
User Reference

Contract Forecasting in PMJSP - v10x

By CMiC

CMiC
Computer Methods
international Corp.

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Forecasting in PMJSP

Overview – Forecasting Options

CMiC offers several Forecasting types within Job Cost application. However, it must be noted that if a particular option is used in forecasting a Job, then the same job should NOT be analyzed in other Forecasting Screens.

The following are the forecasting options currently available.

- Contract Forecasting in Enterprise Forms
- Contract Forecasting with PCI Projections in PM JSP
- Contract Forecasting (ETC - Estimate To Complete) in ADF version of Job Costing application

NOTE: There are no standard reports for contract forecasting and users need to plan on creating required reports as part of implementation of JSP Forecasting. CMiC Support may be contacted for any such requirements.

Recommended Best Practices

Contract Forecasting in PMJSP when used, must be considered as an ongoing continuous process and must be performed monthly as opposed to quarterly or irregular frequencies.

The forecasting process has a functionality of copying last stored forecast to the current period and when this is used in a quarterly forecasting scenario, clearing user overrides may take them back with values of forecasting NOT close enough to the current state of the Contract.

‘**Copying**’ last stored forecast is a commonly used practice in the industry.

‘**Archive**’ function allows storing a snapshot of the Contract Forecast as of the System Date and may be performed in a regular frequency, to facilitate comparison of Contract Forecasting in a specific period with an archived data.

Terminology

In the Construction Sphere, the term Change Order is known to be referring to ‘Owner Change Orders’.

Whereas in Contract Forecasting in PMJSP predominantly deals with Potential Change Items (PCIs) and projections of the same. The term 'Change Order', if used in this document, refers to Potential Change Item or simply 'PCI'. The use of the term 'Change Order' may be necessary in cases where the program name reads so on the screens.

If any reference to be made to the Owner Change Orders, then they will be explicitly pre-fixed with the term 'Owner'.

Contract Forecasting with PCI Projections (PMJSP)

Overview – Contract Forecasting with PCI Projections

The primary purpose of Contract Forecasting is to ensure that all potential issues (financial) in a project are dealt with as soon as identified and acted upon in a timely manner in order to keep the project on a profitable course. Forecasting allows prediction of Over/Under funding based on Productivity, Unit or simple Amount based analysis for the costs incurred, expected and compared to the budgeted values for the project.

The Contract Forecasting with PCI Projections is governed by the standard CMiC rules in the Job Costing Control File, which may restrict updating of forecasts to the defined Year/Period. The Contract Forecast with PCI Projections may include 'Risk Management amounts' (entered via the PCI Projection screen) as well.

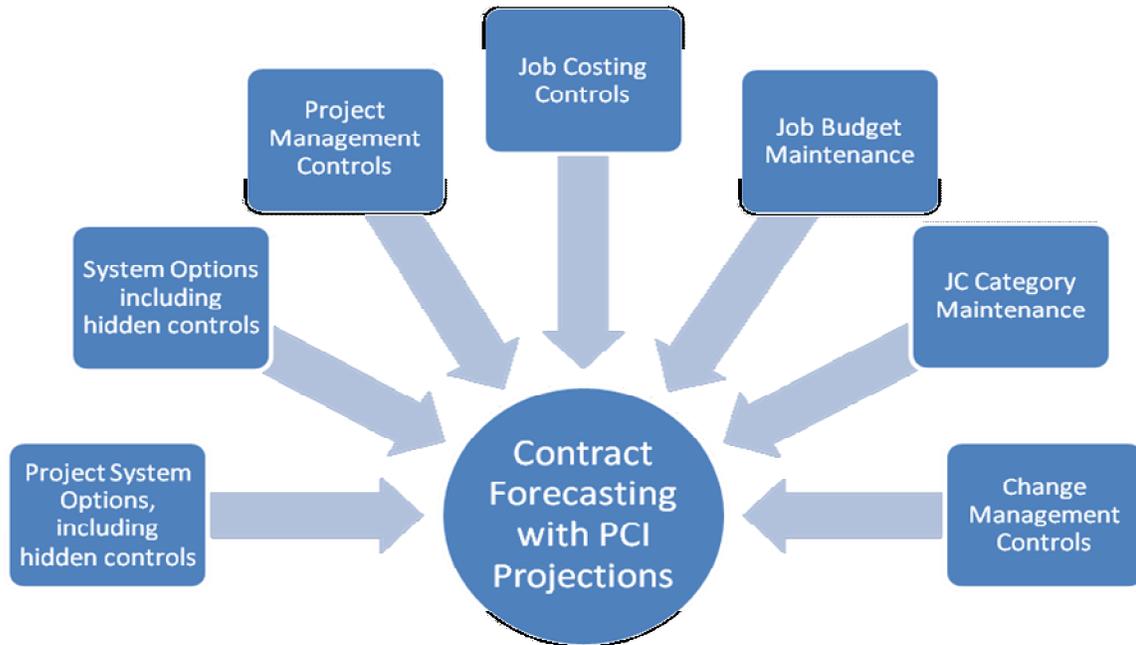
The PCI Projection can be accessed by drilling down on PCI amounts on a phase/category (Bill code) line in the forecast. This also includes a Risk Analysis section. Further drill down in the PCI projection will take the users to the Potential Change Items (PCI's) assigned to the selected job/phase/category combination of the forecast line.

NOTE: JSP Contract Forecasting requires that there is a 'One To One' matching of Phase Codes to Bill Codes to function properly.

Forecasting Controls

Contract Forecasting with PCI projections is determined by many controls in various applications, sometimes hidden for users access/update. Some of the controls may be system wide affecting the way forecasting is performed for all companies/projects, whereas some other controls may be specific to a company or project.

The following diagram illustrates the various controls that affect the forecasting.



Forecasting Controls

Forecasting Setup

Forecasting Setup requires thorough understanding of various applications within CMiC such as JC, JB, CM, PM Etc. and how they are integrated with various options providing flexibility in configuring to their business needs.

There is no pyramidal structure of rules that govern the forecasting program and hence the setup requirements do require elaborate planning, understanding and configuring to implement a vastly successful forecasting system.

The following sections elaborate the setup requirements for Contract Forecasting in PM Hidden Flags

There are a few controls related to forecasting program in the JC application, which are hidden from the user interface. There are a few reasons why these are hidden. Some are 'alternate features', unique to a specific customer, and may NOT be required by a majority of our customers. Some features may replace the commonly used programs and necessitate use of special, alternate programs. Some may NOT be allowed to be switched back and forth and deemed as a 'One Time' setting in the beginning of the configuration.

The following are details about some of the hidden flags.

System Alternate Feature Table (Sys_alternate_feature)

Contract Forecast Independent Cost and Revenue Forecast Flag

If this Flag is set as Y, then for bill codes with type 'Cost', updating the Amount in {Projected Cost Forecast} will not change the amount in the {Revenue Forecast} column. Users have to manually override the {Revenue Forecast} column.

WIP Projected with Risk Flag

If the source for WIP is set as 'Contract Forecast' in JC Control file and, if this Flag is set as 'Y', then the {Projected Cost Forecast Including Pending CO with Risk} will be the source for Project Cost Forecast column in WIP. The {Adjusted Revenue Forecast} Column will be the source for the Contract Amount column in WIP screen. If disabled, the {Projected Cost Forecast} and {Revenue Forecast} columns from the forecasting screen will be source for Projected Cost Forecast and Contract Amount respectively for WIP screen.

JB: Allow Bid Job Contract

The system generally allows billing contracts to be created only for non-bid jobs. It is not possible to do a labor and/or contract forecast on bid jobs as forecasting can be performed only on jobs with contract. .

When the system alternate feature ('JB','ALLOW BID JOB CONTRACT') is installed, then contracts can be created for bid jobs and subsequent forecasting. The first task is to allow for Labor Forecasting to be done on Bid Jobs. The following are the list of possibilities when this feature is turned ON.

- i. Allows creation of a contract on bid jobs.
- ii. Allows creation of contract forecast on bid jobs.
- iii. Allows creation of labor forecast on bid jobs.
- iv. Copy bid contract details when the bid is won.
- v. Copy contract forecast and labor ETC when the bid is won
- vi. Copy original budget change orders when the bid is won

PY: Forecast Burden Calculation

When the system alternate feature (PY, FORECAST BURDEN CALCULATION) is installed, then this is applicable.

System options Table

SYS_ACTUAL_COST_FOR_SPENT Flag

If this flag is set as 'Y' and there is no 'Actual cost' posted, then the {Actual Cost} column will be left as null and NOT as zero and vice versa.

SYS_CMDetail_STAT_CFCast_Flag

If this flag is checked, the system will look into the status of the detailed lines of the PCI, but if it is unchecked, the PCI's Header status is considered for forecasting.

PM System Options Table

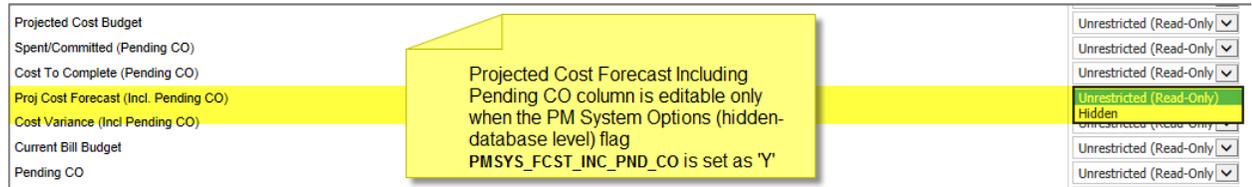
PMSYS_FCST_INC_PND_CO Flag

When this checkbox is checked, the **Proj Cost Forecast (Incl. Pending CO)** column is editable.

Any update within the Cost to Complete popup recalculates the **Proj Cost Forecast (Incl. Pending CO)** column in the PMJSP Contract Forecasting screen. The updated amount (including any manual overrides

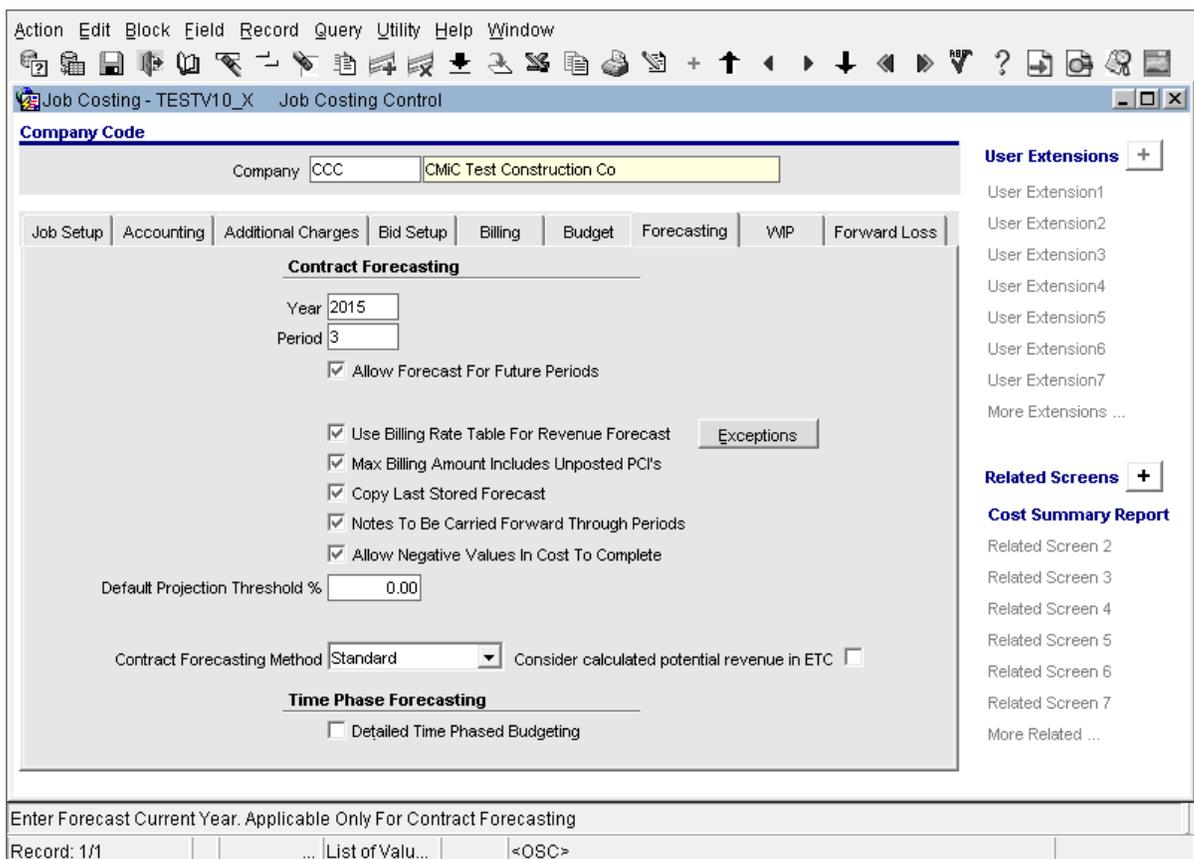
entered directly into this column) will be used to update the Projected Final Amount in the JCJOB CAT table.

If this box is unchecked, the **Proj Cost Forecast (Incl. Pending CO)** column' is NOT editable, and the Projected Cost Forecast amount will be used to update the projected final amount in the JCJOB CAT table.



NOTE: The field security on **Proj Cost Forecast (Incl. Pending CO)** column is normally either 'Read Only' or 'Hidden'. When the database field in PM System Options 'PMSYS_FCST_INC_PND_CO' is set as 'Y', the field is editable and the value is used to update the JCJOB CAT table.

JC Control File (Enterprise Forms)



JC > Setup > Local Tables > Job Costing Control > Forecasting Tab

The controls on the **Forecasting** tab of the JC Control File screen govern forecasting in PMJSP.

Year, Period

Enter the current forecasting default Year/Period. This will be defaulted in to the Year and Period columns in the PMJSP Contract Forecasting screen.

Allow Forecast for Future Periods

Checked: Allows the users to forecast for the future periods.

Unchecked: Allows forecast only for the year/period specified.

Use Billing Rate Table for Revenue Forecast

When checked, this option is used to indicate that the bill rate table is to be used for the calculation of Revenue Forecast in Contract Forecasting, for COST type billing lines. Only those lines from the billing rate table that have no payroll related information are used, i.e., lines with no employee, trade, basic wage type and shift code.

The setting in the JC Control is a default value which defaults to the job during job setup. By default, the flag is un-checked. When checked, the [Exceptions] button becomes enabled. This is used to define any phases and/or categories that will not use the bill rate table in the determination of the Revenue Forecast amount, but will be calculated as usual.

The settings made above will default to the Job Billing tab of Job Setup, and can be changed if needed.

Max Billing Amount Includes Un-posted PCIs

Checked: Any pending PCIs with billing amount will be added on top of the maximum billing amount defined at various levels in billing contract entry. Hence the Contract Forecasting screen will not cap these un-posted PCI billing amounts.

Un-Checked: All pending PCIs with billing amounts will be subject to billing maximums defined and adjustment (negative) amounts will be populated under the 'Adjusted Revenue Forecast' column against the billcodes with adjustments categories.

Copy Last Stored Forecast

This option allows the users while entering the new forecast period, to copy the forecast projections from the last period to the new current period. When checked, the last 'stored' Time Phase forecast future period Projections will be used including any overridden values, in place of basing the values on the standard calculations. This provides the ability to use the last stored overrides in place of having to re-enter the overrides for the future periods.

Notes To Be Carried Forward Through Periods

This flag indicates if forecasting Notes should be carried forward to the next periods. If the flag is checked then when a new period forecast is created the system will bring any existing notes forward as well.

Allow Negative Values in Cost to Complete

This flag is checked, the system will default zero, if the Cost to complete amount is negative. But allows users to enter negative values and commits upon save. As the negative values are stored, upon re-query, the negative values can be verified as well.

If the projected cost is lower than the Spent/Committed, the cost to complete shows as a negative value. Using this value, users will be able to sort the line items and address / correct the same. Also, the standard thumb rule that Spent/Committed plus Cost to complete equals Projected Cost Forecast is maintained when the flag is checked.

Default Projection Threshold

The user can set the company wide default projection threshold percent here, or it can be set individually by job or at the phase level. This field can be used to provide a mechanism to establish a Projection Threshold that would suppress the calculation of the straight line forecast final cost algorithm until a certain percentage of physical work (from either actual units/estimated units or input percentage of completion – as opposed to a cost to cost calculation of percent complete).

NOTE: This is NOT applicable to PMJSP forecasting (Applicable only to Units Forecasting in Forms)

Contract Forecasting Method

The Contract Forecasting Method has two options; Standard & ETC (Estimate To Complete). The default value is 'Standard'.

Standard

When set as 'Standard', the Contract Forecasting screen works as normal.

Customers using the PMJSP version of 'Contract Forecasting' must set the value as 'Standard'.

ETC (Estimate to Complete)

The ETC (Estimate to Complete) program is applicable to ADF version only.

This has the components of Labor, Non-Labor Forecasting with Contract Forecasting and follows a different set of logic in column calculations.

Consider Calculated Potential Revenue (CPR) in ETC

The Contract Forecasting method when set as 'ETC', users may use this flag to consider Calculated Potential Revenue (CPR) in ETC. Once again this is not applicable to PMJSP Contract Forecasting screen.

Detailed Time Phased Budgeting

NOTE: Ensure that this flag is unchecked, as Detailed Time Phased Budgeting has been deprecated. Its current functionality is available, however, as per CMiC's Deprecation Policy, should the need arise to work with older data that used it.

This option changes the Time Phased Budgeting from the Detailed Job/Phase/Category version when checked, to the overall Job Level (unchecked) Time Phasing.

The Job Level Time Phased Budget is applied to GL Periods only (as is JB Time Phased Revenue Budgeting) and allows direct comparison of Costs and Revenues (not available using the Detailed Cost Time Phasing).

This option must also be unchecked in order to utilize the Opportunity Management Financial Forecasting reporting system.

Category Maintenance (Enterprise Forms)

Job Costing - TESTV10_X Category Maintenance

Select Company

Company CMIc Test Construction Co

User Extensions +

MAHTEST

User Extension2

User Extension3

User Extension4

User Extension5

User Extension6

User Extension7

More Extensions ...

Categories

Code	Description	Ctrl	WM	ng oup	Non Recoverable	Available In SC/AP	Active	Include In Forecast	Type
1000	Labour	ALL	HR		<input type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2000	Subcontract	ALL	CY		<input type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3000	Equipment	ALL	DY		<input type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
4000	Material	ALL	LS		<input type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
5000	Sundry	ALL	LS		<input type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
8100	8100 mASTER	ALL	NA		<input type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
8100.A	8100.A Sub Cat	8100	NA		<input type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CC	Construction Continger	ALL	\$		<input type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CFB	Constn Field Burden	ALL	\$		<input checked="" type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CFBNR	NR Constn Field Burden	ALL	\$		<input checked="" type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
WMP	WMP Unposted Cost Cat	ALL	NA		<input type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Account Name WBS Defaults

Checked: Category Will Be Displayed In Contract Forecast.

Record: 1/11 ... <OSC>

Related Screens +

Related Screen 1

Related Screen 2

Related Screen 3

Related Screen 4

Related Screen 5

Related Screen 6

Related Screen 7

More Related ...

JC > Setup > Local Tables > Category Maintenance

The 'Include in Forecast' flag value must be checked in order to make the bill codes associated with the specific category visible on the Contract forecasting screen.

Job Budget Maintenance

Action Edit Block Field Record Query Utility Help Window

Job Costing - TESTV10_X Job Budget

Job Code

Company: CCC CMIIC Test Construction Co
 Job: 12345 Project 12345 - Forecasting PMJSP

Budget Detail

Phase	Cat	Meth	Budgeted Revenue Rate	P	Projected Final	Amt Flag	Time Phased	Spread Rule	Time Phase
02-100	1000	P	75.110	L	99,000.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
02-100					200,000.00	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12MONTH	
02-100					250,000.00	<input type="checkbox"/>	<input type="checkbox"/>		
02-100					195,000.00	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12MONTH	
02-100					75,000.00	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12MONTH	
02-200						<input type="checkbox"/>	<input type="checkbox"/>		
03-100					122,000.00	<input type="checkbox"/>	<input type="checkbox"/>		

Projected Final Flag List

Find: %

Code	Name
C	Committed Costs
L	Largest of Spent or Committed
S	Spent to Date

Job: Project 12
 Phase: Structural
 Cat: Labour

Job Total: 1,592,850.00
 Cost Budget: 1,592,850.00
 Revenue Budget: 1,916,200.00
 Projected: 1,586,000.00

Forecast Based on: Productivity

Choices in list: 3
 Record: 1/? ... List of Valu... <OSC>

JC > Job > Budget Entry

The value in the 'Projected Final Amount' column is available in Contract Forecasting screen under the projected Cost Forecast' column.

Projected Final Flag - 'P' column

This field defaults from the control file. In most cases you will not be changing this value. The program will automatically calculate the expected costs at the completion of the Job, based on the information entered in this field.

- 'C' to use committed costs only.
- 'S' to use spent to date amounts only.
- 'L' to use the larger of the spent or committed amount.

Projected Final

The Cost budget amount will be initially defaulted as the 'Projected Final' amount. This amount will be updated, if the % complete of the job is 100 and costs are less than budget or if costs exceed budget or the user manually overrides.

The Projected Final Amount will be updated with the projected cost forecast column values when contract forecast is stored for any specific period. The 'Cost Status Query' in PMJSP, shows the projected final amounts under the column 'Calculated Projection'.

Freeze Projected Amount Flag

When checked, the amount entered in the Projected Final field will not be updated by the system when costs are posted. This will be the value presented under the 'Projected Cost Forecast' column in Contract Forecasting Screen.

Change Management Control File

Change Management System - TESTV10_X Change Management Control File

Select Company

Company CCC CMiC Test Construction Co

Control Detail

General Rules SC

Transfer CI Budgeted Amount Must Be Balanced Transfer CI Billing Amount Must Be Balanced

Validate Balanced Transfers On Posting Only (PM) Mandatory Bill Code On Transfer Change Orders

Update Max Billing Amounts In JB During Posting Internal Change Orders Update Budget

Default Job Code From Change Item Header Default Billing Amounts Based On Rates Table Setup

Category For Entry Of Phase Budget Changes

Allow Phase Budget Changes Against Any Category

Update Projected Amount During Posting

In Scope Allowance Category CFB Constr

Out Of Scope Allowance Category CFBNR NR Constr Field Burden

Mandatory Billing Amount

Update - Cost Budget Will Be Added To The Projected Amount; Recalculate Will Equal The Highest Of Current Budget, Spent To Date Or Previous Projected Amount

Update - Cost Budget Will Be Added To The Projected Amount; Recalculate Will Equal The Highest Of Current Budget, Spent To Date Or Previous Projected Amount

Record: 1/1 ... <OSC>

CM Control File

Internal Change Orders Update Budget

Check this box if 'Internal' PCIs should update the Job Budget when posted. The setting of this flag depends, if the job budget is the 'Contract' amount (less fee). If this is this case, then this may have to be left unchecked.

Checked: Posting of internal PCIs update the 'Current Cost Budget' and hence affect the other cost forecast columns where the current cost forecast value is directly/indirectly used.

Un-Checked: Posting of internal PCI does NOT affect the Cost budget and hence not included in any column calculations and does NOT affect the forecasting in anyways.

Update Projected Amount during Posting

Check this box if the default on PCI Entry is to update the job projected amount each time a PCI is posted. The setting of this flag depends how pending and pre-pending change-orders are managed. If PCIs are already included in the amounts in your projection forecasts, then this field should not be checked.

The drop down list offers two choices of calculation. When the 'Add CO Budget to Projected Amount' is selected, the PCI cost budget will be added to the previous projected amount. When the 'Recalculate Projected Amount' is selected, the projected amount would equal the highest of current budget (including the CO being posted), the spent to date or the previously projected amount.

PCI Status Setup

The PCI Status Maintenance screen is available in the Change Management module.

Change Management System - TESTV10_X Status Maintenance

Company

Company: CCC | CMIC Test Construction Co

Status

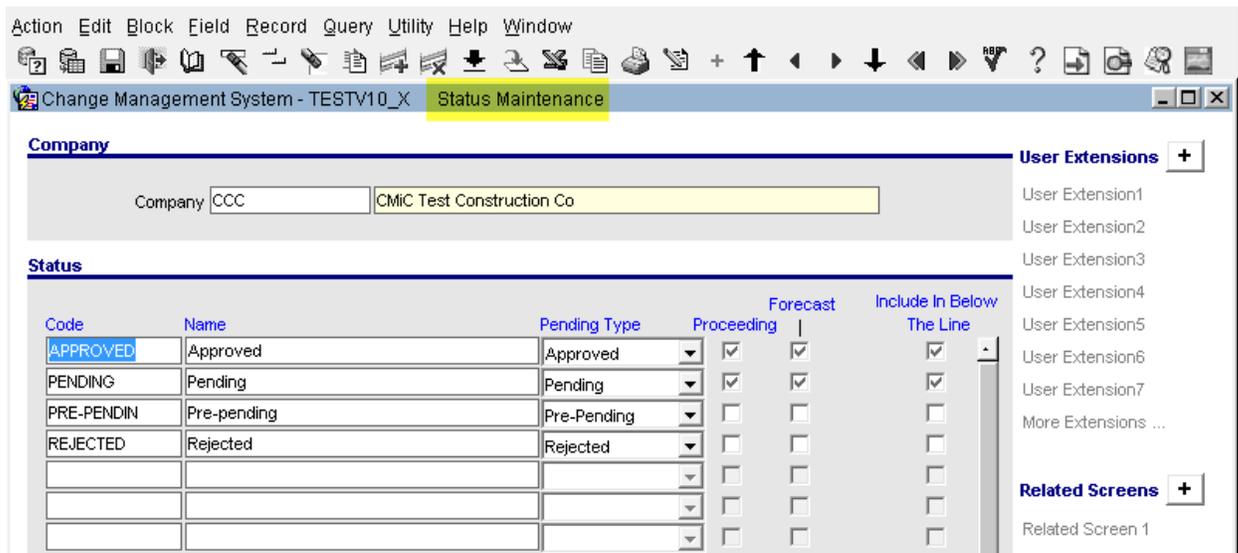
Code	Name	Pending Type	Proceeding	Forecast	Include In Below The Line
APPROVED	Approved	Approved	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PENDING	Pending	Pending	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PRE-PENDIN	Pre-pending	Pre-Pending	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
REJECTED	Rejected	Rejected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Checked: Information On A Change Order With This Status Will Be Included In Job Costing Forecast

Record: 1/4 | ... | <OSC>

Change Management > Setup > Local Tables > Change Order Status Codes

PCI Status codes with the **Forecast** flag checked will only be included in Contract Forecasting. This is set by users according to their business needs to selectively include PCIs with status such as 'Pending' in the forecasting.



Change Management > Local Tables > Change Order Status Codes

The PCI Status Types are the driving force behind how the PCI is treated in contract forecasting with PCI Projections screen.

Users may define status codes as required with the required 'Pending Type' defined by CMiC. The available Pending Types are

- Approved
- Cancelled
- Pending
- Pre-Pending
- Rejected

It must be noted that the PCIs with 'Approved' status may only be posted as the system does NOT allow posting of PCIs with any other pending types. The pending types may be combined with the 3 available check boxes in various combinations to derive the desired results.

Proceeding Flag

Check the Proceeding Box to indicate whether work against a PCI with the status being defined has begun. PCIs that have a status of 'Proceeding' will update amounts within the 'Proceeding Projected' column under the cost section the Job Status Query.

Leave this field blank if work against PCIs with this status has not yet begun. PCIs that do not have this flag set will update amounts within the 'Not Proceeding PCIs' column under the cost section of the Job Status Query.

NOTE: The 'Proceeding Projected' and 'Not Proceeding PCIs' columns will only be updated if you have checked the 'Forecast' box in the next field.

Forecast Flag

Check the Forecast Box if the information on a PCIs with this status should be included in the calculation of the cost forecast within the Job Cost Status Query.

Also, note that the Forecasting program will include only those PCI types with the 'Forecast' flag checked.

Include in Below the Line Billing Flag

The 'Include in below the line billing' is NOT related to contract forecasting. This is used when the system options 'Pending PCI billing' option is used.

This feature is hidden and must be turned on by setting the flag SYS_PCI_BILL_PENDING_FLAG in System Options Table. Only then the Pending PCI Billing group of fields will be available for entry. Users must be aware that the PCI Bill Type 'COST' is the only one supported.

System Tables Maintenance - TESTV10_X System Options

System Options

General Database Opti... Reports Financials Projects Assets Payroll Human Resour... E-TimeSheet Logo Path

System Wide Unique Job Codes Notes Are Mandatory On WIP

Store Phase Projection Quarterly WIP % Complete

Show Reference Description On Job Cost Posting Report

Use WIP Unposted Cost And Unposted Billings

Allow To Build JC Foreign Batch Only When All Records Are Valid

Allow To Store Projected % Complete Value For Each Period Within A Year

Annual Forecast Is Stored On A Period Basis

Copy Additional Fields During JC Transactions Adjustment Posting.

Job Billing Delete Invoices

Never Delete Minority Participation Is To Be Kept At The Change Order Level

At Posting Time Apply Job Security To Billing Rate Table Maintenance

Days After Posting Allow Posted PCIs To Be Linked To Unposted OCOs

Pending PCI Billing

PCI Bill Code

PCI Bill Code Description

PCI Bill Type

Do Not Add Created On The Fly Phases To Phase Master Allow Billing Amount on Non Billing Categories

Job Billing Group Maximums Sequence

Mapping Group	Order
Mapping Group #1	<input type="text"/>
Mapping Group #2	<input type="text"/>
Mapping Group #3	<input type="text"/>
Mapping Group #4	<input type="text"/>
Mapping Group #5	<input type="text"/>

User Extensions +

User Extension 1

User Extension 2

User Extension 3

User Extension 4

User Extension 5

User Extension 6

User Extension 7

More Extensions...

Related Screens +

Related Screen 1

Related Screen 2

Related Screen 3

Related Screen 4

Related Screen 5

Related Screen 6

Related Screen 7

More Related ...

Checked: Unique Job Codes Across Companies; Unchecked: Unique Job Codes Only Within A Company

Record: 1/1 ... <OSC>

System Options > Projects Tab > Pending PCI Billing

In the G/C Prepare Billing program, when there are Pending Un-posted PCIs with the status 'include in Below the line billing' are found, then they will be included in the current draw by creating a pseudo bill code as 'PENDING_PCI'. This bill code is NOT found in the Contract Entry and hence will NOT be available in the Forecasting screen as well.

Once the PCI is posted and during the next billing generation, the billed amounts will be moved to the actual bill code of the PCI, unless the flag 'always below the Line' is checked in the Pending PCI Billing pop-up in G/C Prepare Billing screen.

NOTE: Users must be aware that the system does NOT support the cases where a pending PCI may have been billed, but later it has been rejected or deleted or updated for whatever reason. They must use this feature only when all the aspects of billing and forecasting have been analyzed thoroughly to suit their business needs.

Time Phased Budgeting

Time Phased Budgeting maintains subdivided budgeted, actual spent, and forecasted values over specified periods applicable to the job phase lifetime. A period is identified as a regular interval of time, like a calendar month, calendar year, etc.

This option allows discrepancies between budgeted/forecast and actual spent/revenue amounts to become more apparent sooner rather than at the end of the job cycle, hence making forecasting more accurate. For more in depth details refer to Job Costing manual.

Spread Rules and PCIs Posting

PCIs may be manually time phased between the PCIs start and end dates. Then upon posting, time phased PCIs affect the corresponding time phased budget for the periods covered by the PCIs date range. However, it may also occur that only the PCIs start/end dates and a PCI value are specified without any time phasing. In that case, the PCI value is automatically time phased using a virtual flat spread rule with 2 segments each with a *y-value* of 1, prior to affecting the corresponding time phased budget.

If only the PCI value is specified without time phasing, and without the PCI start/end dates, then the following assumptions are made about the PCI start/end dates:

- The PCI start date becomes the greatest of the time phased budget minimum start date and the PCI reference date
- The PCI end date becomes the time phased budget maximum end date
- If the time phased budget minimum/maximum start/end dates are not available, then the PCI start/end dates become the PCI reference date, which is always specified.

Posting Considerations with Time Phase Budgeting

Cost Transactions

Costs are incurred at a point in time. In relation to time phased budgeting, **actual spent** values are posted into the period in which the post date is found. And the posted cost applies for the whole period. If the period did not exist in the budget, it is created.

Forecast Impacts

The posting of costs should not normally affect projections. However, because of the rule (*Slide Projection Rule*) that projections at the *jejobcat* level can never be less than the *jejobcat* level spent *value*, posting of costs may be automatically increased/decreased the *jejobcat* level projections by a *value* called **sliding value**. When the *sliding value* is not zero, the time phased forecast value is also increased/decreased by the same *sliding value* for the period of the post date.

PCI Transactions

PCIs occur over a date range. When time phased PCIs are posted, the corresponding time phased budget values are increased/decreased by the PCI values for each budget period corresponding to the PCI periods. If the budget periods do not exist they are created. If there is a discrepancy between the *cmdetail* value and the sum of time phased PCI values, the time phased PCI is automatically *synchronized* (using PRO-RATA method) with the *cmdetail* value first.

Forecast Impacts with PCIs

The posting of time phased PCIs affect time phased forecast values in the same way as time phased budget values, but only if the flag **Update Project Amount during Posting** is checked. Otherwise, posting of PCIs should have no effect on the time phased forecast values.

How to Set Up Detailed Time Phase Budgeting

NOTE: Detailed Time Phased Budgeting has been deprecated. Its current functionality is available, however, as per CMiC's Deprecation Policy, should the need arise to work with older data that used it.

1. JC Control > Forecasting > Detailed Time Phased Budgeting - Set as 'Y'

2. Assign Phases Form > Category > Set the Time Phased as 'Y' (for budget method 'Amounts' only)
3. Assign Phases Form > Category > Assign a 'Spread rule Code' as required

WBS Functionality & Contract Forecasting

Work Breakdown Structure (WBS)

The Work Breakdown Structure (WBS) Codes provide a supplementary method to effectively track and summarize costs on a transaction to transaction basis. The type of breakdown is dependent on the costing structure of the job and can be tailored to the specific requirements of the company. The WBS codes are user-defined and may be assigned with the system defined field named PCI#.

The WBS functionality with PCI# allows users to specify the Potential Change Item# when transactions are entered and upon posting, the transaction detail records are associated with specific PCI#s allowing the users to track the costs. Similarly when Request for Payments are posted, the PCI# linked to the Subcontract will be used as a WBS value and posted to the transaction details table.

Forecasting based on the Billing Contracts with WBS Mapping with PCI functionality allows forecasting with PCI projections showing specific bill codes with PCI# and tracking all committed, spent costs and billings.

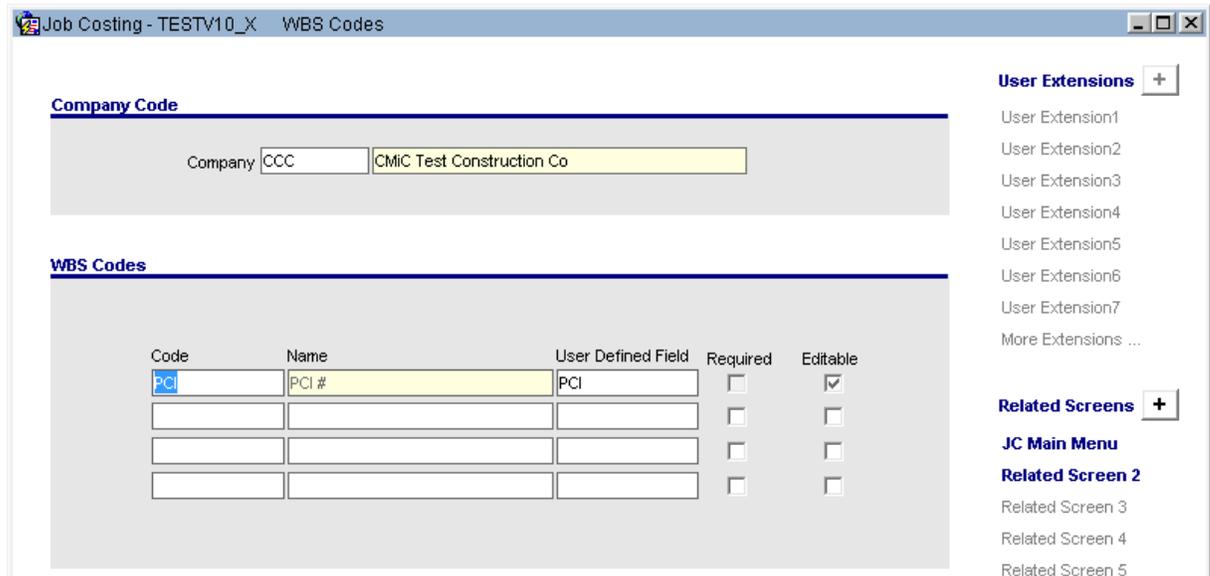
The use of WBS functionality in Contract Forecasting may be classified in two categories.

1. Jobs with WBS mapping and using transactions with PCI# as the WBS code.
2. Jobs with standard mapping and using WBS code (PCI#) for transactions.

Differences between Two Methods

Standard Mapping	WBS Mapping
The number of bill codes are limited to the Job/Phase/Category Structure	The number of bill codes may increase as every PCI whether posted or un-posted, when there exists a posted cost transactions, will get added to the contract code. If the PCI is un-posted but has posted cost transactions, the user will need to add the associated bill code manually by using the "Add New Bill Codes" option on the billing contract.
A single bill code may have many PCIs underlying and each of those PCIs may have their own cost transactions posted against the same.	A single PCI bill code will have only one PCI number and the cost transactions associated with the PCI
Grouping of PCIs and the posted commitments and transactions for the purpose of billing is NOT possible.	The mapping code may have a group code set as WBS code and allows grouping by WBS Code for the purpose of billing.

How to Set Up WBS Codes



Code	Name	User Defined Field	Required	Editable
PCI	PCI #	PCI	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

JC > Local Tables > WBS Setup > WBS Codes

The WBS Codes are maintained via the WBS Codes screen (standard Treeview path: JC > Local Tables > WBS Setup > WBS Codes).

Users may setup up a maximum of 4 WBS codes in the system. For more details about setting up WBS Codes, please refer to the JC user guide.

When setting up a WBS code for the purpose of PCIs, billing & forecasting, users must set up a WBS Code and use the **system defined field called PCI#**

NOTE: Users must be using the system defined value for the user defined field, in order for this functionality to work.

How to Setup WBS Bill Code Mapping

The WBS mapping may be defined as shown in the below example:

Source	Start	Length	Terminator	Name
Source 1	Lowest Level Job	1	8	(.Period)
Source 2	Lowest Level Phase	1	10	(.Period)
Source 3	Lowest Level Category	1	4	(.Period)
Source 4	WBS 1	1	10	Blank Padded
Source 5				

Standard Treeview path: JB > Local Tables > Mapping from JC

The bill code source can be a WBS code and the system allows a maximum of 4 WBS codes to be assigned.

In the example above, only one WBS code is assigned to the **Source 4** field. Using 3 more WBS codes is allowed, but would restrict the length of the bill code to a maximum of only 32.

Billing Contract with WBS Mapping

The Mapping code specifically configured for WBS mapping with PCI must be assigned to the Job as shown.

Field	Value	Value
Company	CCC	CMIC Test Construction Co
Contact		
Tax 1		
Tax 2		
Tax 3		
Invoice Link		
Default Billing Type	COST	Cost Plus Markup
Default Invoice Format	RU17	AIA U17 Invoice Format for Separate Billing
Billing Rate Table	ONERATE	Billing Rate (One Rate upto 2015)
JB Map Code	WBSS	WBSS
Retainage Code	RET0	RET 0%
Billing Address Code		

Job Setup Form

The Contract Entry program when creating bill codes for the contract, creates the bill codes with a separator at the end as '.' as per the bill code mapping setup.

These bill codes are generic bill codes that will be used when generating billing using the costs posted to the job/phase/cat in a normal course.

When there exists a PCI for a phase/category, and when creating cost transactions against the phase/category users may select the PCI# for the WBS 1 column which would create a JC Detail transactions with the reference

to PCI# in WBS 1 field. This allows the grouping during billing by the WBS Code as well when the Group Code is set as WBS Code.

Contract Forecasting with PCI Projections will be able to recognize the Cost transactions against the PCI and display under the column {Spent/Committed Pending CO}.

But users must be aware that they must manually add new bill codes in the Contract entry form to see those transactions in the Contract Forecasting Screen as shown below.

Contract Entry

The Contract forecasting screen upon refresh will show the newly added bill-codes and any posted transactions against the PCI.

The example shown so far is only on un-posted PCIs with Cost transactions entered by users by manually selecting the PCI# in WBS code column,

But users may also create subcontracts linked to the un-posted PCIs which upon creation and posting of the request For Payment would automatically insert the PCI# in JC Detail table. Here again, users have to manually add new bill codes in the Contract Entry.

Once the PCIs are posted the Current Cost Budget column is updated and reflects this update in 'Cost to Complete' and 'Projected Cost Forecast' columns.

Contract															
Contract: WBS3		Job:		Year: 2015		Period: 3		Filter: <input checked="" type="radio"/> Cost/Revenue <input type="radio"/> Projected Cost		Show: <input type="checkbox"/> Zero Cost Lines <input checked="" type="checkbox"/> Zero Cost and Revenue Lines		Hide: <input checked="" type="checkbox"/> Zero Projected Cost Lines		Recoverable <input type="radio"/> Non-Recoverable <input checked="" type="radio"/> Both	
Bill Codes															
Time Phased	Freeze Update	Bill Code	Contract Code	Job	Phase	Name	Category	Phase Type	ending CO (Incl. Risk)	Projected Cost Budget	Spent/Committed (Pending CO)	Cost to Complete			
	<input type="checkbox"/>	WBS3 02-100 1000	WBS3	WBS3	02-100	Structural Demolit...	1000		0.00	105,000.00	0.00	105,000.00	▲		
	<input type="checkbox"/>	WBS3 02-100 1000 COE0000003	WBS3	WBS3	02-100	Structural Demolit...	1000		7,500.00	7,500.00	750.00	0.00	▲		
	<input type="checkbox"/>	WBS3 02-100 1000 COE0000004	WBS3	WBS3	02-100	Structural Demolit...	1000		10,000.00	10,000.00	1,500.00	0.00	▲		
	<input type="checkbox"/>	WBS3 02-100 2000	WBS3	WBS3	02-100	Structural Demolit...	2000		0.00	105,000.00	0.00	105,000.00	▲		
	<input type="checkbox"/>	WBS3 02-100 3000	WBS3	WBS3	02-100	Structural Demolit...	3000		0.00	105,000.00	0.00	105,000.00	▲		
	<input type="checkbox"/>	WBS3 02-100 4000	WBS3	WBS3	02-100	Structural Demolit...	4000		0.00	100,000.00	0.00	100,000.00	▲		
	<input type="checkbox"/>	WBS3 02-100 5000	WBS3	WBS3	02-100	Structural Demolit...	5000		0.00	100,000.00	0.00	100,000.00	▲		
	<input type="checkbox"/>	WBS3 02-100 CFB	WBS3	WBS3	02-100	Structural Demolit...	CFB		0.00	100,000.00	0.00	0.00	▲		
	<input type="checkbox"/>	WBS3 02-100 NR	WBS3	WBS3	02-100	Structural Demolit...	NR		0.00	25,000.00	0.00	25,000.00	▲		
	<input type="checkbox"/>	WBS3 03-100 1000	WBS3	WBS3	03-100	Structural Concrete	1000		0.00	100,000.00	0.00	100,000.00	▲		
	<input type="checkbox"/>	WBS3 03-100 2000	WBS3	WBS3	03-100	Structural Concrete	2000		0.00	100,000.00	0.00	0.00	▲		
	<input type="checkbox"/>	WBS3 03-100 3000	WBS3	WBS3	03-100	Structural Concrete	3000		0.00	100,000.00	0.00	100,000.00	▲		
	<input type="checkbox"/>	WBS3 03-100 4000	WBS3	WBS3	03-100	Structural Concrete	4000		0.00	100,000.00	0.00	100,000.00	▲		
	<input type="checkbox"/>	WBS3 03-100 5000	WBS3	WBS3	03-100	Structural Concrete	5000		0.00	100,000.00	0.00	100,000.00	▲		
	<input type="checkbox"/>	WBS3 03-100 5000 COE0000001	WBS3	WBS3	03-100	Structural Concrete	5000		7,500.00	7,500.00	400.00	0.00	▲		
	<input type="checkbox"/>	WBS3 03-100 5000 COE0000002	WBS3	WBS3	03-100	Structural Concrete	5000		9,750.00	9,750.00	600.00	0.00	▲		
	<input type="checkbox"/>	WBS3 03-100 CFB	WBS3	WBS3	03-100	Structural Concrete	CFB		0.00	100,000.00	0.00	0.00	▲		
	<input type="checkbox"/>	WBS3 03-100 NR	WBS3	WBS3	03-100	Structural Concrete	NR		0.00	25,000.00	0.00	25,000.00	▲		
Totals:									34,750.00	1,299,750.00	3,250.00	860,000.00			

The screen above shows the Bill codes added to the contract with PCI# extension and the costs posted against those un-posted PCIs are displayed under the {Spent/Committed (Pending CO)} column.

Contract															
Contract: WBS3		Job:		Year: 2015		Period: 3		Filter: <input checked="" type="radio"/> Cost/Revenue <input type="radio"/> Projected Cost		Show: <input type="checkbox"/> Zero Cost Lines <input checked="" type="checkbox"/> Zero Cost and Revenue Lines		Hide: <input checked="" type="checkbox"/> Zero Projected Cost Lines		Recoverable <input type="radio"/> Non-Recoverable <input checked="" type="radio"/> Both	
Forecast has been refreshed															
Bill Codes															
Time Phased	Freeze Update	Bill Code	Contract Code	Job	Phase	Name	Category	Phase Type	Pending CO (Incl. Risk)	Projected Cost Budget	Spent/Committed (Pending CO)	Cost to Complete	Projected Cost Forecast		
	<input type="checkbox"/>	WBS3 02-100 1000	WBS3	WBS3	02-100	Structural Demolit...	1000		0.00	105,000.00	0.00	105,000.00	▲		
	<input type="checkbox"/>	WBS3 02-100 1000 COE0000003	WBS3	WBS3	02-100	Structural Demolit...	1000		0.00	7,500.00	6,750.00	7,500.00	▲		
	<input type="checkbox"/>	WBS3 02-100 1000 COE0000004	WBS3	WBS3	02-100	Structural Demolit...	1000		10,000.00	10,000.00	1,500.00	0.00	▲		
	<input type="checkbox"/>	WBS3 02-100 2000	WBS3	WBS3	02-100	Structural Demolit...	2000		0.00	105,000.00	0.00	105,000.00	▲		
	<input type="checkbox"/>	WBS3 02-100 3000	WBS3	WBS3	02-100	Structural Demolit...	3000		0.00	105,000.00	0.00	105,000.00	▲		
	<input type="checkbox"/>	WBS3 02-100 4000	WBS3	WBS3	02-100	Structural Demolit...	4000		0.00	100,000.00	0.00	100,000.00	▲		
	<input type="checkbox"/>	WBS3 02-100 5000	WBS3	WBS3	02-100	Structural Demolit...	5000		0.00	100,000.00	0.00	100,000.00	▲		
	<input type="checkbox"/>	WBS3 02-100 CFB	WBS3	WBS3	02-100	Structural Demolit...	CFB		0.00	100,000.00	0.00	0.00	▲		
	<input type="checkbox"/>	WBS3 02-100 NR	WBS3	WBS3	02-100	Structural Demolit...	NR		0.00	25,000.00	0.00	25,000.00	▲		
	<input type="checkbox"/>	WBS3 03-100 1000	WBS3	WBS3	03-100	Structural Concrete	1000		0.00	100,000.00	0.00	100,000.00	▲		
	<input type="checkbox"/>	WBS3 03-100 2000	WBS3	WBS3	03-100	Structural Concrete	2000		0.00	100,000.00	0.00	0.00	▲		

The screen above shows the posted PCI amounts updated the Current Cost Budget, Projected Cost Budget and moved the amount from {Spent/Committed (Pending CO)} appropriately and effectively updating the {Cost to Complete} column as well.

Contract																
Job:		Year: 2015		Period: 3		Filter: <input checked="" type="radio"/> Cost/Revenue <input type="radio"/> Projected Cost		Show: <input type="checkbox"/> Zero Cost Lines <input checked="" type="checkbox"/> Zero Cost and Revenue Lines		Hide: <input checked="" type="checkbox"/> Zero Projected Cost Lines		Recoverable <input type="radio"/> Non-Recoverable <input checked="" type="radio"/> Both				
Forecast has been refreshed																
Bill Codes																
Bill Code	Contract Code	Job	Phase	Name	Category	Phase Type	Type	Method	Current Cost Budget	Spent/Committed Against Base Contract	Spent/Committed Total	Actual Cost	Spent/Committed (In Scope)	Complete %	Pending Internal PCI	Pend Intern Cost
WBS3 02-100 1000	WBS3	WBS3	02-100	Structural Demolit...	1000		COST	A	105,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WBS3 02-100 1000 COE0000003	WBS3	WBS3	02-100	Structural Demolit...	1000		COST	A	7,500.00	750.00	750.00	750.00	750.00	10.00	0.00	0.00
WBS3 02-100 1000 COE0000004	WBS3	WBS3	02-100	Structural Demolit...	1000		COST	A	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00
WBS3 02-100 2000	WBS3	WBS3	02-100	Structural Demolit...	2000		COST	P	105,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WBS3 02-100 3000	WBS3	WBS3	02-100	Structural Demolit...	3000		COST	U	105,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WBS3 02-100 4000	WBS3	WBS3	02-100	Structural Demolit...	4000		COST	A	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WBS3 02-100 5000	WBS3	WBS3	02-100	Structural Demolit...	5000		COST	A	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WBS3 02-100 CFB	WBS3	WBS3	02-100	Structural Demolit...	CFB		COST	L	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WBS3 02-100 NR	WBS3	WBS3	02-100	Structural Demolit...	NR		NR	A	25,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WBS3 03-100 1000	WBS3	WBS3	03-100	Structural Concrete	1000		COST	P	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WBS3 03-100 2000	WBS3	WBS3	03-100	Structural Concrete	2000		COST	U	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WBS3 03-100 3000	WBS3	WBS3	03-100	Structural Concrete	3000		COST	P	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Contract																
Contract: WBS3		Job:		Year: 2015		Period: 3		Filter: <input checked="" type="radio"/> Cost/Revenue <input type="radio"/> Projected Cost		Show: <input type="checkbox"/> Zero Cost Lines <input checked="" type="checkbox"/> Zero Cost and Revenue Lines		Hide: <input checked="" type="checkbox"/> Zero Projected Cost Lines		Rows: <input type="radio"/> Recoverable <input type="radio"/> Non-Recoverable <input checked="" type="radio"/> Both		Go
Forecast has been refreshed																
Bill Codes																
Time Phased	Freeze Update	Bill Code	Contract Code	Job	Phase	Name	Category	Phase Type	Pending Internal PCI Cost To Complete	Pending CO	Pending CO (Incl. Risk)	Projected Cost Budget	Spent/Committed (Pending CO)	Cost to Complete	Projected Cost Forecast	Cost Variance
	<input type="checkbox"/>	WBS3.02-100.1000	WBS3	WBS3	02-100	Structural Demolit...	1000		0.00	0.00	0.00	105,000.00	0.00	105,000.00	▲	105,000.00
	<input type="checkbox"/>	WBS3.02-100.1000.COE9000003	WBS3	WBS3	02-100	Structural Demolit...	1000		0.00	0.00	0.00	7,500.00	0.00	6,750.00	▲	7,500.00
	<input type="checkbox"/>	WBS3.02-100.1000.COE9000004	WBS3	WBS3	02-100	Structural Demolit...	1000		8,500.00	10,000.00	10,000.00	10,000.00	1,500.00	0.00	▲	0.00
	<input type="checkbox"/>	WBS3.02-100.2000	WBS3	WBS3	02-100	Structural Demolit...	2000		0.00	0.00	0.00	105,000.00	0.00	105,000.00	▲	105,000.00
	<input type="checkbox"/>	WBS3.02-100.3000	WBS3	WBS3	02-100	Structural Demolit...	3000		0.00	0.00	0.00	105,000.00	0.00	0.00	▲	0.00
	<input type="checkbox"/>	WBS3.02-100.4000	WBS3	WBS3	02-100	Structural Demolit...	4000		0.00	0.00	0.00	100,000.00	0.00	100,000.00	▲	100,000.00
	<input type="checkbox"/>	WBS3.02-100.5000	WBS3	WBS3	02-100	Structural Demolit...	5000		0.00	0.00	0.00	100,000.00	0.00	100,000.00	▲	100,000.00
	<input type="checkbox"/>	WBS3.02-100.CFB	WBS3	WBS3	02-100	Structural Demolit...	CFB		0.00	0.00	0.00	100,000.00	0.00	0.00	▲	0.00
	<input type="checkbox"/>	WBS3.02-100.NR	WBS3	WBS3	02-100	Structural Demolit...	NR		0.00	0.00	0.00	25,000.00	0.00	25,000.00	▲	25,000.00
	<input type="checkbox"/>	WBS3.03-100.1000	WBS3	WBS3	03-100	Structural Concrete	1000		0.00	0.00	0.00	100,000.00	0.00	100,000.00	▲	100,000.00
	<input type="checkbox"/>	WBS3.03-100.2000	WBS3	WBS3	03-100	Structural Concrete	2000		0.00	0.00	0.00	100,000.00	0.00	0.00	▲	100.00

The above screens shows the comparison between an un-posted External PCI and a Posted External PCI with both having posted JC Transactions.

Contract																
Contract: WBS3		Job:		Year: 2015		Period: 3		Filter: <input checked="" type="radio"/> Cost/Revenue <input type="radio"/> Projected Cost		Show: <input type="checkbox"/> Zero Cost Lines <input checked="" type="checkbox"/> Zero Cost and Revenue Lines		Hide: <input checked="" type="checkbox"/> Zero Projected Cost Lines		Rows: <input type="radio"/> Recoverable <input type="radio"/> Non-Recoverable <input checked="" type="radio"/> Both		Go
Forecast has been refreshed																
Bill Codes																
Time Phased	Freeze Update	Bill Code	Contract Code	Job	Phase	Name	Category	Phase Type	Cost To Complete (Pending CO)	Proj Cost Forecast (Incl. Pending CO)	Cost Variance (Incl Pending CO)	Current Bill Budget	Pending C...	Pending CO (Incl. Risk) - Bill Budget	Projected	Billed To Date
	<input type="checkbox"/>	WBS3.02-100.1000	WBS3	WBS3	02-100	Structural Demolit...	1000		0.00	105,000.00	0.00	100,000.00	0.00	0.00	100,000.00	0.00
	<input type="checkbox"/>	WBS3.02-100.1000.COE9000003	WBS3	WBS3	02-100	Structural Demolit...	1000		0.00	7,500.00	0.00	7,500.00	0.00	0.00	7,500.00	0.00
	<input type="checkbox"/>	WBS3.02-100.1000.COE9000004	WBS3	WBS3	02-100	Structural Demolit...	1000		8,500.00	10,000.00	0.00	0.00	10,000.00	10,000.00	10,000.00	0.00
	<input type="checkbox"/>	WBS3.02-100.2000	WBS3	WBS3	02-100	Structural Demolit...	2000		0.00	105,000.00	0.00	100,000.00	0.00	0.00	100,000.00	0.00
	<input type="checkbox"/>	WBS3.02-100.3000	WBS3	WBS3	02-100	Structural Demolit...	3000		0.00	0.00	105,000.00	100,000.00	0.00	0.00	100,000.00	0.00
	<input type="checkbox"/>	WBS3.02-100.4000	WBS3	WBS3	02-100	Structural Demolit...	4000		0.00	100,000.00	0.00	100,000.00	0.00	0.00	100,000.00	0.00
	<input type="checkbox"/>	WBS3.02-100.5000	WBS3	WBS3	02-100	Structural Demolit...	5000		0.00	100,000.00	0.00	100,000.00	0.00	0.00	100,000.00	0.00
	<input type="checkbox"/>	WBS3.02-100.CFB	WBS3	WBS3	02-100	Structural Demolit...	CFB		0.00	0.00	100,000.00	100,000.00	0.00	0.00	100,000.00	0.00
	<input type="checkbox"/>	WBS3.02-100.NR	WBS3	WBS3	02-100	Structural Demolit...	NR		0.00	25,000.00	0.00	25,000.00	0.00	0.00	25,000.00	0.00
	<input type="checkbox"/>	WBS3.03-100.1000	WBS3	WBS3	03-100	Structural Concrete	1000		0.00	100,000.00	0.00	100,000.00	0.00	0.00	100,000.00	0.00

Labor Forecasting (Labor Lines Only)

For current and future periods, PMJSP Contract Forecasting allows users to add and edit labor/staffing details via the GC Monitor screen, which is launched for a labor Forecast Line via its **Cost To Complete** field.

For a labor line, GC Monitor's **Labor** tab is used to detail and forecast all of its composite Bill Codes, which roll up to the labor line in Contract Forecasting (the other tabs are not used).

When NOT using this 'Labor' functionality, or when a Category's **Available On GC Monitor** checkbox is NOT checked, and its **Default Forecast Method** field set to "**Productivity**" or "**Units**", the Cost to Complete popup will continue to bring up the standard JSP Productivity/Units popup, as usual.

Labor Category Configuration

MAINTAIN COST CATEGORIES												
SELECTION CRITERIA												
* Company CCC CMIC Test Construction Company												
CATEGORIES												
Code	* Description	Billing Group	O/H Forward Loss %	Non Recoverable	Available On SC/AP	Available In Procurement	* Active	* Incl In Forecast	Exclude Cost Budget From WIP	Exclude Costs From WIP	Available On GC Monitor	Cost Type
1000	Labour			<input type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Labour
2000	Subcontract			<input type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Subcontract
3000	Equipment			<input type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Equipment
4000	Material			<input type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Material
5000	Sundry			<input type="checkbox"/>	Both	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Burden

Pgm: JCCATFM; sample of Maintain Cost Categories screen (standard Treeview path: JC > Setup > Local Tables > Enter Category)

For a labor forecast line to invoke GC Monitor, its Bill Code's Category must be set up, via the Maintain Cost Categories screen (shown above), to have its:

- **Available On GC Monitor** checkbox checked
- **Default Forecast Method** field set to "Amounts"
- **Cost Type** field set to "Labour"

NOTE: If the Job Billing Mapping screen is going to be used to map JC Cost Codes and Categories to JB Bill Codes, there must be a 1-1 mapping between them.

Once this configuration is complete, invoking the Cost To Complete popup on the labor bill code will open the GC Monitor screen, where users may insert/update/delete staffing details for forecasting.

NOTE: On labor detail lines in Contract Forecasting screen, none of the columns are updateable by the users. The LOV for **Cost to Complete** column will open the GC Monitor screen for users to insert, update or delete the records as required.

Field Security to Unhide Labor Column

Job Costing - TESTV10_X - Category Maintenance

System Data Maintenance - TESTV10_X - Maintain Field Security Definitions

Select **Select Context**

Form Name: JCCATFM [Delete]

Block Name: CAT_B2

Role: ALL

Category

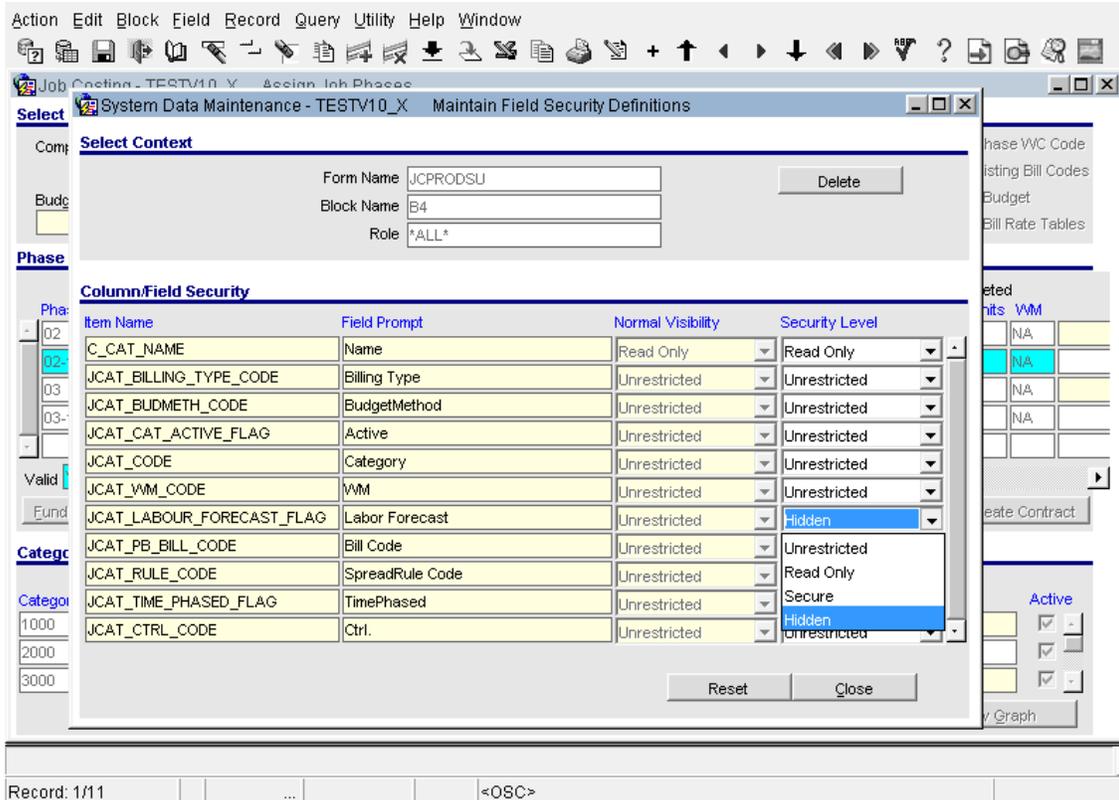
Column/Field Security

Item Name	Field Prompt	Normal Visibility	Security Level
CAT_CTRL_CODE	Ctrl	Unrestricted	Unrestricted
CAT_DEFAULT_BUDMETH_CODE	DefaultForecast Method	Unrestricted	Unrestricted
CAT_IB_ALTERNATE_WMP_ACC_CODE	Alternate WMPCost for Interna	Unrestricted	Unrestricted
CAT_INCL_IN_FORECAST_FLAG	Includeln Forecast	Unrestricted	Unrestricted
CAT_JCS_COST_TYPE	Type	Unrestricted	Unrestricted
CAT_LABOUR_FORECAST_FLAG	Labour Forecast	Unrestricted	Unrestricted
CAT_LTC_ACC_CODE	Adjustments(CR)	Unrestricted	Unrestricted
CAT_NAME	Description	Unrestricted	Unrestricted
CAT_NON_RECOVERABLE_FLAG	NonRecoverable	Unrestricted	Unrestricted
CAT_RESERVE_REV_ACC_CODE	UnbilledReserveRevenue	Unrestricted	Unrestricted
CAT_UNBILLED_REV_ACC_CODE	UnbilledRevenue	Unrestricted	Unrestricted

Reset Close

Record: 15/? ... <OSC>

Category maintenance



Maintain Field Security Definitions popup from Assign Phase Screen.

Category Set as Labor Forecast

Job Costing - TESTV10_X Category Maintenance

Select Company

Company CCC CMIC Test Construction Co

Categories

Code	Description	Ctrl	WM	Default Forecast Method	Labour Forecast	Category Type	Budget Cost Billing Costs	Adjustments (DR)
1000	Labour	ALL	HR	Productivity	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	5200.100 5200.200
2000	Subcontract	ALL	CY	Units	<input type="checkbox"/>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	5200.100 5200.200
3000	Equipment	ALL	DY	Productivity	<input type="checkbox"/>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	5200.100 5200.200
4000	Material	ALL	LS	Amounts	<input type="checkbox"/>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	5200.100 5200.200
5000	Sundry	ALL	LS	Amounts	<input type="checkbox"/>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	5200.100 5200.200
8100	8100 mASTER	ALL	NA	Amounts	<input type="checkbox"/>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	5200.100 5200.200
8100.A	8100.A Sub Cat	8100	NA	Amounts	<input type="checkbox"/>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	5200.100 5200.200
CC	Construction Continger	ALL	\$	Amounts	<input type="checkbox"/>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	5200.100 5200.200
CFB	Constn Field Burden	ALL	\$	Amounts	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	5200.100 5200.200
CFBNR	NR Constn Field Burden	ALL	\$	Amounts	<input type="checkbox"/>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	5200.100 5200.200
WMP	WMP Unposted Cost Cat	ALL	NA	Amounts	<input type="checkbox"/>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	5200.100 5200.200

Account Name Job Cost Expenses

WBS Defaults

Checked: Enable Labour Forecast.

Record: 9/11

JC > Category Maintenance

Job Costing - TESTV10_X Assign Job Phases

Select Company

Company CCC CMIC Test Construction Co

Job 12345 Project 12345 - Forecasting PMJSP

Budget Effective Date Use Phase Template Use Existing Job Threshold % 0.00

Phase Setup

Phase	Description	Control Phase	Phase Type	Single Cat Budget	WC	Budgeted Units	WM
02	Area 2	ALL		<input type="checkbox"/>			NA
02-100	Structural Demolition	02		<input checked="" type="checkbox"/>			NA
03	DIVISION 03: CONCRETE	ALL		<input type="checkbox"/>			NA
03-100	Structural Concrete	03		<input type="checkbox"/>			NA

Valid Y

Funding Source Validate Phases Apply Budgets Calculate Value Notes Budget Update Dates Create Contract

Category

Category Name	Bill Code	Billing Type	Ctrl.	WM	Budget Method	Labor Forecast	Time Phased	Spread Rule Code	Active
4000	Material	12345.02-100.4000	COST	ALL	LS	Amounts	<input type="checkbox"/>	12MONTH	<input checked="" type="checkbox"/>
5000	Sundry	12345.02-100.5000	COST	ALL	LS	Amounts	<input type="checkbox"/>	12MONTH	<input checked="" type="checkbox"/>
CFB	Constn Field Burden	12345.02-100.CFB	COST	ALL	\$	Amounts	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

Show Graph

Enter Category Code

Record: 6/6

JC > Assign Phases Screen (JCPRODSU.FMX)

Escalators Maintenance

SELECTION CRITERIA

Company: RV123456 x RV123456 - Head Quarters of RV

Job: ALL

ESCALATORS

* Union	Union Name	* Year	Period	Cost %	Billing %
ALL	All Unions	2016	1	0.500	0.750
ALL	All Unions	2016	2	0.500	0.750
ALL	All Unions	2016	3	0.600	0.850
1000	Int Brotherhood of Elec Wrkrs	2016	3	0.300	0.400
ALL	All Unions	2016	5	0.700	0.900
1000	Int Brotherhood of Elec Wrkrs	2016	1	0.250	0.350
1000	Int Brotherhood of Elec Wrkrs	2016	2	0.250	0.350
ALL	All Unions	2016	4	0.600	0.850

Escalators Maintenance - Related to ETC Labor Forecasting

Escalators are % amounts that are automatically added to the calculated cost rate and billing rate of the staffing. The concept of escalators is to avoid entering burden markups for inflation on a period/quarterly basis. Instead a yearly cost escalator is applied by job.

Users may setup escalators for 'ALL' jobs in a company and for 'ALL' unions as well, if required.

Also escalators may be setup against specific job and unions as required.

The Cost/Billing Rate escalators in a specific year/period will be applied on the "Base Cost Rate as per Employee Profile Setup + Any Cost Markups that match the Job/Phase/category/Trade combination + any *PY benefits defined as 'Include' in Forecasting.

This will be applied on each labor detail created by the users.

This screen allows rate% of 3 decimal places of accuracy.

NOTE: The 'PY benefits defined as 'Include' in forecasting requires a special feature to be installed. This is a system alternate feature. This flag will be visible and only then users will be able to include PY benefits in this calculation.

Example:

A staff member is assigned to a job for a period of 3 years.

The first year would include the Cost Escalator for the first year applied to the base cost rate (as determined by the employee profile setup) + any Costing Rate Markups that match the Job/Phase/Category/Trade combination + any PY Benefits defined as 'Include' in Forecasting.

Similarly, the second year would include the Cost Escalator for the second year applied to the base cost rate (as determined by the employee profile setup) + any Costing Rate Markups that match the Job/Phase/Category/Trade combination + any PY Benefits defined as 'Include' in Forecasting"

The same statement is true for any subsequent years as well.

TBD Trade Rate Maintenance

This program is used to maintain Cost and Billing Rates to be used by the **Labor** tab when the staff member is unknown at the time and defined as TBD (To Be Decided). Select the Trade Code from the LOV and enter Cost & Billing Rates as required.

The screenshot displays the 'TBD TRADE RATE MAINTENANCE' screen in CMiC Enterprise V10x. The user is logged in as RAVI. The main area shows a table titled 'ESTIMATE TO COMPLETE TRADE RATES' with the following data:

* Trade	Trade Name	Cost Rate	Billing Rate
IA10	Non Skilled	75.0000	100.0000
IA20	Electrician Jr.	60.0000	70.0000
IA50	Carpenter Appr.	37.0000	43.5500
ZZ10	Non Skilled	20.0000	15.0000
ZZ20	Electrician	80.0000	110.0000
ZZ30	Project Manager	85.0000	95.9999

A yellow callout box contains the text: **The Trade Rate Maintenance when the Staff Members are unknown at this point in time in a project**

Users may select the Trade code and setup the Cost Rate / Billing Rate amounts. This screen allows 4 decimal places of accuracy.

During the Labor Detail Entry, called from the PMJSP Labor lines, users have to setup the staff/labor information for the period as required. The cost/billing rates will be defaulted as per the setup in payroll/job. Upon Commit, users may review the 'Period Details' popup for the escalators applied on the cost/billing rates and then multiplied with the quantity to arrive at the 'Cost To Complete' value for the Contract Forecasting.

Labor Cut-Off Date Maintenance

LABOR CUT-OFF DATE MAINTENANCE

Save Exit ? ? ? ? ? ? ? ?

SELECTION CRITERIA

Company 10 CMiC Construction Inc.

LABOR CUT-OFF DATES

View Freeze Detach Search Insert Insert Multiple Delete Workflows Report Options Export

* Cut-Off Date

31-Dec-2015
30-Nov-2015
31-Oct-2015
30-Sep-2015
31-Aug-2015
31-Jul-2015
30-Jun-2015
31-May-2015
30-Apr-2015
31-Mar-2015
28-Feb-2015
31-Jan-2015

Pgm: JCTIMESHEETPOSTDATES – Labor Cut-Off Date Maintenance; standard path: JC > Setup > Local Tables > Contract Forecasting > Labor Cut-Off Date Maintenance.

This screen is only relevant to the GC Monitor forecasting application, which can be used with PMJSP Contract Forecast to forecast labor costs more accurately. It is required, as GC Monitor generates forecasts based on the GL Period Dates of a Chart of Accounts, which often do not match Payroll Period Dates.

This screen's cost cutoff dates are used to set the Company Level **Cost Cutoff Date** field in the **Selection Criteria** section of GC Monitor, which is set to the most recent cutoff date in this screen that is on or before the end date of the GL Period for which the forecast is being created.

Previous Cut-Off Dates remain for reference purposes, when reviewing previous GC Monitor forecasts.

For further details about this functionality, please refer to GC Monitor user guide.

GC Monitor – Forecasting Popup

Contract Forecast with PCI Projections

Forecast Comments Clear Overrides Store Forecast Refresh Contract Summary Notes Attachments Send To Spreadsheet

Project Management Menu

Contract: 12345 Job: Year: 2015 Period: 3 Filter: Cost/Revenue Show: Zero Cost Lines Zero Cost and Revenue Lines Hide: Zero Projected Cost Lines Rows: Recoverable Non-Recoverable Both Go

Time Phased	Freeze Update	Bill Code	Contract Code	Job	Phase	Name	Category	Phase Type	Budget	Spent/Committed (Pending CO)	Cost to Complete
	<input type="checkbox"/>	12345.02-100.1000	12345	12345	02-100	Structural Demolit...	1000		113,480.00	0.00	107,530.00
	<input type="checkbox"/>	12345.02-100.2000	12345	12345	02-100	Structural Demolit...	2000		200,000.00	0.00	100,000.00
	<input type="checkbox"/>	12345.02-100.3000	12345	12345	02-100	Structural Demolit...	3000		250,000.00	0.00	250,000.00
	<input type="checkbox"/>	12345.02-100.4000	12345	12345	02-100	Structural Demolit...	4000		195,000.00	0.00	22,425.00
	<input type="checkbox"/>	12345.02-100.5000	12345	12345	02-100	Structural Demolit...	5000		75,000.00	0.00	75,000.00
	<input type="checkbox"/>	12345.02-100.8100	12345	12345	02-100	Structural Demolit...	8100 A		0.00	0.00	0.00
	<input type="checkbox"/>	12345.02-100.CFB	12345	12345	02-100	Structural Demolit...	CFB		100,000.00	0.00	0.00
	<input type="checkbox"/>	12345.03-100.1000	12345	12345	03-100	Structural Concrete	1000		122,000.00	0.00	122,000.00
	<input type="checkbox"/>	12345.03-100.2000	12345	12345	03-100	Structural Concrete	2000		150,000.00	0.00	150,000.00
	<input type="checkbox"/>	12345.03-100.3000	12345	12345	03-100	Structural Concrete	3000		225,000.00	0.00	143,225.00
	<input type="checkbox"/>				03-100	Structural Concrete	4000		145,000.00	0.00	117,150.00
	<input type="checkbox"/>				03-100	Structural Concrete	5000			0.00	117,150.00
	<input type="checkbox"/>				03-100	Structural Concrete	8100.A			0.00	0.00
											1,162,330.00

GC MONITOR

Employee Number

SELECTION CRITERIA

* Company: CCC CMIC Test Construction Company Contract Start: 01/01/2014 Show Completed Staffing:

* Contract: 12345 Project 12345 - Forecasting PMJSP Contract End: 12/31/2017 Bill Code: 12345.02-200.CFB Utility Removal - Constn Field Burden

Year: 2017 Per: 4 From: 04/01/2017 To: 04/30/2017 Cost Cutoff Date: 10/31/2016

Display Forecast Refresh From Previous Re-calculate All Rates Update Forecast Summary Update Contract Date Refresh Forecast Import/Export Resource Plan Data

Labor Other

View Freeze Detach Search Insert Insert Multiple Delete Workflows Report Options Export Import ECM Documents

Trade	Employee	Employee Name	Union	Pay Type	* Bill Code	* Job	* Cost Code	Cost Code Description	* Cat
1610	1044222	Lantern Green		NWHR	12345.02-200.CFB	12345	02-200	Utility Removal	CFB

Trade: Architect Union: Bill Code: Utility Removal - Constn Field Burden Job: Project 12345 - Forecasting PMJSP Category: Con

Period Details Default Missing Bill Codes Push Update To Resource Plan

GC Monitor popup (ADF)

If PMJSP Contract Forecasting has been set up to work with GC Monitor, for current and future periods, PMJSP Contract Forecasting allows users to add and edit labor forecasting details via the GC Monitor screen, which is launched for a labor Forecast Line via its **Cost To Complete** field (shown in previous screenshot).

For details about GC Monitor, please refer to its user guide.

NOTE: Employee Security applies to the Labor Forecasting screen. Users must be given required access to this screen via the **Employee Security** tab on the User Maintenance screen, by assigning an Employee Security Group.

Contract Forecasting Interface

Contract: 12345 Job: Year: 2015 Period: 3 Filter: Cost/Revenue Projected Cost Show: Zero Cost Lines Zero Cost and Revenue Lines Hide: Zero Projected Cost Lines Rows: Recoverable Non-Recoverable Both

Forecast has been stored

Time Phased	Freeze Update	Bill Code	Contract Code	Job	Phase	Name	Category	Phase Type	Cost to Complete	Projected Cost Forecast	Cost Variance	Cost (Pend)
	<input type="checkbox"/>	12345.02-100.1000	12345	12345	02-100	Structural Demolit...	1000		00 107,530.00	▲ 113,480.00	-1,150.00	
	<input type="checkbox"/>	12345.02-100.2000	12345	12345	02-100	Structural Demolit...	2000		00 100,000.00	▲ 200,000.00	0.00	
	<input type="checkbox"/>	12345.02-100.3000	12345	12345	02-100	Structural Demolit...	3000		00 250,000.00	▲ 250,000.00	0.00	
	<input type="checkbox"/>	12345.02-100.4000	12345	12345	02-100	Structural Demolit...	4000		00 22,425.00	▲ 195,000.00	0.00	
	<input type="checkbox"/>	12345.02-100.5000	12345	12345	02-100	Structural Demolit...	5000		00 75,000.00	▲ 75,000.00	0.00	
	<input type="checkbox"/>	12345.02-100.8100	12345	12345	02-100	Structural Demolit...	8100.A		00 0.00	▲ 0.00	0.00	
	<input type="checkbox"/>	12345.02-100.CFB	12345	12345	02-100	Structural Demolit...	CFB		00 644,224.00	▲ 644,224.00	-544,224.00	
	<input type="checkbox"/>	12345.03-100.1000	12345	12345	03-100	Structural Concrete	1000		00 122,000.00	▲ 122,000.00	0.00	
	<input type="checkbox"/>	12345.03-100.2000	12345	12345	03-100	Structural Concrete	2000		00 0.00	▲ 150,000.00	150,000.00	
	<input type="checkbox"/>	12345.03-100.3000	12345	12345					00 225,000.00	▲ 225,000.00	0.00	
	<input type="checkbox"/>	12345.03-100.4000	12345	12345					00 143,225.00	▲ 145,000.00	0.00	
	<input type="checkbox"/>	12345.03-100.5000	12345	12345					00 117,150.00	▲ 125,000.00	0.00	
	<input type="checkbox"/>	12345.03-100.8100	12345	12345					00 0.00	▲ 0.00	0.00	
Totals:									00 1,806,554.00	▲ 2,094,704.00	-395,374.00	

After refresh the labor cost/billing details are displayed

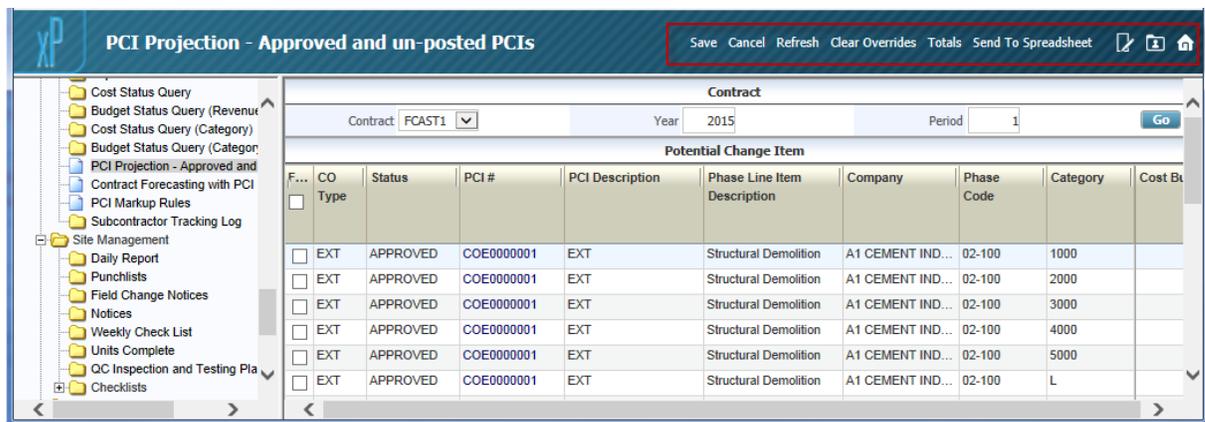
PCI Projections

PCI Projections deals with un-posted PCIs on which work may have already commenced, and hence incurred cost and may be subjected to cost and/or revenue risks. It may be important to recognize risks on un-posted PCIs at an early stage by projecting and forecasting the amounts accordingly.

PCI Projections allows users to apply risk on cost & revenue budget amounts and project Cost and Revenue Amounts, which in turn will affect the Contract Forecasting key columns such as Projected Cost Budget, Projected Cost Forecast, Projected Bill Budget, Pending Co (Revenue side), Revenue and Projected Profit.

The PCI Projection can be accessed from the tree view as a standalone program or may also be accessed from Contract Forecasting drill downs on PCIs.

PCI Projections – Toolbar



The Main Toolbar provides program-specific functions, as well as standard functions, such as the Lite Editor. The following are details about its buttons:

[Save]

When overrides are entered, the 'Save' function stores the PCI projections for the specified period.

[Cancel]

Cancels any un-saved changes and refreshes the screen with the previously stored values.

[Refresh]

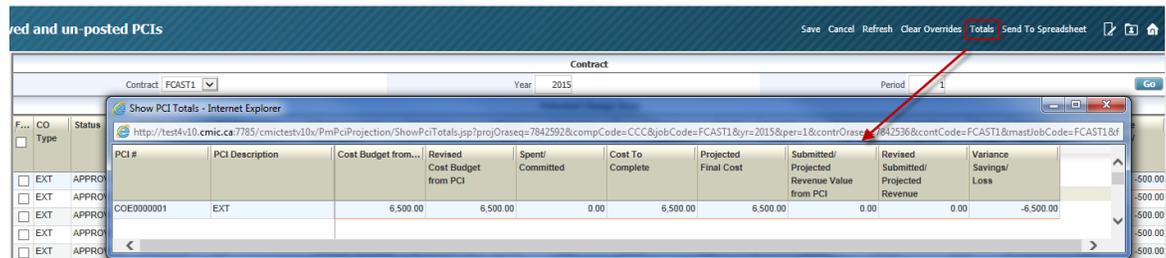
Refreshes the screen by updating the PCI details according to the current status, by adding new PCIs or removing the existing ones. In either case, the stored overrides on existing lines will be preserved.

[Clear Overrides]

Clear Overrides will clear all user overrides and refresh to the system defined values.

[Totals]

This button opens a popup and displays summary totals for each PCI# projected during the period.



[Send To Spreadsheet]

The 'Send to Spreadsheet' function exports the Projections in a specific period into a text file.

Users may apply filters to restrict the detailed records and, if so, the export will be limited to only those visible on the screen.

PCI Projections – Screen Header

The PCI Projections are based on year and period specified and affects only those the projections stored on a period by period basis. This is in synchronization with Contract Forecasting which is also driven from period to period.

Upon initial entry, the program will list all the pending PCIs up to the end of the current period.

Also note that the PCIs with statuses flagged as 'Forecast' will only be allowed in PCI projections.

Similarly, once a PCI is posted, upon clicking [**Refresh**], the PCI will no longer be available for projections.

F... CO Type	Status	PCI #	PCI Description	Phase Line Item Description	Company	Phase Code	Category	Cost Budget f...	Cost Budget % at Risk from PCI	Revised Cost Budget from PCI	Spent/Committed	% Co...	Cost To Complete
<input type="checkbox"/>	PENDING	COE0000001	EXT	Structural Demolition	A1 CEMENT IND...	02-100	1000	500.00	0	500.00	0.00	0	500.00
<input type="checkbox"/>	PENDING	COE0000001	EXT	Structural Demolition	A1 CEMENT IND...	02-100	2000	500.00	0	500.00	0.00	0	500.00
<input type="checkbox"/>	PENDING	COE0000001	EXT	Structural Demolition	A1 CEMENT IND...	02-100	3000	500.00	0	500.00	0.00	0	500.00
<input type="checkbox"/>	PENDING	COE0000001	EXT	Structural Demolition	A1 CEMENT IND...	02-100	4000	500.00	0	500.00	0.00	0	500.00
<input type="checkbox"/>	PENDING	COE0000001	EXT	Structural Demolition	A1 CEMENT IND...	02-100	5000	500.00	0	500.00	0.00	0	500.00
<input type="checkbox"/>	PENDING	COE0000001	EXT	Structural Demolition	A1 CEMENT IND...	02-100	L	500.00	0	500.00	0.00	0	500.00

Contract

The Contract Column, by default, displays all the job billing contracts associated with the current project. A Controlling job may have many sub jobs, with some of them having their own billing contracts. The drop down will list all those contracts under the controlling job.

Year

The JC Control default Forecasting Period is prepopulated in the Year/Period columns. Users may enter a valid year in YYYY format, as required, if projecting for future periods.

Period

The JC Control > Forecasting Period is defaulted upon entry. If required, enter a valid period. It must be understood that, this is NOT the Calendar period and is bound by the GL Period boundaries.

Users must press 'Go' button, to display data when projecting for different periods.

PCI Projections – Details

The details section populates all the un-posted PCIs along with their detail line items, up to the end of the current projection period.

Freeze

The freeze function allows storing user overrides and freezing a specific PCI Line item, so that either clear overrides or refresh actions do NOT affect the projections.

**Update allowed*

CO Type

The PCI type, such as External or Internal as defined in Change Management.

Status

The status of the PCI as defined in Change Management.

PCI#

The PCI# field allows drill down into PCI entry and further actions such as edit are possible from within the PCI Entry screen.

** Drill Down Available

PCI Description

The PCI header description is displayed

Phase Line Item Description

The Phase description from the job Assign Phase set up screen is shown in this column.

Company

The Vendor Code associated with a linked subcontract is displayed. If no subcontract linked, then the field will be left as null.

Phase Code

The PCI Line phase code is displayed.

Category

The PCI line item category code is displayed

Cost Budget from PCI (original Cost Projection)

The Cost Budget from the PCI Line item is displayed.

Cost Budget % at Risk

Users may enter a Cost Budget % at risk as required. Affects other columns.

**Update allowed*

Revised Cost Budget from PCI

The original PCI Cost budget is displayed and when there is an override to the cost budget % at risk, then the value is calculated as

Revised Cost Budget from PCI = (1 - Budget % at Risk) x Cost Budget

Spent / Committed

Displays all Committed Cost and spent cost against the PCI line item detail. There is a drill down available which displays all committed and spent cost against the PCI line item.

When the 'Show Calculated Potential Revenue (CPR) As Cost Amount' flag is checked in Job Maintenance program, then the Contract Forecasting as well as the PCI Projection will use the 'Calculated Potential Revenue (CPR) Amount' in the Committed/Cost column rather than the actual cost amount.

The Drill-Downs to Cost Transactions will also display the Calculated Potential Revenue (CPR) Amount rather than the Cost Amount when this flag is checked.

The 'Cost Status Query' screens in PMJSP application, will show the Calculated Potential Revenue (CPR) amounts as Cost Amounts under the 'Spent' column. All the drill downs will also reflect the Calculated Potential Revenue (CPR) amounts against the actual cost.

IMPORTANT NOTE: When the Calculated Potential Revenue (CPR) amount is 'Null' or 'Zero' for a specific cost transaction record, then the 'Spent' column will reflect the same. Preferably, this option must be used when the posted cost transactions have the Calculated Potential Revenue (CPR) amount calculated and populated in JCDETAIL table.

% Complete

The % Complete = (Spent/Committed / Revised Cost Budget) x 100

**Update allowed – affects Cost to Complete, Projected Final Cost & Variance columns*

** Warns when the value is not within 0 to 100.*

Cost to Complete

Cost To Complete = Revised Cost Budget from PCI – Spent/Committed

When % Complete is overridden, then the Cost to Complete is calculated as

= Spent-Committed (1 – (1/ %Complete))

**Update allowed*

Projected Final Cost

Projected Final Cost = Spent/Committed + Cost to Complete

Overriding Projected Final Cost will back calculate

Cost To Complete = Projected Final Cost – Spent/Committed

% Complete = (Spent/Committed / Projected Final Cost) x 100

**Update allowed*

Submitted Projected Revenue Value from PCI

Billing Budget Amount from PCI Detail Line

Revenue Budget % at Risk

The default value is 'zero' and users may override as required.

**Update allowed*

Revised Submitted/Projected Revenue

The column defaults the Submitted Revenue Value, unless there is a Revenue Budget % at Risk is entered manually by users.

When Risk is applied, it is calculated as

$((\text{Projected Revenue Value from PCI}) \times (1 - \text{Revenue Budget \% at Risk}))$

**Update allowed*

Variance Savings/Loss

Variance = Revised Submitted/Projected Revenue – Projected Final Cost

The Variance may go negative when the Revenue is less than Cost or when there is no billing budget on PCI detail.

**Display only field*

Contract Forecasting with PCI Projections

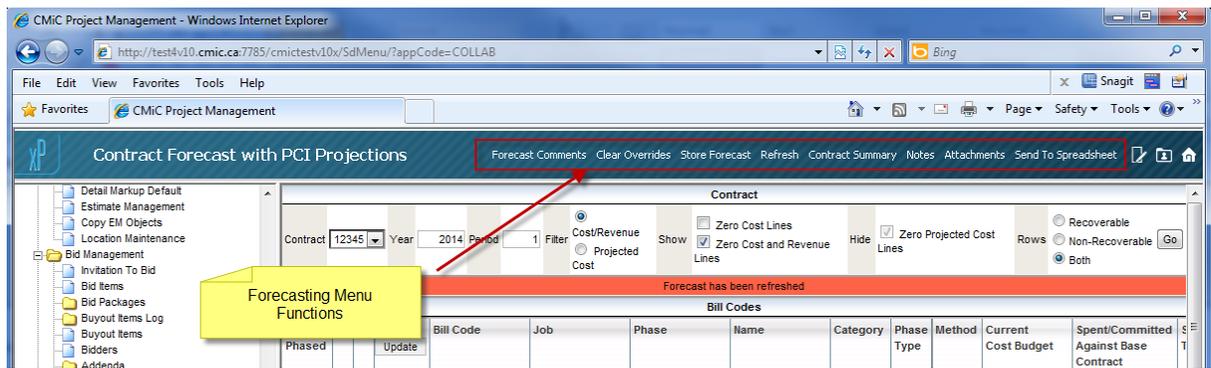
Contract Forecast with PCI Projections

Contract: 12345 Year: 2014 Period: 1 Filter: Cost/Revenue Projected Cost Show: Zero Cost Lines Zero Cost and Revenue Lines Hide: Zero Projected Cost Lines Rows: Recoverable Non-Recoverable Both

Time Phased	Freeze Update	Bill Code	Job	Phase	Name	Category	Phase Type	Method	Current Cost Budget	Spent/Committed Against Base Contract	Spent/Committed Total	Actual Cost
	<input type="checkbox"/>	12345.02-100.1000	12345	02-100	Structural Demol...	1000		P	100,000.00	0.00	0.00	0.00
	<input type="checkbox"/>	12345.02-100.2000	12345	02-100	Structural Demol...	2000		U	200,000.00	0.00	0.00	0.00
	<input type="checkbox"/>	12345.02-100.3000	12345	02-100	Structural Demol...	3000		P	250,000.00	0.00	0.00	0.00
	<input type="checkbox"/>	12345.02-100.4000	12345	02-100	Structural Demol...	4000		A	195,000.00	0.00	0.00	0.00
	<input type="checkbox"/>	12345.02-100.5000	12345	02-100	Structural Demol...	5000		A	75,000.00	0.00	0.00	0.00
	<input type="checkbox"/>	12345.03-100.1000	12345	03-100	Structural Concrete	1000		P	125,000.00	0.00	0.00	0.00
	<input type="checkbox"/>	12345.03-100.2000	12345	03-100	Structural Concrete	2000		U	150,000.00	0.00	0.00	0.00
	<input type="checkbox"/>	12345.03-100.3000	12345	03-100	Structural Concrete	3000		P	225,000.00	0.00	0.00	0.00
	<input type="checkbox"/>	12345.03-100.4000	12345	03-100	Structural Concrete	4000		A	145,000.00	0.00	0.00	0.00
	<input type="checkbox"/>	12345.03-100.5000	12345	03-100	Structural Concrete	5000		A	125,000.00	0.00	0.00	0.00
Totals:									1,590,000.00	0.00	0.00	0.00

Contract Forecasting Screen in PMJSP

Forecasting – Main Toolbar Functions



PMJSP Contract Forecasting Main Toolbar Functions

Forecast Comments

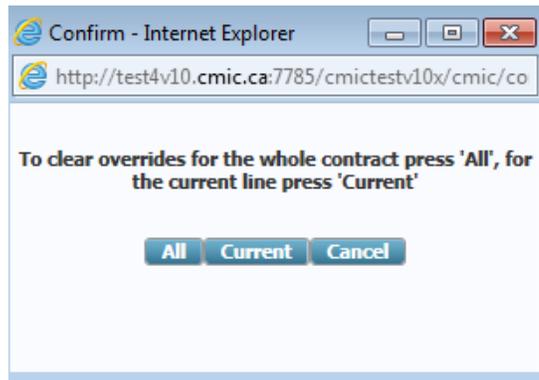
The [Forecast Comments] button will display a popup window with any underlying User Defined Fields that are defined (header and detail level UDF's) in the Forecast UDF. Field security can be applied to the [Forecast Comments] button.

Forecast Comments are tied to each forecast period, for the current contract. Editing of the UDF's in the Forecast Comments is allowed only for forecast periods after and including the JC Control forecast period.

The button will NOT be available when using the 'Job' option for forecasting, which may have more than one contract details shown on the same screen.

Clear Overrides

The [Clear Overrides] button allows the user to completely remove overridden values and revert to system calculated values.



Popup appears on Clicking [Clear Override] button

Clear Override on a single Line

If users clear override using 'Current' option, all the overrides of the current billcode line in focus will be cleared and populated with system generated value.

Clear Override on All Lines

The [ALL] button will clear the overridden values of all the billcodes of the forecasted period and revert them to system generated values.

More Details on 'Clear Overrides' functionality:

When no history of forecast stored for a Contract:

1. For a Contract with no history of forecasts stored, initially, all columns in contract forecast have system generated values for the first time. Users may override and store the very first forecast as required.
2. Clear override using [Current] button will clear the overridden values for the line in focus and revert back to system generated values.
3. Clear override using [All] button will clear all the override values for the entire contract and revert all values to system generated values.

When JC Control > Copy Last Stored Forecast flag un-checked

The overridden values will not be carried forward to the next forecasting period and all columns will have system generated values.

When JC Control > Copy Last Stored Forecast flag checked

The overridden values will be carried forward to the next forecasting period for the very first time. All the overrides (inside drilldown and on the forecasting line for A, P and U) will be carried forward as well and the rest of the values will be system generated.

Clearing overrides in the next period using ALL button will revert all the overridden values to system generated values except the overrides in the 'Cost Detail' drill down for 'A' type lines

NOTE: Once 'Clear Overrides' is performed, there is no way of carrying forward the overrides from the previous period.

NOTE: When users enter the year/period for a contract and press 'Go', the forecast details are displayed and they are stored automatically in the table for the specific period.

Store Forecast

The [Store Forecast] function is used to store the projections and as well updates the WIP information if the JC Control is set to use contract forecasting as the source for WIP amounts. When users enter a year and period, and press 'Go' button, the forecasting is automatically is generate4d and stored in the database. It is NOT necessary to use the 'Store Forecast' button as the 'Save' function commits all the overrides performed on the column values. 'Store Forecast' actually sends the updates to WIP for the specific period.

Refresh

The [Refresh] function is used to update data for the forecasting period from that previously stored and bring in any new data created after the original storage. 'Refresh' may be performed for the 'Current' or 'All' detail lines, by clicking on the required button in the confirmation popup.

Contract Summary

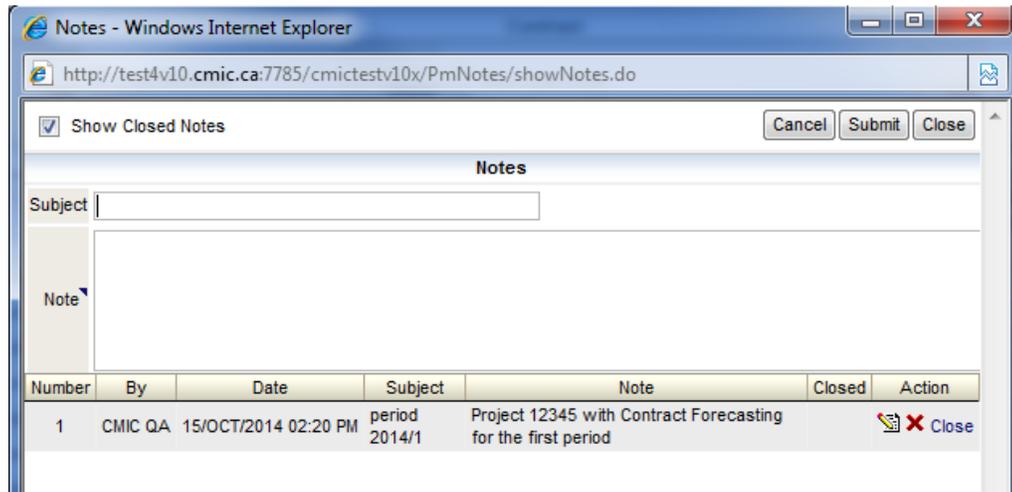
Job Code	Job Name	Proj Cost Budget	Cost Forecast	Proj Bill Budget	Revenue Forecast	Adj Rev Forecast At Bill Code Level	Lost Revenue At Bill Code Level	Max Job Billing At Job Level	Adj Rev Forecast At Job Level	Lost Revenue At Job Level	Total Lost Revenue	Projected Budget Fee	Forecast Fee	Adjusted Fee	Earned Revenue
12345	Project 12345 - Forecasting PMJSP	1,591,200.00	1,590,000.00	1,916,200.00	1,565,000.00	1,565,000.00			1,565,000.00	0.00	0.00	325,000.00	-25,000.00	-25,000.00	0.00
Total (1 row)		1,591,200.00	1,590,000.00	1,916,200.00	1,565,000.00	1,565,000.00			1,565,000.00	0.00	0.00			-25,000.00	0.00
									Max Contract	0.00	Lost Revenue At Contract	0.00	Total Adjusted Fee		-25,000
									Adj Rev Forecast At Contract	1,565,000	Total Lost Revenue	0.00			

PMJSP: Contract Forecasting > Contract Summary popup

The Contract Summary popup provides the summary information for all the jobs under the contract, with key column values for Cost & Revenue and lost revenue if any.

It must be noted that the Contract Summary columns may NOT be secured / hidden selectively. Users have only one option to secure access to the button itself.

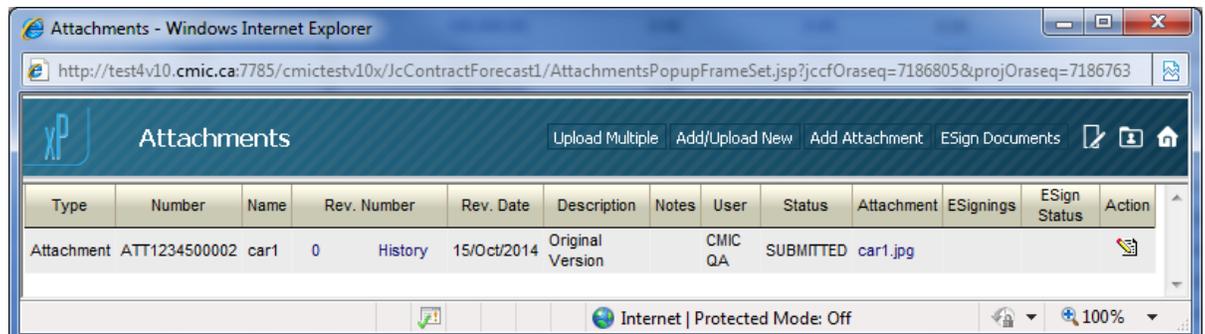
Notes



The Notes popup allows users to maintain notes specific to a forecasting period, against each individual bill code line items, and may be carried forward to the next forecasting period (JC's Control File flag, **Notes to Be Carried Forward through Periods**, is checked).

NOTE: Notes are entered against an individual line item, hence users must select a line before entering a note.

Attachments



The Attachments popup allows users to upload documents with the standard PMJSP Document upload functions. User must select a line in order to upload a document for it. The attachments are stored by line items in each period. There is no way to carry forward the attachments to future periods.

Send To Spreadsheet

The [**Send to Spreadsheet**] button's functionality can be used with CMiC's MIP (Microsoft Integration Program) module (see the MIP user guide for details). Users will be able to send the columns to spreadsheet, either based on a previously stored template or without a template. This allows users to perform any further analysis on the forecasting details.

Users may create their own templates for the Contract Forecasting columns using the log JCCFCAST – Contract Forecasting.

NOTE: Field security can be set for the [Send to Spreadsheet] button, if required.

Archive Forecast

The [Archive Forecast] button is used to store a snapshot of the contract forecasting in a table, where all the column values from the contract forecasting screen will be dumped. This will be useful when users want to compare the contract forecasting values in a period with the archived values and analyze the cause and effects of the differences. This may be required in specific scenarios such as forecast has been stored and then a posted PCI is un-posted or status changed to rejected or cancelled affecting the following period forecasting.

The Archive function may be performed as per user requirements, and on regular intervals. When the button is pressed, a confirmation dialogue pops up and users may accept to store the archive. The system will store only one set of records on any 'system date' and pressing multiple times on a single day will simply overwrite the values in the tables.

Users must be aware that storing the archive in an unplanned manner will simply create large amount of data using up system resources. Users have to use their discretion and when a forecast is considered complete in a specific period and stored finally and then archive the forecast. Alternately, a snapshot of the forecast on a specific day of the week may be stored as well.

Archives help reconcile the stored values in WIP screen compared to the contract forecasting values.

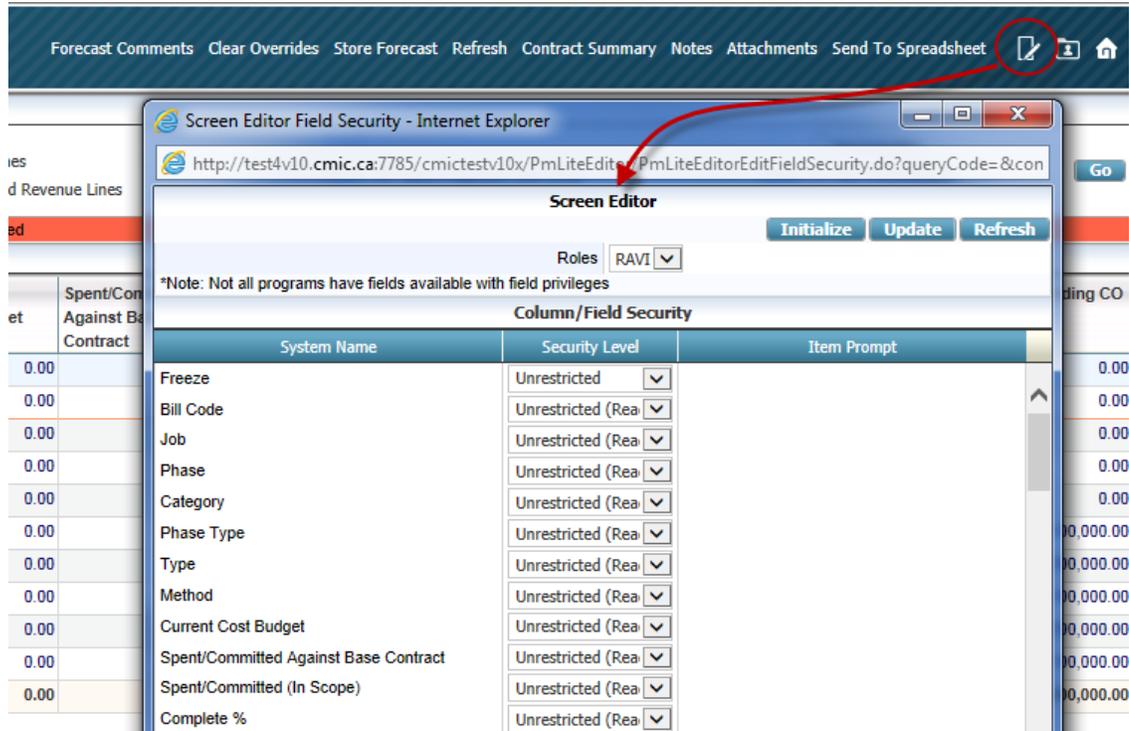
There are no queries and reports for the 'Archive' function at this point in time. Users may use their query tools for data retrieval and analysis.

The screenshot displays the 'PCI Projections' software interface. At the top, there is a navigation bar with buttons for 'Forecast Comments', 'Clear Overrides', 'Refresh', 'Contract Summary NG', 'Notes', 'Attachments NG', 'Send To Spreadsheet', and 'Archive Forecast'. Below this is a 'Contract' section with various filters and options. The main area contains a table with columns for 'Freeze Update', 'Bill Code', 'Job', 'Phase', 'Name', 'Category', 'Phase Type', 'Type', 'Method', 'Current Cost Budget', 'Spent/Committed Against Base Contract', and 'Status'. A red arrow points from the 'Archive Forecast' button in the top bar to a confirmation dialog box that has appeared over the table. The dialog box contains the text 'Are you sure you want to archive the forecast?' and 'OK' and 'Cancel' buttons. The table data includes various bill codes (e.g., FCAST1.01-100, FCAST1.02-100, FCAST1.03-200) and categories (e.g., Temporary Struct..., Demolition, Rough Carpentry, Finish Carpentry, Design Carepentry) with associated costs.

Freeze Update	Bill Code	Job	Phase	Name	Category	Phase Type	Type	Method	Current Cost Budget	Spent/Committed Against Base Contract	Status	Internal PCI	Pending Internal PCI	Cost To Complete
<input type="checkbox"/>	FCAST1.01-100...	FCAST1	01-100	Temporary Struct...	1000		COST	P	100,000.00	0.00		0.00	0.00	0.00
<input type="checkbox"/>	FCAST1.01-100...	FCAST1	01-100	Temporary Struct...	2000		COST	U	100,000.00	0.00		0.00	0.00	0.00
<input type="checkbox"/>	FCAST1.01-100...	FCAST1	01-100	Temporary Struct...	3000		COST	L	100,000.00	0.00		0.00	0.00	0.00
<input type="checkbox"/>	FCAST1.01-100...	FCAST1	01-100	Temporary Struct...	4000		COST	A	100,000.00	0.00		0.00	0.00	0.00
<input type="checkbox"/>	FCAST1.01-100...	FCAST1	01-100	Temporary Struct...	5000		COST	A	100,000.00	0.00		0.00	0.00	0.00
<input type="checkbox"/>	FCAST1.02-100...	FCAST1	02-100	Demolition	1000		COST	P	0.00	0.00		0.00	0.00	0.00
<input type="checkbox"/>	FCAST1.02-100...	FCAST1	02-100	Demolition	2000		COST	U	0.00	0.00		0.00	0.00	0.00
<input type="checkbox"/>	FCAST1.02-100...	FCAST1	02-100	Demolition	3000		COST	L	0.00	0.00		0.00	0.00	0.00
<input type="checkbox"/>	FCAST1.02-100...	FCAST1	02-100	Demolition	4000		COST	A	0.00	0.00		0.00	0.00	0.00
<input type="checkbox"/>	FCAST1.02-100...	FCAST1	02-100	Demolition	5000		COST	A	0.00	0.00		0.00	0.00	0.00
<input type="checkbox"/>	FCAST1.03-100...	FCAST1	03-100	Rough Carpentry	1000		COST	P	100,000.00	0.00		0.00	0.00	0.00
<input type="checkbox"/>	FCAST1.03-200...	FCAST1	03-200	Finish Carpentry	2000		COST	U	100,000.00	0.00		0.00	0.00	0.00
<input type="checkbox"/>	FCAST1.03-300...	FCAST1	03-300	Design Carepentry	4000		COST	A	100,000.00	0.00		0.00	0.00	0.00
Totals:									800,000.00	0.00		0.00	0.00	0.00

Screen Editor

The [Screen Editor] button opens a popup to apply field security to the user's Security Role, for one or more columns in the forecasting screen.



Contract Header

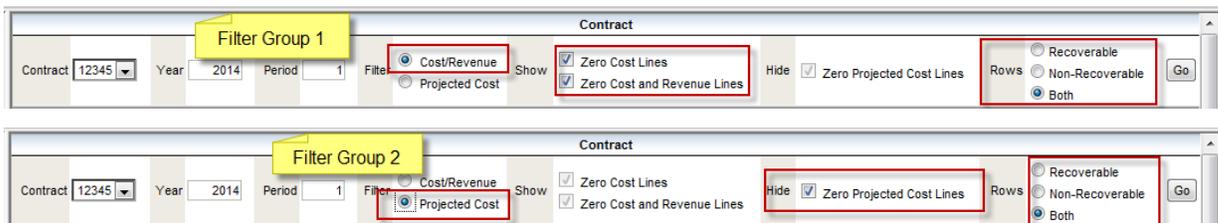
The Contract header sets the Contract or Job, year & period for forecasting.

Also, a set of filter radio options with Cost/Revenue Column values or Projected Cost Column values, to display the Bill codes accordingly. The default values for these filters are set in 'Project System Options' screen.

The Filter options are grouped as follows:

- Cost/Revenue > Show
 - a) Zero Cost Lines
 - b) Zero Cost and Revenue Lines
- Projected Cost > Hide
 - Zero Projected Cost Lines

The rows can additionally be filtered with a radio group option of Recoverable and Non-recoverable Bill codes.



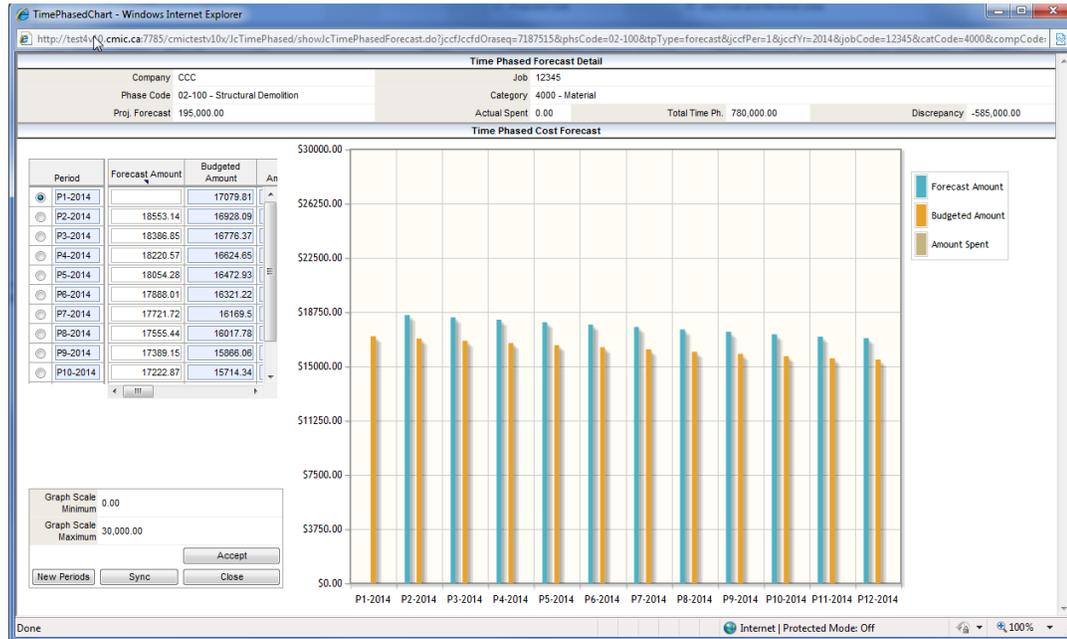
Bill Codes Detail

The following are the columns and their definitions in the Bill Code details section. Where applicable, the calculations are also shown.

Time Phased

The Time Phased column displays an icon, if there exists a 'Detailed Time-Phased Cost Forecast' and clicking on the icon opens the popup for review and update as required. The icon is only available if the forecast record is 'Amount' Budget Method.

NOTE: Only Budget Method **Amounts (A)** is supported.



Detail Level Time Phased Forecasting

Notes

The notes column displays a Notepad icon if there are notes entered against the bill code. Users may click on the icon to invoke the Notes popup, where they may review existing notes or add any new notes as required.

NOTE: Notes can be carried forward from one period to the next if the JC Control flag "Notes to be Carried Forward through Periods" is checked. This flag is located on the Forecasting tab of the JC Control screen in FORMS version.

Attachments

The attachments icon opens the CMiC standard Attachments popup and allows users to view existing attachments or upload new ones.

Freeze

When checked, the 'Projected Cost Forecast' column will be frozen, but the 'Projected Cost Forecast including pending CO' column will not be frozen.

The same is true for the 'Adjusted Revenue Forecast' column, which will be frozen by this button, but the 'Revenue Forecast Column' will NOT be frozen.

Contract

Filter: Cost/Revenue Projected Cost Show: Zero Cost Lines Zero Cost and Revenue Lines Hide: Zero Projected Cost Lines

Forecast has been refreshed

Bill Codes

Phase	Name	Category	Phase Type	Method	Current Cost Budget	Spent/Committed Against Base Contract	Spent/Committed Total	Actual Cost
02-100	Structural Demolit...	1000		P	105,850.00	1,200.00	1,200.00	0.00
02-100	Structural Demolit...	2000		U	200,000.00	0.00	0.00	0.00
02-100	Structural Demolit...						0.00	0.00
02-100	Structural Demolit...						0.00	0.00
02-100	Structural Demolit...						0.00	0.00
02-100	Structural Demolit...						0.00	0.00
03-100	Structural Concrete						0.00	0.00
03-100	Structural Concrete						0.00	0.00
03-100	Structural Concrete						0.00	0.00
03-100	Structural Concrete						0.00	0.00
03-100	Structural Concrete						0.00	0.00
							1,200.00	0.00

Cost Detail

Job 12345
Phase 02-100
Category 1000

Original Budget	Internal CO's & Transfers	External CO's	Current Budget
101,650.00	3,000.00	1,200.00	105,850.00
Total (1 row)			
101,650.00	3,000.00	1,200.00	105,850.00

Current Cost Budget Column

Spent/Committed Against Base Contract

The Spent/Committed against Base Contract column shows the Spent, Committed or Largest of Spent/Committed (based on 'Projected Final Flag'). This is a display only column and NOT used in any calculations.

This is a display only field.

Spent/Committed Against Base Contract =

Spent(S),

Committed(C) or

Largest of Spent/Committed (L)

(Based on Projected Final Flag in JC Budget)

Example: How 'Projected Final Flag' affects the Spent/Committed against Base Contract value?

Committed Cost	Spent Cost	Spent outside Commitment	L	S	C
1200	150	100	1200+100=1300	150+100=250	1200+100=1300
1000	1750	100	1750+100=1850	1750+100=1850	1000+100=1100
-1300	-1800	-250	-1300+(-250)= -1550	-1800+(-250)= -2050 (See below)	-1300+(-250)= -1550

Action Edit Block Field Record Query Utility Help Window

Job Costing - PTFV10_X Job Budget

Job Code

Company	KCON	Kumar Constructions
Job	14.94257	14.94257

Budget Detail

Phase	Cat	Method	Amount	Budgeted Quantity	WM	Budgeted Unit Rate	Budgeted Revenue Amount	Budgeted Revenue Rate	P
01110	1000	A	00.00	0.00	NA		40,000.00		L
01110	2000	P	00.00	0.00	LS		50,000.00		L
01110	3000	U	00.00	0.00	DY		60,000.00		L
01120	1000	A	00.00		NA		70,000.00		L
01120	2000	P	00.00	0.00	LS		80,000.00		S
01120	3000	U	00.00		DY		90,000.00		L

Projected Final Column value set as 'S'

Contract

Contract: 14.94257 Job: Year: 2015 Period: 3 Filter: Cost/Revenue Projected Cost Show: Zero Cost Lines Zero Cost and Revenue Lines

Forecast has been refreshed

Bill Codes

Time Phased	Freeze Update	Bill Code	Job	Phase	Name	Category	Type	Method	Current Cost Budget	Spent/Committed Against Base Contract	Spent/Committed Total
	<input type="checkbox"/>	14.94257.01110.1...	14.94257	01110	leveling	1000	COST	A	40,000.00	7,300.00	7,300.00
	<input type="checkbox"/>	14.94257.01110.2...	14.94257	01110	leveling	2000	COST	P	50,000.00	0.00	-200.00
	<input type="checkbox"/>	14.94257.01110.3...	14.94257	01110	leveling	3000	COST	U	60,000.00	0.00	-200.00
	<input type="checkbox"/>	14.94257.01120.1...	14.94257	01120	Cleaning	1000	COST	A	70,000.00	-1,050.00	-1,250.00
	<input type="checkbox"/>	14.94257.01120.2...	14.94257	01120	Cleaning	2000	COST	P	67,500.00	-2,050.00	-2,050.00
	<input type="checkbox"/>	14.94257.01120.3...	14.94257	01120	Cleaning	3000	COST	U	90,000.00	0.00	0.00
Totals:									377,500.00	4,200.00	3,600.00

Example: Spent / Committed Against Base Contract

Spent/Committed Total

The Spent/Committed Total column displays the JC transaction details of type 'O' and 'C'. This is display only column and NOT updateable by users. This is NOT used in any calculations of other columns. The Drilldown (mouse click) opens the JC Transaction detail popup and displays all committed/spent amounts against bill code.

Drilldown is allowed and opens up JC Transactions Detail pop-up displaying 'C', 'O' type transactions.

Spent/Committed Total = LARGEST OF (ABSOLUTE OF [Commitment] versus ABSOLUTE OF [Spent Against Commitment]) + Spent Out Of Commitment up to and including the current forecasting period

For example:

Commitment [O]	Spent against commitment [C]	Spent outside Commitment [C]	Spent / Committed Total
9582	1759	987	9582+987=10569
8522	10958	758	10958+758=11716
-1500	-1300	250	-1500+250= -1250
-1300	-1800	-250	-1800+(-250)= -2050 (Screen shot Attached)

Contract 14.94257 Job Year 2015 Period 3 Filter Cost/Revenue Projected Cost Show Zero Cost Lines Zero Cost and Revenue Lines Hide Zero Projected Cost Lines

Forecast has been refreshed

Time Phased	Freeze Update	Bill Code	Job	Phase	Name	Category	Type	Method	Current Cost Budget	Spent/Committed Against Base Contract	Spent/Committed Total	Actual Cost	Spent/Committed (In Scope)	Complete %	Pending Internal PCI
	<input type="checkbox"/>	14.94257.01110.1...	14.94257	01110	leveling	1000	COST	A	40,000.00	7,300.00	7,300.00	0.00	7,300.00	0.00	-200.00
	<input type="checkbox"/>	14.94257.01110.2...	14.94257	01110	leveling	2000	COST	P	50,000.00	0.00	-200.00	0.00	0.00	0.00	-200.00
	<input type="checkbox"/>	14.94257.01110.3...	14.94257	01110	leveling	3000	COST	U	60,000.00	0.00	-200.00	0.00	0.00	0.00	-200.00
	<input type="checkbox"/>	14.94257.01120.1...	14.94257	01120	Cleaning	1000	COST	A	70,000.00	-1,050.00	-1,250.00	-1,250.00	-1,050.00	-1.79	0.00
	<input type="checkbox"/>	14.94257.01120.2...	14.94257	01120	Cleaning	2000	COST	P	67,500.00	-1,550.00	-2,050.00	-2,050.00	-1,550.00	0.00	0.00
															700.00
															-600.00

JC Transactions (Cost and Committed) - Windows Internet Explorer

Company KCON Job 14.94257 Phase 01120 Phase Name Cleaning

Category 2000 Category Name Subcontractor

Search	Post Date	Type	Source Description	Ref. Description	Cost Amount	Commitment	Spent Against The Commitment	Spent Out Of Commitment	Commitment Code	Source	Transaction Number	Reference Date	Batch Number	Quantity	WM
	11032015	O	17 VENDOR	TEST-000-1300 som	0.00	-1,300.00	0.00	0.00	TEST 000	SC		11032015	5224	-13	LS
	11032015	C	17 VENDOR	test	-1,800.00	0.00	-1,800.00	0.00	TEST 000	AP	672	11032015	5226	-18	LS
	11032015	C			-250.00	0.00	0.00	-250.00	JC	JC	3255	11032015	5229		LS
Total (3 rows)					-2,050.00	-1,300.00	-1,800.00	-250.00							

Spent/Committed Total > JC Transactions popup

Actual Cost

JC Transactions (Cost and Committed) - Windows Internet Explorer

Company CCC Job 12345 Phase 02-100 Phase Name Structural Demolition

Category 1000 Category Name Labour

Search	Post Date	Type	PCI #	PCI Line Number	Source Description	Ref. Description	Cost Amount	Commitment	Spent Against The Commitment	Spent Out Of Commitment	Commitment Code	Source	Transaction Number	Reference Date	Batch Number	Quantity	WM
	01-Jan-2014	C	COE0000001		A1 Bricks Manufacturing Compan	Project 12345 - Forecasting PMJSP	150.00	0.00	150.00	0.00	CCC-A1BRICK-141015-1000	AP	5195	01-Jan-2014	22170	1.5	HR
	01-Jan-2014	O	COE0000001	1	A1 Bricks Manufacturing Compan	CCC-A1BRICK-141015-1-000 Demolition Labor	0.00	1,200.00	0.00	0.00	CCC-A1BRICK-141015-1000	SC		01-Jan-2014	22164	12	HR
	01-Jan-2014	O			A1DOORS - 'Company RRR'	12345-2-000 12345-2 / Subcontract with No PCI	0.00	2,500.00	0.00	0.00	12345-2000	SC		01-Jan-2014	22174	50	HR
	01-Jan-2014	C			A1DOORS - 'Company RRR'	Project 12345 - Forecasting PMJSP	175.00	0.00	175.00	0.00	12345-2000	AP	5197	01-Jan-2014	22176	3.5	HR
	05-Jan-2014	C					450.00	0.00	0.00	450.00	JC	17349	05-Jan-2014	22177	5	HR	
	05-Jan-2014	O	COI000002	1	A1 FLOOR MAKER	12345-3-000 Internal PCI	0.00	1,800.00	0.00	0.00	12345-3000	SC		05-Jan-2014	22179	30	HR
	05-Jan-2014	C	COI000002	1	A1 FLOOR MAKER	Project 12345 - Forecasting PMJSP	1,350.00	0.00	1,350.00	0.00	12345-3000	AP	5198	05-Jan-2014	22182	22.5	HR
Total (7 rows)							2,125.00	5,500.00	1,675.00	450.00							

The Current Cost Transactions against the job/phase/cat ('C' type transactions in JCDETAIL table). This is a display only field.

Actual Cost = Posted Cost Transactions ('C' type transactions in JCDETAIL table)

This may also be defined as,

Actual Cost = Spent Amount (Against Commitment + Outside of Commitment)

This is a display only field.

The Actual Cost represents the Spent Amount (posted Costs) for the current job. Field security can be applied to this column to make it 'Hidden' or 'Unrestricted (Read-only)'.

Spent/Committed (In Scope)

Spent, Committed, Largest of Spent/Committed minus Spent, Committed, Largest of Spent/Committed against Internal PCI's

Spent/Committed (In Scope) = Spent, Committed, Largest of Spent Committed - The same against Internal PCI's

Drilldown available and opens up JC Cost Transactions Detail pop-up.

Completed %

When Method = A, this is calculated as Cost Amount / Project Forecast Amount.

When Method = P calculation (default as user may modify through popup) is based on Phase Spent Quantity (Completed phase level units) / Phase Projected Quantity.

For both U and P types, if the Projected Quantity equals '0', and the Spent Quantity is not '0', then the % Complete is set to 100%

This is a display only field.

Pending Internal PCI

This column shows the sum of un-posted Pending Internal PCI Amounts. Drilldown on mouse click, opens the Internal PCIs popup. Also, further drilldowns available on PCI numbers and Spent/Committed columns.

Pending Internal PCI = Sum of Un-Posted Internal PCI amounts

Drilldown available and opens up PCI Projections pop-up screen.

Bill Codes									
Method	Current Cost Budget	Spent/Committed Against Base Contract	Spent/Committed Total	Actual Cost	Spent/Committed (In Scope)	Complete %	Pending Internal PCI	Pending Internal PCI Cost To Complete	Pen
P	107,650.00	5,950.00	5,950.00	2,125.00	5,950.00	0.00	3,050.00	5,830.00	

Internal CO's												
Type Code	Number	Name	Status	Date	Budgeted Change Amount	Budgeted Units	WM	Change Amount	Billing Amount	Spent/Committed	Vendor	Contract Code
INT	COI000004	Internal	PENDING	15-Jan-2014	1,900.00		HR	1,900.00		0.00		
INT	COI000003	Internal Approved Unposted	APPROVED	10-Jan-2014	1,150.00		HR	1,150.00		0.00		
Total (2 rows)					3,050.00			3,050.00		0.00		

Pending Internal PCI Cost to Complete

Pending internal /external / Transfer PCI Amount Minus Spent Cost Against the same. (NOTE: PCI could be negative amounts and the spent cost may also be negative. Attention to be paid to follow correct sign when determining the amounts)

This is a display only field.

Pending CO

Sum of Un-Posted Pending External/Original Budget PCI Amounts. Sum of cost budget from Pending external PCI.

Drilldown allows the PCI projections popup screen to open up for review and update.

Pending CO (Incl. Risk)

Sum of The Revised Cost Budget Amount after applying risk to pending internal/external PCI.

Sum of Un-Posted Pending Internal /External/Transfer/Original Budget PCI Amounts including PCI Risk Amount applied. The Revised Cost Budget from PCI column Amount from the Pending CO Column popup.

This is a display only field.

Projected Cost Budget

Current Cost Budget + Pending CO (Including Risk)

This is a display only field.

Spent/Committed (Pending CO)

Spent / Committed against un-posted PCIs.

This is a display only field.

Cost to Complete

Projected Cost Forecast minus Spent/Committed (In Scope)

When the JC Control flag 'Copy Last Stored Forecast' is checked, and if any overrides are made to the Cost to Complete column, then those overrides performed on the main screen directly, will NOT be brought forward to the next period upon the very first entry. Users can again override the Cost to complete amount and commit. Any overrides performed using the 'Cost Detail' popup will be carried forward to the next period.

Projected Cost Forecast

The projected Cost Forecast value is the largest of (Budgeted Cost + Pending CO + Internal CO) or Projected Final amount from the budget entry (JCAT_PROJ_AMT from the JCJOB CAT table). Users must be aware that the bill code detail line is NOT frozen.

When the contract forecast is stored/refreshed in a specific period, the Following three program column values will be in synchronization

Contract Forecasting Screen (PMJSP) -	Projected Cost Forecast column
Budget Entry Form -	Projected Final Amount column
Cost Status Query (PMJSP) -	Calculated Projection column

The Projected Cost Forecast amount will be highlighted in yellow and show a hint line when the value does not match with the Cost to Complete override amount entered.

Cost Variance

The Cost Variance column displays the difference between Current Cost Budget and the Projected Cost Forecast amounts.

This is a display only field.

Cost To Complete (Pending CO)

Cost to Complete (Pending CO) column displays the amount Pending PCI Including Risk less Spent/Committed against Pending CO.

This is a display only field.

Projected Cost Forecast (Incl. Pending CO)

Projected Cost Forecast Including Pending CO is calculated as the sum of the following columns.

Cost to Complete + Spent/Committed total + Cost to Complete (Pending CO)

This is a display only field.

Cost Variance (Incl. Pending CO)

Cost Variance Including Pending CO is calculated as Projected Cost Budget less Projected cost Forecast including Pending CO.

This is a display only field.

Current Bill Budget

Current Bill Budget column displays the Current Billing budget amount which includes the Original Billing budget & Posted PCI Amounts.

Drilldown opens the billing budget details pop-up showing the details and further drilldown possible on external and transfer CO column values.

Pending CO External

Pending CO External column shows the sum of billing amounts of Pending/Approved (un-posted) external and Transfer PCIs.

Drilldown opens the PCI Projection screen showing the Pending External/Transfer PCI.

Pending CO (Incl. Risk) - External

Sum of billing amount of Pending/Approved (un-posted) external PCIs and Transfer PCI with Risk Applied.

This is a display only field.

Projected Bill Budget

Sum of current billing budget and the Pending CO (External Incl. Risk).

Billed To Date

Total Billed Amount up to end of current period.

Drilldown available. Billed transactions are shown as "Billed to Date". The posting date will determine whether the transaction shows for the contract forecast period that is entered.

Revenue Forecast

If Bill Rates are used:

Revenue Forecast = [Spent/Committed total + Cost to Complete + Pending CO (including Risk)] * Base Rate Multiplier from the bill rate.

If Bill Rates are not used:

If Spent/Committed Total is '0',

Then the Projected Bill Budget will be taken as the Revenue Forecast Amount and any overrides to Cost to Complete will NOT recalculate Revenue Forecast.

If Spent/Committed Total is not equal to 0.

Revenue forecast equals percent of completion applied to Calculated Potential Revenue (CPR) (percent of completion equals cost over projected cost)

Formula = Calculated Potential Revenue (CPR) / Percent of Completion

If Calculated Potential Revenue (CPR) = 1875

Cost = 750

Projected Cost = 10000

Revenue Forecast = $1875 / (750 / 10000) = 25,000$

When using the functionality of 'Use Bill Rates for Revenue forecast' for specific categories, then the non-payroll type bill rates defined against those categories will be applied to calculate the Revenue forecast value. For complete details on other types, see the table below.

(NOTE: The database level flag in PM System Options table 'pmsys_fcst_inc_pnd_co', must be set as 'N')

Revenue Variance

Difference between Projected Billing Budget and Adjusted Revenue Forecast amounts. Adj. Revenue Forecast.

Adjusted Revenue Forecast

The Revenue Forecast amount unless there is a Max Billing Amount which will override this value where the Forecast amount is greater than the Max amount.

Projected Profit

Adjusted Revenue Forecast minus Projected Cost Forecast Including Pending PCIs.

Revenue Forecast Amount Calculation for various billing Types

The revenue-forecast amount is calculated according to the billing method assigned to the bill code.

Type	Revenue Forecast
UPHS	The amount is calculated as output spent quantity multiplied by the billing rate.
UNIT	The amount is calculated as input spent quantity multiplied by the billing rate. If the billing code is associated to more than one category, then a conversion is executed to get the total quantity in the WM assigned to the bill code.
COST	<p>If Bill Rates are used:</p> <p>Revenue Forecast = [Spent/Committed total + Cost to Complete + Pending CO (including Risk)] * Base Rate Multiplier from the bill rate.</p> <p>If Bill Rates are not used:</p> <p>If Spent/Committed Total is '0',</p> <p style="padding-left: 40px;">Then the Projected Bill Budget will be taken as the Revenue Forecast Amount and any overrides to Cost to Complete will NOT recalculate Revenue Forecast.</p> <p>If Spent/Committed Total is not equal to 0.</p> <p style="padding-left: 40px;">Revenue forecast equals percent of completion applied to Calculated Potential Revenue (CPR) (percent of completion equals cost over projected cost)</p> <p style="padding-left: 80px;">Formula = Calculated Potential Revenue (CPR) / Percent of Completion</p> <p style="padding-left: 80px;">If Calculated Potential Revenue (CPR) = 1875</p> <p style="padding-left: 80px;">Cost = 750</p> <p style="padding-left: 80px;">Projected Cost = 10000</p> <p style="padding-left: 80px;">Revenue Forecast = 1875 / (750 / 10000) = 25,000</p>
PC	Amount is calculated as unbilled revenue amount divided by Percentage Complete. The percentage is calculated as spent amount divided by projected amount.

Type	Revenue Forecast
PCCO	The projected bill budget amount is taken as revenue amount where there is a Budget Revenue Amount.
MILESTONES	The projected bill budget amount is taken as revenue amount.
BURDEN	Calculated based on the percentages that must be applied to the burden bill codes.

Table of Column Definition

REF#	Column	Description
1.	Current Cost Budget	Current Cost Budget which includes Original Cost Budget, Posted (Internal & Transfer & External) PCI Amounts up to the end of the forecasting period. Also, the internal changes impact the budget only when the CM control file option “Internal PCIs Update Budget” is checked. Note - Negative PCIs Posted up to the end of forecasting period will also be included in current cost budget.
2.	Spent / Committed Against Base Contract	Without the use of WBS (PCI#) Codes The Spent/Committed against Base Contract column shows the Spent, Committed or Largest of Spent/Committed (based on 'Projected Final Flag').Spent/Committed Against Base Contract= Spent(S), Committed(C) or Largest of Spent/Committed (L) (based on Projected Final Flag in JC Budget) With WBS Mapping and use of WBS (PCI#) code in transactions Spent/Committed (In Scope) MINUS (spent/committed against posted internal PCIs that fall outside the period (i.e. PCIs posted in the future) + spent/committed against un-posted internal PCIs) NOTE: PCIs must be flagged to be included in the forecast. The PCI must be within the period range. The transactions must be within the period range and must be posted.
3.	Spent / Committed Total	Spent/Committed Total = LARGEST OF (ABSOLUTE OF Commitment versus ABSOLUTE OF Spent Against Commitment) + Spent Out Of Commitment up to and including the current forecasting period
4.	Actual Cost	Current Cost Transactions against the Job/Cost Code/Category ('C' Type transactions in JCDETAIL table) Sum of Spent against commitment and spent outside commitment.
5.	Spent / Committed (In Scope)	Spent /Committed amount that is not associated to a PCI PLUS Spent/Committed amount associated to an un-posted internal PCI.
6.	% Complete	(Actual Cost / Current Cost Budget) x 100
7.	Pending Internal PCI	Sum of Pending Internal PCI Amount (Un-Posted)
8.	Pending Internal PCI Cost To Complete	Pending Internal / /external/Transfer PCI Amount Minus Spent Cost Against the same. (NOTE: PCI could be negative amounts and the spent cost may also be negative. Attention to be paid to follow correct sign when determining the amounts)
9.	Pending CO	Sum of Un-Posted Pending External/Original Budget PCI Amounts. Sum of cost budget from Pending external PCI.

REF#	Column	Description
10.	Pending CO(Including Risk)	Sum of The Revised Cost Budget Amount after applying risk to pending internal/external PCI. Sum of Un-Posted Pending Internal/External/Transfer/Original Budget PCI Amounts including PCI Risk Amount applied. The Revised Cost Budget From PCI column Amount from the Pending CO Column popup.
11.	Projected Cost Budget	Current Cost Budget + Pending CO (Including Risk)
12.	Spent/Committed (Pending CO)	Spent / Committed against un-posted PCIs
13.	Cost To Complete	Projected Cost Forecast MINUS Spent/Committed (In Scope)
14.	Projected Cost Forecast	If the Billing Code is not frozen, the value is the largest of (Budget + Pending CO + Internal CO) or Projected Amount (JCAT_PROJ_AMT from the JCJOB CAT table).
15.	Cost Variance	Difference between Current Cost Budget and the Projected Cost Forecast.
16.	Cost To Complete (Pending CO)	Pending PCI Including Risk - Spent/Committed against Pending CO
17.	Projected Cost Forecast (Incl. Pending CO)	Cost to Complete + Spent/Committed total + Cost to Complete(Pending CO)
18.	Cost Variance (Incl. Pending CO)	Projected Cost Budget –Projected cost Forecast including Pending CO.
19.	Current Bill Budget	Current Billing budget which includes the Original Billing budget & Posted PCI Amounts
20.	Pending CO (External)	Sum of billing amount of Pending/Approved (un-posted) external PCIs and Transfer PCI.
21.	Pending CO (External Incl. Risk)	Sum of billing amount of Pending/Approved (un-posted) external PCIs and Transfer PCI with Risk Applied.
22.	Projected Bill Budget	Sum of Current Billing Budget & Pending CO (External Incl. Risk).
23.	Billed To Date	Total Billed Amount up to end of current period.

REF#	Column	Description
24.	Revenue Forecast	<p>If Bill Rates are used</p> <p>Revenue Forecast = [Spent/Committed total + Cost to Complete + Pending CO (including Risk)] * Base Rate Multiplier from the bill rate.</p> <p>If Bill Rates are not used</p> <p>If Spent/Committed Total is '0',</p> <p style="padding-left: 40px;">Then the Projected Bill Budget will be taken as the Revenue Forecast Amount and any overrides to Cost to Complete will NOT recalculate Revenue Forecast.</p> <p>If Spent/Committed Total is not equal to 0.</p> <p style="padding-left: 40px;">Revenue forecast equals percent of completion applied to Calculated Potential Revenue (CPR) (percent of completion equals cost over projected cost)</p> <p style="padding-left: 40px;">Formula = Calculated Potential Revenue (CPR) / Percent of Completion</p> <p style="padding-left: 40px;">If Calculated Potential Revenue (CPR) = 1875</p> <p style="padding-left: 40px;">Cost = 750</p> <p style="padding-left: 40px;">Projected Cost = 10000</p> <p style="padding-left: 40px;">Revenue Forecast = $1875 / (750/10000) = 25,000$</p> <p>For complete details on other types, see the table above.</p>
25.	Revenue Variance	Difference between Projected Billing Budget and Adjusted Revenue Forecast amounts.
26.	Adjusted Revenue Forecast	The Revenue Forecast amount unless there is a Max Billing Amount which will override this value where the Forecast amount is greater than the Max amount.
27.	Projected Profit	Adjusted Revenue Forecast minus Projected Cost Forecast Including Pending PCIs

Billing Type & Revenue Calculations

The Revenue calculation is driven by the Billing Type assigned to the Bill Code. This section describes how the Revenue is calculated when using each Billing Type.

Billing Type Rate Rules

Depending on the Billing Type, Billing Rates are derived from different places.

Billing Type	Rule
--------------	------

Cost	<p>If on the Job Master 'Use Payroll Billing Rates or Use Equipment Billing Rates' are checked then these rates will be used where possible to determine the billing amount for Cost transactions generated in the Payroll or Equipment systems. All other billing amounts will be determined by using the Billing Rate table.</p> <p>There is one override to this rule. On the Job Setup Form there is a Max Hourly Rate field, if this is entered then all transactions from payroll will be compared to this Max Billing rate and altered if their billing rate is greater than this Max.</p>
Unit	Under this method the billing rate used is the billing rate applied on the Billing Code Line
Phase Unit	Under this method the billing rate used is the billing rate applied on the Billing Code Line
% Complete of Costs	Under this method the billing amount is the Percent Complete of the costs to the Budgeted Costs for the billing code
% Complete of Construction Value	Under this method the billing amount is the Percent Complete of the % of the Construction Value
% Complete of Units	Under this method the billing amount is the Units Complete of the Billing Code times the Unit Rate of the Billing Code
Milestone	Each Milestone indicates the exact amount to bill when the milestone is released either manually or automatically
Non - Recoverable	This is a NON Billing rate. Any item using this method will NOT be billed unless manually overridden

Billing Types

Code	Billing Type	Calculation Method
COST	COST	This method will select all the 'Cost' transactions for a specific Billing Code and bill the calculated 'Revenue' amount associated with each transaction.
UNIT	UNITS	This method is calculated as the sum of the Units associated with all 'Cost' transactions for a specific Billing Code multiplied by the billing rate on the contract.
UPHS	PHASE UNIT BILLING	This method will calculate as the sum of the amount entered via Job Cost Phase Quantity Completion multiplied by the rate on the billing code line.
NR	NON RECOVERABLE	This method is a 'Non Billable' method – any transactions associated with Bill Codes marked with this billing method will produce a Zero bill.

% Complete Billing – Types Overview

Percent Complete billings work against a fixed contract value, the Budgeted Cost, Budgeted Units or Contract Value. The Units and Costs are derived from the Job Cost Transactions.

Code	Billing Type	Calculation Method
PCCO	% Complete/Cost	With this method the billing type used will depend on the billing contract budget lines. Where there is a budget on the billing line then % COMPLETE billing type will be used. Where the billing budget line is null or zero the billing type COST will be used.

Code	Billing Type	Calculation Method
PC	% Complete of Budgeted Costs	This method will automatically calculate the percent complete of currently asked for costs against the Budgeted Cost Amount of the billing code and create the Bill Amount as '(Budgeted Billing Amount * Percent Complete / 100)'
PCV	% Complete of Construction	This method will automatically calculate the percent complete of currently asked for costs against the Construction Value of the billing code and create the Bill Amount as '((Construction Value* % of Construction Value / 100) * (Percent Complete/100))'
PU	% Complete of Budgeted Units	This method requires the user to enter the % of Units Complete for each Billing Code. The system will then calculate the bill amount as '((Budgeted Units * Percent Complete)/100) * Unit Billing Rate.'

BURDENED BILLINGS – Billing Types Overview

Burdened billings are a method of billing a percent of a different billing line. For Example your Site Management Fee may be 15% of all General Conditions.

Code	Billing Type	Calculation Method
BPC	Burdened Billings % of Cost Amount	This method will sum the 'COST' amount of the associated billing codes cost Transactions and then apply the required Burden %. ((Sum of Costs * Burden Percent) /100)
BPB	Burdened Billings % of Billing Amount	This method will sum the 'BILL' amount of the associated billing codes 'Cost' transactions and then apply the required Burden %. ((Sum of Bill Amounts * Burden Percent)/100)
BPU	Burdened Billings \$ Rate per Unit	This method will take the Billing Units entered of the associated billing codes and then apply a rate per unit. (Sum of Units * \$ Rate per Unit)

MILESTONE BILLINGS – Billing Types Overview

Milestone billings are manual billings triggered by % complete, dates, and costs or manually released. All Milestones except Fixed fee allow for multiple releases of the Milestone.

Code	Billing Type	Calculation Method
MC	Milestones Cost to Date	This method allows the user to define the Amount to be billed every time the Actual Cost to date reaches an entered Value
MD	Milestone Date Based	This method allows the user to define the Amount to be billed on specific dates.
MF	Milestone Fixed Fee	This method allows for a Bill Code to be billed only once, for a specified dollar amount. The User must manually release this Milestone
MU	Milestone User Defined	This method allows the user to define multiple milestones with fixed dollar values for a specific bill code. The User must manually release the Milestones
MPC	Milestone % Complete of Cost	This method allows the user to enter the amount to bill when the calculated % complete equals or is greater than the Percent Complete entered on the milestone
MPCV	Milestone % Complete of Construction Value	This method allows the user to enter the amount to bill when the calculated % complete equals the Percent Complete of Construction Value entered on the milestone
MPU	Milestone % Complete of Units to Date	This method allows the user to enter the amount to bill whenever the units complete equals the percent of budgeted units entered on the milestone

Code	Billing Type	Calculation Method
MQ	Milestone Quantity to Date	This method allows the user to enter the amount to bill whenever the Units to Date equal the amount entered on the milestone

Billing Rate Table & Forecasting

The Billing Rate table may be defined to be used in determining the Revenue Forecast values in Contract Forecasting.

1. Define the Billing Rate table as needed. In the following example, the Category '4000' has a rate multiplier
2. Check the flag 'Use Billing Rate Table for Revenue Forecast' in the Job Maintenance Form and define any exceptions as required.
3. Refresh the Contract Forecasting in Forms. The Revenue Forecast column will have the billing rate applied for all billcodes associated with category code '4000'.

The screenshot shows the 'Billing Rates' window for 'Company Code' CCC (CMiC Test Construction Co). It displays a 'Controlling Rate Code' section with fields for Rate Code (ONERATE), Billing Rate (One Rate upto 2015), Start Date (01-JAN-2011), End Date (31-DEC-2020), Description (ONE RATE Upto 2015), and an Active checkbox. Below this is a 'Sub Rate Code' table with columns for Sub Rate Code, Name, and Start Date. At the bottom is a 'Details' table with columns for Employee, Trade, Shift, Job, Phase, Cat., Basic Wage Type, Base Rate Multiplier, Billing Rate, W/m, and Description. The rows in the Details table are: (blank, blank, blank, blank, blank, blank, blank, 1.0000, blank, NA), (blank, blank, blank, blank, blank, 1000, blank, 1.5000, blank, HR), (blank, blank, blank, blank, blank, 2000, blank, 2.0000, blank, CY), (blank, blank, blank, blank, blank, 3000, blank, 3.0000, blank, DY), (blank, blank, blank, blank, blank, 4000, blank, 4.0000, blank, NA), and (blank, blank, blank, blank, blank, 5000, blank, 5.0000, blank, NA). The last two rows are highlighted with a red border.

Billing Rate Table

Job Costing - TESTV10_X Job Setup

Company Code
Company CCC CMIC Test Construction Co

User Extensions
User Extension1
User Extension2
User Extension3

Job Detail
Job Detail Accounts AP Taxes Job Billing WIP Payroll Bank Security Equipment Locations Compliance

Contact Mr. McDonald Douglas

Tax 1
Tax 2
Tax 3

Invoice Link

Default Billing Type COST Cost Plus Markup

Default Invoice Format CU17 PB (original & changes + retainag

Billing Rate Table ONERATE Billing Rate (One Rate upto 2015)

JB Map Code RV1TO1 RV Company 1 To 1 Mapping

Retainage Code RET10 RET10%

Billing Address Code

Construction Value

% of Construction Value Value

Max Billing Amount Total Phs Max

Max Revenue Cap Total Phs Cap 0.00

Max Hourly Rate

Use Billing Rate Table For Revenue Forecast

Exceptions

Job Costing - TESTV10_X Exceptions - Billing Rate Table

Job	Phase	Category
1491523-S3		5000

Job Name 14.91523-S3Ability to show forecast based on

Phase Name

Category Name Sundry

Close

Related Screen 7
More Related ...

Job Table

Contract

Contract 1491523-S3 Job 2015 Period 3 Filter Cost/Revenue Show Zero Cost Lines Hide Zero Projected Cost Lines Rows Recoverable Non-Recoverable Both

forecast has been refreshed

Bill Codes

Time Phased	Freeze Update	Bill Code	Phase	Name	Category	Phase Type	Projected Bill Budget	Billed To Date	Revenue Forecast	R V
	<input type="checkbox"/>	1491523-S3	100	Structural Demolit...	4000		100,000.00	0.00	400,000.00	
	<input type="checkbox"/>	1491523-S3	100	Structural Demolit...	5000		100,000.00	0.00	100,000.00	
	<input type="checkbox"/>	1491523-S3.02.2...	02-200	Utility Removal	4000		100,000.00	0.00	400,000.00	
	<input type="checkbox"/>	1491523-S3.02.2...	02-200	Utility Removal	5000		100,000.00	0.00	100,000.00	
	<input type="checkbox"/>	1491523-S3.03-1...	03-100	Structural Concrete	4000		100,000.00	0.00	400,000.00	
	<input type="checkbox"/>	1491523-S3.03-1...	03-100	Structural Concrete	5000		100,000.00	0.00	100,000.00	
	<input type="checkbox"/>	1491523-S3.03-2...	03-200	Architectural Con...	4000		100,000.00	0.00	400,000.00	
	<input type="checkbox"/>	1491523-S3.03-2...	03-200	Architectural Con...	5000		100,000.00	0.00	100,000.00	
Totals:							800,000.00	0.00	2,000,000.00	

Bill Rates applied as Job level 'Use Billing Rate Table for Rev Forecast' flag is checked. Also, Category 5000 is an exception defined and NO bill rate applied

Billing Maximums

'Billing Maximum' is a feature available with Job Billing application and automatically caps the billing amount at the following hierarchical levels as applicable.

As far as Contract Forecasting in PMJSP is concerned, the 'Adjusted Revenue Forecast' column applies the maximum rule and displays the amounts accordingly.

1. Billing Contract Level
2. Group Level
3. Billcode Level

The Contract Maximums can be setup at Job Entry form, which in turn is defaulted into the Contract entry when creating a new billing contract.

The following example shows billing maximum at billcode level, where a maximum of \$3200.00 is set.

Job Billing - TESTV10_X Contract Entry

Company Code

Company CCC CMIC Test Construction Co Use Sub-Contract Vendor on New Bill Lines
 Show Closed Contracts

Contract

Job 12345 Project 12345 - Forecasting PMJSP Bid Date Add New Bill Codes
 Contract 12345 Project 12345 - Forecasting PMJSP Contract Date 01-JAN-2014 Reset All Bill Code Budgets
 Customer ABSCONT ABS Contractors Ltd Approved Date 16-OCT-2014 Default Compliance Codes
 Budg. Billing Amt 150,000.00 Time Phased Exclude Non-Inv Receipts Closed Date Start Date 01-JAN-2014
 Max Billing Amt 150,000.00 Spread Rule 12MONTH Contract Billing Type COST End Date 31-DEC-2016
 Starting Draw 1 Invoice Preview Show Graph Defaults Address Description Officials Surcharges Risk Management Bill Rates

Billing Items

Contract Currency US Dollars Show NR Bill Codes Queried Budg. Billing Amt 1,926,480.00 Budg. Billing Amt 1,926,480.00

Billing Code	Type	Description	J. Billing Amt	Curr \$	Budg. Qty.	V/M	Billing Rate	Max Billing Amt
12345.02-100.CFB	COST	Structural Demolition - Constr	150,000.00	US	1,000.000	\$	150.0000	
12345.03-100.1000	BPB	Structural Concrete - Labour	172,000.00	US	1,220.000	HR	140.9836	
12345.03-100.2000	COST	Structural Concrete - Subcontr	200,000.00	US	150.000	CY	1,333.3333	
12345.03-100.3000	PC	Structural Concrete - Equipmen	250,000.00	US	225.000	DY	1,111.1111	
12345.03-100.4000	COST	Structural Concrete - Material	2,500.00	US		LS		3,200.00
12345.03-100.5000	COST	Structural Concrete - Sundry	125,000.00	US		LS		
12345.03-100.8100	COST	Structural Concrete - 8100.A S		US	.000	NA	1,111.1111	

Billing Cost Plus Markup
 Group 1 Project 12345 - Forecasting PMJSP Re-Generate Time Phased Budget View/Edit Time Phased Budget Group Details

Enter Maximum Billing Amount That Is Allowed.
 Record: 11/13 <OSC>

Job Billing - TESTV10_X Cost Transactions

Previously Billed Currently Billed Temporarily Deferr... Permanently Deferred Unbilled Transactions SC Unposted Pay Requests

Filtering Bill Code 12345.03-100.4000

Job	Phase	Cat	Status	Draw	Rev	Bill Code	Post Date	Contract Currency	Calc. Potential Rev	Unit	H
12345	03-100	4000	<input type="radio"/> B <input type="radio"/> T <input type="radio"/> P	1	0	12345.03-100.4000	10-JAN-2014	US	4,881.25		

The Cost Transaction popup shows a calculated potential revenue of \$4881.25

Select All

Transaction Status: Currently Billed

Create Transaction Express Bill Split Units CPR Adj. Close

Bill Code							
						Total Percentage Billed	0.17
Billing Code	Description	Budg. Billing Amt	Prev. Billed Amt	Material Stored	Curr Completed	Compl & Stored %	Total Bill less Ret.
12345.02-100.2000	Structural Demolition - Subcont	270,000.00	0.00	0.00	0.00	0.00	0.00
12345.02-100.3000	Structural Demolition - Equipme	300,000.00	0.00	0.00	0.00	0.00	0.00
12345.02-100.4000	Structural Demolition - Material	195,000.00	0.00	0.00	0.00	0.00	0.00
12345.02-100.5000	Structural Demolition - Sundry	75,000.00	0.00	0.00	0.00	0.00	0.00
12345.02-100.8100	Structural Demolition - 8100.A S	150,000.00	0.00	0.00	0.00	0.00	0.00
12345.02-100.CFB	Structural Demolition - Constrn F	150,000.00	0.00	0.00	0.00	0.00	0.00
12345.03-100.1000	Structural Concrete - Labour	172,000.00	0.00	0.00	0.00	0.00	0.00
12345.03-100.2000	Structural Concrete - Subcontr	200,000.00	0.00	0.00	0.00	0.00	0.00
12345.03-100.3000	Structural Concrete - Equipmer	250,000.00	0.00	0.00	0.00	0.00	0.00
12345.03-100.4000	Structural Concrete - Material	2,500.00	0.00	0.00	3,200.00	3,200.00	3,200.00
		1,926,480.00	0.00	0.00	3,200.00	3,200.00	3,032.50

Prepare Billing program caps the billcode maximum at \$3200.00

The following example shows the Contract Maximum applied when generating an invoice. The Contract Maximum is set at \$1888.00. The program applies the billcode maximum on the lines and then the contract maximum on the entire bill generated by effectively offsetting the amounts using negative billed amounts on the currently billed lines.

Job Billing - TESTV10_X Contract Entry

Company Code: Company CCC CMIC Test Construction Co

Contract: Job 12345 Project 12345 - Forecasting PMJSP

Customer: ABSCONT ABS Contractors Ltd

Budg. Billing Amt: 1,888.00

Max Billing Amt: 1,888.00

Contract Billing Type: COST

Contract Date: 01-JAN-2014

Approved Date: 16-OCT-2014

Start Date: 01-JAN-2014

End Date: 31-DEC-2016

Spread Rule: 12MONTH

Invoice Preview Show Graph Defaults Address Description Officials Surcharges Risk Management Bill Rates

Billing Contract Maximum

Bill Code							
Contract Maximum Applied						Total Percentage Billed	0.10
Billing Code	Description	Budg. Billing Amt	Prev. Billed Amt	Material Stored	Curr Completed	Compl & St	Total Bill less Ret.
12345.02-100.4000	Structural Demolition - Material	195,000.00	0.00	0.00	0.00	0.00	0.00
12345.02-100.5000	Structural Demolition - Sundry	75,000.00	0.00	0.00	0.00	0.00	0.00
12345.02-100.8100	Structural Demolition - 8100.A S	150,000.00	0.00	0.00	0.00	0.00	0.00
12345.02-100.CFB	Structural Demolition - Constrn F	150,000.00	0.00	0.00	0.00	0.00	0.00
12345.03-100.1000	Structural Concrete - Labour	172,000.00	0.00	0.00	0.00	0.00	0.00
12345.03-100.2000	Structural Concrete - Subcontr	200,000.00	0.00	0.00	0.00	0.00	0.00
12345.03-100.3000	Structural Concrete - Equipmer	250,000.00	0.00	0.00	0.00	0.00	0.00
12345.03-100.4000	Structural Concrete - Material	2,500.00	0.00	0.00	3,200.00	3,200.00	3,200.00
12345.03-100.5000	Structural Concrete - Sundry	125,000.00	0.00	0.00	-1,312.00	-1,312.00	-1,312.00
12345.03-100.8100	Structural Concrete - 8100.A S	150,000.00	0.00	0.00	0.00	0.00	0.00
		1,926,480.00	0.00	0.00	1,888.00	1,888.00	1,720.50

SName

Name

Group Project 12345 - Forecasting PMJSP

Contract Maximum reached and Billing Amount Reduced

Current Bill Amount

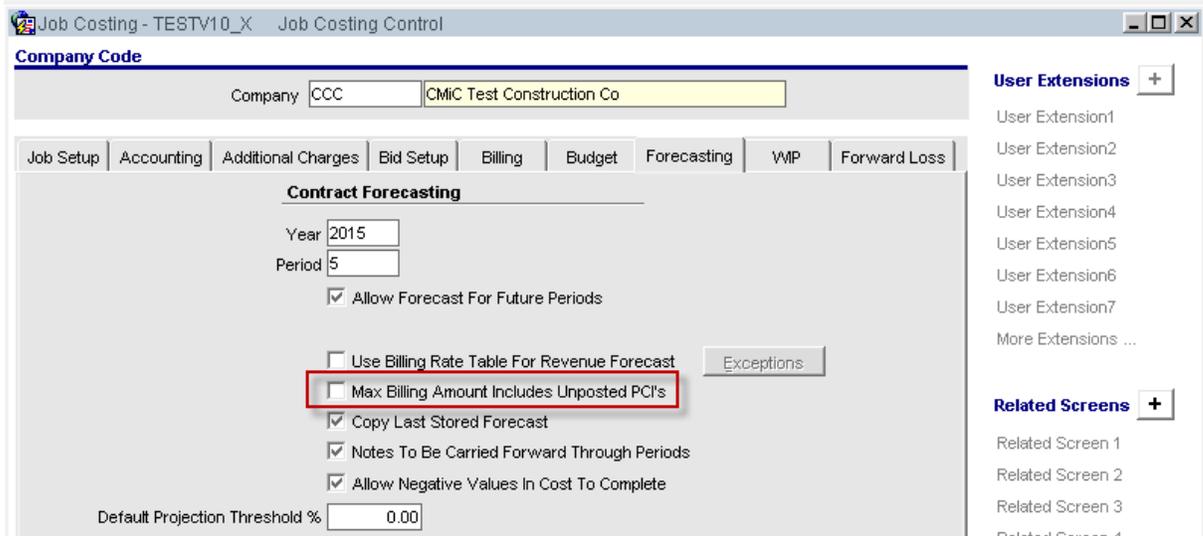
Record: 12/13

Un-Posted PCIs & Billing Maximums in Forecasting

The Adjusted Revenue Forecast column displays appropriate billing maximums applied and if there are no maximums, then the Revenue Forecast amounts are populated.

When the JC Control > Forecasting > 'Max Billing Amount Includes Un-posted PCI's' is checked, the Adjusted Revenue Forecast will include the Un-posted PCI Billing amounts on top of the billing maximums if any.

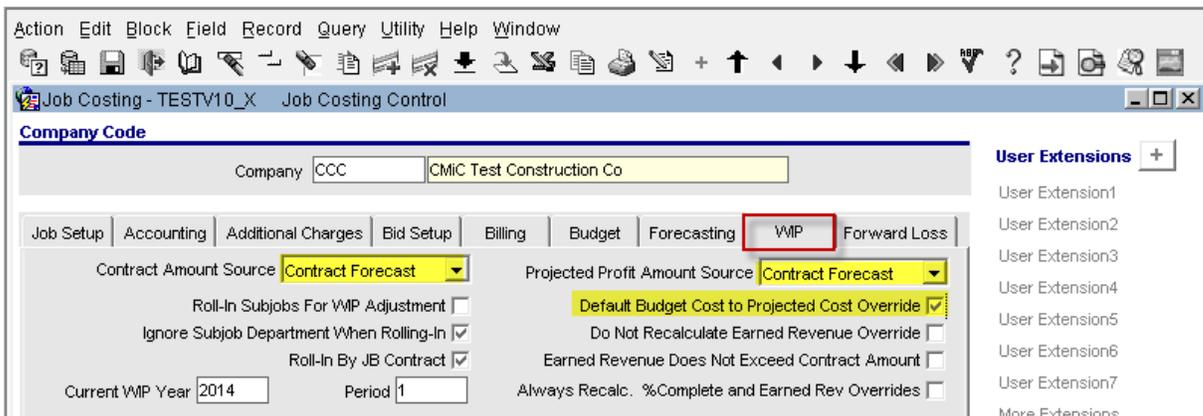
When un-checked, Un-Posted PCIs will be subject to billing maximums defined and adjustments will be calculated and shown against the billcodes with adjustment categories



The screenshot shows the 'Contract Forecasting' section of the 'Job Costing Control' application. The 'Company Code' is set to 'CCC' (CMIC Test Construction Co). The 'Year' is 2015 and the 'Period' is 5. The 'Allow Forecast For Future Periods' checkbox is checked. The 'Max Billing Amount Includes Unposted PCI's' checkbox is un-checked and highlighted with a red box. Other options include 'Use Billing Rate Table For Revenue Forecast' (un-checked), 'Copy Last Stored Forecast' (checked), 'Notes To Be Carried Forward Through Periods' (checked), and 'Allow Negative Values In Cost To Complete' (checked). The 'Default Projection Threshold %' is 0.00. The 'WIP' tab is highlighted in the top navigation bar.

JC WIP Integration

There JC Company Control allows users to configure the WIP program defaults from the Contract Forecasting Screen as follows:



The screenshot shows the 'WIP' section of the 'Job Costing Control' application. The 'Company Code' is set to 'CCC' (CMIC Test Construction Co). The 'WIP' tab is highlighted in the top navigation bar. The 'Contract Amount Source' is set to 'Contract Forecast' and the 'Projected Profit Amount Source' is also set to 'Contract Forecast'. The 'Default Budget Cost to Projected Cost Override' checkbox is checked. Other options include 'Roll-In Subjobs For WIP Adjustment' (un-checked), 'Ignore Subjob Department When Rolling-In' (checked), 'Roll-In By JB Contract' (checked), 'Do Not Recalculate Earned Revenue Override' (un-checked), 'Earned Revenue Does Not Exceed Contract Amount' (un-checked), and 'Always Recalc. %Complete and Earned Rev Overrides' (un-checked). The 'Current WIP Year' is 2014 and the 'Period' is 1.

1. The WIP Entry > Contract Amount and Projected Profit Amount column sources may be set as 'Contract Forecasting' and the forecasted values will be used when creating WIP.

- The flag 'Default Budget Cost to Projected Cost Override' may be checked if required. This applies when the stored forecasting does NOT have projected cost.

The following examples show the Contract Forecasting & WIP program interaction:

Forecast has been refreshed

Freeze Update	Bill Code	Job	Phase	Name	Category	Phase at Forecast Type	Cost Variance (Incl Pending CO)	Current Bill Budget	Pending...	Pending CO (Incl. Risk...)	Projected Bill Budget	Billed To Date	Revenue Forecast	Revenue Variance	Adj Rev Forecast	Projected Profit	
<input type="checkbox"/>	23456.02-100.1000	23456	02-100	Structural Demolit...	1000		1,111.00	23,889.00	25,000.00	0.00	0.00	25,000.00	0.00	2,222.00	22,778.00	2,222.00	1,111.00
<input type="checkbox"/>	23456.02-100.2000	23456	02-100	Structural Demolit...	2000		2,222.00	22,778.00	25,000.00	0.00	0.00	25,000.00	0.00	3,333.00	21,667.00	3,333.00	1,111.00
<input type="checkbox"/>	23456.02-100.3000	23456	02-100	Structural Demolit...	3000		3,333.00	21,667.00	25,000.00	0.00	0.00	25,000.00	0.00	4,444.00	20,556.00	4,444.00	1,111.00
<input type="checkbox"/>	23456.02-100.4000	23456	02-100	Structural Demolit...	4000		8,194.00	20,556.00	25,000.00	4,850.00	4,850.00	29,850.00	0.00	5,555.00	24,295.00	5,555.00	-2,639.00
Totals:							14,860.00	88,890.00	100,000.00	4,850.00	4,850.00	104,850.00	0.00	15,554.00	89,296.00	15,554.00	694.00

Contract Amount Source in WIP

Projected Profit in WIP screen

Forecast has been refreshed

Freeze Update	Bill Code	Job	Phase	Name	Category	Phase at Forecast Type	Projected Cost Forecast	Cost Variance	Proj Cost Forecast (Incl. Pending CO)	Cost Variance (Incl Pending CO)	Current Bill Budget	Pending...	Pending CO (Incl. Risk...)	Projected Bill Budget
<input type="checkbox"/>	23456.02-100.1000	23456	02-100	Structural Demolit...	1000		1,111.00	23,889.00	1,111.00	23,889.00	25,000.00	0.00	0.00	25,000.00
<input type="checkbox"/>	23456.02-100.2000	23456	02-100	Structural Demolit...	2000		2,222.00	22,778.00	2,222.00	22,778.00	25,000.00	0.00	0.00	25,000.00
<input type="checkbox"/>	23456.02-100.3000	23456	02-100	Structural Demolit...	3000		3,333.00	21,667.00	3,333.00	21,667.00	25,000.00	0.00	0.00	25,000.00
<input type="checkbox"/>	23456.02-100.4000	23456	02-100	Structural Demolit...	4000		4,444.00	24,308.00	4,444.00	24,308.00	25,000.00	4,850.00	4,850.00	29,850.00
Totals:							11,110.00	11,110.00	14,860.00	88,890.00	100,000.00	4,850.00	4,850.00	104,850.00

Defaults in to WIP Projected Cost Column

Company: CCC | CMIC Test Construction Co

Contract: 23456

Year: 2014 | Period: 1 | From: 01-JAN-2014 | To: 31-JAN-2014

Status: Open Jobs

Include Jobs With Posted VMP:

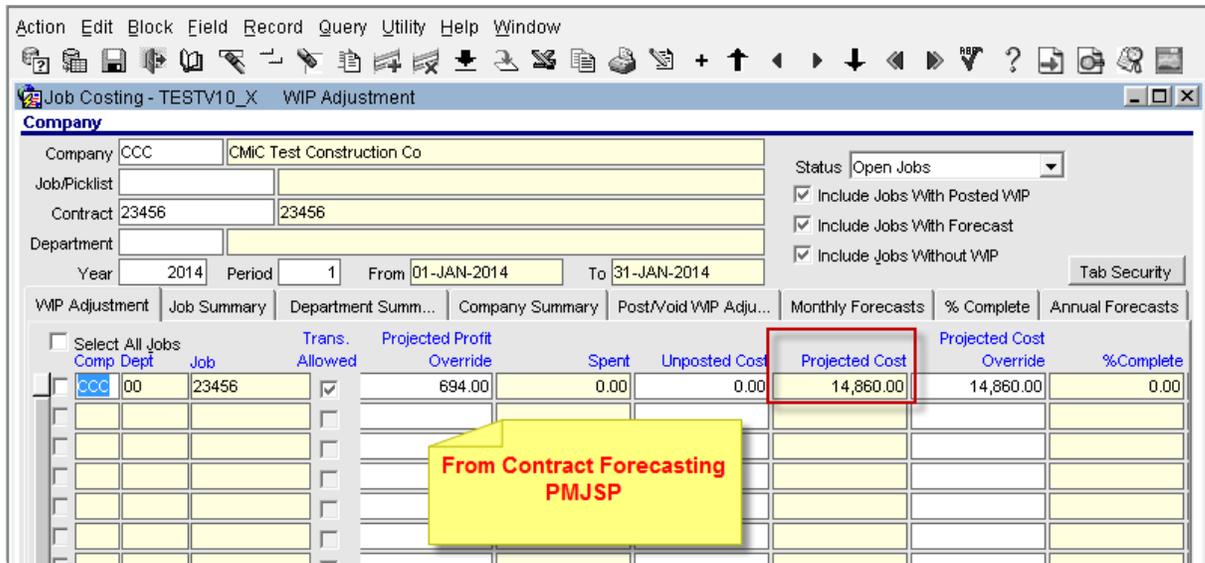
Include Jobs With Forecast:

Include Jobs Without WIP:

WMP Adjustment	Job Summary	Department Summ...	Company Summary	Post/Void WIP Adju...	Monthly Forecasts	% Complete	Annual Forecasts	
<input type="checkbox"/>	Select All Jobs	Trans. Allowed	Budget	Contract	Contract Override	Projected Profit	Projected Profit Override	Spent
<input type="checkbox"/>	CCC	00	23456	100,000.00	15,554.00	694.00	694.00	0.00

Value Source is Contract Forecasting in PMJSP

Defaults in to WIP Projected Cost Column

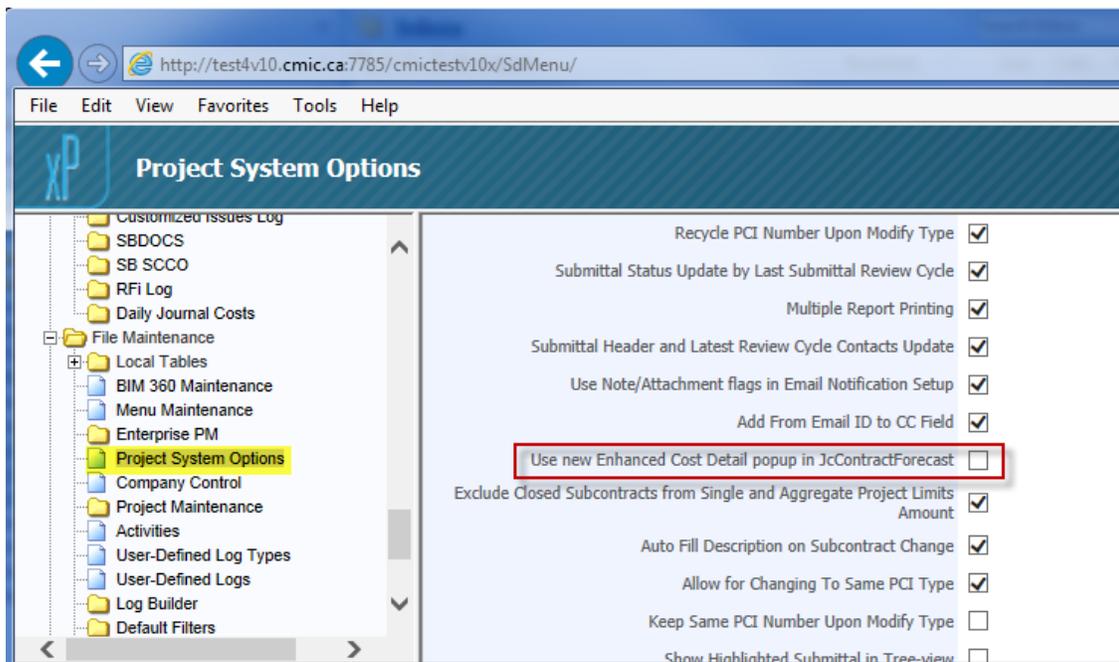


Cost Detail Popup

The Cost Detail field in forecast screen allows user overrides as required. In order to providing more details with multiple records on the components that necessitated the overrides 'Cost Detail Pop-up' screen is available as well. The pop-up is accessible by clicking on the button next to the field.

This is a system wide configuration and affects all projects under all companies.

NOTE: Cost Detail pop-up is applicable to billcodes with budget method 'Amounts' (A) only.



PMJSP > Project System Options

The Cost Detail pop-up also has a variant and may be used by setting up the flag in Project System Options table.

The field 'Use Enhanced Cost Detail popup in 'JcContractForecast' in PM System options may be set as Y/N.

- 'Y' - Simple Cost Detail pop-up.
- 'N' - Enhanced Cost Detail pop-up.

Simple Cost Detail Pop-up

Cost Detail Pop-up (Simple)

Description	Quantity	WM*	Rate	Projected To Complete
Cost Detail 1	100.00	LS	100	10000.00
Cost Detail 2	75.00	NA	50	7750.00

Simple Cost Detail pop-up

The Simple Cost Detail pop-up may be used to add multiple details of components that make up the overrides. System would calculate the 'Projected to Complete' column based on the Qty/Rate provided and the sum of the projected cost amount will be populated in the main screen upon 'Save/Refresh'.

PCI Projections												
Contract												
Time Phased	Freeze Update	Bill Code	Contract Code	Job	Phase	Name	Category	Phase Type	Committed (g CO)	Cost to Complete	Projected Cost Forecast	Cost Variance
	<input type="checkbox"/>	FORECAST2.02...	FORECAST2	FORECAST2	02-100	Structural Demolit...	1000		0.00	100,000.00	100,000.00	0.00
	<input type="checkbox"/>	FORECAST2.02...	FORECAST2	FORECAST2	02-100	Structural Demolit...	3000		0.00	100,000.00	100,000.00	0.00
	<input type="checkbox"/>	FORECAST2.02...	FORECAST2	FORECAST2	02-100	Structural Demolit...	4000		0.00	100,000.00	100,000.00	0.00
	<input type="checkbox"/>	FORECAST2.02...	FORECAST2	FORECAST2	02-100	Structural Demolit...	5000		0.00	100,000.00	100,000.00	0.00
	<input type="checkbox"/>	FORECAST2.02...	FORECAST2	FORECAST2	02-100	Structural Demolit...	NR		0.00	25,000.00	25,000.00	0.00
	<input type="checkbox"/>	FORECAST2.03...	FORECAST2	FORECAST2	03-100	Structural Concrete	1000		0.00	100,000.00	100,000.00	0.00
	<input type="checkbox"/>	FORECAST2.03...	FORECAST2	FORECAST2	03-100	Structural Concrete	3000		0.00	100,000.00	100,000.00	0.00
	<input type="checkbox"/>	FORECAST2.03...	FORECAST2	FORECAST2	03-100	Structural Concrete	4000		0.00	13,750.00	13,750.00	86,250.00
	<input type="checkbox"/>	FORECAST2.03...	FORECAST2	FORECAST2	03-100	Structural Concrete	5000		0.00	100,000.00	100,000.00	0.00
	<input type="checkbox"/>	FORECAST2.03...	FORECAST2	FORECAST2	03-100	Structural Concrete	NR		0.00	25,000.00	25,000.00	0.00
Totals:									0.00	763,750.00	763,750.00	86,250.00

Contract: FORECAST2 Job: Year: 2015 Period: 3 Filter: Cost/Revenue Projected Cost Show: Zero Cost Lines Zero Cost and Revenue Lines Hide: Zero Projected

Time Phased	Freeze Update	Bill Code	Contract Code	Job	Phase	Name	Category	Phase Type	Committed (g CO)	Cost to Complete	Projected Cost Forecast
	<input type="checkbox"/>	FORECAST2.02-...	FORECAST2	FORECAST2	02-100	Structural Demolit...	1000		0.00	100,000.00	100,000.00
	<input type="checkbox"/>	FORECAST2.02-...	FORECAST2	FORECAST2	02-100	Structural Demolit...	3000		0.00	100,000.00	100,000.00
	<input type="checkbox"/>	FORECAST2.02-...	FORECAST2	FORECAST2	02-100	Structural Demolit...	4000		0.00	100,000.00	100,000.00
	<input type="checkbox"/>	FORECAST2.02-...	FORECAST2	FORECAST2	02-100	Structural Demolit...	5000		0.00	100,000.00	100,000.00
	<input type="checkbox"/>	FORECAST2.02-...	FORECAST2	FORECAST2	02-100	Structural Demolit...	NR		0.00	25,000.00	25,000.00
	<input type="checkbox"/>	FORECAST2.02-...	FORECAST2	FORECAST2	03-100	Structural Concrete	1000		0.00	100,000.00	100,000.00
	<input type="checkbox"/>	FORECAST2.03-...	FORECAST2	FORECAST2	03-100	Structural Concrete	3000		0.00	100,000.00	100,000.00
	<input type="checkbox"/>	FORECAST2.03-...	FORECAST2	FORECAST2	03-100	Structural Concrete	4000		0.00	29750	13,750.00
	<input type="checkbox"/>	FORECAST2.03-...	FORECAST2	FORECAST2							100,000.00
	<input type="checkbox"/>	FORECAST2.03-...	FORECAST2	FORECAST2							25,000.00
		Totals:									763,750.00

Message from webpage

ⓘ This override will delete Cost to Complete detail lines entered in the popup. Do you wish to continue?

OK Cancel

Override the Cost to Complete in the forecasting screen, when there exist the cost detail pop-up overrides, then a message will be issued and upon confirmation the details will be deleted as well.

IMPORTANT NOTE: When the JC Control flag 'Copy Last Stored Forecast' is checked, and if any overrides are made to the Cost to Complete column, then those overrides performed on the main screen directly, will NOT be brought forward to the next period upon the very first entry. Users can again override the 'Cost to Complete' amount and commit. Any overrides performed using the 'Cost Detail' popup will be carried forward to the next period.

Enhanced Cost Detail Popup

Contract: FORECAST2 Job: Year: 2015 Period: 3 Filter: Cost/Revenue Projected Cost Show: Zero Cost Lines Zero Cost and Revenue Lines Hide: Zero Projected Cost Lines

Time Phased	Freeze Update	Bill Code	Contract Code	Job	Phase	Name	Category	Phase Type	Projected Cost Budget	Spent/Committed (Pending CO)	Cost to Complete
	<input type="checkbox"/>	FORECAST2.02-...	FORECAST2	FORECAST2	02-100	Structural Demolit...	1000		260,000.00	0.00	428,000.00

Cost Detail

Phase 02-100 - Structural Demolition
Category 1000 - Labour

Current Budget Amount: 260,000.00
Spent/Committed To Date: 160,000.00
Pending Internal PCI Cost To Complete: 0.00
Spent/Committed Total: 160,000.00

Description	Burdened Rate	Quantity Of Rate	Frequency	From Date	To Date	Rem. Duration	Cost To Complete
Enhanced Cost Detail-1	10	100	DY	010115	123115	365	\$365,000.00
Enhanced Cost Detail-2	10	100	WK	010415	122615	51	\$51,000.00
Enhanced Cost Detail-3	10	100	MO	123114	123115	12	\$12,000.00
Total Cost To Complete							428000.00
Projected Cost Forecast 777							588000.00
Projected Variance							-328000.00

Cost Detail Pop-Up Enhanced

Enhanced Cost Detail pop-up

The enhanced Cost Detail popup allows multiple details of overrides with Burdened Rate, Quantity of Rate, Frequency and From/To Dates. System then calculates the 'Cost to Complete' amount and upon Save/Refresh' updates the contract forecasting main screen.

The frequency may be selected logically with calendar types as 'HR/DY/MO/YR/WK' from the weight measures LOV. If selecting any other weight measure that is not a calendar type weight measure, then the system will assume a factor of 1 and simply calculate as Burdened Rate x Quantity of Rate as the 'Cost To Complete' value.

NOTE: Users must define Weight Measures as HR/DY/MO/YR in order for the calendar function to work.

Date Defaults

The 'From/To' date default values may be selected for each of the Cost Details records as required. An LOV next to the Calendar icon allows users to select the date as shown. Users may move the mouse pointer to get the display of the date value for each of the options and select accordingly

The screenshot shows the 'Cost Detail' web application interface. The main window displays summary information for 'Phase 02-100 - Structural Demolition' and a table of cost details. A pop-up window titled 'Cost Detail - From Date Default...' is open, showing a list of date selection options. A yellow callout box labeled 'From Date Defaults' points to the pop-up. A red arrow points from the pop-up to the 'From Date' field in the table.

Description	Burdened Rate	Quantity Of Rate	Frequency	From Date	To Date	Rem. Duration	Cost To Complete
Enhanced Cost Detail-1	10	100.00	DY	123118	123115	0	1000.00
Enhanced Cost Detail-2	10	100	WK	010415	122615	51	\$51,000.00
Enhanced Cost Detail-3					123115	12	\$12,000.00

Cost Detail Pop-Up > From Date Defaults

The screenshot shows the 'Cost Detail' web application interface. The main window displays summary information for 'Phase 02-100 - Structural Demolition' and a table of cost details. A pop-up window titled 'Cost Detail - To Date Defaults...' is open, showing a list of date selection options. A yellow callout box labeled 'To Date Defaults' points to the pop-up. A red arrow points from the pop-up to the 'To Date' field in the table.

Description	Burdened Rate	Quantity Of Rate	Frequency	From Date	To Date	Rem. Duration	Cost To Complete
Enhanced Cost Detail-1	10	100.00	DY	123118	123118	1	1000.00
Enhanced Cost Detail-2	10					51	\$51,000.00
Enhanced Cost Detail-3	10					12	\$12,000.00

Cost Detail Pop-Up > To Date Defaults

Productivity & Units Pop-ups

Productivity/Units					
<input type="button" value="Save"/> <input type="button" value="Cancel"/>					
Phase 010160 - Temporary Buildings					
Category 1000 - Labour					
	Output		Input		
	WM		\$	Units	WM
Budgeted	5000	CY	125,000.00	1000	HR
Complete	1250	CY	30,000.00	250	HR
Projected	<input type="text" value="5000"/>	CY	<input type="text" value="30000"/>	<input type="text" value="1000"/>	HR
Remaining	3750.0	CY	0.0	750.0	HR
	Budgeted	Current	Go Forward Override		
Input Rate	125.00	120.00	<input type="text"/>		/HR
Output Rate	25.00	24.00	<input type="text"/>		/CY
Productivity	5.0	5.0	<input type="text"/>		CY / HR
Yield	0.2	0.2	<input type="text"/>		HR / CY
Estimate To Complete	95,000.00	90,000.00	0.00		
Projected Cost	125,000.00	120,000.00	30,000.00		

The productivity forecast screen allows analysis of this relationship in terms of the dollars and quantities needed to complete an output unit. Based on the information provided, productivity can then be analyzed to see where the actual progress may be out of line with the estimates.

Users may now update Input Units as well as the Input Amount. If the user desires, they may update the Input Amount value and system will prompt the user to use the described formulas for recalculating, OR, they may select to modify the Input Amount and NOT update any other values based on this change.

Productivity Pop up Calculations

A	B	C	D	E	F	G		
		Output		Input		Units		
6	Budgeted	5000		125,000		1000		
7	Completed	1250		30000		250		
8	Projected	5000		30000		1000	(G7/C7)*C6	
9	Remaining	3750	C8-C7	0	E8-E7	750	(G8-G7)	
		Budgeted		Current				
13	Input Rate	125	E6/G6	120	E7/G7			
14	Output Rate	25	E6/C6	24	E7/C7			
15	Productivity	5	C13/C14	5	E13/E14			
16	Yield	0.2	1/C15	0.2	1/E15			
17	ETC	95,000	E6-E7	90,000	G9*E13			
18	Projected Cost	125,000		120,000	E17+E7			

1. Output Budgeted Units= Budgeted unit for the phase.
2. Output Complete Units= Phase completion Transaction

3. Output Projected Units= it is equal to budgeted output and available for override.
4. Output Remaining Units= Output Projected Units – Output Complete Units
5. Input Budgeted Amount = Budgeted Amount set for category
6. Input Complete Amount = Amount posted in JC transaction against the category.
7. Input Projected Amount= value defaulting from budgeted input amount and will change upon overriding current output rate. Available for override.
8. Remaining Input Amount = Input projected Amount minus Input Complete Amount.
9. Budgeted Units= Budgeted unit for categories under that phase.
10. Units Complete= Unit posted in JC transaction against the category.
11. Projected Units= (Completed Input Units divided by complete Output Quantity)* Output Budgeted Units
12. Remaining units = Projected units – Completed Units

Calculations of Rates

	Name of Field	Formula
Budgeted Column	Input Rate	Budgeted Input Amount / Budgeted input units
	Output Rate	Budgeted Input Amount / Budgeted Output Units
	Productivity	Budgeted Input Rate / Budgeted Output Rate
	Yield	1 / Budgeted Productivity
	Estimate to complete	Budgeted input amount – Complete Input Amount
	Projected Cost	ETC + Complete Input Amount
	Current Column	Input Rate
Output Rate		Complete Input Amount / Complete Output Units
Productivity Rate		Current Input Rate / Current Output Rate
Yield		1 / Current Productivity
Estimate to complete		Remaining Input units * Current input Rate
Projected Cost		Estimate to complete+ Complete Input Amount

Productivity Forecasting Overview

The calculation of job percent complete becomes far more complex when dealing with 'productivity' as a forecast method to calculating the projected at completion costs on a job. In the case of productivity forecasting (P line budgets) the percent complete is calculated based on the budgeting of units at the phase level and the subsequent posting of quantities complete for these phases. Projected Cost at Completion is updated through the entry of 'Go-Forward Overrides', which change the Estimate to Complete and subsequently change the Projected Cost at Completion.

Initial Calculations:

Percent Complete = Output Units Complete / Output Units Projected
Output Units to Complete = Output Units Projected - Output Units Complete
Cost to Complete = (Current Output Unit Rate Amt * Output Units to Complete)
Projected Cost At Completion = Cost to Complete + Input Cost Spent

Example 1: Prior to posting of costs and units complete

Prior to the posting of Units Complete, the system will assume that the Final Cost at Completion is equal to the Input Cost Budgeted. This means that the cost to complete this phase/category (\$125,000) will be equal to the budget to complete this phase / category. In the case of a 'P' line forecast, the posting of input quantities and costs to the phase / category will not affect the Final Cost at Completion.

Budgeted Output Units	5,000	CY
Units Complete	0	CY
Percent Complete:		0%
Budgeted Input Quantity	1,000	HR
Budgeted Input Amount	\$125,000	
Spent Input Quantity	0	HR
Spent Input Cost	\$0	
Projected Final Quantity:	1,000	HR
Projected Final Cost	\$125,000	

Example 2: After posting of Units Complete

Once the units have been posted as complete against the 'P' line phases, the system updates the percent complete by dividing the Units Complete by the Budgeted Output Units. Projected Final Quantities and Costs (against the input units) are then revised to account for the percent complete based on the output units. In the example below, the percent complete is 25% based on output units. Applying the output percent complete (25%) against the input units spent to date (\$30,000) has the effect of changing the Projected Final Cost.

Budgeted Output Units	5,000	CY
Units Complete	1,250	CY
Percent Complete:		25% (1,250/5,000 CY)
Budgeted Input Quantity	1,000	HR
Budgeted Input Amount	\$125,000	
Spent Input Quantity	250	HR
Spent Input Cost	\$30,000	
Projected Final Quantity:	1,000	HR
Projected Final Cost	\$120,000	(\$30,000/25%)

Productivity Analysis

The analysis of conceptual unit price estimates is based on the relationship between input units and output units. The productivity-forecast screen allows analysis of this relationship in terms of the dollars and quantities needed to complete an output unit. Based on the information provided, productivity can be analyzed to see where the actual progress may be out of line with the estimates.

Due to the nature of productivity forecasts it should be noted that forecast amounts as a lump sum figure on the first screen cannot be changed. In order to change the Final Cost at Completion enter Go-Forward Override amounts against the productivity forecast figures.

Below is an example of a productivity forecast based on the information presented in example 2. In this example, budget is a labor cost of \$125.00 per hour to complete the work on this particular phase. Under this scenario labor would cost \$25.00 per cubic yard to complete the work on this phase. Budgeted productivity would then be 5 cubic yards per hour with a yield of 1 cubic yard every .20 hours where yield is the inverse of productivity.

Budgeted

Input Unit Cost Rate HRS)	\$125.00 / HR	(\$125.00/HR = \$125,000/1000
Output Unit Cost Rate	\$ 25.00 / CY	(\$125,000 / 5000 CY)
Productivity	5 CY / HR	(5,000 CY / 1000 HRS)
Yield	.20 HR / CY	(1000 HRS / 5,000 CY)
Projected Cost	\$125,000	(Budget)
Estimate to Complete	\$95,000	(\$125,000 - \$30,000)

Analyzing the current forecast rates shows that the job costs are doing better than projected. In the current scenario labor is only costing \$120 per hour. Given the decrease in the labor cost per hour actual spending is only \$24.00 a cubic yard on labor. Since consumption of 25% of the budgeted quantity (250 / 1000) as the units complete (1250/1000) productivity and yield remain the same. In this case, the job is working on schedule but it has cost less to do so. For this reason, the projected cost at completion has been modified down to reflect the decrease in labor cost.

Current

Input Unit Cost Rate	\$120.00 / HR	(\$30,000 / 250 HRS)
Output Unit Cost Rate	\$ 24.00 / CY	(\$30,000 / 1250 CY)
Productivity	5 CY / HR	(1250 CY / 250 HRS)
Yield	.20 HR / CY	(250 HRS / 1250 CY)
Projected Cost	\$120,000	(\$30,000 / 25%)
Estimate to Complete	\$90,000	(\$120,000 - \$30,000)

Example 3: Changes to the Go-Forward Override Amounts

Continuing with the scenario in example 2, it may be decided that for whatever reason the rates or productivity numbers are misleading and are over or under estimating the Projected Cost at Completion. In this case, override the calculated amounts through the Go-Forward Overrides. The system allows direct modification of any of the forecast amounts except for the Project Cost amount. As modification of one of the forecast amounts occurs, the remaining amounts will automatically update with the over-ride.

Take, for example, the situation from example 2. Assume that if labor is kept down to \$120 per hour it is known 5 cubic yards per hour will not be accomplished. The project manager estimates that as the job continues productivity will actually reduce to 4.75 CY / HR. In this case, enter 4.75 in the productivity field for the go forward amounts. Using this new productivity the system will calculate the yield will increase to .21 hours to complete one cubic yard causing the output unit cost rate to increase to \$25.26 per cubic yard. Given that there are 3,750 remaining output units to complete the job, the Estimate to Complete would be \$94,725 (Remaining Units * Output Rate).

When working with the go-forward override amounts the system ignores the posted input and output amounts for the calculation of the remaining units. The go-forward amounts are calculated under the following formula:

Productivity/Units					
<input type="button" value="Save"/> <input type="button" value="Cancel"/>					
Phase 010160 - Temporary Buildings					
Category 1000 - Labour					
	Output		Input		
		WM	\$	Units	WM
Budgeted	5000	CY	125,000.00	1000	HR
Complete	1250	CY	30,000.00	250	HR
Projected	<input type="text" value="5000"/>	CY	<input type="text" value="124725"/>	<input type="text" value="1039.375"/>	HR
Remaining	3750	CY	94725	789.375	HR
	Budgeted	Current	Go Forward Override		
Input Rate	125.00	120.00	<input type="text" value="120.0"/>	/ HR	
Output Rate	25.00	24.00	<input type="text" value="25.26"/>	/ CY	
Productivity	5.0	5.0	<input type="text" value="4.75"/>	CY / HR	
Yield	0.2	0.2	<input type="text" value="0.2105"/>	HR / CY	
Estimate To Complete	95000	90,000.00	94725		
Projected Cost	125,000.00	120,000.00	124725		

When Productivity or Yield change:

Productivity, Yield, Output Rate and Projected Cost Change

$$\text{Productivity} = 1 / \text{Yield}$$

$$\text{Yield} = 1 / \text{Productivity}$$

$$\text{Output Rate} = \text{Input Rate} \times 1 / \text{Productivity}$$

$$\text{Productivity}$$

$$\text{Estimate to Complete} = \text{Remaining Output Units} * \text{Output Rate}$$

$$\text{Projected Cost} = \text{Estimate to Complete} + \text{Spent}$$

When Output Rate changes:

Input Rate and Projected Cost change – Productivity and Yield are constant

When Input Rate changes:

Output Rate and Projected Cost Change – Productivity and Yield are constant

Overrides:

Input Unit Cost Rate \$120.00 / HR Remains the Same

Output Unit Cost Rate \$ 25.26 / CY \$ 120 / 4.75

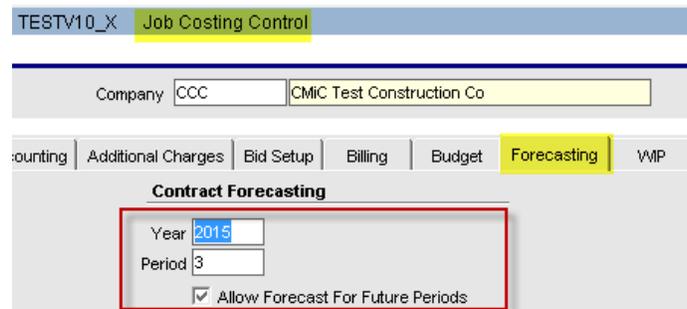
Productivity 4.75 CY / HR as entered in Go Forward Override
Yield .21 HR / CY 1 / 4.75
Estimate to Complete \$ 94,725 3750 * 25.26
Projected Cost \$124,725.00

Frequently Asked Questions

General Questions

1. Where does the Forecast 'Year' and 'Period' default from?

JC Control File > **Forecasting** tab > **Year, Period** fields



The screenshot shows the 'Job Costing Control' window for 'TESTV10_X'. The 'Company' field is set to 'CCC' and 'CMIC Test Construction Co'. The 'Forecasting' tab is selected. The 'Contract Forecasting' section contains a 'Year' field with '2015' and a 'Period' field with '3'. A red box highlights these two fields. Below them is a checked checkbox labeled 'Allow Forecast For Future Periods'.

JC Control > Forecasting Tab

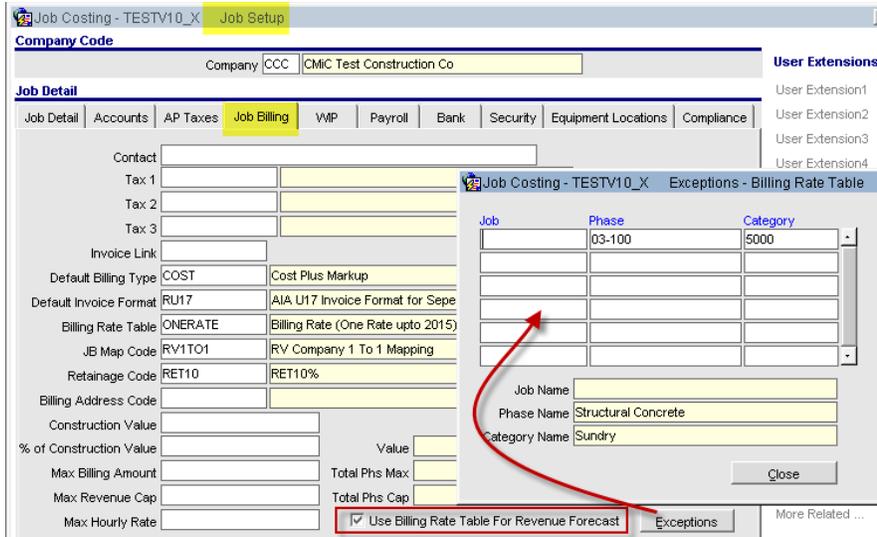
2. What is the difference between using Contract or Job Code in the header?

The Job Structure, may have a Controlling job with many sub jobs. There may be some sub jobs with their own Contract codes as well. When using the Contract Code, users have to select one Contract at a time and then store the forecast as required.

When using the Job field, which allows the users to select the Controlling Job Code (rather only controlling job is available in this field) and all billcodes related to the main and sub jobs will be displayed. Users will be able to forecast, review, override and store forecast for all contracts in one step.

3. Is there any Flag behind the Bill rates to affect Revenue Forecast?

Yes, Job Setup>Job Billing Tab> 'Use billing Rate Table for Revenue Forecast' Flag. You can also exclude any bill code from the effect of multiplier set in bill rate table, by using exceptions button next to the flag. The default values may be set in JC Control > Forecasting Tab and applies to any new jobs created.

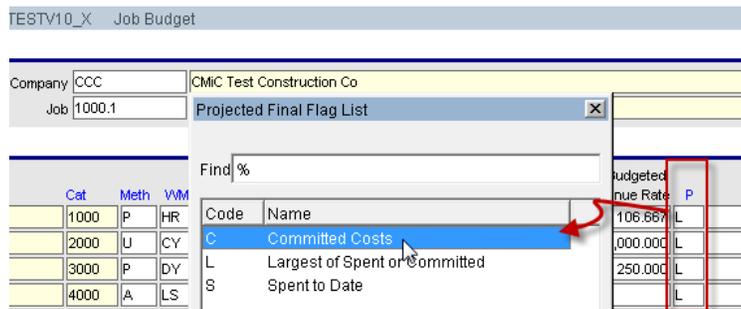


Job Maintenance Form > Job Billing Tab

4. What if a PCI is pending in Period 2 and Posted in Period 3?

The Contract Forecasting Screen should show this PCI as Pending in Period 2 and posted in Period 3.

5. Where is 'Projected Final Flag', which is used in calculation of the column {Spent/Committed against Base Contract}?



It is available in Job Budget Screen against each detail line. To avoid confusion with the name, it is not a flag, but is a field and need to be set as required from the LOV. The valid values are 'C, L and S'.

6. How can we set a default value for the {Projected Final} flag?



In JC Company Control > Job Setup tab, set the required value as default for 'Projected Final Flag' field.

7. Do the Pending and Approved PCIs effect contract forecast in different ways (when include in forecast is checked)?

No, both are treated as Un-posted PCIs and effect the same columns as the other.

Approved PCIs maybe posted readily, whereas 'Pending' ones needs to be approved before posting.

8. How many Budget Methods are available in Phase/Category maintenance?

Category	Name	Bill Code	Billing Type	Ctrl.	WM	Budget Method	Labor Forecast	Time	Spread Rule Code
5000	Sundry			ALL	LS	Amounts	<input type="checkbox"/>	<input type="checkbox"/>	
CFB	Constn Field Burden			ALL	\$	Amounts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
NR	Non Recoverable			ALL	NA	Amounts	<input type="checkbox"/>	<input type="checkbox"/>	

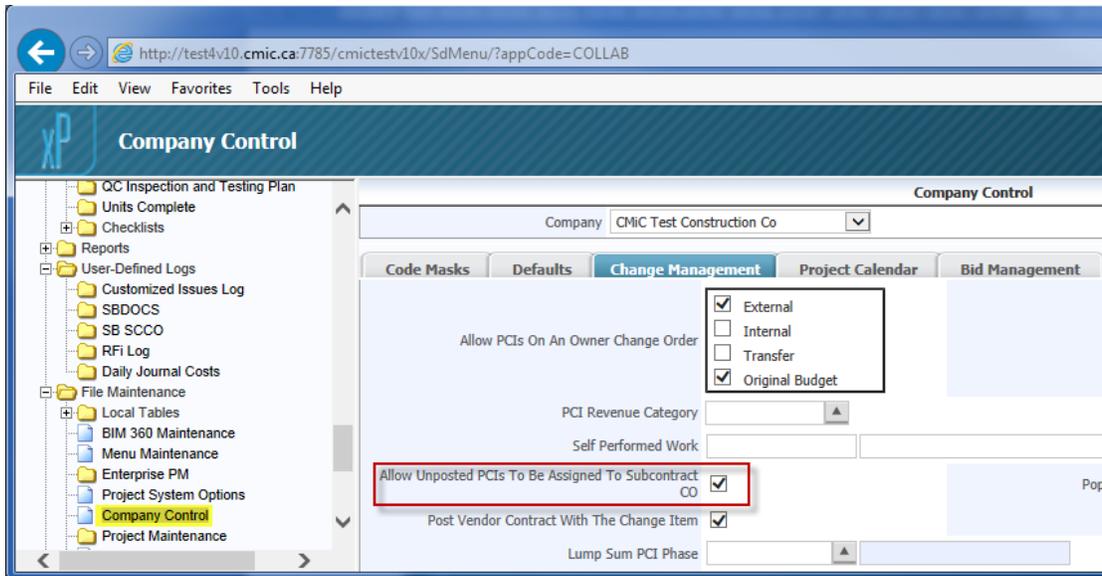
There are 3 budget methods in the drop down list and the 4th one being combination of 'Amounts' with 'Labor ' flag checked.

9. Why do I get the message 'Filed is protected against update' when trying to check the {Labor} Forecast flag?

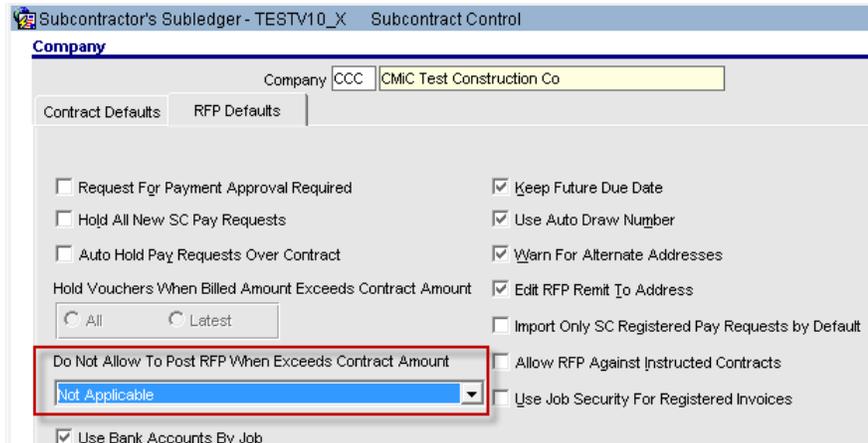
The budget method by design allows only {Amounts} categories to be designated as 'Labor Forecast' lines.

10. Can we assign Pending internal PCI to Subcontract PCI?

Yes, Pending internal PCI can be assigned to SCO if the flag 'Allow un-posted PCIs to be assigned to Subcontract CO' is checked. It is available under PMJSP>File Maintenance>Company Control>Change Management tab.



11. Can a RFP be posted if it exceeds the Contract Amount? How this is related to Contract Forecasting?

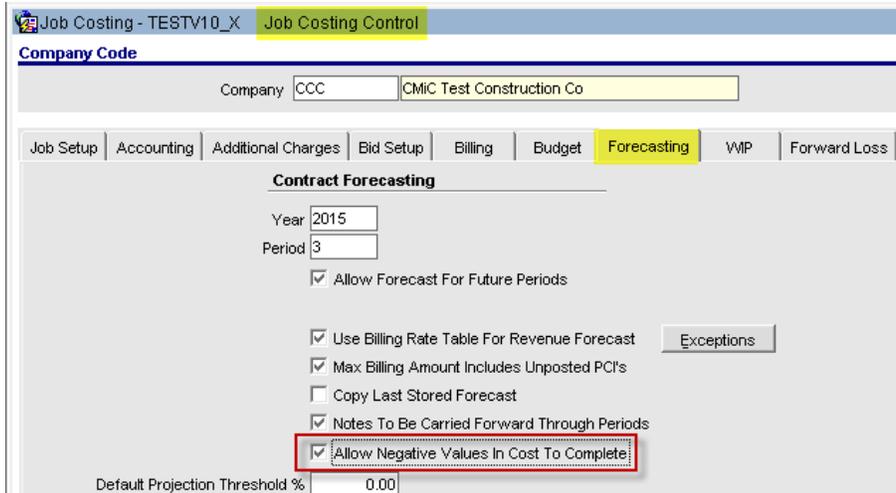


Yes, if drop down value of “Do not Allow to post RFP when exceeds contract amount” is set to ‘Not Applicable’ the RFP exceeding the contract amount can be posted.

When determination of Largest of the spent vs commitment for column {Spent/Committed Total} is to be made, that is when the spent amount can be greater than the commitment.

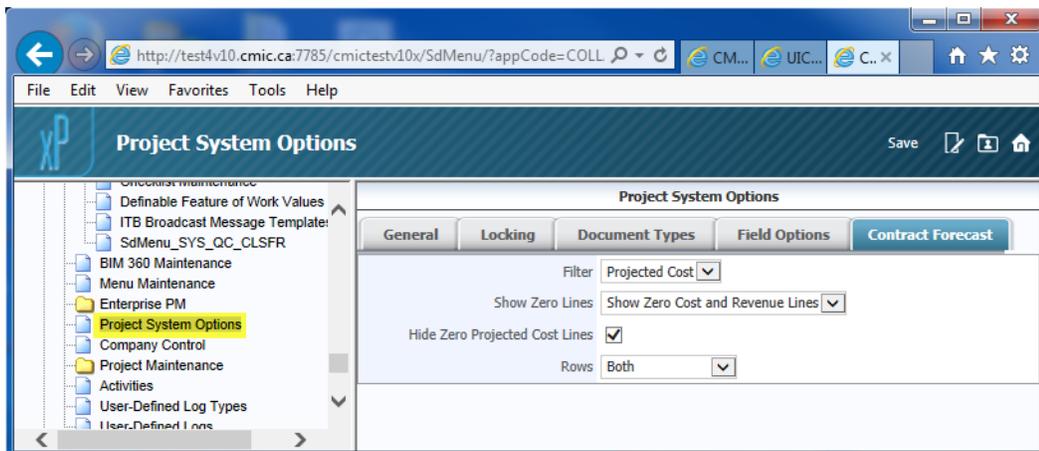
12. How Negative and Positive PCIs Impact Contract Forecasting?

Both PCIs effect contract forecasting in the same way. {Cost to complete} column will reflect the negative posted PCIs by summing up all posted PCIs.



When the summary amount goes negative and if the JC Control > Forecasting tab > 'Allow Negative Values in Cost to Complete' flag is checked, then the column will reflect negative values accordingly.

13. How do I change the default values for the forecast header filters?



Project System Options

The default filter values may be set in project System Options > Contract Forecast Tab.

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