing requirements to be successfully added to a contract. Therefore, each material should have at least one producer/supplier identified.

Note: Attachments can be accessed from the description tab on the Producer/Supplier window.

For a Producer/Supplier, SiteManager allows the tracking of data for the:

- Producer/Supplier,
- Producer/Supplier Plants, and
- Producer/Supplier Approved Materials.

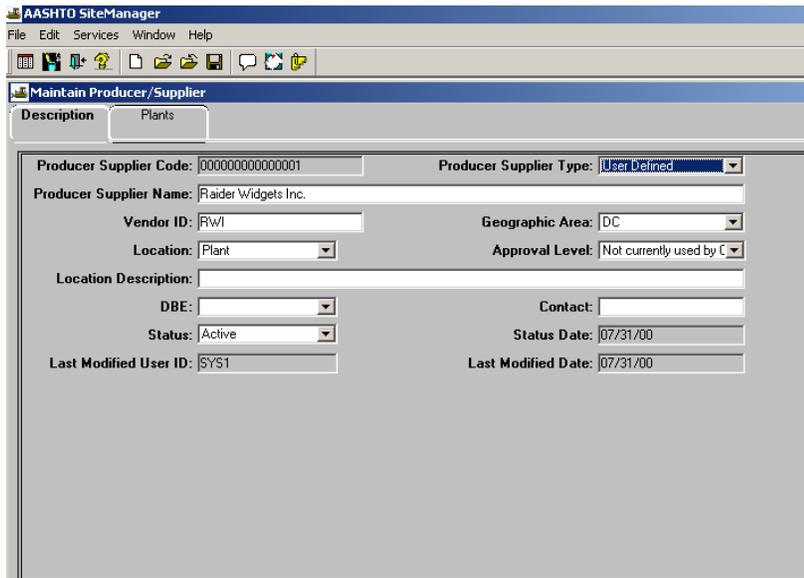


Figure 13-35 The Maintain Producer/Supplier Window

13.4.8.1 Producer/Supplier

The Producer/Supplier window allows the addition and modification of information on any organization that produces or supplies materials used by a transportation agency. This data is used for validation when entering sample data and material sources. This data will also allow verification, documentation, analysis and reporting for Quality Control/Quality Assurance (QC/QA) programs.

Field Name	Description
Producer Supplier Code	Transportation Agency-defined ID for a source/location of the material.
Producer Supplier Type	Identifies the type of source (e.g., producer, supplier, etc.)
Producer Supplier Name	The name of the source.
Vendor ID	Unique ID for a vendor. Generally, the company's Federal Tax ID.
Geographic Area	Transportation Agency-defined geographical region where the producer supplier is located.

Field Name	Description
Location	Source type of location (e.g., GIS, point, geodetic coordinates, etc.)
Approval Level	Source level of approval.
Location Description	The physical location.
DBE	Transportation Agency-defined code to indicate that the company has certification as a disadvantaged business enterprise or as some other historically disadvantaged group (e.g., DBE, MBE, WBE, etc.)
Contact	The name of the contact person.
Status	Indicates if the source is active or inactive.
Status Date	System captured date of when the status was changed.
Last Modified User ID	System captured user ID of last user to update record.
Last Modified Date	System captured date of when the last change was made.

Table 13-21 The Producer/Supplier Fields Table

To add a new producer/supplier:

1. On the **Approved List** panel, double-click the **Producer Supplier** icon.
2. In the **Producer/Supplier Code** field, type the code for the producer supplier.
3. In the **Producer Supplier Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
4. Press the **Tab** key.
5. In the **Producer/Supplier Name** field, type the vendor's name.
6. Press the **Tab** key.
7. In the **Vendor ID** field, type the vendor ID.

8. In the **Geographic Area** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
9. In the **Location** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
10. In the **Approval Level** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
11. Press the **Tab** key.
12. In the **Location Description** field, type the location description.
13. In the **DBE** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
14. Press the **Tab** key.
15. In the **Contact** field, type the contact person's name.
16. In the **Status** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
17. Click the **Save** button.

To modify an existing producer/supplier:

1. On the **Approved List** panel, double-click the **Producer Supplier** icon.
2. Click the **Open** button.
3. In the **Select Producer/Supplier** list, scroll to and click the desired producer supplier.
4. Click **Ok**.
5. In the **Producer Supplier Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
6. Press the **Tab** key.
7. In the **Producer/Supplier Name** field, type the vendor's name.
8. Press the **Tab** key.
9. In the **Vendor ID** field, type the vendor ID.
10. In the **Geographic Area** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
11. In the **Location** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
12. In the **Approved level** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.

13. Press the **Tab** key.
14. In the **Location Description** field, type the location description.
15. In the **DBE** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
16. Press the **Tab** key.
17. In the **Contact** field, type the contact person's name.
18. In the **Status** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
19. Click the **Save** button.

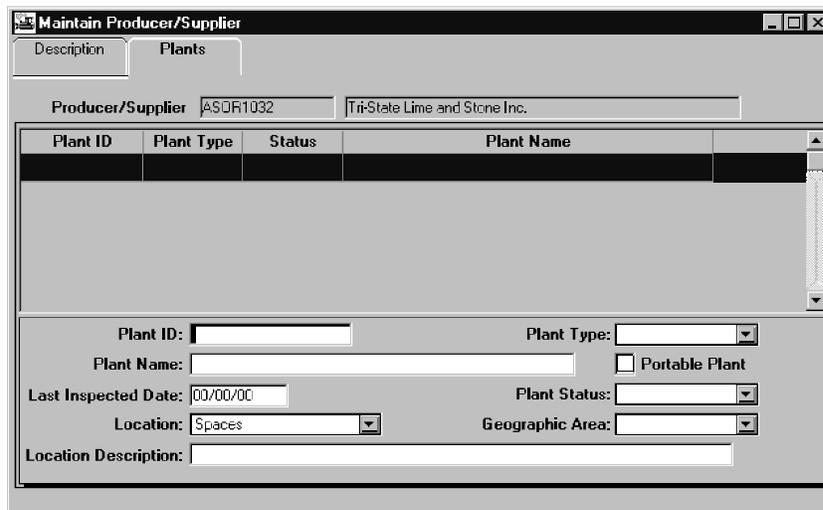


Figure 13-36 The Producer/Supplier Plant Folder Tab

13.4.8.2 Producer/Supplier Plants

The Producer/Supplier Plant window is used to add and update producer/supplier plants, pits and/or quarries provide materials to a transportation agency. The plant type field is used to distinguish between plants, pits, quarries, or other plants. This data is used for validation when entering sample data. It can also be used to determine when the last inspection of the plant was done.

Field Name	Description
Plant ID	Transportation agency-defined ID for a plant.
Plant Type	Identifies the type of plant, e.g., plant, pit, quarry, etc.

Field Name	Description
Plant Name	Name of the plant, pit or quarry.
Portable Plant	Indicates if the plant is portable.
Last Inspected Date	Date the plant was last inspected.
Plant Status	Identifies if the plant is active or inactive.
Location	Source type of location (e.g., GIS, point, geodetic coordinates, etc.)
Geographic Area	Transportation agency-defined geographical unit where the plant is located.
Location Description	Description of the physical location.

Table 13-22 The Producer/Supplier Plant Fields Table

To add a producer/supplier plant:

1. On the **Approved List** panel, double-click the **Producer Supplier** icon.
2. Add a producer supplier
3. Click the **Plants** folder tab.
4. In the **Plant ID** field, type the identification code for the plant.
5. Press the **Tab** key.
6. In the **Plant Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
7. In the **Plant Name** field, type the plant's name.
8. Press the **Tab** key.
9. Click the **Portable Plant** check box (ON), if applicable.
10. Press the **Tab** key.
11. In the **Last Inspected Date** field, type the date of the last inspection.

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12. In the **Plant Status** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
13. In the **Location Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
14. In the **Geographic Area** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
15. Press the **Tab** key.
16. In the **Location Description** field, type the description location.
17. Click the **Save** button.

To modify an existing producer/supplier plant:

1. On the **Approved List** panel, double-click the **Producer Supplier** icon.
2. Click the **Open** button.
3. Select the desired producer supplier record.
4. Click **Ok**.
5. Click the **Plants** folder tab.
6. In the select list at the top, scroll to and click the desired producer/supplier plant.
7. Press the **Tab** key to advance to the field to be modified.
8. Enter the desired change.
9. Click the **Save** button.

The screenshot shows a software window titled "Producer / Supplier Materials". At the top, there are two text boxes: "Producer/Supplier" containing "005" and "Dakotah Cement". Below this is a table with the following headers: "Material Code", "Material Full Name", "Material Category", and "Active". The table body is empty. Underneath the table is a form with several fields: "Material Code:" followed by a text box; "Material Category:" followed by a text box; "Approval Status:" followed by a dropdown menu; "Source Type:" followed by a dropdown menu; "Effective Date:" followed by a text box; "Expiration Date:" followed by a text box; "Sample ID:" followed by a text box; "Last Modified Date:" followed by a text box containing "00/00/00"; and "Last Modified User ID:" followed by a text box.

Figure 13-37 The Producer/Supplier Materials Window

13.4.8.3 Producer/Supplier Materials

The Producer/Supplier Materials window allows the addition and modification of approved materials for a specified producer/supplier. The producer/supplier materials data is used for validation when entering sample data and during the Materials Generation process. An approved product can also have Remarks attached to it.

The Producer/Supplier Materials window also tracks expiration dates/times for materials and makes the material active or inactive for a given Producer/Supplier.

For a material’s sampling and testing requirements to be monitored, it must have a producer/supplier identified. However, a producer/supplier does not have to be identified for a material’s sampling and testing requirements to be successfully added to a contract during the Materials Generation process. The producer/suppliers may be identified for the testing requirements after the Generation.

Field Name	Description
Active	This indicator designates all Active materials, based on expiration date.
Material Code	Transportation Agency-defined ID for a material. The material Code must have an active status
Material Full Name	Full description of material.
Material Category Type	The category into which the material is logically grouped in a Transportation Agency-defined list (e.g., aggregates, admixtures, reinforcing steel, pipe, etc.)
Approval Status Type	Identifies the approval status. Values come from a Transportation Agency-defined list (e.g., approved, acceptable, pending, etc.)
Source Type	Identifies the source type (e.g., concrete plant, asphalt plant, etc.)
Effective Date	Effective date the material became active for the Producer/Supplier. Defaults to current date when a new material is added and must be less than Expiration Date. The Effective Date may be greater than the expiration date of a previous inactive row of the same material, if present.
Expiration Date	Expiration date of the approved material for Producer/Supplier. Expiration Date must be greater than the Effective Date, when entered.

Field Name	Description
Sample ID	ID for the sample used to approve the material.
Last Modified User ID	System captured user ID of last user to update record.
Last Modified Date	System captured date of when the last change was made.

Table 13-23 The Producer/Supplier Materials Fields Table

To add a new producer/supplier material:

1. On the Approved List panel, double-click the Producer Supplier Material icon.
2. Click the desired producer/supplier record.
3. Click OK.
4. Click the New button.
5. Using the *right* mouse button, click the Material Code field.
6. From the object menu, click the Search choice.
7. Click the desired material record.
8. Click OK.
9. In the Approved Status Type drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
10. In the Source Type drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
11. Press the Tab key.
12. In the Effective Date field, type the effective date of the material, if appropriate.
13. Press the Tab key.
14. In the Expiration Date field, type the expiration date of the material, if applicable.
15. Using the *right* mouse button, click the Sample ID field.
16. From the object menu, click the Search choice.
17. Click the desired sample ID record.
18. Click OK.

19. Click the Save button.

To modify an existing producer/supplier material:

1. On the Approved List panel, double-click the Producer Supplier Material icon.
2. Click the desired producer/supplier record.
3. Click OK.
4. In the select list at the top, scroll to and click the desired producer/supplier material.
5. Press the Tab key to advance to the field to be modified.
6. Enter the desired change.
7. Click the Save button.

13.4.9 Qualified Labs

The Qualified Labs Icon allows the addition and maintenance of the laboratories qualified to test samples and the tests they are qualified to perform for a transportation agency.

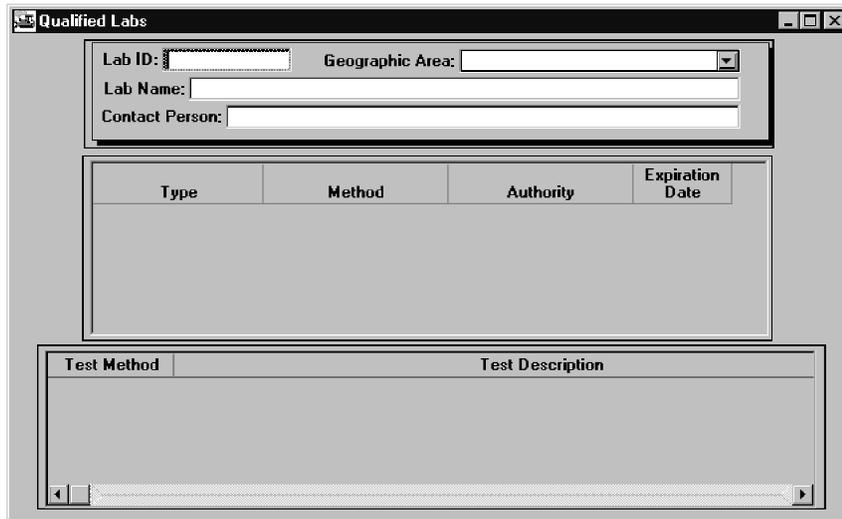


Figure 13-38 The Qualified Labs Window

Field Name	Description
Lab ID	Transportation agency-defined ID for the lab.
Geographic Area	Transportation agency-defined geographical unit where the lab is located.
Name	The name of the lab.
Contact Person	The name of the lab's contact person.
Type	The type of qualification.
Method	The method of qualification used.
Authority	The authority by which the qualification was judged.
Expiration Date	The date the qualification expires.
Test Method	The Test Method.
Test Description	The Description of the Test.

Table 13-24 The Qualified Labs Fields Table

To add a new lab:

1. On the **Approved List** panel, double-click the **Qualified Labs** icon.
2. In the **Lab ID** field, type the lab's ID.
3. In the **Geographic Area** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
4. Press the **Tab** key.
5. In the **Lab Name** field, type the lab's name.
6. Press the **Tab** key.

7. In the **Contact Person** field, type the contact person's name.
8. Click the **Save** button.
9. In the middle portion of the window, click to change the focus to the test qualification section.
10. Click the **New** button.
11. In the **Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
12. In the **Method** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
13. In the **Authority** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
14. Press the **Tab** key.
15. In the **Expiration Date** field, type the expiration date of the qualification.
16. Click the **Save** button.
17. In the lower portion of the window, click to change the focus.
18. Click the **New** button.
19. In the list box, scroll to and click the desired test method.
20. Click **Ok**.
21. Repeat steps 18-20 until all test methods have been added *for this test qualification*.
22. Click the **Save** button.
23. Repeat steps 9-22 until all test qualifications and applicable test methods have been added.

To modify an existing lab:

1. On the **Approved List** panel, double-click the **Qualified Labs** icon.
2. Click the **Open** button.
3. In the list box, scroll to and click the desired lab.
4. Click **OK**.
5. Press the **Tab** key to advance to the field to be modified.
6. Enter the desired change.
7. Click the **Save** button.

To add a new test qualification (and its methods) for a lab:

1. On the **Approved List** panel, double-click the **Qualified Labs** icon.
2. Click the **Open** button.
3. In the list box, scroll to and click the desired lab.
4. Click **OK**.
5. In the middle portion of the window, click to change the focus to the test qualification section.
6. Click the **New** button.
7. In the **Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
8. In the **Method** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
9. In the **Authority** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
10. Press the **Tab** key.
11. In the **Expiration Date** field, type the expiration date of the qualification.
12. Click the **Save** button.
13. In the lower portion of the window, click to change the focus to the test method.
14. Click the **New** button.
15. In the list box, scroll to and click the desired test method.
16. Click **Ok**.
17. Repeat steps 14-16 until all test methods have been added *for this test qualification*.
18. Click the **Save** button.
19. Repeat steps 5-18 until all test qualifications and applicable test methods have been added.

To add a new test method to an existing test qualification for a lab:

1. On the **Approved List** panel, double-click the **Qualified Labs** icon.
2. Click the **Open** button.
3. In the list box, scroll to and click the desired lab.
4. Click **OK**.
5. In the middle portion of the window, click to change the focus to the test qualification section.

6. In the select list in the middle portion of the window, scroll to and click the desired test qualification.
7. In the lower portion of the window, click to change the focus.
8. Click the **New** button.
9. In the list box, scroll to and click the desired test method.
10. Click **Ok**.
11. Repeat steps 8-10 until all test methods have been added *for this test qualification*.
12. Click the **Save** button.

To delete a test method for a lab:

1. On the **Approved List** panel, double-click the **Qualified Labs** icon.
2. Click the **Open** button.
3. In the list box, scroll to and click the desired lab.
4. Click **OK**.
5. In the middle portion of the window, click to change the focus to the test qualification section.
6. In the select list in the middle portion of the window, scroll to and click the desired test qualification.
7. In the lower portion of the window, click to change the focus.
8. In the select list in the middle portion of the window, scroll to and click the desired test method.
9. Click the **Delete** button.
10. Click the **Yes** button.
11. Click the **Save** button.

13.4.10 Tester Qualifications

The Tester Qualifications window will be used to maintain Qualifications for a Tester. This also includes the tester's qualifications for Test Methods.

The top data window panel of the window will display information from the new Material User table. All the fields in this data window will be read-only. The user can also use menu options and toolbar icons to access Generic Fields, Address and Remarks information for the Material user. All the information related to the Material user, except the Remarks, will be read-only from this window. A user will be able to enter or modify Remarks from this window.

A qualification is considered active when the Expiration Date is greater than or equal to the current system date/time. A new field called Active Indicator has been added for each qualification record to display whether the qualification is active or not.

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A service menu option is available to allow the copy of a selected qualification record to create a new qualification record.

The screenshot shows the 'Tester Qualifications' window. At the top, there are input fields for 'User ID' (123245), 'User Name' (Bob Smith), and 'Geographic Area' (Region 1). Below these are checkboxes for 'SM Security User' (unchecked), 'Sampler' (checked), 'Tester' (checked), and 'Global Tester' (checked). The main part of the window is a table with columns: Type, Level, Authority, Effective Date, Expiration Date, and Active Ind. Below the table is a section for 'Test Meth' and 'Test Description'.

Type	Level	Authority	Effective Date	Expiration Date	Active Ind
Asphalt	ACI Grade I Field	Colorado Contractors Ass	03/08/05 00:00:00	03/08/06 23:59:59	Y
Asphalt	ACI Grade I Lab	AASHTO	03/08/05 00:00:00	03/08/06 23:59:59	Y
Concrete	ACI Grade I Field	American Concrete Institu	03/08/05 00:00:00	03/08/06 23:59:59	Y
User Defined	ACI Grade I Field	AASHTO	02/10/04 00:00:00	12/31/07 23:59:59	Y
User Defined	ACI Grade I Field	AASHTO	01/01/08 00:00:00	12/31/08 23:59:59	
User Defined	ACI Grade I Field	AASHTO	01/01/09 00:00:00	01/01/10 23:59:59	
Asphalt	ACI Grade II Lab	Central Lab	03/08/02 00:00:00	03/08/02 23:59:59	N
Liquid Bituminous	ACI Grade I Field	AASHTO	03/08/01 00:00:00	03/08/01 23:59:59	N

Figure 13-39 The Tester Qualifications Window

Field Name	Description
User ID	The Transportation agency-defined ID of the testing person.
Geographic Area	This is the geographic area in which the testing person is located.
Name	The name of the testing person.
SM User	Indicator to specify whether the user is a SiteManager user or not.
Sampler	Indicator to specify whether the user is a Sampler or not.
Tester	Indicator to specify whether the user is a Tester or not.
Global Tester	Indicator to specify whether the user is a Global Tester or not
Active Indicator	Indicator to specify whether a qualification is active or not. This is a display only field. The value is not stored in the database. An empty space (' ') will be used for a 'pending active' qualification which means, the effective date is in the future.

Field Name	Description
Type	The type of qualification.
Level	The level of qualification.
Authority	The authority by which qualification was judged.
Effective Date	The date when the qualification became effective. On a new qualification row, the date will default to the current date.
Expiration Date	The date when the qualification expires. This is a required field.
Test Method	The Test Method.
Test Description	The Description of the Test.

Table 13-25 The Tester Qualifications Table

To add a new test qualification for an existing Material User:

1. On the **Approved List** panel, double-click the **Tester Qualifications** icon.
2. Click the **Open** button.
3. In the **Select Tester** list, scroll to and click the desired tester.
4. Click **OK**.
5. In the middle portion of the window, click to change the focus to the test qualification section.
6. Click the **New** button.
7. In the **Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
8. In the **Level** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
9. In the **Authority** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
10. Press the **Tab** key.

11. In the **Effective Date** field, type the date of the qualification became effective.
12. Press the **Tab** key.
13. In the **Expiration Date** field, type the expiration date of the qualification.
14. Click the **Save** button.

To add a new test method to a qualification for an existing tester:

1. On the **Approved List** panel, double-click the **Testing Qualification** icon.
2. Click the **Open** button.
3. In the **Select Tester** list, scroll to and click the desired tester.
4. Click **OK**.
5. In the middle portion of the window, click to change the focus to the test qualification section.
6. In the select list in the middle portion of the window, scroll to and click the desired test qualification.
7. Click the **New** button.
8. In the **Select Test** list, scroll to and click the desired test method.
9. Click **Ok**.
10. Repeat steps 7-9 until all test methods have been added *for this test qualification*.
11. Click the **Save** button.

To delete a test method for a tester qualification:

1. On the **Approved List** panel, double-click the **Tester Qualifications** icon.
2. Click the **Open** button.
3. In the **Select Test** list, scroll to and click the desired test method.
4. Click **OK**.
5. In the middle portion of the window, click to change the focus to the test qualification section.
6. In the select list in the middle portion of the window, scroll to and click the desired test qualification.
7. In the **Select Test** list, scroll to and click the desired test method.
8. Click the **Delete** button.
9. Click the **Yes** button.
10. Click the **Save** button.

To review Generic Fields for Tester Qualifications:

1. Click the **Services** menu and click the **Generic Fields** choice.

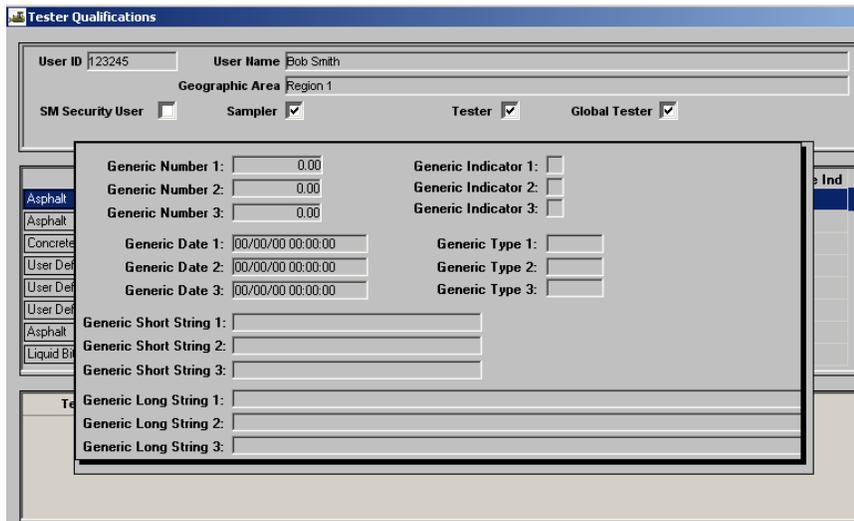


Figure 13-40 Tester Qualifications – Generic Fields

To review Address from Tester Qualifications:

1. Click the **Services** menu and click the **Address** choice.

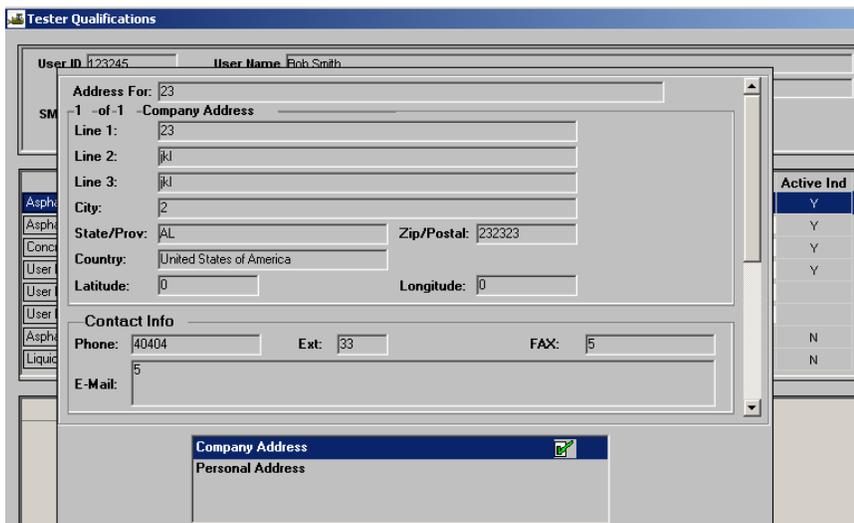


Figure 13-41 Tester Qualifications – Address

To review **Remarks** for Tester Qualifications:

1. Click the **Services** menu and click the **Remarks** choice.

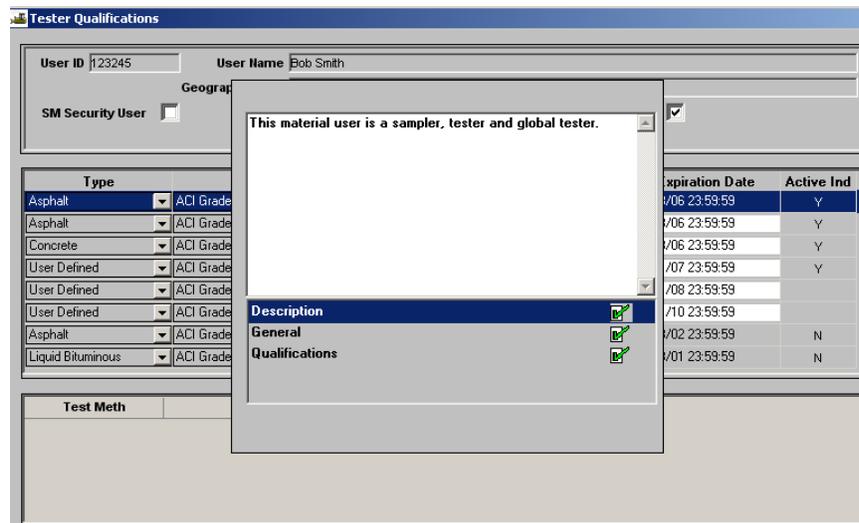


Figure 13-42 Sampler Qualifications – Remarks

13.5 Approved Lists Reports

The Approved Lists Reports panel generates commonly used Approved List reports.

The PowerBuilder reports listed below, which are affected due to the base table changes in this enhancement and those from the SiteManager Contract Sampling & Testing enhancement, will not be modified and the reports will be removed from the SiteManager panel and documentation.

- 1) Materials Expiring for Sources report.
- 2) Material Sources Report.
- 3) Producer/Supplier Materials Report.
- 4) Contract Producer/Supplier (Exceptions) Report.
- 5) Failing Samples Report
- 6) Inspectors Report.
- 7) Testing Personnel Report.
- 8) Approved Material Report.

- 9) Welders Report.
- 10) Approved Material Expiring Report.
- 11) Producer/Supplier Report.

The following report topics are available on this panel:

Qualified Labs Report,
Calibrated Equipment Report,
Tests and Fee Schedule Report,
Welders Report and,
View Saved Report (PSR).

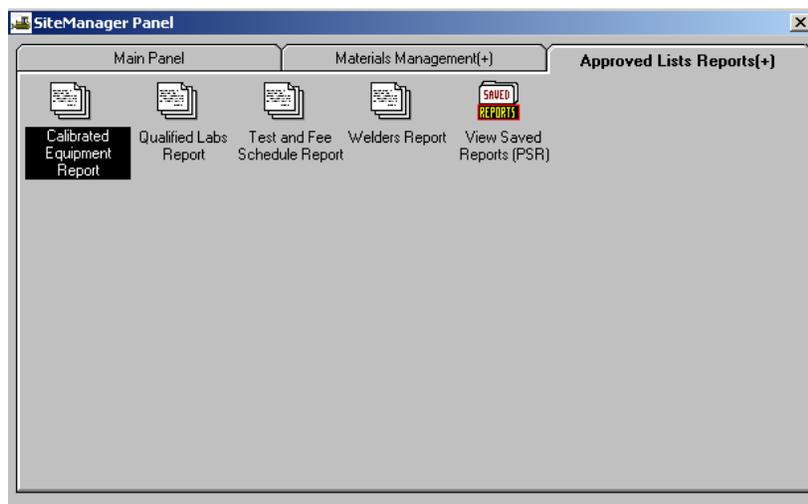


Figure 13-43 The Materials Management Approved List Reports Panel

To generate an approved list report:

1. Double-click the desired report icon.
2. Select the criteria.
3. To generate the report on-line, click **Ok**.

Or

To generate the report off-line to a file, click the **Generate Off-line File** check box (ON).

1. Click **Ok**.

Or

To generate and print the report off-line, click the **Generate Off-line Print** check box (ON).

2. Click **Ok**.

To make selections in the **Report Criteria** dialog:

1. Click the desired radio button to select the desired format.

By Summary selects all items

By Criteria (field name) selects an individual field

In a **By Criteria (field name)** format:

2. Using the *right* mouse button, click the field.
3. Perform a **Search** using the object menu (referenced in the Getting Started section).
4. Click **OK**.

13.5.1 Report Options

The report options are available as toolbar buttons or menu options for reports that have been generated on-line.

Components	Description
Close button	Closes the report preview.
Save button	In a simple report (see Save Reports section) invokes the Save dialog allowing the report to be saved in a .PSR file format.
Print button	Prints the report.
Prior button	Displays the prior page of a multi-page selection.
Next button	Displays the next page of a multi-page selection.
Zoom spin button	Magnifies or reduces the display of the report preview.
Copies spin button	Allows more than one copy of the report to be printed.

Table 13-26 The Report Components Table

13.5.2 Saving and Exporting Simple Reports

There are two types of reports in SiteManager — simple reports and complex reports. Simple report can be saved and exported, but complex reports cannot. It is easy to identify a simple report — the File menu's Save choice (or the Save button) and the Service menu's Export choice will be active for a simple report. They will not be active for a complex report.

For procedures on saving, opening, and exporting a report, please refer to the General Concepts section.

13.5.3 View Saved Reports (PSR)

A saved simple report can be viewed using the View Saved Reports (PSR) icon. For procedures on opening and viewing a saved report, please refer to the General Concepts section.

13.6 Contract Materials

After a contract has been initialized in SiteManager, the Contract Materials component allows the creation of Sampling and Testing Requirements, creation of Sampling and Testing Requirement Materials, or generation of an Outstanding Item List for a selected contract. SiteManager can identify the items on the contract that do not have defined Sampling and Testing Requirements. Through a background process, SiteManager generates Contract Sampling and Testing Requirements and Contract Sampling and Testing Requirement Materials records for the items that have materials for the specified contract. A notice of the generation is sent via an In-Box Message. After the process is complete, sampling and testing requirements may be modified through the Contract Sampling and Testing Requirements component of SiteManager. The Contract Change Order component would handle changes in material.

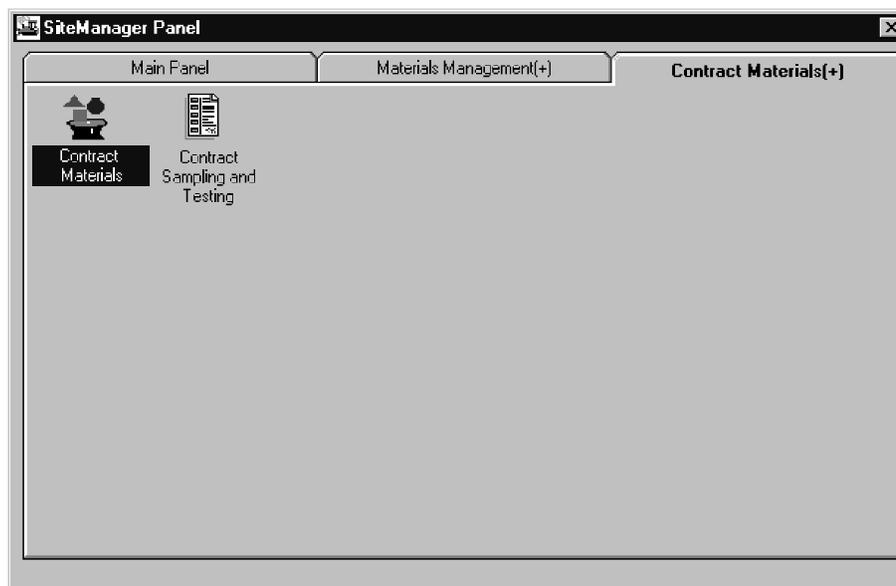


Figure 13-44 The Contract Materials Panel

To access the Contract Materials panel:

1. On the **Materials Management** panel, double-click the **Contract Materials** icon.

13.6.1 Building the Contract Materials List

After a contract has been initialized in SiteManager, the Contract Materials window allows the creation of Sampling and Testing Requirements for the Contract, creation of Sampling and Testing Requirement Materials, or generation of an Outstanding Item List for a selected contract. By selecting the Outstanding Items List button, the items on the contract that do not have defined Sampling and Testing Requirements can be identified. When the Generate button is selected, the Generate Contract Requirements background process is initiated. Contract Sampling and Testing Requirements and Contract Sampling and Testing Requirement Materials records are created for the items that have materials for the specified contract. Upon completion of the generate sampling and testing requirements background process, a notice is sent via an In-Box.

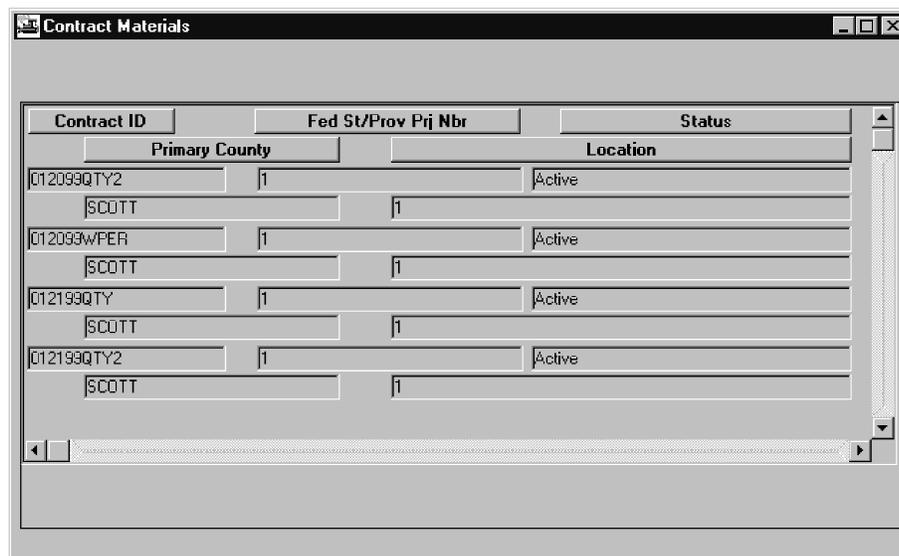


Figure 13-45 The Contract Materials Window

Once the generation is complete a contract's sampling and testing requirements may be modified through the Contract Sampling and Testing Requirements component during the life of the contract. An essential step that must be taken after generation is the selection of a producer/supplier for each requirement. A producer/supplier is necessary for each material's contract sampling and testing requirement so that it may be monitored on the contract.

When a new Item is added to the Contract by the Change Order process, Contract Sampling and Testing Requirements records will automatically be generated for each material of the Item when the Change Order is approved.

Field Name	Description
Prim District	The district with primary responsibility to administer the contract.
Contract ID	The contract ID.
Fed St/Prov Prj Nbr	The federal state/province project number that identifies the contract.
Status	The current status of the contract.
County	The contract's primary county.
Location	The description of the contract's work location.

Table 13-27 The Contract Material Fields Table

To generate the Contract Sampling and Testing Requirements:

2. On the **Contract Materials** panel, double-click the **Contract Materials** icon.
3. In the **Contracts** list box, scroll to and click the desired contract.
4. Click **Ok**.
5. Click the **Generate** button.
6. Click the **Close** button.

To generate the Sampling and Testing Requirements Materials:

1. On the **Contract Materials** panel, double-click the **Contract Materials** icon.
2. In the **Contracts** list box, scroll to and click the desired contract.
3. Click **Ok**.
4. Click the **Outstanding Item** button.
5. Click the **Close** button.

13.6.2 Maintaining Contract Materials List

The Contract Change Order component of SiteManager would handle changes in materials. When a new Item is added to the Contract by the Change Order process, Contract Sampling and Testing Requirements records will automatically be generated for each material of the Item when the Change Order is approved.

For more information, refer to Section 8, Change Orders.

13.6.3 Contract Sample and Testing Requirements

After the Contract Materials List generation is complete, sampling and testing requirements may be modified through the Contract Sampling and Testing Requirements icon. The main purpose of this process is to provide the ability to make changes to materials contained within a contract line item and the contract sampling and testing requirements for that material. This includes adding the producer/supplier of a material, material substitutions, conversion factor changes and testing requirement changes. Sample and Testing Requirements may change throughout the life of the contract.

To access Contract Sampling and Testing Requirements:

1. On the Contract Materials panel, double-click the Contract Sampling and Testing icon.

13.6.3.1 Materials Folder Tab

The Material folder tab allows the specification of the conversion factor and approved source required indicator for a selected material on a bid item. If necessary, the Material can also be viewed from this window.

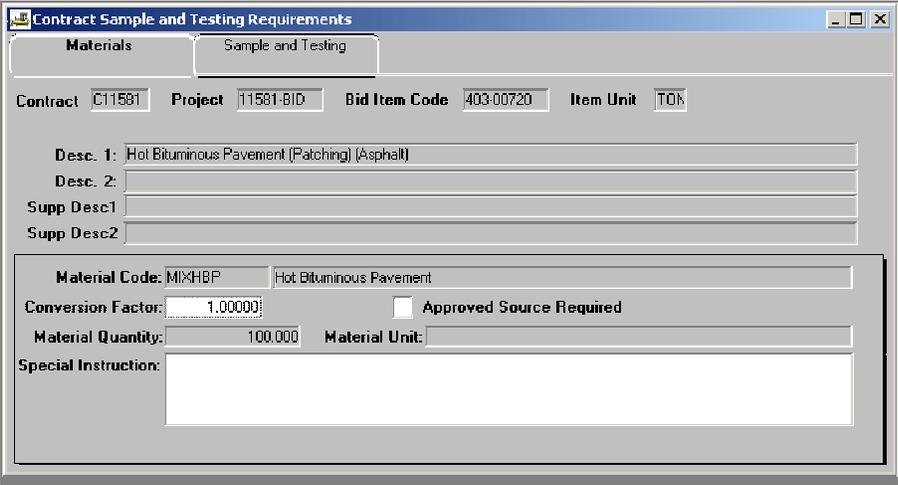


Figure 13-46 The Material Folder Tab

Field Name	Description
Material Code	The ID for a material.
Conversion Factor	This is used by the required samples calculation to convert current quantity to required quantity.
Approved Source Required Indicator	This indicates whether or not an approved source must be used here. Depending upon the System Operational Parameters settings, this field may be hidden.
Material Unit	The description of the material’s unit of measure. Depending upon the System Operational Parameters settings, the field will either be protected or the user will be allowed to pick from a drop down list of units.
Special Instructions	This is the special instruction for the material on the contract. This will be passed from the Material Sampling and Testing Requirements window.

Table 13-28 The Materials Window Fields Table

To modify a material code for a bid item:

2. On the Contract Materials panel, double-click the Contract Sampling and Testing icon.
3. In the list box, scroll to and double-click the desired Contract.
4. In the list box, scroll to and double-click the desired Project/Line Item.
5. In the list box, scroll to and click the desired Material.
6. Click Ok.
7. In the Conversion Factor field, type desired value.
8. If desired, click the Approved Source Require check box (ON).
9. Click the Save button.

To add material code for a bid item:

1. On the Contract Materials panel, double-click the Contract Sampling and Testing icon.
2. Click the Service menu and click the Choose Keys choice.
3. In the Item list box, scroll to and click the desired item.

4. Click Ok.
5. Using the *right* mouse button, click the Material Code field.
6. Perform a Search using the object menu (referenced in the Getting Started section).
7. Click Ok.
8. Press the Tab key.
9. In the Conversion Factor field, type desired value.
10. If desired, click the Approved Source Require check box (ON).
11. Click the Save button.

To view the material:

1. On the Contract Materials panel, double-click the Contract Sampling and Testing icon.
2. Open or select the material.
3. Click the Services menu and click the View Material choice.
4. When complete, click the Close button.

13.6.3.1.1 Materials Copy Capabilities

Like the Sampling and Testing Requirements window, the Materials folder tab of the Contract Sampling and Testing Requirements window has an unusual copy capability. The Service menu's Copy Records choice allows the user to copy the sampling and testing requirements of a contract item's material to a new material for the same item, but only if the sampling and testing requirements are applicable for the material. Also, the sampling and testing requirements of a contract item's material cannot be copied to another material that is already associated to the contract item.

The Service menu's Copy Item Records capability allows the user to copy the materials of an item (and their sampling and testing requirements) to another item on the same contract.

To copy the material records:

1. On the Contract Materials panel, double-click the Contract Sampling and Testing Requirements icon.
2. Open the Contract item's material.
3. Click the Services menu and click the Copy Records choice.
4. Using the *right* mouse button, click the Material field.
5. In the list box, scroll to and click the desired material
6. Click Ok.

To copy the material item records:

1. On the Contract Materials panel, double-click the Contract Sampling and Testing Requirements icon.
2. Open a Contract item’s material.
3. Click the Services menu and click the Copy Item Records choice.
4. In the list box, scroll to and click the item choice.
5. Click Ok.

Tip: On the Contract Sampling and Testing Requirements window, the materials of an item (and their sampling and testing requirements) cannot be copied to an item on a different contract.

13.6.3.2 Sampling and Testing Folder Tab

The Sampling and Testing tab allows the modification of a materials sample and testing information for a given bid item. The top portion of the tab allows the user to pick which of the sets of detail needs to be edited. The bottom portion allows the user to edit the information.

Producer Supplier Code	Sample Type	Acceptance method	Test Method
M0000	Acceptance	Certificate of Compliance	PF-CP-22

Figure 13-47 The Sampling and Testing Folder Tab

Field Name	Description
Producer/Supplier Code	The name of the producer/supplier. This field may be optional, dependent upon the System Operational Parameter settings.
Sample Type	Identifies the type of the test begin performed (e.g., acceptance, job control, manufacturers, certification, visual, etc.) This field may be optional, dependent upon the System Operational Parameter settings.
Acceptance Method	Identifies how the material will be accepted on the contract (e.g., manufacturer certification, brand name, etc.) This field may be optional, dependent upon the System Operational Parameter settings.
Test Method	Method used for testing the material (e.g., T11, T27, T84, etc.) This field may be optional, dependent upon the System Operational Parameter settings.
Producer/Supplier Code	The Producer/Supplier ID
Sample Location	The area from which to collect the sample (e.g., roadside, plant, truck, stockpile, etc.)
Sample Frequency	The rate at which a sample must be collected.
Sample Size	The size of the sample.
Sample Unit	The unit of measure for a sample (e.g., mm, feet, yards, inches)
Sample Responsibility	A Transportation agency-defined value identifying the level responsible for taking the sample (e.g., project engineer, inspector, central test lab, etc.)
Test Responsibility	A Transportation agency-defined value identifying the entity responsible for processing the test (e.g., local test lab, central test lab, etc.)

Table 13-29 The Sampling and Testing Folder Tab Fields Table

To add sampling and testing requirements to the material for a bid item:

1. On the Contract Materials panel, double-click the Contract Sampling and Testing icon.
2. Open or add a material for a bid item.
3. Click the Sample and Testing folder tab.
4. If necessary, click the **New** button.
5. In the Producer Supplier Code field, use the *right* mouse button to perform a Search using the object menu. Click the desired choice and click OK.
6. In the Sample Type drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
7. In the Acceptance Method drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
8. In the Test Method field, use the *right* mouse button to perform a Search using the object menu. Click the desired choice and click OK.
9. Press the Tab key.
10. Type the number of Samples that should be taken per a specific quantity of Items installed
11. In the Sample Location drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
12. Press the Tab key.
13. In the Sample Frequency field, type the desired value.
14. In the Sample Units drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
15. Press the Tab key.
16. In the Sample Size field, type the desired value.
17. In the Sample Responsibility drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
18. In the Test Responsibility drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
19. Click the Save button.

To modify sampling and testing requirements of the material for a bid item:

1. On the Contract Materials panel, double-click the Contract Sampling and Testing icon.
2. Open a material for a bid item.

3. Click the Sample and Testing folder tab.
4. In the list at the top of the window, click the desired sampling and testing requirement record.
5. Press the Tab key to advance to the field to be modified.
6. Enter the desired change.
7. Click the Save button.

13.6.4 Contract Materials Reports

The Contract Materials Reports panel generates commonly used Contract Materials reports. The following report topics are available on this panel:

View Saved Reports (PSR)

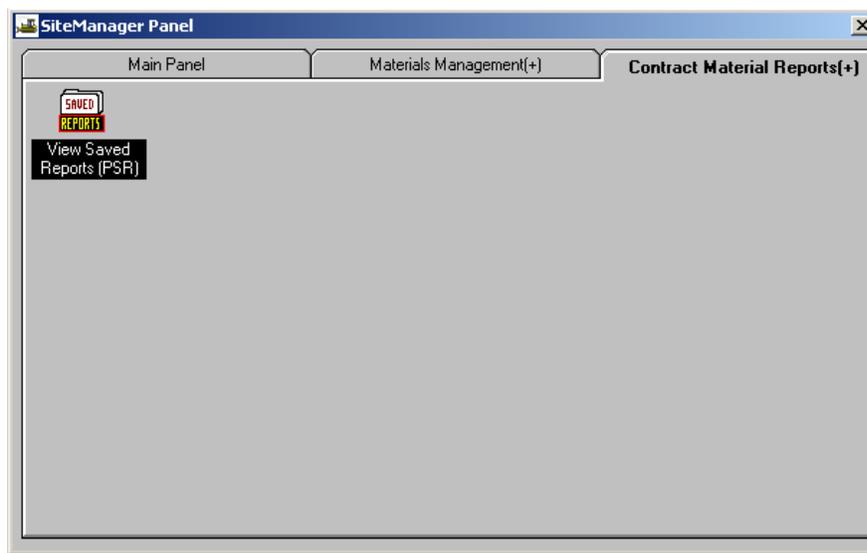


Figure 13-48 The Contract Materials Reports Panel

To access the Contract Materials Reports:

1. On the Materials Management panel, double-click the Contract Materials Reports icon.
2. Double-click the icon for the desired report.

To generate a Contract Materials report:

1. Double-click the desired report icon.
2. Select the criteria.
3. To generate the report on-line, click **Ok**.

Or

To generate the report off-line to a file, click the **Generate Off-line File** check box (ON).

4. Click **Ok**.

Or

To generate and print the report off-line, click the **Generate Off-line Print** check box (ON).

5. Click **Ok**.

To make selections in the **Report Criteria** dialog:

1. Click the desired radio button to select the desired format.

By Summary selects all items

By Criteria (field name) selects an individual field

In a **By Criteria (field name)** format:

2. Using the *right* mouse button, click the field.
3. Perform a **Search** using the object menu (referenced in the Getting Started section).
4. Click **OK**.

13.6.5 Report Options

The report options are available as toolbar buttons or menu options for reports that have been generated on-line.

Components	Description
Close button	Closes the report preview.
Save button	In a simple report (see Save Reports section) invokes the Save dialog allowing the report to be saved in a .PSR file format.
Print button	Prints the report.
Prior button	Displays the prior page of a multi-page selection.
Next button	Displays the next page of a multi-page selection.
Zoom spin button	Magnifies or reduces the display of the report preview.

13.7.1 Bituminous Concrete Mix Designs

SiteManager provides three Bituminous Concrete Mix Designs:

- HVEEM,
- Marshall Mix, and
- SUPERPAVE.

Each Bituminous Concrete Mix Designs is represented by an icon on the Mix Designs panel. When you open any of the Bituminous Concrete Mix Designs, by double-clicking its icon, the window that initially appears (as illustrated in Figure 1-39) has four folder tabs:

- Description,
- Properties,
- Materials, and
- Gradations.

The windows that will display for the Description and Properties folder tab of each Bituminous Concrete Mix Design will be similar, but different. In the following documentation, these windows are documented uniquely.

The windows that will display for the Materials and Gradation folder tab of each Bituminous Concrete Mix Designs are IDENTICAL. In the following documentation, these windows are documented one time. A cross reference at the end of each Bituminous Concrete Mix Design section will refer to the common procedure covered in the Bituminous Concrete Mix Designs Materials and Gradation Folder Tabs topic.

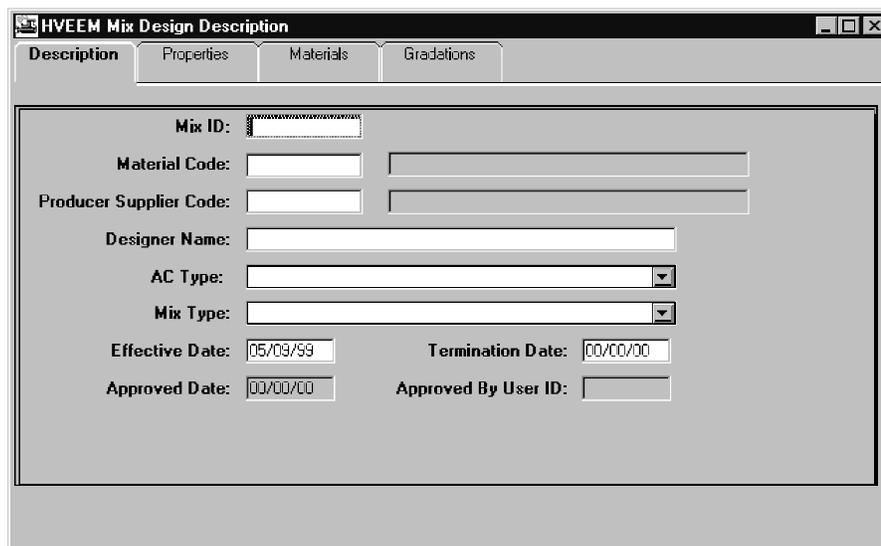


Figure 13-50 The Bituminous Concrete Mix Design Description Folder Tab

13.7.1.1 HVEEM Mix Designs

HVEEM Mix Design window allows for the addition, modification, and approval of HVEEM Mix Designs. An HVEEM Mix Design may not be changed if it is approved. The test results on this window is used by SiteManager for comparison. An HVEEM Mix Design may also be downloaded for a specific contract.

The search lens on the Materials Tab - Sample ID field will display all the samples if the current user group is the same as assigned to the 'Limited Access Sample Group' or 'Limited Access Standalone Group' System Operational Parameter. The samples locked in "Limited Access" will be excluded from all other user groups.

To modify an existing unapproved HVEEM Mix Design:

2. On the **Mix Design** panel, double-click the **HVEEM Mix Design** icon.
3. On the **Description** folder tab, click the **Open** button.
4. Select the desired HVEEM Mix Design.
5. Click **Ok**.
6. Press the **Tab** key to advance to the field to be modified.
7. Enter the desired change.
8. Click the **Save** button.
9. Click the **Properties** folder tab.
10. Press the **Tab** key to advance to the field to be modified.
11. Enter the desired change.
12. Click the **Save** button.
13. Click the **Materials** folder tab.
14. Press the **Tab** key to advance to the field to be modified.
15. Enter the desired change.
16. Click the **Save** button.
17. Click the **Gradations** folder tab.
18. Press the **Tab** key to advance to the field to be modified.
19. Enter the desired change.
20. Click the **Save** button.

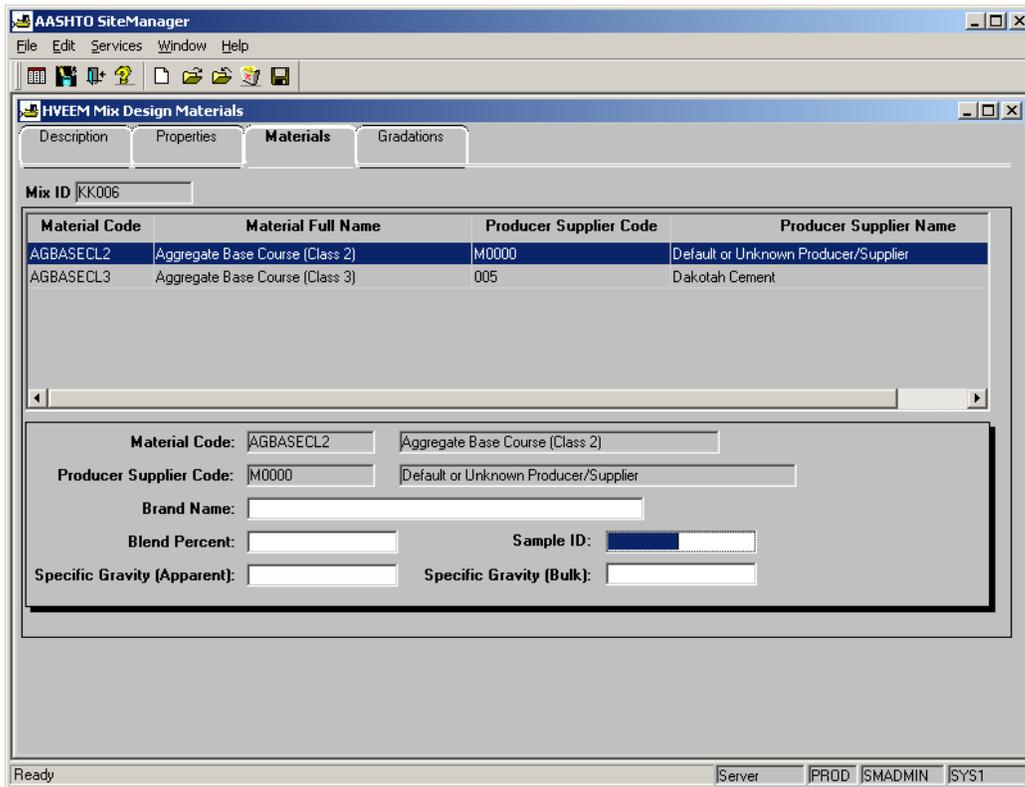


Figure 13-51 The HVEEM Mix Design Description Folder Tab

13.7.1.1.1 HVEEM Mix Designs Description Folder Tab

Field Name	Description
Mix ID	The ID for the HVEEM mix.
Material Code	The transportation agency-defined ID for a material. This is the material code for the HVEEM mix.
Full Name	Full description of material.
Producer/Supplier Code	The transportation agency-defined ID for a source/location of the material. Producer/Supplier Code must have an active status on the Producer Supplier table, when entered.
Producer Supplier Name	Source name.
Designer Nm	The name of the designer responsible for the HVEEM mix.

Field Name	Description
AC Type	Identifies the type of asphalt cement.
Mix Type	This describes the type of mix design (e.g., A, D, etc.)
Effective Date	Effective date for the HVEEM mix. Defaults to current date when a new HVEEM mix is entered.
Termination Date	Date the HVEEM mix is no longer available for use. Must be greater than Effective Date.
Approved Date	A system generated date to identify when the HVEEM mix was approved. Defaults to current date when a HVEEM mix is approved.
Approved By User ID	A system generated value containing the user ID of the person approving the HVEEM mix.

Table 13-31 The HVEEM Mix Design Description Tab Fields Table

To add a new HVEEM Mix Design description:

1. On the **Mix Design** panel, double-click the **HVEEM Mix Design** icon.
2. On the **Description** folder tab, type the mix id.
3. Press the **Tab** key.
4. Using the *right* mouse button, click the **Material Code** field.
5. From the object menu, click the **Search** choice.
6. In the list box, scroll to and click the desired material code
7. Click **Ok**.
8. Press the **Tab** key.
9. Using the *right* mouse button, click the **Producer/Supplier Code** field.
10. From the object menu, click the **Search** choice.
11. In the list box, scroll to and click the desired Producer/Supplier code.
12. Click **Ok**.
13. Press the **Tab** key.

14. Using the *right* mouse button, click the **Designer Name** field.
15. From the object menu, click the **Search** choice.
16. In the list box, scroll to and click the desired designer name.
17. Click **Ok**.
18. In the **AC Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
19. In the **Mix Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
20. Press the **Tab** key.
21. In the **Effective Date** field, type effective date if different than today.
22. Press the **Tab** key.
23. In the **Termination Date** field, type termination date if appropriate.
24. Click the **Save** button.

The screenshot shows a window titled "HVEEM Mix Design Properties" with four tabs: "Description", "Properties", "Materials", and "Gradations". The "Properties" tab is active. At the top, there is a "Mix ID" field containing "HVEEM01248". Below this, the text "Results Recorded at Optimum Asphalt Content Percent" is centered. The form contains several input fields and dropdown menus arranged in two columns:

Optimum AC % Tot Weight:	<input type="text"/>	Stabilometer Value:	<input type="text"/>
Bulk Density:	<input type="text"/>		<input type="text"/>
Maximum Density:	<input type="text"/>		<input type="text"/>
Air Void %:	<input type="text"/>	VFA %:	<input type="text"/>
VMA %:	<input type="text"/>	Dust Asphalt Ratio:	<input type="text"/>
Average Film Thickness:	<input type="text"/>		<input type="text"/>
Moisture Susceptibility:	<input type="text"/>		
Bulk Specific Gravity:	<input type="text"/>	Maximum Specific Gravity:	<input type="text"/>
Mixing Temperature:	<input type="text"/>		<input type="text"/>
Compaction Temperature:	<input type="text"/>		<input type="text"/>

Figure 13-52 The HVEEM Mix Design Properties Window

13.7.1.1.2 HVEEM Mix Designs Properties Folder Tab

Field Name	Description
Optimum AC % Tot Weight	Target value asphalt content weight of total mixture.
Stabilometer Value	Stabilometer value at optimum asphalt content.
Bulk Density	Weight per unit volume of mix at optimum asphalt content.
<i>Bulk Dnsty Optm AC Units Type</i>	Unit of measure for bulk density at optimum asphalt content, (e.g., PCF, etc.)
Maximum Density	Unit weight of mix zero air voids at optimum asphalt content.
<i>Max Density Units Type</i>	Unit of measure for Maximum Density (e.g., PCF, etc.)
Air Void %	Percentage of air voids in the compacted HVEEM mix at optimum asphalt content.
VFA %	Percent of VMA filled by the effective asphalt.
VMA %	Percent voids in the mineral aggregate at optimum AC content.
Average Film Thickness	Average thickness of asphalt film that surrounds the aggregate.
Dust Asphalt Ratio	Ratio of material passing the #200 sieve to the optimum asphalt content.
Moisture Susceptibility	Ratio of conditional (wet) to dry tensile strength.
Maximum Specific Gravity	Maximum specific gravity of the mix at zero air voids.
Bulk Specific Gravity	Bulk specific gravity of the mix at optimum AC content.
Mixing Temperature	Mixing temperature.

Field Name	Description
<i>Mixing Temperature Units Type</i>	Unit of measure for Mixing Temperature (e.g., Fahrenheit, Celsius, etc.)
Compaction Temp	Compaction temperature.
<i>Compaction Temp Units Type</i>	Unit of measure for Compaction Temperature (e.g., Fahrenheit, Celsius, etc.)

Table 13-32 The HVEEM Mix Design Properties Fields Table

To add a new HVEEM Mix Design properties:

1. On the **Mix Design** panel, double-click the **HVEEM Mix Design** icon.
2. Add a HVEEM Mix Design description.
3. Click the **Properties** folder tab.
4. In the **Optimum AC % Tot Weight** field, type the desired value.
5. Press the **Tab** key.
6. In the **Stabilometer Value** field, type the desired value.
7. Press the **Tab** key.
8. In the **Bulk Density** field, type the desired value.
9. In the **Bulk Dnsty Optm AC Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
10. Press the **Tab** key.
11. In the **Maximum Density** field, type the desired value.
12. In the **Max Density Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
13. Press the **Tab** key.
14. In the **Air Void %** field, type the desired value.
15. Press the **Tab** key.
16. In the **VFA %** field, type the desired value.
17. Press the **Tab** key.

18. In the **VMA %** field, type the desired value.
19. Press the **Tab** key.
20. In the **Dust Asphalt Ratio** field, type the desired value.
21. Press the **Tab** key.
22. In the **Average Film Thickness** field, type the desired value.
23. In the drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
24. Press the **Tab** key.
25. In the **Bulk Specific Gravity** field, type the desired value.
26. Press the **Tab** key.
27. In the **Maximum Specific Gravity** field, type the desired value.
28. Press the **Tab** key.
29. In the **Mixing Temperature** field, type the desired value.
30. Press the **Tab** key.
31. In the **Mixing Temperature Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
32. In the **Compaction Temp** field, type the desired value.
33. Press the **Tab** key.
34. In the **Compaction Temp Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
35. Click the **Save** button.

13.7.1.1.3 HVEEM Mix Designs Material and Gradations Folder Tab

To complete the creation of an HVEEM Mix Design, the data on the Material and Gradations folder tab must also be completed. The steps for completing the process are described in the Bituminous Concrete Mix Designs Materials and Gradation Folder Tabs topic.

13.7.1.2 Marshall Mix Designs

Marshall Mix Design window allows for the addition, modification, and approval of Marshall Mix Designs. A Marshall Mix Design may not be changed if it is approved. The test results on this window can be used by SiteManager for comparison. A Marshall Mix Design may also be downloaded for a specific contract.

The search lens on the Materials Tab - Sample ID field will display all the samples if the current user group is the same as assigned to the 'Limited Access Sample Group' or 'Limited Access Standalone Group' System Operational Parameter. The samples locked in "Limited Access" will be excluded from all other user groups.

To modify an existing unapproved Marshall Mix Design:

1. Double-click the **Marshall Mix Design** icon.
2. On the **Description** folder tab, click the **Open** button.
3. Select the desired mix design.
4. Click **Ok**.
5. Press the **Tab** key to advance to the field to be modified.
6. Enter the desired change.
7. Click the **Save** button.
8. Click the **Properties** folder tab.
9. Press the **Tab** key to advance to the field to be modified.
10. Enter the desired change.
11. Click the **Save** button.
12. Click the **Materials** folder tab.
13. Press the **Tab** key to advance to the field to be modified.
14. Enter the desired change.
15. Click the **Save** button.
16. Click the **Gradations** folder tab.
17. Press the **Tab** key to advance to the field to be modified.
18. Enter the desired change.
19. Click the **Save** button.

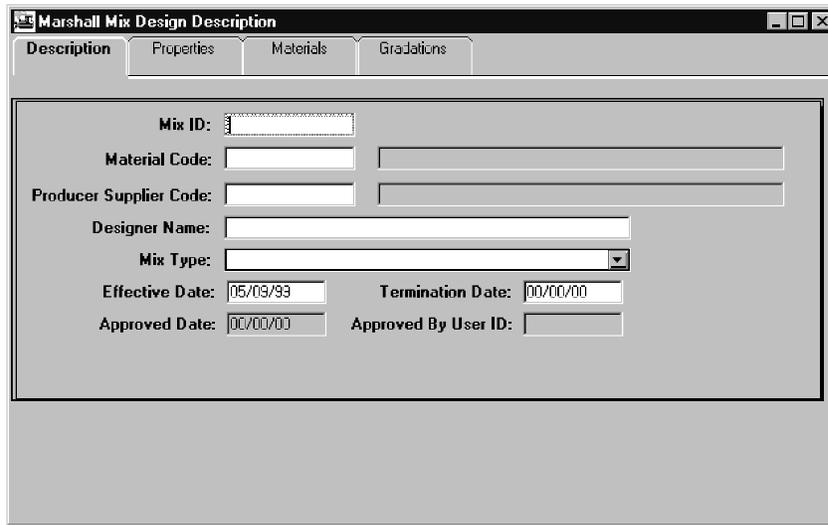


Figure 13-53 The Marshal Mix Design Description Window

13.7.1.2.1 Marshal Mix Design Description Folder Tab

Field Name	Description
Mix ID	The ID for the Marshall mix.
Material Code	The transportation agency-defined ID for a material. This is the material code for the Marshall mix.
<i>Full Name</i>	Full description of material.
Producer/Supplier Code	The transportation agency-defined ID for a source/location of the material. Producer/Supplier Code must have an active status on the Producer Supplier table, when entered.
<i>Producer Supplier Name</i>	Source name.
Designer Nm	The name of the designer responsible for the Marshall mix.
Mix Type	This describes the type of mix design (e.g., A, D, etc.)

Field Name	Description
Effective Date	Effective date for the Marshall mix. Defaults to current date when a new Marshall mix is entered.

Figure 13-54

Field Name	Description
Termination Date	Date the Marshall mix is no longer available for use. Must be greater than Effective Date.
Approved Date	A system generated date to identify when the Marshall mix was approved. Defaults to current date when a Marshall mix is approved.
Approved By User ID	A system generated value containing the user ID of the person approving the Marshall mix.

Table 13-33 The Marshall Mix Design Description Fields Table

To add a new Marshall Mix Design description:

1. On the **Mix Design** panel, Double-click the **Marshall Mix Design** icon.
2. On the **Description** folder tab, type the mix id.
3. Press the **Tab** key.
4. Using the *right* mouse button, click the **Material Code** field.
5. From the object menu, click the **Search** choice.
6. In the list box, scroll to and click the desired material code
7. Click **Ok**.
8. Press the **Tab** key.
9. Using the *right* mouse button, click the **Producer/Supplier Code** field.
10. From the object menu, click the **Search** choice.
11. In the list box, scroll to and click the desired Producer/Supplier code.
12. Click **Ok**.

13. Press the **Tab** key.
14. Using the *right* mouse button, click the **Designer Name** field.
15. From the object menu, click the **Search** choice.
16. In the list box, scroll to and click the desired designer name.
17. Click **Ok**.
18. In the **Mix Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
19. Press the **Tab** key.
20. In the **Effective Date** field, type effective date if different than today.
21. Press the **Tab** key.
22. In the **Termination Date** field, type termination date if appropriate.
23. Click the **Save** button.

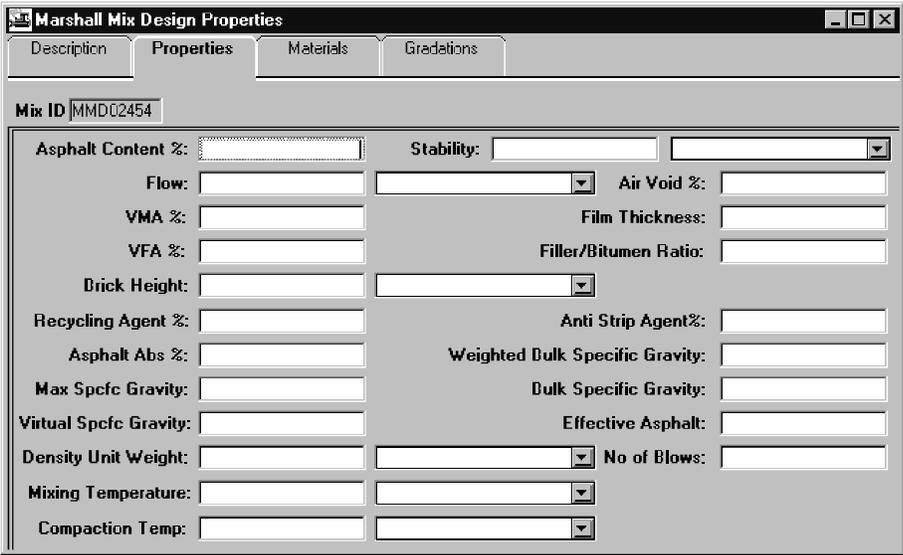


Figure 13-55 The Marshall Mix Design Properties Folder Tab

13.7.1.2.2 Marshall Mix Designs Properties Folder Tab

Field Name	Description
Asphalt Content %	Percentage of asphalt content.

Field Name	Description
Stability	Stability of the Marshall mix design.
Stability Units Type	Unit of measure for stability value (e.g., newtons, pounds.) Required when Stability entered.
Flow	Flow of the Marshall mix design.
Flow Units Type	Unit of measure for flow value (e.g., millimeters, inches.) Required when Flow entered.
Air Void %	Percentage of air voids in the mix.
VMA %	Percent voids in the mineral aggregate.
Film Thickness	Thickness of asphalt film surrounding aggregates.
Filler/Bitumen Ratio	Ratio of filler/bitumen in the mix.
VFA %	Percent of VMA filled by the effective asphalt.
Brick Height	Height of the brick.
Brick Height Units Type	Unit of measure for brick height value (e.g., inches, etc.) Required when Brick Height entered.
Recycling Agent %	The percentage of recycling agent added into the mix.
Anti-Strip Agent %	The percentage of anti-strip agent added into the mix.
Asphalt Absorption %	Percent of asphalt absorbed.
Weighted Bulk Specific Gravity	Weighted bulk specific gravity of aggregates.

Field Name	Description
Maximum Specific Gravity	Maximum specific gravity of the Marshall mix design.
Bulk Specific Gravity	Bulk specific gravity of the Marshall mix design.
Virtual Specific Gravity	Virtual specific gravity of the Marshall mix design.
Effective Asphalt	Percent of asphalt after absorption by aggregate.
Density/Unit Weight	Density/unit weight of the Marshall mix design.
Density Unit Weight Units Type	Unit of measure for density/unit weight value, e.g. grams/cm ³ , lb/ft ³ , etc.) Required when Density/Unit Weight entered.
Number of Blows	The number of times struck.
Mixing Temperature	Design mixing temperature.
Mixing Temperature Units Type	Unit of measure for mixing temperature value (e.g., Centigrade, Fahrenheit, etc.) Required when Mixing Temperature entered.
Compaction Temp	Design compaction temperature.
Compaction Temperature Units Type	Unit of measure for compaction temperature value (e.g., Centigrade, Fahrenheit, etc.) Required when Compaction Temp entered.

Table 13-34 The Marshall Mix Design Properties Fields Table

To add a new Marshall Mix Design properties:

1. Add or open the Marshall Mix Design description.
2. Click the **Properties** folder tab.
3. In the **Asphalt Content %** field, type the desired value.
4. Press the **Tab** key.

5. In the **Stability** field, type the desired value.
6. In the **Stability Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
7. Press the **Tab** key.
8. In the **Flow** field, type the desired value.
9. In the **Flow Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
10. Press the **Tab** key.
11. In the **Air Void %** field, type the desired value.
12. Press the **Tab** key.
13. In the **VMA %** field, type the desired value.
14. Press the **Tab** key.
15. In the **Film Thickness** field, type the desired value.
16. Press the **Tab** key.
17. In the **Filler/Bitumen Ratio** field, type the desired value.
18. Press the **Tab** key.
19. In the **VFA %** field, type the desired value.
20. Press the **Tab** key.
21. In the **Brick Height** field, type the desired value.
22. In the **Brick Height Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
23. Press the **Tab** key.
24. In the **Recycling Agent %** field, type the desired value.
25. Press the **Tab** key.
26. In the **Anti-Strip Agent %** field, type the desired value.
27. Press the **Tab** key.
28. In the **Weighted Bulk Specific Gravity** field, type the desired value.
29. Press the **Tab** key.
30. In the **Maximum Specific Gravity** field, type the desired value.

31. Press the **Tab** key.
32. In the **Bulk Specific Gravity** field, type the desired value.
33. Press the **Tab** key.
34. In the **Virtual Specific Gravity** field, type the desired value.
35. Press the **Tab** key.
36. In the **Effective Asphalt** field, type the desired value.
37. Press the **Tab** key.
38. In the **Density/Unit Weight** field, type the desired value.
39. In the **Density/Unit Weight Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
40. In the **Mixing Temperature** field, type the desired value.
41. In the **Mixing Temperature Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
42. In the **Compaction Temp** field, type the desired value.
43. Press the **Tab** key.
44. In the **Compaction Temp Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
45. Click the **Save** button.

13.7.1.2.3 Marshall Mix Designs Materials and Gradations Folder Tab

To complete the creation of a Marshall Mix Design, the data on the Materials and Gradations folder tab must also be completed. The steps for completing the process are described in the Bituminous Concrete Mix Designs Materials and Gradation Folder Tabs topic.

13.7.1.3 SUPERPAVE Mix Designs

SUPERPAVE Mix Design window allows for the addition, modification, and approval of SUPERPAVE Mix Designs. A SUPERPAVE Mix Design may not be changed if it is approved. The test results on this window is used by SiteManager for comparison. A SUPERPAVE Mix Design may also be downloaded for a specific contract.

The SUPERPAVE Mix Design window has a copy function located under Services on the Description folder tab. The user will be able to open up an existing mix design and copy all the details on the existing SUPERPAVE Mix design to a new SUPERPAVE Mix Design and assign a new Mix ID. The copy functionality will copy all the values of the Descriptive tab, Properties tab, Material tab and Gradation tab data. The copy functionality will assign the Effective Date as the current system date on the new mix design. The Termination Date will be blanked out. The Approved Date and Approved By User ID fields will be

cleared even if the original mix design had been approved. The user will have to save the data with the new Mix ID to view or change the data of Material tab or Gradation tab.

If the user changes the Material Code on the Description tab and there is Gradation data for that Mix Design ID then a message will be displayed prompting the user that the Gradation data associated to the mix will be deleted and based on users choice the new material code will be accepted and the Gradation data will be deleted.

The search lens on the Materials Tab - Sample ID field will display all the samples if the current user group is the same as assigned to the 'Limited Access Sample Group' or 'Limited Access Standalone Group' System Operational Parameter. The samples locked in "Limited Access" will be excluded from all other user groups.

To modify an existing unapproved SUPERPAVE Mix Design:

1. On the **Mix Design** panel, double-click the **SUPERPAVE Mix Design** icon.
2. On the **Description** folder tab, click the **Open** button.
3. Select the desired mix design.
4. Click **Ok**.
5. Press the **Tab** key to advance to the field to be modified.
6. Enter the desired change.
7. Click the **Save** button.
8. Click the **Properties** folder tab.
9. Press the **Tab** key to advance to the field to be modified.
10. Enter the desired change.
11. Click the **Materials** folder tab.
12. Press the **Tab** key to advance to the field to be modified.
13. Enter the desired change.
14. Click the **Gradations** folder tab.
15. Press the **Tab** key to advance to the field to be modified.
16. Enter the desired change.
17. Click the **Save** button.

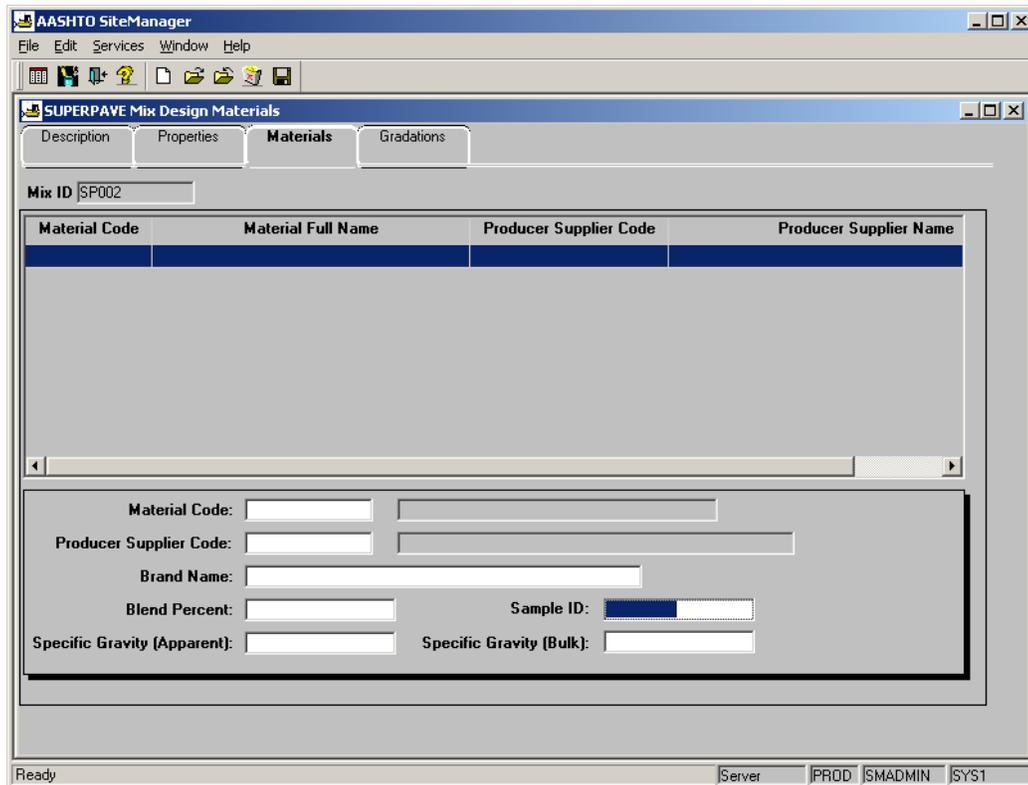


Figure 13-56 The SUPERPAVE Mix Design Description Window

13.7.1.3.1 SUPERPAVE Mix Designs Description Folder Tab

Field Name	Description
Mix ID	The ID for the SUPERPAVE mix.
Material Code	The transportation agency-defined ID for a material. This is the material code for the SUPERPAVE mix.
Full Name	Full description of material.
Producer/Supplier Code	The transportation agency-defined ID for a source/ location of the material. Producer/Supplier Code must have an active status on the Producer Supplier table, when entered.
Producer Supplier Name	Source name.

Field Name	Description
Designer Nm	The name of the designer responsible for the SUPERPAVE mix.
AC Type	Identifies the type of asphalt cement.
Mix Type	This describes the type of mix design (e.g., A, D, etc.)
Effective Date	Effective date for the SUPERPAVE mix. Defaults to current date when a new SUPERPAVE mix is entered.
Termination Date	Date the SUPERPAVE mix is no longer available for use. Must be greater than Effective Date.
Approved Date	A system generated date to identify when the SUPERPAVE mix was approved. Defaults to current date when a SUPERPAVE mix is approved.
Approved By User ID	A system generated value containing the user ID of the person approving the SUPERPAVE mix.

Table 13-35 The SUPERPAVE Mix Design Description Fields Table

To add a new SUPERPAVE Mix Design description:

1. On the **Mix Design** panel, double-click the **SUPERPAVE Mix Design** icon.
2. On the **Description** folder tab, type the mix id.
3. Press the **Tab** key.
4. Using the *right* mouse button, click the **Material Code** field.
5. From the object menu, click the **Search** choice.
6. In the list box, scroll to and click the desired material code
7. Click **Ok**.
8. Press the **Tab** key.
9. Using the *right* mouse button, click the **Producer/Supplier Code** field.
10. From the object menu, click the **Search** choice.

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11. In the list box, scroll to and click the desired Producer/Supplier code.
12. Click **Ok**.
13. Press the **Tab** key.
14. Using the *right* mouse button, click the **Designer Name** field.
15. From the object menu, click the **Search** choice.
16. In the list box, scroll to and click the desired designer name.
17. Click **Ok**.
18. In the **AC Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
19. In the **Mix Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
20. Press the **Tab** key.
21. In the **Effective Date** field, type effective date if different than today.
22. Press the **Tab** key.
23. In the **Termination Date** field, type termination date if appropriate.
24. Click the **Save** button.

Figure 13-57 The SUPERPAVE Mix Design Properties Folder Tab

13.7.1.3.2 SUPERPAVE Mix Designs Properties Folder Tab

Field Name	Description
N (Initial)	Initial compaction gyrations.
N (Max)	Maximum compaction gyrations.
N (Design)	Design compaction gyrations.
% Gmm @ N (Init)	Percent of solids by volume @ initial compaction gyrations.
% Gmm @ N (Max)	Percent of solids by volume @ maximum compaction gyrations.
Equiv Single Axle Loads	Number of load axle equivalent weight that pavement can endure before damage occurs.
Optimum AC % by Tot Weight	Asphalt content that mix will be produced in the field
Dust Proportion	Percent of material passing 0.075 mm sieve divided by the effective asphalt binder content.
VMA %	Percent voids in the mineral aggregate.
VFA %	Percent of VMA filled by the effective asphalt.
Lottman TSR	Tensile strength ratio.
Sand Equivalent	Percent of "fines" in the aggregate.
Maximum Specific Gravity	Maximum specific gravity of the SUPERPAVE mix design @ optimum AC %.
Bulk Specific Gravity	Bulk specific gravity of the SUPERPAVE mix design @ optimum AC %.
Mixing Temperature	Design mixing temperature.

Field Name	Description
Mixing Temperature Units Type	Unit of measure for mixing temperature. Required when Mixing Temperature entered.
Compaction Temp	Design compaction temperature.
Compaction Temp Units Type	Unit of measure for compaction temperature. Required when Compaction Temp entered.
High Air Temperature	Average high air temperature.
High Air Temperature Units Type	Unit of measure for high air temperature. Required when high air temperature entered.

Table 13-36 The SUPERPAVE Mix Design Properties Fields Table

To add a new SUPERPAVE Mix Design properties:

1. On the **Mix Design** panel, double-click the **SUPERPAVE Mix Design** icon.
2. Click the **Properties** folder tab.
3. In the **N (Initial)** field, type the desired value.
4. Press the **Tab** key.
5. In the **N (Maximum)** field, type the desired value.
6. Press the **Tab** key.
7. In the **N (Design)** field, type the desired value.
8. Press the **Tab** key.
9. In the **% Gmm @ N (Initial)** field, type the desired value.
10. Press the **Tab** key.
11. In the **% Gmm @ N (Maximum)** field, type the desired value.
12. Press the **Tab** key.
13. In the **Equiv Single Axle Loads** field, type the desired value.
14. Press the **Tab** key.
15. In the **Dust Proportion** field, type the desired value.

16. Press the **Tab** key.
17. In the **VMA %** field, type the desired value.
18. Press the **Tab** key.
19. In the **VFA %** field, type the desired value.
20. Press the **Tab** key.
21. In the **Lottman TSR** field, type the desired value.
22. Press the **Tab** key.
23. In the **Sand Equivalent** field, type the desired value.
24. Press the **Tab** key.
25. In the **Maximum Specific Gravity** field, type the desired value.
26. Press the **Tab** key.
27. In the **Bulk Specific Gravity** field, type the desired value.
28. Press the **Tab** key.
29. In the **Mixing Temperature** field, type the desired value.
30. In the **Mixing Temperature Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
31. Press the **Tab** key.
32. In the **Compaction Temp** field, type the desired value.
33. Press the **Tab** key.
34. In the **Compaction Temp Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
35. In the **High Air Temperature** field, type the desired value.
36. Press the **Tab** key.
37. In the **High Air Temperature Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
38. Click the **Save** button.

13.7.1.3.3 SUPERPAVE Mix Designs Materials and Gradations Folder Tab

To complete the creation of a SUPERPAVE Mix Design, the data on the Materials and Gradations folder tab must also be completed. The steps for completing the process are described in the Bituminous Concrete Mix Designs Materials and Gradation Folder Tabs topic.

13.7.1.4 Bituminous Concrete Mix Designs Materials and Gradation Folder Tabs

The windows that will display for the Materials and Gradation folder tab of each Bituminous Concrete Mix Designs are IDENTICAL. The common procedures for these windows are documented in the following.

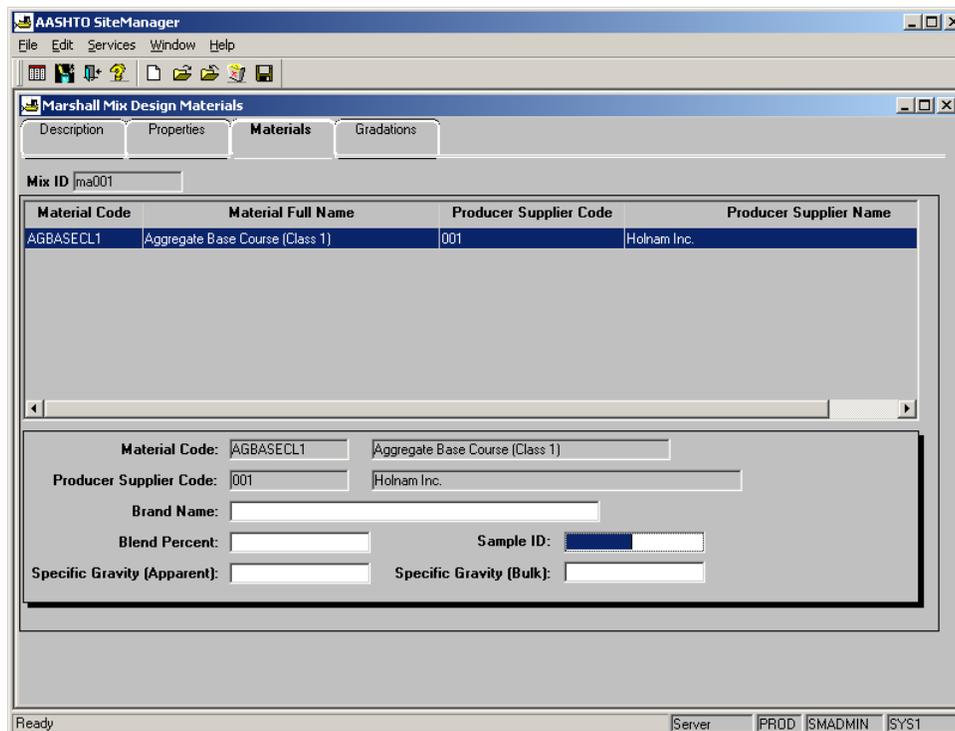


Figure 13-58 A Bituminous Concrete Mix Design Materials Window

13.7.1.4.1 Bituminous Concrete Mix Designs Materials Folder Tab (Common)

Field Name	Description
Material Code	The transportation agency-defined ID for a material. This is the material code for the mix.
<i>Full Name</i>	Full description of material.
Brand Name	Identifies the brand of the material contained within the bituminous concrete mix design.
Producer/Supplier Code	The transportation agency-defined ID for a source/location of the material. Producer/Supplier Code must have an active status on the Producer Supplier table, when entered.

Field Name	Description
<i>Producer Supplier Name</i>	Source name.
%	The percentage of material contained within the bituminous concrete mix design.
Sample ID	The sample ID. Identifies the sample used to approve the material contained within the bituminous concrete mix design. Sample ID must exist on the Sample Table.
Spc Gr (Apparent)	Apparent specific gravity of the material contained within the bituminous concrete mix design.
Spc Gr (Bulk)	Bulk specific gravity of the material contained within the bituminous concrete mix design.

Table 13-37 A Bituminous Concrete Mix Design Materials Fields Table

To add a new Bituminous Concrete mix Design materials:

1. On the **Mix Design** panel, double-click the desired bituminous concrete mix design icon.
2. Add or open the Mix Design description.
3. Click the **Materials** folder tab.
4. If necessary, click the **New** button.
5. Using the *right* mouse button, click the **Material Code** field.
6. From the object menu, click the **Search** choice.
7. In the list box, scroll to and click the desired material code.
8. Click **Ok**.
9. Press the **Tab** key.
10. Using the *right* mouse button, click the **Producer/Supplier Code** field.
11. From the object menu, click the **Search** choice.
12. In the list box, scroll to and click the desired producer/supplier.
13. Click **Ok**.
14. Press the **Tab** key.

15. In the **Brand Name** field, type the brand name.
16. Press the **Tab** key.
17. In the **Blend Percent** field, type the desired value.
18. Press the **Tab** key.
19. Using the *right* mouse button, click the **Sample ID** field.
20. From the object menu, click the **Search** choice.
21. In the list box, scroll to and click the desired sample id.
22. Click **Ok**.
23. Press the **Tab** key.
24. In the **Specific Gravity (Apparent)** field, type the desired value.
25. Press the **Tab** key.
26. In the **Specific Gravity (Bulk)** field, type the desired value.
27. Click the **Save** button.

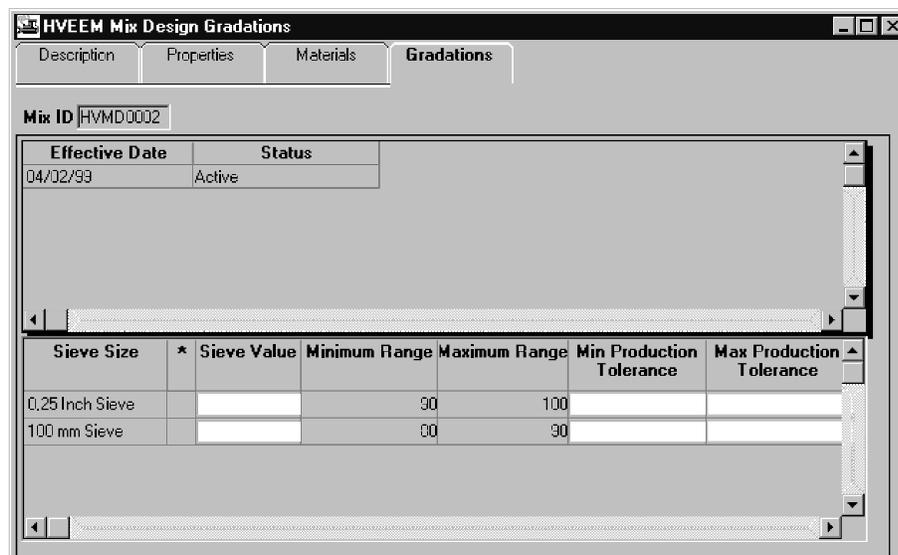


Figure 13-59 A Bituminous Concrete Mix Design Materials Gradations Window

13.7.1.4.2 Bituminous Concrete Mix Designs Gradations Folder Tab (Common)

Field Name	Description
Effective Date	Material gradation effective date. This list will contain all specification dates for the material.
Sieve Size	Size of sieve window.
Sieve Value	Percentage of material passing through sieve window.
<i>Master Gradation Limits</i> Minimum	Beginning value for the master gradation specification limit.
<i>Master Gradation Limits</i> Maximum	Ending value for the master gradation specification limit.
<i>Production Tolerance</i> Minimum	The minimum production tolerance value specification. This field is required when a Sieve Value is entered.
<i>Production Tolerance</i> Maximum	The maximum production tolerance value specification. This field is required when a Sieve Value is entered.

Table 13-38 A Bituminous Concrete Mix Design Materials Gradation Fields Table

To add a new Bituminous Concrete Mix Design gradations:

1. On the **Mix Design** panel, double-click the desired bituminous concrete mix design icon.
2. Add or open the Mix Design description.
3. Click the **Gradations** folder tab.
4. In the **Sieve Value** field, type the desired value.
5. Press the **Tab** key.
6. In the **Minimum Production Tolerance** field, type the desired value.
7. Press the **Tab** key.
8. In the **Maximum Production Tolerance** field, type the desired value.
9. Press the **Tab** key.

10. Repeat steps 3-8 for all Sieve Values.
11. When complete, click the **Save** button.

13.7.2 Portland Concrete Mix Designs

Portland Concrete Mix Design window allows for the addition, modification, and approval of Portland Concrete Mix Designs. A Portland Concrete Mix Design may not be changed if it is approved. The test results on this window is used by SiteManager for comparison. A Portland Concrete Mix Design may also be downloaded for a specific contract.

The Portland Concrete Mix Design window has a copy function located under Services on the Description folder tab. The user will be able to open up an existing mix design and copy all the details on the existing Portland Concrete Mix design to a new Portland Concrete Mix Design and assign a new Mix ID. The copy functionality will copy all the values of the Descriptive tab, Properties tab, Material tab and Gradation tab data. The copy functionality will assign the Effective Date as the current system date on the new mix design. The Termination Date will be blanked out. The Approved Date and Approved By User ID fields will be cleared even if the original mix design had been approved. The user will have to save the data with the new Mix ID to view or change the data of Material tab or Gradation tab.

If the user changes the Material Code on the Description tab and there is Gradation data for that Mix Design ID then a message will be displayed prompting the user that the Gradation data associated to the mix will be deleted and based on users choice the new material code will be accepted and the Gradation data will be deleted.

The search lens on the Materials Tab - Sample ID field will display all the samples if the current user group is the same as assigned to the 'Limited Access Sample Group' or 'Limited Access Standalone Group' System Operational Parameter. The samples locked in "Limited Access" will be excluded from all other user groups.

To modify an existing unapproved Portland Concrete Mix Design:

1. Double-click the Portland Concrete Mix Design icon.
2. On the Description folder tab, click the Open button.
3. Select the desired mix design.
4. Click Ok.
5. Press the Tab key to advance to the field to be modified.
6. Enter the desired change.
7. Click the Save button.
8. Press the Tab key to advance to the field to be modified.
9. Enter the desired change.
10. Click the Save button.

11. Click the Materials folder tab.
12. Press the Tab key to advance to the field to be modified.
13. Enter the desired change.
14. Click the Save button.
15. Click the Gradations folder tab.
16. Press the Tab key to advance to the field to be modified.
17. Enter the desired change.
18. Click the Save button.

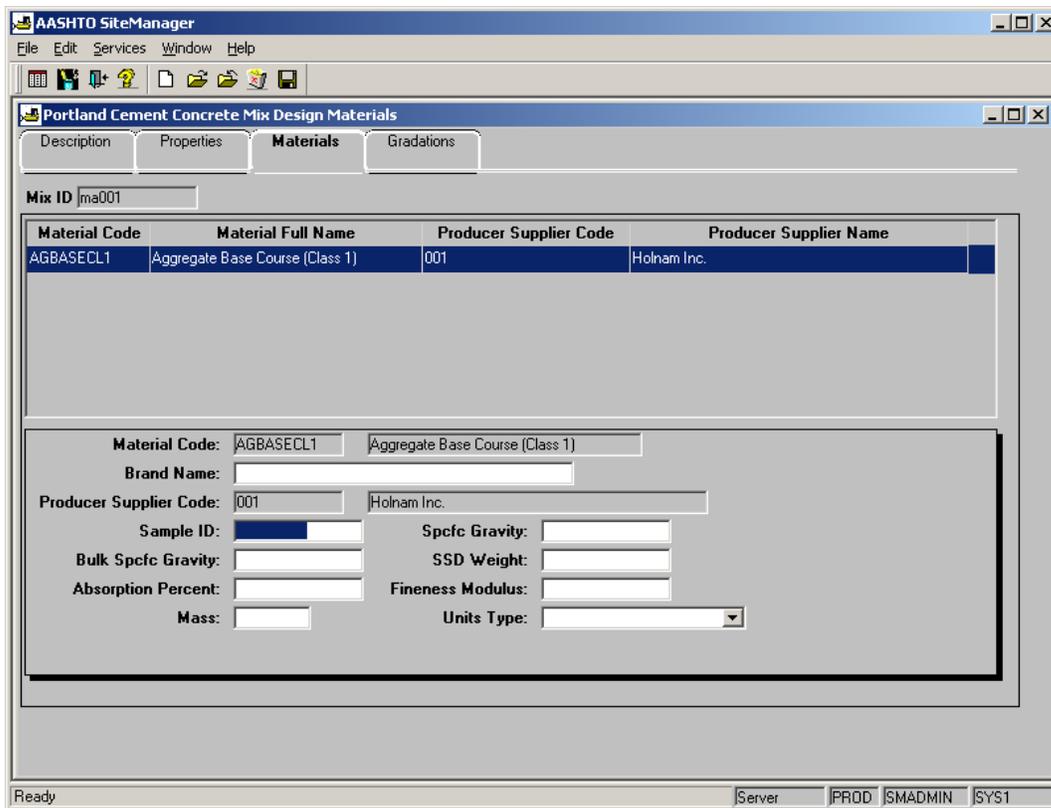


Figure 13-60 The Portland Concrete Mix Design Window

13.7.2.1 Portland Concrete Mix Designs Description Folder Tab

Field Name	Description
Mix ID	The ID for the Portland Cement Concrete mix design.

Field Name	Description
Material Code	The transportation agency-defined identifier for a material. This is the material code for the Portland Cement Concrete mix design. Material Code must have an active status.
Full Name	The description of the material.
Producer Supplier Code	The transportation agency-defined ID for a source/location of the material. Producer/Supplier Code must have an active status.
Producer Supplier Name	Source name.
Designer Nm	The name of the designer responsible for the Portland Cement Concrete mix design. The designer name must exist on the Testing Personnel table, when entered.
Concrete Class Type	Type of concrete (e.g., Type 1, Type 1A, Type II, etc.)
Effective Date	Effective date for the Portland Cement Concrete mix design. Defaults to current date when a new Portland Cement Concrete mix design is entered.
Termination Date	Date the Portland Cement Concrete mix design is no longer available for use. Must be greater than Effective Date.
Approved Date	A system generated date to identify when the Portland Cement Concrete mix design was approved. Defaults to current date when a Portland Cement Concrete mix design is approved.
Approved By User ID	A system generated value containing the user ID of the person approving the Portland Cement Concrete mix design. Defaults to user ID of user approving the Portland Cement Concrete mix design.

Table 13-39 The Portland Concrete Design Mix Description Fields Table

To add a new Portland Concrete Mix Design description:

1. On the Mix Design panel, double-click the Portland Concrete Mix Design icon.

2. On the Description folder tab, type the mix id.
3. Press the Tab key.
4. Using the *right* mouse button, click the Material Code field.
5. From the object menu, click the Search choice.
6. In the list box, scroll to and click the desired material code
7. Click Ok.
8. Press the Tab key.
9. Using the *right* mouse button, click the Producer/Supplier Code field.
10. From the object menu, click the Search choice.
11. In the list box, scroll to and click the desired Producer/Supplier code.
12. Click Ok.
13. Press the Tab key.
14. Using the *right* mouse button, click the Designer Name field.
15. From the object menu, click the Search choice.
16. In the list box, scroll to and click the desired designer name.
17. Click Ok.
18. In the Concrete Class Type drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
19. Press the Tab key.
20. In the Effective Date field, type effective date if different than today.
21. Press the Tab key.
22. In the Termination Date field, type termination date if appropriate.
23. Click the Save button.

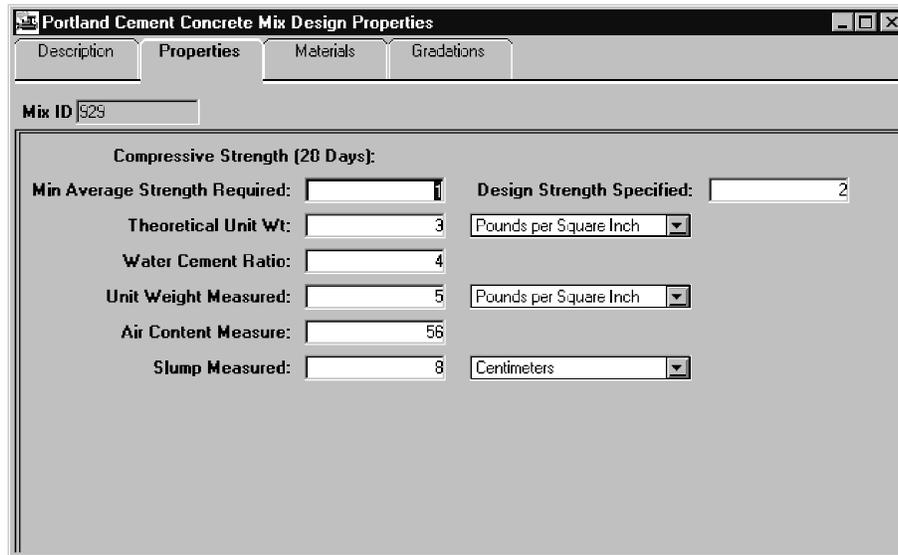


Figure 13-61 The Portland Concrete Mix Design Properties Folder Tab

13.7.2.2 Portland Concrete Mix Designs Properties Folder Tab

Field Name	Description
Min Average Strength Required	Minimum strength of concrete required.
Design Strength Specified	Specified concrete strength.
Water Cement Ratio	Ratio of total water content to total cement material per given volume of concrete.
Theoretical Unit Wt	Unit weight of mix as calculated from the concrete proportioning.
Theoretical Unit Wt Units Type	Unit of measure for theoretical unit weight. Required when Theoretical Unit Wt entered.
Unit Weight Measured	Unit weight of mix as calculated from the concrete proportioning.
Unit Weight Measured Units Type	Unit of measure for measured unit weight. Required when Unit Weight Measured entered.

Field Name	Description
Air Content Measure	Air content of freshly mixed concrete.
Slump Measured	Slump of concrete after trail batch.
Slump Measured Units Type	Unit of measure for measured slump. Required when Slump Measured entered.

Table 13-40 The Portland Concrete Mix Design Properties Folder Tab Fields Table

To add a new Portland Concrete Mix Design properties:

1. On the Mix Design panel, double-click the Portland Concrete Mix Design icon.
2. Add or open the Portland Concrete Mix Design description.
3. Click the Properties folder tab.
4. In the Min Average Strength Required field, type the desired value.
5. Press the Tab key.
6. In the Design Strength Specified field, type the desired value.
7. Press the Tab key.
8. In the Water Cement Ratio field, type the desired value.
9. Press the Tab key.
10. In the Theoretical Unit Wt field, type the desired value.
11. In the Theoretical Unit Wt Units Type drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
12. Press the Tab key.
13. In the Unit Weight Measured field, type the desired value.
14. In the Unit Weight Measured Units Type drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
15. Press the Tab key.
16. In the Air Content Measure field, type the desired value.
17. Press the Tab key.
18. In the Slump Measured field, type the desired value.

19. In the Slump Measured Units Type drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
20. Click the Save button.

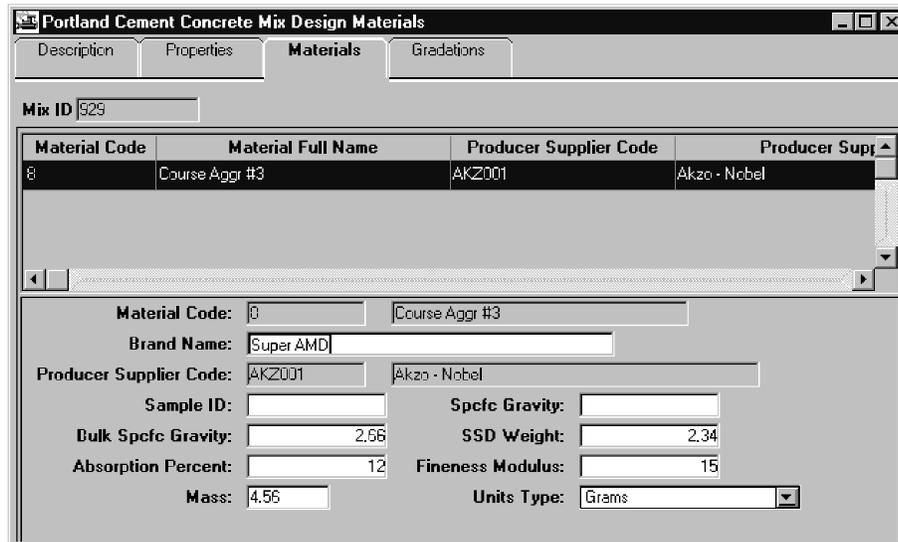


Figure 13-62 The Portland Concrete Mix Design Materials Folder Tab

13.7.2.3 Portland Concrete Mix Designs Materials Folder Tab

Field Name	Description
Material Code	The transportation agency-defined ID for a material. The Material Code must have an active status on the Material table.
Brand Name	Identifies the brand of the material contained within the Portland Cement Concrete mix design.
Producer Supplier Code	The transportation agency-defined ID for a source/location of the material. P/S Code must have an active status on the Producer Supplier table, when entered.
%	The percentage of material contained within the Portland Cement Concrete mix design.
Sample ID	The ID for a sample. Identifies the sample used to approve the material contained within the Portland Cement Concrete mix design.

Field Name	Description
Spfc Gravity	Specific gravity of the material within the Portland Cement Concrete mix design.
Bulk Spfc Gravity	Bulk specific gravity of the material within the Portland Cement Concrete mix design.
SSD Weight	Weight of the material within the Portland Cement Concrete mix design needed to make one cubic yard total.
Absorption %	Percent of water the aggregate can absorb.
Fineness Modulus	Function of the grading of the fine aggregate.
Mass	The quantity of the material within the Portland Cement Concrete mix design.
Unit Type	The unit of measure for the quantity of material within the Portland Cement Concrete mix design. Required when Mass entered

Table 13-41 The Portland Concrete Mix Design Materials Fields Table

To add a new Portland Concrete Mix materials:

1. On the Mix Design panel, double-click the Portland Concrete Mix Design icon.
2. Add or open the Mix Design description.
3. Click the Materials folder tab.
4. Using the *right* mouse button, click the Material Code field.
5. From the object menu, click the Search choice.
6. In the list box, scroll to and click the desired material code
7. Click Ok.
8. Press the Tab key.
9. In the Brand Name field, type the brand name.
10. Press the Tab key.

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11. Using the *right* mouse button, click the Producer/Supplier Code field.
12. From the object menu, click the Search choice.
13. In the list box, scroll to and click the desired Producer/Supplier code.
14. Click Ok.
15. Press the Tab key.
16. Using the *right* mouse button, click the Sample ID field.
17. From the object menu, click the Search choice.
18. In the list box, scroll to and click the desired sample id.
19. Click Ok.
20. Press the Tab key.
21. In the Spcfc Gravity field, type the desired value.
22. Press the Tab key.
23. In the Bulk Spcfc Gravity field, type the desired value.
24. Press the Tab key.
25. In the SSD Weight field, type the desired value.
26. Press the Tab key.
27. In the Absorption Percent field, type the desired value.
28. Press the Tab key.
29. In the Fineness Modules field, type the desired value.
30. Press the Tab key.
31. In the Mass field, type the desired value.
32. Press the Tab key.
33. In the Units Type drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
34. Click the Save button.

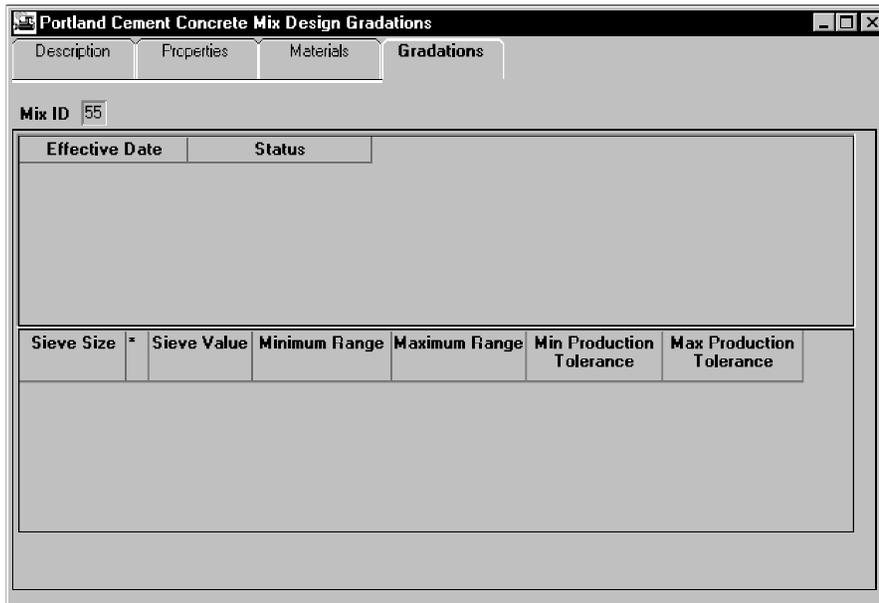


Figure 13-63 The Portland Concrete Mix Designs Gradations Folder Tab

13.7.2.4 Portland Concrete Mix Designs Gradations Folder Tab

Field Name	Description
Effective Date	Material gradation effective date. This list will contain all specification dates for the material.
Sieve Size	Size of sieve window.
Sieve Value	Percentage of material passing through sieve window.
<i>Master Gradation Limits</i> Minimum	Beginning value for the master gradation specification limit.
<i>Master Gradation Limits</i> Maximum	Ending value for the master gradation specification limit.
<i>Production Tolerance</i> Minimum	The minimum production tolerance value specification. This field is required when a Sieve Value is entered.
<i>Production Tolerance</i> Maximum	The maximum production tolerance value specification. This field is required when a Sieve Value is entered.

Table 13-42 The Portland Concrete Mix Designs Gradations Fields Table

To add a new Portland Concrete Mix Design gradations:

1. Add or open the Mix Design description.
2. Click the **Gradations** folder tab.
3. In the **Sieve Value** field, type the desired value.
4. Press the **Tab** key.
5. In the **Minimum Production Tolerance** field, type the desired value.
6. Press the **Tab** key.
7. In the **Maximum Production Tolerance** field, type the desired value.
8. Press the **Tab** key.
9. Repeat steps 3-8 for all Sieve Values.
10. When complete, click the **Save** button.

13.7.3 Aggregate Mix Designs

Aggregate Mix Design window allows for the addition, modification, and approval of Aggregate Mix Designs. An Aggregate Mix Design may not be changed if it is approved. The test results on this window is used by SiteManager for comparison. An Aggregate Mix Design may also be downloaded for a specific contract.

The search lens on the Materials Tab - Sample ID field will display all the samples if the current user group is the same as assigned to the 'Limited Access Sample Group' or 'Limited Access Standalone Group' System Operational Parameter. The samples locked in "Limited Access" will be excluded from all other user groups.

To modify an existing unapproved Aggregate Mix Design:

1. On the **Mix Design** panel, double-click the **Aggregate Mix Design** icon.
2. On the **Description** folder tab, click the **Open** button.
3. Select the desired Aggregate Mix Design.
4. Click **Ok**.
5. Press the **Tab** key to advance to the field to be modified.
6. Enter the desired change.
7. Click the **Save** button.
8. Press the **Tab** key to advance to the field to be modified.

9. Enter the desired change.
10. Click the **Save** button.
11. Click the **Materials** folder tab.
12. Press the **Tab** key to advance to the field to be modified.
13. Enter the desired change.
14. Click the **Save** button.
15. Click the **Gradations** folder tab.
16. Press the **Tab** key to advance to the field to be modified.
17. Enter the desired change.
18. Click the **Save** button.

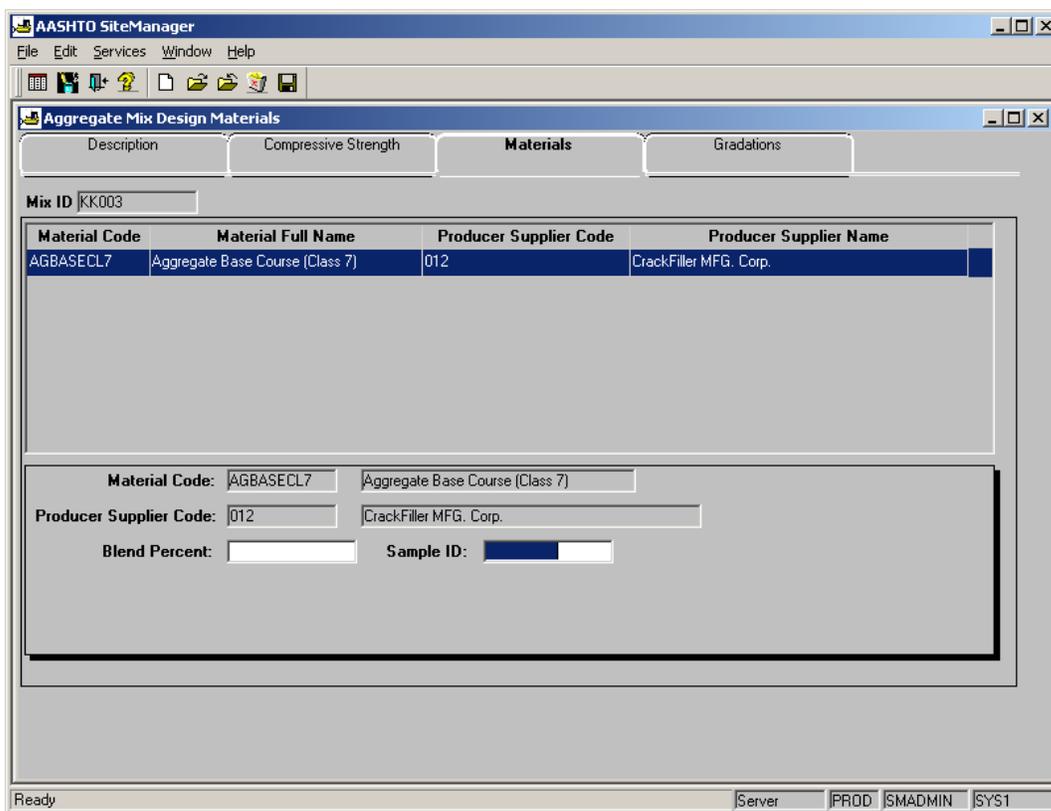


Figure 13-64 The Aggregate Mix Design Description Folder Tab

13.7.3.1 Aggregate Mix Designs Description Folder Tab

Field Name	Description
Mix ID	The ID for the Aggregate mix design.
Material Code	The transportation agency-defined identifier for a material. This is the material code for the Aggregate mix design. Material Code must have an active status.
Full Name	The description of the material.
Producer Supplier Code	The transportation agency-defined ID for a source/location of the material. Producer/Supplier Code must have an active status.
Producer Supplier Name	Source name.
Designer Nm	The name of the designer responsible for the Aggregate mix design. The designer name must exist on the Testing Personnel table, when entered.
Concrete Class Type	Type of concrete (e.g., Type 1, Type 1A, Type II, etc.)
Effective Date	Effective date for the Aggregate mix design. Defaults to current date when a new Aggregate mix design is entered.
Termination Date	Date the Aggregate mix design is no longer available for use. Must be greater than Effective Date.
Approved Date	A system generated date to identify when the Aggregate mix design was approved. Defaults to current date when a Aggregate mix design is approved.
Approved By User ID	A system generated value containing the user ID of the person approving the Aggregate mix design. Defaults to user ID of user approving the Aggregate mix design.
Raw Soil Maximum Density	The oven-dry density of the soil at optimum moisture content.

Field Name	Description
Units (<i>Soil Maximum Density Units Typ</i>)	The unit of measure for Raw Soil Maximum Density. Required when Raw Soil Maximum Density entered.
Raw Soil Optimum Moisture %	The moisture content corresponding to the peak of the curve produced by plotting the densities and corresponding moisture contents for the soil.
Raw Soil Plus Cement Percent	Percentage of cement content in soil-cement mixture. Required when Soil Cement Maximum Density and Soil Cement Optimum Moisture % are entered.
Soil Cement Maximum Density	The oven-dry mass of the soil cement mixture at optimum moisture content.
Units (<i>Soil Cement Max Density Units</i>)	The unit of measure for Soil Cement Maximum Density. Required when Soil Cement Maximum Density entered.
Soil Cement Optimum Moisture %	The moisture content corresponding to the peak of the curve produced by plotting the densities and corresponding moisture contents for the soil-cement mixture.
Recommended Cement Content by Volume	Recommended percentage of cement content in mixtures of cement with soil by volume of soil.
Recommended Cement Content by Weight	Recommended percentage of cement content in mixtures of cement with soil by weight of soil.
Maximum Volume Change %	This is the difference between the volume of the specimen at the time of molding and subsequent volume as a percent of original volume.

Table 13-43 The Aggregate Design Mix Description Folder Tab Fields Table

To add a new Aggregate Mix Design description:

1. On the **Mix Design** panel, double-click the **Aggregate Mix Design** icon.
2. On the **Description** folder tab, type the mix id.
3. Press the **Tab** key.

4. Using the *right* mouse button, click the **Material Code** field.
5. From the object menu, click the **Search** choice.
6. In the list box, scroll to and click the desired material code
7. Click **Ok**.
8. Press the **Tab** key.
9. Using the *right* mouse button, click the **Producer/Supplier Code** field.
10. From the object menu, click the **Search** choice.
11. In the list box, scroll to and click the desired Producer/Supplier code.
12. Click **Ok**.
13. Press the **Tab** key.
14. Using the *right* mouse button, click the **Designer Name** field.
15. From the object menu, click the **Search** choice.
16. In the list box, scroll to and click the desired designer name.
17. Click **Ok**.
18. In the **Concrete Class Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
19. Press the **Tab** key.
20. In the **Effective Date** field, type effective date if different than today.
21. Press the **Tab** key.
22. In the **Termination Date** field, type termination date if appropriate.
23. Press the **Tab** key.
24. In the **Raw Soil Maximum Density** field, type the desired value.
25. In the **Raw Soil Maximum Density Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
26. Press the **Tab** key.
27. In the **Raw Soil Optimum Moisture %** field, type the desired value.
28. Press the **Tab** key.
29. In the **Raw Soil Plus Cement Percent** field, type the desired value.
30. Press the **Tab** key.

31. In the **Soil Cement Maximum Density** field, type the desired value.
32. In the **Soil Cement Maximum Density Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
33. Press the **Tab** key.
34. In the **Soil Cement Optimum Moisture %** field, type the desired value.
35. Press the **Tab** key.
36. In the **Recommended Cement Content by Volume** field, type the desired value.
37. Press the **Tab** key.
38. In the **Recommended Cement Content by Weight** field, type the desired value.
39. Press the **Tab** key.
40. In the **Maximum Volume Change %** field, type the desired value.
41. Press the **Tab** key.
42. Click the **Save** button.

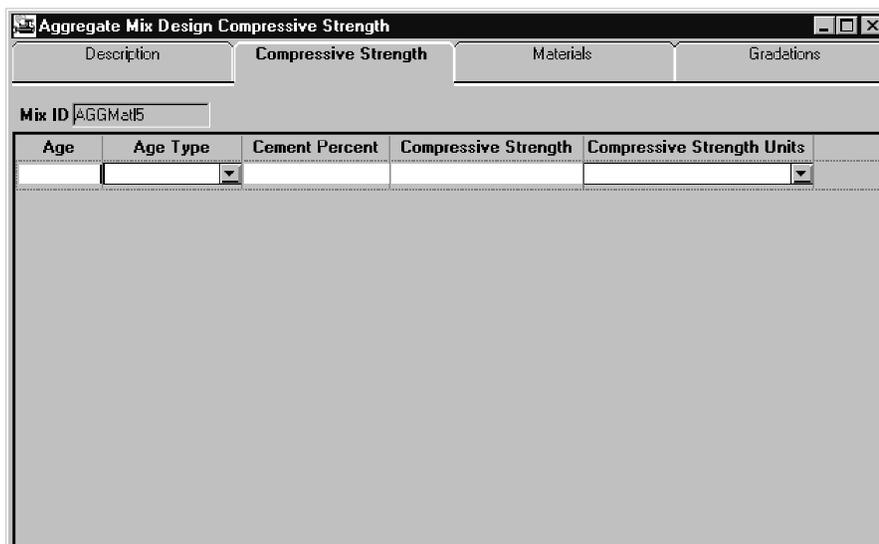


Figure 13-65 The Aggregate Mix Designs Compression Strength Folder Tab

13.7.3.2 Aggregate Mix Designs Compression Strength Folder Tab

Field Name	Description
Age	The age of the specimen break.
Age Type	Specifies the type of age (e.g., days, hours, minutes.)
Cement Percent	Percent of cement in mixture.
Compressive Strength	Compressive strength of the mixture.
Compressive Strength Units Type	Unit of measure for compressive strength value (e.g., PSI.) Required when Compressive Strength entered.

Table 13-44 The Aggregate Mix Designs Gradations Fields Table

To add a new Aggregate Mix Design compression strength:

1. On the **Mix Design** panel, double-click the **Aggregate Mix Design** icon.
2. Add or open the Mix Design description.
3. Click the **Compression Strength** folder tab.
4. In the **Age** field, type the desired value.
5. In the **Age Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
6. Press the **Tab** key.
7. In the **Cement Percent** field, type the desired value.
8. Press the **Tab** key.
9. In the **Compression Strength** field, type the desired value.
10. In the **Compression Strength Units Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
11. When complete, click the **Save** button.

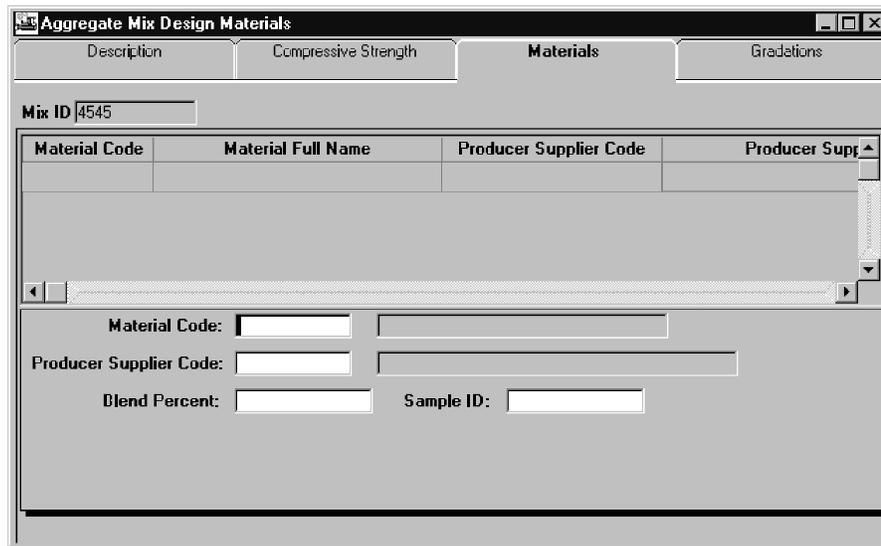


Figure 13-66 The Aggregate Mix Design Materials Folder Tab

13.7.3.3 Aggregate Mix Designs Materials Folder Tab

Field Name	Description
Material Code	The transportation agency-defined ID for a material. The Material Code must have an active status on the Material table.
Material Name	Identifies the brand of the material contained within the Aggregate mix design.
<i>Producer Supplier Code</i>	The transportation agency-defined ID for a source/location of the material. P/S Code must have an active status on the Producer Supplier table, when entered.
Blend Percent	The percentage of material contained within the Aggregate mix design.
Sample ID	The ID for a sample. Identifies the sample used to approve the material contained within the Aggregate mix design.

Table 13-45 The Aggregate Mix Design Materials Fields Table

To add a new Aggregate Mix materials:

1. On the **Mix Design** panel, double-click the **Aggregate Mix Design** icon.
2. Add or open the Mix Design description.
3. Click the **Materials** folder tab.
4. Using the *right* mouse button, click the **Material Code** field.
5. From the object menu, click the **Search** choice.
6. In the list box, scroll to and click the desired material code
7. Click **Ok**.
8. Press the **Tab** key.
9. Using the *right* mouse button, click the **Producer/Supplier Code** field.
10. From the object menu, click the **Search** choice.
11. In the list box, scroll to and click the desired Producer/Supplier code.
12. Click **Ok**.
13. Press the **Tab** key.
14. In the **%** field, type the desired value.
15. Press the **Tab** key.
16. Using the *right* mouse button, click the **Sample ID** field.
17. From the object menu, click the **Search** choice.
18. In the list box, scroll to and click the desired sample id.
19. Click **Ok**.
20. Click the **Save** button.

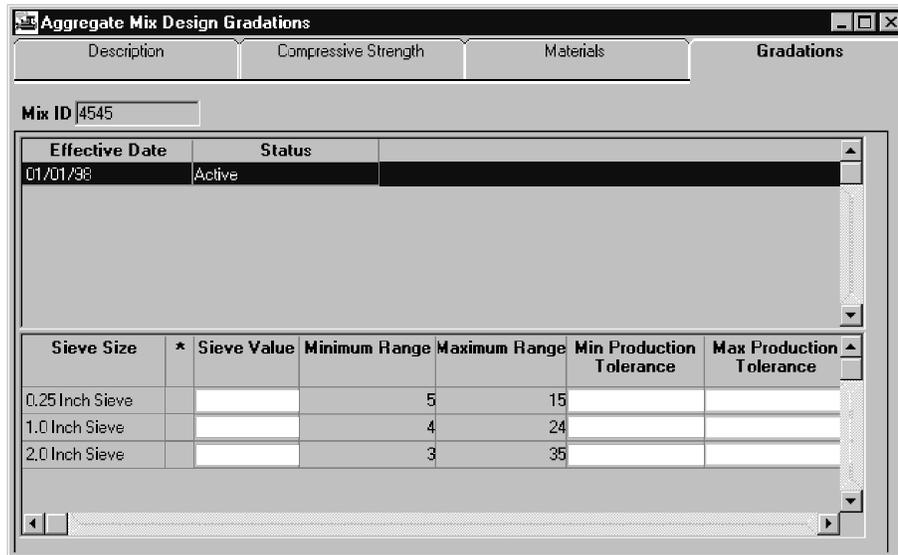


Figure 13-67 The Aggregate Mix Designs Gradations Folder Tab

13.7.3.4 Aggregate Mix Designs Gradations Folder Tab

Field Name	Description
Effective Date	Material gradation effective date. This list will contain all specification dates for the material.
Sieve Size	Size of sieve window.
Sieve Value	Percentage of material passing through sieve window.
Master Gradation Limits Minimum	Beginning value for the master gradation specification limit.
Master Gradation Limits Maximum	Ending value for the master gradation specification limit.
Production Tolerance Minimum	The minimum production tolerance value specification. This field is required when a Sieve Value is entered.
Production Tolerance Maximum	The maximum production tolerance value specification. This field is required when a Sieve Value is entered.

Table 13-46 The Aggregate Mix Designs Gradations Fields Table

The SiteManager Road Map

To add a new Aggregate Mix Design gradations:

1. Add or open the Mix Design description.
2. Click the **Gradations** folder tab.
3. In the **Sieve Value** field, type the desired value.
4. Press the **Tab** key.
5. In the **Minimum Production Tolerance** field, type the desired value.
6. Press the **Tab** key.
7. In the **Maximum Production Tolerance** field, type the desired value.
8. Press the **Tab** key.
9. Repeat steps 3-8 for all Sieve Values.
10. When complete, click the **Save** button.

13.7.4 Mix Design Approval

Each of the mix designs has an Approval Date field. The person who enters the mix design will not always be the person with authority to approve the mix design. Thus, the mix design process entry and approval process are two distinct steps with one person entering the mix design and another reviewing and approving the mix design. Remember that a mix design may not be changed after it is approved. But, it must be approved before it can be associated with a contract.

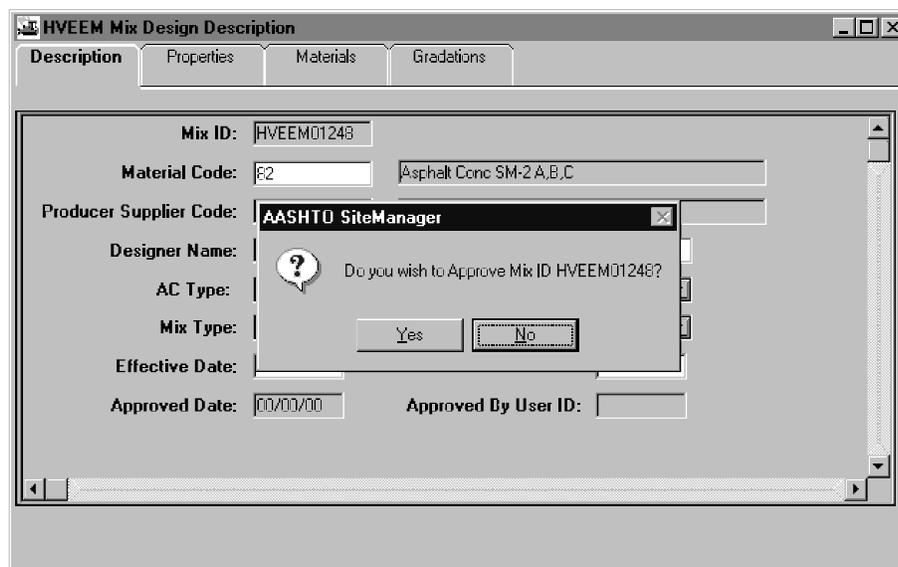


Figure 13-68 The Mix Design Approval Dialog Box

To review and approve a mix design:

1. On the **Mix Design** panel, double-click the desired mixed design icon.
2. On the **Description** folder tab, click the **Open** button.
3. Select the desired mix design.
4. Click **Ok**.
5. Click the each folder tab and review the data.
6. When complete, click the **Description** folder tab.
7. Click the **Services** menu and click the **Approve** choice.
8. Click the **Yes** button.
9. Click **Ok**.

The screenshot shows a window titled "Pavement Structural Design Data". It contains the following fields and controls:

- Region: [] Project Type: [] Subaccount #: []
- Funding Category: [] Activity Date: 00/00/00 Route: []
- Top Surface Layer: [] Surface Thickness: []
- Second Surface Layer: [] Base Thickness: []
- Third Surface Layer: [] Subbase Thickness: []
- Pavement Base: [] Effective Thickness: []
- Pavement Subbase: [] Subgrade R-Value: []
- Pavement Shoulder: [] Structural Capacity: []
- Drainage Condition: [] Composite K-Value: []
- Beginning Reference Point: [] Ending Reference Point: [] Milled Depth: []
- Number of Lanes: [] Direction: []
- Inside Shoulder
 Lane 3
 Lane 6
 Lane 9
- Lanes Affected: Lane 1
 Lane 4
 Lane 7
 Lane 10
- Lane 2
 Lane 5
 Lane 8
 Outside Shoulder

Figure 13-69 The Pavement Structural Design Data Window

13.7.5 Pavement Structural Design Data

The Pavement Structural Design Data window is used to add, update or view pavement structural design data. The window provides a means for capturing “as built” pavement design data for a contract and project.

Field Name	Description
Contract ID	The unique ID for the contract.

Field Name	Description
Project Number	The unique ID for the project.
Region	The unique ID for the region.
Project Type	Type of project (e.g., New Construction, Reconstruction, etc.)
Project Subaccount #	Subaccount number for the project.
Funding Category	Type of funding (e.g., Major Overlay, Minor Overlay, etc.)
Activity Date	Structural design date.
Route	The route number of project construction
Number of Lanes	The number of lanes involved.
Direction	The direction of the road (e.g., Both, Primary Only, etc.)
Top Surface Layer	The top surface treatment (e.g., Bituminous surface treatment, Mixed bituminous, etc.)
Second Surface Layer	The second surface treatment (e.g., Bituminous surface treatment, Mixed bituminous, etc.)
Third Surface Layer	The third surface treatment (e.g., Bituminous surface treatment, Mixed bituminous, etc.)
Pavement Base	The pavement base of the surface (e.g., Roadbed soil, Granular, Cement stabilized, etc.)
Pavement Subbase	The pavement subbase of the surface (e.g., Roadbed soil, Granular, Cement stabilized, etc.)

Field Name	Description
Pavement Shoulder	The pavement shoulder of the surface (e.g., Roadbed soil, Granular, Cement stabilized, etc.)
Drainage Condition	The drainage condition of the surface (e.g., Dense base without edge drains, Dense base with edge drains, etc.)
Surface Thickness	Surface Thickness value.
Base Thickness	Base Thickness value.
Subbase Thickness	Subbase Thickness value.
Effective Thickness	Effective Thickness value.
Subgrade R-value	Subgrade R-value.
Structural Capacity	Structural Capacity value.
Composite k-value	Composite k-value.
Beginning Reference Point	Beginning Reference Point value.
Ending Reference Point	Ending Reference Point value.
Milled Depth	Milled Depth value.
Inside Shoulder	Inside shoulder of lanes affected
Lane 1	Lane 1 of lanes affected
Lane 2	Lane 2 of lanes affected
Lane 3	Lane 3 of lanes affected

Field Name	Description
Lane 4	Lane 4 of lanes affected
Lane 5	Lane 5 of lanes affected
Lane 6	Lane 6 of lanes affected
Lane 7	Lane 7 of lanes affected
Lane 8	Lane 8 of lanes affected
Lane 9	Lane 9 of lanes affected
Lane 10	Lane 10 of lanes affected
Outside Shoulder	Outside shoulder of lanes affected

Table 13-47 The Structural Pavement Design Data Fields Table

To add a structural pavement design:

1. On the Mixed Design panel, double-click the Structural Pavement Design Data icon.
2. Click the Services menu and click the Choose Keys choice.
3. In the list box, scroll to and double-click the desired Contract.
4. In the list box, scroll to and click the desired Project.
5. Click Ok.
6. In the Region field, type the region ID.
7. In the Project Type drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
8. Press the Tab key.
9. In the Subaccount # field, type the subaccount ID.
10. In the Funding Category drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
11. Press the Tab key.

12. In the Activity Date field, type the date of the activity.
13. Press the Tab key.
14. In the Route field, type the route ID.
15. In the Top Surface Layer drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
16. Press the Tab key.
17. In the Surface Thickness field, type the desired value.
18. In the Second Surface Layer drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
19. Press the Tab key.
20. In the Base Thickness field, type the desired value.
21. In the Third Surface Layer drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
22. Press the Tab key.
23. In the Subbase Thickness field, type the desired value.
24. In the Pavement Base drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
25. Press the Tab key.
26. In the Effective Thickness field, type the desired value.
27. In the Pavement Subbase drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
28. Press the Tab key.
29. In the Subgrade R-Value field, type the desired value.
30. In the Pavement Shoulder drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
31. Press the Tab key.
32. In the Structural Capacity field, type the desired value.
33. In the Drainage Condition drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
34. Press the Tab key.
35. In the Composite K-Value field, type the desired value.

36. Press the Tab key.
37. In the Beginning Reference Point field, type the desired value.
38. Press the Tab key.
39. In the Ending Reference Point field, type the desired value.
40. Press the Tab key.
41. In the Milled Depth field, type the desired value.
42. Press the Tab key.
43. In the Number of Lanes field, type the desired value.
44. In the Direction drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
45. In the Lanes Affected check boxes, Click the appropriate check box (ON) as applicable.
46. Click the Save button.

To modify a structural pavement design:

1. On the Mixed Design panel, double-click the Structural Pavement Design Data icon.
2. Click the Open button.
3. In the list box, scroll to and double-click the desired Contract.
4. In the list box, scroll to and double-click the desired Project.
5. In the list box, scroll to and click the desired Project Type/Direction.
6. Click Ok.
7. Press the Tab key to advance to the field to be modified.
8. Enter the desired change.
9. Click the Save button.

13.7.6 Aggregate Blend

The Aggregate Blend window allows the user to create aggregate blends based on the current aggregate sieve data. This data can be used to develop new mix designs. The user enters the sample ID(s) and the percentage of each one. Using this information, SiteManager retrieves the sieve data. The blend percentage is calculated for each sieve. This is calculated by multiplying the percentage of the sample by the passing percentage of each sieve. The overall blend percentage is calculated by summing the newly calculated passing percents for each sieve. The maximum number of sieves per sample is 25. The blend data is not stored in the SiteManager. However, the user can export the blend result data to a text file in a tab-delimited format. This

information can be used by mix design software to develop or graph new mix designs. Each record in the file would contain the sieve size and the percentage passing of the sieve.

The search lens on the Sample ID field will display all the samples if the current user group is the same as assigned to the ‘Limited Access Sample Group’ or ‘Limited Access Standalone Group’ System Operational Parameter. The samples locked in “Limited Access” will be excluded from all other user groups.

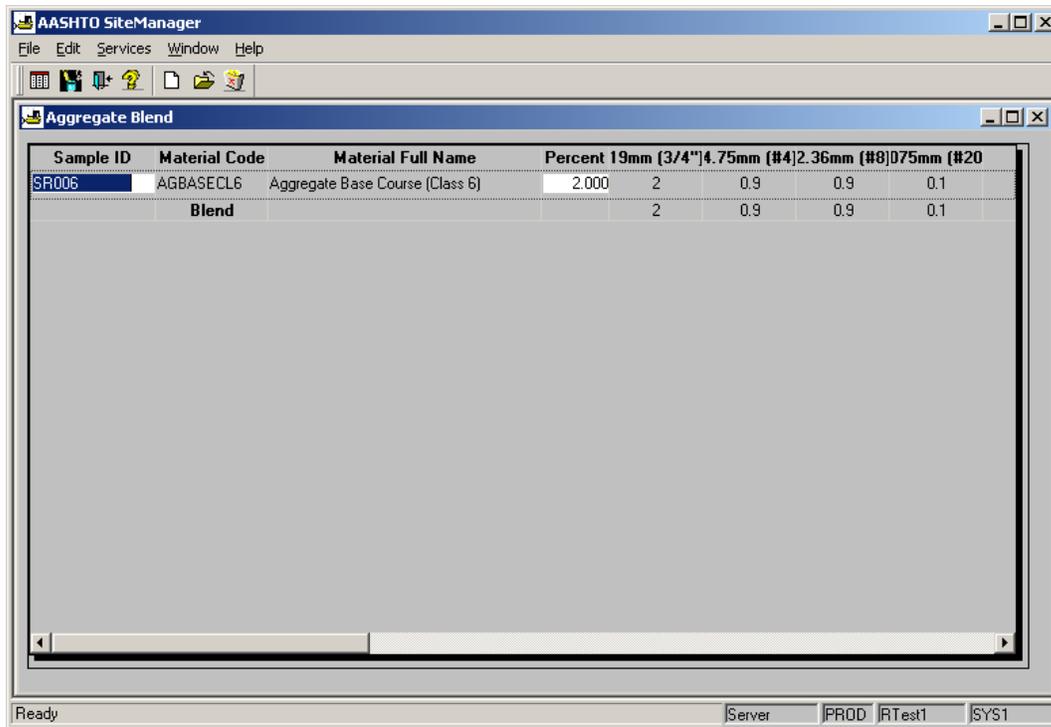


Figure 13-70 The Aggregate Blend Window

Field Name	Description
Sample ID	Identifies the sample related to the sieve analysis of aggregates test.
Material Code	The transportation agency defined ID for a material.
Material Name	Full description of material.
Percent	This is the percent of the sample to be used in determining the blend result.

Field Name	Description
Sieve Size	Size of sieve window.
Percent Passing	Percentage of material passing through sieve window. Percent of Sample * Percent of material passing sieve
Blend Percent Passing	The sum of the percent passing for all samples

Table 13-48 The Aggregate Blend Fields Table

To export a new aggregate blend:

1. Double-click the **Aggregate Blend** icon.
2. Using the *right* mouse button, click the **Sample ID** field.
3. From the object menu, click the **Search** choice.
4. In the list box, scroll to and click the desired sample.
5. Press the **Tab** key.
6. In the **Percent** field, type the percent of the sample to be using in determining the blend result.
7. Click the **New** button.
8. Repeat steps 2-6 until all samples have been added.
9. When complete, click the **Save** button.
10. Click the **Services** menu and click the **Export** choice.
11. Type the name for the file.
12. Change the drive and directory as desired.
13. Click **Ok** twice.

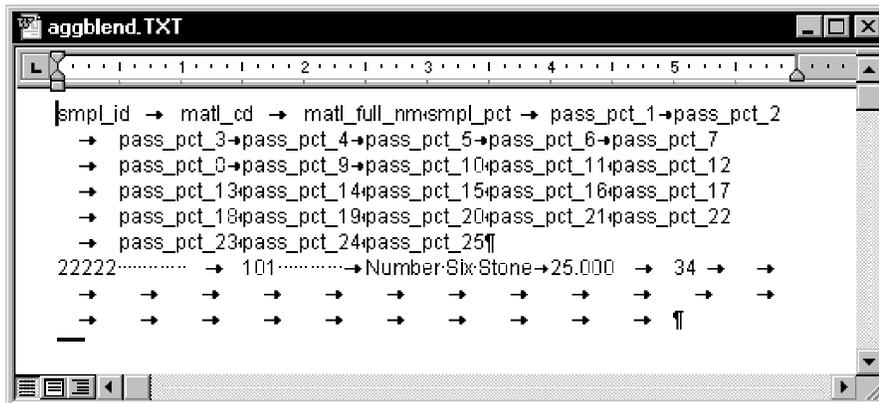


Figure 13-71 The Exported Aggregate Blend’s Tab Delimited Format

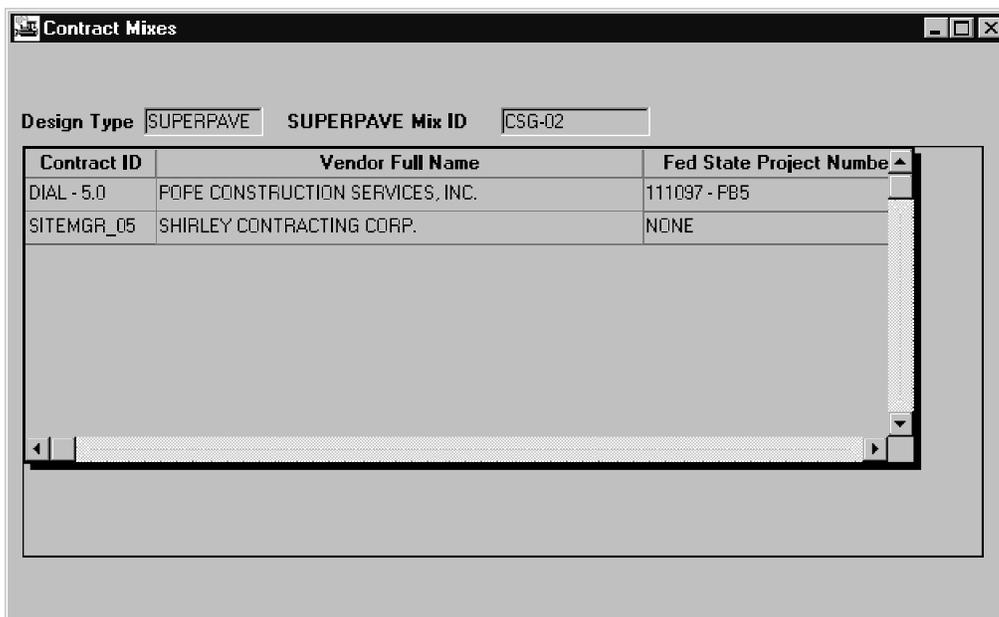


Figure 13-72 The Contract Mixes Window

13.7.7 Contract Mixes

The Contract Mixes window is used to associate an approved design mix with a contract. Upon entry into the Contract Mixes window, the selection of a Mix ID will list all contracts associated with it, if any. A contract can be associated to the Mix ID and will be added to the list. A contract cannot be deleted from the list.

Field Name	Description
Mix ID	The ID for the mix design.

Field Name	Description
Contract ID	The ID for the contract.
Prime Contr	The full name of the primary contractor.
Fed St/Prov Prj Nbr	The federal state/province project number that identifies the contract.
County	The primary county of construction work.

Table 13-49 The Contract Mixes Window Fields Table

To associate a contract with a mix design:

1. On the **Mix Design** panel, Double-click the **Contract Mixes** icon.
2. In the **Design Type** list box, scroll to and double-click the desired design mix type.
3. In the **Mix ID** list box, scroll to and click the desired design mix.
4. Click **Ok**.
5. Click the **New** button.
6. In the **Contract ID** list box, scroll to and click the desired choice.
7. Click **Ok**.
8. Click the **Yes** button.
9. Click the **Save** button.
10. Repeat step 2-8 until all contracts have been associated with the mix design.

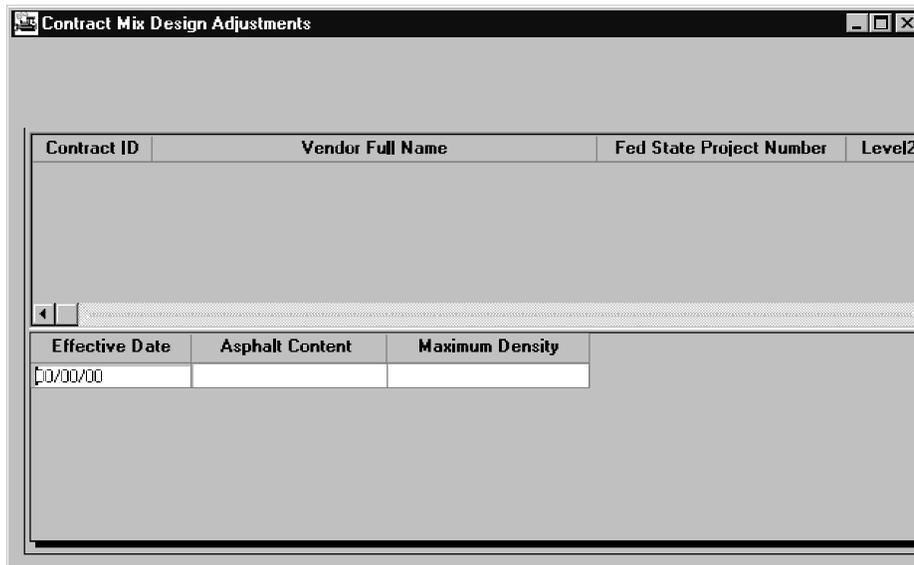


Figure 13-73 The Contract Mix Design Adjustment

13.7.8 Contract Mix Design Adjustment

The Contract Mix Design Adjustments window is used to record minor adjustments to bituminous concrete mix designs.

Field Name	Description
Mix ID	The ID for the mix design.
Contract ID	The ID for the contract.
Prime Contractor	The full name of the primary contractor.
Fed St/Prov Prj Nbr	The federal state/province project number that identifies the contract.
Prime County	The primary county of construction work.
Effective Date	Date the adjustment was effective. Effective Date must be unique for Mix ID or Contract ID. Defaults to current date when a new adjustment is made.
Asphalt Content	Percentage of asphalt content.

Field Name	Description
Maximum Density	Maximum density of the mix.

To add a contract mix design adjustment:

1. On the Mix Design panel, Double-click the Contract Mix Design Adjustment icon.
2. In the Design Type list box, scroll to and click the desired design type.
3. In the Mix ID list box, scroll to and click the desired design mix.
4. Click Ok.
5. In the select list at the bottom, click the select list to change the focus.
6. Click the New button.
7. In the Effective Date field, type the desired value.
8. Press the Tab key.
9. In the Asphalt Content field, type the desired value.
10. Press the Tab key.
11. In the Maximum Density field, type the desired value.
12. Click the Save button.

13.7.9 Mix Design Reports

The Mix Design Reports panel generates commonly used Mix Design reports. The following report topics are available on this panel:

HVEEM Mix Design List,
Marshall Mix Design List,
SUPERPAVE Mix Design List,
PCC Mix Design List,
Aggregate Mix Design List,
Mix Design for Contract List,
Samples Using Mix Design Report,
Contract for Mix Design Report, and
View Saved Reports (PSR)

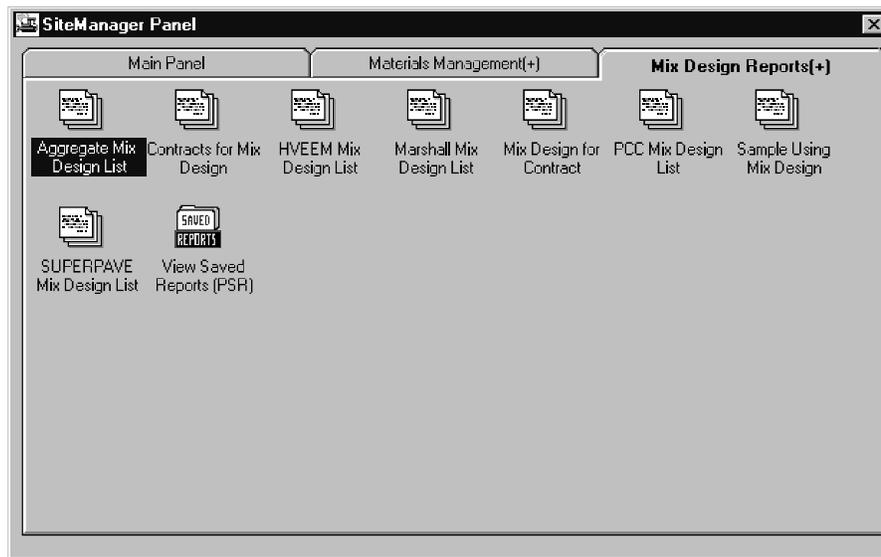


Figure 13-74 The Materials Management Mix Design Reports Panel

To access Mix Design Reports:

1. On the Materials Management panel, double-click the Mix Design Reports icon.
2. Double-click the icon for the desired report.

To generate a Mix Design report:

1. Double-click the desired report icon.
2. Select the criteria.
3. To generate the report on-line, click **Ok**.

Or

To generate the report off-line to a file, click the **Generate Off-line File** check box (ON).

1. Click **Ok**.

Or

To generate and print the report off-line, click the **Generate Off-line Print** check box (ON).

8. Click **Ok**.

To make selections in the **Report Criteria** dialog:

1. Click the desired radio button to select the desired format.

By Summary selects all items

By Criteria (field name) selects an individual field

In a **By Criteria (field name)** format:

2. Using the *right* mouse button, click the field.
3. Perform a **Search** using the object menu (referenced in the Getting Started section).
4. Click **OK**.

13.7.10 Report Options

The report options are available as toolbar buttons or menu options for reports that have been generated on-line.

Components	Description
Close button	Closes the report preview.
Save button	In a simple report (see Save Reports section) invokes the Save dialog allowing the report to be saved in a .PSR file format.
Print button	Prints the report.
Prior button	Displays the prior page of a multi-page selection.
Next button	Displays the next page of a multi-page selection.
Zoom spin button	Magnifies or reduces the display of the report preview.
Copies spin button	Allows more than one copy of the report to be printed.

Table 13-50 The Report Components Table

13.7.11 Saving and Exporting Simple Reports

There are two types of reports in SiteManager — simple reports and complex reports. Simple report can be saved and exported, but complex reports cannot. It is easy to identify a simple report — the File menu's Save choice (or the Save button) and the Service menu's Export choice will be active for a simple report. They will not be active for a complex report.

For procedures on saving, opening, and exporting a report, please refer to the General Concepts section.

13.7.12 View Saved Reports (PSR)

A saved simple report can be viewed using the View Saved Reports (PSR) icon. For procedures on opening and viewing a saved report, please refer to the General Concepts section.

13.8 Sampling and Testing

Sampling and Testing are maintained using the components of the Sampling and Testing panel.

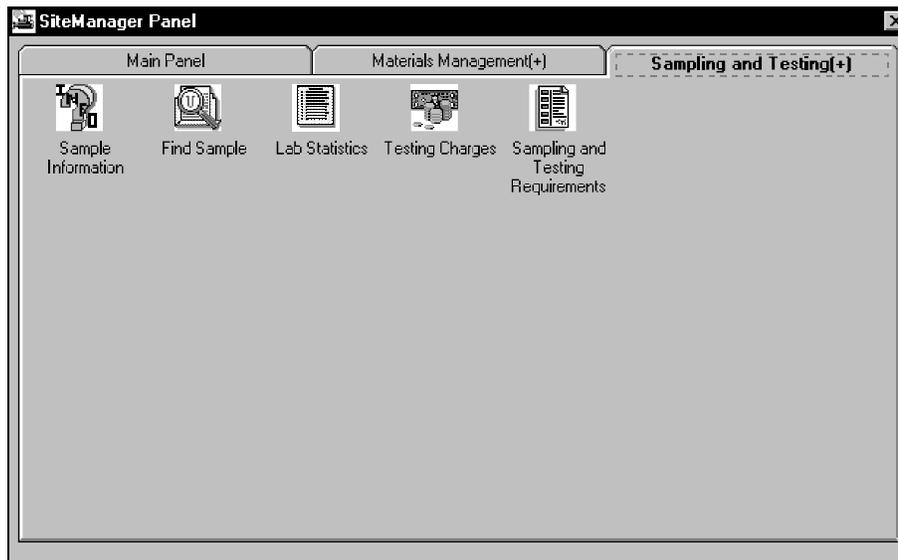


Figure 13-75 The Sampling and Testing Panel

To access the Sampling and Testing panel:

1. On the Materials Management panel, double-click the Sampling and Testing icon.

13.8.1 Maintain Sample Information

The Maintain Sample Information icon allows for the addition of base sample data. Up until a sample is authorized, it can be modified. An authorized sample cannot be modified or deleted, but it can be voided by revising it. However, an authorized or voided sample can have Disposition Remarks (as opposed to standard Remarks) attached.

When a Producer/Supplier code is entered, the expiration date of the Material is verified. If the Producer/Supplier's expiration date for that material occurs before the current date, a warning message will be displayed.

To open the Sample Information window:

1. On the **Sampling and Testing** panel, double-click the **Sample Information** icon.

13.8.1.1 Basic Sample Data Folder Tab

The Basic Sample Data tab allows creating and maintaining the Sample information.

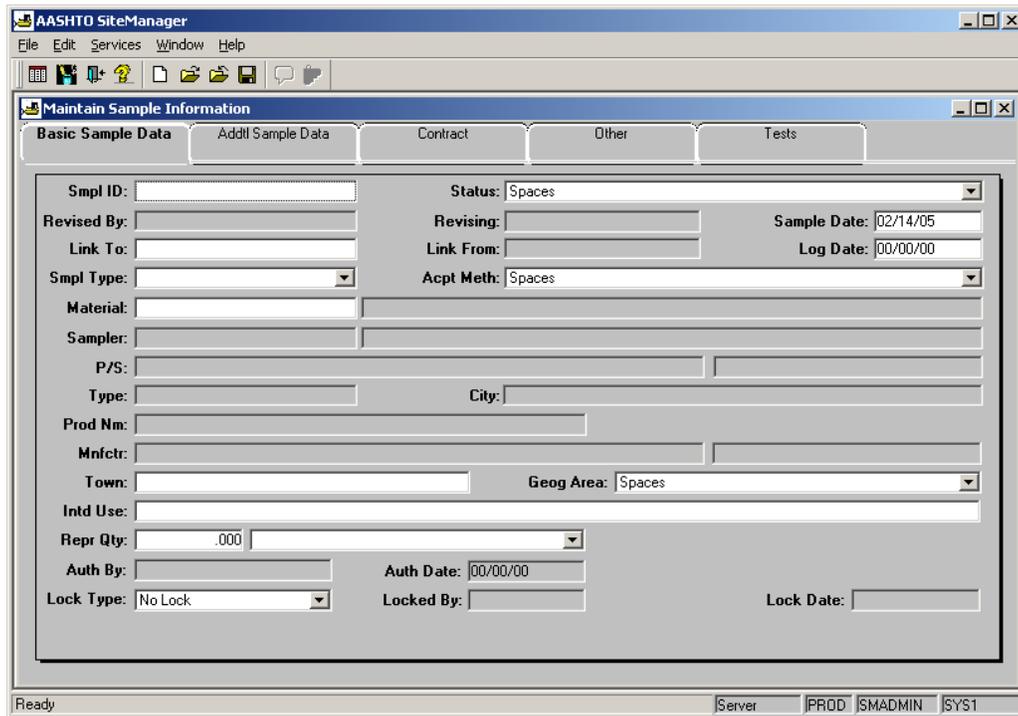


Figure 13-76 The Basic Sample Data Folder Tab

Field Name	Description
	<p>The sample ID of the material being tested and/or accepted for a contract. The unique identifier of a sample. The Open-Search lens feature to select from the list of available sample in the system. The list will display Sample ID and Material code from the sample list data window.</p>
	<p>This column is editable and user can enter the partial sample ID and use the search lens facility.</p>
	<p>If the member of “Limited Access Sample Group” or “Limited Access Standalone Group” locks the sample then it will be</p>

Field Name	Description
	available only to the member of this group to link to another sample.
Sample Status	Display the current status description of the sample record. The sample status is a drop down list from the code table 'SMPLSTAT'
Revised By	Used when the current sample has been authorized and a revision is being made. The original sample is referred to as the new sample.
Revising	This field is automatically filled in by the system when the revise function is used.
Sample Date	The date the sample was taken. If a future date is entered then a message will display, and on confirmation the value will be accepted. If sample date is changed then following fields will be "blanked out": Producer/Supplier, Product Name, Manufacturer and Inspector. This column is editable and defaults to current system date time.
Link To	This sample ID reflects another sample to which this one is-linked. This link reflects the tie from this sample to the next in the chain of samples. It is used in part, to group samples together. If the member of "Limited Access Sample Group" or "Limited Access Standalone Group" locks the sample then it will be available only to the member of this group to link to another sample.
Link From	This reflects the opposite relationship as the Linked To. This will display the ID of the sample that contains this sample in its Linked To field. This field is meant to allow the user the ability to travel up the linked chain.
Log Date	The date the sample was received at the lab or date the dispute or claim was entered into SiteManager.
Sample Type	Identifies the type of Sample taken (e.g., acceptance, job control, etc.).
Acceptance Method	The method by which the sample is being accepted (e.g., visual, manufacturer certification, etc.)
Material	The material code for the sample. The standard search lens will display the Material information.  This field will be editable and once a material is selected then Producer/Supplier, Manufacturer, Product name, Repr Qty, Repr Unit and Sampler will be "blanked out". The English and Metric units of the selected material will be populated on the Sample Unit drop down list.

Field Name	Description
	If the selected material has the Brand Name Required field checked, the Product Name will be enabled and will be required. The Manufacturer field will remain protected and will be populated based on Product Name. Otherwise, if the Brand Name Required field on the selected material is unchecked, the Product Name will remain protected and Manufacturer will be enabled.
Sampler	The ID of the inspector that took the sample. If the selected material has been defined in the new table “Controlled Material Categories”, then the Sampler field will be restricted to those inspectors who are active, and have active qualification with the same material category, and where the Sample Date falls within the active qualification’s date range.
Producer/Supplier Name	The Producer Supplier Name of the selected material. The Filter-Search lens will display the Producer/Supplier Name for the selected material where the Sample Date falls between the producer/supplier material Effective and Expiration date or the Sample Date is greater than Effective date and Expiration date is ‘0’. On selection, the P/S Code will be populated.
	This field will be editable.
Producer/Supplier Code	The Producer Supplier Code of the selected material.
	This field will be protected. On selection, the Producer Supplier Name the Code will be populated.
Type	The Producer/Supplier Type identifies the type of source. (e.g., prod/supplier, plant, pit, or quarry)
City	The City identifies where the producer/supplier is located.
Product Name	The brand of the material. The standard search lens will display Product name that match both the material selected and the sample date falls between the effective date and expiration date of the approved material. Once the name is selected the Manufacturer name and code will be populated.
	Initially this field will be disabled until the material is selected. If the selected material has brand name required field checked than this field will be editable and Manufacturer field will be disabled.
Manufacturer	The manufacturer of the material. The Filter-Search lens will display the Manufacturer name and code from producer/supplier table. Once the name is selected the code will be populated. The Manufacturer name from producer/supplier material table with sample date between effective and expiration date will be allowed.
	Initially this field will be disabled until the material is selected. If the selected material has brand name required field unchecked then this field will be editable.
Manufacturer Code	The Manufacturer Code of the selected material.
	This field will be protected. On selection, the Manufacturer Name

Field Name	Description
	and Code will be populated.
Intd Use	Description of the intended use of the material
	This column is editable.
Town	The name of the town where the work is being done.
Geographical Area	Transportation Agency-defined geographical region where the sample, lab, or equipment is located.
Represented Quantity	The quantity of the sample being associated with the contract or the quantity of material represented by the sample.
Sample Unit	The unit of measure of the sample with no label has been moved next to Represent Quantity field.
	After the material is selected the default value for a new sample will be units defined in material details and the system operation parameter 'Default Material Unit'.
	The drop down list box will be populated with the defined English and Metric material units based on the selected material.
	The Smpl Unit field will present data from a new table, MTLUNITS, a code table in (T_CD_TBL_HDR and DTL).
Authorized By	The ID of the user that authorized (completed) the sample.
Authorized Date	The date the sample was authorized (completed). The system will use the current date when the same is authorized.
Lock Type	Indicates what access is available for this sample.
	If the agency has selected 'No' to 'Allowed Sample Limited Access Lock' in the system operational parameter then this field will be protected. If the agency has selected "Yes' then based on the user group defined for System Operational Parameter "Limited Access Sample Group" or "Limited Access Standalone Group" and the current user group the 'Limited Lock' lock type will be available in the drop down list box.
	The Limited Access Lock will be available to the group member belonging to the assigned group for "Limited Access Sample Group" or "Limited Access Standalone Group" in the System Operational Parameter. This will be available even after the sample is authorized. A user within this group will be able to set or release the lock on a sample at any time.
Locked By	When the 'Locked Type' field is set to 'Locked' the system

Field Name	Description
	will populate this field with the user ID of the locking personnel.
Lock Date	When the 'Locked Type' field is set to 'Locked' the system will populate this field with the current date.

Table 13-51 The Basic Sample Data Fields Table

To add basic sample data:

1. On the **Sampling and Testing** panel, double-click the **Sample Information** icon.
2. In the **Sample ID** field, type the sample ID.
3. In the **Smpl Unit** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
4. In the **Status** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
5. Press the **Tab** key.
6. In the **Smpl Dt** field, type the date the sample was taken.
7. Press the **Tab** key.
8. In the **Link To** field, type the sample ID to which this sample is linked.
9. Press the **Tab** key.
10. In the **Log Dt** field, type the date the sample was received at the lab or date the dispute or claim was entered into SiteManager..
11. In the **Smpl Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
12. In the **Acpt Meth** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
13. Press the **Tab** key.
14. Using the *right* mouse button, click the **Smpld By** field.
15. From the object menu, click the **Search** choice.
16. In the list box, scroll to and click the desired ID of the sampler.
17. Click **Ok**.
18. Press the **Tab** key.
19. Using the *right* mouse button, click the **Material** field.

20. From the object menu, click the **Search** choice.
21. In the list box, scroll to and click the desired material.
22. Click **Ok**.
23. Press the **Tab** key.
24. Using the *right* mouse button, click the **P/S** field.
25. From the object menu, click the **Search** choice.
26. In the list box, scroll to and click the desired producer/supplier.
27. Click **Ok**.
28. Press the **Tab** key.
29. Using the *right* mouse button, click the **Mnfctr** field.
30. From the object menu, click the **Search** choice.
31. In the list box, scroll to and click the desired manufacturer.
32. Click **Ok**.
33. Press the **Tab** key.
34. In the **Town** field, type the name of the town where the work is being done.
35. In the **Geog Area** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
36. Press the **Tab** key.
37. In the list box, scroll to and click the desired manufacturer.
38. Click **Ok**.
39. Press the **Tab** key.
40. In the **Intd Use** field, type the intended use of the material.
41. Press the **Tab** key.
42. In the **Represented Quantity** field, type the desired value.
43. Press the **Tab** key.
44. In the **Lock Type** field, select the lock type for the sample.
45. Click the **Save** button.

To modify an unauthorized sample:

1. On the **Sampling and Testing** panel, double-click the **Sample Information** icon.
2. Click the **Open** button.
3. In the list box, scroll to and click the desired Sample.
4. Click **Ok**.
5. Press the **Tab** key to advance to the field to be modified.
6. Enter the desired change.
7. Click the **Save** button.
8. Click the **Addtl Sample Data** folder tab.
9. Press the **Tab** key to advance to the field to be modified.
10. Enter the desired change.
11. Click the **Save** button.
12. Click the **Contract** folder tab.
13. Press the **Tab** key to advance to the field to be modified.
14. Enter the desired change.
15. Click the **Save** button.
16. Click the **Other** folder tab.
17. Press the **Tab** key to advance to the field to be modified.
18. Enter the desired change.
19. Click the **Save** button.
20. Click the **Tests** folder tab.
21. Press the **Tab** key to advance to the field to be modified.
22. Enter the desired change.
23. Click the **Save** button.

Tip: If the material code on an unauthorized sample needs to be modified, all Tests must be deleted first. Also, if a sample's material code is changed, the values populating the following fields will be removed:

Producer Supplier
Manufacturer
Town

Product Name

Any Contract associations

To view the lab report of an existing sample:

1. On the **Basic Sample Data** folder tab, click the **Open** button.
2. Click the **Open** button.
3. In the list box, scroll to and click the desired Sample.
4. Click **Ok**.
5. Click the **Services** menu and click the **Lab Report** choice.
6. Select the criteria.
7. Click **Ok**.
8. When complete, click the **Close** button.

13.8.1.2 Sample Security

A facility to lock the sample is available. When a sample is locked only the user(s) with access will be allowed to edit the sample information, including authorizing the sample. All the users without access will have inquiry only access. The sample can be locked at the following levels:

- a) No Lock – The sample with this security option will be open for changes from any users with update window rights. (as the system works currently)
- b) User Only - allows update access to the user who last modified the sample record only.
- c) Office Level - allows update access to the sample to the specified office and to the users from all the office levels in the chain above the specified office level.

The sample security Lock Type drop down will be populated with these types based on the active security types selected by the agency.

If the agency has selected the 'User Level' by assigning 'Y' to 'Allow Sample User Lock' in the system operational parameter then the Lock Type drop down will have option for 'User lock' and 'No Lock'.

If the agency has selected 'Office level' by assigning 'Y' to 'Allow Sample Office Lock' in the system operational parameter then the users office levels and 'No Lock' will be populated in the sample security type drop down.

The System Operational Parameter 'Default Sample Security' determines the security type, which is allowed in the agency. The default value will be set to 'No Lock'. The security types available will be all security types (i.e. No lock, User Only, Office Level1, Office Level2, Office Level3, Office Level4 based on the defined office level in the System Operational Parameter). The agency will select the option and based on the option selected, the Maintain Sample Information window will assign the default to the new sample if available to the user.

If the agency has selected 'No' to 'Allow Sample User Lock' and 'Allow Sample Office Lock' in the system operational parameter then sample security will not be enabled in the Maintain Sample Information window.

13.8.1.3 Limited Access Sample Lock

A facility to lock the sample in a "Limited Access" mode is required.

If the agency assigns a user group for "Limited Access", the user group will be declared in the SiteManager Systems Administration - System Operational Parameter window for the "Limited Access Sample Group" and "Limited Access Standalone Group" parameter.

The member of the user group defined for "Limited Access Sample Group" or "Limited Access Standalone Group" will be able to lock the sample in 'Limited Access' mode and will be shown the 'Limited Access' Lock type along with the Locked by and Lock date fields. If the current group selected by the user is not the assigned group for "Limited Access Sample Group" or "Limited Access Standalone Group" then the Locked by and Lock date field will not be displayed on the screen and 'Limited Access' lock type will not be available.

When a sample is locked in "Limited Access" only the user(s) belonging to the assigned group for "Limited Access Sample Group" or "Limited Access Standalone Group" will be allowed to view or edit the sample information, including authorizing the sample.

The sample locked in the "Limited Access" will not be accessible by the users not belonging to the assigned group for "Limited Access Sample Group" or "Limited Access Standalone Group".

The Sample Information window – File Open pick list window and the Search window will exclude samples locked in "Limited Access" for the users not belonging to the assigned group for "Limited Access Sample Group" or "Limited Access Standalone Group".

A sample created by a user belonging to the assigned group for "Limited Access Sample Group" or "Limited Access Standalone Group" but not locked in 'Limited Access' mode will be available for all the material users.

When the Sample Information window is in 'new' mode for creating a sample the value of the "Lock Type" field if available will be defaulted to 'No Lock'.

The user belonging to the assigned group for "Limited Access Sample Group" or "Limited Access Standalone Group" will be able to set or release the lock on a sample at any time .

The samples locked in the "Limited Access" lock type will be only available in the search window on "Link To" field for the defined "Limited Access Sample Group" or "Limited Access Standalone Group".

Figure 13-77 The Basic Sample Data Folder Tab - Limited Access

Field Name	Description
Lock Type	<p data-bbox="605 436 1187 468">Indicates what access is available for this sample.</p> <p data-bbox="605 520 1219 617">If the agency has selected 'No' to 'Allowed Sample Limited Access Lock' in the system operational parameter then this field will be protected.</p> <p data-bbox="605 632 1235 827">If the agency has selected "Yes" then based on the user group defined for System Operational Parameter "Limited Access Sample Group" or "Limited Access Standalone Group" and the current user group the 'Limited Lock' lock type will be available in the drop down list box.</p> <p data-bbox="605 842 1235 1104">The Limited Access Lock will be available to the group member belonging to the assigned group for "Limited Access Sample Group" or "Limited Access Standalone Group" in the System Operational Parameter. This will be available even after the sample is authorized. A user within this group will be able to set or release the lock on a sample at any time.</p>
Locked By	<p data-bbox="605 1119 1219 1220">When the 'Locked Type' field is set to 'Locked' the system will populate this field with the user ID of the locking personnel.</p>
Lock Date	<p data-bbox="605 1228 1219 1329">When the 'Locked Type' field is set to 'Locked' the system will populate this field with the current date.</p>
 Sample ID	<p data-bbox="605 1337 1219 1551">The sample ID of the material being tested and/or accepted for a contract. The unique identifier of a sample. The Open-Search lens feature to select from the list of available sample in the system. The list will display Sample ID and Material code from the sample list data window.</p> <p data-bbox="605 1556 1235 1757">This column is editable and user can enter the partial sample ID and use the search lens facility. If the member of "Limited Access Sample Group" or "Limited Access Standalone Group" locks the sample then it will be available only to the member of this group to link to another sample.</p>
Link To	<p data-bbox="605 1766 1219 1827">The sample ID reflects another sample to which this one is linked</p>

Field Name	Description
	If the member of “Limited Access Sample Group” or “Limited Access Standalone Group” locks the sample then it will be available only to the member of this group to link to another sample.

13.8.1.4 Additional Sample Data Folder Tab

On the Additional Sample Data window, the Mix ID field has a search lens facility to select the relevant Mix Id for the selected Design Type. The search lens window displays the list of Mix Id. The picklist for SUPERPAVE and PCC will display the will display the Producer Supplier Name, Effective Date, Termination Date, Approved Date.

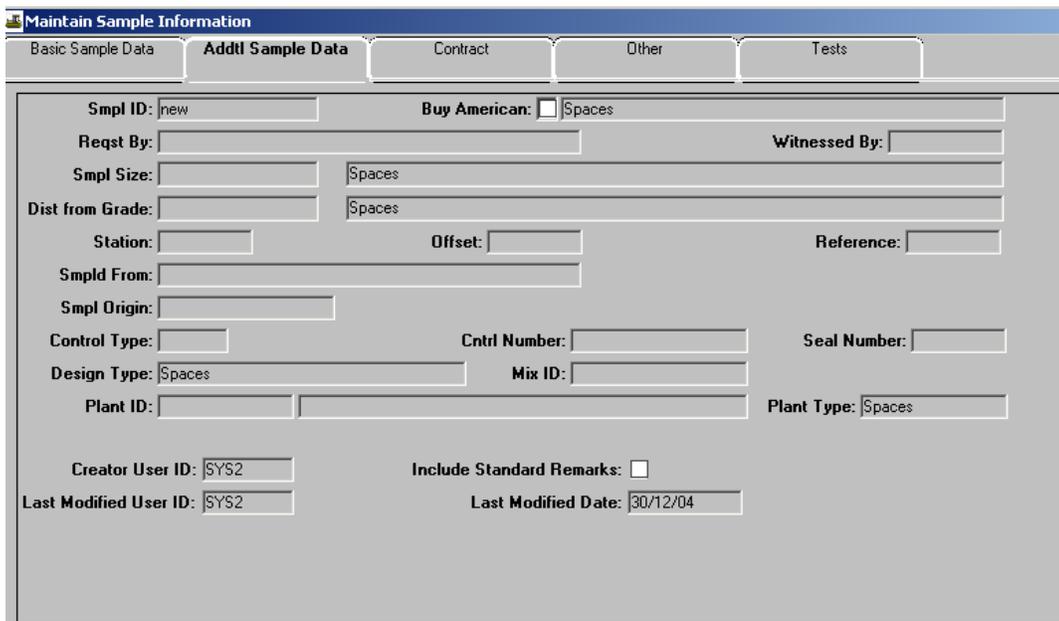


Figure 13-78 The Additional Sample Data Folder Tab

Field Name	Description
Sample ID	The ID of a sample.
Buy American (checkbox)	Identifies if the material sampled fulfills the requirement for the Buy USA program.

Field Name	Description
Buy American (drop-down list)	Identifies the documentation required to accept materials for the Buy USA program.
Requested By	Description identifying who requested the permit.
Witnessed By	The ID of the person who witnessed the sample being taken.
Sample Size	The size of the sample being taken.
Dist. from Finished Grade	The distance from finished grade measurement. It takes care of the height of fill, height of test, and test depth measurements.
Dist. from Finished Grade Unit of Measure	The unit of measure in which the distance from finished grade is measured.
Reference	Line on plans to reference the location of the sample.
Station	Used for measuring distances and identifying points on the ground along a survey line.
Offset	Distance and direction from the reference.
Sampled From	Description of where the sample was taken (e.g., truck, bin, etc.)
Sample Origin	Description of the originating location for a sample.
Control Type	Provides an additional identifier for the sample (if available). The type is from a list of defined values by the transportation agency. Examples are heat number, lot number, batch number, etc.
Control Number	The actual number for the type of control to identify the sample.

Field Name	Description
Seal Number	The seal number of the batch of material tested.
Design Type	This is one of the five type of designs (i.e., Marshall, HVEEM, SUPERPAVE, PCC, Aggregate).
Mix ID	The ID for the mix design. This field cannot be used if Design Type is not entered.
Plant Type	Identifies the type of plant (e.g., plant, pit, quarry, etc.)
Plant ID	The unique identifier for the plant. Plant ID is required if Plant Type is entered.
Plant Name	Name of the plant, pit or quarry.

Table 13-52 The Additional Sample Data Table

To add additional sample data:

1. On the **Sampling and Testing** panel, double-click the **Sample Information** icon.
2. On the **Sample Data** folder tab, add a sample.
3. Click the **Addtl Data** folder tab.
4. Click the **Buy American** check box (ON) if appropriate.
5. In the **By American** drop-down list, click the expand arrow to the right of the current selection and click the desired choice *if the Buy American checkbox is clicked* (ON).
6. Press the **Tab** key.
7. In the **Reqst By** field, type the name of the person requesting the sample.
8. Press the **Tab** key.
9. Using the *right* mouse button, click the **Witnessed By** field.
10. From the object menu, click the **Search** choice.
11. In the list box, scroll to and click the desired witness.
12. Click **Ok**.
13. Press the **Tab** key.

14. In the **Smpl Size** field, type the size of the sample.
15. Press the **Tab** key.
16. In the **Dstnc Finish Grade** field, type the distance from finished grade measurement.
17. In the **Dstnc Finish Grade Unit** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
18. Press the **Tab** key.
19. In the **Station** field, type the desired value.
20. Press the **Tab** key.
21. In the **Offset** field, type the desired value.
22. Press the **Tab** key.
23. In the **Reference** field, type the desired value.
24. Press the **Tab** key.
25. In the **Smpld From** field, type the desired value.
26. Press the **Tab** key.
27. In the **Smpl Origin** field, type the desired value.
28. Press the **Tab** key.
29. In the **Control Type** field, type the desired value.
30. Press the **Tab** key.
31. In the **Cntrl Number** field, type the desired value.
32. Press the **Tab** key.
33. In the **Seal Number** field, type the desired value.
34. Press the **Tab** key.
35. In the **Design Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
36. Press the **Tab** key.
37. Using the *right* mouse button, click the **Mix ID** field.
38. From the object menu, click the **Search** choice.
39. In the list box, scroll to and click the desired mix ID.
40. Click **Ok**.

41. Press the **Tab** key.
42. In the **Plant Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
43. Press the **Tab** key.
44. Using the *right* mouse button, click the **Plant ID** field.
45. From the object menu, click the **Search** choice.
46. In the list box, scroll to and click the desired plant ID.
47. Click **Ok**.
48. Click the **Save** button.

Contract ID	Project	Line Item	Item Code	Fed State Prj Nbr	Cont Est Matrl Qty	Represented Qty	Material Unit	Reported Matrl Qty	Satisfy Rep Matl Qty	Line
C11581	11581-BID	0005	202-00033	BR 067A-008	31.000	.000		76.000	0.000	Remo
C11730	11730-BID	0015	202-00033	BR 144A-018	3.000	.000		0.000	0.000	Remo

Figure 13-79 The Contract Sample Data Folder Tab

13.8.1.5 Contract Sample Data

The Contract (Sample) window is used to associate a sample to a particular contract by project (or contracts). When an association is made between a sample and a contract, it is done at the line item level. That is, the sample is kept on the line item within a project within the contract. A quantity to be associated with the contract may also be entered.

When adding a new row, the pick list will include a Contract ID search lens facility. Once a valid contract is selected, it will display the line items on the contract where one or more line items can be selected using standard Windows select functionality.

The Satisfied Represented Material Quantity (labeled as ‘Satisfy Repr Matl Qty’) from the Daily Work Report - Work Item tab displays next to Reported Material Quantity.

Depending upon System Operational Parameters settings, the Represented Quantity field may be a required entry.

Field Name	Description
Contract	The ID of a contract.
Project	The ID of a project.
Line Item	An transportation agency-defined code used to identify a particular item.
Item Code	Code for Bid Item
Fed State Prj Nbr	The federal, state, or province Project number for the Contract, Project or Category. This is a required field.
Cont Est Matrl Qty	The current material quantity expected on the entire contract. Calculated: (Bid Quantity of Contract Item + Change Order Quantity) x Conversion Factor
Represented Qty	Represented Quantity. This field may be required, depending upon System Operational Parameters settings.
Material Unit	The Material Unit short description.
Reported Matrl Qty	This total material installed. Calculated: Installed Quantity of Contract Item x Conversion Factor
Satisfy Repr Matl Qty	The current satisfied represented material quantity, i.e. How much of the material this sample represents to this contract item.
	Calculation: Satisfy Repr Material x Conversion Factor.
Line Item Description	Description of the contract.
Supp Description 1	This field contains a textual description that is supplemental to the item’s description and may be required by the transportation

	agency.
Supp Description 2	This field contains a secondary textual description that is supplemental to the item's description and may be required by the transportation agency.
PickList-Contract	The Contract for the sample. The standard search lens will display the Contract information.
PickList-Item list	The contract line items information like the Project Number, Line Item Number, Line Item Description, and Supplemental Descriptions 1 and 2 for the given contract will be displayed and the user will have the facility to select multiple contract line items. The selected Contract line items will be added to the sample

Table 13-53 The Contract Sample Data Fields Table

To add the association of a sample with a Contract And Project/Line Item:

1. On the **Sampling and Testing** panel, double-click the **Sample Information** icon.
2. On the **Sample Data** folder tab, add a sample.
3. Click the **Contract** folder tab.
4. In the list box, scroll to and double-click the desired Contract.
5. In the list box, scroll to and click the desired Project/Line Item.
6. Click **Ok**.
7. Click the **Yes** button if you wish to add all project/line item combinations to this sample.
8. In the **Represented Quantity** field, type the desired value.
9. To add additional contracts and projects/ line items, click the **New** button and repeat steps 4-8.
10. Click the **Save** button.

13.8.1.6 Other Sample Data

The Other (Sample) folder tab allows the assignment of the current sample to entities other than contracts. Examples of entities other than contracts that may be specified are purchase order requisitions for maintenance, research, design, or geo-technical.

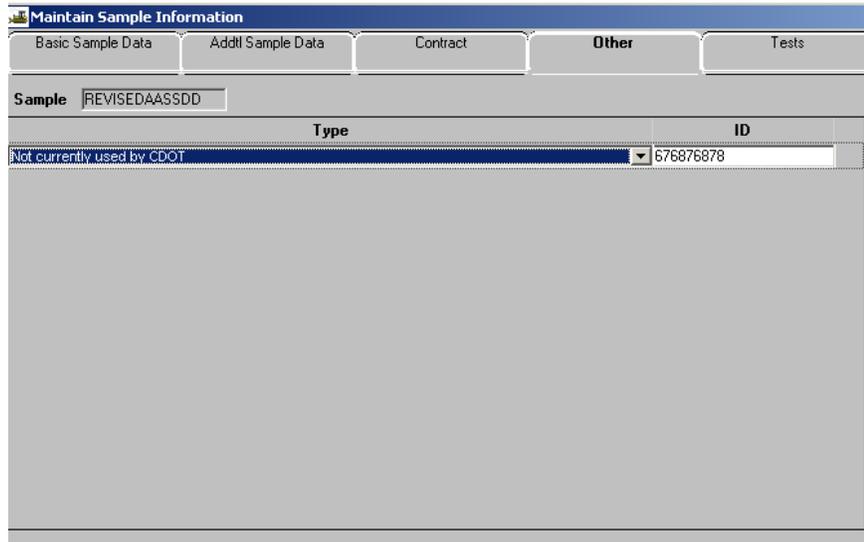


Figure 13-80 The Other Sample Data Folder Tab

Field Name	Description
Type	The transportation agency-defined list of entities other than a contract that require sampling and testing (e.g., maintenance, research, design, or geo-technical).
ID	A value representing the entity.

Table 13-54 The Other Sample Data Fields Table

To add the association of a sample with another entity:

1. On the **Sampling and Testing** panel, double-click the **Sample Information** icon.
2. On the **Sample Data** folder tab, add a sample.
3. Click the **Other** folder tab.
4. In the **Type** drop-down list, click the expand arrow to the right of the current selection and click the desired choice.
5. Press the **Tab** key.
6. In the **ID** field, type the desired value.
7. Click the **Save** button.

13.8.1.7 Sample Tests

This tab allows the user to identify the tests to be performed on the sample and to enter the results of the tests. The user can identify tests that have been defined for the material. It also allows the user to track when the test starts and is completed. A test method may be performed on a material more than once since a unique Sample Test Number must be assigned to each test.

The Start Date field is a required field and is currently defaulting to the current system date. The ‘Start Date’ of the test not the ‘Actual Completion Date’ will be used in the validation with the active qualification’s date range. If the start date is altered after testers have been associated with the test, the qualifications of all associated testers will be reconfirmed before accepting the start date. An error message will be displayed for any error encountered, and the original date will be restored.

Only qualified users will be able to access test results in an update mode. A qualified user is identified by a user ID, that either has global access to test data entry, or by having an active test method qualification with the same test method that is specified on the sample’s Tests tab, and where the test start date falls within the active qualification’s date range. Otherwise, the test data will only be available in read-only mode.

When test results are saved, the tester (that is, the current User ID) is compared to the list of testers shown in the Sample Testers window. If the tester is already there, no action is taken. If the tester is not there, his or her information will be added. This action will be performed for each associated test. If a test is deleted, the testers’ information associated to the test will also be deleted (as is currently being performed).

The screenshot shows the 'Maintain Sample Information' window with the 'Tests' tab selected. The 'Sample' field contains 'REVISEDAAASDD'. Below this is a table with the following data:

Test Method	Sample Test Nbr	Test Description
T239	001	Moisture of Soil & Soil-Agg. in-place by Nuclear mthds.
Test3	001	Test3

Below the table is a form for entering test details:

- Test Method: T239 (selected) | Moisture of Soil & Soil-Agg. in-place by Nuclear mthds.
- Lab ID: PLUTO | PLUTO DIGGING SERVICES
- Sample Test Nbr: 001
- Charge Amount: \$00
- Start Date: 00/00/00
- Estimated Completion Date: 00/00/00
- Actual Completion Date: 00/00/00

Figure 13-81 The Sample Tests Folder Tab

Field Name	Description
------------	-------------

Field Name	Description
Test Method	Method used for testing the material.
Test Description	Description of the test.
Lab ID	The ID for the testing lab
Lab	The name of the testing lab.
Sample Test Nbr	Unique number/identifier for the test.
Start Date	Date to specify when the test began. Defaults to current date for a new test. This is a required field.
Charge Amount	The amount charged for the test.
Estimated Completion Date	The date the test is expected to be completed. Estimated Completion date must be greater than Start Date.
Actual Completion Date	The date the test is completed. Actual Completion date must be greater than Start Date.

Table 13-55 The Sample Tests Fields Table

To add the association of a sample with a test:

1. On the **Sampling and Testing** panel, double-click the **Sample Information** icon.
2. On the **Sample Data** folder tab, add a sample.
3. Click the **Tests** folder tab.
4. Using the *right* mouse button, click the **Test Method** field.
5. From the object menu, click the **Search** choice.
6. In the list box, scroll to and click the desired test method.
7. Click **Ok**.
8. Press the **Tab** key.
9. Using the *right* mouse button, click the **Lab ID** field.

10. From the object menu, click the **Search** choice.
11. In the list box, scroll to and click the desired lab ID.
12. Click **Ok**.
13. Press the **Tab** key.
14. In the **Sample Test Nbr** field, type the number for the test.
15. Press the **Tab** key.
16. In the **Start Date** field, type the date the testing started.
17. Press the **Tab** key.
18. In the **Charge Amount** field, type the amount charged for the test.
19. Press the **Tab** key.
20. In the **Estimate Completion Date** field, type the date.
21. Press the **Tab** key.
22. In the **Actual Completion Date** field, type the date
23. To add additional tests, click the **New** button and repeat steps 4-20.
24. Click the **Save** button.

To view related sample tests:

1. On the **Sampling and Testing** panel, double-click the **Sample Information** icon.
2. On the **Sample Data** folder tab, add a sample.
3. Click the **Tests** folder tab.
4. In the list box, scroll to and click the desired test method.
5. Click the **Services** menu and click the **Related Sample Tests** choice.
6. Click the **Close** button to return to the **Test** folder tab.

13.8.1.8 Test Data

When a test is selected, the Services menu's Enter/View Test Data choice allows the entry of the test data. This menu choice will access the fields of the material specification as a template for entry of the test data and the values of the materials specification for comparison to the sample.

Soil Classification

Sample: SD060803 Sample Test Nbr: 33

Liquid Limit:

Plastic Limit: Plasticity Index:

Gradation Sample ID:

200 Sieve:

Hydrometer --

D10: Coefficient of Uniformity, Cu:

D30: Coefficient of Curvature, Cc:

D60:

Unified Soil Classification - ASTM AASHTO

Group Symbol: General Classification:

Group Name: Group Classification:

Reviewer User ID:

Figure 13-82 The Test Data Window Using the Determining the Plastic Limit and Plasticity Index of Soils

To add the test data:

1. On the **Sampling and Testing** panel, double-click the **Sample Information** icon.
2. On the **Sample Data** folder tab, add a sample.
3. Click the **Tests** folder tab.
4. Click the desired **Test Method**.
5. Click the **Services** menu and click the **Enter/View Test Data** choice.
6. Enter the appropriate test data values for the specific test specification.
7. Click the **Save** button.
8. Click the **Close** button to return to the **Test** folder tab.

13.8.1.9 Testers

The Sample Testers window allows testing personnel to be associated with the sample's specific test method.

The Sample Tester window can be accessed from Sample Information window - Test tab service menu option 'Tester'.

The tester search lens filter is restricted to those testers who have valid test method qualifications, by either having global access to test, or by having an active test method qualification with the same test method that is specified on the sample's Tests tab and where the test start date falls within the active qualification's date range. The delete will be available until the test results have been recorded.

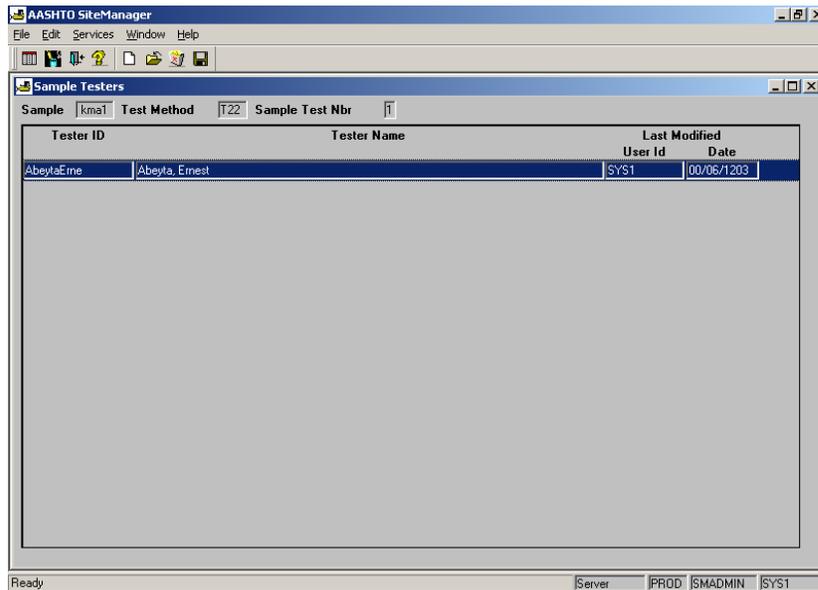


Figure 13-83 The SampleTesters Window

Field Name	Description
Tester ID	The Tester to be associated to a sample’s specific test method.
	This is editable field. The Tester search lens filter will be a display only tester with active qualification, i.e., the sample date is between the qualification start date and end date or having global access
Last Modified User Id	The Tester ID of the last person visited this record.
	This field is protected and is assigned by the system.
Last Modified Date	The date when the last user changed the record.
	This field is protected and is assigned by the system.

To add a sample tester associated to the test method:

1. On the **Sampling and Testing** panel, double-click the **Sample Information** icon.
2. On the **Sample Data** folder tab, add a sample.
3. Click the **Tests** folder tab.
4. Click the desired **Test Method**.

5. Click the **Services** menu and click the **Tester** choice.
6. Using the *right* mouse button, click the **Tester ID** field.
7. From the object menu, click the **Search** choice.
8. In the list box, scroll to and click the desired ID of the tester.
9. Click **Ok**.
10. Click the **Save** button.
11. Click the **Close** button to return to the **Test** folder tab.

13.8.1.10 Sampling Information — Authorizing

In order to authorize the sample, all required fields on the Base Sample Data tab need to contain a value, and all tests specified for the sample must have an actual completion date entered. When the sample is authorized, the Authorized Date and Authorized By fields are filled in, and appropriate messages are sent to the project personnel letting them know about the completion. Once the sample has been authorized, the sample cannot be modified.

In the user code table “Sample Status Allowing Sample Authorization” (SMPLAUTH) will allow users to enter codes that indicate the status of a sample suitable for authorization. The values entered should be a subset of the Sample Status code table (SMPLSTAT). To disable the function provided by this code table makes the codes in SMPLAUTH exactly match those in SMPLSTAT. The initial values in the SMPLAUTH table would be the values from SMPLSTAT.

To authorize a sample:

1. On the **Sampling and Testing** panel, double-click the **Sample Information** icon.
2. Click the **Open** button.
3. In the list box, scroll to and click the desired Sample.
4. Click **Ok**.
5. Click the **Services** menu and click the **Authorize** choice.
6. Click the **Save** button.

13.8.1.11 Sample Information — Copying Sample and Revising

Authorized, unauthorized or *Void* samples can be copied using the Services menu’s Copy Sample choice. Once the sample has been copied, it will require a new sample ID at a minimum.

An authorized sample cannot be modified, but it can be *revised*. The Service menu’s Revise choice creates a copy of the original sample and voids the original sample. The void original is automatically linked to the revised copy. The copy of the sample created by the Revise choice also requires a new sample ID.

To copy an existing sample:

1. On the **Sampling and Testing** panel, double-click the **Sample Information** icon.
2. Click the **Open** button.
3. In the list box, scroll to and click the desired Sample.
4. Click **Ok**.
5. Click the **Services** menu and click the **Copy Sample** choice.
6. In the **Sample ID** field, type the sample ID.
7. Click the **Save** button.

To revise an authorized sample:

1. On the **Sampling and Testing** panel, double-click the **Sample Information** icon.
2. On the **Basic Sample Data** folder tab, click the **Open** button.
3. Click the **Open** button.
4. In the list box, scroll to and click the desired authorized Sample.
5. Click **Ok**.
6. Click the **Services** menu and click the **Revise** choice.
7. In the **Sample ID** field, type the sample ID.
8. Click the **Save** button.

13.8.1.12 Sample Information — Remarks and Disposition Remarks

The Remarks button functions normally and cannot be modified once the sample has been authorized.

In addition to the Remarks buttons, authorized and void samples can have a Disposition Remark attached using the Services menu's Disposition Remark choice. This is the only modification that can be made to authorized or void samples.

To attach a disposition remark to an authorized or void sample:

1. On the **Sampling and Testing** panel, double-click the **Sample Information** icon.
2. On the **Basic Sample Data** folder tab, click the **Open** button.
3. Click the **Open** button.
4. In the list box, scroll to and click the desired authorized or void Sample.
5. Click **Ok**.

6. Click the **Services** menu and click the **Disposition Remark** choice.
7. Click in the window in the background.
8. Click the **Save** button.

13.8.2 Find Sample — Sample Tracking

The Find Sample window allows a search for samples based on a specific list of criteria. This list of criteria includes geographic area, sampled by, sample date range, producer/supplier, material, contract, and item code. The window allowing the selection of these criteria is called the Find Sample Parameters window. This window will be displayed immediately after opening the Find Sample icon. Once parameters are selected, the data is found and displayed on the original Find Sample window, known below as the “Non-Contract Related Window Format”, window. There are two exceptions to this rule. They are in the case of contract and/or item code specification. If item code is specified, whether in combination with other criteria or not, a special data presentation known below as the “Item Code Related Window Format” will be used. If the item is not specified but the contract is, the presentation known below as the “Contract Related Window Format” is used.

It is important to note that in order for any sample to be shown, it must meet all the conditions specified in the Find Sample Parameters window. For example, if two criteria are specified, and a given sample meets only one of the two conditions, it will not be shown on the report.

If the current user group is the same as assigned to the ‘Limited Access Sample Group’ or ‘Limited Access Standalone Group’ System Operational Parameter then all the samples satisfying these conditions will be shown.

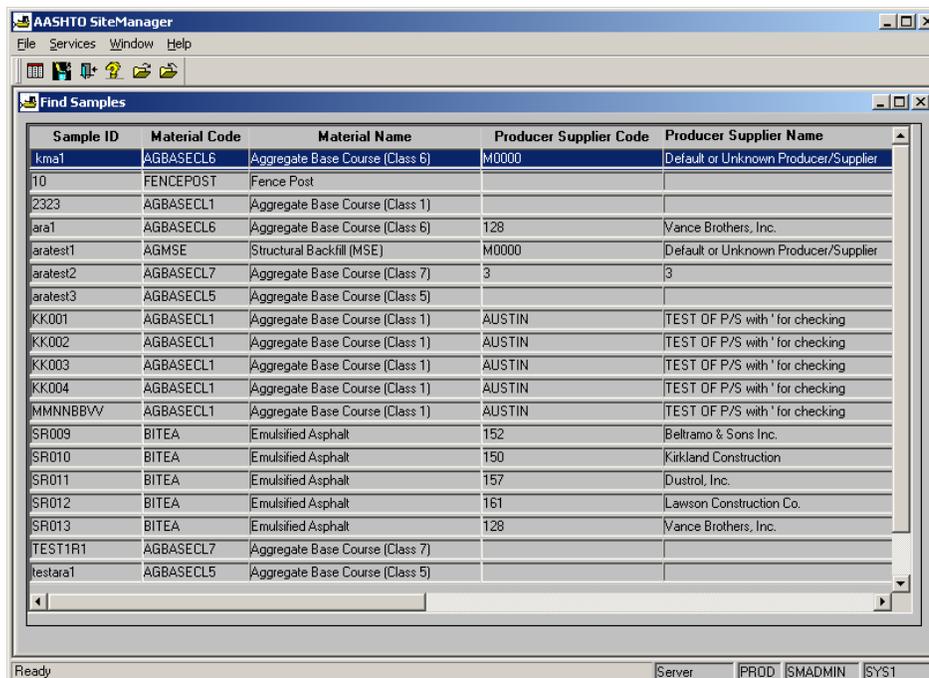


Figure 13-84 The Find Sample Window

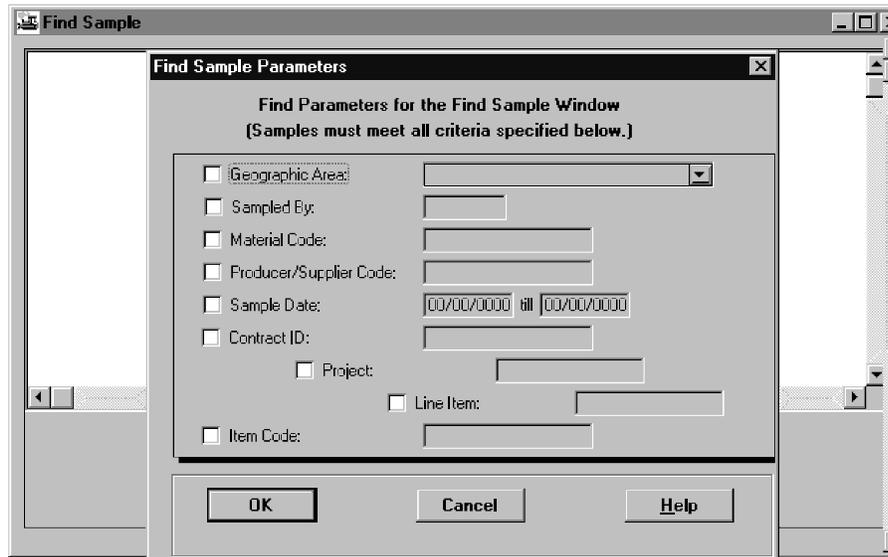


Figure 13-85 The Find Sample Parameters Window

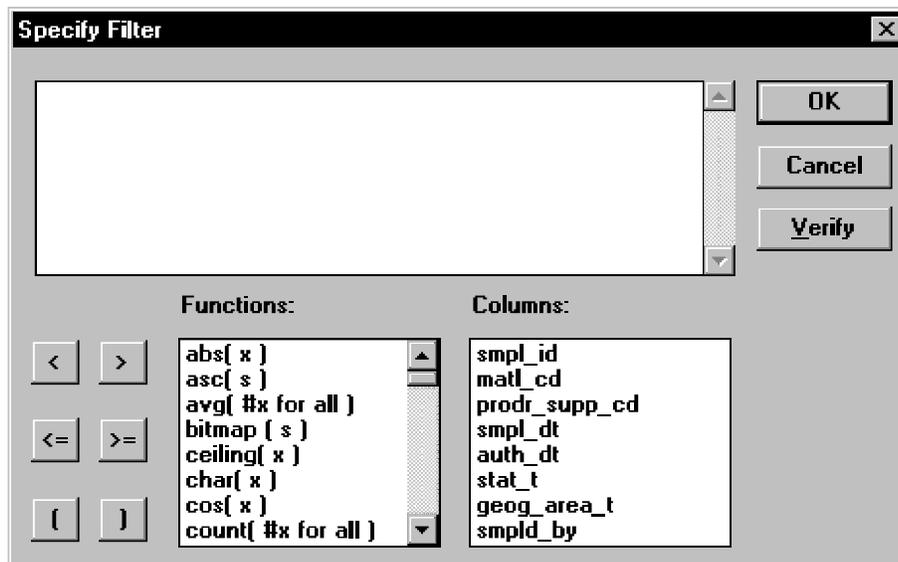


Figure 13-86 The Find Sample Criteria Window

Field Name	Description
Sample ID	The ID of the sample.
Sample Date	The date the sample was taken.

Field Name	Description
Sampled By	The inspector who took the sample.
Authorized Date	The date the sample was authorized.
Status	The current status of the sample.
Geographic Area	The geographic area of the sample.
Producer/Supplier	The producer or supplier of the material.
Material	The material from which the sample was taken.

Table 13-56 The Non-Contract Related Fields Table

Field Name	Description
Project	The project ID with a contract
Line Item	The line item ID of a contract.
Sample ID	The ID of the sample.
Sample Date	The date the sample was taken.
Sampled By	The inspector who took the sample.
Authorized Date	The date the sample was authorized.
Status	The current status of the sample.
Geographic Area	The geographic area of the sample.
Producer/Supplier	The producer or supplier of the material.

Field Name	Description
Material	The material from which the sample was taken.

Table 13-57 The Contract Fields Table

Field Name	Description
Contract	The ID of the contract.
Project	The project ID with a contract
Line Item	The line item ID of a contract.
Sample ID	The ID of the sample.
Sample Date	The date the sample was taken.
Sampled By	The inspector who took the sample.
Authorized Date	The date the sample was authorized.
Status	The current status of the sample.
Geographic Area	The geographic area of the sample.
Producer/Supplier	The producer or supplier of the material.
Material	The material from which the sample was taken.

Table 13-58 The Item Fields Table

To find a sample:

1. On the **Sampling and Testing** panel, double-click the **Find Sample** icon.
2. Click the desired parameter check box (ON).
3. Click **Ok**.

4. If appropriate, perform a **Filter** using the object menu (referenced in the Getting Started section).
5. Click **Ok**.

13.8.3 Sampling and Testing Requirement

The Sampling and Testing Requirements icon of the Sampling and Testing panel is identical in functionality to the same icon on the Material Information panel.

13.8.4 Standard Sample Remarks

The Standard Sample Remarks window is used to add optional standard remarks that will be added to all samples. A standard remarks entry can be created for the following sample types:

Failed,
Complete, and
Void.

To modify a standard sample remark:

1. On the Sampling and Testing panel, double-click the Standard Sample Remarks icon.
2. Click the Code Description to be modified.
3. In the remarks window, type a message or edit the existing message.
4. Click the Save button.

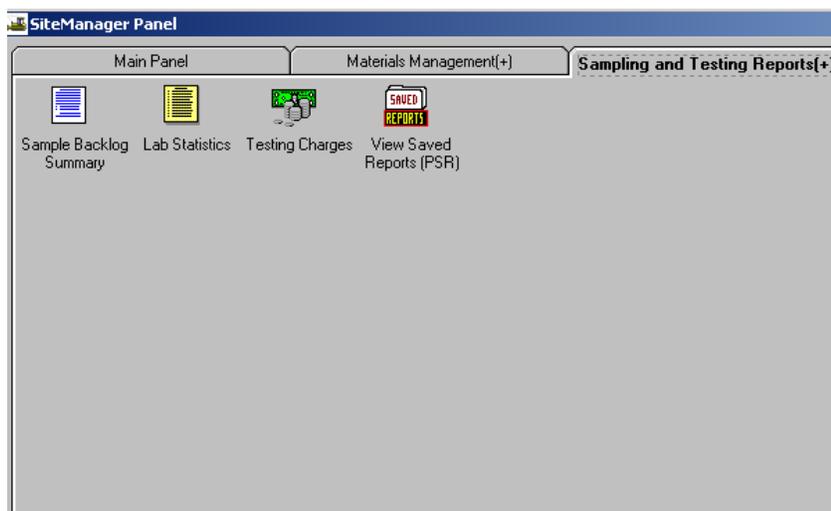


Figure 13-87 The Materials Management Sampling and Testing Reports Panel

13.8.5 Sampling and Testing Reports

The Sampling and Testing Reports panel generates commonly used Sampling and Testing reports. The following report topics are available on this panel:

Lab Statistics Report,
Testing Charges Report,
Failing Samples Report,
Sample Backlog Summary, and
View Saved Reports (PSR).

To access Sampling and Testing Reports:

1. On the Materials Management panel, double-click the Sampling and Testing Reports icon.
2. Double-click the icon for the desired report.

To generate a Sampling and Testing report:

1. Double-click the desired report icon.
2. Select the criteria.
3. To generate the report on-line, click **Ok**.

Or

To generate the report off-line to a file, click the **Generate Off-line File** check box (ON).

4. Click **Ok**.

Or

To generate and print the report off-line, click the **Generate Off-line Print** check box (ON).

5. Click **Ok**.

To make selections in the **Report Criteria** dialog:

6. Click the desired radio button to select the desired format.
By Summary selects all items
By Criteria (field name) selects an individual field

In a **By Criteria (field name)** format:

7. Using the *right* mouse button, click the field.
8. Perform a **Search** using the object menu (referenced in the Getting Started section).
9. Click **OK**.

13.8.6 Report Options

The report options are available as toolbar buttons or menu options for reports that have been generated on-line.

Components	Description
Close button	Closes the report preview.
Save button	In a simple report (see Save Reports section) invokes the Save dialog allowing the report to be saved in a .PSR file format.
Print button	Prints the report.
Prior button	Displays the prior page of a multi-page selection.
Next button	Displays the next page of a multi-page selection.
Zoom spin button	Magnifies or reduces the display of the report preview.
Copies spin button	Allows more than one copy of the report to be printed.

Table 13-59 The Report Components Table

13.8.7 Saving and Exporting Simple Reports

There are two types of reports in SiteManager — simple reports and complex reports. Simple report can be saved and exported, but complex reports cannot. It is easy to identify a simple report — the File menu’s Save choice (or the Save button) and the Service menu’s Export choice will be active for a simple report. They will not be active for a complex report.

For procedures on saving, opening, and exporting a report, please refer to the General Concepts section.

13.8.8 View Saved Reports (PSR)

A saved simple report can be viewed using the View Saved Reports (PSR) icon. For procedures on opening and viewing a saved report, please refer to the General Concepts section.

13.9 Process List (Materials Management)

The Process List window lists processes that are available to the authorized user. Available processes depend upon the functional area of the process list, for example, Contractor Payment processes are available by clicking the Process List icon located on the Contractor Payments panel. Processes appearing in Process Lists also depend upon the user security assigned to the individual process.

The Materials Management Process List contains the following standard process:

Sampling Checklist Report (SMPCHKLS)

Processes may be RTF reports, SiteManager PowerBuilder reports, or batch processes. From this window, authorized users may submit processes for batch and background execution.

A process is run from the Process List window by clicking on the named process, and choosing Run Process from the Services menu, or by clicking the named process and clicking the Run Process button or double-clicking the process.

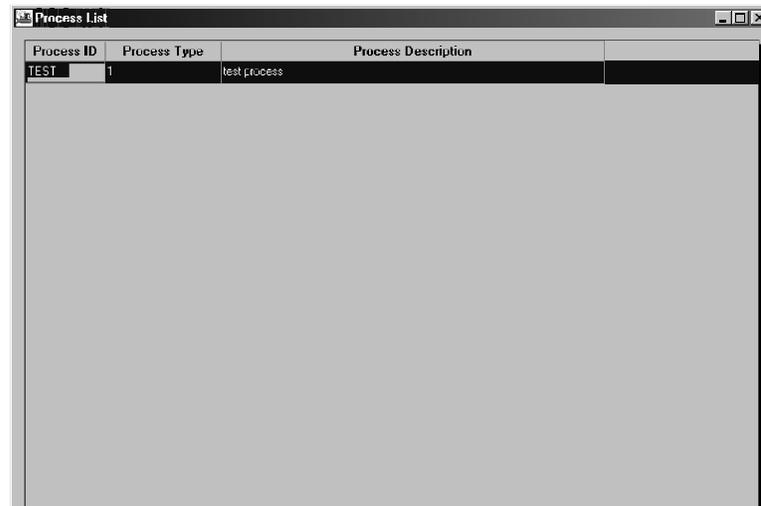


Figure 13-88 The Process List Window

<u>Field Name</u>	<u>Description</u>
Process ID	The name of the process.
Process Description	Short textual description of the process.
Process Type	Denotes whether the process is a standard process or custom process.

Table 13-60 The Process List Window Field Descriptions Table

To display the Process List window:

1. From the **Main panel**, double click the icon for the desired functional area.
2. Double click the **Process List** icon.

13.9.1.1 Submitting a Process

In addition to the parameters that may be specified while defining a process, there are runtime parameters that may be specified by the user at the time the process is executed. Processes may also be scheduled to run continuously on a specific day, week, or month. If there are any parameters associated to the process during its definition, a window will display when the process is run requesting the specified information from the user.

The Confirm Process Submission window allows users to choose to continue submission directly, cancel submission immediately, or navigate to a runtime parameters window before queuing the job for execution. The Confirm Process Submission window is accessed when the user selects/highlights a process row then selects Run from the Services menu or when the user double clicks on the process row. If any process-specific parameters have been associated to the process, a process parameter window will display, and the options to submit, cancel or specify parameters are available. The Confirm Process Submission window has three buttons, which are described in the table below.

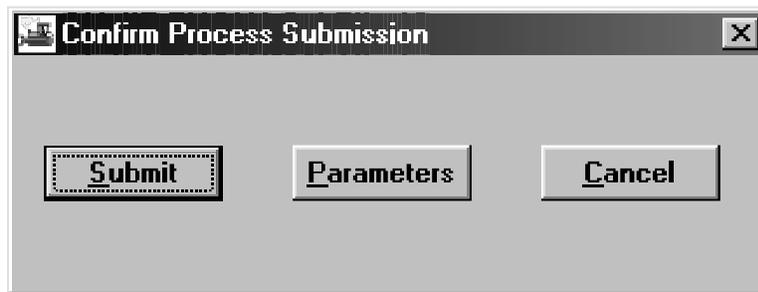


Figure 13-89 The Confirm Process Submission Window

<u>Button Name</u>	<u>Description</u>
Submit	Submits the selected process for execution.
Parameters	Displays the Process Submission Parameters window
Cancel	Exits the window without submitting the selected process for execution.

Table 13-61 The Confirm Process Submission Button Description Table

To submit a process:

1. From the **Main panel**, double click the icon for the desired functional area.
2. Double click the **Process List** icon.
3. Double click the desired process.

4. If the process has any runtime parameters associated, a screen will display requesting values from the user. Enter the requested values as desired.
5. If the process does not have any runtime parameters associated with it, the Confirm Process Submission window will display.
6. Click the **Submit** button.

13.9.1.2 Setting Process Submission Parameters

The Parameters button on the Confirm Process Submission window navigates the user to the Process Submission Parameters window. This window allows the user to declare certain runtime parameters for each process as it is selected for execution.

Standard SiteManager reports may utilize the Parameters window to schedule the execution of reports off-line.

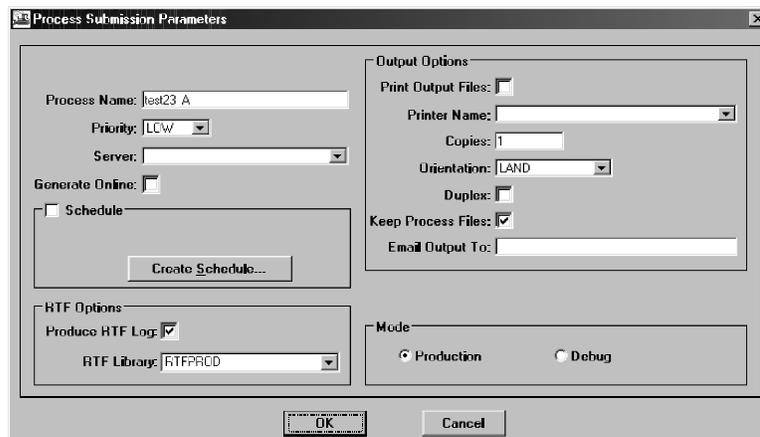


Figure 13-90 The Process Submission Parameters Window

<u>Field Name</u>	<u>Description</u>
Process Name	System-populated from the selected row on the Process List window.
Priority	Specifies the priority (the level of importance) of the process. Available priority levels are high, medium, or low.
Server	Displays the IP address of the application server.
Generate Online	If checked on, indicates that the report should be generated online in the client machine and not submitted for application server batch processing.

<u>Field Name</u>	<u>Description</u>
Schedule	If checked on, indicates the process has a previously-defined schedule for processing. This box may not be check on/off manually.
Create Schedule (Button)	Clicking this button begins the Create Schedule process.
RTF Options	
Produce RTF Log	If selected, this field indicates that RTF log files such as job control and error processing should be generated and included in the output files. The default value for this field is ON.
RTF Library	This field indicates from which report template repository directory the job should obtain its template files. Valid values are test, production, and base (RTFTEST, RTFPROD, RTFBASE). The default is RTFBASE. This access hierarchy applies to all templates used within a custom report. The user CANNOT indicated one template from production and another from test. Regardless of which the user indicates, if the template file is not found where indicated, all jobs will then search for the template in the following hierarchical sequence: base, production, test. The default RTF library is specified on the User Security window for the User ID.
Output Options	
Print Output Files	If checked, the user has chosen to send the executed process's output directly to a printer.
Printer Name	This is the printer name of the printers available to the application server
Copies	This field declares the number of copies the user wants to print. Default value is one.
Orientation	Indicates the orientation of the report. Valid values are LAND-landscape and PORT-portrait.
Duplex	If checked, this indicates that the user has chosen to print the report double-sided. Regardless of whether checked, this is overridden by the selected printer's print duplex documents configuration and setting. If the selected printer is not set to print duplex it will not.

<u>Field Name</u>	<u>Description</u>
Keep Process Files	If checked, the user has chosen to send the executed process's output to electronic files accessible through the Process Status window. This holds the output to be viewed or printed at a later time.
Email Output To	This is the e-mail address to which the user wants to send the output.
Mode	
Production	If selected, this radio button indicates the process is to be run normally.
Debug	If selected, this radio button indicates the process is to be run in debug mode. Do not select this mode unless instructed to do so by the system manager. This mode generates a detailed log of the batch program for problem determination and resolution.

Table 13-62 The Process Submission Parameters Window Field Description Table

To modify the Process Submission parameters of a process:

1. From the **Main** panel, click the icon for the desired functional area.
2. Double click the **Process List** icon.
3. Double click the desired process.
4. If the process has any runtime parameters associated, a screen will display requesting values from the user. Enter the requested values as desired.
5. Click the **Parameters** button.
6. On the **Process Submission Parameters** window, click the arrow to the right of the **Priority** field to display the drop down list.
7. Click the desired priority level.
8. Click the arrow to the right of the **Server** field to display the drop down list, and click the desired server. If any application server may execute the process, it is not necessary to select a specific server.
9. If desired, click the **Generate Online** check box on.
10. If desired, click the **Create Schedule** button.
11. If an RTF Log file is desired, click the **Produce RTF Log** check box on.

12. Click the arrow to the right of the **RTF Library** field to display the drop down list, and click the desired RTF Library.
13. If desired, click the **Print Output Files** check box on.
14. If the Print Output Files check box is clicked on, click the arrow to the right of the **Printer Name** field to display the drop down list. Click the desired printer.
15. If the Print Output Files check box is clicked on, click the **Copies** field and enter the desired number of copies.
16. If the Print Output Files check box is clicked on, click the arrow to the right of the **Orientation** field to display the drop down list. Click the desired page orientation.
17. If the Print Output Files check box is clicked on, click the **Duplex** check box on if desired.
18. If desired, click the **Keep Process Files** check box on.
19. If desired, click the **Email To** field and enter an email address.
20. Click the **Production** mode radio button or the **Debug** mode radio button.
21. Click the **OK** button.
22. On the **Confirm Process Submission** window, click the **Submit** button.

13.9.1.3 Creating a Process Schedule

The Create Process Schedule window allows users to create a scheduled submission and frequency for a process. A process may be scheduled to run Once, Daily, Weekly, or Monthly. Depending upon the frequency (once, daily, weekly, or monthly), different fields will be presented on the Schedule window.

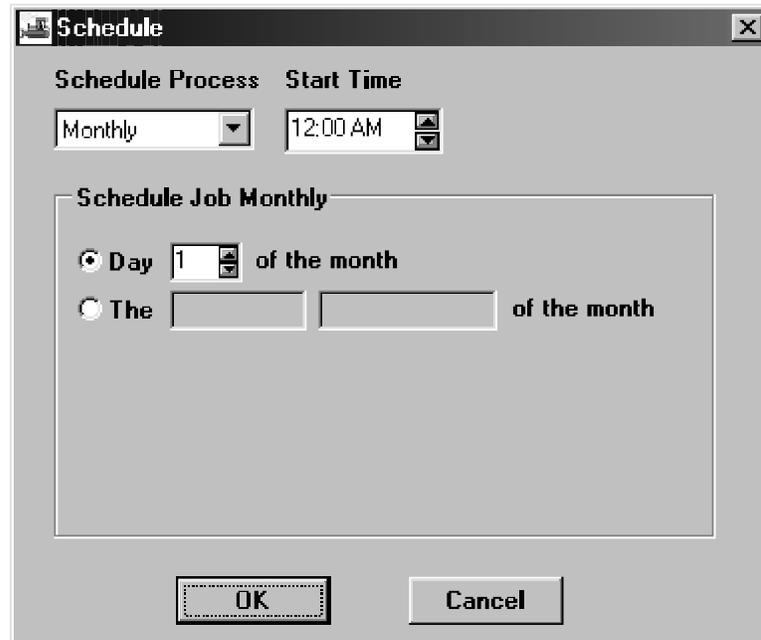


Figure 13-91 The Schedule Monthly Window

<u>Field Name</u>	<u>Description</u>
Schedule Process	The process schedule's frequency type. Option is Monthly. Selected from drop-down box.
Start Time	Time of day the process is scheduled to execute.
Day	Indicates that the monthly schedule is a numerical day of the month. This radio button enables the day spin box and disables the radio button.
Of the month	Identifies the scheduled numerical day of the month. Values are 1 through 28.
The	Indicates that the monthly schedule is a regular day of the month. For example, third Monday and last Friday. This radio button enables the Of the month boxes and disables the day radio button.
Of the month (first box)	Identifies which regular occurrence of a month's day is scheduled. Values are First through Fourth and Last.

<u>Field Name</u>	<u>Description</u>
Of the month (second box)	Identifies which day is scheduled. Values are Monday through Sunday.

Table 13-63 Schedule Job Monthly Window Field Descriptions

To schedule a process to execute monthly:

1. From the **Main** panel, click the icon for the desired functional area.
2. Double click the **Process List** icon.
3. Double click the desired process.
4. If the process has any runtime parameters associated, a screen will display requesting values from the user. Enter the requested values as desired, and click the **Parameters** button.
5. Click the **Create Schedule** button. The Schedule window appears.
6. Click the arrow to the right of the **Schedule Process** field to display the drop down list, and click the **Monthly** choice.
7. Click the up or down arrow to the right of the **Start Time** field to display the desired start time.
8. If an exact date is desired, click the radio button beside the **Day of the Month** choice and use the up or down arrow to display the desired day of the month.
9. If a day of the week is desired, click the radio button beside the **Day of the Month** choice.
10. Click the arrow to the right of the first blank field to display the frequency choices. Choose the desired frequency.
11. Click the arrow to the right of the second blank field to display the day choices. Choose the desired day of the week.
12. Click the **OK** button.

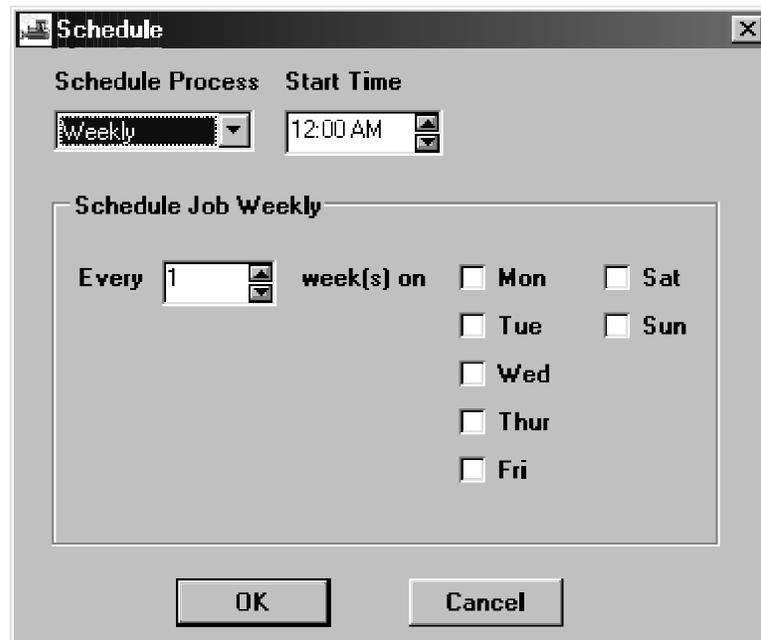


Figure 13-92 The Schedule Weekly Window

<u>Field Name</u>	<u>Description</u>
Schedule Process	The process schedule's frequency type. Option is Weekly. Selected from drop-down box.
Start Time	Time of day the process is scheduled to execute.
Every	The frequency number of the schedule week. Values are 1 through 104.
On	Day of the week the weekly job is scheduled to run. Values are Monday through Sunday.

Table 13-64 Schedule Job Weekly Window Field Descriptions

To schedule a process to execute weekly:

1. From the **Main** panel, click the icon for the desired functional area.
2. Double click the **Process List** icon.
3. Double click the desired process.
4. If the process has any runtime parameters associated, a screen will display requesting values from the user. Enter the requested values as desired, and click the **Parameter** button.

5. Click the **Create Schedule** button. The Schedule window appears.
6. Click the arrow to the right of the **Schedule Process** field to display the drop down list, and click the **Weekly** choice.
7. Click the up or down arrow to the right of the **Start Time** field to display the desired start time.
8. Click the up or down arrow to the right of the **Every** field to display the desired frequency in weeks.
9. Click the check box(es) beside the desired day(s) of the week.
10. Click the **OK** button.

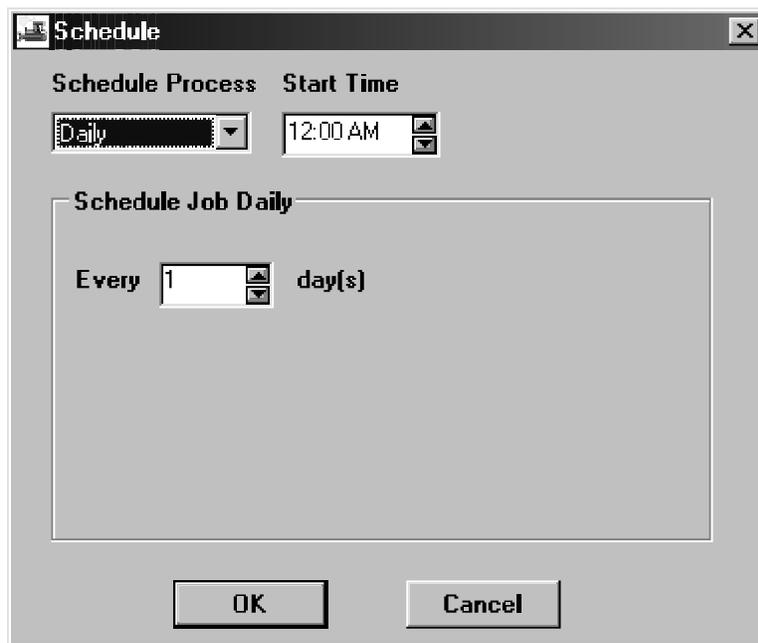


Figure 13-93 The Schedule Process Daily Window

<u>Field Name</u>	<u>Description</u>
Schedule Process	The process schedule’s frequency type. Option is Daily. Selected from drop-down box.
Start Time	Time of day the process is scheduled to execute.
Every	The day frequency of the daily job. Every day equals one (1). Quarterly equals 91.

Table 13-65 Schedule Job Daily Window Field Descriptions

To schedule a process to execute daily:

The SiteManager Road Map

1. From the **Main** panel, click the icon for the desired functional area.
2. Double click the **Process List** icon.
3. Double click the desired process.
4. If the process has any runtime parameters associated, a screen will display requesting values from the user. Enter the requested values as desired, and click the **Parameter** button.
5. Click the **Create Schedule** button. The Schedule window appears.
6. Click the arrow to the right of the **Schedule Process** field to display the drop down list, and click the **Daily** choice.
7. Click the up or down arrow to the right of the **Start Time** field to display the desired start time.
8. Click the up or down arrow to the right of the **Every** field to display the desired frequency in days.
9. Click the **OK** button.

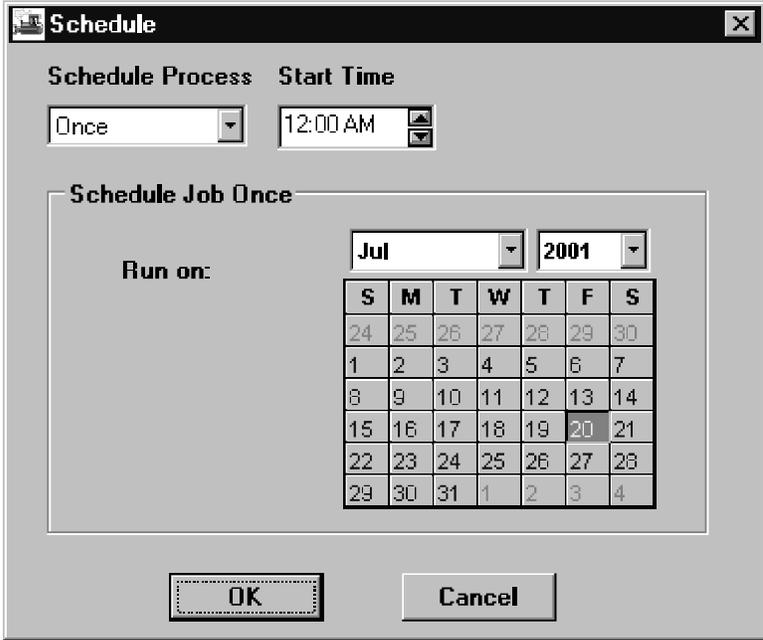


Figure 13-94 The Schedule Process Once Window

<u>Field Name</u>	<u>Description</u>
Schedule Process	The process schedule's frequency type, selected from a drop-down list. Option is Once.
Start Time	Time of day the process is scheduled to execute.

Run On: Month	The month the one-time process is scheduled to execute, selected from a drop-down box.
Run On: Year	The year the one-time process is schedule dto execute, selected from a drop-down box.
Run On: Day	The day and date the one-time process is scheduled to execute, selected from a calendar.

Table 13-66 Schedule Job Once Window Field Descriptions

To schedule a process to execute once:

1. From the **Main** panel, click the icon for the desired functional area.
2. Double click the **Process List** icon.
3. Double click the desired process.
4. If the process has any runtime parameters associated, a screen will display requesting values from the user. Enter the requested values as desired, and click the **Parameter** button.
5. Click the **Create Schedule** button. The Schedule window appears.
6. Click the arrow to the right of the **Schedule Process** field to display the drop down list, and click the **Once** choice.
7. Click the up or down arrow to the right of the **Start Time** field to display the desired start time.
8. Click the **OK** button.

13.9.2 Sampling Checklist Report

This report shows information regarding the current test status of items on a contract. The process is based on the Contract Sampling and Testing Requirements.

The report can be used to identify discrepancies between the total number of required samples and the number of samples taken based on the current quantity, throughout the life of the contract and at finalization. The report contains information on the required values (e.g., number of samples to be taken over the life of a contract, number of samples that should be taken based on the current installed quantities) along with the current values (e.g., how many samples have been taken to date).

When insufficient samples have been taken, an Estimate Discrepancy will result when an estimate is generated (if this discrepancy option is marked ON).

A sample is considered ‘Taken’ when it is complete but has not yet been authorized. A sample is considered ‘Completed’ when it is complete and authorized.

Field Name	Description
Contract ID	The primary identifier for the contract.
Fed State Project Number	The federal or state project number for the contract, project, category.
Location	Physical location.
Type of Work	A DOT defined code which can be used to identify the major type of work being done on the contract.
County	Identifies the primary county of construction work.
Route	Route number of the road affected.
Vendor ID	Identifier for the vendor.
Project	Identifier for the project.
Line Item	The contract line item number which uniquely identifies each item as it appears on proposal and contract.
Item Code	An agency defined code used to identify a particular item.
Item Description	Description of the item.
Unit	Unit of measure for this item.
Bid + CO Qty	The Bid quantity of the line item plus the Change Order quantity for the item.
Installed Qty	Quantity of line item represented by the samples (sum of quantities entered on Contract tab of Sample Information window).
Material	Identifier for a material

Field Name	Description
Name	Description of the material
Unit	Unit of measure for the material.
Smpl Type	Type of sample taken.
Acpt Mthd	Method by which the sample is accepted.
Prod/Supp	Producer/Supplier ID.
Test Meth	Method by which the sample is tested.
Cur Req	Current required samples. Number of samples that should be taken to date based on current installed quantities of the line item.
Tot Taken	Total taken samples. Number of samples satisfying contract sampling and testing requirement criteria, but NOT authorized. NOTE: These samples may or may not satisfy the “Material Discrepancy Accept Sample By” criteria (i.e., have either an authorized date, and acceptable status, or both). In the case where authorized date is required to meet the requirement, Tot Taken and Tot Comp will be mutually exclusive, i.e., any sample included in Tot Comp will not be seen as part of Tot Taken. In the case where only Sample Status is required, Tot Taken will give an indication of how many of the Tot Comp samples have not been authorized (i.e., a Tot Taken is a subset of Tot Comp).
Tot Comp	Total Completed samples. Number of samples satisfying all criteria.
Tot Req	Total required samples. Total number of samples that should be taken based on the total current quantity of the line item.
Tot Rem	Total remaining samples required. Total samples required minus total samples completed (i.e., Tot Req – Tot Comp).
Qty Reported to Date	The total of all reported quantities in DWRs, regardless of

Field Name	Description
	whether the quantities are authorized or unauthorized and regardless of whether or not they are included on an estimate.
Qty Authorized to Date	The total of all reported quantities on DWRs that are authorized.
Installed Qty	The total of all reported authorized reported quantities included on estimates (of all statuses).
Auth Repr Matrl Qty	The total material quantity reported on the Contract tab of Maintain Sample window. Calculated: Total of all applicable Represented Quantity on samples for this material on this item from the Contract tab. These samples will have an authorized date and/or an acceptable status, based on the "Material Discrepancy Accept Sample By" in System Operational Parameter settings.
Reported Matrl Qty	The total material installed. Calculated: Installed Quantity of Contract Item x Conversion Factor.
Sample Calc Matrl Qty	The total system calculated "represented" material quantity based on authorized sampl count. Calculated: (Authorized samples MOD (Sample Rate) x Sample Frequency; where MOD meand divide by and then round down to the next whole integer.
Discr/Deficient Calc Method	A flag specifying whether the system used the "Authorized Represented Material Quantity", displayed as "R", or the "Sample Calculated Material Quantity", displayed as "C", to calculate discrepancies and deficiencies.

Table -13-67 The Sampling Checklist Report Fields Table

13.10 Pipeline Applicability

Project Managers and Inspectors use SiteManager's Pipeline process to transfer Contract data, especially Daily Work Reports, *Materials data*, and *Sample and Test data*. Throughout the life of a Contract, the Project Manager downloads Contract plan data from the SiteManager Server to the field. Only the Project Manager can download data from the Server database. This data is not modified in the field; it is used as a basis for generating Contract activity data. Both the Project Manager and Inspector generate Contract activity data.

First, the Project Manager must download ‘Basic Contract Data’ and Materials data from the Server to their workstation. ‘Basic Contract Data’ includes any Force Accounts or Change Orders that apply to the Contract. Then the Project Manager selects data to transfer to the Inspector. After the Inspector receives the data, they can begin generating Contract activity data in the form of Daily Work Reports and Sample and Test data.

The Inspector submits Daily Work Reports to the Project Manager for approval. The Project Manager then uploads the approved Daily Work Reports to the Server. Unapproved Daily Work Reports can be transferred back to the Inspector for modification. The Project Manager creates Diaries, which are also uploaded to the Server. If necessary, the Project Manager can download Daily Work Reports and Diaries from the Server for modification.

Generally, Sample and Test data is not subject to approval. The Inspector submits Sample and Test data to the Project Manager to be uploaded to the Server. Materials data and Sample and Test data may or may not be associated with a specific Contract. For more information, refer to Section 6 — Pipeline.

Due to changes in database structure for the Materials enhancement, the pipeline process has been modified so that users can download data into their stand-alone database and upload data into the server. The login process will be modified to allow the download of instopt table into the local database. The instopt table information will be used by the Contract tab of Sample Information window in the stand-alone mode.

There is a new ‘MaterialUserDownload’ entry in the smapp.ini file which will be used to perform a Material User refresh from the server

13.11 Sampling and Testing Procedures

As each transportation agency installs SiteManager, it will convert its sampling and testing procedures documentation to an Adobe Acrobat format that allows the access of the procedures on-line.

13.11.1 On-Line Access of Sampling and Testing Manuals

On-line versions of the Sampling and Testing Procedures for your transportation agency are accessible in an Adobe Acrobat™ format..

To access on-line documentation:

1. On the Main Panel, double-click the **Manuals** icon.
2. Double-click the documentation icon you wish to reference.

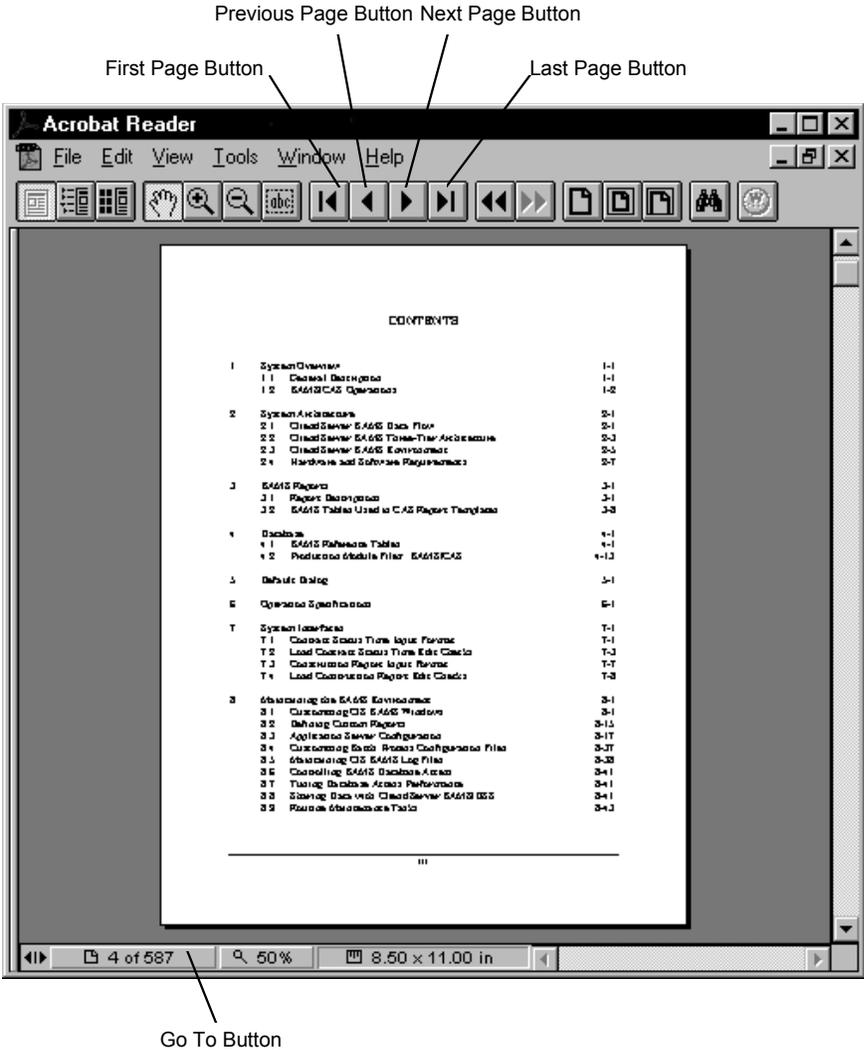


Figure 13-95 The Documentation in Adobe Acrobat

To navigate in Adobe Acrobat:

- 1. Click the **Next Page** button.

Or

- 2. Click the **Previous Page** button.

Or

- 3. Click the **First Page** button.

Or

4. Click the **Last Page** button.

Or

5. Click the **Go To** button.
6. Type page number you want to which you wish to go.
7. Press **Enter**.

Appendix A Glossary

August 2005

A**AASHTO**

American Association of State Highway and Transportation Officials

AASHTOware

AASHTO owned and distributed software

AGC

Association of General Contractors

API

Application Program Interface

Application Workbench

7 components: (1) Materials Testing Templates, (2) Custom Contract Records Templates, (3) Custom Approved Lists Templates, (4) Security Administration, (5) Reference Table Mntce, (6) Help Text Mntce, (7) Message Mntce.

Architecture

GUI Windows-based client/server architecture interoperable across various hardware platforms and will comply with Microsoft's ODBC and OLE2 standards.

ASTM

American Society of Testing and Materials. An association which defines standards and procedures for tests and materials used by the construction industry and others.

B**BAMS**

AASHTO's Bid Analysis Management System for Managing Transportation Programs. Now known as Trns•port.

Bid Quantity

The quantity of an item of work appearing on the contract between the prime contractor and the DOT. Generally an estimated quantity. Also called the award quantity.

Bituminous Price Adjustment

An adjustment to the price of an item of work based on a significant change in the price of asphalt products and the quantity of asphalt in the item. An asphalt (or bituminous) price index is established at the time of the contract, and is compared to the index at the time the item is installed.

BLOB

Binary Large Object

BPE

Business Process Engineering

C

CAD

Computer Aided Design

CAS

The Construction Administration System module of BAMS.

Category

A grouping of items within a contract project. Usually set up during pre-construction. Can be done for the purpose of grouping like or related items, such as roadway items, traffic control items, or structure items. In BAMS™ all items within a project category share the same funding sources.

CES

The Cost Estimating System module of BAMS

Charge Day

A normal working day for a contractor. See No Charge Day and Credit Day.

Checklist Event

A scheduled event associated with a contract

CMS

Construction Management System. Prior name of SiteManager.

CNS

Construction (subsystem)

CO/EWO

Change Order/Extra Work Order

Contract

The entity which represents the legal agreement between the contractor and the DOT. Can include multiple projects, each of which includes specific items of work. In SiteManager, formerly CMS, can also refer to the total of the contract-related data on the system.

Conversion Factor

The factor applied to the item quantity to determine the material quantity. The conversion factor converts the item's quantity based on its unit measure to a material quantity based on the materials unit of measure (e.g., item bid in tons and sampled in linear feet). Current quantity times conversion factor equals required quantity. Also called placement factor.

CPI

Continuous Process Improvement

Credit Day

A day in which limited or no work was completed (e.g., official shut down, rain day). This does not relate to liquidated damages. In other words, the DOT allows the contractor to have credit for a no charge day of work. See Charge Day and No Charge Day.

Critical Date

The Critical Dates are required dates because SiteManager includes critical date information in the standard

Contract status reports. The default Critical Date types are defined for the transportation agency when the system is installed. The User can not add, modify, or delete the Critical Date types. SiteManager adds the Critical Date types automatically to each new Contract.

CUF

Commercially Useful Function

Current Quantity

Bid quantity plus the net quantity on approved change orders, unless an anticipated overrun or underrun has been entered in a state which allows overruns without change orders. If an anticipated overrun or underrun has been entered, the over/underrun quantity will be the current quantity. If a final quantity has been approved, the final quantity is the current quantity.

D**Daily**

Inspector's Daily Work Report. Captures data for a job or part of a job on a daily basis. Associated with either a particular inspector or a particular aspect of the job (say, a bridge deck or paving). Data is collected on a standalone PC, and is uploaded to a "master" PC which contains the current copy of the contract. There can be none to many IDWRs per contract.

DBE

Disadvantaged Business Enterprises

DBE/WBE

Disadvantaged/Women Business Enterprises

DBMS

Data Base Management System

DC

The IBM CICS/DB2 version of BAMS

Development Software

Application written in PowerBuilder.

DFD

Data Flow Diagram

Diary

Diary representing all work done on the contract for a given day. Includes weather and time charge information. When the Project Manager approves the contract diary, all installed item quantities from all IDWRs for that day are available for payment and will be used the next time an estimate is generated. Must be one and only one for each contract per day.

DOT

Department of Transportation. In the documentation, the term transportation agency is used.

Draft Estimate

The estimate generated automatically by SiteManager, formerly CMS, from previously entered data. This estimate is generated upon request (usually from the Project Manager), and is available for review within minutes of the request.

DSS

The Decision Support System module of BAMS

DWR

Daily Work Reports (Pen Based System)

E

EBS

Electronic Bidding System

EDA

Economic Development Association

EEO

Equal Employment Opportunity

Estimate

Payment for all or part of the work accomplished by the contractor and his subcontractors. Variations on the term are partial payment, estimate payment, progress estimate (for all estimates except the final one), and voucher.

Estimate Generation

SiteManager, formerly CMS, automatically generates an estimate from previously entered data. This data can include installed quantities from approved diaries, stockpiled materials, and adjustments. The estimate generation process is initiated by the Project Manager, and occurs virtually immediately, in background. When the generation is complete, the Project Manager can look at the “draft” estimate, which is a list of all the items for which payment is being made, plus all other adjustment-type data. Note that the Project Manager does not have to enter data on every item to be paid; this information comes from data previously entered on the system.

Extra Work

An item of work not provided for in the contract but found essential for the completion of the project.

F

FHWA

Federal Highway Association

Force Account

In the most general sense, a method of applying a cost to a defined piece of construction work. Often used when the DOT and the contractor cannot agree on a cost for the work before it is done, or when the full extent of the work cannot be determined in advance. Consists of data on the equipment, labor, and materials used by the contractor when doing the work.

Fuel Price Adjustment

An adjustment to the price of an item of work based on a significant change in the price of fuel. A base fuel index is established at the time of the contract and is compared to the fuel index at the time the item is installed.

G**GDS**

Graphical Data System

GUI

Graphical User Interface

GPS

Global Positioning System

H**HighEst**

Highway Construction Cost Estimate Workstation

HUB

Historically Underutilized Business

I**IAS**

Independent Assurance Sample

IDWR

Inspector's Daily Work Report. Captures data for a job or part of a job on a daily basis. Associated with either a particular inspector or a particular aspect of the job (say, a bridge deck or paving). Data is collected on a standalone PC, and is uploaded to a "master" PC which contains the current copy of the contract. There can be none to many IDWRs per contract.

Installed Quantity

The quantity of a line item which has been completed and can be paid. Can be an estimated quantity until the approved final quantity is determined.

ISTEA

Intermodal Surface Transportation Efficiency Act

J**JAD**

Joint Application Design

JMF

Job Mix Formula.

Job Mix Formula

The specific requirements for blending materials used in an asphalt or concrete mix for a contract.

K

Key Date

The Key Dates are not considered ‘critical dates’ because SiteManager does not require them for the standard Contract status reports. SiteManager adds the default Key Date types automatically to each new Contract.

Key Value

When associated with an entity, data store, or table, the values by which that entity, data store, or table can be uniquely identified. For example, “contract ID” is the key value which identifies the contract data store.

L

LAS

The Letting and Award System module of BAMS

LAN

Local Area Network

LIMS

Laboratory Information Management System

Liquidated Damages

Damages assessed by the DOT because the contractor did not complete all or a portion of the work before a specified date or time. The damages are intended to cover additional DOT costs associated with the contractor’s failure to complete the work on time.

Lump Sum

Most items of work are paid for in terms of an item of measure relating to a physical characteristic of the item; for example, guardrail is usually paid for in linear feet. For items which are defined in the proposal as lump sum, payment is not made in terms of a physical characteristic. The contractor bids a dollar figure for the entire item of work, and is paid that dollar amount (unless circumstances change significantly), either in one payment or in a series of partial payments.

M

Milestone

Intermediate steps within a contract which must be met to receive incentives and avoid disincentives.

MM

Materials Management subsystem

Mix ID

Method by which a DOT defines different types of test for concrete/gravel/sand/ashpahl concrete. Types include: Aggregate, Super Pave, Hveem, Marshall, and Portland Cement.

N**No Charge Day**

A day in which limited or no work was completed, but work was scheduled. See Charge Day and Credit Day.

NOI

Notice of Intent. The official notice provided by the contractor to the DOT which indicates that the contractor intends to file a claim.

NOT

Notice of Termination

O**OCR**

Optical Character Recognition

ODBC

Open Database Connectivity

OJT

On-the-Job Training

OLE2

Object Linking and Embedding Version 2

P**Paybook**

This term is frequently used in the transportation business. The SiteManager, formerly CMS, paybook displays information regarding how much was paid to a contractor, when the information was sent to the financial department, etc.

Pay Factor Adjustments

Adjustments to the agreed price for an item based on test results.

PBL

Power Builder Library

PE

Professional Engineer

Pending Quantity

The quantity of an item on unapproved change orders.

PES

The Proposal and Estimates System module of BAMS.

PIN

Project Identification Number

Pipeline

The pipeline process loads data groups from one database to another. The Project Manager uses the pipeline process to upload and download data directly to and from the Server's database.

Prime Contractor

A firm or corporation who has a signed contract with the DOT to perform work. Often referred to as the contractor.

Project

A construction job, defined using a number of items of work which must be accomplished. Multiple projects can be grouped into a single contract during the letting process. Within BAMS, projects are divided into categories, which contain items. All items within a category must be funded in the same way, in general.

Project Manager (PM)

The individual responsible for the day-to-day management of the contract. The person responsible for approving the contract diary. Also has responsibility to maintain contract records, perform contractor evaluations, and do a design evaluation at the end of the job.

Proposal

The document by which the DOT describes the construction work to be done, and requests bids on that work. When a job is awarded, the proposal becomes the contract between the DOT and the contractor (with some additional documentation).

Q**QA/QC**

Quality Assurance/Quality Control

R**RAS**

Remote Access Support

Required Quantity

Current quantity times the conversion factor for the material. Identifies the quantity of the material which must be tested and approved.

Reporting

Standardized reports developed within the application.

Represented Quantity

Amount of material represented by a sample.

Retainage

Funds withheld from the progress payments made to the contractor for the purpose of ensuring that the work done is satisfactory and that timely progress is made.

RFP

Request for Proposal

S

Sample

Provides a record as to why a material from a designated source is being tested and/or accepted for a contract (or multiple contracts or multiple line items in a contract) or "other" entity (e.g. purchase order, research, preliminary survey, etc.). The Material Sample area in SiteManager can be used to record sample and testing information as well as provide a source record for accepting material for reasons such as manufacturers certification, visual acceptance, approved source, etc. where testing is not required. Identified information includes the sample identifier, date sampled, reason for taking the sample, reason for accepting the material, material, material source, represented quantity, sample quantity, location, mix identifier, plant, pass/fail status, approval status, comments, etc. Testing information (test results, labs, testers, completion date, etc.) can also be recorded.

SCOSS

AASHTO's Standing Committee on Software Systems

S/F

Semi-Final

SiteManager

The name of the system being developed by the prime sub-contractor Info Tech.

Special Provisions

Additions and revisions to the standard and supplemental specifications covering conditions peculiar to an individual contract.

Specialty Items

Items of work which require highly specialized knowledge or equipment not ordinarily available in the contractor community. These items can be excluded from the value of the contract when calculating the percentage of work which must be done by the prime contractor.

Specifications

The directions, provisions, and requirements for construction and materials defined by the DOT and included by reference in construction contracts.

SQL

Structured Query Language

SRS

System Requirements Specification

SSN

Social Security Number

Stockpiled Materials

Materials which are eligible for payment before they are "installed." Sometimes called materials on hand or allocation for materials.

Surety

A corporation or company which executes a performance or payment bond furnished by the contractor.

Supplemental Specifications

Additional specifications not included in the most recent published version of the DOT's specification book. In general, they supersede or supplement the specifications in the DOT specification book.

Subcontractor

A contractor who has a signed contract with either a prime contractor or another subcontractor to do a portion of the work on a construction contract. A subcontractor does not have a contract with the DOT for this work. A contractor can be a subcontractor on one contract and a prime contractor on another.

SWPPP

Storm Water Pollution Prevention Plan

T**TAG**

Technical Advisory Group

TFJD

AASHTO's Task Force on Joint Development

TRT

Technical Review Team

Type of Test

Reason for which sample is being taken. For example, manufacturers certification, visual, independent assurance, acceptance.

U**Unit of Measure**

The term describing the physical characteristic by which an item or material is measured. For items of work on a contract, the unit of measure defined in the contract is used when paying for the item.

V**Vendor**

A contractor (prime or sub), producer, supplier, hauler, trucker, surety, bonding company, utility, or other commercial concern being referenced in SiteManager, formerly CMS. Before any of these entities can be used in SiteManager, some limited data such as ID (generally the Federal tax ID), type, and name must be entered on a vendor list.

W**W/G**

Warranty/Guarantee

WORM

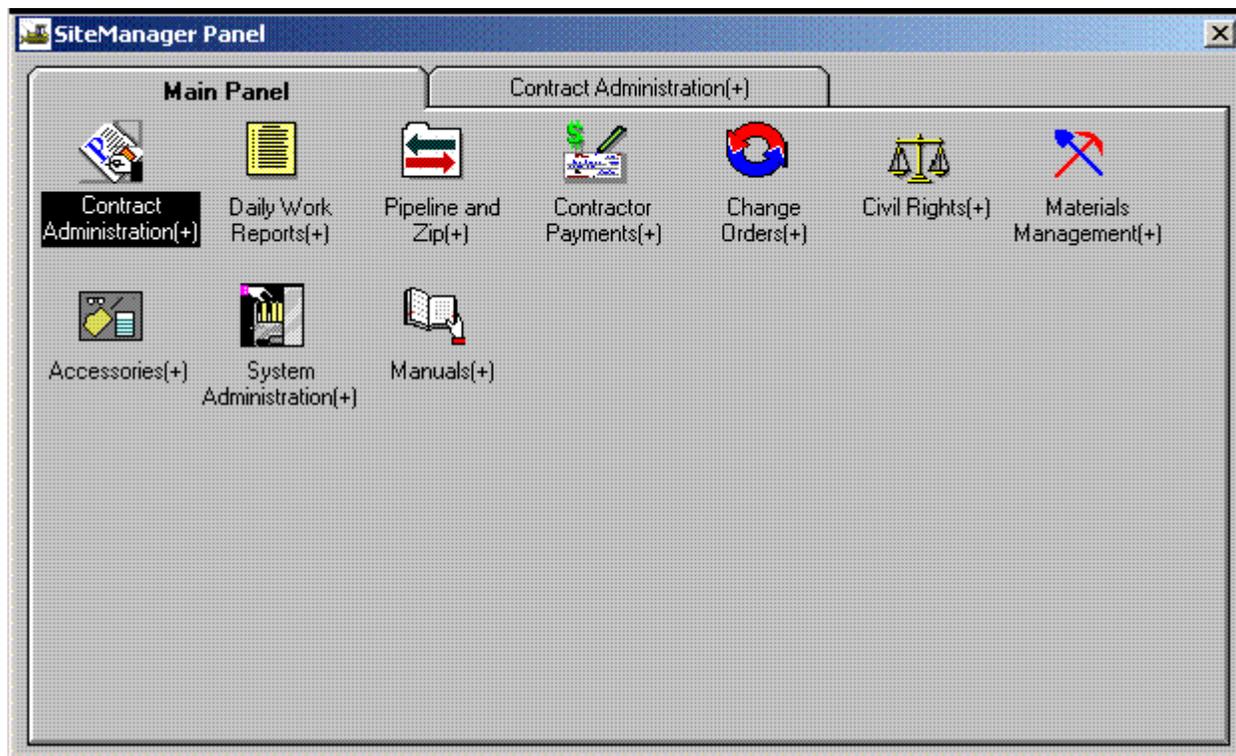
Write Once, Read Many

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Appendix B SiteManager Navigation

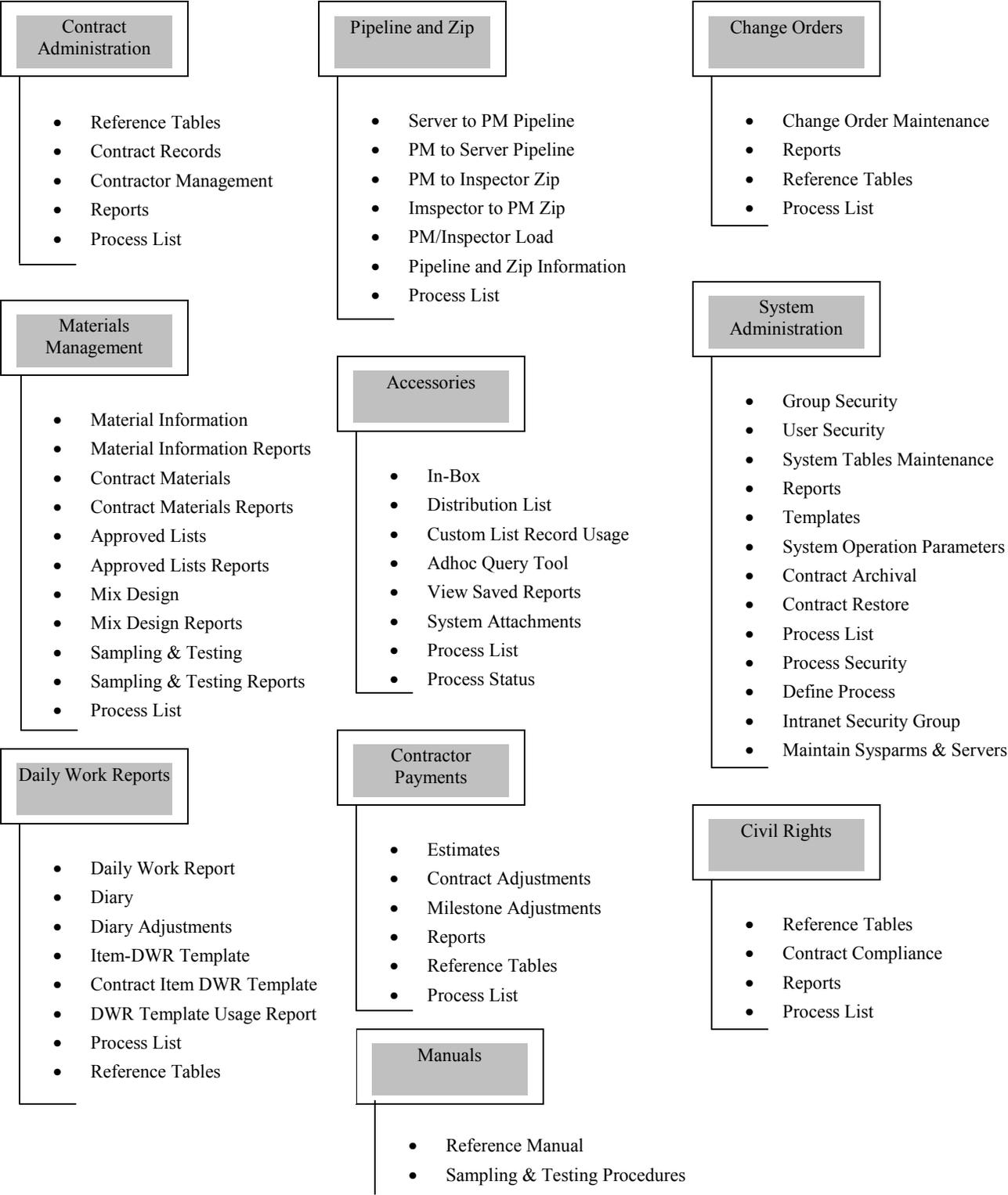
June 2002

The SiteManager Main Panel



The SiteManager Road Map

The figure below illustrates the navigation in SiteManager through the second panel.



Appendix C Estimate Generation Calculation

August 2005

Introduction

This appendix documents the calculation components of the Generate Estimate process. Due to the complexity and size of the generate process, the documentation has been broken down into components. In total, the generate process is comprised of the following components:

Component	Description
Generate Estimate	Handles the on-line process which queries the user on the type of estimate to generate and commences the Initiate Estimate Generation component.
Initiate Estimate Generation	Is the driving process of the estimate generation. It determines which of the components should be included in the generation process; as dependent on the type of estimate and the status of other generation parameters.
Delete Pending Estimate	Removes an estimate and all associated details for the estimate calculated prior to this date and existing in an unapproved status. (Only one estimate may exist for a given estimate period).
Calculate Contract Adjustments	Calculates contract adjustments which are to be applied to the contract payment amount for the current estimate period, e.g., liquidated damages.
Calculate Price Adjustments	Calculates line item adjustments in price which are to be applied to a contract item with installed quantities for the current contract and estimate period, e.g., fuel adjustments.
Calculate Retainage	Calculates a contract adjustment for retainage which is to be applied to the contract payment amount. (See Appendix D - Retainage Calculation)
Calculate Stockpiled Materials	Calculates a line item adjustment to reflect stockpiled materials which are to be applied to contract items with installed quantities for the current contract and estimate period. Calculates stockpiled materials and associated replenishment stockpiles in sequence.

Determine Quantity To Be Paid	Calculates the quantity and amount which is to be paid out on each contract item with installed quantities for the current contract and estimate period.
Determine Training Items	Determines whether training has taken place without an associated contract item and if so to calculate the contract adjustment dollar amount for the training which was given for the current contract and estimate period.
Identify Discrepancies	Determines if a discrepancy exists for the current contract and estimate period for those discrepancies which are valid (as determined by the Discrepancy Table).
Determine Funding Amounts	Calculates the amount of funding dollars which are added to participating or non-participating funds identified at the contract item, category, project or contract level for the current contract and estimate period.

The Estimate Generation Component Table

Appendix Table C-1

From the this point forward, this document will describe the individual components associated to this appendix except for Retainage Calculation documented in Appendix D.

Delete Pending Estimate

This process is initiated by one of the following two means:

1. User requests a delete of a pending estimate from the Estimate Summary window, or
2. The Initiate Estimate process detects that a pending estimate exists which needs to be deleted before a new estimate can be generated and the user confirms the desire to delete the current estimate.

The process does the following tasks in the sequence they are described. At the end of all the tasks, it returns the control to the window that invoke it. (Initiate Estimate Generation window, or the Estimate Summary window,).

- a) Select the payroll rows which were included in the estimate and initialize the Estimate number to zero for all the selected Payrolls.
- b) Select all the rows from the DWR table for the estimate. Initialize the Estimate number to zero so that the DWRs will be included in the next generation.
- c) Delete all the rows from the Contract Liquidated Damages for the Estimate.

- d) All Securities encumbered and Retainage information for the estimate are stored in the Estimate, and Estimate Project tables. So, no action will be necessary to revert these information because the rows for the above tables for the estimate will be deleted.
- e) Delete all the Contract Estimate Adjustments for the estimate.
- f) Delete all the rows from the Contract Line Item Adjustments for the estimate.
- g) Delete all the rows from the Contract Estimate approval for the estimate.
- h) Delete all the rows from the Contract Estimate Discrepancy for the estimate.
- i) Delete all the rows from the Contract Estimate Item Discrepancy table for the estimate.
- j) Delete all the rows from the Contract Estimate Project table for the estimate.
- k) Delete all the rows from the Contract Estimate Item Funding table for the estimate.
- l) Delete all the rows from the Contract Estimate Item table.
- m) Delete the Contract Estimate row for the estimate number.

The above deletions and initializations are prerequisites for the re generation of the estimate. At this point, the Contract reverts to the status before the estimate was generated.

Calculate Contract Adjustments

This process calculates liquidated damages applied to a contract and incentives or disincentives applied to a milestone. In SiteManager, these types of contract adjustments are referred to as system-defined adjustments. The contract adjustment amounts calculated by this process (i.e., liquidated damages or incentives/disincentives) are applied to the prime project in a contract. The prime project is define as the project within the contract that comprises the most amount in the bid amount of the contract. A detailed description of the process and examples is included below:

APPLYING LIQUIDATED DAMAGES – Working Day Contract

If it's a 'Working Day' contract, SiteManager will extract the number of days for which the contract was bid, 'Contract Bid Days'.

$$\text{CONTRACT_BID_DAYS} = \text{T_CONT.Bid Days}$$

SiteManager will extract all time extensions/reduction, 'Change Order Adjustment Days'.

$$\text{CHANGE_ORDER_ADJ_DAYS} = \text{T_CONT_CO.Change Order Adjustment Days}$$

SiteManager will add the 'Contract Bid Days' and all 'Change Order Adjustment Days', which would give you the 'Current Days' for the contract.

$$\text{CURRENT_DAYS} = \text{CONTRACT_BID_DAYS} + \text{CHANGE_ORDER_ADJ_DAYS}$$

SiteManager will extract the number of 'Total Charge Days'.

$$\text{TOTAL_CHARGE_DAYS} = \text{T_CONT.Total Charged Days}$$

SiteManager will compare the value of ‘Current Days’ and ‘Total Charge Days’. If the ‘Total Charge Days’ is greater than ‘Current Days’, then a liquidated damage will be applied to the contract.

$$\text{TOTAL_CHARGE_DAYS} > \text{CURRENT_DAYS}$$

The amount of liquidated damage applied is calculated by multiplying the rate amount in the Contract Table with the difference between ‘Total Charge Days’ and ‘Current Days’. Therefore,

$$\text{LIQUIDATED_DAMAGE_AMOUNT} = \text{T_CONT.Liqd Dam Rate Amount} \\ * (\text{TOTAL_CHARGE_DAYS} - \text{CURRENT_DAYS})$$

If the ‘Total Charge Days’ is equal or less than ‘Current Days’, then no liquidated damages will be applied to the current estimate.

$$\text{TOTAL_CHARGE_DAYS} \leq \text{CURRENT_DAYS}$$

But, if there are liquidated damages which have been applied to the contract prior to this estimate (e.g., the current days or contract completion date for this contract has been increased), then an amount equal to the sum of all liquidated damages that have been applied prior to this estimate will be release to the contractor.

APPLYING LIQUIDATED DAMAGES – Calendar Day or Fixed Completion Date Contract

If it’s a Calendar Day or a Fixed Completion Date Contract, SiteManager will extract the ‘Type of Date’, e.g., ‘Substantial Completion Date’ or ‘Physical Completion Date’, to calculate the liquidated damage against.

$$\text{TYPE_OF_DATE} = \text{T_SYS_OPRTNL_PARAM.Liqd Dam Calc Type}$$

SiteManager will extract the ‘Estimated Completion Date’.

$$\text{ESTIMATED_COMPLETION_DATE} = \text{CRITICAL_DATE(Code Table).Estimated Completion Date}$$

SiteManager will compare the value of the ‘Substantial Completion Date’ or ‘Physical Completion Date’ with the ‘Estimate Completion Date’. If the ‘Substantial Completion Date’ or the ‘Physical Completion Date’ (as determined by ‘Type of Date’) is later than the ‘Estimate Completion Date’, then a liquidated damage will be applied to the contract.

$$\text{CRITICAL_DATE(Code Table).Substantial} > \text{ESTIMATED_COMPLETION_DATE}$$

OR

$$\text{CRITICAL_DATE(Code Table). Physical Completion Date} > \text{ESTIMATED_COMPLETION_DATE}$$

The amount of liquidated damage applied is calculated by multiplying the liquidated damage rate amount with the difference (in days) between ‘Substantial Completion Date’ or ‘Physical Completion Date’ (as determined by ‘Type of Date’) and the ‘Estimate Completion Date’. Therefore,

$$\text{LIQUIDATED_DAMAGE_AMOUNT} = \text{T_CONT. Liqd Dam Rate Amount} * \\ \text{CRITICAL_DATE(Code Table).Substantial} - \text{ESTIMATED_COMPLETION_DATE,}$$

OR

$LIQUIDATED_DAMAGE_AMOUNT = T_CONT.Liqd\ Dam\ Rate\ Amount * CRITICAL_DATE(Code\ Table).Physical\ Completion\ Date - ESTIMATED_COMPLETION_DATE,$

If the 'Substantial Completion Date' or 'Physical Completion Date' (as determined by 'Type of Date') is equal or earlier than the 'Estimate Completion Date' then no liquidated damages will be applied to the current estimate.

$CRITICAL_DATE(Code\ Table).Substantial \leq ESTIMATED_COMPLETION_DATE$

OR

$CRITICAL_DATE(Code\ Table).Physical\ Completion\ Date \leq ESTIMATED_COMPLETION_DATE$

But, if there are liquidated damages which have been applied to the contract prior to this estimate then an amount equal to the sum of all liquidated damages that have been applied prior to this estimate will be release to the contractor (e.g. the estimated completion date for this contract has been extended).

APPLYING INCENTIVES/DISINCENTIVES

If it's a 'Work Days' Milestone, SiteManager will extract the number of days/hours for which the associated milestone is bid. If the milestone rate time period type is designated as hour, then the milestone bid hours is used; otherwise, milestone bid days is used.

$IF\ T_CONT_MLSTN.Rate\ Time\ Period\ Type = \{hour\}T_CONT_MLSTN.Bid\ Hours$

$\{is\ used\}$

ELSE:

$T_CONT_MLSTN.Bid\ Days\ \{is\ used\}$

If milestone bid days is used (T_CONT_MLSTN.Bid Days):

SiteManager will extract all the adjustment days, 'Total Adjustment Days' for the associated milestone.

$TOTAL_ADJUSTMENT_DAYS = T_CONT_MLSTN.Total\ Adjustment\ Days$

SiteManager will add the milestone bid days and all 'Total Adjustment Days', which would give you the 'Current Days' for the milestone.

$CURRENT_DAYS = T_CONT_MLSTN.Bid\ Days + TOTAL_ADJUSTMENT_DAYS$

SiteManager will extract the number of days 'Total Charged Days' the contractor has worked on the contract towards the milestone.

$TOTAL_CHARGED_DAYS = T_CONT_MLSTN.Total\ Charged\ Days$

SiteManager will compare the value of 'Current Days' and 'Total Charged Days' if the 'Total Charged Days' is greater than 'Current Days' then a disincentive will be applied to the contract.

$TOTAL_CHARGED_DAYS > CURRENT_DAYS$

Sampling and Testing Procedures

The amount of disincentive applied is calculated by multiplying the rate with the difference between ‘Total Charged Days’ and ‘Current Days’. Therefore,

$$\text{DISINCENTIVE_AMOUNT} = \text{T_CONT.Disincentive Rate Amount} * (\text{TOTAL_CHARGED_DAYS} - \text{CURRENT_DAYS})$$

Incentives will be applied only if the ‘Actual Completion Date’ has been entered for a Day type milestone and ‘Actual Completion Date’ and ‘Actual Completion Time’ have been entered for Hour type milestone. If the Completion Date/Time fields have been entered incentive will be calculated by the following process:

If the ‘Total Charged Days’ is equal or less than ‘Current Days’ and the incentive indicator for the milestone is blank, then no incentive is calculated.

$$\text{TOTAL_CHARGED_DAYS} \leq \text{CURRENT_DAYS} \text{ AND } \text{T_CONT_MLSTN.Incentive Indicator} = \text{,}$$

But, if there are disincentives which have been applied to the milestone prior to the current estimate, then an amount equal to the sum of all disincentives that have been applied prior to this estimate will be release to the contractor (e.g. the current days for this milestone has been extended).

Otherwise, if ‘Total Charged Days’ is less than ‘Current Days’ and incentive indicator for the milestone is not blank, an incentive is calculated for the associated milestone.

$$\text{TOTAL_CHARGED_DAYS} \leq \text{CURRENT_DAYS} \text{ AND } \text{T_CONT_MLSTN.Incentive Indicator} \neq \text{,}$$

Below is the calculation for an incentive to a milestone:

$$\text{INCENTIVE_AMOUNT} = \text{T_CONT_MLSTN.Incentive Rate Amount} * (\text{TOTAL_CHARGED_DAYS} - \text{CURRENT_DAYS})$$

If milestone bid hours is used (T_CONT_MLSTN.Bid Hours), SiteManager will extract the ‘Current Specified Completion Date and Time’.

$$\text{CURRENT_COMPLETION_DATE_TIME} = \text{T_CONT_MLSTN.Current Specified Completion Date and Time}$$

SiteManager will extract the ‘Actual Completion Date and Time’. If the ‘Actual Completion Date and Time’ is blank then the current date and time will be used

$$\text{IF } \text{T_CONT_MLSTN.Actual Completion Date and Time} = 0$$

$$\text{ACTUAL_COMPLETION_DATE_TIME} = \{\text{current date and time}\}$$

ELSE:

$$\text{ACTUAL_COMPLETION_DATE_TIME} = \text{T_CONT_MLSTN.Actual Completion Date and Time}$$

SiteManager will compare the value of ‘Actual Completion Date and Time’ to ‘Current Completion Date and Time’, if the ‘Actual Completion Date and Time’ is later than the ‘Current Completion Date and Time’ and the milestone generate disincentive indicator is not blank then a disincentive will be applied to the milestone.

ACTUAL_COMPLETION_DATE_TIME > CURRENT_COMPLETION_DATE_TIME AND
T_CONT_MLSTN.Auto Gen Disincentive <> “

The amount of disincentive applied is calculated by multiplying the rate with the difference (in hours) between ‘Actual Completion Date and Time’ and ‘Current Completion Date and Time’. Therefore,

Disincentive Amount = T_CONT_MLSTN.Disincentive Rate Amount * (T_CONT_MLSTN.Actual Completion Date and Time - T_CONT_MLSTN.Current Completion Date and Time)

Incentives will be applied only if the ‘Actual Completion has been entered for a “day” type milestone and ‘Actual Completion Date and Time’ have been entered for “hour” type milestone. If the Completion Date/Time fields have been entered, incentives will be calculated by the following process:

If the ‘Actual Completion Date and Time’ is equal or earlier than ‘Current Completion Date’ and the milestone incentive indicator is blank then no incentive is calculated.

ACTUAL_COMPLETION_DATE_TIME <= CURRENT_COMPLETION_DATE AND
T_CONT_MLSTN.Incentive Indicator = “

But, if there are disincentives which have been applied to the milestone prior to the current estimate, then an amount equal to the sum of all disincentives that have been applied prior to this estimate will be release to the contractor (e.g. the current completion date for this milestone has been extended).

Otherwise, if the ‘Actual Completion Date’ is earlier than ‘Current completion Date’ and the milestone incentive indicator is not blank, an incentive is calculated for the associated milestone.

ACTUAL_COMPLETION_DATE_TIME <= CURRENT_COMPLETION_DATE AND
T_CONT_MLSTN.Incentive Indicator = “

Below is the calculation for an incentive to a milestone:

INCENTIVE_AMOUNT = T_CONT_MLSTN.Incintive Rate Amount * |ACTUAL_COMPLETION_DATE_TIME -CURRENT_COMPLETION_DATE_TIME|

Note: If Incentive amount is greater than Incentive Cap amount, then Incentive Amount equals Incentive Cap Amount

If it’s a Calendar Day or a Fixed Completion Date Milestone, SiteManager will extract the number of days/hours for which the associated milestone is bid. If the milestone rate time period type is designated as hour, then the milestone bid hours is used; otherwise, milestone bid days is used.

IF T_CONT_MLSTN.Rate Time Period Type = {hour} T_CONT_MLSTN.Bid Hours {is used}

ELSE

T_CONT_MLSTN.Bid Days {is used}

If the rate time period is days (T_CONT_MLSTN.Rate Time Period Type):

SiteManager will extract the ‘Current Completion Date’.

CURRENT_COMPLETION_DATE = T_CONT_MLSTN.Current Specified Completion Date

SiteManager will extract the 'Actual Completion Date'. If the 'Actual Completion Date' is blank then the current date will be used as the value for the 'Actual Completion Date'.

IF T_CONT_MLSTN.Actual Completion Date = 0

ACTUAL_COMPLETION_DATE = {current date}

ELSE

ACTUAL_COMPLETION_DATE = T_CONT_MLSTN.Actual Completion Date

SiteManager will compare the value of 'Actual Completion Date' and 'Estimated Completion Date':

If the 'Actual Completion Date' is later than the 'Current Completion Date' and milestone automatic generation disincentive indicator is not blank, then a disincentive will be applied to the milestone.

ACTUAL_COMPLETION_DATE > CURRENT_COMPLETION_DATE

ANDT_CONT_MLSTN.Auto Gen Disincentive Ind

The amount of disincentive applied is calculated by multiplying the rate with the difference (in days) between 'Actual Completion Date' and 'Estimated Completion Date'. Therefore,

DISINCENTIVE_AMOUNT = T_CONT_MLSTN.Disincentive Rate Amount * (ACTUAL_COMPLETION_DATE - ESTIMATED_COMPLETION_DATE)

Incentives will be applied only if the 'Actual Completion has been entered for a Day type milestone and 'Actual Completion Date' and 'Actual Completion Time' have been entered for Hour type milestone. If the Completion Date/Time fields have been entered, the incentive will be calculated by the following process if the 'Actual Completion Date' is equal or earlier than 'Current Completion Date' and the milestone incentive indicator is blank then no incentive is calculated.

ACTUAL_COMPLETION_DATE <= CURRENT_COMPLETION_DATE AND

T_CONT_MLSTN.Incentive Indicator = ''

But, if there are disincentives which have been applied to the milestone prior to the current estimate, then an amount equal to the sum of all disincentives that have been applied prior to this estimate will be release to the contractor (e.g. the current completion date for this milestone has been extended).

Otherwise, if the 'Actual Completion Date' is earlier than 'Current Completion Date' and the milestone incentive indicator is not blank, an incentive is calculated for the associated milestone.

ACTUAL_COMPLETION_DATE <= CURRENT_COMPLETION_DATE

ANDT_CONT_MLSTN.Incentive Indicator <> ''

Below is the calculation for an incentive to a milestone:

INCENTIVE_AMOUNT = T_CONT_MLSTN.Incintive Rate Amount

*|ACTUAL_COMPLETION_DATE - ESTIMATED_COMPLETION_DATE|

If the rate time period is hours (T_CONT_MLSTN.Rate Time Period Type), SiteManager will extract the 'Current Completion Date and Time' for the milestone.

ACTUAL_COMPLETION_DATE_TIME = T_CONT_MLSTN.Current Completion Date and Time.

SiteManager will extract the ‘Actual Completion Date and Time’. If the ‘Actual Completion Date and Time’ is blank then the current date and time will be used.

```

IF T_CONT_MLSTN.Actual Completion Date and Time = 0
ACTUAL_COMPLETION_DATE_TIME = {current date and time}
ELSE
ACTUAL_COMPLETION_DATE_TIME = T_CONT_MLSTN.Actual Completion Date and Time
    
```

SiteManager will compare the value of ‘Actual Completion Date and Time’ and ‘Current Completion Date and Time’ if the ‘Actual Completion Date and Time’ is later than the ‘Current Completion Date and Time’ and the milestone automatic generate disincentive indicator is not blank then a disincentive will be applied to the milestone.

```

ACTUAL_COMPLETION_DATE_TIME > CURRENT_COMPLETION_DATE_TIME AND
T_CONT_MLSTN.Auto Gen Disincentive Ind <> ‘
    
```

The amount of disincentive applied is calculated by multiplying the rate amount with the difference (in hours) between ‘Actual Completion Date and Time’ and ‘Current Completion Date and Time’. Therefore,

```

DISINCENTIVE_AMOUNT = T_CONT_MLSTN.Disincentive Rate Amount *
(ACTUAL_COMPLETION_DATE_TIME - CURRENT_COMPLETION_DATE_TIME)
    
```

Incentives will be applied only if the ‘Actual Completion Date’ has been entered for a Day type milestone and ‘Actual Completion Date’ and ‘Actual Completion Time’ have been entered for Hour type milestone. If the Completion Date/Time fields have been entered incentive will be calculated by the following process:

If the ‘Actual Completion Date and Time’ is equal or earlier than ‘Current Completion Date Time’ and the milestone incentive indicator is blank, then no incentive is calculated.

```

ACTUAL_COMPLETION_DATE_TIME <=
CURRENT_COMPLETION_DATE_TIME AND T_CONT_MLSTN.Incentive Indicator = ‘
    
```

But, if there are disincentives which have been applied to the milestone prior to the current estimate, then an amount equal to the sum of all disincentives that have been applied prior to this estimate will be release to the contractor (e.g. the current completion date for this milestone has been extended).

Otherwise, if the ‘Actual Completion Date and Time’ is earlier than ‘Current Completion Date and Time’ and the milestone incentive indicator T_CONT_MLSTN.Incentive Indicator is not blank, an incentive is calculated for the associated milestone.

```

ACTUAL_COMPLETION_DATE_TIME <
CURRENT_COMPLETION_DATE_TIME AND T_CONT_MLSTN.Incentive Indicator <> ‘
    
```

Below is the calculation for an incentive to a milestone:

```

INCENTIVE_AMOUNT = Incentive Rate Amount * |ACTUAL_COMPLETION_DATE_TIME -
CURRENT_COMPLETION_DATE_TIME|
    
```

Note: If Incentive amount is greater than Incentive Cap amount, then Incentive Amount equals Incentive Cap Amount.

Calculate Price Adjustments

This process determines if a price adjustment (e.g., fuel adjustment or asphalt adjustment) is required for a line item in a contract. The calculation of price adjustment is performed after the calculation of installed quantity and after any substandard item calculations have been applied to the line item. An item is a candidate for price adjustment, if a record exist in the Project Adjustment table for the project and the item with which it is associated. A price adjustment to an item is a modification (positive or negative) to the 'To Be Paid Amount' for the item in the estimate. A detail description and examples of price adjustment calculation is covered below.

The following procedure and examples describe the method used in calculating price adjustments :

1. Access the Contract Table and examine the value of the Adjustment Indicator (T_CONT.PRIC_ADJMNT_IND), if the value is 'Y' then price adjustment processing is enabled for the contract, otherwise no price adjustment processing is needed for the contract.
2. Access the Critical Dates Code table and access the value for 'INDEX BASE DATE'.
3. Access the Project Adjustment table (T_PROJ_ADJ) for each project in the contract to determine if a price adjustment calculation is needed for the items in the project. If there is no record in T_PROJ_ADJ for a project, then no price adjustment is needed for the corresponding items in the project.

For each line item that corresponds to the project found in Project Adjustment table (T_PROJ_ADJ) from above, access the price index record for the line item in the Item Price Index table (T_ITM_PRIC_INDX_ADJ). The following steps are performed to calculate the price adjustment:

1. Using the project number and the price index, access the Project Adjustment table (T_PROJ_ADJ), if the record exist.
2. If no record is found, skip to the next index price adjustment for the item that is within the project.
3. Using the price index, access the Price Index table (T_PRIC_INDX) for the default threshold percent.
4. Using the price index and index base date, access the Price Index History table (T_PRIC_INDX_HISTORY) for the BASE_PRICE. If no record is found, then find a record using the same price index within the table that is just prior to the index base date.
5. Using the price index and estimate generation date, access the Price Index History table (T_PRIC_INDX_HISTORY) for the CURRENT_PRICE. If no record is found, then find a record using the same price index within the table that is just prior to the estimate generation date.

The following steps describe the formulas and variables are involved in calculating the price adjustments :

To calculate the PERCENT_PRICE_CHANGE:

The PERCENT_PRICE_CHANGE is the absolute value of one minus the quotient of the BASE_PRICE divided by the CURRENT_PRICE.

$$(\text{PERCENT_PRICE_CHANGE} = |1 - (\text{BASE_PRICE} / \text{CURRENT_PRICE})|)$$

To calculate the INDEX_THRESHOLD_PERCENT:

The INDEX_THRESHOLD_PERCENT is based upon the value of Threshold Percent field in the Item Price Index Adjustment table (T_ITM_PRIC_INDX_ADJ). If the value is blank, then the INDEX_THRESHOLD_PERCENT is equal to the Threshold Percent found in the Price Index table (T_PRIC_INDX). Otherwise, it is equal to the Threshold Percent found in the Item Price Index Adjustment table (T_ITEM_PRIC_INDX_ADJ).

(If T_ITM_PRIC_INDX_ADJ.THRESHOLD_PERCENT is blank then,

$$\text{INDEX_THRESHOLD_PERCENT} = \text{T_PRIC_INDX.THRESHOLD_PERCENT}$$

ELSE

$$\text{INDEX_THRESHOLD_PERCENT} = \text{T_ITM_PRIC_INDX_ADJ.THRESHOLD_PERCENT})$$

If the PERCENT_PRICE_CHANGE is less than the INDEX_THRESHOLD_PERCENT, skip to the next index for the item. The price change must exceed the threshold for an adjustment to be made.

To calculate the ADJUSTED_BASE_PRICE:

If the CURRENT_PRICE is greater than the BASE_PRICE, the ADJUSTED_BASE_PRICE is the original BASE_PRICE plus the product of the BASE_PRICE and the INDEX_THRESHOLD_PERCENT. Otherwise, the ADJUSTED_BASE_PRICE is the original BASE_PRICE minus the product of the BASE_PRICE and the INDEX_THRESHOLD_PERCENT.

(If CURRENT_PRICE > BASE_PRICE then,

$$\text{ADJUSTED_BASE_PRICE} = \text{BASE_PRICE} + \text{BASE_PRICE} * \text{INDEX_THRESHOLD_PERCENT}$$

ELSE

$$\text{ADJUSTED_BASE_PRICE} = \text{BASE_PRICE} - \text{BASE_PRICE} * \text{INDEX_THRESHOLD_PERCENT})$$

To calculate the INDEX_FACTOR:

If the Item Value Index Percent in the Item Price Index Adjustment table (T_ITM_PRIC_INDX_ADJ.ITM_VAL_INDX_P) is non-zero, then the INDEX_FACTOR is equal to the Item Value Index Percent in the Item Price Index Adjustment table divided by 100. Otherwise, the INDEX_FACTOR is equal to the contract item's unit price multiplied by the Item Unit Index Quantity from the Item Price Index Adjustment table divided by the Unit Value (Unit Value is set at \$1000)

(If T_ITM_PRIC_INDX_ADJ.ITM_VAL_INDX_P <> 0, then

$$\text{INDEX_FACTOR} = (\text{T_ITM_PRIC_INDX_ADJ.ITM_VAL_INDX_P}/100)$$

ELSE

UNIT_VALUE is set to \$1,000

$$\text{INDEX_FACTOR} = \text{T_CONT_ITEM}.\text{UNIT_PRICE} * (\text{T_ITM_PRIC_INDX_ADJ}.\text{ITM_UNT_INDX_QTY} / \text{UNIT_VALUE})$$

To calculate the UNIT_PRICE_ADJUSTMENT_PERCENT:

The UNIT_PRICE_ADJUSTMENT_PERCENT for this period is the INDEX_FACTOR multiplied by the difference between the ADJUSTED_BASE_PRICE and the CURRENT_PRICE.

$$(\text{UNIT_PRICE_ADJUSTMENT_PERCENT} = \text{INDEX_FACTOR} * (\text{ADJUSTED_BASE_PRICE} - \text{CURRENT_PRICE}))$$

To calculate the ADJUSTED_PRICE:

The ADJUSTED_PRICE is calculated by UNIT_PRICE_ADJUSTMENT_PERCENT multiplied by the quantity to be paid this period from the Contract Estimate Item table (T_CONT_EST_ITM.QTY_THIS_PRD).

$$(\text{ADJUSTED_PRICE} = \text{UNIT_PRICE_ADJUSTMENT_PERCENT} * \text{T_CONT_EST_ITEM}.\text{QTY_THIS_PRD})$$

(See following examples)

ROUNDING METHOD

A value will be rounded up if the next significant digit is equal to or greater than five, otherwise the value stays the same if the next significant digit is less than 5. See example below.

Rounding example :

1. If a value is 5.6789 and needs to be rounded to two significant digits to the right of the decimal, then the new value will be 5.68.
2. If a value is 5.6759 and needs to be rounded to two significant digits to the right of the decimal, then the new value will be 5.68.
3. If a value is 5.6739 and needs to be rounded to two significant digits to the right of the decimal, then the new value will be 5.67.

EXAMPLES

The threshold is set to 5.0%

Example 1)

BASE_PRICE	= \$1.059/GAL
CURRENT_PRICE	= \$1.179/GAL

$$T_ITM_PRIC_INDX_ADJ.ITM_VAL_INDX_P = 17.00$$

$$INDEX_FACTOR = (17.00 / 100) = .17$$

$$T_CONT_EST_ITM.QTY_THIS_PRD = 4,500$$

$$PERCENT_PRICE_CHANGE = |1 - (1.059/1.179)| = .1018 = 10.18 \%$$

(Which is > the 5%, therefore an adjustment will be made)

$$ADJUSTED_BASE_PRICE = 1.059 + (.05 * 1.059) = 1.112$$

$$UNIT_PRICE_ADJUSTMENT_PERCENT = (1.179 - 1.112) * .17 = 0.0114$$

$$ADJUSTED_PRICE = 0.0114 * 4,500 = \$51.26$$

(\$51.26 will be added to the Amount to be Paid to the item for the estimate period)

Example 2)

$$BASE_PRICE = \$1.179/GAL$$

$$CURRENT_PRICE = \$1.059/GAL$$

$$T_ITM_PRIC_INDX_ADJ.ITM_VAL_INDX_P = 17.00$$

$$INDEX_FACTOR = (17.00 / 100) = .17$$

$$T_CONT_EST_ITM.QTY_THIS_PRD = 4,500$$

$$PERCENT_PRICE_CHANGE = |1 - (1.179/1.059)| = 0.1133 = 11.33 \%$$

(Which is > the 5%, therefore an adjustment will be made.)

$$ADJUSTED_BASE_PRICE = 1.179 - (.05 * 1.179) = 1.120$$

$$UNIT_PRICE_ADJUSTMENT_PERCENT = (1.059 - 1.120) * .17 = -0.0104$$

$$ADJUSTED_PRICE = -0.0104 * 4,500 = \$-46.67$$

Sampling and Testing Procedures

(\$46.67 will be subtracted to the Amount to be Paid to the item for the estimate period.)

(Example 3)

BASE_PRICE	= \$1.059/GAL
CURRENT_PRICE	= \$1.179/GAL
T_ITM_PRIC_INDX_ADJ.ITM_UNT_INDX_QTY	= 19.00
T_CONT_ITM.UNT_PRICE	= \$50.000
T_CONT_EST_ITM.QTY_THIS_PRD	= 500

$$\text{PERCENT_PRICE_CHANGE} = |1 - (1.059/1.179)| = .1018 = 10.18 \%$$

(Which is > the 5%, therefore an adjustment will be made)

ADJUSTED_BASE_PRICE	
INDEX_FACTOR	= 1.059 + (.05 * 1.059) = 1.112
UNIT_PRICE_ADJUSTMENT_PERCENT	= (1.179 - 1.112) * .95 = 0.064
ADJUSTED_PRICE	= 0.064 * 500 = \$32.00

(\$32.00 will be added to the Amount to be Paid to the item for the estimate period)

Calculate Retainage

This component's purpose is to calculate a contract adjustment for retainage which is to be applied to the contract payment amount. Due to the complexity retainage calculation and size of the retainage calculation documentation, it is documented in a separate appendix. See Appendix D - Retainage Calculation.

Determine Initial Stockpile Payment

This process creates a positive adjustment to the associated contract line item, for the initial payment to be made for an invoiced stockpiled material which the contractor has submitted through the Maintain Stockpiled Materials window (see Section 3.3.1.3). This initial payment to the contractor will be added to the total earnings for the estimate. This module will be performed prior to the Calculate Stockpiled Materials module to ensure proper payment for stockpiled materials.

This process will create a Line Item Adjustment record in Contract Line Item Adjustment table for any stockpiled material records which have not paid out their initial invoice payment amount. The adjustment

amount is equal to the value entered in ‘Initial Invoice Payment’ field on the Maintain Stockpiled Materials window (see Section 3.3.1.3). The contract line item number used in this process is taken from the Stockpile Record created for the associated invoice.

Calculate Stockpiled Materials

This calculation of stockpiled materials determines the quantity of materials used for installed quantities of a line item in a contract from the stockpile during the estimate generation. This process will be invoked only if a line item has a stockpiled material record in the Contract Stockpile Material table, that has an open status. This component’s purpose is to calculate a line item adjustment to reflect stockpiled materials which are to be applied to contract items with installed quantities for the current contract and estimate period. When this process is executed the quantity of the stockpile will be adjusted and an adjustment for the line item earnings will be generated.

The information used in this process is entered through the Maintain Stockpiled Materials window (see Section 3.3.1.3). A detailed description of the process and examples is included below:

- The initial payment of the stockpile invoice for a material can either be a full payment or a partial payment for the material and is entered on the Maintain Stockpiled Materials window. The amount entered will be equal or less than the invoice amount. The amount is paid out on the first estimate generated after the stockpile has been entered.
- If an installed line item has a corresponding stockpile material this process will reduce the quantity of the stockpile material using the following formula:

STOCKPILE REMAINING QUANTITY = PREV. STOCKPILED REMAINING QTY — (INSTALLED QTY ITEM * MATERIAL CONV. FACT)

- Item earnings are adjusted by the Stockpile Line Item adjustment which is calculated for each item containing a stockpile. This adjustment is computed using the following formula:

STOCKPILE ADJUSTMENT = MATERIAL CONV. FACT * (UNIT PRICE * LINE ITEM ADJ. PERCENT) * ITEM INSTALLED QTY

- The following example illustrates how item earnings are adjusted due to stockpile materials.

Example

Contract Item: Guardrail Unit = 500 Unit of Measure = LF Unit Price = \$25/unit

<u>Material</u>	<u>Unit of Measure</u>	<u>Material Conversion Factor</u>
Post	Each	0.16 (0.16 of Post per LF of Guardrail)
Washers	Each	3.0 (3.0 Washers per LF of Guardrail)
Guardrail	LF	1.0

Panels LF 1.0 (1.0 Panel per LF of Guardrail)

Definitions

Conversion Factor	A Factor that converts from the material unit of measure to the item unit of measure.
Line Item Adj. Percent	Amount paid for the material on the invoice divided by the invoice amount for the material

Stockpiled Material

Washers

Invoice Amount =\$2,000
 Quantity =2,000
 Unit Price (per washer) =\$1
 Conversion Factor =3.0

Panels

Invoice Amount =\$7,500
 Quantity =750
 Unit Price (per foot) =\$10
 Conversion. Factor =1.0

Scenario 1 – 100% of invoiced material paid on first estimate. (Using the data from above.)

- Invoice amount is paid in full for Washers (\$2,000) and Panel (\$7,500). Therefore:

For Washers:

Amount Paid for the Material on the Invoice = \$2,000

Invoice Amount for the Material = \$2,000

Line Item Adj. Percent = \$2,000/\$2,000

= 1.0

For Panels:

Amount Paid for the Material on the Invoice = \$7,500

Invoice Amount for the Material = \$7,500

Line Item Adj. Percent = \$7,500/\$7,500

= 1.0

250 ft. of Guardrail has been installed for the current estimate. Therefore,

Contract Item Cost:

Guardrail l(\$25/LF) 250 * \$25 = \$6,250

Less:

Stockpiled Material Conversion .Factor * (Unit Price * Line Item
Adj. Percent) * Item Installed Qty

Washers : 3.0(\$1 * 1.0) * 250 = \$750

Panels : 1.0(\$10 * 1.0)) * 250 = \$2,500

Stockpile Line = \$3,250
Adjustment Total

Net Amount To be Paid on the Item = \$3,000

Scenario 2 — Partial payment of invoiced material on first estimate (Using the data from above.)

- Invoiced amount is paid in full for Panel (\$7,500).
- Invoiced amount is partially paid for Washers (\$1,000). Therefore,

For Panel:

Amount Paid for the Material on the Invoice =7.500
 Invoice Amount for the Material =7,500
 Line Item Adj. Percent =7,500/\$7,500
 =1.0

For Washers:

Amount Paid for the Material on the Invoice \$1,000
 Invoice Amount for the Material \$2,000
 Line Item Adj. Percent \$1,000/\$2,000
 0.5

- 250 ft. of Guardrail has been installed for the current estimate. Therefore ,

Contract Item Cost:

Guardrail (\$25/LF) 250 * \$25 =\$6,250

Less:

Stockpile Material	Conv.Fact * (Unit Price * Line Item Ad. Percent) * Item Installed Qty	
Washers:	3.0(\$1.0 * 0.5) * 250	= \$375
Panels :	1.0(\$10 * 1.0) * 250	= \$2,500
Stockpile Line Item Adjustment Total		= \$2,875
Net Amount To be Paid on the Item		= \$3,375

Determine Quantity To Be Paid

This process calculates quantities to be paid using three quantities for the line item; the Installed Quantity, Payable Quantity to date, and Paid Quantity up to previous estimate (up to and including the previous estimate where this line item was included). These quantities are explained as follows:

The Installed Quantity is the sum total of all the daily work report’s (DWR) Item Reported Quantity since the last estimate.

Example for how Installed Quantity will be calculated:

For example suppose we have a contract (say contract 1) with only one estimate paid on 1/5/96. The estimate was generated on 1/1/96 with the following DWRs (assume that there is only one Inspector and one item associated with the contract.):

- DWR for 12/25/95
- DWR for 12/26/95

Both these DWRs are paid in estimate 1.

We now want to calculate quantities to be paid using this module on 01/06/96. There are four more DWRs which are approved and waiting to be included in the next estimate. They are as follows:

- DWR for 12/27/95
- DWR for 12/28/95
- DWR for 01/04/96
- DWR for 01/05/96

The calculation process will include the quantities in these four DWRs to calculate the installed quantity. Suppose there is one more DWR for 12/29/95 which is not approved yet. This will not be included in the quantity calculation (Once this DWR is approved it will be included in the next calculation.).

Paid Quantity is total quantity paid in all the previous estimates up to and including the latest paid estimate where this line item was included. This information is stored in the Quantity Paid To Date field of the Contract Item table.

The Payable Quantity is the minimum of:

(Contract Item.Bid Quantity + Contract Item.Net Change Order Quantity + Contract Item.Overrun Quantity, if any, - Paid Quantity), and

Installed Quantity (calculated in the first step).

The process reads all the approved DWRs which are not checked-out from the Server and not paid in any of the previous estimates. For these DWRs, the associated work items are accessed and quantities are accumulated for each estimate line item. When quantities for all the unprocessed DWRs are accumulated, the line number, project number, and accumulated quantities are returned to the calling object. If the calling object was estimate generation process, all the DWRs which were successfully accumulated are updated with the estimate number and the quantities are updated to the Database.

The formula for the quantity calculation is detailed below:

Create and populate a temporary array with the following fields:

- Project Number,
- Line Item Number,
- Item Reported Quantity.

Read all the DWRs where Paid Indicator is not equal to 'Y' and checked-out indicator is not equal to 'Y'.

Reject the record if there is an entry in the Estimate_DWR table for the same DWR. (This means that the record has already been added to the Item Reported Quantity for the line item.)

Add the quantity to the temporary field Item Reported Quantity of the array.

Save the Item Reported Quantity and Item Number and Project Number in the temporary array fields.

After all the DWRs are read, read the array.

If the calling object was the Estimate Generation process, create a row for each DWR with Estimate Number in the Estimate_DWR table (An entry in this table means the quantities reported in the DWR are added to the Item Reported Quantity for the line item).

For each entry in the array, retrieve the Contract Item and Item Master row.

Check the overrun indicator whether an overrun is allowed or not.

If an overrun is allowed and the item is a minor item calculate overrun quantity using the percentage overrun allowed and the (Bid + Net Change Order).

Create a Contract Estimate Item row with the following information:

Move the Quantity Installed To Date field from Contract Item to Quantity Installed Previous To Date field of the Contract Estimate Item.

Move the Quantity Paid To Date field from Contract Item to Quantity Paid Previous To Date field of the Contract Estimate Item.

Move the Item Reported Quantity from the array to the Current Installed Quantity of the Contract Estimate Item.

Move to the Current Quantity To Be Paid of Contract Estimate Item the minimum of:

The (Payable Quantity (i.e., (Contract Item.Bid Quantity + Net Change Order Quantity + Allowed Overrun Quantity if any) - Previous to Date Paid Quantity), and Installed Quantity to Current Quantity To Be Paid (QTY_THIS_PRD) of the estimate item row.

Calculate the amount to be paid this period by multiplying Current Quantity To Be Paid from Contract Estimate Item with Unit Price from the Contract Item.

Save the updated Contract Estimate Item row.

Repeat the creation of Contract Estimate Item rows for each entry of the array.

Determine Training Items

This process determines whether a training payment needs to be included in the current estimate for the contract and whether a Contract Adjustment or an Estimate Line Item needs to be created for paying the eligible training hours. This process will be called by Initiate Estimate Generation process. Depending on the System options, the process will either create a Contract Adjustment or an Estimate Line Item if there are eligible training hours for the estimate period. The process will call a function 'Determine Training Line Item' detailed in Accrue Training Experience. This process will give the unit price and Contract Line Item Number associated with the training activity. If the function 'Determine Training Line Item' does not return the Line Item Number, this process will create a Contract Adjustment for the eligible training hours to be paid.

There are four steps involved in this process. There are as follows:

From the Contract table, the training hours accrued during the estimate period will be retrieved. (This field will be incremented by the Accrue Training Experience process and will be initialized when the estimate is approved and paid.)

Determine whether the training hours should be an Estimate Line Item or a Contract Adjustment. (This will depend on the return values from the 'Determine Training Line Item function.)

If the eligible training hours are to be paid as an Estimate Line Item Adjustment (This will be controlled by Contract Set up when the user will instruct the system to calculate the training hours as a line item by setting up a line item or as an adjustment by not setting up the line item), the Estimate Line Item will be created using the training hours field from the Contract table and unit price and Line Number fields from the returned values of the function 'Determine Training Item'.

If the eligible training hours are to be paid as a Contract Adjustment (This will be controlled by Contract Set up when the user will instruct the system to calculate the training hours as a line item by setting up a line item

or as an adjustment by not setting up the line item), a Contract Adjustment row will be created using the Training Unit Price and Eligible Training Hours from the Contract table.

Identify Discrepancies

This process identifies the discrepancies associated with an estimate. The discrepancies are of two levels; discrepancies at estimate level and discrepancies at item level. If DBE requirements are not met or payrolls are not certified the discrepancies are associated to the estimate. If there is a deficiency in testing requirements or overrun situations the discrepancies are associated with the line item. There are six types of discrepancies and each will be identified using different criteria. These six discrepancies are as follows:

- Overrun Discrepancy,
- Material test discrepancy,
- Payroll certification discrepancy,
- Milestone and Contract Completion discrepancy,
- Checklist event discrepancy,
- DBE compliance Discrepancy.

The discrepancy checks are explained in the following.

OVERRUN DISCREPANCY

For the calculation of overrun situation, the following steps will be performed:

Find the latest Estimate Item, if any. (It may be that this item was not included in the immediate previous estimate.)

Calculate Total Quantity For Current Estimate.

The Total Quantity For Current Estimate is calculated by the Quantity To Be Paid function and is stored on the Contract Estimate Item.

(T_CONT_EST_ITM(current estimate).QTY_THIS_PRD = QTY_TO_BE_PAID_FUNCTION)

Calculate Previous To Date Total Quantity

The Previous To Date Total Quantity is calculated by the Quantity To Be Paid function and is stored on the Contract Estimate Item.

(T_CONT_EST_ITM(current estimate).QUANTITY_PREVIOUS_TO_DATE_PRD = QTY_TO_BE_PAID_FUNCTION)

Determine the Quantity To Date

Add Previous to Date Quantity to Total Quantity This Period giving Quantity To Date.

(L_QTY_TO_DATE = T_CONT_EST_ITM (current estimate).QUANTITY_PREVIOUS_TO_DATE + T_CONT_EST_ITM (current estimate). QTY_THIS_PRD)

Determine overrun status.

Subtract the quantity to date from Bid + Net Change Order Quantity. If the result is negative report overrun discrepancy.

(IF T_CONT_ITM.BID_QTY + NET_C_O_QTY - L_QTY_TO_DATE > 0) AND the item is a Major Item THEN

Set the flag overrun discrepancy-major to true.

If T_CONT_ITM.BID_QTY + NET_C_O_QTY - L_QTY_TO_DATE > 0 and the item is a Minor Item

Set the flag overrun discrepancy-minor to true.)

MATERIAL TEST DISCREPANCY

For the calculation of insufficient material test, the following steps are performed:

For each line item, find the materials for the line item (from T_CONT_STREQ_MATL)

For each material, find the contract sampling test requirement (from T_CONT_STREQ).

Pass the parameters to the functions which calculate the samples required and samples taken. These functions are:

u_mm_nvo_calc_samples_req (Calculate Number of Samples Required) and

u_mm_nvo_calc_samples_complete (Calculate Number of Samples Taken)

Sum of sampling required must be less than or equal to the sum of sampling taken for each line item material. If this is not true, set the Insufficient Samples Flag to true.

PAYROLL CERTIFICATION DISCREPANCY

For the payroll certification check, the following steps are performed:

Calculate Payroll End Date = Estimate End Date - Payroll Discrepancy Lag Days (from the System Parameters table)

Select all the Vendors from Contract Vendor (T_CONT_VEND) table for the contract. Select all the payrolls for the Contract Vendor for Payroll Date <= Payroll End Date. If any of the payroll is not certified, set the Not Certified Payroll Flag to true.

MILESTONE AND CONTRACT COMPLETION DISCREPANCY

This discrepancy can be of two types Milestone discrepancy or Contract Completion discrepancy. The following sections explains each of these types:

Milestone Discrepancy

Sampling and Testing Procedures

For the Milestone Discrepancy check, the following steps are performed:

Select all the milestones for which Anticipated Completion Date is less than the Estimate End Date and (Actual Completion Date is either blank or greater than Estimate End Date.).

If one such row is found, the milestone is missed, so set the Milestone Missed Flag to true.

Contract Completion Discrepancy

For the Contract Completion discrepancy check, the following steps are performed:

Select the Contract Dates table for the contract and Estimated Completion Date and Contract and Actual Completion Date.

If the Estimated Completion Date is less than or equal to the Estimate End Date, and Actual Completion Date is blank or greater than the Estimate End Date, set the Contract End Date Missed Flag to true.

CHECKLIST EVENT DISCREPANCY

For the Checklist Event discrepancy check, the following steps are performed:

Select all the checklist events with projected dates \leq Estimate End Date (using the Contract Check List Date and Contract Checklist Event tables (T_CONT_CHKLIST_DT and T_CONT_CHKLIST_EVENT tables)).

If any of the Event actual dates is blank or less than the Estimate End Date, set the Checklist Event Incomplete Flag to true.

DBE COMPLIANCE DISCREPANCY

This edit needs to be done only for the final estimate. For the DBE Compliancy discrepancy check, the following step are performed:

If total work done by the subcontractor is less than the original commitment amount or sum of the DBE subcontract verified payment is less than the DBE goal amount for the contract, the DBE-not_Met flag needs to be set true.

Determine Funding Amounts

This process calculates the funding amounts for an estimate and updates the Estimate Project table with Total Participating and Non Participating Line Item Amounts. Funding can be at different levels: i.e., Contract, Project, Category or Item level. At each of these levels there can be two types of funding; i.e., participating and non-participating. Each type of funding can have one or more sources of funding. Each source can have one or more funding rows.

First all the rows for the Contract are retrieved from the Contract Funding Table for the Contract ID. The first row (if exists in the database and satisfies all the selection conditions) will represent the Contract (with no Project Number, Category, and no Line Item Number). The Contract Limit Amount (Limit amounts are the high caps of amount that can be used from a funding source.) and the Contract Participating Percentage will be saved in temporary local variables. The subsequent rows will represent, Project level limits and Participating Percentages, or Category level Limits and Participating Percentage or Line Item level Limits and Participating Percentages. These values also will be saved in sets of temporary local variables (These sets are

called arrays.). In other words, there will be four sets of temporary local variables (which will be saved) as follows:

1. Contract Level Local Variables (Occurs only once)
2. Fund Source Code
3. Contract Funding Sequence Number
4. Contract ID
5. Contract Limit
6. Contract Participating Percentage
7. Original Limit Amount
8. Funding Amount Used
9. Project Level Variables (Occurs as many times as number of projects in the Contract)
10. Fund Source Code
11. Contract Funding Sequence Number
12. Contract ID
13. Project Number
14. Project Limit
15. Project Participating Percentage
16. Original Limit Amount
17. Funding Amount Used
18. Category Level Variables (Occurs as many times as number of categories in the Contract)
19. Fund Source Code
20. Contract Funding Sequence Number
21. Contract ID
22. Project Number
23. Category
24. Category Limit
25. Category Participating Percentage
26. Original Limit Amount

27. Funding Amount Used
28. Item Level Variables (occurs as many times as the number of Line Items in the Contract)
29. Fund Source Code
30. Contract Funding Sequence Number
31. Contract ID
32. Project Number
33. Line Item Number
34. Line Item Limit
35. Line Item Participating Percentage
36. Original Limit Amount
37. Funding Amount Used

The process reads all the Estimate Line Items and for each line items accesses the Contract Funding Table entries saved in the arrays as described above. One of the following set of tasks will be the done to calculate the funding depending on the level at which funding exists (Item Level, Category Level, Project Level or Contract Level) for this item. The following algorithm is followed to apply the Amount Paid This Period from the Estimate Line Item:

1. First the Line Item level array is checked for entries. One of the following conditions will be true:

If not found, the next level entry (Category) is searched until a valid entry is found.

If found, then all of the following tasks need to be done for each entry of the Line Item Level array (Thus all the paid amount will be allocated to the multiple Funding sources):

Check if the Funding Amount Used is less than the Limit Amount. If not, the next Priority order entries needs to be checked until the condition is satisfied or all the entries at this level is exhausted. If all the entries at this level is exhausted, then there is no funding available for this item. So, the process will return an error message to the calling object and terminate itself.

Multiply the Amount To Be Paid from the Estimate Line Item by the Contract Participating Percentage of the array and add this amount to the Funding Amount Used in the Item Fund table. Check the Limit whether all of this amount can be applied to the current priority entry. If not, go to the next priority level and apply until all of it is applied. If all of this amount can not be applied to the funding return an error message to the calling object and terminate itself. Update the Item Fund Table with the amount applied to this fund and Contract Funding table with the Funding Amount Used.

Repeat the previous two steps for the next Funding Source Code

2. Repeat above calculations at Category Level, if there is no entry at the Item Level. If there is no entry at Category Level, the next step needs to be performed.

3. Repeat above calculations at Project Level, if there is no entry at the Category Level. If there is no entry at Project level, the next step needs to be performed.
4. Repeat above calculations at Contract Level, if there is no entry at the Project Level. If there is no entry at Contract Level, return an error that no funding exists for the item and terminate.

After the allocation, the database will be updated with the funding allocations at item level and the used funding amount will be updated at funding level. After all the item level calculations are done the funding will be accumulated at project level and the Project funding table row will be created.

This specification covers the funding for line items only. It is to be noted that there are other funding classifications that are updated in the other contractor payment modules. The following is the list of fields updated in other processes. These fields are in the Project Estimate table.

- Current Disincentive Amount
- Current Incentive Amount
- Current Liquidated Damage Amount
- Current Retainage (Participating and Non-Participating)
- Current Other Adjustments
- Prev Tot Disincentive
- Prev Tot Incentive
- Prev Tot Liquidated Damage
- Prev Tot Other Adjustments
- Prev Tot Retainage (Participating and Non-Participating)

Calculate Autopay Items

This process calculates payments to be made for an autopay item. Autopay items are paid depending on the total approved work done at the contract level in lieu of the work done at the item level. The parameters to calculate the payments are defined on the Autopay Table. Using these parameters and the Paid quantities for all the items in the contract (Calculated by Determine Quantities To Be Paid) the autopay item payable quantities are calculated.

There are two methods of autopay calculation:

- **COXA:** The total amounts and earnings are based on contract bid items (original items) excluding the autopay items.
- **CCXA:** The total amounts and earnings are based on all current items (original items + change order items) excluding the autopay items.

The calculation details are explained in the special processing section.

The following are the steps for the Autopay Calculation.

1. Read all the Contract Items and find if there is an Autopay item.
2. If there is one, proceed; else, skip this function
3. Find the method of Autopay (if COXA proceed to 2.1. If CCXA proceed to 2.2).

COXA

Read all the Contract Items. Skip the Autopay item. Find whether the item is an original item or not. If the item is a contract bid item. Compute total amount by multiplying the item's 'Unit Price' with the item's 'Quantity Paid To Date'. Skip 2.2.

$$\text{TOTAL_AMOUNT} = \text{UNIT_PRICE} * \text{QUANTITY_PAID_TO_DATE}$$

CCXA

Read all the Contract Items. Skip the Autopay item. Compute total amount by multiplying item's 'Unit Price' with the item's 'Quantity Paid To Date'.

$$\text{TOTAL_AMOUNT} = \text{UNIT_PRICE} * \text{QUANTITY_PAID_TO_DATE}$$

4. Find the ratio of '**Total Amount**' computed by COXA (or CCXA) to '**Total Bid Amount**' (T_CONT.Total Bid Amount) from the Contract Table. Multiply this amount by 100 to calculate '**Percent Complete**'. Store this field in a temporary variable.

$$\text{TOTAL_BID_AMOUNT} = \text{T_CONT.Total Bid Amount}$$

$$\text{PERCENT_COMPLETE} = \text{TOTAL_AMOUNT} /$$

$$\text{TOTAL_BID_AMOUNT} * 100$$

5. Locate the Autopay rows where 'Threshold Percent' (CMPL_THRSHLD_P) is less than or equal to the temporary variable 'Percent Complete' (calculated in the previous step). Sort the rows by 'Threshold Percent' descending. Select the first row (This way the row selected will be the row with highest value of CMPL_THRSHLD_P and still be less than or equal to percent_complete.).
6. Calculate '**Amount Paid By The Autopay Item**' by multiplying '**Quantity Paid To Date**' field in the Contract Item table with the item's '**Unit Price**'.

$$\text{AMOUNT_PAID_AUTOPAY_ITEM} = \text{QUANTITY_PAID_TO_DATE} *$$

$$\text{UNIT_PRICE}$$

7. Calculate '**Percent Paid By Autopay Item**' as the ratio of '**Amount Paid By The Autopay Item**' to the '**Total Bid Amount**' multiplied by 100.

$$\text{PERCENT_PAID_AUTOPAY_ITEM} =$$

$$\text{AMOUNT_PAID_AUTOPAY_ITEM} / \text{TOTAL_BID_AMOUNT} * 100$$

8. If **'Percent Paid By Autopay Item'** is greater than or equal to **'Maximum Amount Paid Percent'** (T_AUTO_PD_ITM.Maximum Amount Paid Percent) in the Autopay table, then payment has already been made. The module will return control to the calling program.

PERCENT_PAID_AUTOPAY_ITEM >=

T_AUTO_PD_ITM.Maximum Amount Paid Percent

9. Calculate **'Quantity To Be Paid'** as the **'Quantity Paid Percent'** (T_AUTO_PD_ITM.QTY_PD_P) divided by 100 multiplied by the item's **'Current Quantity'** (T_CONT_ITEM.BID_QTY + T_CONT_ITM.NET_C_O_QTY).

CURRENT_QUANTITY = T_CONT_ITEM.BID_QTY +

T_CONT_ITM.NET_C_O_QTY

QUANTITY_TO_BE_PAID = T_AUTO_PD_ITEM.Quantity Paid Percent /

100 * CURRENT_QUANTITY

10. Calculate a temporary variable **'Total Amount To Be Paid'** as the **'Quantity To Be Paid'** multiplied by the item's **'Unit Price'**.

TOTAL_AMOUNT_TO_BE_PAID = QUANTITY_TO_BE_PAID *

UNIT_PRICE

11. Calculate **'Maximum Amount To Be Paid'** as the **'Current Quantity'** multiplied by the item's **'Unit Price'** multiplied by the autopay item's **'Maximum Contract Paid Amount Percent'**.

MAXIMUM_AMOUNT_TO_BE_PAID = CURRENT_QUANTITY *

UNIT_PRICE * T_AUTO_PD_ITM.MAX_CONT_PD_AMT

12. Calculate **'Upto date Amount To Be Paid'** for the autopay item as the minimum of the **'Maximum Amount To be Paid'** and the **'Total Amount To Be Paid'** (calculated in Step 9.).

UPTO_DATE_AMOUNT_TO_BE_PAID =

MIN(MAXIMUM_AMOUNT_TO_BE_PAID, TOTAL_AMOUNT_TO_BE_PAID)

13. Create an Estimate Line Item with the **'Upto date Amount To Be Paid'** and associated quantity.

Appendix D Retainage Calculation

August 2005

Introduction

This appendix documents a component of the Generate Estimate process. Due to the complexity and size of the generate process, the documentation has been broken down into components. In total, the generate process is comprised of the following components:

Component	Description
Generate Estimate	Handles the on-line process which queries the user on the type of estimate to generate and commences the Initiate Estimate Generation component.
Initiate Estimate Generation	Is the driving process of the estimate generation. It determines which of the components should be included in the generation process; as dependent on the type of estimate and the status of other generation parameters.
Delete Pending Estimate	Removes an estimate and all associated details for the estimate calculated prior to this date and existing in an unapproved status. (Only one estimate may exist for a given estimate period).
Calculate Contract Adjustments	Calculates contract adjustments which are to be applied to the contract payment amount for the current estimate period, e.g., liquidated damages.
Calculate Price Adjustments	Calculates line item adjustments in price which are to be applied to a contract item with installed quantities for the current contract and estimate period, e.g., fuel adjustments.
Calculate Retainage	Calculates a contract adjustment for retainage which is to be applied to the contract payment amount.
Calculate Stockpiled Materials	Calculates a line item adjustment to reflect stockpiled materials which are to be applied to contract items with installed quantities for the current contract and estimate period.

Component	Description
Determine Quantity To Be Paid	Calculates the quantity and amount which is to be paid out on each contract item with installed quantities for the current contract and estimate period.
Determine Training Items	Determines whether training has taken place without an associated contract item and if so to calculate the contract adjustment dollar amount for the training which was given for the current contract and estimate period.
Identify Discrepancies	Determines if a discrepancy exists for the current contract and estimate period for those discrepancies which are valid (as determined by the Discrepancy Table).
Determine Funding Amounts	Calculates the amount of funding dollars which are added to participating or non-participating funds identified at the contract item, category, project or contract level for the current contract and estimate period.

The Estimate Generation Component Table

Table D-1

From the this point forward, this document will describe the individual component associated to this appendix.

Calculating Retainage

This process will calculate retainage as well as release retainage for the project(s) in a contract as appropriate. In SiteManager, retainage will be calculated separately for participating and non-participating at the item level earnings, but will be rolled up to the project level for display and reporting. Three types of retainage calculation methods will be used within the system (See table below).

Calculation Method	Description
Work In Place(WINP)	Based on the total amount of work that is in place.
Work Per Period(WPER)	Based on the amount of work that is reported for the current estimate period.
Work Remaining(WREM)	Based on the total amount of work remaining.

The Retainage Calculation Methods Table

Table D-2

From the three methods of calculation above, Work In Place and Work Remaining are cumulative (based on total amounts), which offers the capability of mixing these methods in the lifetime of the same contract. But Work Per Period is incremental, which is mutually exclusive to the cumulative Work In Place and Work Remaining methods. When Work Per Period is used, it must be used through the life of the contract. This process will utilize the retainage record from the ‘Contract Retainage’ table, that is effective during the estimate generation.

In this process, the first step is to calculate the retainage amount against the item earnings (not including items which are exempt from retainage) for the estimate. Once the retainage amount has been calculated against the item earnings, the actual amount retain by the DOT depends on the amount of calculated retainage that is applied to the security in lieu of retainage and escrow account. A more detailed description on the actual amount retained by the DOT is covered in the ‘Special Processing’ of this document.

A release of retainage will be calculated automatically in this process, whenever the criteria for ‘release retainage’ are met (See examples in special processing for criteria). This process supports the releasing of retainage at a project level whenever the ‘release retainage indicator’ is set to ‘Y’ in ‘Contract Project’ window. When the estimate process releases retainage (retainage indicator is set to ‘Y’) for a project, this amount is passed to the accounting system and the accounting system has the option to pay or not pay the released retainage to the final estimate amount.

Once the retainage has been calculated for the project(s) in a contract, securities can be applied in lieu of retainage if the contract has an associated securities account(s). If the contract has multiple security accounts, SiteManager will apply security in lieu of retainage against one of the accounts, until the account’s funds is exhausted. Once the account is exhausted, SiteManager will utilize another account that has available funds until all of the accounts have no funds available.

If a contract is associated with an escrow agent and a retainage amount still exists even after applying the securities in lieu of retainage, then the remaining retainage amount will be applied to the escrow account up to the maximum escrow amount.(See examples).

Retainage Calculation Examples

The following examples should give a clearer understanding, on how retainage is being calculated in SiteManager. In the following examples the information below are used :

Contract = CONT1 consist of 3 projects PROJ1,PROJ2 and PROJ3.

The distribution of the amount awarded to the contract is described below:

PROJ1 = \$500,000.00

PROJ2 = \$350,000.00

PROJ3 = \$650,000.00

\$1,500,000.00

The contract has 10 estimates that were generated while it was active. The following table lists the amounts that were paid for each project. A 'Release Retainage Indicator' has been added at the project level that indicates whether retainage should be released when the project is finished. If this indicator is enabled, then all retainage for the project is released when the project is completed. Any earnings for the completed project will not be included in calculating the retainage for the contract if the contract has multiple projects which are still in progress. This scenario is illustrated in the following examples, starting from estimate 8 to 10.

Earnings

EST	<u>PROJ1</u>	<u>PROJ2</u>	<u>PROJ3</u>	<u>TOTAL</u>
	ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
	ACCUMULATE	ACCUMULATE	ACCUMULATE	ACCUMULATE
0001	\$10,000.00	0.00	0.00	\$10,000.00
	\$10,000.00	0.00	0.00	\$10,000.00
0002	\$50,000.00	\$10,000.00	\$10,000.00	\$70,000.00
	\$60,000.00	\$10,000.00	\$10,000.00	\$80,000.00
0003	\$50,000.00	\$50,000.00	\$75,000.00	\$175,000.00
	\$110,000.00	\$60,000.00	\$85,000.00	\$255,000.00
0004	\$75,000.00	\$75,000.00	\$95,000.00	\$245,000.00
	\$185,000.00	\$135,000.00	\$180,000.00	\$500,000.00

EST	<u>PROJ1</u>	<u>PROJ2</u>	<u>PROJ3</u>	<u>TOTAL</u>
	ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
	ACCUMULATE	ACCUMULATE	ACCUMULATE	ACCUMULATE
0005	\$85,000.00	\$85,000.00	\$100,000.00	\$270,000.00
	\$270,000.00	\$220,000.00	\$280,000.00	\$770,000.00
0006	\$75,000.00	\$0.00	\$30,000.00	\$105,000.00
	\$345,000.00	\$220,000.00	\$310,000.00	\$875,000.00
0007	\$75,000.00	\$80,000.00	\$80,000.00	\$235,000.00
	\$420,000.00	\$300,000.00	\$390,000.00	\$1,110,000.00
0008	\$50,000.00	\$50,000.00	\$110,000.00	\$210,000.00
	\$470,000.00	\$350,000.00	\$500,000.00	\$1,320,000.00
0009	\$30,000.00	\$0.00	\$100,000.00	\$130,000.00
	\$500,000.00	\$350,000.00	\$600,000.00	\$1,450,000.00
0010	\$0.00	\$0.00	\$50,000.00	\$50,000.00
	\$500,000.00	\$350,000.00	\$650,000.00	\$1,500,000.00

The Earnings Table

Table D--3

Sampling and Testing Procedures

Below are descriptions of terminology used in the examples.

Term	Description
Maximum Dollar Limit	The maximum amount of retainage that can be applied to the contract.
Amount Percent Limit	An amount derived from multiplying 'Retainage Percent Limit' with the 'Contract Amount Base'. If 'Maximum Dollar Limit' and 'Amount Percent Limit' are specified, the lower of the two is used for retainage limit.
Retainage Percent Limit	This is the percent used in calculating the 'Amount Percent Limit' from above.
Lump Sum Retainage	This is a lump sum amount that is retained in addition to the retainage that results from the computation involving the retainage percentage and the contract amount base.
Retainage Percent	The percentage of work that should be retained. This percent is used in conjunction with the contract amount base to compute retainage.
Trigger Percent	The percentage of work completed on the contract, in which time a retainage will be applied to the contract (See example 1).
Work Complete Basis Code	The method used to calculate the amount of work to which the retainage percentage and the lump sum retainage are applied.(e.g., WINP, WPER, WREM).

Terminology Table

Table D-4

In the following examples, all items are considered to be bid items and all items participate in the retainage calculation. An item can be defined to be exempt from retainage in the Item Master file; for example, an item such as mobilization might be exempt from retainage. These examples should behave the same if the retainage were computed on current items. However, if only the awarded items were being used, the addition of new items or changes in the current amounts of various items could cause the calculations to vary.

Example 1

Contract Retainage Based on Work in Place: (w/ no Trigger Percent)

In this example, a contract retainage record is created with the following values:

- Maximum Dollar Limit 0
- Amount Percent Limit 0%
- Retainage Percent Limit 10.00
- Lump Sum Retainage 0
- Retainage Percent 10.00
- Work Complete Basis Code WINP

Earnings

EST	<u>PROJ1</u>	<u>PROJ2</u>	<u>PROJ3</u>	<u>TOTAL</u>
	ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
	ACCUMULATE	ACCUMULATE	ACCUMULATE	ACCUMULATE
0001	\$10,000.00	0.00	0.00	\$10,000.00
	\$10,000.00	0.00	0.00	\$10,000.00
0002	\$50,000.00	\$10,000.00	\$10,000.00	\$70,000.00
	\$60,000.00	\$10,000.00	\$10,000.00	\$80,000.00
0003	\$50,000.00	\$50,000.00	\$75,000.00	\$175,000.00
	\$110,000.00	\$60,000.00	\$85,000.00	\$255,000.00
0004	\$75,000.00	\$75,000.00	\$95,000.00	\$245,000.00
	\$185,000.00	\$135,000.00	\$180,000.00	\$500,000.00
0005	\$85,000.00	\$85,000.00	\$100,000.00	\$270,000.00
	\$270,000.00	\$220,000.00	\$280,000.00	\$770,000.00
0006	\$75,000.00	\$0.00	\$30,000.00	\$105,000.00

EST	<u>PROJ1</u>	<u>PROJ2</u>	<u>PROJ3</u>	<u>TOTAL</u>
	ESTIMATE ACCUMULATE	ESTIMATE ACCUMULATE	ESTIMATE ACCUMULATE	ESTIMATE ACCUMULATE
	\$345,000.00	\$220,000.00	\$310,000.00	\$875,000.00
0007	\$75,000.00 \$420,000.00	\$80,000.00 \$300,000.00	\$80,000.00 \$390,000.00	\$235,000.00 \$1,110,000.00
0008	\$50,000.00 \$470,000.00	\$50,000.00 \$350,000.00	\$110,000.00 \$500,000.00	\$210,000.00 \$1,320,000.00
0009	\$30,000.00 \$500,000.00	\$0.00 \$350,000.00	\$100,000.00 \$600,000.00	\$130,000.00 \$1,450,000.00
0010	\$0.00 \$500,000.00	\$0.00 \$350,000.00	\$50,000.00 \$650,000.00	\$50,000.00 \$1,500,000.00

The Example 1 Earnings Table

Table D-5

Retainage Withheld

EST	PROJ1	PROJ2	PROJ3	EST TOT	CONT TOT
0001	\$1,000.00	0.00	0.00	\$1,000.00	\$1,000.00
0002	\$5,000.00	\$1,000.00	\$1,000.00	\$7,000.00	\$8,000.00
0003	\$5,000.00	\$5,000.00	\$7,500.00	\$17,500.00	\$25,500.00
0004	\$7,500.00	\$7,500.00	\$9,500.00	\$24,500.00	\$50,000.00
0005	\$8,500.00	\$8,500.00	\$10,000.00	\$27,000.00	\$77,000.00
0006	\$7,500.00	0.00	\$3,000.00	\$7,860.00	\$84,860.00
0007	\$7,500.00	\$8,000.00	\$8,000.00	\$26,140.00	\$111,000.00
W/ Release Retainage Indicator = 'Y'					
0008	\$5,000.00	-\$30,000.00	\$11,000.00	Retainage = \$16,000.00 Release = \$30,000.00	Retainage = \$127,000.00 Release = \$30,000.00
0009	-\$47,000.00	0.00	\$10,000.00	Retainage = \$10,000.00 Release = \$47,000.00	Retainage = \$137,000.00 Release = \$77,000.00
0010	0.00	0.00	-\$60,000.00	Retainage = 0.00 Release = \$60,000.00	Retainage = \$137,000.00 Release = \$137,000.00
W/ Release Retainage Indicator = 'N'					

EST	PROJ1	PROJ2	PROJ3	EST TOT	CONT TOT
0008	\$5,000.00	\$5,000.00	\$11,000.00	\$21,000.00	Retainage = \$132,000.00
0009	\$3,000.00	0.00	\$10,000.00	\$13,000.00	Retainage = \$145,000.00
0010	-\$50,000.00	-\$35,000.00	-\$60,000.00	Retainage = \$0.00 Release = \$145,000.00	Retainage = \$145,000.00 Release = \$145,000.00

The Example 1 Retainage Withheld

Table D-6

Estimate 1

Earnings: Contract	\$10,000.00
Retainage Percent	10%
Target Retainage	\$1,000.00
Prior Retainage	\$0.00
Potential Retainage	\$1,000.00

Earnings for Estimate 1

PROJ1	PROJ2	PROJ3	EST. TOT	CONT. TOT
\$10,000.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00

Sampling and Testing Procedures

PROJ1	6,000.00 * (50,000.00/ 60,000.00)	= \$5,000.00
PROJ2	1,000.00 * (10,000.00/ 10,000.00)	= \$1,000.00
PROJ3	1,000.00 * (10,000.00/ 10,000.00)	= <u>\$1,000.00</u>
Total Retained for Estimate		\$7,000.00
Total Retained for Contract		\$8,000.00

Estimate 3

Earnings: Contract	\$255,000.00
Retainage Percent	10%
Target Retainage	\$25,500.00
Prior Retainage	\$8,000.00
Potential Retainage	\$17,500.00

Earnings for Estimate 3

	PROJ1	PROJ2	PROJ3	TOTAL
Estimate	\$50,000.00	\$50,000.00	\$75,000.00	\$175,000.00
Accum.	\$110,000.00	\$60,000.00	\$85,000.00	\$255,000.00

PROJ1	11,000.00 * (50,000.00/110,000.00)	= \$5,000.00
PROJ2	6,000.00 * (50,000.00/60,000.00)	= \$5,000.00
PROJ3	8,500.00 * (75,000.00/85,000.00)	= <u>\$7,500.00</u>
Total Retained for Estimate		\$17,500.00
Total Retained for Contract		\$25,500.00

Estimate 4

Earnings: Contract	\$500,000.00
Retainage Percent	10%
Target Retainage	\$50,000.00
Prior Retainage	\$25,500.00
Potential Retainage	\$24,500.00

Earnings for Estimate 4

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$75,000.00	\$75,000.00	\$95,000.00	\$245,000.00
Accum.	\$185,000.00	\$135,000.00	\$180,000.00	\$500,000.00

Sampling and Testing Procedures

PROJ1	18,500.00 * (75,000.00/185,000.00)	= \$7,500.00
PROJ2	13,500.00 * (75,000.00/75,000.00)	= \$7,500.00
PROJ3	18,000.00 * (95,000.00/180,000.00)	= <u>\$9,500.00</u>
Total Retained for Estimate		\$24,500.00
Total Retained for Contract		\$50,000.00

Estimate 7

Earnings: Contract	\$1,110,000.00
Retainage Percent	10%
Target Retainage	\$111,000.00
Prior Retainage	\$84,860.00
Potential Retainage	\$26,140.00

Earnings for Estimate 7

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$75,000.00	\$80,000.00	\$80,000.00	\$235,000.00
Accum.	\$420,000.00	\$300,000.00	\$390,000.00	\$1,110,000.00

PROJ1 42,000.00 * (75,000.00/420,000.00) = \$7,500.00

PROJ2 30,000.00 * (80,000.00/300,000.00) = \$8,000.00

PROJ3 39,000.00 * (80,000.00/390,000.00) = \$8,000.00

Total Retained for Estimate \$23,500.00

Total Retained for Contract \$111,000.00

Estimate 8

In this estimate PROJ2 has been completed.

If Release Retainage Indicator is set to 'Y' for PROJ2

Note: Since Release Retainage Indicator is set to 'Y' and PROJ2 has been completed. Therefore all retainage will be release for PROJ2 and the earnings for PROJ2 in this estimate will not be included in calculating the retainage

Earnings: Contract	\$1,320,000.00
Earnings: Contract (eligible for Retainage)	1,320,000 - 350,000= \$970,000
Retainage Percent	10%
Target Retainage	\$97,000.00
Prior Retainage (Releasing 30,000 for PROJ2)	\$111,000 - 30,000 = 81,000
Potential Retainage	\$16,000.00

Earnings for Estimate 8

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$50,000.00	\$50,000.00	\$110,000.00	\$210,000.00
Accum.	\$470,000.00	\$350,000.00	\$500,000.00	\$1,320,000.00

PROJ1	$47,000.00 * (50,000.00/470,000.00)$	= \$5,000.00
PROJ2		= -\$30,000.00
PROJ3	$50,000.00 * (110,000.00/500,000.00)$	= <u>\$11,000.00</u>
Total Retained for Estimate		\$16,000.00
Total Released for Estimate		\$30,000.00
Total Retained for Contract		\$127,000.00
Total Release for Contract		\$30,000.00

If Release Retainage Indicator is set to 'N' for PROJ2

Earnings: Contract	\$1,320,000.00
Retainage Percent	10%
Target Retainage	\$132,000.00
Prior Retainage	\$111,000.00
Potential Retainage	\$21,000.00

PROJ1	$47,000.00 * (50,000.00/470,000.00)$	= \$5,000.00
PROJ2	$35,000.00 * (50,000.00/350,000.00)$	= \$5,000.00
PROJ3	$50,000.00 * (110,000.00/500,000.00)$	= \$11,000.00
Total Retained for Estimate		\$21,000.00
Total Retained for Contract		\$132,000.00

Estimate 9

In this estimate PROJ1 has been completed.

If Release Retainage Indicator is set to 'Y' for PROJ1

Note: Since Release Retainage Indicator is set to 'Y' and PROJ1 has been completed. Therefore all retainage will be release for PROJ1 and the earnings for PROJ1 in this estimate will not be included in calculating the retainage

Earnings: Contract	\$1,450,000.00
Earnings: Contract (eligible for Retainage) (Subtracted PROJ1 & PROJ2	1,320,000 - 350,000 - 500,000 = \$600,000
Retainage Percent	10%
Target Retainage	\$60,000.00
Prior Retainage (Released 47,000 for PROJ1)	\$97,000 - 47,000 = \$50,000
Potential Retainage	\$10,000.00

Earnings for Estimate 9

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$30,000.00	\$0.00	\$100,000.00	\$130,000.00
Accum.	\$500,000.00	\$350,000.00	\$600,000.00	\$1,450,000.00

PROJ1		= -\$47,000.00
PROJ3	$60,000.00 * (100,000.00/600,000.00)$	= \$10,000.00
Total Retained for Estimate		\$10,000.00
Total Released for Estimate		\$47,000.00
Total Retained for Contract		\$137,000.00
Total Release for Contract		\$77,000.00

If Release Retainage Indicator is set to 'N' for PROJ1

Earnings: Contract	\$1,450,000.00
Retainage Percent	10%
Target Retainage	\$145,000.00
Prior Retainage	\$132,000.00
Potential Retainage	\$13,000.00

PROJ1	$50,000.00 * (30,000.00/500,000.00)$	= \$3,000.00
PROJ3	$60,000.00 * (100,000.00/600,000.00)$	= <u>\$10,000.00</u>
Total Retained for Estimate		= \$13,000.00
Total Retained for Contract		\$145,000.00

Estimate 10

Since this is the final estimate the Release Retainage Indicator is automatically set to 'Y' and all retainage are release. If Release Retainage Indicator is set to 'Y' for the contract then the amount indicated below will be release.

PROJ3	\$60,000.00
Total Release for Estimate	\$60,000.00
Total Retained for Contract	\$137,000.00
Total Release for Contract	\$137,000.00

If Release Retainage Indicator is set to 'N' for the life of the contract then the amount below will be release.

PROJ1	- \$50,000.00
PROJ2	- \$35,000.00
PROJ3	- \$60,000.00
Total Retained for Estimate	\$0.00
Total Released for Estimate	\$145,000.00
Total Retained for Contract	\$145,000.00
Total Released for Contract	\$145,000.00

Example 2

Contract Retainage Based on Work in Place:(w/ Trigger Pct)

In this example, a contract retainage record is created with the following values:

- Maximum Dollar Limit = 0
- Amount Percent Limit = 0 %
- Retainage Percent Limit= 10.00
- Lump Sum Retainage = 0
- Retainage Percent = 10.00
- Trigger Percent = 50.00
- Work Complete Basis Code = WINP

Earnings

EST	<u>PROJ1</u>	<u>PROJ2</u>	<u>PROJ3</u>	<u>TOTAL</u>
	ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
	ACCUMULATE	ACCUMULATE	ACCUMULATE	ACCUMULATE
0001	\$10,000.00	0.00	0.00	\$10,000.00
	\$10,000.00	0.00	0.00	\$10,000.00
0002	\$50,000.00	\$10,000.00	\$10,000.00	\$70,000.00
	\$60,000.00	\$10,000.00	\$10,000.00	\$80,000.00
0003	\$50,000.00	\$50,000.00	\$75,000.00	\$175,000.00
	\$110,000.00	\$60,000.00	\$85,000.00	\$255,000.00
0004	\$75,000.00	\$75,000.00	\$95,000.00	\$245,000.00
	\$185,000.00	\$135,000.00	\$180,000.00	\$500,000.00
0005	\$85,000.00	\$85,000.00	\$100,000.00	\$270,000.00
	\$270,000.00	\$220,000.00	\$280,000.00	\$770,000.00

EST	<u>PROJ1</u>	<u>PROJ2</u>	<u>PROJ3</u>	<u>TOTAL</u>
	ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
	ACCUMULATE	ACCUMULATE	ACCUMULATE	ACCUMULATE
0006	\$75,000.00	\$0.00	\$30,000.00	\$105,000.00
	\$345,000.00	\$220,000.00	\$310,000.00	\$875,000.00
0007	\$75,000.00	\$80,000.00	\$80,000.00	\$235,000.00
	\$420,000.00	\$300,000.00	\$390,000.00	\$1,110,000.00
0008	\$50,000.00	\$50,000.00	\$110,000.00	\$210,000.00
	\$470,000.00	\$350,000.00	\$500,000.00	\$1,320,000.00
0009	\$30,000.00	\$0.00	\$100,000.00	\$130,000.00
	\$500,000.00	\$350,000.00	\$600,000.00	\$1,450,000.00
0010	\$0.00	\$0.00	\$50,000.00	\$50,000.00
	\$500,000.00	\$350,000.00	\$650,000.00	\$1,500,000.00

The Example 2 Earnings Table

Appendix Table Appendix D-7

Retainage Withheld

EST	PROJ1	PROJ2	PROJ3	EST TOT	CONT TOT
0001	0.00	0.00	0.00	0.00	0.00
0002	0.00	0.00	0.00	0.00	0.00
0003	0.00	0.00	0.00	0.00	0.00
0004	0.00	0.00	0.00	0.00	0.00

EST	PROJ1	PROJ2	PROJ3	EST TOT	CONT TOT
0005	\$629.62	\$629.62	\$740.76	\$2,000.00	\$2,000.00
0006	\$7,500.00	0.00	\$3,000.00	\$10,500.00	\$12,500.00
0007	\$7,500.00	\$8,000.00	\$8,000.00	\$23,500.00	\$36,000.00
W/ Release Retainage Indicator = 'Y'					
0008	\$5,000.00	-\$8,629.62	\$11,000.00	Retainage = \$16,000.00 Release = \$8,629.62	Retainage = \$52,000.00 Release = \$8,629.62
0009	-\$20,629.62	0.00	\$10,000.00	Retainage = \$10,000.00 Release = \$20,629.62	Retainage = \$62,000.00 Release = \$29,259.24
0010	0.00	0.00	-\$32,740.76	Retainage = \$0.00 Release = \$32,740.76	Retainage = \$62,000.00 Release = \$62,000.00
W/ Release Retainage Indicator = 'N'					
008	\$5,000.00	\$5,000.00	\$11,000.00	Retainage = \$21,000.00 Release = \$0.00	Retainage = \$57,000.00 Release = \$0.00
009	\$3,000.00	\$0.00	\$10,000.00	Retainage = \$13,000.00 Release = \$0.00	Retainage = \$70,000.00 Release = \$0.00
010	-\$23,629.62	-\$13,629.62	-\$32,740.76	Retainage = \$0.00	Retainage = \$70,000.00

EST	PROJ1	PROJ2	PROJ3	EST TOT	CONT TOT
				Release = \$70,000.00	Release = \$70,000.00

Example 2 Retainage Withheld Table D-8

Estimate 5

Note: In this estimate since the earnings has reached 50% of the contract, the retainage calculation will take effect using the current retainage record . The retainage calculations will be illustrated below:

Accumulated Earnings	\$770,000.00
50% Threshold Amount	\$750,000.00
Earnings eligible for Retainage	\$20,000.00
Retainage Percent	10%
Target Retainage	\$2,000.00
Prior Retainage	\$0.00
Potential Retainage	\$2,000.00

Earnings for Estimate 5

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$85,000.00	\$85,000.00	\$100,000.00	\$270,000.00
Accum.	\$270,000.00	\$220,000.00	\$280,000.00	\$770,000.00

Sampling and Testing Procedures

PROJ1	$2,000.00 * (85,000.00/270,000.00)$	= \$629.62
PROJ2	$2,000.00 * (85,000.00/270,000.00)$	= \$629.62
PROJ3	$2,000.00 * (100,000.00/270,000.00)$	= <u>\$740.76</u>
Total Retained for Estimate		\$2,000.00
Total Retained for Contract		\$2,000.00

Estimate 6

Earnings : Estimate	\$105,000.00
Retainage Percent	10%
Target Retainage	\$10,500.00
Prior Retainage	\$2,000.00
Potential Retainage	\$12,500.00

Earnings for Estimate 6

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$75,000.00	0.00	\$30,000.00	\$105,000.00
Accum.	\$345,000.00	\$220,000.00	\$310,000.00	\$875,000.00

Sampling and Testing Procedures

PROJ1	$23,500.00 * (75,000.00/235,000.00)$	= \$7,500.00
PROJ2	$23,500.00 * (80,000.00/235,000.00)$	= \$8,000.00
PROJ3	$23,500.00 * (80,000.00/235,000.00)$	<u>= \$8,000.00</u>
Total Retained for Estimate		\$23,500.00
Total Retained for Contract		\$36,000.00

Estimate 8

During this estimate, PROJ2 is completed and the examples below illustrates the scenario of having the 'Release Retainage Indicator' set to 'Y' and 'N'.

If Release Retainage Indicator is set to 'Y' for PROJ2

Note: Since Release Retainage Indicator is set to 'Y' and PROJ2 has been completed. Therefore all retainage will be release for PROJ2 and the earnings for PROJ2 in this estimate will not be included in calculating the retainage

Earnings: Estimate	\$210,000.00
Earnings from PROJ1 and PROJ3 (PROJ2 earnings is not included since it has been completed)	\$160,000.00
Retainage Percent	10%
Target Retainage	\$16,000.00
Prior Retainage	\$27,370.38
Potential Retainage	\$43,370.38

Earnings for Estimate 8

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$50,000.00	\$50,000.00	\$110,000.00	\$210,000.00
Accum.	\$470,000.00	\$350,000.00	\$500,000.00	\$1,320,000.00

PROJ1	21,000.00 * (50,000.00/210,000.00)	= \$5,000.00
PROJ2	21,000.00 * (50,000.00/210,000.00)	= \$5,000.00.
PROJ3	21,000.00 * (110,000.00/210,000.00)	= <u>\$11,000.00</u>
Total Retained for Estimate		\$21,000.00
Total Release for Estimate		\$0.00
Total Retained for Contract		\$57,000.00
Total Release for Contract		\$0.00

Estimate 9

During this estimate, PROJ1 is completed and the examples below illustrates the scenario of having the 'Release Retainage Indicator' set to 'Y' and 'N'.

If Release Retainage Indicator is set to 'Y' for PROJ1

Note: Since Release Retainage Indicator is set to 'Y' and PROJ1 has been completed. Therefore all retainage will be release for PROJ1 and the earnings for PROJ1 in this estimate will not be included in calculating the retainage.

Earnings for Estimate 9

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$30,000.00	\$0.00	\$100,000.00	\$130,000.00
Accum.	\$500,000.00	\$350,000.00	\$600,000.00	\$1,450,000.00

Earnings: Estimate	\$130,000.00
Earnings PROJ3 (PROJ1 earnings is not included since it has been completed)	\$100,000.00
Retainage Percent	10%
Target Retainage	\$10,000.00
Prior Retainage (PROJ1 Retainage)	43,370.38 - 20,629.62 = \$22,740.76
Potential Retainage	\$32,740.76

PROJ1		= -\$20,629.62
PROJ3	10,000.00 * (10,000.00/10,000.00)	= \$10,000.00
Total Retained for Estimate		\$10,000.00
Total Release for Estimate		\$20,629.62
Total Retained for Contract		\$32,740.76
Total Release for Contract		\$29,259.24

If Release Retainage Indicator is set to 'N' for PROJ1

Earnings: Estimate	\$130,000.00
Retainage Percent	10%
Target Retainage	\$13,000.00
Prior Retainage	\$57,000.00
Potential Retainage	\$70,000.00

PROJ1 13,000.00 * (30,000.00/130,000.00) = \$3,000.00

PROJ3 13,000.00 * (100,000.00/130,000.00) = \$10,000.00

Total Retained for Estimate \$13,000.00

Total Release for Estimate \$0.00

Total Retained for Contract \$70,000.00

Total Release for Contract \$0.00

Estimate 10

Since this is the final estimate the Release Retainage Indicator is automatically set to 'Y' and all retainage are release.

Earnings for Estimate 10

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$0.00	\$0.00	\$50,000.00	\$50,000.00
Accum.	\$500,000.00	\$350,000.00	\$650,000.00	\$1,500,000.00

If Release Retainage Indicator is set to 'Y' for the contract then the amount indicated below will be release.

PROJ3	-\$32,740.76
Total Retained for Estimate	\$0.00
Total Release for Estimate	\$32,740.76
Total Retained for Contract	\$62,000.00
Total Release for Contract	\$62,000.00

If Release Retainage Indicator is set to 'N' for the contract then the amount indicated below will be release.

Total Retained for Estimate	\$0.00
Total Release for Estimate	\$70,000.00
Total Retained for Contract	\$70,000.00
Total Release for Contract	\$70,000.00

Example 3

Contract Retainage Based on Work Per Period

In this example the following information is used:

- Maximum Dollar Limit = \$150,000.00
- Amount Percent Limit = 0 %
- Lump Sum Retainage = 0
- Retainage Percent = 10.00
- Work Complete Basis Code = WPER
- Trigger Percent = 50.00
- Trigger Percent Amount Base = BID

Using the retainage calculations from above, a retainage will be applied to the contract when the fifth estimate is generated. The following table summarizes when, how much and how the retainage is distributed among the projects. There is no retainage released until each project is finished and the release of retainage indicator is set to 'Y'.

Earnings

EST	<u>PROJ1</u>	<u>PROJ2</u>	<u>PROJ3</u>	<u>TOTAL</u>
	ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
	ACCUMULATE	ACCUMULATE	ACCUMULATE	ACCUMULATE
0001	\$10,000.00	0.00	0.00	\$10,000.00
	\$10,000.00	0.00	0.00	\$10,000.00
0002	\$50,000.00	\$10,000.00	\$10,000.00	\$70,000.00
	\$60,000.00	\$10,000.00	\$10,000.00	\$80,000.00
0003	\$50,000.00	\$50,000.00	\$75,000.00	\$175,000.00
	\$110,000.00	\$60,000.00	\$85,000.00	\$255,000.00

EST	<u>PROJ1</u>	<u>PROJ2</u>	<u>PROJ3</u>	<u>TOTAL</u>
	ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
	ACCUMULATE	ACCUMULATE	ACCUMULATE	ACCUMULATE
0004	\$75,000.00	\$75,000.00	\$95,000.00	\$245,000.00
	\$185,000.00	\$135,000.00	\$180,000.00	\$500,000.00
0005	\$85,000.00	\$85,000.00	\$100,000.00	\$270,000.00
	\$270,000.00	\$220,000.00	\$280,000.00	\$770,000.00
0006	\$75,000.00	\$0.00	\$30,000.00	\$105,000.00
	\$345,000.00	\$220,000.00	\$310,000.00	\$875,000.00
0007	\$75,000.00	\$80,000.00	\$80,000.00	\$235,000.00
	\$420,000.00	\$300,000.00	\$390,000.00	\$1,110,000.00
0008	\$50,000.00	\$50,000.00	\$110,000.00	\$210,000.00
	\$470,000.00	\$350,000.00	\$500,000.00	\$1,320,000.00
0009	\$30,000.00	\$0.00	\$100,000.00	\$130,000.00
	\$500,000.00	\$350,000.00	\$600,000.00	\$1,450,000.00
0010	\$0.00	\$0.00	\$50,000.00	\$50,000.00
	\$500,000.00	\$350,000.00	\$650,000.00	\$1,500,000.00

The Example 3 Earnings Table

Table D-9

Retainage Withheld

EST	PROJ1	PROJ2	PROJ3	EST TOT	CONT TOT
0001	0.00	0.00	0.00		0.00
0002	0.00	0.00	0.00		0.00
0003	0.00	0.00	0.00		0.00
0004	0.00	0.00	0.00		0.00
0005	\$8,500.00	\$8,500.00	\$10,000.00	\$27,000.00	\$27,000.00
0006	\$7,500.00	0.00	\$3,000.00	\$10,500.00	\$37,500.00
0007	\$7,500.00	\$8,000.00	\$8,000.00	\$23,500.00	\$61,000.00
W/ Release Retainage Indicator = 'Y'(BAMS Method)					
0008	\$5,000.00	-\$16,500.00	\$11,000.00	Retainage = \$16,000.00 Release = \$16,500.00	Retainage = \$77,000.00 Release = \$16,500.00
0009	-\$28,500.00	0.00	\$10,000.00	Retainage = \$10,000.00 Release = \$28,500.00	Retainage = \$87,000.00 Release = \$45,000.00
0010	0.00	0.00	-\$42,000.00	Retainage = 0.00 Release = \$42,000.00	Retainage= \$87,000.00 Release = \$87,000.00
W/ Release Retainage Indicator = 'N'					

EST	PROJ1	PROJ2	PROJ3	EST TOT	CONT TOT
008	\$5,000.00	\$5,000.00	\$11,000.00	Retainage = \$21,000.00	Retainage = \$82,000.00
009	\$3,000.00	\$0.00	\$10,000.00	Retainage = \$13,000.00	Retainage = \$95,000.00
010	\$0.00	\$0.00	\$0.00	Retainage = \$0.00 Release = \$95,000.00	Retainage = \$0.00 Release = \$95,000.00

The Example 3 Retainage Withheld

Table D-10

As it is shown from the above table, the contract passes the 50% complete threshold during the fifth estimate, in which case a retainage will be applied to the contract. The algorithm for retainage distributes the retainage to the projects on the basis of how much the project participates in the earnings..

Estimate 5

Earnings: Estimate	\$270,000.00
Retainage Percent	10%
Target Retainage	\$27,000.00
Prior Retainage	\$ 0.00
Potential Retainage	\$27,000.00

Earnings for Estimate 5

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$85,000.00	\$85,000.00	\$100,000.00	\$270,000.00
Accum.	\$270,000.00	\$220,000.00	\$280,000.00	\$770,000.00

PROJ1 27,000.00 * (85,000.00/270,000.00) = \$8,500.00

PROJ2 27,000.00 * (85,000.00/270,000.00) = \$8,500.00

PROJ3 27,000.00 * (100,000.00/270,000.00) = \$10,000.00

Total Retained for Estimate \$27,000.00

Total Retained for Contract \$27,000.00

Estimate 6

Earnings: Estimate	\$105,000.00
Retainage Percent	10%
Target Retainage	\$10,500.00
Prior Retainage	\$27,000.00
Potential Retainage	\$37,500.00

Earnings for Estimate 6

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$75,000.00	0.00	\$30,000.00	\$105,000.00
Accum.	\$345,000.00	\$220,000.00	\$310,000.00	\$875,000.00

PROJ1	$10,500.00 * (75,000.00/105,000.00)$	\$7,500.00
PROJ2	$10,500.00 * (0.00/105,000.00)$	= \$0.00
PROJ3	$10,500.00 * (30,000.00/105,000.00)$	= <u>\$3,000.00</u>
Total Retained for Estimate		\$10,500.00
Total Retained for Contract		\$37,500.00

Estimate 7

Earnings: Estimate	\$235,000.00
Retainage Percent	10%
Target Retainage	\$23,500.00
Prior Retainage	<u>\$37,500.00</u>
Potential Retainage	\$61,000.00

Earnings for Estimate 7

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$75,000.00	\$80,000.00	\$80,000.00	\$235,000.00
Accum.	\$420,000.00	\$300,000.00	\$390,000.00	\$1,110,000.00

PROJ1 23,500.00 * (75,000.00/235,000.00) = \$7,500.00

PROJ2 23,500.00 * (80,000.00/235,000.00) = \$8,000.00

PROJ3 23,500.00 * (80,000.00/235,000.00) = \$8,000.00

Total Retained for Estimate \$23,500.00

Total Retained for Contract \$61,000.00

Estimate 8

During this estimate, PROJ2 is completed and the examples below illustrates the scenario of having the 'Release Retainage Indicator' set to 'Y' and 'N'.

If Release Retainage Indicator is set to 'Y' for PROJ2

Note: Since Release Retainage Indicator is set to 'Y' and PROJ2 has been completed. Therefore all retainage will be release for PROJ2 and the earnings for PROJ2 in this estimate will not be included in calculating the retainage

Total Retained for Estimate	\$16,000.00
Total Released for Estimate	\$16,500.00
Total Retained for Contract	\$77,000.00
Total Released for Contract	\$16,500.00

If Release Retainage Indicator is set to 'N' for PROJ2

Earnings: Estimate	\$210,000.00
Retainage Percent	10%
Target Retainage	\$21,000.00
Prior Retainage	\$61,000.00
Potential Retainage	\$82,000.00

Earnings for Estimate 8

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$50,000.00	\$50,000.00	\$110,000.00	\$210,000.00
Accum.	\$470,000.00	\$350,000.00	\$500,000.00	\$1,320,000.00

Sampling and Testing Procedures

PROJ1	$21,000.00 * (50,000.00/210,000.00)$	= \$5,000.00
PROJ2	$21,000.00 * (50,000.00/210,000.00)$	= \$5,000.00
PROJ3	$21,000.00 * (110,000.00/210,000.00)$	= \$11,000.00
Total Retained for Estimate		\$21,000.00
Total Retained for Contract		\$82,000.00

Estimate 9

During this estimate, PROJ1 is completed and the examples below illustrates the scenario of having the 'Release Retainage Indicator' set to 'Y' and 'N'.

If Release Retainage Indicator is set to 'Y' for PROJ1

Note: Since Release Retainage Indicator is set to 'Y' and PROJ1 has been completed. Therefore all retainage will be released for PROJ1 and the earnings for PROJ1 in this estimate will not be included in calculating the retainage

If Release Retainage Indicator is set to 'Y' for PROJ1

Earnings: Estimate	\$130,000.00
Earnings PROJ3	\$100,000.00
(PROJ1 earnings is not included since it has been completed)	
Retainage Percent	10%
Target Retainage	\$10,000.00
Prior Retainage	PROJ1 retainage is not included (77,000 - 16,500 - 28,500) = \$32,000.00
Potential Retainage	\$42,000.00

Earnings for Estimate 9

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$30,000.00	\$0.00	\$100,000.00	\$130,000.00
Accum.	\$500,000.00	\$350,000.00	\$600,000.00	\$1,450,000.00

PROJ1		-\$28,500.00
PROJ3	10,000.00 * (100,000.00/100,000.00)	\$10,000.00
Total Retained for Estimate		\$10,000.00
Total Retained for Contract		\$28,500.00
Total Retained for Contract		\$87,000.00
Total Released for Contract		\$45,000.00

If Release Retainage Indicator is set to 'N' for PROJ1

Earnings: Estimate	\$130,000.00
Retainage Percent	10%
Target Retainage	\$13,000.00
Prior Retainage	\$82,000.00
Potential Retainage	\$95,000.00

Earnings for Estimate 9

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$30,000.00	\$0.00	\$100,000.00	\$130,000.00
Accum.	\$500,000.00	\$350,000.00	\$600,000.00	\$1,450,000.00

PROJ1	13,000.00 * (30,000.00/130,000.00)	= \$3,000.00
PROJ3	13,000.00 * (100,000.00/130,000.00)	= \$10,000.00
Total Retained for Estimate		\$13,000.00
Total Retained for Contract		\$95,000.00

Estimate 10

Since this is the final estimate the Release Retainage Indicator is automatically set to ‘Y’ and all retainage are release.

If Release Retainage Indicator is set to ‘Y’ for the contract then the amount indicated below will be release.

Earnings: Estimate	\$50,000.00
Retainage Percent	10%
Target Retainage	\$5,000.00
Prior Retainage	Not Applicable
Potential Retainage	Not Applicable

Earnings for Estimate 10

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$0.00	\$0.00	\$50,000.00	\$50,000.00
Accum.	\$500,000.00	\$350,000.00	\$650,000.00	\$1,500,000.00

PROJ3	-\$42,000.00
Total Released for Estimate	\$42,000.00
Total Retained for Contract	\$87,000.00
Total Released for Contract	\$87,000.00

If Release Retainage Indicator is set to 'N' for the contract then the amount indicated below will be release.

Earnings: Estimate	\$50,000.00
Retainage Percent	10%
Target Retainage	\$5,000.00
Prior Retainage	Not Applicable
Potential Retainage	Not Applicable

Earnings for Estimate 10

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$0.00	\$0.00	\$50,000.00	\$50,000.00
Accum.	\$500,000.00	\$350,000.00	\$650,000.00	\$1,500,000.00

PROJ1	-\$31,500.00
PROJ2	-\$21,500.00
PROJ3	-\$42,000.00
Total Released for Estimate	\$95,000.00
Total Retained for Contract	\$0.00

Example 4

Contract Retainage Based on Work Per Period

This example uses the same basic scenario as in Example 3. However, this time a new contract retainage record is added to the Contract Retainage file. This new record contains an effective date that coincides with the seventh estimate. It also places a limit of \$50,000.00 on the amount that can be retained for the contract. The table below illustrates the effect of this new record.

Earnings

EST	<u>PROJ1</u>	<u>PROJ2</u>	<u>PROJ3</u>	<u>TOTAL</u>
	ESTIMATE ACCUMULATE	ESTIMATE ACCUMULATE	ESTIMATE ACCUMULATE	ESTIMATE ACCUMULATE
0001	\$10,000.00	0.00	0.00	\$10,000.00
	\$10,000.00	0.00	0.00	\$10,000.00
0002	\$50,000.00	\$10,000.00	\$10,000.00	\$70,000.00
	\$60,000.00	\$10,000.00	\$10,000.00	\$80,000.00
0003	\$50,000.00	\$50,000.00	\$75,000.00	\$175,000.00
	\$110,000.00	\$60,000.00	\$85,000.00	\$255,000.00

EST	<u>PROJ1</u>	<u>PROJ2</u>	<u>PROJ3</u>	<u>TOTAL</u>
	ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
	ACCUMULATE	ACCUMULATE	ACCUMULATE	ACCUMULATE
0004	\$75,000.00	\$75,000.00	\$95,000.00	\$245,000.00
	\$185,000.00	\$135,000.00	\$180,000.00	\$500,000.00
0005	\$85,000.00	\$85,000.00	\$100,000.00	\$270,000.00
	\$270,000.00	\$220,000.00	\$280,000.00	\$770,000.00
0006	\$75,000.00	\$0.00	\$30,000.00	\$105,000.00
	\$345,000.00	\$220,000.00	\$310,000.00	\$875,000.00
0007	\$75,000.00	\$80,000.00	\$80,000.00	\$235,000.00
	\$420,000.00	\$300,000.00	\$390,000.00	\$1,110,000.00
0008	\$50,000.00	\$50,000.00	\$110,000.00	\$210,000.00
	\$470,000.00	\$350,000.00	\$500,000.00	\$1,320,000.00
0009	\$30,000.00	\$0.00	\$100,000.00	\$130,000.00
	\$500,000.00	\$350,000.00	\$600,000.00	\$1,450,000.00
0010	\$0.00	\$0.00	\$50,000.00	\$50,000.00
	\$500,000.00	\$350,000.00	\$650,000.00	\$1,500,000.00

The Example 4 Earnings Table

Table D-11

Retainage Withheld

EST	PROJ1	PROJ2	PROJ3	EST TOT	CONT TOT
0001	0.00	0.00	0.00		0.00
0002	0.00	0.00	0.00		0.00
0003	0.00	0.00	0.00		0.00
0004	0.00	0.00	0.00		0.00
0005	\$8,500.00	\$8,500.00	\$10,000.00		\$27,000.00
0006	\$7,500.00	0.00	\$3,000.00		\$37,500.00
0007	\$3,989.36	\$4,255.31	\$4,255.33		\$50,000.00
W/ Release Retainage Indicator = 'Y'(BAMS Method)					
0008	\$3,986.03	-\$12,755.31	\$8,769.28	Retainage = \$12,755.31 Release = \$12,755.31	Retainage = \$62,755.31 Release = \$12,755.31
0009	-\$23,975.39	0.00	\$10,000.00	Retainage = \$10,000.00 Release = \$23,975.39	Retainage = \$72,755.31 Release = \$36,730.70
0010	0.00	0.00	-\$36,024.61	Retainage = 0.00 Release = \$36,024.61	Retainage= \$72,755.31 Release = \$72,755.31
W/ Release Retainage Indicator = 'N'					

EST	PROJ1	PROJ2	PROJ3	EST TOT	CONT TOT
008	\$0.00	\$0.00	\$0.00	Retainage = \$0.00	Retainage = \$50,000.00
009	\$0.00	\$0.00	\$0.00	Retainage = \$0.00	Retainage = \$50,000.00
010	-\$19,989.36	-\$12,755.31	-\$27,255.33	Retainage = \$0.00 Release = \$50,000.00	Retainage = \$50,000.00 Release = \$50,000.00

The Example 4 Retainage Withheld

Table D-12

In this example, the new Contract Retainage record resulted in less retainage being withheld during and after the seventh estimate.

Estimate 5

Earnings: Estimate	\$270,000.00
Retainage Percent	10%
Target Retainage	\$27,000.00
Prior Retainage	0.00
Potential Retainage	\$27,000.00

Earnings for Estimate 5

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$85,000.00	\$85,000.00	\$100,000.00	\$270,000.00
Accum.	\$270,000.00	\$220,000.00	\$280,000.00	\$770,000.00

PROJ1 27,000.00 * (85,000.00/270,000.00) = \$8,500.00

PROJ2 27,000.00 * (85,000.00/270,000.00) = \$8,500.00

PROJ3 27,000.00 * (100,000.00/270,000.00) = \$10,000.00

Total Retained for Estimate \$27,000.00

Total Retained for Contract \$27,000.00

Estimate 6

Earnings: Estimate	\$105,000.00
Retainage Percent	10%
Target Retainage	\$10,500.00
Prior Retainage	\$27,000.00
Potential Retainage	\$37,500.00

Earnings for Estimate 6

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$75,000.00	0.00	\$30,000.00	\$105,000.00
Accum.	\$345,000.00	\$220,000.00	\$310,000.00	\$875,000.00

PROJ1 $10,500.00 * (75,000.00/105,000.00)$ = \$7,500.00

PROJ2 $10,500.00 * (0.00/105,000.00)$ = \$0.00

PROJ3 $10,500.00 * (30,000.00/105,000.00)$ = \$3,000.00

Total Retained for Estimate \$10,500.00

Total Retained for Contract \$37,500.00

Estimate 7

Note: A new retainage record is added to the contract, which results in a new limit of \$ 50,000.00 as the maximum amount to be retained.

Basis Amount: Contract	\$235,000.00
Retainage Percent	10%
Target Retainage	\$23,500.00
Prior Retainage	\$37,500.00
Potential Retainage	\$61,000.00

Note: Because this potential retainage is greater than the maximum amount that can be retained, the difference between the amount that has been retained before this estimate and the maximum retainage will replace the target retainage for this period.

New Target Retainage	\$12,500.00
Prior Retainage	\$37,500.00
New Potential Retainage	\$50,000.00

Earnings for Estimate 7

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$75,000.00	\$80,000.00	\$80,000.00	\$235,000.00
Accum.	\$420,000.00	\$300,000.00	\$390,000.00	\$1,110,000.00

PROJ1	$12,500.00 * (75,000.00/235,000.00)$	= \$3,989.36
PROJ2	$12,500.00 * (80,000.00/235,000.00)$	= \$4,255.31
PROJ3	$12,500.00 * (80,000.00/235,000.00)$	= <u>\$4,255.33</u>
Total Retained for Estimate		\$12,500.00
Total Retained for Contract		\$50,000.00

Estimate 8

During this estimate, PROJ2 is completed and the examples below illustrates the scenario of having the 'Release Retainage Indicator' set to 'Y' and 'N'.

If Release Retainage Indicator is set to 'Y' for PROJ2

Note: Since Release Retainage Indicator is set to 'Y' and PROJ2 has been completed. Therefore all retainage will be release for PROJ2 and the earnings for PROJ2 in this estimate will not be included in calculating the retainage.

Sampling and Testing Procedures

Earnings: Estimate	\$210,000.00
Earnings from PROJ1 and PROJ3 (PROJ2 earnings is not included since it has been completed)	\$160,000.00
Retainage Percent	10%
Target Retainage	\$16,000.00
Prior Retainage PROJ2 retainage is not included	(50,000.00 - 12,755.31) =\$37,244.69
Potential Retainage	\$53,244.69

Because this potential retainage is greater than the maximum amount that can be retained, the difference between the amount that has been retained before this estimate and the maximum retainage will replace the target retainage for this period.

New Target Retainage	\$12,755.31
Prior Retainage	\$37,244.69
New Potential Retainage	\$50,000.00

Earnings for Estimate 8

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$50,000.00	\$50,000.00	\$110,000.00	\$210,000.00
Accum.	\$470,000.00	\$350,000.00	\$500,000.00	\$1,320,000.00

PROJ1	12,755.31 * (50,000.00/160,000.00)	= \$3,986.03
PROJ2		-\$12,755.31
PROJ3	12,755.31 * (110,000.00/160,000.00)	= \$8,769.28
Total Retained for Estimate		\$12,755.31
Total Release for Estimate		\$12,755.31
Total Retained for Contract		\$62,755.31
Total Released for Contract		\$12,755.31

If Release Retainage Indicator is set to 'N' for Proj 2

No retainage will be applied since the maximum dollar limit has been reached.

Estimate 9

During this estimate, PROJ1 is completed and the examples below illustrates the scenario of having the 'Release Retainage Indicator' set to 'Y' and 'N'.

If Release Retainage Indicator is set to 'Y' for PROJ1

Note: Since Release Retainage Indicator is set to 'Y' and PROJ1 has been completed. Therefore all retainage will be release for PROJ1 and the earnings for PROJ1 in this estimate will not be included in calculating the retainage.

Earnings: Estimate	\$130,000.00
Earnings PROJ3 (PROJ1 earnings is not included since it has been completed)	\$100,000.00
Retainage Percent	10%
Target Retainage	\$10,000.00
Prior Retainage PROJ1 retainage is not included	(50,000.00 - 23,975.39) = \$26,024.61
Potential Retainage	\$36,024.61

Earnings for Estimate 9

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$30,000.00	\$0.00	\$100,000.00	\$130,000.00
Accum.	\$500,000.00	\$350,000.00	\$600,000.00	\$1,450,000.00

PROJ1		= -\$23,975.39
PROJ3	10,000.00 * (100,000.00/100,000.00)	= \$10,000.00
Total Retained for Estimate		= \$10,000.00
Total Release for Estimate		= \$23,975.39
Total Retained for Contract		\$72,755.70
Total Released for Contract		\$36,730.70

If Release Retainage Indicator is set to 'N' for Proj 2

No retainage will be applied since the maximum dollar limit has been reached.

Estimate 10

Since this is the final estimate the Release Retainage Indicator is automatically set to 'Y' and all retainage are release.

If Release Retainage Indicator is set to 'Y' for the contract then the amount indicated below will be release.

Earnings: Estimate	\$50,000.00
Retainage Percent	10%
Target Retainage	\$5,000.00
Prior Retainage	Not Applicable
Potential Retainage	Not Applicable

Earnings for Estimate 10

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$0.00	\$0.00	\$50,000.00	\$50,000.00
Accum.	\$500,000.00	\$350,000.00	\$650,000.00	\$1,500,000.00

PROJ3	-\$36,024.61
Total Released for Estimate	\$36,024.61
Total Retained for Contract	\$72,755.31
Total Released for Contract	\$72,755.31

If Release Retainage Indicator is set to 'N' for the contract then the amount indicated below will be release.

Total Retained for Contract	\$0.00
Total Released for Contract	\$50,000.00

Example 5

Contract Retainage Based on Work Per Period:

In this example, when the 50% of work is completed for the contract the retainage percent is reduced from 10% to 5% and a Maximum Retainage Amount of \$50,000.00. The following values below shows the data used for each basis code:

	<u>WPER</u>	<u>WPER</u>
Maximum Dollar Limit	= 0	\$40,000.00
Amount Percent Limit	= 0	0
Retainage Percent Limit	= 10.00	0
Lump Sum Retainage	= 0	0
Retainage Percent	= 10.00	5.00
Trigger Percent	= 0	50.00
Trigger Percent Amount Base	CURRENT	CURRENT

The following tables give an overview of how retainage is withheld and released for the example contract with these options.

Earnings

EST	<u>PROJ1</u>	<u>PROJ2</u>	<u>PROJ3</u>	<u>TOTAL</u>
	ESTIMATE ACCUMULATE	ESTIMATE ACCUMULATE	ESTIMATE ACCUMULATE	ESTIMATE ACCUMULATE
0001	\$10,000.00	0.00	0.00	\$10,000.00
	\$10,000.00	0.00	0.00	\$10,000.00
0002	\$50,000.00	\$10,000.00	\$10,000.00	\$70,000.00
	\$60,000.00	\$10,000.00	\$10,000.00	\$80,000.00
0003	\$50,000.00	\$50,000.00	\$75,000.00	\$175,000.00
	\$110,000.00	\$60,000.00	\$85,000.00	\$255,000.00

EST	<u>PROJ1</u>	<u>PROJ2</u>	<u>PROJ3</u>	<u>TOTAL</u>
	ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE
	ACCUMULATE	ACCUMULATE	ACCUMULATE	ACCUMULATE
0004	\$75,000.00	\$75,000.00	\$95,000.00	\$245,000.00
	\$185,000.00	\$135,000.00	\$180,000.00	\$500,000.00
0005	\$85,000.00	\$85,000.00	\$100,000.00	\$270,000.00
	\$270,000.00	\$220,000.00	\$280,000.00	\$770,000.00
0006	\$75,000.00	\$0.00	\$30,000.00	\$105,000.00
	\$345,000.00	\$220,000.00	\$310,000.00	\$875,000.00
0007	\$75,000.00	\$80,000.00	\$80,000.00	\$235,000.00
	\$420,000.00	\$300,000.00	\$390,000.00	\$1,110,000.00
0008	\$50,000.00	\$50,000.00	\$110,000.00	\$210,000.00
	\$470,000.00	\$350,000.00	\$500,000.00	\$1,320,000.00
0009	\$30,000.00	\$0.00	\$100,000.00	\$130,000.00
	\$500,000.00	\$350,000.00	\$600,000.00	\$1,450,000.00
0010	\$0.00	\$0.00	\$50,000.00	\$50,000.00
	\$500,000.00	\$350,000.00	\$650,000.00	\$1,500,000.00

The Example 5 Earnings Table

Table D-13

Retainage Withheld

EST	PROJ1	PROJ2	PROJ3	EST TOT	CONT TOT
0001	\$1,000.00	0.00	0.00	\$1,000.00	\$1,000.00
0002	\$5,000.00	\$1,000.00	\$1,000.00	\$7,000.00	\$8,000.00
0003	\$5,000.00	\$5,000.00	\$7,500.00	\$17,500.00	\$25,500.00
0004	\$7,500.00	\$7,500.00	\$9,500.00	\$24,500.00	\$50,000.00
0005	-\$3,148.14	-\$3,148.14	-\$3,703.72	Retainage = \$0.00 Release = \$10,000.00	Retainage = \$50,000.00 Release = \$10,000.00
0006	\$0.00	0.00	\$0.00	Retainage = \$0.00 Release = \$0.00	Retainage = \$50,000.00 Release = \$10,000.00
0007	\$0.00	\$0.00	\$0.00	Retainage = \$0.00 Release = \$0.00	Retainage = \$50,000.00 Release = \$10,000.00
W/ Release Retainage Indicator = 'Y'					
0008	\$2,500.00	-\$10,351.86	\$5,500.00	Retainage = \$8,000.00 Release = \$10,351.86	Retainage = \$58,000.00 Release = \$20,351.86
0009	-\$17,851.86	0.00	\$5,000.00	Retainage = \$5,000.00 Release =	Retainage = \$63,000.00 Release =

Sampling and Testing Procedures

EST	PROJ1	PROJ2	PROJ3	EST TOT	CONT TOT
				\$17,851.86	\$38,203.72
0010	0.00	0.00	-\$24,796.28	Retainage = 0.00 Release = \$24,796.28	Retainage = \$63,000.00 Release = \$63,000.00
W/ Release Retainage Indicator = 'N'					
0008	\$0.00	\$0.00	\$0.00	Retainage = \$0.00 Release = \$0.00	Retainage = \$50,000.00 Release = \$10,000.00
0009	\$0.00	0.00	\$0.00	Retainage = \$0.00 Release = \$0.00	Retainage = \$50,000.00 Release = \$10,000.00
0010	-\$15,351.86	-\$10,351.86	-\$14,296.28	Retainage = \$0.00 Release = \$40,000.00	Retainage = \$50,000.00 Release = \$50,000.00

The Example 5 Retainage Withheld

Table D-14

Estimate 2

Earnings: Estimate	\$70,000.00
Retainage Percent	10%
Target Retainage	\$7,000.00
Prior Retainage	\$1,000.00
Potential Retainage	\$8,000.00

Earnings for Estimate 2

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$50,000.00	\$10,000.00	\$10,000.00	\$70,000.00
Accum.	\$60,000.00	\$10,000.00	\$10,000.00	\$80,000.00

PROJ1	$7,000.00 * (50,000.00 / 70,000.00)$	= \$5,000.00
PROJ2	$7,000.00 * (10,000.00 / 70,000.00)$	= \$1,000.00
PROJ3	$7,000.00 * (10,000.00 / 70,000.00)$	= <u>\$1,000.00</u>
Total Retained for Estimate		\$7,000.00
Total Retained for Contract		\$8,000.00

Estimate 3

Earnings: Estimate	\$175,000.00
Retainage Percent	10%
Target Retainage	\$17,500.00
Prior Retainage	\$8,000.00
Potential Retainage	\$25,500.00

Earnings for Estimate 3

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$50,000.00	\$50,000.00	\$75,000.00	\$175,000.00
Accum.	\$110,000.00	\$60,000.00	\$85,000.00	\$255,000.00

PROJ1 $17,500.00 * (50,000.00/175,000.00)$ = \$5,000.00

PROJ2 $17,500.00 * (50,000.00/175,000.00)$ = \$5,000.00

PROJ3 $17,500.00 * (75,000.00/175,000.00)$ = \$7,500.00

Total Retained for Estimate \$17,500.00

Total Retained for Contract \$25,500.00

Estimate 4

Earnings: Estimate	\$245,000.00
Retainage Percent	10%
Target Retainage	\$24,500.00
Prior Retainage	\$25,500.00
Potential Retainage	\$50,000.00

Earnings for Estimate 4

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$75,000.00	\$75,000.00	\$95,000.00	\$245,000.00
Accum.	\$185,000.00	\$135,000.00	\$180,000.00	\$500,000.00

PROJ1 $24,500.00 * (75,000.00/245,000.00)$ = \$7,500.00

PROJ2 $24,500.00 * (75,000.00/245,000.00)$ = \$7,500.00

PROJ3 $24,500.00 * (90,000.00/245,000.00)$ = \$9,500.00

Total Retained for Estimate \$24,500.00

Total Retained for Contract \$50,000.00

Estimate 5

Note: The new Contract Retainage (basis code = WPER) record will take in effect when this phase of the contract is processed. This new record now withholds 5 % of the contract and implement a \$40,000.00 retainage limit. This change is incorporated immediately and retainage is released for this estimate.

Earnings: Estimate	\$270,000.00
Retainage Percent	5%
Target Retainage	\$13,500.00
Prior Retainage	\$50,000.00
Potential Retainage	\$63,500.00

Since there is a maximum retainage limit of \$40,000.00 in effect during this estimate and the retainage assessed prior to this estimate is \$50,000.00. A \$10,000.00 of retainage will be released during this estimate and will be distributed to all the projects.

Earnings for Estimate 5

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$85,000.00	\$85,000.00	\$100,000.00	\$270,000.00
Accum.	\$270,000.00	\$220,000.00	\$280,000.00	\$770,000.00

PROJ1	-10,000.00 * (85,000.00/270,000.00)	= -\$3,148.14
PROJ2	-10,000.00 * (85,000.00/270,000.00)	= -\$3,148.14
PROJ3	-10,000.00 * (100,000.00/270,000.00)	= -\$3,703.72
Total Retained for Estimate		\$0.0
Total Released for Estimate		\$10,000.00
Total Retained for Contract		\$50,000.00
Total Released for Contract		\$10,000.00

Estimate 6

Earnings: Estimate	\$105,000.00
Retainage Percent	5%
Target Retainage	\$5,250.00
Prior Retainage	\$40,000.00
Potential Retainage	\$45,000.00

Earnings for Estimate 6

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$75,000.00	0.00	\$30,000.00	\$105,000.00
Accum.	\$345,000.00	\$220,000.00	\$310,000.00	\$875,000.00

Since the maximum retainage limit of \$40,000.00 has been reached from the previous estimate, no retainage will be assessed during this estimate.

Total Retained for Estimate	\$0.00
Total Released for Estimate	\$0.00
Total Retained for Contract	\$50,000.00
Total Released for Contract	\$10,000.00

Estimate 7

Basis Amount: Contract	\$235,000.00
Retainage Percent	5%
Target Retainage	\$11,750.00
Prior Retainage	\$40,000.00
Potential Retainage	\$51,750.00

Earnings for Estimate 7

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$75,000.00	\$80,000.00	\$80,000.00	\$235,000.00
Accum.	\$420,000.00	\$300,000.00	\$390,000.00	\$1,110,000.00

Since the maximum retainage limit of \$40,000.00 has been reached from the previous estimate, no retainage will be assessed during this estimate.

Sampling and Testing Procedures

Total Retained for Estimate	\$0.00
Total Released for Estimate	\$0.00
Total Retained for Contract	\$50,000.00
Total Released for Contract	\$10,000.00

Estimate 8

During this estimate, PROJ2 is completed and the examples below illustrates the scenario of having the 'Release Retainage Indicator' set to 'Y' and 'N'.

If Release Retainage Indicator is set to 'Y' for PROJ2

Note: Since Release Retainage Indicator is set to 'Y' and PROJ2 has been completed. Therefore all retainage will be release for PROJ2 and the earnings for PROJ2 in this estimate will not be included in calculating the retainage

Earnings: Estimate	\$210,000.00
Earnings from PROJ1 and PROJ3 (PROJ2 earnings is not included since it has been completed)	\$160,000.00
Retainage Percent	5%
Target Retainage	\$8,000.00
Prior Retainage PROJ2 retainage is not included	(40,000.00 - 10,351.86) =\$29,648.14
Potential Retainage	\$37,648.14

Sampling and Testing Procedures

Estimate 9

During this estimate, PROJ1 is completed and the examples below illustrates the scenario of having the 'Release Retainage Indicator' set to 'Y' and 'N'.

If Release Retainage Indicator is set to 'Y' for PROJ1

Note: Since Release Retainage Indicator is set to 'Y' and PROJ1 has been completed. Therefore all retainage will be release for PROJ1 and the earnings for PROJ1 in this estimate will not be included in calculating the retainage.

Earnings: Estimate	\$130,000.00
Earnings from PROJ1 and PROJ3 (PROJ1 earnings is not included since it has been completed)	\$100,000.00
Retainage Percent	5%
Target Retainage	\$5,000.00
Prior Retainage PROJ1 retainage is not included	(37,648.14 - 17,851.86) = \$19,796.28
Potential Retainage	\$24,796.28

Earnings for Estimate 9

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$30,000.00	\$0.00	\$100,000.00	\$130,000.00
Accum.	\$500,000.00	\$350,000.00	\$600,000.00	\$1,450,000.00

PROJ1		-	\$17,851.86
PROJ3	5,000.00 * (100,000.00/100,000.00)	=	\$5,000.00
Total Retained for Estimate			\$5,000.00
Total Released for Estimate			\$17,851.86
Total Retained for Contract			\$63,000.00
Total Released for Contract	(\$10,000.00 + \$10,351.86 + 17,851.86) =		\$38,203.72

If Release Retainage Indicator is set to 'N' for PROJ2

Since the maximum retainage limit of \$40,000.00 has been reached from the previous estimate, no retainage will be assessed during this estimate.

Total Retained for Estimate	\$0.00
Total Released for Estimate	\$0.00
Total Retained for Contract	\$40,000.00
Total Released for Contract	\$10,000.00

Estimate 10

Since this is the final estimate the Release Retainage Indicator is automatically set to 'Y' and all retainage are release.

Earnings for Estimate 10

	PROJ1	PROJ2	PROJ3	TOT
Estimate	\$0.00	\$0.00	\$50,000.00	\$50,000.00
Accum.	\$500,000.00	\$350,000.00	\$650,000.00	\$1,500,000.00

If Release Retainage Indicator is set to 'Y' for the contract then the amount indicated below will be release.

PROJ3		-\$24,796.28
Total Retained for Estimate		\$0.00
Total Released for Estimate		\$24,796.28
Total Retained for Contract		\$63,000.00
Total Released for Contract	$(\$10,000.00 + \$10,351.86 + 17,851.86 + 24,796.28) =$	\$63,000.00

If Release Retainage Indicator is set to 'N' for the contract then the amount indicated below will be release.

Total Retained for Estimate		\$0.00
Total Release for Estimate		\$40,000.00
Total Retained for Contract		\$50,000.00
Total Released for Contract	$(10,000 + 40,000) =$	\$50,000.00

Application of Retainage

The following process below is executed after the retainage against the item earnings is calculated for the estimate.

Definitions

Term	Definition
Securities in lieu of retainage	To apply securities in lieu of retainage, the 'Allowed Securities' indicator must be enabled at contract setup. Once the indicator is enabled, SiteManager will apply the retainage amount against the available security in lieu of retainage. All of the retainage amount will be applied only if the available security is equal or greater than the retainage amount, otherwise the amount of retainage applied will be equal to the amount of available security.
Max Escrow Amount	<p>If a retainage amount still exist after applying securities in lieu of retainage and an escrow agent is associated with the contract. Then, SiteManager will transfer(through the financial sequential file) retainage amount using the following logic:</p> <p>If retain amount is equal to or less than the available escrow amount then apply all retain amount to escrow</p> <p>If retain amount is greater than the available escrow amount then apply retain amount equal to the available escrow amount</p>
Net Retainage(Cash Retainage)	This is the amount remaining after securities in lieu of retainage and escrow has been applied to the calculated retainage against the earnings for the estimate. This is the cash amount being retain by the state against the contract.

The Definitions Table

Table D-15

Application of Retainage Examples

The process will be demonstrated through an example for clarity. The following assumptions are used for the examples

Assumptions :

- Allow Security indicator is enabled
- An escrow agent is associated with the contract.

Example 1

Estimate 1

Available Security(e.g., stocks, bonds)	= \$10,000
Maximum Escrow	= \$1,000
Retainage(before applying security and escrow)	= \$11,000

From the data above, the following process will be applied to the Retainage amount

Retainage	= \$11,000
Less:	
Security in lieu of retainage	= \$10,000
Escrow Amount	= <u>\$1,000</u>
Net Retainage	= \$0
Available Security	= \$0
Available Escrow Amount	= \$0

Example 2

Estimate 1

Available Security(e.g.,
stocks, bonds) = \$10,000

Maximum Escrow = \$1,000

Retainage(before applying
security and escrow)

= \$15,000

From the data above, the following process will be applied to the Retainage amount.

Retainage = \$15,000

Less:

Security in lieu of retainage

= \$10,000

Escrow Amount = \$1,000

Net Retainage = \$4,000

Available Security = \$0

Available Escrow Amount = \$0

Example 3:

Estimate 1

Available Security(e.g., stocks, bonds) = \$10,000

Maximum Escrow = \$1,000

Retainage(before applying security and escrow)

= \$5,000

From the data above, the following process will be applied to the Retainage amount.

Retainage = \$5,000

Less:

Security in lieu of retainage

= \$5,000

Escrow Amount

Net Retainage = \$0

Available Security = \$5,000

Available Escrow Amount = \$1,000

Example 4:

Estimate 1

Available Security(e.g.,
stocks, bonds) = \$10,000

Maximum Escrow = \$1,000

Retainage(before applying
security and escrow)

= \$10,500

From the data above, the following process will be applied to the Retainage amount.

Retainage = \$10,500

Less:

Security in lieu of retainage

= \$10,000

Escrow Amount = \$500

Net Retainage = \$0

Available Security = \$0

Available Escrow Amount = \$500

Appendix E Materials Sampling & Testing Calculations

August 2005

Overview

SiteManager's Materials Management functionality has been enhanced to allow transportation agencies more usability and flexibility in defining their contracts' material testing requirements. Each Sampling and Testing Requirement needs to include the material, producer/supplier, sample type, acceptance method and test method. Also when determining qualifying samples during materials discrepancy processing, all these same criteria must be met to qualify a sample.

The additional flexibility of Materials Management is implemented through the use of System Operational Parameters, as listed below:

- **Use Satisfied Represented Material Qty in Discrepancies Process** – Sets system to first attempt to satisfy sampling and testing requirements with sufficient “Satisfied Represented Material Quantity” user-entered represented quantity; options include Yes (‘Y’) and No (‘N’).
- **Material Discrepancy Accept Sample By** – Designates how samples will be accepted during the materials Sampling and Testing requirements calculation process, requiring Authorized Date ‘A’, Acceptable Sample Status (also defined in System Operational Parameters) ‘S’, or both ‘B’.
- **Material Discrepancy Accept Sample Status 1-3** – The value entered in each of these three parameters is the status the system will use to accept a sample to count towards the sample and testing requirements.
- **Sampling & Testing Req Criteria Priority 1-4** – Ranks Producer/Supplier (PS), Test Method (TM), Sample Type (ST) or Acceptance Method (AM) first, second, third, or fourth for the Material Sampling and Testing Requirements process.

The purpose of this Appendix is to provide examples of Materials System Operational Parameters settings and their effects on samples of varying types.

How Samples Meet Contract Sampling & Testing Requirements Based on System Operational Parameters (Example 1)

This example is based on the System Operational Parameters outlined in the table below.

Parameter	Setting
Sampling & Testing Req Criteria Priority 1-4	TM, AM, ST, PS (in descending priority order)
Material Discrepancy Accept Smply By	B (Both)
Material Discrepancy Accept Sample Status	APPR
Use Satisfied Represented Material Qty	N

For the purpose of this example, the following authorized installed quantities are used:

- Line Item A = 20 units
- Line Item B = 2,000 units

The following table details the Sampling and Testing Requirements for the Contract.

Line Item Number / Requirement Number	Material Code	Test Method	Producer/Supplier Code	Acceptance Method	Sample Type	Sample Rate	Sample Frequency
A, Requirement #1	1	T27	---	---	ACC	1	40
A, Requirement #2	1	T11	152	---	---	1	40
A, Requirement #3	1	---	---	INSP	---	1	40
A, Requirement #4	1	---	---	---	ACC	1	40
A, Requirement #5	1	---	---	---	---	1	40
B, Requirement #6	2	T59	157	INSP	QC	1	4,000
B, Requirement #7	2	---	161	PRAP	QC	1	4,000
B, Requirement #8	2	---	---	PRAP	---	1	4,000
B, Requirement #9	2	---	---	---	QC	1	4,000
B, Requirement #10	2	---	160	---	---	1	4,000

The following table details the samples that were taken.

Line Itm #	Smpl ID	Mat'l	Rep Qty	P/S Code	Test Meth	Accept Meth	Smpl Type	Authorized (Y or N)	Status
A	SR0002	1	5	152	T11	INSP	QC	Y	FAIL
A	SR0004	1	35	152	T11	INSP	QC	N	APPR
A	SR0005	1	10	152	T27	INSP	ACC	N	APPR
A	SR0001	1	25	161	T11	INSP	QC	N	APPR
A	SR0003	1	5	152	T11	INSP	QC	N	APPR
A	SR0005	1	10	152	T11	INSP	ACC	N	APPR
A	SR0006	1	10	152	T27	INSP	ACC	Y	FAIL
A	SR0008	1	10	128	---	INSP	QC	Y	FAIL
A	SR0007	1	10	161	---	INSP	QC	Y	APPR
A	SR0005	1	10	152	T11	INSP	ACC	N	APPR
B	SR0009	2	5	152	T59	INSP	QC	Y	APPR
B	SR0013	2	9	128	T59	INSP	QC	N	APPR
B	SR0012	2	8	161	---	PRAP	QC	Y	FAIL
B	SR0010	2	6	150	---	PRAP	QC	Y	APPR
B	SR0011	2	7	157	T59	PRAP	QC	N	FAIL

Conclusion:

In this example, only Sample ID's SR0007, SR0009, and SR0010 meet the specified criteria. Sample ID SR0007 meets Requirement #3, Sample ID SR0009 meets Requirement #9, and Sample ID SR0010 meets Requirement #8.

The following table details results that will appear on the Sampling Checklist report:

Line Item Number / Requirement Number	Total Samples Required	Total Samples Satisfied	Current Samples Required	Total Samples Taken	Satisfied Material Qty	Calculated Represented Material Qty
A, Requirement #1	3	0	1	1	0	0
A, Requirement #2	12	0	2	4	0	0
A, Requirement #3	3	1	1	1	10	40
A, Requirement #4	3	0	1	0	0	0
A, Requirement #5	3	0	1	0	0	0
B, Requirement #6	2	0	1	0	0	0
B, Requirement #7	2	0	1	0	0	0
B, Requirement #8	2	1	1	0	6	4,000
B, Requirement #9	2	1	1	1	5	4,000
B, Requirement #10	2	0	1	0	0	0

How Samples Meet Contract Sampling & Testing Requirements Based on System Operational Parameters (Example 2)

This example is based on the System Operational Parameters outlined in the table below.

Parameter	Setting
Sampling & Testing Req Criteria Priority 1-4	TM, AM, ST, PS (in descending priority order)
Material Discrepancy Accept Samply By	A
Material Discrepancy Accept Sample Status	APPR
Use Satisfied Represented Material Qty	N

For the purpose of this example, the following authorized installed quantities are used:

- Line Item A = 20 units
- Line Item B = 2,000 units

The following table details the Sampling and Testing Requirements for the Contract.

Line Item Number / Requirement Number	Material Code	Test Method	Producer/Supplier Code	Acceptance Method	Sample Type	Sample Rate	Sample Frequency
A, Requirement #1	1	T27	---	---	ACC	1	40
A, Requirement #2	1	T11	152	---	---	1	40
A, Requirement #3	1	---	---	INSP	---	1	40
A, Requirement #4	1	---	---	---	ACC	1	40
A, Requirement #5	1	---	---	---	---	1	40
B, Requirement #6	2	T59	157	INSP	QC	1	4,000
B, Requirement #7	2	---	161	PRAP	QC	1	4,000
B, Requirement #8	2	---	---	PRAP	---	1	4,000
B, Requirement #9	2	---	---	---	QC	1	4,000
B, Requirement #10	2	---	150	---	---	1	4,000

The following table details the samples that were taken.

Line Itm #	Smpl ID	Mat'l	Rep Qty	P/S Code	Test Meth	Accept Meth	Smpl Type	Authorized (Y or N)	Status
A	SR0002	1	5	152	T11	INSP	QC	Y	FAIL
A	SR0004	1	35	152	T11	INSP	QC	N	APPR
A	SR0005	1	10	152	T27	INSP	ACC	N	APPR
A	SR0001	1	25	161	T11	INSP	QC	N	APPR
A	SR0003	1	5	152	T11	INSP	QC	N	APPR
A	SR0005	1	10	152	T11	INSP	ACC	N	APPR
A	SR0006	1	10	152	T27	INSP	ACC	Y	FAIL
A	SR0008	1	10	128	---	INSP	QC	Y	FAIL
A	SR0007	1	10	161	---	INSP	QC	Y	APPR
A	SR0005	1	10	152	T11	INSP	ACC	N	APPR
B	SR0009	2	5	152	T59	INSP	QC	Y	APPR
B	SR0013	2	9	128	T59	INSP	QC	N	APPR
B	SR0012	2	8	161	---	PRAP	QC	Y	FAIL
B	SR0010	2	6	150	---	PRAP	QC	Y	APPR
B	SR0011	2	7	157	T59	PRAP	QC	N	FAIL

Conclusion

In this example, Sample ID's SR0002, SR0006, SR0008, SR0009, SR0012 and SR0010 meet the specified criteria. Sample ID SR0002 meets Requirement #2, Sample ID SR0006 meets Requirement #1, Sample ID

SR0008 meets Requirement #3, Sample ID SR0009 meets Requirement #9, Sample ID SR0012 meets Requirement #7, and Sample ID SR0010 meets Requirement #8.

The following table details results that will appear on the Sampling Checklist report:

Line Item Number / Requirement Number	Total Samples Required	Total Samples Satisfied	Current Samples Required	Total Samples Taken	Satisfied Material Qty	Calculated Represented Material Qty
A, Requirement #1	3	1	1	1	10	40
A, Requirement #2	12	1	2	4	5	10
A, Requirement #3	3	2	1	1	20	80
A, Requirement #4	3	0	1	0	0	0
A, Requirement #5	3	0	1	0	0	0
B, Requirement #6	2	0	1	0	0	0
B, Requirement #7	2	1	1	0	5	4,000
B, Requirement #8	2	1	1	1	6	4,000
B, Requirement #9	2	1	1	1	5	4,000
B, Requirement #10	2	0	1	0	0	0

How the ‘Use Satisfied Represented Material Qty in Discrepancies Process’ Indicator Is Used, Example 1

The following example assumes the ‘Use Satisfied Represented Material Qty in Discrepancies Process’ indicator is set to ‘Y’, and the material’s installed quantity is 20.

Requirement	Current Required Samples	Total Samples Satisfied	Satisfied Represented Material Quantity
1	4	2	10
2	2	5	15
3	5	1	5
Total			30

In the example above, since the total Satisfied Material Quantity meets or exceeds the Installed Quantity, the individual requirements will not be evaluated. No discrepancies will occur, even though there are not enough samples for requirement 3.

How the ‘Use Satisfied Represented Material Qty in Discrepancies Process’ Indicator Is Used, Example 2

The following example assumes the ‘Use Satisfied Represented Material Qty in Discrepancies Process’ indicator is set to ‘Y’, and the material’s installed quantity is 20.

Requirement	Current Required Samples	Total Samples Satisfied	Satisfied Represented Material Quantity
1	2	2	1
2	2	5	0
3	5	1	10
Total			11

In the example above, the total Satisfied Material Quantity is less than the Installed Quantity, so the individual Requirements are evaluated. Requirement 3 has Total Samples Satisfied less than Current Required Samples, so a discrepancy will occur.

Material Discrepancy Payment Adjustment Example 1

The following examples detail the results of System Operational Parameter settings when given the following variables:

System Operational Parameter Settings	
Use Auth Represented Material Qty in Discrepancies Process	‘Y’
Material Discrepancy Payment Calculation	‘Y’
Material Discrepancy Accept Sample Status	‘Complete’

- Item Installed – 15 units
- One material associated to item with a conversion factor of 1, so 15 units of material installed.
- Test A – 1 per 4
- Test B – 1 per 10
- 1 authorized sample that matches Test A requirement; represented quantity of 5 on contract tab
- 1 authorized sample that matches Test B requirement; represented quantity of 5 on contract tab

Test A	
Total of Currently Required Samples for Test A	4
Sample Calculated Material Quantity for Test A	4 <small>(Authorized samples MOD (Sample Rate)) x Sample Frequency; Where MOD meand divide-by and then round down to the next whole integer.</small>
Reported Material Quantity	15
Sample Rate	1
Sample Frequency	4

Payment Adjustment for Test A should be based on:

Sample Calculated Material Quantity ÷ Reported Material Quantity (4 ÷ 15)

27% of material quantity has been met by sampling. Only 27% should be paid based on Test A.

Test B	
Total of Currently Required Samples for Test B	2
Sample Calculated Material Quantity for Test B	10 <small>(Authorized samples MOD (Sample Rate)) x Sample Frequency; Where MOD means divide-by and then round down to the next whole integer.</small>
Reported Material Quantity	15
Sample Rate	1
Sample Frequency	10

Payment Adjustment for Test B should be based on:

Sample Calculated Material Quantity ÷ Reported Material Quantity (10 ÷ 15)

66% of material quantity has been met by sampling. Only 66% should be paid based on Test B.

Conclusion:

Only 27% of the item should be paid, since this is the requirement that has been met the least. Therefore, a line item adjustment to reduce the item quantity by 73% should be added to the estimate during the estimate generation process.

Material Discrepancy Payment Adjustment Example 2

The following examples detail the results of System Operational Parameter settings when given the following variables:

System Operational Parameter Settings	
Use Auth Represented Material Qty in Discrepancies Process	‘Y’
Material Discrepancy Payment Calculation	‘Y’
Material Discrepancy Accept Sample Status	‘Complete’

- Item Installed – 15 units
- Two materials associated to item with a conversion factor of 1, so 15 units of material installed.
- Test A is linked to the first material – 1 per 4
- Test B is linked to the second material – 1 per 10
- 1 authorized sample that matches Test A requirement; represented quantity of 5 on contract tab
- 1 authorized sample that matches Test B requirement; represented quantity of 5 on contract tab

Test A	
Total of Currently Required Samples for Test A	4
Sample Calculated Material Quantity for Test A	4 <small>(Authorized samples MOD (Sample Rate)) x Sample Frequency; Where MOD meand divide-by and then round down to the next whole integer.</small>
Reported Material Quantity	15
Sample Rate	1
Sample Frequency	4

Payment Adjustment for Test A should be based on:

Sample Calculated Material Quantity ÷ Reported Material Quantity (4 ÷ 15)

27% of material quantity has been met by sampling. Only 27% should be paid based on Test A.

Test B	
Total of Currently Required Samples for Test B	2
Sample Calculated Material Quantity for Test B	10 (Authorized samples MOD (Sample Rate)) x Sample Frequency; Where MOD means divide-by and then round down to the next whole integer.
Reported Material Quantity	15
Sample Rate	1
Sample Frequency	10

Payment Adjustment for Test B should be based on:

Sample Calculated Material Quantity ÷ Reported Material Quantity (10 ÷ 15)

66% of material quantity has been met by sampling. Only 66% should be paid based on Test B.

Conclusion:

Only 27% of the item should be paid, since this is the requirement that has been met the least. Therefore, a line item adjustment to reduce the item quantity by 73% should be added to the estimate during the estimate generation process.

Material Sampling and Testing Discrepancies in the Estimate Generation Process

The following steps outline the process SiteManager uses to check for and calculate Material Sampling and Testing Discrepancies.

1. During processing, when sample records are reviewed for compliance with the requirements:
 - a. First, the system considers whether the Satisfied Represented Quantity exceeds the Reported Material Quantity. When it does, no sampling discrepancy exists. This is the most important criterion. It overrides all other criteria. This first consideration will be used and satisfy sampling and testing requirements only if the transportation agency sets a new flag in System Operational Parameters.
 - b. Second, the system considers the most complex to least complex Contract Sampling and Testing criteria, comparing existing sample records to the criteria. The hierarchy of the criteria will be as designated by the transportation agency in System Operational Parameters. Each of the following will be ranked: Material, Producer/Supplier, Test Method, Sample Type, and Acceptance Method. The transportation agency may effectively cancel the ranking of one or more criteria by not specifying that criteria in the Maintain Sample and Testing Requirements, and Contract Sample and Testing Requirements windows.
 - c. Any value shown on a sample record for Producer/Supplier, Sample Type, Acceptance Method, or Test Method will be considered acceptable if that field has been left blank in the Contract Sample and Testing Requirements window. Users may still alter the Contract Sampling and Testing Requirements as the project progresses and new information becomes available regarding the material source(s) and sampling and testing requirements.
2. Currently, the total required samples are calculated using: $\text{CEILING}[(\text{DWR Installed Qty} \times \text{Conversion Factor}) / \text{Sample Frequency}] * \text{Sample Rate}$; where CEILING means rounding up to the next whole integer.
3. When calculating item payment adjustments based on Material Sampling and Testing deficiencies, the payment adjustments are based on the System Operational Parameter “Discrepancy/Deficiency Calculation Method”. The calculations use the computations below:
 - a. Authorized Represented Material Quantity
 - b. Total of all Represented Quantity on authorized samples for this material on this item from the Contract tab.
 - c. Sample Calculated Material Quantity
(Authorized samples MOD Sample Size) x Sample Frequency; Where MOD means divide-by and then round down to the next whole integer.

Recalculate Estimate Discrepancies Process

The following steps outline the process SiteManager uses to recalculate Estimate Discrepancies associated with Material Sampling & Testing.

1. During processing, when sample records are reviewed for compliance with the requirements:
 - a. The system first considers whether the Authorized Represented Material Quantity exceeds the Reported Material Quantity. When it does, no sampling discrepancy exists. This is the most important criterion. It overrides all other criteria. This first consideration will be used to satisfy sampling and testing requirements only if agency sets a new flag in the System Operational Parameters.
 - b. Secondly, the system considers the most complex to least complex Sampling and Testing criteria, comparing existing sample records to the criteria. The hierarchy of the criteria will be as designated by the transportation agency in System Operational Parameters. Each of the following will be ranked: Material, Producer/Supplier, Test Method, Sample Type, and Acceptance Method. The transportation agency may effectively cancel the ranking of one or more criteria by not specifying that criteria in the Maintain Sample and Testing Requirements, and Contract Sample and Testing Requirements windows.
 - c. Any value shown on a sample record for Producer/Supplier, Sample Type, Acceptance Method, or Test Method will be considered acceptable if that field has been left blank in the Contract Sample and Testing Requirements window. Users may still alter the Contract Sampling and Testing Requirements as the contract progresses and new information becomes available regarding the material source(s), and sampling and testing requirements.

Appendix F Price Index Adjustment Calculation

August 2005

Introduction

Price Index tables are used in the calculation of line item adjustments (e.g., fuel adjustments) during the Estimate generation process.

The following table details the methods used by the system to calculate price adjustments.

Calculation	Formula Description
Percent Price Change (PERCENT_PRICE_CHANGE)	<p>The Percent Price Change is the absolute value of one minus the quotient of the Base Price divided by the Current Price.</p> $(PERCENT_PRICE_CHANGE = 1 - (BASE_PRICE / CURRENT_PRICE))$
Index Threshold Percent (INDEX_THRESHOLD_PERCENT)	<p>The Index Threshold Percent is based upon the value of Threshold Percent field in the Item Price Index Adjustment table. If the value is blank, then the Index Threshold Percent is equal to the Threshold Percent found in the Price Index table. Otherwise, it is equal to the Threshold Percent found in the Item Price Index Adjustment table.</p> <p>(If T_ITM_PRIC_INDX_ADJ.THRESHOLD_PERCENT is blank then</p> $INDEX_THRESHOLD_PERCENT =$ $T_PRIC_INDX.THRESHOLD_PERCENT$ <p>else</p> $INDEX_THRESHOLD_PERCENT =$ $T_ITM_PRIC_INDX_ADJ.THRESHOLD_PERCENT)$
Adjusted Base Price (ADJUSTED_BASE_PRICE)	<p>To calculate the Adjusted Base Price, if the Current Price is greater than the Base Price, the Adjusted Base Price is the original Base Price plus the product of the Base Price and the Index Threshold Percent. Otherwise, the Adjusted Base Price is the original Base Price minus the product of the Base Price and the Index Threshold Percent.</p> <p>(If CURRENT_PRICE > BASE_PRICE then</p> $ADJUSTED_BASE_PRICE = BASE_PRICE + BASE_PRICE *$ $INDEX_THRESHOLD_PERCENT$ <p>else</p> $ADJUSTED_BASE_PRICE = BASE_PRICE - BASE_PRICE *$ $INDEX_THRESHOLD_PERCENT)$

Calculation	Formula Description
<p>Index Factor (INDEX_FACTOR)</p>	<p>To calculate the Index Factor, if the Item Value Index Percent in the Item Price Index Adjustment table (T_ITM_PRIC_INDX_ADJ.ITM_VAL_INDX_P) is non-zero, then the Index Factor is equal to the Item Value Index Percent in the Item Price Index Adjustment table divided by 100. Otherwise, the Index Factor is equal to the contract item's unit price multiplied by the Item Unit Index Quantity from the Item Price Index Adjustment table divided by the Unit Value (Unit Value is set at \$1,000).</p> <p>(If T_ITM_PRIC_INDX_ADJ.ITM_VAL_INDX_P <> 0, then</p> <p style="padding-left: 40px;">INDEX_FACTOR (T_ITM_PRIC_INDX_ADJ.ITM_VAL_INDX_P/100)</p> <p>else</p> <p style="padding-left: 40px;">UNIT_VALUE is set to \$1,000</p> <p style="padding-left: 40px;">INDEX_FACTOR = T_CONT_ITEM.UNIT_PRICE * (T_ITM_PRIC_INDX_ADJ.ITM_UNIT_INDX_QTY/UNIT_VALUE))</p>
<p>Unit Price Adjustment Percent (UNIT_PRICE_ADJUSTMENT_PERCENT)</p>	<p>The Unit Price Adjustment percent for this period is the Index Factor multiplied by the difference between the Adjusted Base Price and the Current Price.</p> <p>(UNIT_PRICE_ADJUSTMENT_PERCENT = INDEX_FACTOR * (ADJUSTED_BASE_PRICE – CURRENT_PRICE))</p>
<p>Adjusted Price (ADJUSTED_PRICE)</p>	<p>The Adjusted Price is calculated by Unit Price Adjustment Percent multiplied by the quantity to be paid this period from the Contract Estimate Item table (T_CONT_EST_ITM.QTY_THIS_PRD).</p> <p>(ADJUSTED_PRICE = UNIT_PRICE_ADJUSTMENT_PERCENT * T_CONT_EST_ITM.QTY_THIS_PRD)</p>

Table F-1 The Price Index Adjustments Calculation Formulas Table

Rounding Method

A value will be rounded up if the next significant digit is equal to or greater than five, otherwise the value stays the same if the next significant digit is less than 5. Examples are below.

- If a value is 5.6789 and needs to be rounded to two significant digits to the right of the decimal, then the new value will be 5.68.
- If a value is 5.6759 and needs to be rounded to two significant digits to the right of the decimal, then the new value will be 5.68.

- If a value is 5.6739 and needs to be rounded to two significant digits to the right of the decimal, then the new value will be 5.67.

Price Index Adjustment Calculation Examples

The following examples should give a clearer understanding, on how Price Index Adjustments are calculated in SiteManager. In the following examples the information below are used :

The Threshold Percent is set to 5.0%

EXAMPLE 1

BASE_PRICE = \$1.059/gal

CURRENT_PRICE = \$1.179/gal

T_ITM_PRIC_INDX_ADJ.ITM_VAL_INDX_P = 17.00

INDEX_FACTOR = (17.00 / 100) = .17

T_CONT_EST_ITM.QTY_THIS_PRD = 4,500

PERCENT_PRICE_CHANGE = $|1 - (1.059/1.179)| = .1018 = 10.18\%$

(Which is less than the 5% threshold, therefore an adjustment will be made.)

ADJUSTED_BASE_PRICE = $1.059 + (.05 * 1.059) = 1.112$

UNIT_PRICE_ADJUSTMENT_PERCENT = $(1.179 - 1.112) * .17 = 0.0114$

ADJUSTED_PRICE = $0.0114 * 4,500 = \$51.26$

(The amount of \$51.26 will be added to the Amount to be Paid to the item for the estimate period.)

EXAMPLE 2

BASE_PRICE = \$1.179/gal

CURRENT_PRICE = \$1.059/gal

T_ITM_PRIC_INDX_ADJ.ITM_UNT_INDX_QTY = 19.00

T_CONT_ITM.UNT_PRICE = \$50.000

T_CONT_EST_ITM.QTY_THIS_PRD = 500

PERCENT_PRICE_CHANGE = $|1 - (1.059/1.179)| = .1018 = 10.18\%$

(Which is less than the 5% threshold, therefore an adjustment will be made.)

$$\text{ADJUSTED_BASE_PRICE} = 1.059 + (.05 * 1.059) = 1.112$$

$$\text{INDEX_FACTOR} = 50 * (19 / 1000) = .95$$

$$\text{UNIT_PRICE_ADJUSTMENT_PERCENT} = (1.179 - 1.112) * .95 = 0.064$$

$$\text{ADJUSTED_PRICE} = 0.064 * 500 = \$32.00$$

(The amount of \$32.00 will be added to the Amount to be Paid to the item for the estimate period.)