SPECIAL EDITION

KEY FEATURES

RMS 2.38

CONSTRUCTIVELY SPEAKING

US Army Corps of Engineers—Afghanistan Engineer District—

March 12, 2010

Issue No. 4

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HERE WE GO AGAIN
RMS VERSION 2.38

By Sandy Higgins

With the implementation of RMS version 2.38 next week, I thought it would be a good time to let the folks in the field know the key features that you will see in this version. I'm sure if you're like me you're sitting back waiting for a lot of lost time due to glitches that usually occur whenever the RMS gurus decide to rock the boat. I'm trying to be really optimistic with this one primarily because there are some really great features in this version that have been long awaited. I'd like to highlight those for you in this edition of the newsletter. I realize there are a lot of folks getting the newsletter that don't use RMS, but skim through it and hopefully there will still be something interesting for you in this edition.

Let me first start out by letting you know that the majority of the new features deal with access controls and CEFMS finances so most if not all of you in the field won't use these changes. One thing will see instantly is the new look to RMS. The navigation in RMS will remain the same, but the look has been enhanced.

1. Access Control in RMS

The changes in this area are intended to greatly simplify granting access to RMS for our Staff Members by entering data in a single area with only a minimum of keystrokes.

2. Financial Modules Changes — Pay Activity Enhancements

The primary goal for the changes in the finances is to present a picture of finances that will agree with the data found in CEFMS. RMS also now captures more of the CEFMS data for ease in evaluating the contract status. More information is gleaned from existing data related to the Contractor's Pay Activities to better enable you to understand what is actually required and what is being provided by our Contractors.

3. Schedule Enhancements

We have all faced challenges in evaluating the Contractor's construction schedule and comparing it to actual progress and previously accepted schedules. This version of RMS will enable you to see at a glance the difference between the current Activity Schedule and the Previous Accepted Schedule. The program will give us a Summary of the Activities and also a tabulation on comparison between the current and previous schedules.

3. RMS Word Documents — Now referred to as "Word Templates"

Word Templates are now located in the District Library and can be shared between all offices. It is no longer necessary to copy your templates from Office to Office. Make sure you copy and existing documents to the District Library BEFORE the switch is made to this new version. Otherwise, your existing data will be lost.

4. Automated Weather Modifications

This version of RMS will allow you to use existing QA and QC weather entries to determine time extensions that should be issued to the Contractor based on Weather delays. The program will generate a letter to the Contractor, if required and, more importantly, will create the entire change package and Modification for you.

RMS VERSION 2.38 (cont'd)

5. Contractor Insurance and Payroll Tracking

Contractor Insurance (General, Auto, and Workman's Comp) are still entered the same way as previous versions of RMS. The SF1413 is now entered on the "Contractor Payrolls" screen and includes tracking milestones as to when it was received and sent to the District. Contractor Payrolls have been greatly expanded and will even provide the ENG Form 3180 required to be sent to the District. Payrolls are processed very similar to a standard Submittal / Transmittal.

6. Government Action Item Report

This new report is similar to the Contractor Action Item report in that it will present a listing of items that are outstanding and are the responsibility of the Government staff. You will see, for example, the following headings in this report: (There are actually 18 areas that are evaluated for your report.) Contract Issues/Remarks Require Update, Status Photos not Entered, Activities Requiring Final Follow-up Inspection, Submittals in Review, Contract Changes Not Completed, Milestone Events Requiring Schedule Updates, Daily QA Reports not completed.

7. Import Another Contract

This feature is very useful when you have a Delivery Order (Task Order) type contract or, perhaps, O&M Contracts that are very similar in scope and design. This is accomplished from the Import/Export module. You can import the following items from another contract: Contract Description, 3 Phase Inspections, Transfer Property, Project Delivery Team, QC Tests, QA Tests, Prime Contractor, User Schools, Submittal Register, Subcontractors, Installed Property, and Real Property.

8. A-E Performance — Evaluation

You are able to provide evaluation data on the A-E for the Construction phase of the contract. The information will be used by the ACASS Rating Official when completing the DD Form 2631.The rating procedure is similar to the Construction Contractor Evaluation. The completed entry is then emailed to the ACASS Rating Official, as entered on the "Evaluated By" tab.

9. Pay Activity Enhancements

The Pay Activities now include a Tab labeled "Contractors" and "Features". The "Contractor's" tab includes a listing of the Responsibility Code , Trade, Number of Activities assigned to each Contractor/Subcontractor and a Status column that indicates challenges of completing information in QCS as it should be. The Pay Activity detail screen itself, remains unchanged.

10. Closeout Documents

You are able to add as many documents or attachments pertaining to Closeout that you desire in this area. Of course, any documents will need to be created in the District Library before you can do so.

Continued on page 3

PAY ACTIVITIES

All too often we are finding contractors schedules that have cost loaded activities that are not pay items. Remember that cost loaded pay activities should be associated with work in place activities. Although these activities should be in the contractors schedule, they shouldn't have a cost associated with them.

Examples of acceptable pay activities:

- Install windows
- Place concrete
- Excavation of site
- Install lighting
- Trenching

Examples of non-acceptable pay activities:

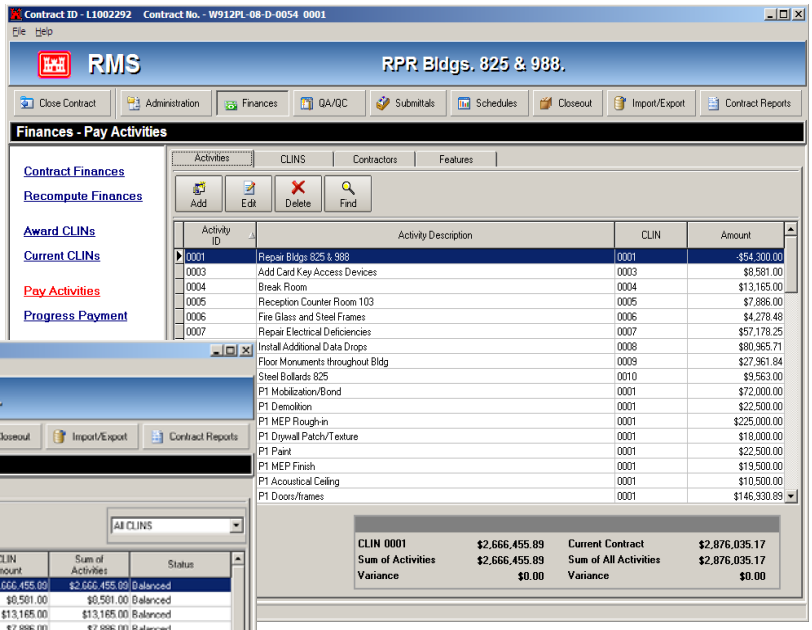
- Procurement of windows
- Delivery of materials
- Submit/Approve QC Plan
- Testing of Compaction
- Fabrication of Roofing

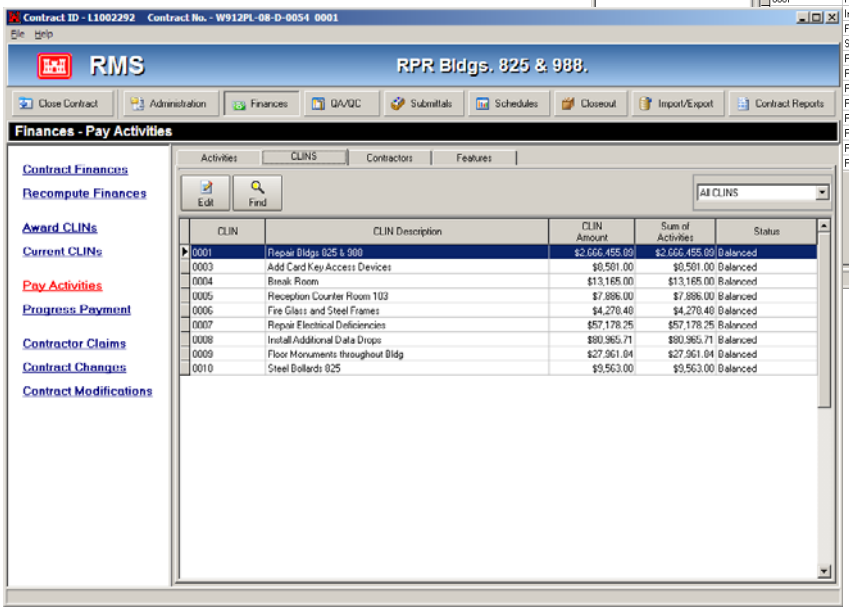
Also remember to determine what the pay activity involves before you agree to pay them at 100%. By making sure that all required items are linked to the pay activity in RMS, you can track it more easily. These items would include submittal requirements, testing, and any deficiencies that may have been issued on the work. If your contractor doesn't link these in QCS it would be beneficial for you to do it in RMS. The contractor does need to cost load as-built drawings, final O&M Manuals, and commissioning of equipment.

RMS VERSION 2.38 (cont'd)

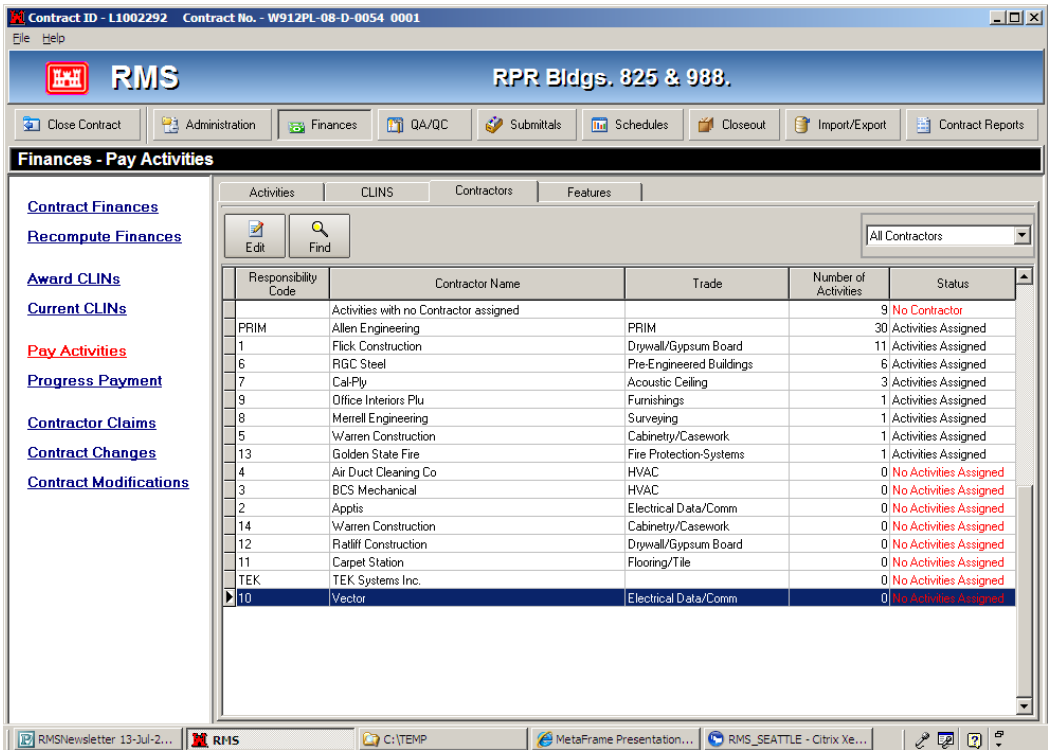
PAY ACTIVITY ENHANCEMENTS

This screen now has four (4) Tabs instead of just two. The first two tabs are the same, and present the same information as previous versions of RMS. Even the individual Pay Activity screen remains unchanged. The two additional Tabs present information regarding the contractors effort in assigning activities to Sub-Contractors and the QC effort in assigning Features of Work to the Activities.





These two screens show the same data as previous versions of RMS.



This "Contractors" tab is new and presents a look at some of the successes and shortcomings of the Contractors' scheduling efforts.

You can readily see how many activities were assigned to each contractor and if NO activities have been assigned to a contractor.

The screen also shows how many activities do not have a Contractor assigned to do the work.

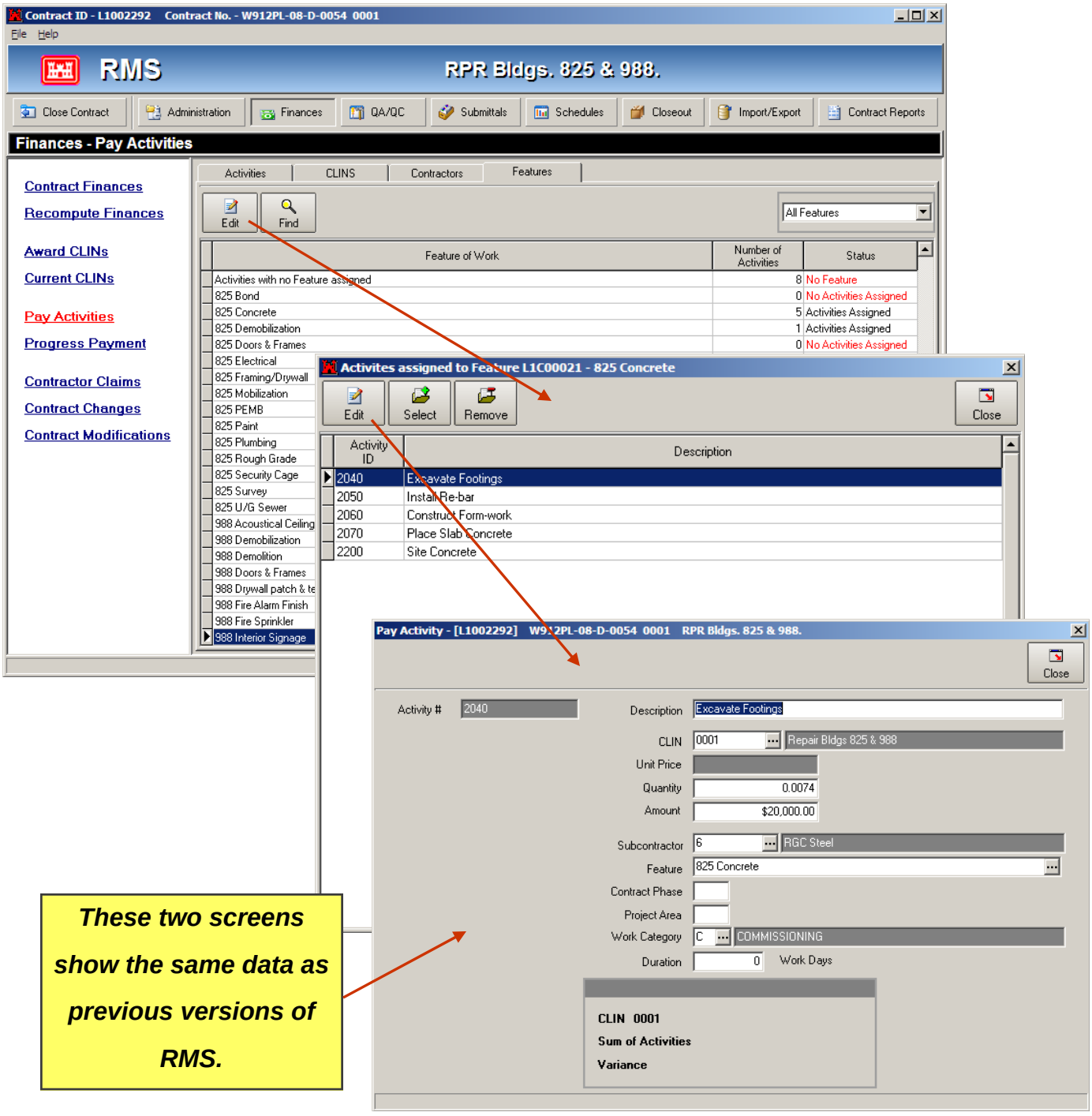
By using the EDIT button, you can view the details of each line and make corrections on the Activity screen itself.

RMS VERSION 2.38 (cont'd)

The "Features" tab is also new and shows how many activities have been assigned to each Feature of Work, or if none have been assigned.

It doesn't make sense to create a Feature of Work and then neglect to assign activities to it. In addition, an Activity Hazard Analysis is required to be prepared for each Feature of Work and without activities associated with it, the AHA would be incomplete.

You can use the "Edit" buttons to view the details and make corrections/adjustments as needed. You can navigate all the way to the Pay Activity input screen if you need to.

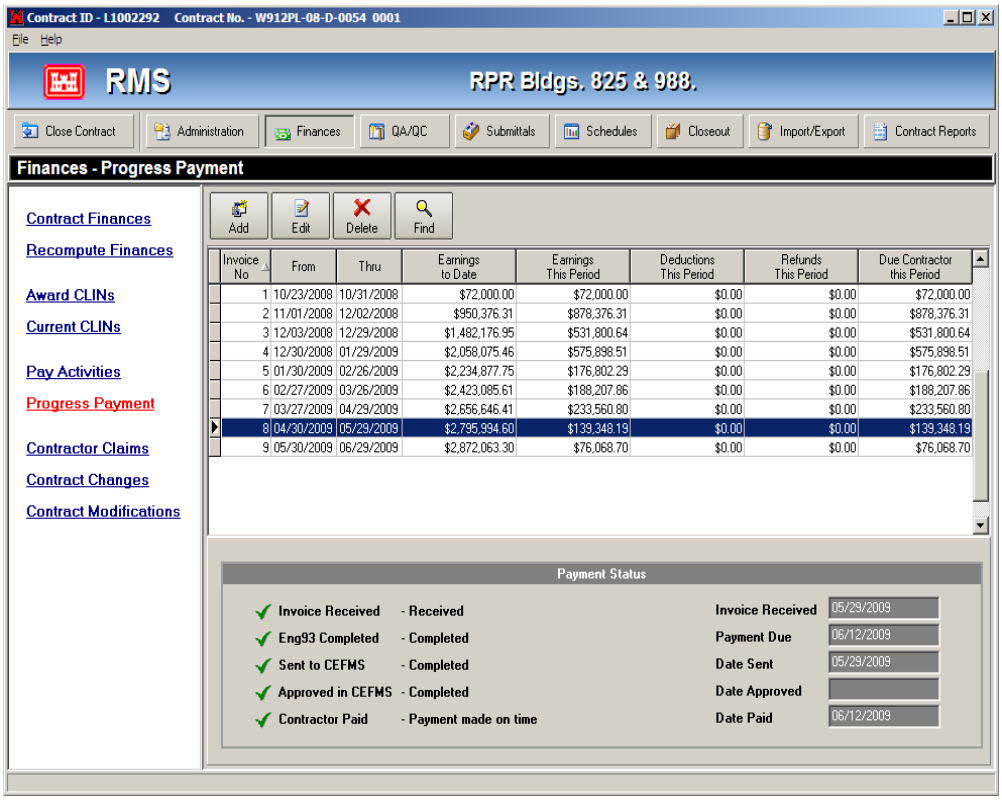


These two screens show the same data as previous versions of RMS.

RMS VERSION 2.38 (cont'd)

PROGRESS PAYMENTS

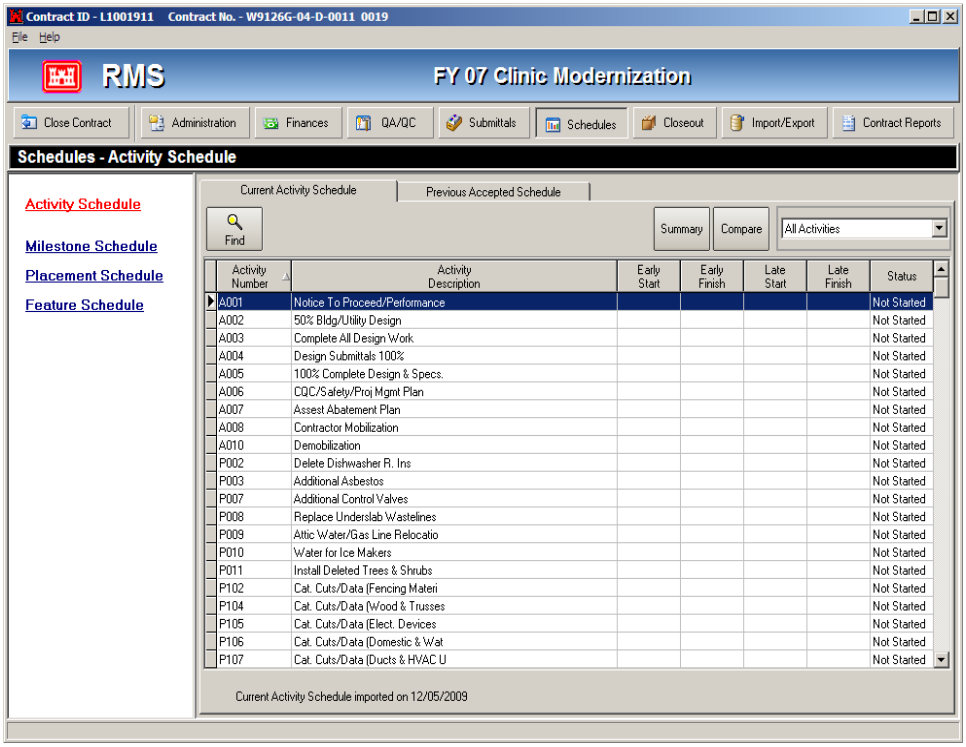
I'm sure everyone will appreciate this new feature. This screen now shows the Deductions and Refunds for the pay period, the amount Due the Contractor for the pay period, and shows the date the payment request was sent to and approved in CEFMS. It's still important that you use the remarks section of the ENG 93 to list your retainages, withholdings, and liquidated damages.



ACTIVITY SCHEDULE

RMS will now present a better picture of the Contractor's scheduling efforts. The Activity Schedule screen now has an additional tab and two buttons to assist in this effort.

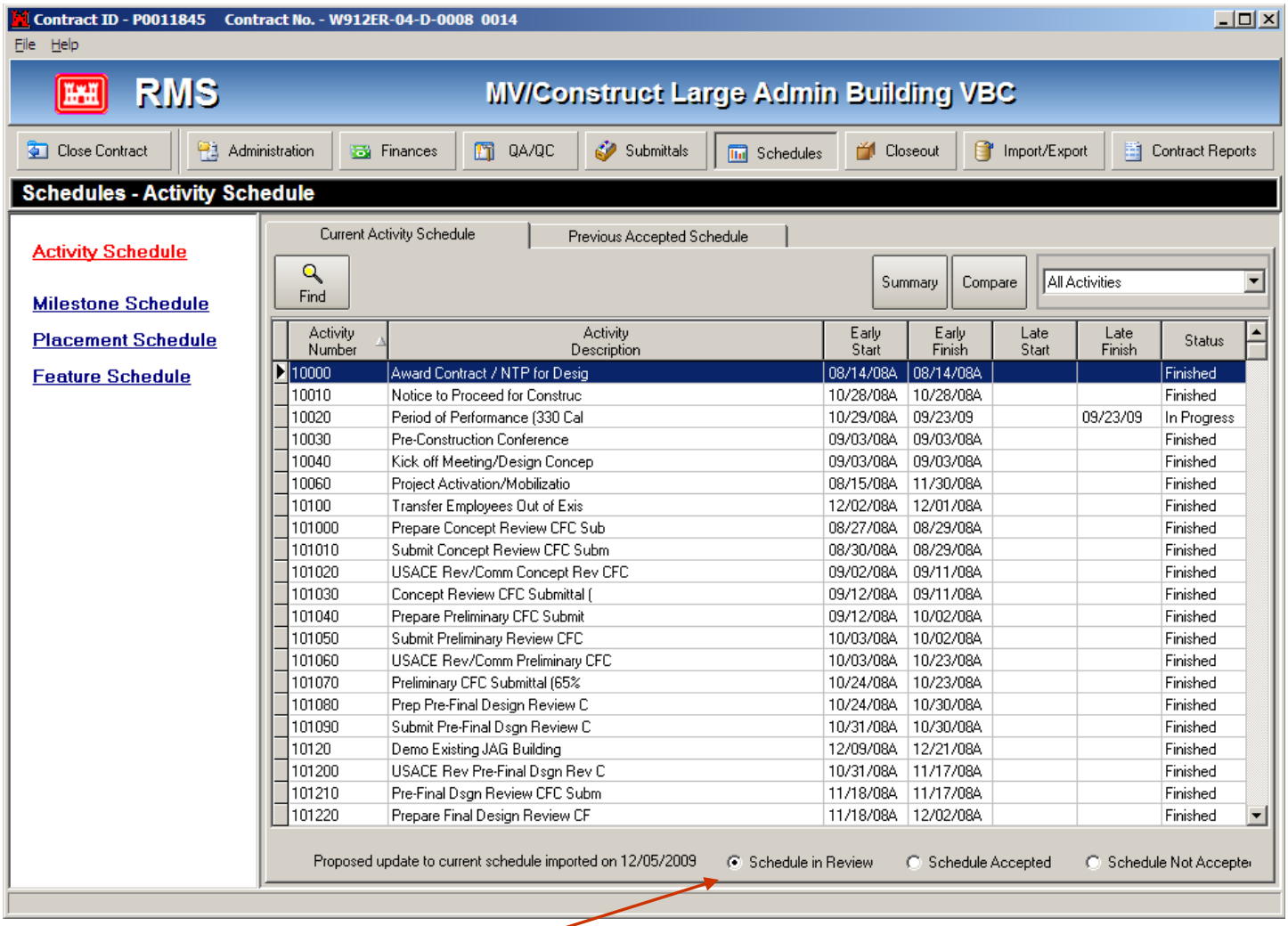
Upon importing the initial SDEF file from the Contractor, both tabs (Current and Previous) will be identical, as you haven't anything yet to compare. Following the next import of the SDEF file, the "Current Activity Schedule" will be moved to the "Previous Accepted Schedule" tab. You can toggle between the tabs and probably see some differences.



However, a much better way to spot the differences is to use the Summary and Compare buttons. The Summary button will show you the Current Activity Schedule Summary and will show a listing of 13 items relative to the schedule, including the scheduled finished date and float.

The Compare button gives you an in-depth look at the schedules when compared. It will show you the Activities Added, Amount Changed on the Activities, Duration Changes, and many others. The compare button will actually create a report that you can review immediately.

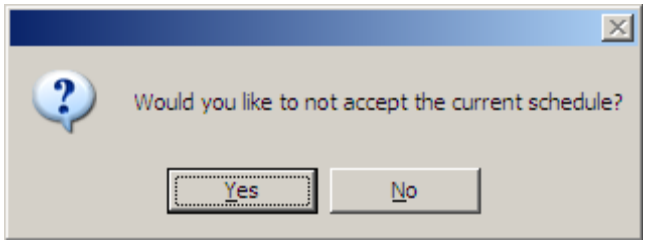
RMS VERSION 2.38 (cont'd)



The radial buttons along the bottom of the screen will show you are reviewing the schedule, you are accepting the schedule, or you are not accepting the schedule.

If you Accept the schedule, the listing will copy the Current Activity to the Previous Accepted Schedule to enable you to repeat the process with your next SDEF import.

If you do not accept the schedule, you will get a message asking if you would like to not accept it, and if you say "Yes", the program will delete it and restore the screen to its previous listing.

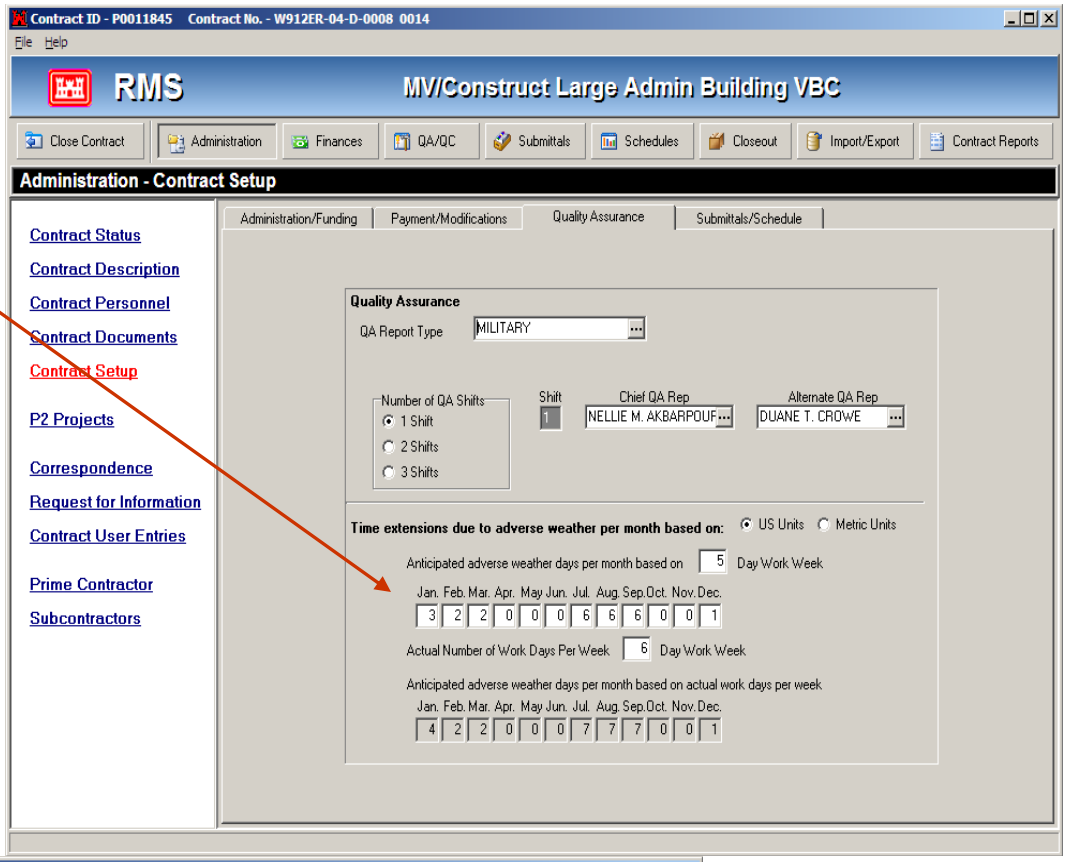


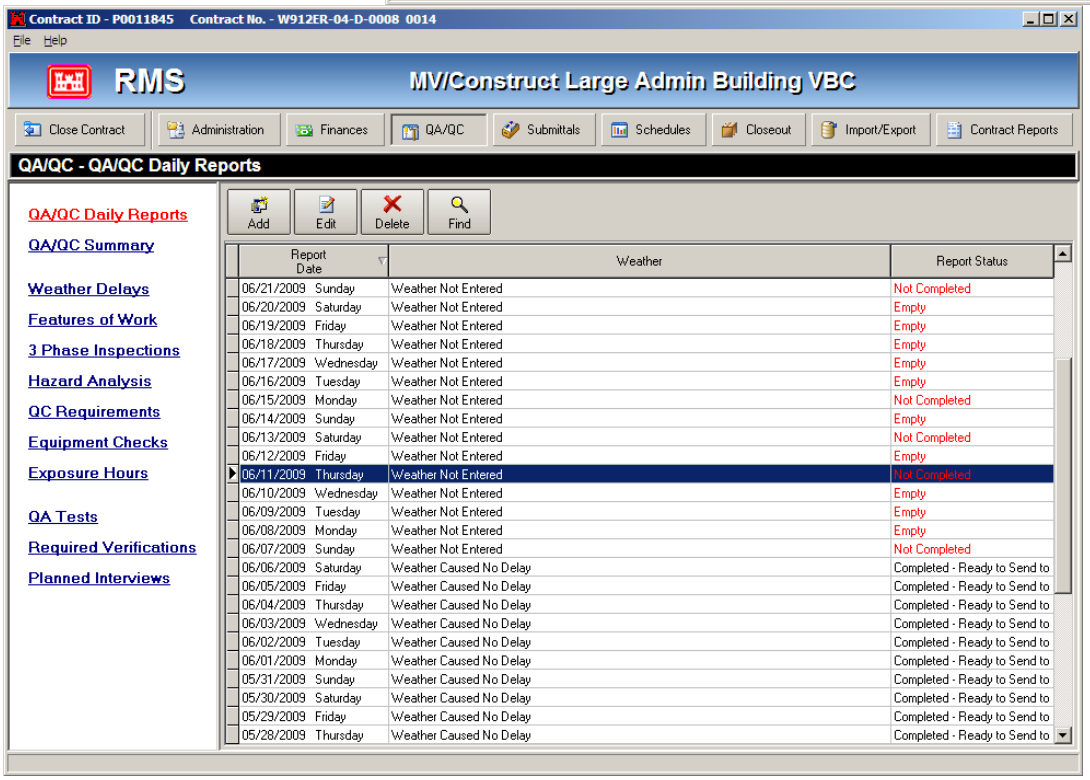
RMS VERSION 2.38 (cont'd)

Automated Weather Modifications

WEATHER TABLE

The Weather table needs to be completed in Contract Setup / Quality Assurance before the new features will work as designed. If the table is not completed, RMS will assume that there are ZERO expected bad weather days and there are ZERO work days per week — pretty lame, huh? It is important to complete this table and enter the Contractor work days per week.





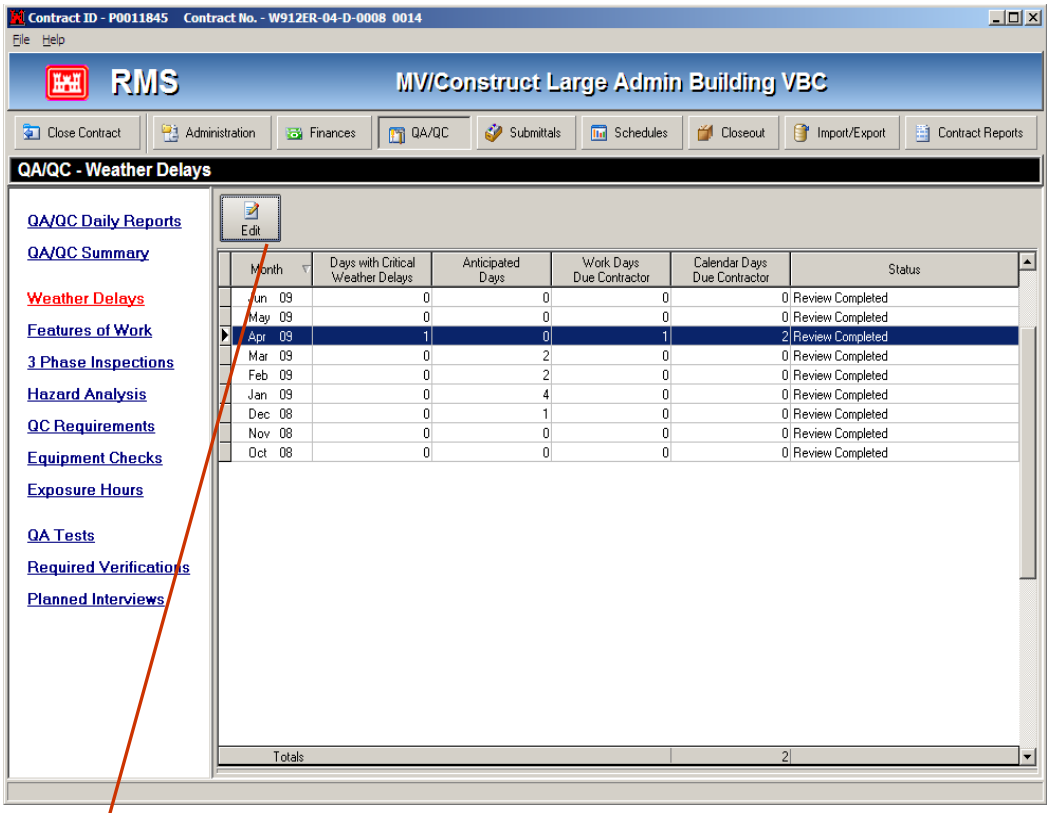
The QA and QC Daily Reports are completed as in previous versions of RMS and the actual weather conditions are entered. Each report should be marked "Complete".

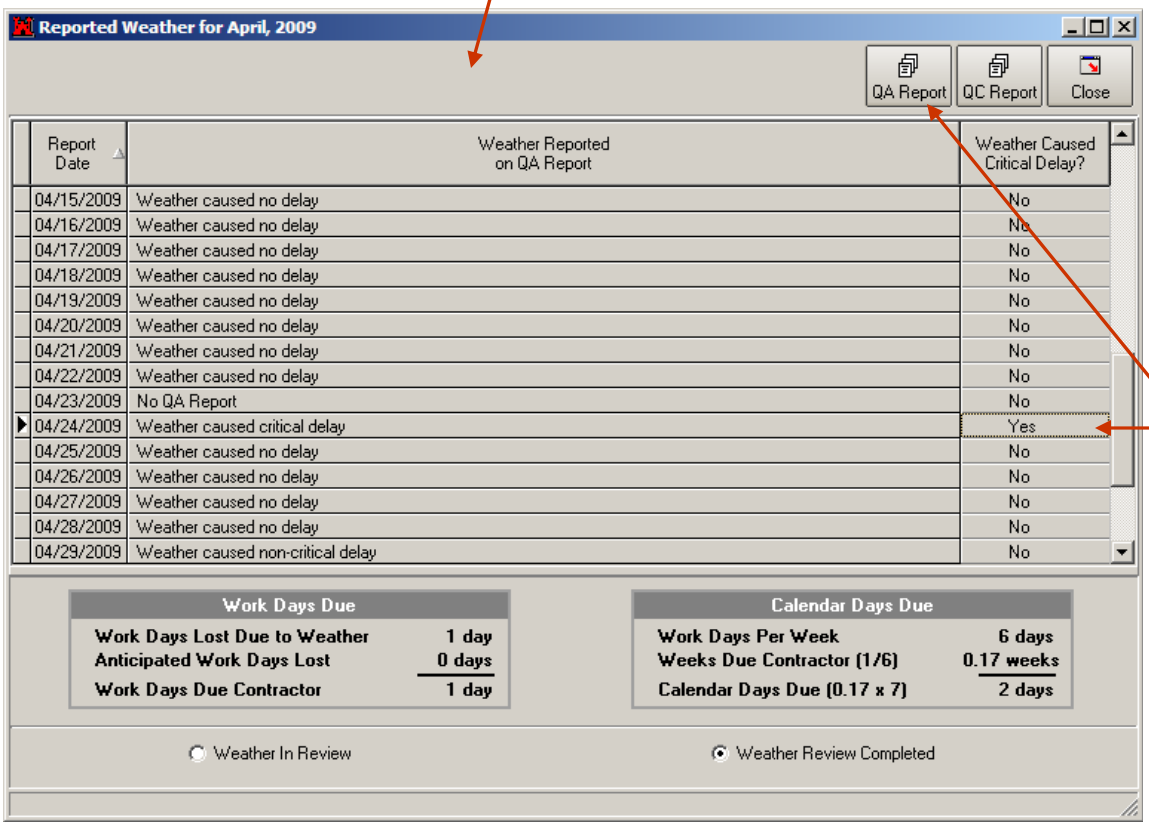
RMS VERSION 2.38 (cont'd)

WEATHER DELAYS

This is a new selection in RMS and will show a tabulation of the QA and QC Reports where weather was reported as a critical delay. It also shows how many work days should be included in a Modification to extend the contract for adverse weather.

When you "Edit" a month that shows a critical day you can go directly to the QA and / or QC Report to review the comments.





Select the day you want to review and push the QA/ QC button to review the report for that day.

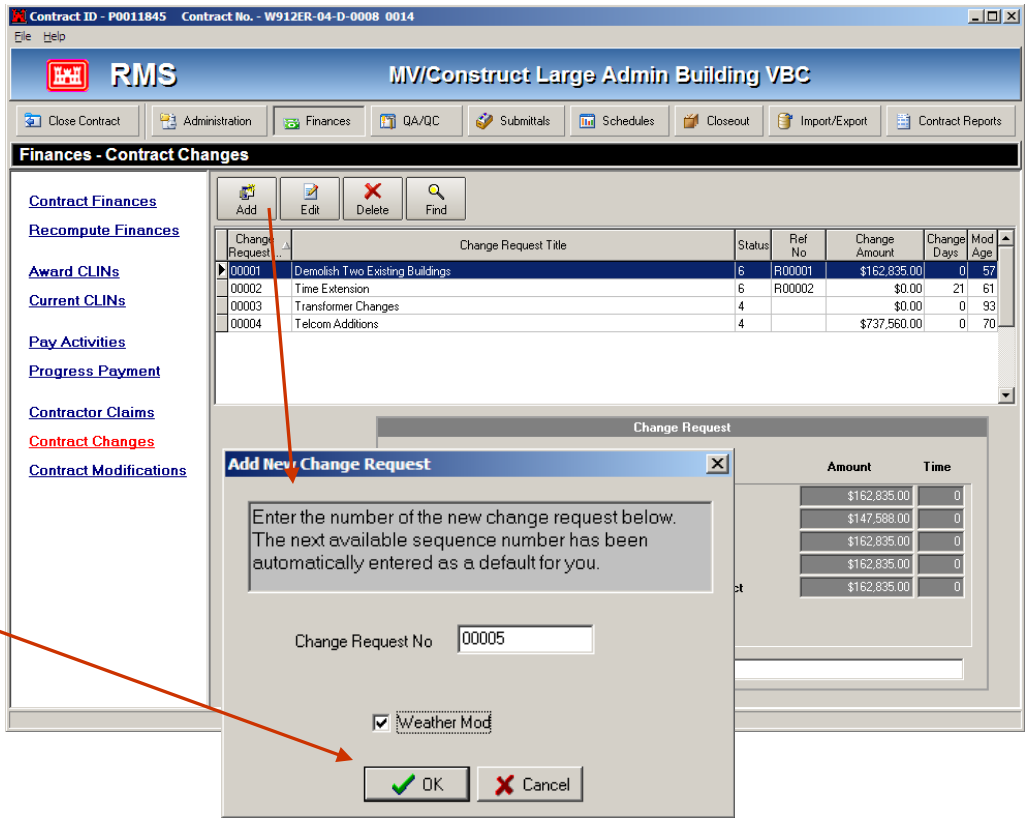
RMS VERSION 2.38 (cont'd)

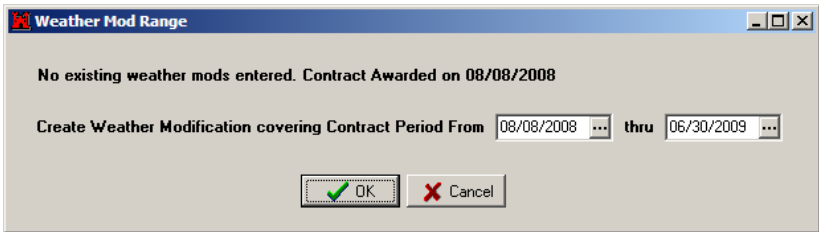
WEATHER CHANGES

We should be evaluating the weather impacts on a monthly basis and issuing a formal modification on at least a quarterly basis when required.

This is about the easiest modification to make within RMS. When a weather mod is required, select the ADD button to enter the Contract Change.

Indicate that is will be a Weather Mod and select OK.

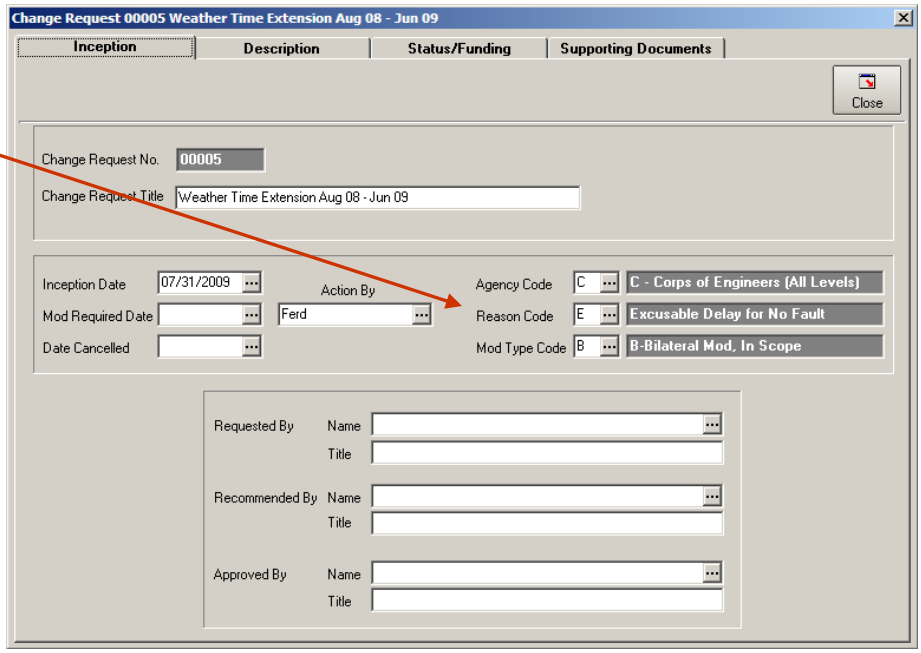




RMS will automatically let you know if a weather mod has been issued and suggest the months you should include in this new Change/Modification.

The default dates will usually be correct, if you have completed each report as required.

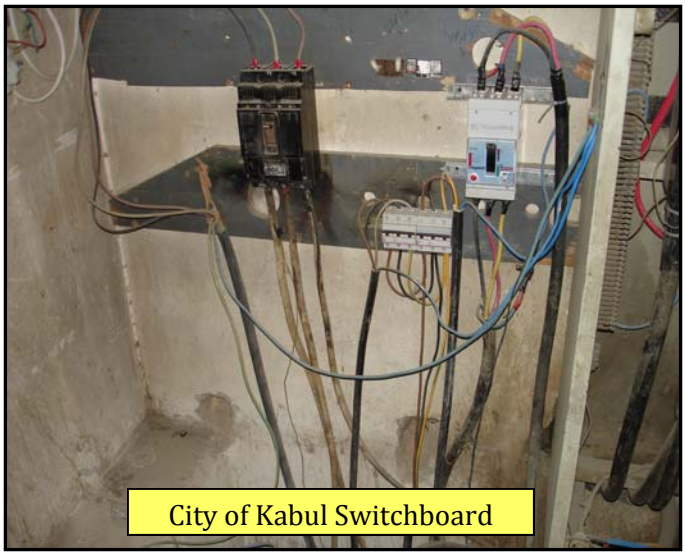
The Change is automatically entered and the Reason Code for the Mod is already indicated.



CHOOSING THE RIGHT CABLE

By Paul Cravens, P.E. Electrical Engineer

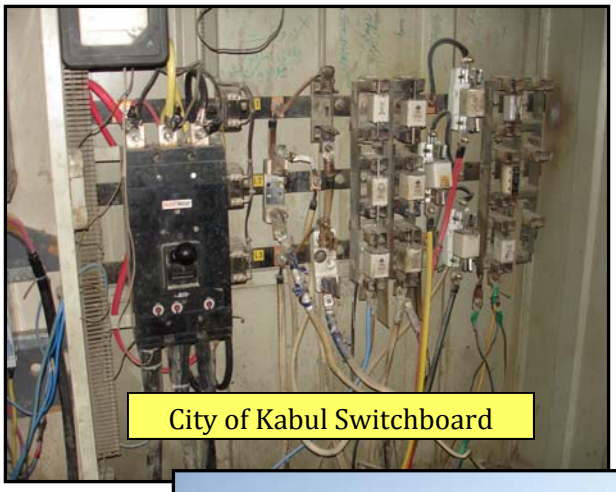
Recently there were electrical fires in new buildings which had been built at one of our Forward Operating Bases (FOB) in the north part of Afghanistan. After investigation, it was determined that the fires were caused by a lack of proper grounding, by conductors that were undersized for the loads that were connected, and for improper connections at the service entrance. Proper grounding and properly sized conductors are crucial for the health and safety of the people that occupy the buildings that are being constructed.


City of Kabul Switchboard

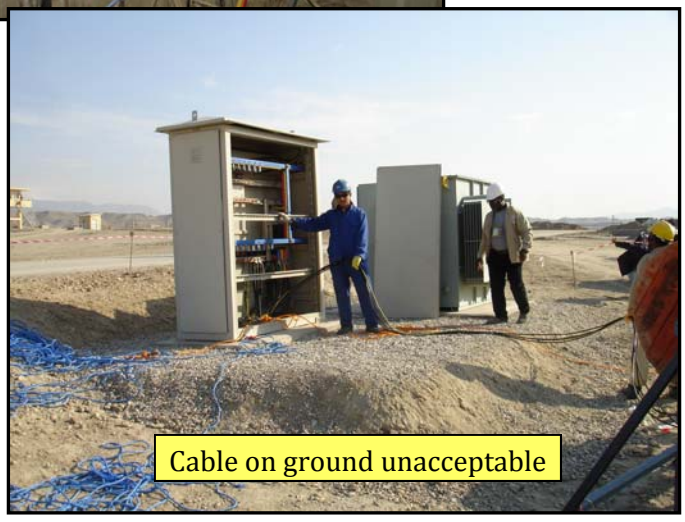
Engineering staff review building designs that are submitted at various steps in the design/build process. For electrical engineering design reviews, a large percentage of our time is spent checking that the conductors that are being installed are sized properly and in accordance with the National Electrical Code. Even after the design is checked and approved and during the construction process, undersized conductors are still being installed into new buildings; fires and damaged equipment are the result.

The Engineering and Construction management team responded to this serious issue by hiring several excellent electrical journeymen to assist in the inspection and identification of electrical construction problems and to take steps to resolve those problems. Two of these electrical journeymen are working with the O&M staff and have already provided real insight into resolving some of the ongoing electrical issues that we see in Afghanistan.

These electrical experts have made tremendous progress in helping to resolve our electrical problems at various sites, and have started to mentor the Afghan contractors, by helping them to understand the proper way to size conductors and choose the proper types/sizes of conductors for the various building projects.


City of Kabul Switchboard

Two of our electrical engineers have developed a tool which helps anyone involved with sizing electrical conductors and choosing the proper conductor for various electrical loads. The tool uses the information from the tables in the National Electrical Code and the IEC. The tool presents the proper wire sizes and impedances for various loads. Cable sizes are presented in the US standard (AWG) and in the Afghan standard (mm^2). This tool is attached for your use and reference.


Cable on ground unacceptable

ALLOWABLE CAPACITIES OF CONDUCTORS RATED 0 THRU 2000 VOLTS

Not more than 3 Current-Carrying Conductors in Raceway/Cable/Earth (86°F)			Impedance (Z) Coated Copper	
Size AWG (Cu)	Size mm^2	Ampacity	ohm/kFT	ohm/km
12	4	20	2.050	6.730
10	6	30	1.290	4.226
8	10	40	0.809	2.653
6	16	55	0.510	1.671
4	25	70	0.321	1.053
3	35	85	0.254	0.833
2	35	89	0.201	0.661
1	50	108	0.160	0.524
1/0	70	136	0.127	0.415
2/0	70	136	0.101	0.329
3/0	95	164	0.080	0.261
4/0	120	188	0.063	0.205
250	150	216	0.054	0.175
300	150	216	0.045	0.146
350	185	245	0.038	0.125
400	240	286	0.033	0.108
500	300	328	0.027	0.087
600	300	328	0.022	0.073

CONSTRUCTION DELAYS

By Philip Di Salvi, Senior Scheduler, Baker Contractor

"Time is of the Essence". We have all heard the term as it relates to construction contracts. But what happens when time itself, or a lack thereof, becomes the problem? Virtually every construction project will experience a delay…most hopefully will not be critical, while others may impact the Critical Path resulting in a delay to contract completion.

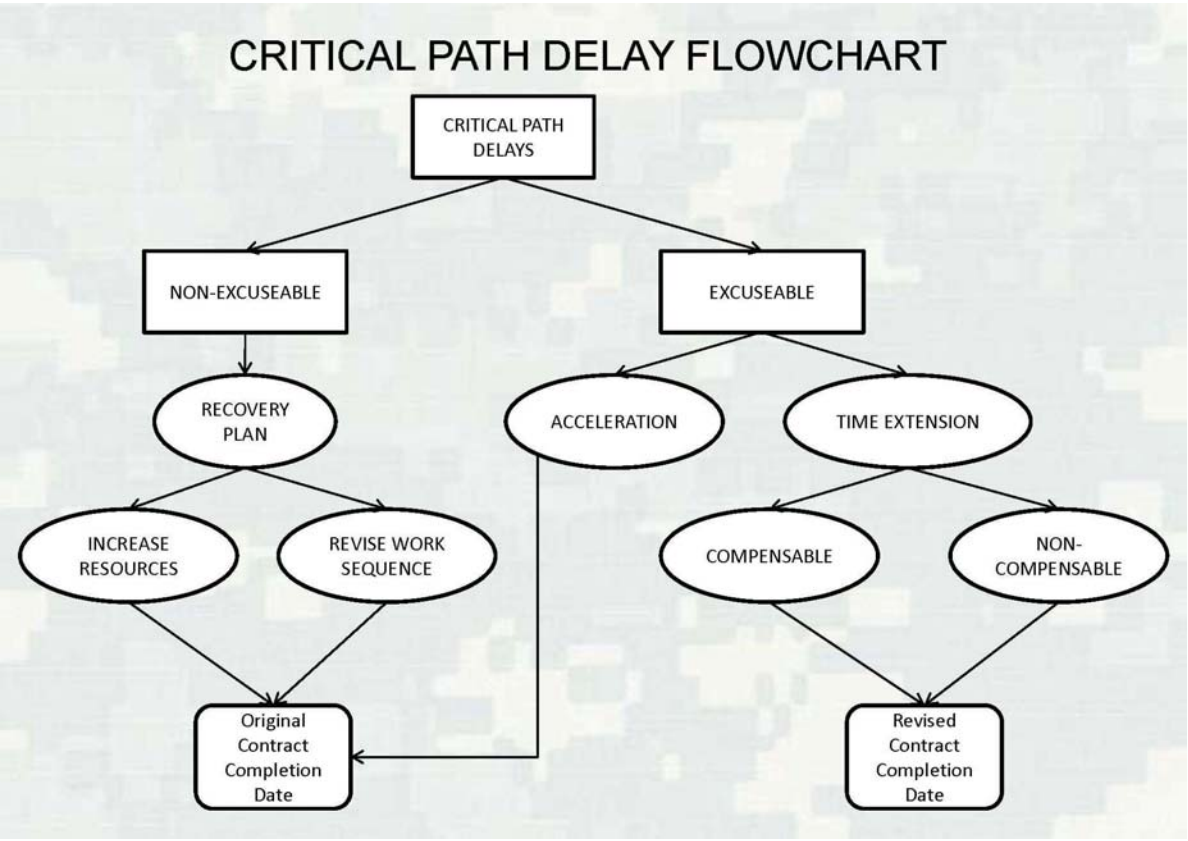
There is no shortage of information and opinions on the subject of construction delays, yet there remains a considerable lack of understanding of the basics. Given the magnitude and complexity of present-day construction projects, it has become necessary for owners, contractors, project managers and superintendents to have a basic understanding of scheduling principles, and the types and causes of delays.

Without a doubt, the added time associated with construction delays will most often result in increased costs due to either extended overhead or acceleration of the work; not to mention the claims consultants and attorneys. Accordingly, a basic understanding of the cause and effect of delays is paramount to the successful management of any construction project.

In simple terms, a construction delay is an impact to a scheduled activity. However, generally only delays to the Critical Path which consume all available float resulting in an impact to the contract completion date are recognized as project critical. Additionally, Critical Path delays can be further separated into two categories; Excusable or Non-Excusable.

It is generally accepted that excusable delays are delays that are unpredictable or unforeseeable and/or those that are outside the control of the contractor and the owner; examples of which might be severe weather, acts of God, fires and floods, hostilities, and strikes, or unforeseen site conditions, and outside or third party intervention. An excusable delay may also be the result of owner direction.

Excusable delays can also be further divided into compensable and non- compensable delays. For example, an excusable and non- compensable delay might be local hostilities, severe weather, and outside or third party intervention. Excusable and compensable delays might be resultant of the addition of work scope, or an owner direction whereupon the contractor might be paid the direct costs for the change and be further compensated for added costs of extended overhead; or be directed to accelerate the work in order to meet the current contract completion date.



On the other hand, non-excusable delays are delays that are predictable or should/could have been foreseen, and those that are within the contractor's control.

continued

CONSTRUCTION DELAYS (cont'd)

While excusable delays will generally result in an extension to the contract duration unless the owner is willing to direct the contractor to accelerate, non- excusable delays seldom extend the contract duration. This may lead to increased costs to the contractor either by having the contractor mitigate the delay, or as a result of liquidated damages should he fail to complete the Works by the contract completion date.

Weather days may also delay a project. Weather days are generally recognized as days on which the work, or a specific portion of the work, cannot occur due to inclement weather. Most often a specific number or days are included in the schedule to accommodate local average weather conditions. However, extreme weather days in excess of those already included in the schedule are generally allowed as non- compensable excusable delay.

One last category of delay to be considered is concurrent delay. If for example the contractor's materials delivery is delayed, and the owner also is experiencing delays along the same logic path, the argument can be made for concurrent delay. However, concurrent delay can be difficult to prove, and the specific components of the overall delay must be segregated to determine responsibility. Moreover, generally one party or the other will commence upon a delay first which may negate the other party's delay. However, the argument for concurrent delay is often used to relieve one party or the other from responsibility and if successful can result in both parties agreeing to a non compensable time extension.

The best early-defense against delay claims is a strong set of schedule specifications and a solid knowledge of construction principles, in concert with good judgment and a broad understanding of construction management practices. Alternatively, a primary tool in analyzing a delay is the use of accepted monthly update schedules. For that reason, it is crucial that a qualified scheduling professional be employed to review baseline schedules for contract compliance, and analyze the subsequent updates in an effort to ensure that all schedule submittals accurately represent the project's current status, the as-built conditions, and a realistic plan for completion.

We have all heard the rule of thumb in real estate investing; "Location, Location, Location". Similarly, the one most important, yet all too often overlooked, requirement to claims mitigation is the need for documentation…. "Document, Document, Document"

Put everything in writing and file it; every document issued on a construction project; every letter, every memo and email; every schedule, every submittal response, every note, etc. Moreover, telephone conversations should be followed up with a confirming document, such as an email. These important documents should be accurately filed either electronically or in hard form for easy accessibility, as someday these documents may be called into scrutiny in an effort to settle a delay claim. Therefore, be sure that you have sufficient documentation to support the facts concerning any delay. End

WE NEED YOUR HELP

We've been doing the newsletter for almost 3 months now. One of the purposes of this newsletter is to provide a way for the field offices to communicate and share information. We still haven't received any stories, articles or suggestions from the field offices. We want to challenge you all to help us to make this a successful venue for communication. Challenge some of your LN's to write an article or share a success story. Please include pictures to help tell the story. Also, please let us know if you have any suggestions to help improve the newsletter such as format.

ADVANCED LNQAR TRAINING HELD

By Tom Urbaniak, P.E. Quality Assurance Branch

The AEN Quality Assurance Branch (QAB) put on a week long training for selected LNQAs from each of our field offices. All of the instructors from QAB had to improve their presentations to come up with something new for our seasoned Local National Quality Assurance (LNQA) Afghan engineers. Subjects like HVAC, Plumbing, Portland Cement Concrete, Reinforced Masonry, and Basic Electrical were some of the technical topics that were presented. Presentations on Safety, Contract Administration, Scheduling, and the LN Contract were also part of the week long course. We are hoping that those who attended the course can take the knowledge and reference materials and conduct the training to fellow LNQAs. QAB is hoping to offer more advanced classes to LNQA's in the very near future with more advanced technical topics and contract administration.

SCHEDULING 101.....OFFERED BY THE BAKER GROUP

The Baker Group is back with a whole new series of classes we like to call Construction Scheduling 101, designed for those who are interested in expanding their knowledge of construction scheduling. These classes are more advanced than the two day class offered monthly on the basic fundamentals of scheduling.

Today we are announcing the start of the special classes for those who would like to expand their scheduling knowledge. Contractors are especially encouraged to require their schedulers to attend to learn how to better prepare and manage their schedules as required per USACE.

To be held in the K-Span starting March 15, and for the following seven weeks, the Baker Group will be offering courses in such subjects as:

March 15 - Introduction to Schedule Development/Contract Compliance
March 22 - An Overview of Primavera (P3)

March 29 - Learning to Code: Work Breakdown Structure; Construction Logic and Sequence; and Calendars

April 5 - Understanding Design, Procurement and Submittals

April 12 - How do we Cost & Resource Loading; what are CLINS

April 19 - Basics of Developing the Baseline Schedule and Loading into QCS; and review of the Baseline Evaluation Form

April 26 - Time to Update: How to Properly Update a Schedule / Developing a Recovery Plan

May 3 - Preparation of Weekly and Monthly Schedule Reports and Layouts (Primavera)

To register for the class, please forward your request to TAN.Baker.Group.USACE. Army. Mil. and a confirmation will be returned reserving your slot. Space is limited. You will be required to be at the Qalaa House Gate in Kabul every morning by 7:30 for check-in. Classes will be held between 8:00 AM-Noon each session. Proper identification will be required for gate entry. No cell phones or personal computers will be allowed.