STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

MANUAL CHANGE TRANSMITTAL		NO. **13-8**
TITLE: Department of Transportation *Construction Manual*	APPROVED BY: Shirley Choate for Mark Leja, Chief Division of Construction	DATE ISSUED: June 27, 2013
SUBJECT AREA Table of Contents and various sections of the *Construction Manual*	ISSUING UNIT Division of Construction	
SUPERSEDES CPB 00-8, CPB 05-3, CPB 06-4, CPB 08-6, CPB 09-1, CPB 09-2, CPB 09-9, CPB 10-4, CPB 10-6, and CPB 12-1 CPD 01-6 and CPD 09-10	DISTRIBUTION All Requested Manual Holders	

This manual change transmittal delivers the revisions of the Chapter 3, Sections 6, 8, and 9 of the *Construction Manual*. Updated sections may contain updated language, information, corrections, and references resulting from updates to the 2010 *Standard Specifications*, and from policy, and procedural changes. Change bars in the margins of the revised sections indicate text that was changed or added.

Please update your manual according to the table below.

Section	Incorporates	Remove Old Page(s)	Insert New/Revised Page(s)
Table of Contents	None	TOC.1	TOC.1
Goldenrod, Chapter 3, Section 6, “Control of Materials”	None	3-6.i	3-6.i
Chapter 3, Section 6, “Control of Materials”	None	3-6.1 thru 3-6.8	3-6.1 thru 3-6.7
Goldenrod, Chapter 3, Section 8, “Prosecution and Progress”	None	3-8.i thru 3-8.ii	3-8.i thru 3-8.ii
Chapter 3, Section 8, “Prosecution and Progress”	Refer to summary below for incorporated CPBs.	3-8.1 thru 3-8.37	3-8.1 thru 3-8.26
Goldenrod, Chapter 3, Section 9, “Payment”	None	3-9.i thru 3-9.iii	3-9.i thru 3-9.iii
Chapter 3, Section 9, “Payment”	Refer to summary below for incorporated CPBs and CPDs.	3-9.1 thru 3-9.40	3-9.1 thru 3-9.41

Section 3-6, "Materials"

- Reorganizes and updates subsection titles to align with 2010 *Standard Specifications*.
- Updates references to align with 2010 *Standard Specifications*.
- Updates terminology and text to align with 2010 *Standard Specifications* and current policy.
- Removes references to outdated forms.
- Minimizes redundancies within *Construction Manual*.
- Updates cross references within *Construction Manual*.
- In Section 3-601, "General," adds information on where to find the products which will be inspected by METS and which products METS has assigned to be inspected by the resident engineer.
- Moves prior Section 3-603, "Defective Materials," into Section 3-514, "Noncompliant and Unauthorized Work."
- In prior Section 3-605A, "Buy America Requirements," deletes references to 23 CFR 635.410 since it is referenced in the *Standard Specifications*.
- Moves parts of prior Section 3-607, "Local Materials," into Sections 3-510A, "Permits, Licenses, Agreements, and Certifications," and 3-510B, "Contractor-Property Owner Agreement."
- Updates and moves Example Supplemental Materials Site Agreements between a contractor and a property owner for acquiring or disposing of material on the owner's property to Section 3-510B, "Contractor-Property Owner Agreement."
- Adds Section 3-604, "Quality."
- Adds Section 3-611, "Guarantee."

Section 3-8, "Prosecution and Progress"

- Update section title to align with 2010 *Standard Specifications.*
- Updates references to align with 2010 *Standard Specifications*.
- Updates terminology (e.g., change order, time adjustment, payment adjustments, start of job site activities).
- Updates cross references within *Construction Manual*.
- Incorporates the following Construction Policy Bulletins:
  - CPB 12-1, "Use of 'Other Days'"
  - CPB 10-4, "Smart Start—Beginning of Work Specification"
  - CPB 06-4, "Beginning of Work"
  - CPB 00-8, "Contract Administration of Time Related Overhead" (TRO Q Sheet and Instructions are not included.)

Section 3-9, "Payment"

- Updates section title to align with 2010 *Standard Specifications*.
- Updates references to align with 2010 *Standard Specifications*.
- Updates terminology (e.g. change order, time adjustment, payment adjustments, start of job site activities, bid item) and removes references to outdated forms (e.g., CEM-4902, "Extra Work Bill (Short Form)").
- Updates cross reference within *Construction Manual*.
- Includes revision to materials on hand payment for the raw material for Piling, Structural Steel and Sign Structures. Language is in Section 3-906E, "Materials on Hand," to match direction provided by Office of Structure Construction.

- Incorporates the following Construction Policy Bulletins:
  - CPB 10-6, “Revised Special Provision for Asphalt Price Index Fluctuations.”
  - CPB 09-9, “Rental Invoice Reimbursement for Equipment on the Jobsite.”
  - CPB 09-2, “Asphalt Price Adjustments.”
  - CPB 09-1, “Partial Payment for Structural Concrete, Bridge.”
  - CPB 08-6, “Force Account Markups.”
  - CPB 05-3, “Compensation Adjustment for Price Index Fluctuations.”
  - CPB 00-8, “Contract Administration of Time Related Overhead.” (TRO Q Sheet and TRO Q Sheet Instructions are not included as these are superseded by current policy.)

- Incorporates the following Construction Procedure Directives:
  - CPD 09-10, “Supplemental Progress Payment Estimates.”
  - CPD 01-6, “Unsatisfactory Progress of Work.”

CONSTRUCTION MANUAL

TABLE OF CONTENTS

Chapter-Section

1 Caltrans Construction Organization

1-0 Construction Manual Overview
1-1 Construction Organization
1-2 Public Relations
1-3 Personnel Development
1-4 Facilities and Equipment
1-5 Field Expenses and Purchases

2 Safety and Traffic

2-1 Safety
2-2 Traffic
2-3 Major Construction Incidents

3 General Provisions

3-0 Introduction
3-1 General
3-2 Bidding
3-3 Contract Award and Execution
3-4 Scope of Work
3-5 Control of Work
3-6 Control of Materials
3-7 Legal Relations and Responsibility to the Public
3-8 Prosecution and Progress
3-9 Payment

4 Construction Details

4-00 Introduction
4-10 Dust Control
4-11 Quality Control and Assurance
4-12 Construction Area Traffic Control Devices
4-15 Existing Highway Facilities

Section 6 Control of Materials

3-601 General

3-602 Department-Furnished Materials

3-603 Local Materials

3-604 Quality

3-605 Brand or Trade Names and Substitutions

3-606 Certificates of Compliance

3-606A Buy America Requirements

3-606A (1) Resident Engineer Approval of Minimum Use Requirements

3-606A (2) Federal Highway Administration Approval of Waivers

3-607 Out-of-State Fabrication

3-608 Testing

3-608A Operating Range and Contract Compliance

3-609 Testing by Contractor

3-610 Suspected Fraudulent Test and Inspection Reports

3-611 Guarantee

3-611A General

3-611B Work Not Completed by Contractor

This manual is being updated to reflect changes from the 2006 to the 2010 *Standard Specifications*. Bracketed section numbers refer to the 2006 *Standard Specifications*.

Section 6 Control of Materials

Section 6 Control of Materials

3-601 General

3-601 General

Section 6, "Control of Materials," of the *Standard Specifications*, describes the contractor's responsibilities regarding materials used on the project.

The service life of a properly designed highway depends on the construction methods and quality of materials used in the highway's construction. The resident engineer must ensure that materials used in the work comply with contract specifications. This section presents general guidelines for ensuring that specifications are met.

Caltrans' Office of Materials Engineering and Testing Services (METS) will assign inspectors for materials that require inspection during manufacture or at the source of supply. Obtain a properly completed Form CEM-3101, "Notice of Materials to Be Used," which lists the contractor's sources of materials and the location at which those materials can be inspected. Review this form to ensure that all expected materials are included, then forward the completed form to METS. METS will ensure the proper assignment of inspectors and notify the suppliers of the required inspections.

For a list of products inspected by METS, see Table 6-2.2, "Inspection of Fabricated and Manufactured Materials," of this manual.

Not all products will be inspected by METS. METS has assigned to the resident engineer the inspection and release at the job site of those products listed in Table 6-2.1, "Materials Accepted by Resident Engineer," of this manual.

Do not allow any material to be incorporated into the work until the required evidence or certificate of inspection has been received and until the field inspection has been completed at the job site.

3-602 Department-Furnished Materials

3-602 Department-Furnished Materials

Section 6-2.03 [*6-1.02*] "Department-Furnished Materials," of the *Standard Specifications* describes the conditions under which the contractor receives department-furnished materials. The resident engineer's duties related to these materials include the following:

- Review the special provisions for materials to be furnished. For materials manufactured specifically for the project, such as signs, check with the district unit responsible for ordering them to ensure they will be available when the contractor requests them.
- Obtain the contractor's written request for all department-furnished materials. Retain a copy of the request in the project file under Category 52, "Charges to Total Contract Allotment."
- Ensure the contractor signs a receipt for the materials when they are delivered. Retain a copy of the receipt in the project file.

- If department-furnished materials are damaged or lost, deduct a sufficient amount from the contractor's monthly estimate to cover the estimated cost of repair or replacement, pending such repair or replacement.
- Ensure the return or disposal of department-furnished material that has not been used in the work.

3-603 Local Materials

3-603 Local Materials

Section 6-2.04 [*6-2*], "Local Materials," of the *Standard Specifications*, covers the requirements for the use of local materials and the resident engineer's responsibility for testing the material. This section also requires the contractor to furnish material from any source the contractor may elect, except that when mandatory local sources of certain materials are designated in the special provisions or on the plans, the contractor must furnish material from those designated mandatory sources.

If the contractor elects to obtain material from a non-mandatory local source, the contractor is responsible for making all arrangements necessary to obtain materials from that source. The contractor must furnish the resident engineer with a copy of the contractor's agreement with the property owner and provide copies of all necessary permits, licenses, and environmental clearances prior to removing any material. Refer to Section 3-510, "Coordination With Other Entities," of this manual and Section 5-1.20 [*6-2.01*], "Coordination With Other Entities," of the *Standard Specifications* for additional information.

Where Caltrans has entered into agreements with property owners in the vicinity of a project for obtaining material from an owner's property, the arrangements are made solely for the purpose of providing all bidders an equal opportunity to obtain material from that property. Provide the contractor a copy of the agreement between Caltrans and the property owner. Refer to Section 3-510, "Coordination with Other Entities," of this manual for more information.

The special provisions may require the contractor to obtain materials from a specified source. It may be necessary for the contractor to process the material as indicated in the special provisions to produce acceptable materials from this source.

If the resident engineer determines that the specified local material source can no longer be used for any reason, designate an alternative local material source for the balance of the material. Pay for the costs associated with the change in material source as extra work.

Occasionally, it becomes necessary to obtain additional embankment material from outside the local area when the contract does not allow the contractor to import non-local material because there is no item for "imported borrow." Under these circumstances, it is normal practice for Caltrans to locate an alternative source for this material. Consult with the district materials engineer for help locating an alternative material source.

In accordance with the State Contract Act, material sources must comply with the Surface Mining and Reclamation Act of 1975 (SMARA). Refer to Chapter 7, "Environmental Stewardship," of this manual and the Department of Conservation's website at the link provided later in this section for further information regarding SMARA requirements.

If a change order directs the contractor to obtain material from Caltrans' chosen source, the Federal Highway Administration (FHWA) considers the source mandatory. The

FHWA then requires written approval of a public interest determination before approval of the change order.

At a minimum, the public interest determination, written by the resident engineer, must include the following:

- The reason the chosen source is the most economical. If the determination is not based on economy, other reasons such as public safety or convenience must be included.
- The alternatives considered.
- The effect on the value of the material site.

All such sites are subject to compliance with SMARA. Mining operations determined to be in compliance are listed on the AB 3098 SMARA Eligible List. This list can be obtained from the Division of Construction or at the Department of Conservation's website:

http://www.consrv.ca.gov/OMR/ab_3098_list/index.htm

The above requirements do not apply to "local borrow," as defined in Section 19-7 [*19-7.01*], "Borrow Material," of the *Standard Specifications* and the special provisions. Refer to Chapter 7, "Environmental Stewardship," of this manual for a list of mining operations which are and which are not subject to SMARA requirements.

3-604 Quality

Section 6-3.04, "Quality Control," of the *Standard Specifications* informs the contractor of general quality control requirements regarding the materials incorporated into the work. Ensure the contractor maintains thorough quality control records.

Section 6-3.05, "Quality Assurance," of the *Standard Specifications* allows the resident engineer access to the material sources for quality assurance. Refer to Section 3-501, "General," of this manual for information regarding safe access.

The resident engineer and their authorized representatives have a primary duty to sample and test the materials incorporated into the work to ensure compliance with the *Standard Specifications*, special provisions, and plans within the tolerances specified. When tolerances are not specified, the resident engineer and their authorized representatives use judgment in determining the allowable deviation consistent with the trades and materials involved.

Deduct retesting costs. Contact the district materials engineer who oversees the district materials lab for guidance on determining the costs. For hot mix asphalt verification retesting, refer to Section 39-1.03E, "Job Mix Formula Verification," of the *Standard Specifications*.

3-605 Brand or Trade Names and Substitutions

When specific brand or trade names are used to designate required products, the contractor may furnish other products that are of equal or better quality.

A product is not necessarily equivalent merely because it is on an approved products list published by Caltrans. These lists indicate that the products meet the general qualifications. However, some of the listed products may not meet the specific needs of the project or may not be appropriate for a particular location due to factors such as climate conditions or maintenance difficulties. Consult with the responsible unit (the

design unit, traffic unit, maintenance unit, or METS, among others) before making decisions about the acceptability of substitutes.

3-606 Certificates of Compliance

3-606 Certificates of Compliance

For a discussion about certificates of compliance, refer to the subsection titled "Materials Accepted on the Basis of a 'Certificate of Compliance'" in Section 6-2, "Acceptance of Material and Sampling Methods," of this manual.

3-606A Buy America Requirements

Section 6-2.05 "Buy America" of the *Standard Specifications* includes Buy America provisions for crumb rubber, steel, and iron materials.

A discussion of the Buy America requirements should be included in preconstruction conferences for federal-aid projects.

To be considered a domestic material, all manufacturing processes must take place domestically. Manufacturing begins with the initial melting and mixing and continues through the bending and coating stages. If a domestic product is taken out of the United States for any process, it becomes a foreign source of material.

The manufacturing process for steel and iron products is considered complete when the product is ready for use in items such as fencing, posts, and girders. It could also be considered complete if the material could be incorporated as components of a more complex product through a further manufacturing process, as is the case for a traffic signal head. The final assembly process does not need to be accomplished domestically as long as the steel or iron component is only installed and no manufacturing process is performed on the steel or iron component.

A certificate of compliance from the manufacturer (not the contractor) showing compliance with Buy America requirements must accompany all steel and iron products incorporated into a federal-aid project. The resident engineer must ensure receipt of the required certificates of compliance and mill test reports.

3-606A (1) Resident Engineer Approval of Minimum Use Requirements

Buy America requirements do not apply to a minimal use of steel and iron materials incorporated in the work as specified in Section 6-2.05C, "Steel and Iron Materials," of the *Standard Specifications*.

Before incorporating any foreign steel and iron materials into the work, the contractor must submit documentation of the quantity and value of any foreign steel and iron to the resident engineer. Review the documentation to determine if it supports the minimum use rule before allowing the material to be incorporated into the project. If the minimum use rule applies, approve the exception in writing. This applies as a one-time total exemption for each contract, not for each purchase. File the documentation, exceptions, and a running total of the value of foreign steel and iron allowed under the minimal use allowance under Category 41, "Report of Inspection of Materials."

3-606A (2) Federal Highway Administration Approval of Waivers

Caltrans does not have the authority to allow the use of foreign steel and iron in federal-aid projects without FHWA approval. The California FHWA Division administrator may grant waivers only upon receiving concurrence from FHWA headquarters in Washington, D.C. Approval or denial may take several months.

Approval by FHWA of the waiver is required prior to allowing foreign steel or iron that exceeds the minimum use rule into the project. Lack of an FHWA-approved waiver can result in the loss of all federal funds for the project.

The contractor must submit the following information to the resident engineer when requesting a waiver to Buy America requirements:

- A detailed description of the waiver item.
- Item cost—obtained from the manufacturer or supplier.
- The country of origin for the product.
- The reason for the waiver.

The resident engineer must provide the following information when preparing a waiver request for the FHWA engineer:

- The contractor's waiver submission.
- Federal-aid project number, description, and location.
- Analysis of proposed redesigns using available domestic products

3-607 Out-of-State Fabrication

3-607 Out-of-State Fabrications

Section 6-3.05B, "Source Inspection Expense Deductions," of the *Standard Specifications* includes deductions in payment for fabrication at some distance from Sacramento and Los Angeles. In addition, some special provisions may modify the amount to be deducted. Deduct the appropriate amount, applying it as an administrative deduction on estimates that include payment for the item. Use a standard description of "Out of State Inspect" on Form CEM-6101, "Project Record—Estimate Request." This deduction should be made in whole, when appropriate. However, if the deduction is large, the resident engineer has the option to deduct incremental amounts until the full deduction is made.

3-608 Testing

3-608 Testing

In addition to the California Tests, the *Standard Specifications* contain references to the standards and tests of the American Association of State Highway and Transportation Officials (AASHTO) and the American Society for Testing and Materials (ASTM). These standards and tests may or may not be readily available to the resident engineer. Note any references to these tests well in advance of need, and obtain any necessary copies of them from the district materials engineer. It is not practical to supply each resident engineer with complete AASHTO and ASTM standard test procedures.

Whenever samples are taken from materials sites, the resident engineer must ensure the samples are representative of material being used. Degradation and segregation may occur in aggregates between the processing operation and their incorporation in the work. The resident engineer cannot assume that material satisfactorily tested at the source or at the processing plant is still satisfactory at the job site. To ensure specification compliance, confirm the contractor tests at the frequencies shown in the specifications as the material is being incorporated into the work. Also, perform and record acceptance tests as required by Section 6-1, "Sample Types and Frequencies," of this manual.

3-608A Operating Range and Contract Compliance

Section 25, "Aggregate Subbases"; Section 26, "Aggregate Bases"; Section 27, "Cement Treated Bases"; Section 28, "Concrete Base"; Section 39, "Hot Mix Asphalt"; and Section 90, "Concrete," of the *Standard Specifications*, all contain provisions for an acceptable range of test results. If a test result fails to meet the requirements of the operating range but meets contract compliance, the contractor usually needs to make some change in operations to ensure subsequent test results meet the "operating range" requirements. The resident engineer should document the contractor's actions and any off-site testing done before the next day's work.

If a test result fails to meet the specified value for contract compliance, the result should be treated just like any other failing test result. However, if the contractor writes a request, the resident engineer may consider leaving the material in place and applying the specified deduction, if the specifications allow. The contractor's written request, along with documentation of reasons for leaving the material in place and the contractor's actions, is sufficient for the contract records. A change order accepting out-of-specification material is not required in this case because the specifications provide the procedure for acceptance.

The resident engineer must inform the contractor promptly of test results that indicate unacceptable or borderline work. The contractor must be advised that all test results are available for the contractor's inspection. Accordingly, test results must remain in the project files for ready accessibility.

3-609 Testing by Contractor

3-609 Testing by Contractor

The contractor must be satisfied at all times that the quality of materials entering the work and the work performed, regardless of who supplies the materials or performs the work, will meet the contract requirements. For acceptance of materials or work, resident engineers must not use as documentation any tests the contractor performs to control the work.

3-610 Suspected Fraudulent Test and Inspection Reports

3-610 Suspected Fraudulent Test and Inspection Reports

When fraudulent tests or inspection reports are suspected, discuss the situation with the Division of Construction field coordinator. Contact METS for assistance in evaluating the reports. Retest the material represented by suspect tests, as appropriate. If after investigating, fraud is still suspected, the deputy district director provides the facts in writing to the Division of Construction field coordinator.

3-611 Guarantee

3-611 Guarantee

3-611A General

The contractor must perform corrective work due to a substantial defect as part of the guarantee if all of the following can be demonstrated:

1. The substantial defect existed in the contractor's work based on the specifications.
2. The substantial defect existed when the contract work was accepted.
3. A reasonable inspection by the resident engineer during construction would not have revealed the defect.

If the resident engineer cannot demonstrate the substantial defect is the responsibility of the contractor, the corrective work cannot be completed as part of the contract.

If a substantial defect is identified, the resident engineer will discuss the substantial defect with district management and the Division of Construction field coordinator. Send a letter to the contractor describing the substantial defect to be remedied. Any correspondence with the contractor regarding corrective work and the substantial defect must include the following language:

"Your refusal may result in a review of your responsibility to perform future work with Caltrans."

The contractor can perform corrective work without obtaining an encroachment permit.

The contractor may dispute the need for the corrective work but is nevertheless contractually bound to perform the necessary repairs. If the proposed final estimate (PFE) has not been issued, the contractor can file an exception in response to the PFE. Otherwise, the contractor must file for arbitration pursuant to Section 10240.1 of the Public Contract Code. The contractor has 90 days from the completion of the corrective work or the end of the guarantee period, whichever is later, to file for arbitration.

The end of the guarantee period is 1 year from contract acceptance and will not be suspended or extended based on any corrective work being required or performed.

3-611B Work Not Completed by Contractor

If the contractor refuses to perform the corrective work or if the corrective work requires an immediate response, Caltrans will perform the corrective work. The district may complete the corrective work with its own forces, day labor, by informal contract or by director's order. Discuss this process with district management and the Division of Construction field coordinator.

The contractor is liable to the state for the costs to Caltrans resulting from the contractor's failure to complete the corrective work. The resident engineer will need to maintain records on corrective work expenditures to expedite billing.

The resident engineer will send the detailed billing to the Division of Accounting, abatements section, with instructions to prepare the accounts receivable bill and to mail it to the contractor. If the contractor is not available, the bill should be mailed to the surety.

Section 8 Prosecution and Progress

3-801 Schedule

3-802 Preconstruction Conference

3-803 Start of Job Site Activities

3-803A Work Before Contract Approval

3-803B Flexible Start

3-803C Potential Budget Impasse Start

3-803D Delayed Start

3-803E Next Day Start

3-804 Time

3-804A Weekly Statement of Working Days

3-804A (1) The Record Section (Upper Block)

3-804A (2) Change Order Time Adjustments (Center Block)

3-804A (3) Computation of Extended Date for Completion (Lower Block)

3-804A (4) Final Weekly Statement of Working Days

3-804A (4) Examples

Example 3-8.1 First Working Day/Begin Work

Example 3-8.2 Change Order Time Adjustment

Example 3-8.3 Revised Weekly Statement of Working Days for Nonworking Day

Example 3-8.4 Nonworking Day Due to Temporary Suspension

Example 3-8.5 Type 2 Plant Establishment Period. Highway Work Not Yet Completed

Example 3-8.6 Type 1 Plant Establishment. Non-Plant Establishment Work Completed

Example 3-8.7 Final Weekly Statement of Working Days

Example 3-8.8 Contract in Overrun

Example 3-8.9 Calendar Day Project

3-805 Suspensions

3-805A Suspensions Related to Contractor Performance

3-805B Suspensions Unrelated to Contractor Performance

3-806 Delays

3-806A Payment Adjustments

3-806B Material Shortage

3-807 Liquidated Damages

3-807A Failure to Complete Work Parts Within Specified Times

3-807A (1) Case 1

3-807A (2) Case 2

3-807A (3) Case 3

3-807A (4) Case 4

3-808 Contractor's Control Termination

3-808A Work Completed by the Surety

3-808B Work Not Completed by the Surety

3-808B (1) Section 1

3-808B (2) Section 2

3-808B (3) Section 3

3-808B (4) Section 4

3-808B (5) Section 5

3-808C Billing

3-809 Contract Termination

3-809A Federal-Aid Contracts on the National Highway System

This manual is being updated to reflect changes from the 2006 to the 2010 *Standard Specifications*. Bracketed section numbers refer to the 2006 *Standard Specifications*.

Section 8 Prosecution and Progress

Section 8 Prosecution and Progress

3-801 Schedule

3-801 Schedule

Three levels of critical path method schedules are defined in Section 8-1.02, “Schedule,” of the *Standard Specifications*. The level is determined by the number of working days and the total bid amount.

Make every effort to obtain a reasonable baseline schedule at the beginning of the contract. Record in a daily report any communication regarding the schedule. Notify the contractor in advance if a progress payment will be withheld for failure to submit a satisfactory schedule.

In general, schedules should:

- Separate the major items into activities that are likely to become the controlling activity or activities.
- Be used by the resident engineer and the contractor to monitor and evaluate progress, determine controlling items of work, and analyze time impacts from changes or work delays.
- Be consistent with contract time requirements.
- Display milestones such as placing traffic on detours or new pavement and beginning new phases of the work in staged construction.

Require the contractor to submit an updated or revised schedule monthly or when significant changes occur in the project. Level 1 and level 2 specifications require that you request a revised schedule to evaluate alterations to the critical path or an extension to the completion date. For these levels, the revised schedule may be used in lieu of a time impact analysis. Also refer to critical path method training publications, *Intro to CPM Scheduling with Suretrak, Advanced CPM Scheduling with Suretrak,* and *Project Scheduling with Primavera P6*, located on the Division of Construction intranet website.

3-802 Preconstruction Conference

3-802 Preconstruction Conference

Schedule a preconstruction conference as soon as practical after a contractor has been selected for a project. Be prepared to discuss with the contractor the items in Section 8-1.03, "Preconstruction Conference," of the *Standard Specifications*.

Refer to Section 5-003, “Preconstruction Conferences with the Contractor,” of this manual for additional guidance. Review the job with Caltrans personnel before the start of construction, and refer to Section 5-002, “Preconstruction Conference with Caltrans Personnel,” of this manual.

3-803 Start of Job Site Activities

This section covers the subject of when the contractor begins work. Do not confuse the beginning of work with the beginning of contract time which is specified in Section 8-1.05 [*8-1.03*], "Time," of the *Standard Specifications*, and the date used on Form CEM-2701, "Weekly Statement of Working Days" (Section 3-805, "Time of Completion," of this manual).

Section 8-1.04 [*8-1.03*], "Start of Jobsite Activities," of the *Standard Specifications* requires the contractor to begin work on a project within 15 calendar days after receiving notice of contract approval. The special provisions may modify the 15-day requirement for some instances including:

- Flexible start
- Delayed start
- Potential budget impasse start
- Next-day start

The start of job site activities may not coincide with the first chargeable working day. The contractor is required to submit a 72-hour notice before the start of job site activities. If the project has work at more than one location, require submittal of a separate notice for each location.

Determine when to record the beginning of job site activities based on judgment and experience. For example, setting up construction area signs might be the only work underway. If conversations with the contractor indicate movement toward pursuing the work, the setting up of signs is sufficient to indicate the beginning of job site activities. Record the date the contractor begins job site activities on Form CEM-2701, on the resident engineer's daily report, and on the original or supplemental Form CEM-6003, "Progress Pay-Estimate, Project Initiation or Update." For more information, see Section 5-103B (1), "Completing Form CEM-6003, "Progress Pay-Estimate Project Initiation or Update," of this manual.

Record the district's actions toward encouraging the contractor to begin work. Notes of discussions from the preconstruction conference or other conversations with the contractor provide the necessary records. If a contractor fails to begin work by the specified time, remind the contractor of this failure under "Remarks" on Form CEM-2701.

Send a separate letter with an additional reminder which includes notice that, according to Section 8-1.05 [*8-1.03*] "Time," of the *Standard Specifications*, the contract time starts on the day specified in Section 8-1.04 [*8-1.03*] "Start of Job Site Activities," of the *Standard Specifications* or on the day job site activities are started, whichever occurs first.

If you decide that failure to begin work will result in unsatisfactory progress, discuss the situation with your district management.

3-803A Work Before Contract Approval

After the contractor has executed and returned the contract to Caltrans, the contractor, after submitting the specified notice, may enter the site and begin job site activities.

When a contractor wants to start work before contract approval, call the Office of Office Engineer, contract documents unit, to determine whether Caltrans has received

the executed contract documents. If the office has received the documents, proceed as set forth in Section 8-1.04 [*8-1.03*], "Start of Job Site Activities," of the *Standard Specifications*.

If a contractor wants to begin work before contract documents have been delivered to Caltrans, the contractor must obtain an encroachment permit from the district. The permit must incorporate the same terms stated in Section 8-1.04 [*8-1.03*] that apply after the contractor has returned the executed contract documents to Caltrans but before the time of the contract's approval. In addition, the permit must include the following:

- A statement that the contractor is responsible and liable for any personal injury or property damage resulting from the work.
- The requirements for cooperation contained in the special provisions and in Section 5-1.20 [*7-1.14*], "Coordination with Other Entities," of the *Standard Specifications*. The terms of the permit should include notice that the contractor may be working on the site concurrently with others performing utility relocation, right-of-way clearance work, or other construction activities and that the work of the others will take precedence over the contractor's job site activities. When obvious conflicts are apparent, a permit should not be issued.
- The limits of the area in which work will be performed.
- The activity or activities to be performed.
- A statement that the contractor will comply with the requirements of the contract plans, the *Standard Specifications*, the project's special provisions, and any order of work specified in these documents.
- A statement that the contractor's job site activities will not deprive property owners of access.
- A requirement to provide an adequate bond (or cash deposit) to cover the work contemplated before starting any work. The amount should be the same as for other types of work, as covered in the *Manual for Encroachment Permits on California State Highways*.
- A reference to the contract's water pollution control requirements.

When extra work must be a first order of work, it should be performed under a "prior authorization," as covered in Section 5-3, "Change Orders," of this manual. After the executed contract documents have been delivered as specified, change orders may be approved in the normal manner. The district must not process requests for maintenance and protection relief or contract acceptance until after the contract's approval.

3-803B Flexible Start

Flexible start is a beginning-of-work specification that allows a contractor to choose the first working day based on conditions defined by the district before advertising. This section applies in cases where the standard 15-day start has been modified to a flexible start in the special provisions.

The contractor must submit a request for authorization to establish the first working day within 10 days after contract approval. If the contractor does not submit the request for authorization to begin work within 10 days after contract approval, the first working day will be 15 days after contract approval.

3-803C Potential Budget Impasse Start

Minor A or highway maintenance program projects advertised before the fiscal year in which the project is budgeted will include additional contract language restricting the start of work date to begin after the State of California budget becomes law.

3-803D Delayed Start

This section applies in cases where the standard 15-day start has been modified to a delayed start. For example, the special provisions may allow a 55-day delayed start.

Work should not be started at the job site until the resident engineer approves the submittals listed in the special provisions. Work may be started at the job site before the time specified in the delayed start if the submittals are approved and the resident engineer authorizes the start in writing. The beginning of work provision allows adequate time for contractors to prepare, and for the resident engineer to approve, specified submittals before job site activities begin. Review and approve satisfactory contractor submittals or return insufficient submittals within contractually required time frames.

3-803E Next-Day Start

Informal-bid contracts may be used after a catastrophic incident or after a notification of a threat of future significant damage. The special provisions for these types of projects require that the start of job site activities begin the next business day after contract approval.

3-804 Time

3-804 Time

Section 8-1.05 [*8-1.06*], "Time" of the *Standard Specifications* discusses the use of the Form CEM-2701, "Weekly Statement of Working Days," as the method of tracking contract time. Issue this weekly statement to the contractor every week until the contract is accepted. To determine if the progress of the work may require a withholding, refer to Section 3-906F(1), "Progress Withholds," of this manual.

Section 1-1.07 [*8-1.06*], "Definitions," of the *Standard Specifications*, defines the terms "day," "working day," and "controlling activity." Days during the contract are either a working day or a nonworking day. However, the contract's special provisions may modify the definition of working days.

The total time allowed for completion of a contract is a specified number of working days. The "computed date for completion" of a contract is the date of the last working day, based on the number of working days specified in the original contract. On most projects, situations arise that extend the date for completion beyond the "computed date for completion." The "computed date for completion" will be extended by either charging a nonworking day or by writing a change order which adds working days to the contract.

3-804A Weekly Statement of Working Days

Use Form CEM-2701, "Weekly Statement of Working Days," to report the status of contract time to the contractor.

As soon as possible and no later than the end of the following week, forward the original statement to the contractor. Send one copy to the district construction office for review, and file another copy with the project records. Form CEM-2701 consists of three sections:

3-804A (1) The Record Section (Upper Block)

This section is used to record all working days, nonworking days as defined in Section 1-1.07 [*8-1.06*], "Definitions," of the *Standard Specifications*; and working days on which no productive work was performed on the controlling activity. In this section, tabulate each elapsed working and nonworking day during the life of the project.

Each day, determine whether to charge a working day and, if necessary, discuss the decision with the contractor. The "current controlling activity" is the basis of this determination; therefore, the resident engineer must base the decision on conditions effective on the day under consideration. If the progress schedule does not accurately represent conditions effective on that day, request that the contractor update the next progress schedule to provide an accurate representation. Note on Form CEM-2701 the activity that, in your opinion, is currently controlling. If the contractor does not concur, the entry will give the contractor an opportunity to protest formally.

If the controlling activity is not dependent upon weather, such as concrete curing or an embankment settlement period, a working day must be charged during inclement weather.

When determining nonworking days, loss of time because of inclement weather may extend beyond the period of actual inclement weather. Situations occur where there is no progress toward contract completion though the full crew might have worked the entire day. This may be due to the grade being too wet to work, access to the work needing to be reestablished, or saturated material needing to be removed from the tops of slopes.

Inclement weather can be other than wet or cold weather. For instance, it may be too hot to produce concrete that meets specified temperatures. If all specified precautions have been complied with and the concrete work is the controlling activity, a weather nonworking day should be granted.

If a nonworking day is granted because of requirements in Section 12, "Temporary Traffic Control," of the *Standard Specifications*, state the reason as "traffic restriction" in the "Remarks" section of Form CEM-2701.

In the column "Working Day No Work Done on Controlling Operation," record any working day on which no work is done on the project or on the controlling activities. If the reasons are known for lack of work, note them in the "Remarks" section and on the daily report.

3-804A (2) Change Order Time Adjustments (Center Block)

This section is used for recording adjustments of time as a result of approved change orders. In the column under "Change Order Days Approved," record working days granted for approved change orders during the week. In the column under "Change Order Number," list the approved change order numbers corresponding to the working days granted during the week. In considering a time adjustment, deduct all nonworking days within the adjustment period, and ensure that the adjustment is made only for the working days charged to the contract during the adjustment period. For additional information on time adjustments after contract completion, refer to Section 3-807, "Liquidated Damages," of this manual.

3-804A (3) Computation of Extended Date for Completion (Lower Block)

In the lower section of Form CEM-2701, summarize the information the contractor will receive. The "first working day" is the calendar day specified in Section 8-1.05 [*8-1.03*], "Time," of the *Standard Specifications*. This day is usually the 15th calendar day after contract approval. If the contractor starts job site activities before the 15th day after contract approval, the first working day is the day the contractor starts job site activities.

Several methods are used to specify the first working day. Read and understand the contract's specifications and correctly record the date of the first working day.

Use the Construction Workday Calendar to determine the correct values to place in the "Numbered Day" column on Form CEM-2701 for the first working day, the computed date for completion, and the extended date for completion. Standard 5-day and 7-day calendars are available online:

http://www.dot.ca.gov/hq/construc/calendar/index.htm

The number shown on the calendar on a particular date is that date's numbered day.

Refer to Section 4-2002C (8), "Plant Establishment Work," of this manual for guidelines on plant establishment time requirements and computation of the extended date for completion.

3-804A (4) Final Weekly Statement of Working Days

Designate the Form CEM-2701 that is used for the week when a contract is accepted as the "Final Weekly Statement of Working Days." Prepare this statement on the day the district accepts the contract and ensure that the statement reflects the "approved status of time" on this date. For revising the status of time from that shown on the final weekly statement of working days, refer to Section 3-807, "Liquidated Damages," later in this section.

3-804A (5) Examples

The following pages show examples of typical entries for Form CEM-2701, "Weekly Statement of Working Days."

Example 3-8.1: First Working Day/Begin Work

(Form may be changed pending revised *Standard Specifications* and Construction Management System implementation.)

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. DRAFT)

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814

JOB STAMP
08-888884

REPORT NUMBER **1**

CONTRACTOR
Name of Contractor, Inc.

WEEK ENDING (*month, day, year*)
03/24/2012

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Activity[2]
03/18/12					
03/19/12	Monday		0		
03/20/12	Tuesday		0		
03/21/12	Wednesday	First Working Day - Clear	1		
03/22/12	Thursday	Clear	1		
03/23/12	Friday	Clear	1		
03/24/12					
Days this week			3	0	0
Days previously reported			0	0	0
Total days to date			3	0	0

Change Order Time Adjustments	Change Order Days Approved	Change Order Numbers[3]
Days this report	0	None
Days previously reported	0	
Total change order days to date	0	

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		755	03/21/12
2. Original working days specified in contract	40		
3. COMPUTED DATE FOR COMPLETION **(line 1 + line 2 - 1)**		794	05/15/12
4. Total change order days approved to date	0		
5. Total nonworking days to date[4]	0		
6. EXTENDED DATE FOR COMPLETION **(line 3 + line 4 + line 5)**		794	05/15/12
7. Revised working days for contract **(line 2 + line 4)**	40		
8. Total working days to date	3		
9. WORKING DAYS REMAINING **(line 7 - line 8)**	37		

CONTROLLING ACTIVITY(IES)
Installation of construction area signs.

REMARKS
Contract approved on March 6, 2012. Refer to Special Provisions Section 4, the first working day 15th day after contract approval.

The contractor will be allowed fifteen (15) days in which to protest in writing the correctness of the statement; otherwise, the statement shall be deemed to have been accepted by the contractor as correct.
NOTE: ***Footnote instruction for resident engineer are on reverse side.***

RESIDENT ENGINEER SIGNATURE	DATE

Distribution: Original – contractor; Copies – district and resident engineer

Example 3-8.2: Change Order Time Adjustment

(Form may be changed pending revised *Standard Specifications* and Construction Management System implementation.)

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. DRAFT)

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814

JOB STAMP

08-888884

REPORT NUMBER **3**

CONTRACTOR

Name of Contractor, Inc.

WEEK ENDING (*month, day, year*)

04/07/2012

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Activity[2]
04/01/12					
04/02/12	Monday	Rain	0	1	
04/03/12	Tuesday	Cloudy – Wet Grade	0	1	
04/04/12	Wednesday	Clear	1	0	
04/05/12	Thursday	Clear	1	0	
04/06/12	Friday	Clear	1	0	
04/07/12					
Days this week			3	2	0
Days previously reported			8	0	0
Total days to date			11	0	0

Change Order Time Adjustments	Change Order Days Approved	Change Order Numbers[3]
Days this report	2	#2
Days previously reported	0	
Total change order days to date	2	

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		755	03/21/12
2. Original working days specified in contract	40		
3. COMPUTED DATE FOR COMPLETION **(line 1 + line 2 - 1)**		794	05/15/12
4. Total change order days approved to date	2		
5. Total nonworking days to date[4]	2		
6. EXTENDED DATE FOR COMPLETION **(line 3 + line 4 + line 5)**		798	05/21/12
7. Revised working days for contract **(line 2 + line 4)**	42		
8. Total working days to date	11		
9. WORKING DAYS REMAINING **(line 7 - line 8)**	31		

CONTROLLING ACTIVITY(IES)

Shoulder widening at location 2 EB, A line Station 2+00.

REMARKS

04/04 and 04/05 granted 2 days time adjustment for extra work related to CCO #2 at location 2.

The contractor will be allowed fifteen (15) days in which to protest in writing the correctness of the statement; otherwise, the statement shall be deemed to have been accepted by the contractor as correct.
NOTE: ***Footnote instruction for resident engineer are on reverse side.***

RESIDENT ENGINEER SIGNATURE | DATE

Distribution: Original – contractor; Copies – district and resident engineer

Example 3-8.3: Revised Weekly Statement of Working Days for Nonworking Day

(Form may be changed pending revised *Standard Specifications* and Construction Management System implementation.)

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. DRAFT)

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814

JOB STAMP

08-888884

REPORT NUMBER **4 (REVISED)**

CONTRACTOR

Name of Contractor, Inc.

WEEK ENDING (*month, day, year*)

04/14/2012

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Activity[2]
04/08/12					
04/09/12	Monday	Labor Dispute (Revised) – Cloudy	0	1	
04/10/12	Tuesday	Labor Dispute (Revised) – Cloudy	0	1	
04/11/12	Wednesday	Clear	1	0	
04/12/12	Thursday	Clear	1	0	
04/13/12	Friday	Clear	1	0	
04/14/12					
Days this week			3	2	0
Days previously reported			11	2	0
Total days to date			14	4	0

Change Order Time Adjustments	Change Order Days Approved	Change Order Numbers[3]
Days this report	0	
Days previously reported	0	
Total change order days to date	2	

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		755	03/21/12
2. Original working days specified in contract	40		
3. COMPUTED DATE FOR COMPLETION **(line 1 + line 2 - 1)**		794	05/15/12
4. Total change order days approved to date	2		
5. Total nonworking days to date[4]	4		
6. EXTENDED DATE FOR COMPLETION **(line 3 + line 4 + line 5)**		800	05/23/12
7. Revised working days for contract **(line 2 + line 4)**	42		
8. Total working days to date	14		
9. WORKING DAYS REMAINING **(line 7 - line 8)**	28		

CONTROLLING ACTIVITY(IES)

Shoulder widening at location 3 EB, A line Station 4+00.

REMARKS

A review of our records indicate that the controlling activity of shoulder widening was delayed by a labor dispute on 04/09/12 and 04/10/12. In accordance with definition of "working day" of the Standard Specifications, and your letter dated April 20, 2012, two nonworking days are granted and shown in this report.

The contractor will be allowed fifteen (15) days in which to protest in writing the correctness of the statement; otherwise, the statement shall be deemed to have been accepted by the contractor as correct.
NOTE: ***Footnote instruction for resident engineer are on reverse side.***

RESIDENT ENGINEER SIGNATURE | DATE

Distribution: Original – contractor; Copies – district and resident engineer

Example 3-8.4: Nonworking Day Due to Temporary Suspension

(Form may be changed pending revised *Standard Specifications* and Construction Management System implementation.)

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. DRAFT)

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814

JOB STAMP

08-888884

REPORT NUMBER **5**

CONTRACTOR

Name of Contractor, Inc.

WEEK ENDING (*month, day, year*)

04/21/2012

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Activity[2]
04/15/12					
04/16/12	Monday	Clear	1	0	
04/17/12	Tuesday	Clear	1	0	
04/18/12	Wednesday	Clear	1	0	
04/19/12	Thursday	Clear	1	0	
04/20/12	Friday	Clear – Suspension	0	1	
04/21/12					
Days this week			4	1	0
Days previously reported			14	4	0
Total days to date			18	5	0

Change Order Time Adjustments	Change Order Days Approved	Change Order Numbers[3]
Days this report	0	
Days previously reported	0	
Total change order days to date	2	

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		755	03/21/12
2. Original working days specified in contract	40		
3. COMPUTED DATE FOR COMPLETION **(line 1 + line 2 - 1)**		794	05/15/12
4. Total change order days approved to date	2		
5. Total nonworking days to date[4]	5		
6. EXTENDED DATE FOR COMPLETION **(line 3 + line 4 + line 5)**		801	05/24/12
7. Revised working days for contract **(line 2 + line 4)**	42		
8. Total working days to date	18		
9. WORKING DAYS REMAINING **(line 7 - line 8)**	24		

CONTROLLING ACTIVITY(IES)

Digouts from Station 1+00 to 3+00.

REMARKS

Work is suspended for April 20, 2012 in accordance with Section 8-1.06B, "Suspensions Unrelated to Contractor Performance," of the Standard Specifications and will be recorded as a nonworking day. The town has a special event on 04/21/12.

The contractor will be allowed fifteen (15) days in which to protest in writing the correctness of the statement; otherwise, the statement shall be deemed to have been accepted by the contractor as correct.

NOTE: ***Footnote instruction for resident engineer are on reverse side.***

RESIDENT ENGINEER SIGNATURE | DATE

Distribution: Original – contractor; Copies – district and resident engineer

Example 3-8.5: Type 2 Plant Establishment Period Highway Work Not Yet Completed

Refer to Section 4-2002C (8), "Plant Establishment Work," of this manual for more information.

(Form may be changed pending revised *Standard Specifications* and Construction Management System implementation.)

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. DRAFT)

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814

JOB STAMP
08-888884

REPORT NUMBER **8**

CONTRACTOR
Name of Contractor, Inc.

WEEK ENDING (*month, day, year*)
05/19/2012

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Activity[2]
05/13/12					
05/14/12	Monday	Clear	1	0	
05/15/12	Tuesday	Clear	1	0	
05/16/12	Wednesday	Clear (PEP started, see remarks)	1	0	
05/17/12	Thursday	Clear	1	0	
05/18/12	Friday	Clear	1	0	
05/19/12					
Days this week			5	0	0
Days previously reported			18	20	0
Total days to date			23	20	0

Change Order Time Adjustments	Change Order Days Approved	Change Order Numbers[3]
Days this report	0	
Days previously reported	0	
Total change order days to date	2	

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		755	03/21/12
2. Original working days specified in contract	40		
3. COMPUTED DATE FOR COMPLETION **(line 1 + line 2 - 1)**		794	05/15/12
4. Total change order days approved to date	2		
5. Total nonworking days to date[4]	20		
6. EXTENDED DATE FOR COMPLETION **(line 3 + line 4 + line 5)**		816	06/15/12
7. Revised working days for contract **(line 2 + line 4)**	42		
8. Total working days to date	23		
9. WORKING DAYS REMAINING **(line 7 - line 8)**	19		

CONTROLLING ACTIVITY(IES)
Paving final lift on EB "A" line Station 0+50 to 15+00.

REMARKS
Begin Type 2 plant establishment period of bioswales (Location 6 and 10).

Status of plant establishment work and working days

1. Plant establishment period started	05/16/12
2. There are 125 plant establishment days in this contract	125
3. Working days previously credited	0
4. Working days credited this week	3
5. Total plant establishment days credited to date	3
6. Plant establishment days remaining	122

The contractor will be allowed fifteen (15) days in which to protest in writing the correctness of the statement; otherwise, the statement shall be deemed to have been accepted by the contractor as correct.
NOTE: ***Footnote instruction for resident engineer are on reverse side.***

RESIDENT ENGINEER SIGNATURE | DATE

Distribution: Original – contractor; Copies – district and resident engineer

Example 3-8.6: Type 1 Plant Establishment. Non-Plant Establishment Work Completed

Refer to Section 4-2002C (8), "Plant Establishment Work," of this manual for more information.

(Form may be changed pending revised *Standard Specifications* and Construction Management System implementation.)

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. DRAFT)

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814

JOB STAMP
08-888884

REPORT NUMBER **39**

CONTRACTOR
Name of Contractor, Inc.

WEEK ENDING (*month, day, year*)
12/22/2012

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Activity[2]
12/16/12					
12/17/12	Monday	Rain – Contract Accepted (end of PEP)	0	0	
12/18/12	Tuesday		0	0	
12/19/12	Wednesday		0	0	
12/20/12	Thursday		0	0	
12/21/12	Friday		0	0	
12/22/12					
Days this week			0	0	0
Days previously reported			42	20	0
Total days to date			42	20	0

Change Order Time Adjustments	Change Order Days Approved	Change Order Numbers[3]
Days this report	0	
Days previously reported	0	
Total change order days to date	2	

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		755	03/21/12
2. Original working days specified in contract	165 *		
3. COMPUTED DATE FOR COMPLETION **(line 1 + line 2 - 1)**		794	05/15/12
4. Total change order days approved to date	2		
5. Total nonworking days to date[4]	20		
6. EXTENDED DATE FOR COMPLETION **(line 3 + line 4 + line 5)**		941	12/17/12
7. Revised working days for contract **(line 2 + line 4)**	167		
8. Total working days to date	167		
9. WORKING DAYS REMAINING **(line 7 - line 8)**	0		

CONTROLLING ACTIVITY(IES)
End of PEP.

REMARKS
Contract work completed 06/15/12 (42 WDs), WSWD Report Number 42. End of PEP on 12/17/12, contract accepted on 12/17/12. Final WSWD. * - PEP plus non-PEP time added (125 + 40 = 165 working days).

Status of plant establishment work and working days

1. Plant establishment period started	06/15/12
2. There are 125 plant establishment days in this contract	125
3. Working days previously credited	124
4. Working days credited this week	1
5. Total plant establishment days credited to date	125
6. Plant establishment days remaining	0

The contractor will be allowed fifteen (15) days in which to protest in writing the correctness of the statement; otherwise, the statement shall be deemed to have been accepted by the contractor as correct.
NOTE: ***Footnote instruction for resident engineer are on reverse side.***

RESIDENT ENGINEER SIGNATURE | DATE

Distribution: Original – contractor; Copies – district and resident engineer

Example 3-8.7: Final Weekly Statement of Working Days

(Form may be changed pending revised *Standard Specifications* and Construction Management System implementation.)

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. DRAFT)

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814

JOB STAMP

08-888884

REPORT NUMBER **49**

CONTRACTOR
Name of Contractor, Inc.

WEEK ENDING (*month, day, year*)
12/22/2012

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Activity[2]
12/16/12					
12/17/12	Monday	Rain – Contract Accepted (end of PEP)	0	0	
12/18/12	Tuesday		0	0	
12/19/12	Wednesday		0	0	
12/20/12	Thursday		0	0	
12/21/12	Friday		0	0	
12/22/12					
Days this week			0	0	0
Days previously reported			42	20	0
Total days to date			42	20	0

Change Order Time Adjustments	Change Order Days Approved	Change Order Numbers[3]
Days this report	0	
Days previously reported	0	
Total change order days to date	2	

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		755	03/21/12
2. Original working days specified in contract	165		
3. COMPUTED DATE FOR COMPLETION **(line 1 + line 2 - 1)**		794	05/15/12
4. Total change order days approved to date	2		
5. Total nonworking days to date[4]	20		
6. EXTENDED DATE FOR COMPLETION **(line 3 + line 4 + line 5)**		941	12/17/12
7. Revised working days for contract **(line 2 + line 4)**	167		
8. Total working days to date	167		
9. WORKING DAYS REMAINING **(line 7 - line 8)**	0		

CONTROLLING ACTIVITY(IES)
PEP

REMARKS
Contract work completed 06/15/12 (42 WDs), WSWD Report Number 42. End of PEP on 12/17/12, contract accepted on 12/17/12. Final WSWD.

Status of plant establishment work and working days

1. Plant establishment period started	06/15/12
2. There are 125 plant establishment days in this contract	125
3. Working days previously credited	124
4. Working days credited this week	1
5. Total plant establishment days credited to date	125
6. Plant establishment days remaining	0

The contractor will be allowed fifteen (15) days in which to protest in writing the correctness of the statement; otherwise, the statement shall be deemed to have been accepted by the contractor as correct.
NOTE: ***Footnote instruction for resident engineer are on reverse side.***

RESIDENT ENGINEER SIGNATURE | DATE

Distribution: Original – contractor; Copies – district and resident engineer

Example 3-8.8: Contract in Overrun

(Form may be changed pending revised *Standard Specifications* and Construction Management System implementation.)

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. DRAFT)

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814

JOB STAMP

04-888884

REPORT NUMBER **80**

CONTRACTOR

Another Name of Contractor, Inc.

WEEK ENDING (*month, day, year*)

10/27/2012

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Activity[2]
10/21/12					
10/22/12	Monday	Clear	1*	0	
10/23/12	Tuesday	Cloudy	1*	0	
10/24/12	Wednesday	Cloudy	1*	0	
10/25/12	Thursday	Cloudy	1*	0	
10/26/12	Friday	Clear	1*	0	
10/27/12					
Days this week			5*	0	0
Days previously reported			314	59	0
Total days to date			319	59	0

Change Order Time Adjustments	Change Order Days Approved	Change Order Numbers[3]
Days this report	0	
Days previously reported	0	
Total change order days to date	14	

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		531	03/21/12
2. Original working days specified in contract	300		
3. COMPUTED DATE FOR COMPLETION **(line 1 + line 2 - 1)**		830	07/06/12
4. Total change order days approved to date	14		
5. Total nonworking days to date[4]	59		
6. EXTENDED DATE FOR COMPLETION **(line 3 + line 4 + line 5)**		903	10/19/12
7. Revised working days for contract **(line 2 + line 4)**	314		
8. Total working days to date	319		
9. WORKING DAYS REMAINING **(line 7 - line 8)**	-5*		

CONTROLLING ACTIVITY(IES)

Functional testing.

REMARKS

* – Working days are shown for record only as the contract time has elapsed, contract time expired on 10/19/12. There are currently a total of 5 working days overrun through October 26, 2012.

The contractor will be allowed fifteen (15) days in which to protest in writing the correctness of the statement; otherwise, the statement shall be deemed to have been accepted by the contractor as correct.

NOTE: ***Footnote instruction for resident engineer are on reverse side.***

RESIDENT ENGINEER SIGNATURE | DATE

Distribution: Original – contractor; Copies – district and resident engineer

Example 3-8.9: Calendar Day Project

(Form may be changed pending revised *Standard Specifications* and Construction Management System implementation.)

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. DRAFT)

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814

JOB STAMP

04-848484

REPORT NUMBER **80**

CONTRACTOR

Yet Another Name of Contractor, Inc.

WEEK ENDING (*month, day, year*)

11/10/2012

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Activity[2]
11/04/12	Sunday	Clear	1	0	
11/05/12	Monday	Rain	0	1	
11/06/12	Tuesday	Cloudy – Wet Grade	0	1	
11/07/12	Wednesday	Clear	1	0	
11/08/12	Thursday	Cloudy	1	0	
11/09/12	Friday	Clear	1	0	
11/10/12	Saturday	Clear	1	0	
Days this week			5	2	0
Days previously reported			36	11	0
Total days to date			41	13	0

Change Order Time Adjustments	Change Order Days Approved	Change Order Numbers[3]
Days this report	0	
Days previously reported	7	
Total change order days to date	7	

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		106	09/18/12
2. Original working days specified in contract	80		
3. COMPUTED DATE FOR COMPLETION **(line 1 + line 2 - 1)**		185	12/06/12
4. Total change order days approved to date	7		
5. Total nonworking days to date[4]	13		
6. EXTENDED DATE FOR COMPLETION **(line 3 + line 4 + line 5)**		205	12/26/12
7. Revised working days for contract **(line 2 + line 4)**	87		
8. Total working days to date	41		
9. WORKING DAYS REMAINING **(line 7 - line 8)**	46		

CONTROLLING ACTIVITY(IES)

Timber lagging at wall 2 (11/04 – 11/07); excavation for tieback of level 3 at wall 1 (11/08 – 11/10).

REMARKS

Wet grade prevented excavation at wall 2 for timber lagging and wall 1 bench after rain event on 11/05/12, 2 nonworking days provided.

The contractor will be allowed fifteen (15) days in which to protest in writing the correctness of the statement; otherwise, the statement shall be deemed to have been accepted by the contractor as correct.
NOTE: ***Footnote instruction for resident engineer are on reverse side.***

RESIDENT ENGINEER SIGNATURE

DATE

Distribution: Original – contractor; Copies – district and resident engineer

3-805
Suspensions

3-805 Suspensions

Temporary suspension of work is covered under Section 8-1.06 [*8-1.05*], "Suspensions," of the *Standard Specifications* and gives the resident engineer the authority to suspend work. The two general categories of suspensions are described below.

In areas subject to severe weather, it is permissible to suspend an entire project if this action is considered to be in the best interest of Caltrans. However, authority to suspend work is limited to the reasons stated in Section 8-1.06. When an entire project is suspended for reasons that do not fall under the scope of Section 8-1.06 the suspension must have the contractor's concurrence.

A suspension does not always impact the entire project; it might only affect some items. Usually this type of suspension is used when either the work or the public will be affected adversely by continued work activity. Although this type of suspension is an option available only to the resident engineer, consider the contractor's opinion on such a suspension.

3-805A Suspensions Related to Contractor Performance

Any letter that orders such a suspension must include references to applicable sections of the specifications and, if possible, state the conditions under which work may be resumed. Such action is taken only after careful consideration of all aspects of the problem.

3-805B Suspensions Unrelated to Contractor Performance

This type of suspension may result from any condition unfavorable for the prosecution of the work. This includes anticipated heavy traffic because of a holiday or a special event.

During any suspension, advise the contractor of the conditions under which maintenance will be performed. During a suspension, preferably use the contractor to perform work necessary to provide for public convenience or public safety. If Caltrans must perform such work, the district will request a director's order, financed from the contract allotment, that allows the district to hire a contractor to perform the work at force account.

When the reason for a suspension no longer exists, or when favorable conditions for resuming work are expected, notify the contractor in writing. The letter must state the date when working days will resume and must allow sufficient time to permit the contractor to remobilize the necessary labor and equipment. Generally speaking, a period of 10 working days is considered reasonable.

Because of an ordered suspension of work, the contractor may be due additional compensation, contract time, or both depending on whether the delay is a critical delay or just an excusable delay.

3-806
Delays

3-806 Delays

3-806A Payment Adjustments

Section 8-1.07 [*8-1.07*], "Delays," of the *Standard Specifications* covers provisions for delay-related time or payment adjustments.

The resident engineer must monitor the progress of any work that may cause an excusable delay or critical delay. To avoid or mitigate the effects of delays, initiate action such as the following:

- Initiate requests to the district utility coordinator to modify agreements that would allow the contractor's forces to perform work under change order. Section 5-1.36D [*8-1.10*], "Nonhighway Facilities," of the *Standard Specifications* covers such work by the contractor.
- Initiate any changes in the order of work that would eliminate or mitigate an excusable delay or critical delay, provided that any cost involved would not exceed the estimated cost resulting from a delay.

If an excusable delay or critical delay occurs, take the following actions:

- Determine the length of the delay.
- Make a list of the equipment that will be affected by the delay. Attempt to get agreement from the contractor regarding the list's accuracy.
- Estimate the cost of the delay using the method specified in Section 8-1.07C [*8-1.09*], "Payment Adjustments," of the *Standard Specifications*.
- Estimate the cost of removing the affected equipment from the project and returning it when the delay is over.
- Compare the costs and choose the most cost-effective option. If the contractor removes the equipment, but the cost for doing so is higher than leaving the equipment on the project, pay only the delay cost for idle equipment.
- If the contractor does not remove the equipment, attempt to determine how the contractor intended to use the delayed equipment. Review the progress schedule to determine if the contractor intended to use the delayed equipment full time or if the contractor intended some idle time. Use this estimate of time when determining delay costs.

3-806B Material Shortage

Material shortage is defined in Section 1-1.07 [*8-1.07*], "Definitions," of the *Standard Specifications*. Do not make a time adjustment for a material shortage. Days during a material shortage are considered nonworking days. Before a determination of nonworking days can be made, several conditions must be satisfied:

- A request for information for the delay exists.
- The contractor's request for information must be received no later than 15 days after the material shortage first caused the work delay.
- The delay must affect the controlling activity.
- If the delay does not affect the controlling activity, advise the contractor accordingly in writing. If the contractor asks to be allowed to substitute the unavailable material with available material, the resident engineer must seek assistance from those responsible for the design. Change orders are to be processed as contractor-requested changes.
- The materials, articles, parts, or equipment are standard items.

  Standard items are produced to meet the specifications of such industry-wide organizations as the American Association of State Highway and Transportation

Officials (AASHTO), the American Society for Testing and Materials (ASTM), the American Wood-Preservers' Association, the American Institute of Steel Construction (AISC), and the United States Department of Agriculture (USDA), among others. The fact that Caltrans specifications refer to these standards does not alter the item's status.

Standard items include those that are listed in a catalog and are available for immediate delivery, and items that are normally shelf items available for purchase at supply houses. Items that are manufactured only upon order are not standard items even if included in a catalog.

Examples of materials that are usually considered standard items:

1. Commercial fertilizer (industry specification)
2. Soil amendment (industry specification)
3. Iron sulfate (USDA)
4. Straw (USDA)
5. Seed (USDA)
6. Lumber (industry specification)
7. Plants (USDA)
8. Pipes and conduit, except cast-in-place (industry specification)
9. Backflow preventers (industry specification or catalog item)
10. Lime (industry specification or shelf item)
11. Asphalt (industry specification or shelf item)
12. Timber piles (industry specification)
13. Steel plates or shapes shown in the AISC handbook (shelf item)
14. Prestressing steel (industry specification)
15. Expansion joint materials (industry specification)
16. Elastomeric bearing pads (industry specification)
17. Steel bars for reinforcement—the material, not the bending and cutting (shelf or catalog item)
18. Bolts (industry specification)
19. Pumping plant equipment, components only (catalog items)
20. Miscellaneous metal, material, not fabrication (industry specification)
21. Fence posts, wire, fabric, hardware (industry specification)
22. Guide marker posts, plates, reflectors, hardware (industry specification)
23. Metal beam guard railing (industry specification)
24. Metal beam barrier (industry specification)
25. Type 1 lighting standards (industry specification)
26. Electrical conductors (industry specification)
27. Controller components (industry-wide catalogs)

28. Traffic signals and fittings (proprietary item)
29. Lamps for luminaries (proprietary item)
30. Ballasts (proprietary item)
31. Cement (industry specification or shelf item)
32. Pavement markers (proprietary item)

Items that do not fall into the above list and that are produced to meet the requirements of Caltrans plans and specifications are not standard items. For example, the following materials are usually not standard items:

1. Processed structure backfill material.
2. Pervious backfill material.
3. Aggregates for bases and subbases.
4. Aggregates for cement-treated base, asphalt concrete, portland cement concrete, rock slope protection, and screenings.
5. Wood chips.
6. Portland cement concrete.
7. Traffic signal and lighting standards (except Type 1).
8. Controller assembly.
9. All material manufactured to meet a state specification such as curing compound, paint, or epoxy.
10. Concrete piling.

The nonstandard items listed above may contain components that are in short supply. They may then be eligible for consideration in a material shortage situation if the component is a standard item.

- If a "physical shortage" exists.

  The term "physical shortage" means that the standard item or component of a standard item is not available at the time it is required for work on a controlling activity. However, do not consider an extension if the "physical shortage" results from any of the following:

  1. Untimely ordering of material.
  2. Failure to make a requested down payment.
  3. Lack of credit.

  You must presume that a contractor, when submitting a bid, thoroughly considers all aspects of procuring materials and bids accordingly. This thorough consideration can include timely delivery commitments, price, and responsibility for meeting specifications.

  Whenever it has been determined that an industry-wide shortage exists, the Division of Construction will advise all districts

  A "physical shortage" will not be considered to exist if either the contractor or a subcontractor has failed to perform any required fabrication or processing.

- Whether the contractor diligently tried to obtain the material.

  Require the contractor to furnish documented proof of dates that material was ordered and confirmed. The orders must have been placed sufficiently in advance of the desired delivery to cover a normal lapse time in the particular industry. However, you cannot expect the contractor to have placed orders before contract approval.

  If the contractor's order was timely, request documented proof of efforts to obtain material from alternate sources that normally supply such materials to projects in the area. Alternate sources include, when possible, production of an item using the contractor's own forces.

  If written proof is unavailable from an alternate source, the resident engineer may accept a verbal confirmation from a supplier. Record such confirmation in the daily report. When no alternate source exists or when procurement from an alternate source may delay delivery even longer than procurement from the original source, also record confirmation of this situation.

3-807 Liquidated Damages

3-807 Liquidated Damages

Section 8-1.10 [*8-1.07*], "Liquidated Damages," of the *Standard Specifications* lists the daily rate to be charged for damages related to contract time overrun.

3-807A Failure to Complete Work Parts within Specified Times

If the "Extended Date for Completion" on the final "Weekly Statement of Working Days" contains a date before the date of the contract's completion, an apparent overrun has occurred. Proceed as follows:

3-807A (1) Case 1

The district intends to assess liquidated damages for the overrun shown on the final "Weekly Statement of Working Days." Enter the deduction for liquidated damages into the project records, and proceed with the proposed final estimate.

3-807A (2) Case 2

The district intends to change the status of time from that shown on the final "Weekly Statement of Working Days" by time due on change orders. Time adjustments resulting from change orders should have been resolved before the contract's acceptance in accordance with instructions covered elsewhere in this manual. For those instances where extenuating circumstances result in unresolved time for change orders after completion, complete all deferred-time change orders, enter the data into the project records, enter any remaining deductions for liquidated damages into the records, and proceed with the proposed final estimate.

3-807A (3) Case 3

The district intends to change the status of time from that shown on the final "Weekly Statement of Working Days" by changing working days to nonworking days. Obtain concurrence for making such changes from the Division of Construction. Report the recommended disposition of each item of unresolved time so clearly and completely that no interpretation or further explanation is needed. Upon receipt of the recommendations, the division will advise the district of what action to take.

Include a status of contract time in a form similar to the following:

	Calendar Date	Working Days or Numbered Day
Date attorney general approved contract	3/06/2012	744
First working day	3/21/2012	755
Working days specified in contract		40
Computed date for completion	5/15/2012	794
Total change order time adjustments, final CEM-2701		5
Nonworking days, final CEM-2701		75
Additional change order days (if applicable)		14
Additional working days recommended (if applicable)		10
Extended date for completion	10/12/2012	898
Date contract completed	10/12/2012	898
Remaining overrun		0

After the disposition of overruns has been determined, the district will advise the contractor directly. Place copies of all memorandums in the project files as the record of final disposition of overruns. For any unresolved overrun in time, show a deduction to assess liquidated damages on the proposed final estimate. If the contractor objects to this assessment, follow the claim procedures outlined in Section 5-4, "Disputes," of this manual.

3-807A (4) Case 4

When the final quantities of individual contract items have exceeded 125 percent of the engineer's estimate, not as a result of ordered changes, the district may recommend the director's approval of a commensurate time extension. Such a recommendation is subject to all of the following provisions:

- Time is allowable only to the extent that each item was considered controlling.
- Any time extension is applicable only to the excess above 125 percent of the engineer's estimate.
- The maximum allowable time extension for each item cannot exceed the amount of time determined by applying normal production rates to the increased quantity of the item involved.

3-808 Contractor's Control Termination

3-808 Contractor's Control Termination

Section 8-1.13 [*8-1.08*], "Contractor's Control Termination," of the *Standard Specifications* explains the contractual requirements for terminating the contractor's control of the work. Sections 10253 through 10260 of the Public Contract Code cover defaulted contracts.

Termination of control may occur only when a contractor fails to supply an adequate work force, fails to supply material of proper quality, fails to make proper and timely

payments to subcontractors, or fails in any other respect to prosecute the work with the diligence and force specified by the contract. Normally, when Caltrans terminates the contractor's control, the surety (bonding company) assumes responsibility for completing the contract. The following are guidelines for determining if the contractor may be failing to supply an adequate workforce:

- If the "percent completed" of the contract is more than 25 percent behind the "percent time elapsed." These percentages can be found in the project status report.
- Complete cessation of the work.
- The work has not started within a period equal to 10 percent of the original working days or 50 working days, whichever is less.

If the resident engineer suspects termination may be necessary, the resident engineer must immediately notify the construction engineer and construction manager.

With agreement from the construction engineer, the Division of Construction field coordinator, and the structure construction engineer (if applicable), the resident engineer sends a letter to the contractor that describes the defaults to be remedied. The letter also specifies the amount of time allowed to remedy the defaults and states that, in accordance with Section 8-1.13 [*8-1.08*], "Contractor's Control Termination," of the *Standard Specifications*, Caltrans will start the termination process if the defaults are not remedied. A copy of this letter is sent to the contractor's surety. Typically, Caltrans allows 5 business days to remedy either failure to supply an adequate work force or failure to supply proper quality material. Generally, 15 days are allowed to remedy failure to pay subcontractors.

If the contractor fails to promptly remedy the defaults outlined in the resident engineer's letter, the district construction deputy director will send a request to the Division of Construction chief to start the termination process. The request must include:

- The defaults to be remedied.
- Current status of the contract, including dates the contractor last performed work.
- Any other information considered pertinent.

To determine what action is necessary, the Division of Construction chief may call a conference with the contractor's representatives, its surety, the Division of Construction field coordinator, and the district. If terminating the contractor's control is necessary, the Division of Construction chief will send a letter to the contractor, with a copy to the surety, notifying the contractor that it has 5 business days to remedy the defaults or Caltrans will terminate the contractor's control of the work. The contractor and surety will be responsible for any costs Caltrans incurs to complete the work.

If available, the contractor must be personally served with the 5-day notice letter. If both the contractor and its representative are unavailable and their addresses are known, send the letter by registered mail. If both the contractor and its representative cannot be located and their addresses are unknown, post the 5-day notice letter in the most conspicuous place within the project limits. If the contractor does not remedy the defaults within the time required, the Division of Construction chief will send a letter to the contractor notifying the contractor that its control of the work has been terminated. The Division of Construction field coordinator will notify the district of the effective starting date of the notice and will transmit any further instructions deemed necessary.

All 5-day notices and termination of control letters must include the following language:

Your default may result in a review of your responsibility to perform future work with Caltrans.

Once the contractor's control has been terminated, the Division of Construction field coordinator will notify the arbitration engineer in the Division of Construction by forwarding a copy of the termination letter. The arbitration engineer will update and maintain the termination database.

The district will maintain a file that can be used as evidence to defend the termination or in a future responsibility hearing for the terminated contractor. The file should remain in the district for a minimum of three years.

The Division of Construction chief will send a letter to the surety requesting the surety to fulfill its obligations under the bond to complete the work with other forces. Because it is typically preferred that the surety proceed with the contractual work, the resident engineer should assist the surety in its efforts to complete the work. The resident engineer will determine and resolve with the surety the precise quantities and costs necessary to complete the work.

For additional information, refer to the *Construction Coordinator's Termination Desk Guide* on the Division of Construction intranet.

The following two sections describe the process to complete the contract after the contractor's control has been terminated.

3-808A Work Completed by the Surety

As requested by the surety, the Division of Construction field coordinator, with the assistance of the district, negotiates a takeover agreement or a tender-and-release agreement with the surety. A takeover agreement is an agreement between Caltrans and the surety outlining terms and conditions for the remaining contract work to be performed by the surety or a contractor hired by the surety. The surety is not released from contract responsibility until the contract is accepted. A tender-and-release agreement is an agreement between Caltrans and the surety outlining the terms and conditions for the remaining work to be performed by a contractor recommended by the surety. The recommended contractor agrees to do the remaining work and provides new bonds, and the surety pays the additional contract costs. The surety is then released from any further contractual responsibility.

Once the Division of Construction field coordinator has negotiated an agreement with the surety, the coordinator sends a draft copy of the appropriate agreement to the surety and requests that the surety make project specific revisions as needed. The Division of Construction field coordinator will review the agreement and forward it to the Legal Division. Both the Division of Construction field coordinator and the Legal Division recommends approval. The Division of Construction chief approves either agreement.

In the interim between the termination of the contractor's control of the work and completion by other forces, the district must take all necessary steps to preserve any already completed work. The district may use a separate work order for interim maintenance work by "day labor." Day labor may be obtained by entering into a service contract with another contractor to perform the contract work. To use day labor, a director's order is necessary.

3-808B Work Not Completed by the Surety

If time or circumstance does not permit the surety to complete the work, Caltrans may elect to complete the work with its own forces. If the surety elects not to complete the contract after termination of the contractor's control over the work, the district may complete the work by day labor or by informal contract. The district will determine the amount of completed work, the amount of work remaining to be performed, materials on hand, and extra work authorized. In the interim between the termination of the contractor's control of the work and completion by other forces, the district must take all necessary steps to preserve any completed work. The district may use a separate work order for interim maintenance work by day labor.

An informal contract permits a short advertising period. If the work will be completed by informal contract, the resident engineer, with the assistance of the district office engineer, will put together plans and specifications to complete the work, select three to five bidders, and take informal bids for the work. The informal bids must be sent to the contractor and the surety 3 days before the informal contract proceeds. In some cases, additional funds will be needed to complete the work. The resident engineer must request that the surety provide these funds although, under the Public Contract Code, the surety is allowed to wait until completion of the work to make payment. If the surety does not immediately provide these funds, the resident engineer may use available contingency funds or submit a supplemental funds request, if needed.

If either the surety asks Caltrans to complete the work or Caltrans elects to complete the work, the surety and the original contractor are liable to the state for the costs to Caltrans resulting from the original contractor's failure to complete the work. These costs include:

- The sum paid to the completion contractor to complete the various items to the extent it exceeds the sum that would have been payable to the original contractor.
- The sum of all costs to protect the work during the period between the original contractor leaving and the completion contractor arriving (usually day labor costs).
- The sum of all costs related to corrective change order work required to bring the original contractor's work into contract compliance and Caltrans' engineering costs to develop a completion contract and administer it. If appropriate, liquidated damages may be used to estimate these costs.

During completion of the work, the resident engineer must maintain current contract records to expedite billing. The project files must show the following:

- Segregated quantities of work performed under the original contract and under the day labor or informal contract for completion.
- Overruns and underruns greater than 25 percent requiring adjustment.
- Change orders.
- All other pertinent information.

When the surety does not complete the work, the resident engineer must prepare a bill for the original contractor and surety and break down the billing into the following five sections:

3-808B (1) Section 1

Subsection A—This subsection lists the amount Caltrans paid for the entire contract item work. This amount would be equal to the sum of the amount paid to the original

contractor for item work before the termination plus the amount paid to the completion contractor to complete the item work.

Subsection B—This subsection shows the amount that would have been paid for the item work assuming the original contractor had not defaulted on the contract.

Subsection C—This subsection lists the amount billable to the original contractor or surety under Section 1 of the billing. This amount would be the difference between Subsection A and Subsection B. If Subsection A is less than Subsection B, the original contractor must not be credited with this amount; instead, a zero balance will apply.

3-808B (2) Section 2

This section lists the costs Caltrans incurred to maintain the contract during the period between the original contractor's departure and the arrival of the completion contractor. These costs are usually day labor costs but may include costs incurred by the Caltrans maintenance forces.

3-808B (3) Section 3

This section lists the change orders and related costs to correct any defects left in the original work by the original contractor.

3-808B (4) Section 4

This section lists the engineering costs Caltrans incurred to develop, implement, and administer the completion contract. Separate the administrative costs from the development and implementation costs. Compare the total administrative engineering costs with the liquidated damages costs incurred in the original contract, assuming the original contract was not complete until the completion contractor finished its contract.

3-808B (5) Section 5

This section shows the amounts determined in Sections 1, 2, 3, and 4, and adds them together. List the penal sum of the bond, along with the bond number. The penal sum of a performance bond limits the responsibility of the surety. The original contractor may be billed for the full cost of completion even when that cost exceeds the penal sum of the bond.

3-808C Billing

The resident engineer sends the detailed billing, as described above, to the Division of Accounting, abatements section, with instructions to prepare the accounts receivable bill and to mail it to the contractor. If the contractor is not available, the resident engineer should mail it to the surety. After payment is received, the abatements section will credit the payment to a specific expenditure authorization.

If payment is not received within 45 calendar days, the abatements section will inform the district construction deputy director that payment has not been received. Representatives of district construction, the Division of Construction, and the Legal Division will meet to discuss alternate courses of action and choose the appropriate one. The abatements section must not submit the billing to a collection agency unless the meeting participants have agreed to this action.

Keep backup documents in the project files and make them available to the surety upon request. To ensure special handling of defaulted contracts, identify all related internal correspondence with the words "Defaulted Contract" under the job's file reference.

3-809 Contract Termination

Section 8-1.14 [*8-1.11*], "Contract Termination," of the *Standard Specifications* specifies the contractual requirements for termination when the district director determines and the deputy director of Project Delivery approves that it is not in Caltrans best interest to continue with the project.

When the majority of the contract work has been completed, it is normally not the preferred alternative to terminate the contract. Instead, it is preferred to delete the remaining work by change order, accept the contract, and provide additional payment to the contractor, if necessary, in accordance with Section 9-1.17C [*9-1.08*], "Proposed Final Estimate," of the *Standard Specifications*.

Termination of contracts is rare. Section 4412 of the Government Code covers contracts terminated in the best interest of Caltrans. The Division of Construction must ensure that all necessary steps are taken in handling contracts terminated for the convenience of Caltrans. To ensure the special handling of these types of terminated contracts, identify all internal correspondence related to them with the words "Convenience Termination" under the job's file reference.

To initiate contract termination, the district director must write a letter to the Division of Construction chief stating the reasons for requesting the termination. The letter should include:

- Reasons for the termination.
- Work performed.
- Work yet to be performed.
- Any information pertaining to the advertisement date of the new contract.

If the Division Construction chief concurs, the Division of Construction will prepare a letter to the deputy director of Project Delivery to reiterate the relevant points from the district's letter and recommend approval for terminating the contract. If appropriate, the deputy director of Project Delivery approves the termination.

Upon approval, the Division of Construction chief will issue a letter to the contractor, signed by the deputy director of Project Delivery, notifying the contractor that Caltrans will terminate the contract as soon as any work the resident engineer requested is complete. When all work is complete, the district must accept the project.

The contractor will be paid all reasonable costs as computed according to Section 8-1.14 [*8-1.11*], "Contract Termination," of the *Standard Specifications*. An audit of the contractor's cost records is normally required to resolve compensation issues. After contract acceptance, payments can be made in accordance with Section 9-1.17D [*9-1.07B*], "Final Payment and Claims," of the *Standard Specifications*.

For additional information, refer to the *Construction Coordinator's Termination Desk Guide* on the Division of Construction intranet

3-809A Federal-Aid Contracts on the National Highway System

For federal-aid contracts, the resident engineer or construction engineer must contact the Division of Construction field coordinator to obtain concurrence from the Federal Highway Administration's engineer on the termination of a contract. Refer to the Code of Federal Regulations, Title 23, Part 635 (23 CFR 635.125).

Section 9 Payment

3-901 General

3-902 Measurement

3-902A Method of Measurement

3-902B Accuracy

3-902C Source Documents

3-902D Audit Trail

3-902E Weighing Equipment and Procedures

3-902E (1) Personnel

3-902E (2) Responsibilities

3-902E (2a) Resident Engineers

3-902E (2b) District Weights And Measures Coordinator

3-902E (2c) Assistant Resident Engineers

3-902E (2d) Contractors

3-902E (2e) Division of Construction Weights and Measures Coordinator

3-902F Final Pay items

3-903 Force Account

3-903A Authorization for Force Account Payment

3-903B Force Account Records

3-903C Tentative Agreements

3-903D Markup for Subcontracted Work

3-903E Owner-Operated Labor and Equipment

3-903F Billing for Extra Work at Force Account

3-903G Labor

3-903H Material

3-903I Equipment Rental

3-903I (1) Equipment Selection

3-903I (2) Equipment Rental Rates

3-903I (3) Time in Operation

3-903I (4) Equipment Not on the Job Site

3-903I (5) Non Owner-Operated Dump Truck Rental

3-903I (6) Standby Time

3-903J Extra Work Performed by Specialists

3-904 Payment Adjustments

3-904A Changed Quantity Payment Adjustments

3-904A (1) Increases of More Than 25 Percent

3-904A (2) Decreases of More Than 25 Percent

3-904A (3) Eliminated Items

3-904A (4) Surplus and Salvaged Material

3-904B Payment Adjustments for Price Index Fluctuations

3-904C Work-Character Changes

3-905 Time-Related Overhead

3-905A Audit Examination and Reports

3-905B Payment

3-906 Progress Payments

3-906A Bid Items

3-906B Schedule of Values

3-906C Extra Work

3-906D Interest

3-906E Materials on Hand

3-906E (1) Materials at the Project

3-906E (2) Materials Not at the Project

3-906F Withholds

3-906F (1) Progress Withholds

3-906F (1a) Noncompliant Progress

3-906F (1b) Plant Establishment Work

3-906F (2) Penalty Withhold

3-906G Deductions

3-906H Supplemental Progress Payments

3-906I Negative Estimates

3-907 Payment After Contract Acceptance

3-907A Payment Before Final Estimate

3-907B Proposed Final Estimate

3-907C Semifinal Estimate

3-907D Final Payment and Claims

3-907D (1) Material to Submit with the Final Estimate

3-907E Payment Offset

3-908 Arbitration

Example 3-9.1 *Quantity Calculations*
Example 3-9.2 *Form letter for Submitting Proposed Final Estimate to the Contractor*
Example 3-9.3 *Acceptance Statement Form*
Example 3-9.4 *Sample of the Proposed Final Estimate*
Example 3-9.5 *Sample of Project Record Estimate, Summary of Payment*
Example 3-9.6 *Schedule B—Extra Work and Adjustment of Compensation*
Example 3-9.7 *Schedule of Extra Work*
Example 3-9.8 *Schedule of Deductions*

This manual is being updated to reflect changes from the 2006 to the 2010 *Standard Specifications*. Bracketed section numbers refer to the 2006 *Standard Specifications*.

Section 9 Payment

Section 9 Payment

3-901 General

3-901 General

This section covers measurement and payment of bid item work and change order work, partial payments, and payment to the contractor after contract acceptance. The contract provides the following methods to make payment for all work performed:

- Payment for bid item work at unit prices. The contractor establishes the fixed prices of the bid items included in the contract. Fixed prices of bid items should not be confused with the costs to produce the work. Loss of profit, damage, repair, cost escalation, or other unanticipated changes of item costs are the sole responsibility of the contractor unless specifically provided for in the contract.
- Adjustments to contract prices (known as payment adjustments).
- Payment for change order work. Before payment can be made for change order work, the resident engineer must issue an approved change order as described in Section 5-3, "Change Orders," of this manual. For additional information regarding Caltrans policies on change order work, refer to Section 3-403, "Changes and Extra Work," of this manual. The methods specified for paying for change order work are bid item prices, force account, agreed price, and specialist billing.
- Deductions and withholds are temporarily or permanently taken from monies due under the contract.

3-902 Measurement

3-902 Measurement

Contract work, as bid on by the contractor, is measured and paid for as bid items. Bid items are measured for payment as units. The unit for each bid item is shown in the bid item list as "unit of measure." Bid items may be measured by units of count, length, area, volume, weight, or lump sum. The bid item list also includes the estimated quantity of each bid item. Resident engineers and assistant resident engineers must determine, by measurement and calculation, the quantities of the various bid items actually performed by the contractor.

3-902A Method of Measurement

Check the "measurement" or "measurement and payment" clauses in the specifications for the required method of measurement for each bid item. Use the specified method to measure quantities. For more information about measuring quantities for specific bid items, refer to Chapter 4, "Construction Details," of this manual.

A change in the unit or the method of measurement changes the contract. Do not change the unit or the method of measurement unless the change is provided for in a change order.

3-902B Accuracy

Measure and calculate bid item quantities to a degree of accuracy consistent with the unit price of the item. Give early consideration to the accuracy desired so that all personnel on a given project will measure and calculate uniformly. The general rule is to measure to a degree of accuracy that, when calculated, the resulting value will be accurate within 0.2 percent to 0.5 percent. A $50,000 item should be measured and calculated to result in payment accurate within about $100.

3-902C Source Documents

Enter measurements and calculations for bid item quantities on permanent record sheets that are commonly referred to as "source documents." Include on each source document the appropriate bid item number, the location of installation (if applicable), the necessary measurements and calculations, and the name of the person preparing the document. Check source document calculations independently, and enter the name of the checker on the document.

Check source document calculations as soon as possible, preferably before the quantity is entered on a progress pay estimate. Always check them before entry on the proposed final estimate. Whenever possible, measure, calculate, and check bid item quantities as the work on a bid item is completed. Resident engineers must assign responsibility for checking calculations to assistant resident engineers in the same manner that other project responsibilities are assigned.

Enter into the system for progress payment the quantities from the source documents. For a description of the progress payment process, refer to Section 5-1, "Project Records and Reports," of this manual.

3-902D Audit Trail

State the source of any figure, calculation, or quantity shown on the source document. For instance, a quantity may be the result of a field measurement, scale weights, a count, or a calculation based on planned dimensions.

Create a clear and easily followed trail for the total pay quantity in the proposed final estimate back to the first measurement or calculation for each bid item.

Consider organizing source documents for each bid item so an easily followed audit trail exists. Category 47, "Drainage Systems," in Section 5-102, "Organization of Project Documents," of this manual, provides a very good system, especially for large projects, for organizing source documents for drainage related bid items. Category 48, "Bid Item Quantity Documents," in the same manual section, describes the numbering system to be used for source documents for other bid items.

3-902E Weighing Equipment and Procedures

The following describes the duties and responsibilities of the people involved in weighing and measuring materials and the procedures for ensuring accurate weighing and measuring:

3-902E (1) Personnel

The process of determining bid item quantities by weighing and measuring includes the following personnel:

- The resident engineer

- Assistant resident engineers
- The district weights and measures coordinator
- The Division of Construction weights and measures coordinator

In addition to Caltrans personnel, the following people also are involved in the weighing and measuring process:

- County sealers of weighing and measuring devices
- Representatives of the California Department of Food and Agriculture, Division of Measurement Standards
- Private scale technicians performing California Test 109, "Test for Weighing and Measuring Devices"

3-902E (2) Responsibilities

All Caltrans personnel must be alert for conditions that contribute to failure to obtain the accurate weight and measurement of materials. The following describes the typical duties and responsibilities for ensuring compliance with the specifications for weighing and measuring:

3-902E (2a) Resident Engineers

The resident engineer must do the following:

- Ensure accurate weighing and measuring through adequate inspection.
- Routinely determine that proper weighing procedures are used.
- Ensure that the spot-checking of weighing procedures is recorded in daily reports.
- Require the contractor to correct any malfunctioning weighing or measuring device.
- To ensure accuracy, order the resealing and retesting of scales and meters as often as necessary.
- Determine when load slips are to be used. Order the use of load slips except when the number of loads is very small or conditions preclude proper weighing procedures. In the daily report, record the reasons for not using load slips.

3-902E (2b) District Weights and Measures Coordinator

The district weights and measures coordinator must do the following:

- Provide technical assistance to the resident engineer and assistant resident engineers.
- Provide information to resident engineers regarding the adequacy of scales and the validity of seals.
- When requested by the resident engineer, witness the testing of scales or meters in compliance with the requirements of California Test 109, "Method of Testing of Material Production Plants."
- Furnish copies of California Test 109 report to each project using a scale tested in accordance with California Test 109.
- Furnish and attach Form CEM-4204, "California Test 109 Sticker," to tested scales.

- Maintain a file on the current status of all scales that are commonly used for weighing materials for Caltrans projects in the district.
- On request, provide scale status information to adjacent districts.
- Perform spot-checks of weighing and measuring devices and procedures in the district, and furnish written reports to the resident engineer.
- Determine whether any weighing or measuring problems should involve the California Department of Food and Agriculture, Division of Measurement Standards. Request any such involvement through the Division of Construction weights and measures coordinator.

3-902E (2c) Assistant Resident Engineers

Assistant resident engineers act for the resident engineer and, depending on the authority delegated to them, do the following:

- Observe the installation of scales installed primarily for use on a given project. Decide whether such scales and appurtenances meet the requirements of the specifications. When necessary request assistance from the district weights and measures coordinator.
- Inspect and observe the general condition of all scales used on the project. If the scales are in questionable condition, request advice from the district weights and measures coordinator.
- Request a material plant approval report from the district weights and measures coordinator on the validity of the current seals. If a seal or Form CEM-4204 is not valid, require the contractor to have the scales tested before use.
- Witness scale testing. Determine that the scales have been tested to the capacity for which they are being used on the project. Request the district weights and measures coordinator to observe the procedure.
- Whenever a scale is moved, overhauled, or shows obvious deficiencies, require the scale to be restored to normal operating condition and then retested.
- To observe the weighing of materials, visit the scale house or plant periodically. If necessary, request technical assistance from the district weights and measurement coordinator. Check the scale sheets and load slips to ensure they are being used properly.
- Spot-check tare and gross weights to see that weigh masters are using the correct tare. Ensure the weigh master is licensed for the scale location.
- Observe all meters that are required under the contract, and ensure they have been tested and sealed.
- Collect load slips at the point of delivery. A Caltrans employee should be present at the work site to collect load slips. Sign or initial the load slip or weight certificate to indicate that the represented material was used in the work.

When certified summary scale sheets are used, and load slips are not used, verify that material shown on the summary sheets has been used in the work. Do this verification by using a tally sheet, a spread record, or a random check. In the daily report, record that the material has been used in the work and the verification method. Sign the

summary scale sheets to certify that the represented material, less any material deducted from the total, was used in the work.

Return to the contractor a copy of any load slips or scale sheets representing loads or partial loads that are not to be paid for. On the load slip or scale sheet, indicate the quantity of material not included for payment. Retain a copy for the project records. When a determination is made to reduce the quantity, advise the contractor's foreman or superintendent of the amount and reason for the reduction. In the daily report, note the reduction and the name of the contractor's employee who you advised of the reduction.

3-902E (2d) Contractors

The following describes some of the duties and responsibilities of contractors and their agents in using scales and measuring devices for measuring and proportioning materials:

- The contractor and materials suppliers must maintain scales and meters within the accuracy required by the California Department of Food and Agriculture, Division of Measurement Standards.
- The owner of the scale or meter must maintain it in good operating condition at all times. If breakdowns or suspected inaccuracies occur, the owner must make repairs. After repairing a commercial device, the owner must notify in writing the county sealer of weights and measures that this work has been done. The device must be resealed before it is used to weigh materials for payment. For non-commercial devices, the contractor must ensure California Test 109, "Test for Weighing and Measuring Devices," is performed. In either case, the contractor must notify the resident engineer at least 24 hours before any scheduled testing so that the testing can be witnessed.
- The resident engineer may recommend to the contractor the following procedure for obtaining tests by the county sealer of weights and measures:
    1. Contact the county sealer of weights and measures directly by telephone and request testing followed by written confirmation of the request.
    2. When the county sealer of weights and measures cannot respond to the contractor's request in a reasonable time, the contractor should contact the California Department of Food and Agriculture, Division of Measurement Standards.

Do not directly contact the county sealer of weights and measures for the contractor. The owner of the measuring device must request the testing. The resident engineer may only inform the contractor that such testing is necessary.

The district weights and measures coordinator may contact the Division of Construction weights and measures coordinator on any question regarding the validity of a seal or the legal capacity of a scale.

3-902E (2e) Division of Construction Weights and Measures Coordinator

The Division of Construction weights and measures coordinator does the following:

- Ensures the weights and measures program is operating satisfactorily throughout the various Caltrans districts.

- Serves as a contact between the district weights and measures coordinators and the California Department of Food and Agriculture, Division of Measurement Standards.
- Keeps the district weights and measures coordinators informed of the latest equipment and techniques being developed throughout the industry.

3-902F Final Pay Items

Section 9-1.02C [*9-1.015*], "Final Pay Item Quantities," of the *Standard Specifications*, defines and specifies the procedure for calculating pay quantities for final pay items.

3-903 Force Account

3-903 Force Account

The force account method, used to determine payment for extra work, consists of adding specified markups to the actual cost of labor, equipment, and material used to perform the extra work.

Section 9-1.04 [*9-1.03*], "Force Account," of the *Standard Specifications* specifies the force account method of payment. Section 5-3, "Change Orders," of this manual contains examples of change orders with payment for extra work at force account.

Normally the contractor will use labor and equipment that is on the site and used for work in progress. The change order will usually specify materials to be used in the extra work. However, before the work begins, the resident engineer should discuss with the contractor the labor, equipment, and materials to be used. The resident engineer can avoid misunderstandings and inefficiencies by knowing the resources to be used ahead of time. After the work is performed, Caltrans must pay the contractor for material used and at the appropriate rates for the number of hours that labor and equipment was used.

3-903A Authorization for Force Account Payment

On the authorizing change order, always show the amount to be paid for extra work at force account as an estimated amount. For the format for change orders, refer to Section 5-3," Change Orders," of this manual. You may make payment for extra work in excess of the estimated amount shown on the contract change order up to 100 percent of the estimated amount or $15,000, whichever is smaller. To authorize any additional payment, use a supplemental change order.

3-903B Force Account Records

On daily reports, record observations and inspections of extra work in progress in sufficient detail to provide a reasonable basis for agreement on payment. Records must be original, not a copy from other documents.

Include the following information when appropriate to the method of payment for the work:

- Description of work performed. This description must be consistent with the description of extra work authorized by the change order.
- Time and date of inspection.
- The change order number.
- Location of work.

- Types of labor, equipment, and materials used.
- Estimated hours worked.
- General measurement or amount of work accomplished.

Make entries on the day of observation. If clarifying reports are necessary to cover work not previously reported, state the facts as known and date the clarifying report as of the day it is written.

The daily report must also contain a reference to any known off-site work.

When extra work is performed at force account, decide whether the magnitude of the work warrants the full-time presence of an assistant resident engineer. An assistant resident engineer assigned full time must include in the daily report the number of hours actually worked at the site. When an assistant resident engineer is assigned only part-time, daily reports must present only known facts. On the daily report, record that inspection was "intermittent." A typical entry might read as follows:

> Hours reported on report dated 6/26/00 entry based on one inspection during the day. Later found out that crew and equipment worked whole shift instead of half shift [add the date of the supplemental entry and sign the entry].

Include notations concerning decisions to allow or deny payment for work that may be in dispute or not considered a legitimate part of extra work. Similarly, prepare a supplemental daily report if it is later found that the number of hours or labor and equipment was substantially different than recorded on the original daily report. Such a supplemental daily report might read as follows:

> 6/26/00 – 10:15 a.m. – Change Order No. 17 – Placing Riprap Lt. of Sta. 500.
>
> Crew of two laborers and foreman with a D-6 crawler tractor with side-boom and operator laid about 150 sq. feet of salvaged rubble riprap. Estimate crew and tractor worked about 4 hours.

3-903C Tentative Agreements

Do not give copies of daily reports to the contractor's personnel. Do not permit the contractor's personnel to sign or initial daily reports. However, at the earliest possible time, reach tentative agreement on extra work details. With the contractor's foreman, discuss labor, equipment, and materials at the end of each shift or no later than the following shift that extra work was performed. Good communication at this time will help to prevent misunderstanding and arguments over details at a later date.

Use a district "tentative agreement" form if the form complies with district policy. On this form, tentatively agree to and list hours of labor and equipment used in extra work at force account for each change order each day. The form must state that the labor, equipment, and time worked are "acceptable for progress payment purposes." In this way, use of the form does not preclude subsequent audit and adjustment.

3-903D Markup for Subcontracted Work

Section 9-1.04A [*9-1.03A*], "General," of the *Standard Specifications* includes an extra work markup for the prime contractor when a subcontractor performs the work.

When an engineer's cost analysis is based on force account, using rates as specified in the contract, include a markup in the calculation of the work performed by a subcontractor in the following situations:

- Changes and extra work at the agreed prices in accordance with Section 4-1.05A [*4-1.03D*], "General," of the *Standard Specifications*.
- Work performed before item elimination in accordance with Section 9-1.06D [*4-1.03B(3)*], "Eliminated Items," of the *Standard Specifications*.
- Bid item adjustment due to increased or decreased quantities in accordance with Section 9-1.06B [*4-1.03B(1)*], "Increases of More Than 25 Percent," and Section 9-1.06C [*4-1.03B(2)*], "Decreases of More Than 25 Percent," of the *Standard Specifications*.
- Payment adjustments for work-character changes are made in accordance with Sections 4-1.05B [*4-1.03C*], "Work-Character Changes," and 9-1.15 [*4-1.03C*], "Work-Character Changes," of the *Standard Specifications*.

3-903E Owner-Operated Labor and Equipment

For owner-operated labor and equipment refer to Section 9-1.04A [*9-1.03A(3c)*], "General," of the *Standard Specifications*. The method for paying for owner-operated equipment on a force account basis is at market-price invoice. Apply the applicable markup for owner-operated labor and equipment.

3-903F Billing for Extra Work at Force Account

The following are the procedures for billing for extra work at force account:

- The contractor must submit change order bills covering extra work under each change order each day that extra work is performed. The contractor must use the Caltrans internet change order billing system to submit change order bills.
- Field construction personnel must do the following when reviewing change order bills:

  1. Compare change order bills against assistant resident engineer's daily reports and tentative agreements, if they are used. Make this comparison to verify the correctness of the contractor's billing, and to avoid the possibility of a duplicate payment for the same work. For a discussion of assistant resident engineer's daily reports and tentative agreements, refer to Section 3-903B, "Force Account Records," and Section 3-903C, "Tentative Agreements."
  2. The contractor must include everything to be paid for on the change order bill. Do not add any items even though you know them to be legitimate charges. Instead, call the omission to the contractor's attention. The contractor may submit a supplemental change order bill to include the omitted items.
  3. Delete items for which the contractor is not entitled to payment.
  4. You may correct hours for labor and equipment downward, but not upward.
  5. Do not correct wage rates that the contractor has submitted. Reject any change order bill with incorrect wage rates. Note that Caltrans must pay for extra work at the same wage rate paid by the contractor. Do not refuse to pay a particular wage rate because it is above the prevailing wage rate.

6. Correct equipment rental codes that are obviously in error, or reject the reports. Ensure the rental codes shown are for the equipment that was actually used.
7. The person, whether a contractor or Caltrans employee, who makes corrections to a change order bill must print out, sign (not initial) and date the corrected change order bill.
8. Maintain a log of change order bills received and rejected.

The resident engineer must approve the change order bill to authorize payment for extra work. The resident engineer's approval of a change order bill for progress payment certifies that payment is in accordance with contract requirements and established administrative procedures.

3-903G Labor

The markups to be applied to the cost of labor performed on force account work are specified in Section 9-1.04B [*9-1.03A*], "Labor," of the *Standard Specifications,* or as changed by the special provisions.

A "labor surcharge" is included in the cost of labor. The *Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)* book in effect at the time the work is performed contains the labor surcharge percentage. One general rate applies to most crafts, and the book contains several higher rates for certain crafts. The resident engineer must determine the correct surcharge percentage to be used and verify that the percentage has been entered on the change order bill.

At times, a superintendent or owner acts as a working foreman or an equipment operator or works at some other craft. In such situations, make payment on a "value received" basis. Payment will be made for owners or supervisory personnel at the proper rate for the work performed. For example, pay for a superintendent acting as a foreman on force account work at the normal hourly rate for a foreman. Do not prorate the superintendent's weekly or monthly salary to an hourly rate. In paying for a superintendent on force account work, make the payment on a functional basis and not on a position or classification basis.

On some projects, a superintendent or project manager directs the activities of several foremen or one or more general foremen who directly supervise the foremen. The general foremen are sometimes referred to as superintendents, such as grading superintendents or paving superintendents. This change in nomenclature does not change the functional nature of these positions. They are general foremen or foremen and are not considered to be supervisory or overhead personnel. Make payment at the actual hourly rate paid by the contractor when such personnel function as foremen on force account work.

When paying for salaried personnel, do not authorize force account payment for overtime hours unless the contractor has an established practice of paying overtime to salaried personnel. The usual case is that the weekly or monthly salary covers the number of hours required by the work.

The *Standard Specifications* allow for payment of the actual subsistence and travel allowances paid by the contractor.

Pay per diem and travel allowances on force account only when the contractor is paying these allowances on bid item work.

When 7-day subsistence is included in labor contracts in lieu of per diem and travel time, subsistence will be paid for the entire period involved if the workers are employed full time on force account.

When workers are employed on both force account work and bid item work in the same day, prorate subsistence payments and travel allowances between the contractor and Caltrans. Base the prorated amount on the first 8 hours worked. Do not pay per diem for time worked after the first 8 hours in any one day.

3-903H Material

Payment for material purchased for force account work must be supported by a copy of the vendor's invoice whenever possible. If no individual invoice is available, as in the case of materials taken from contractor's stock, a copy of the mass purchase invoice may be used as support. If no invoice is available to support unit purchase prices, submit a statement with the change order bill. In the statement, explain how the unit prices were verified. Any invoice the contractor submits must represent the material actually used.

3-903I Equipment Rental

For equipment used for extra work paid at force account, refer to Section 9-1.04D [*9-1.03A(3)*], "Equipment Rental," of the *Standard Specifications* or as modified by the special provisions. The following are guidelines for paying for equipment rental.

3-903I (1) Equipment Selection

In accordance with Section 5-1.03 [*5-1.01*], "Engineer's Authority," of the *Standard Specifications*, approve equipment used on force account work. Before giving approval, determine whether available and suitable equipment is already on the job site or whether equipment not on the job site is required. For example, a piece of equipment on the job site that can perform a given operation satisfactorily may be larger than necessary. Determine if it will be economical to use oversized equipment at its rate or to obtain equipment of the proper size. Obtaining equipment not on the job site necessitates payment for move-in and move-out expenses and for minimum rental periods. The determination may also be based on other factors, such as public safety and the urgency of the work. Availability of equipment on the job site can be determined by using daily diaries, progress schedule, and other contractor-provided information. When there is no contractor-owned equipment available for use and only rented equipment is available on the job site, the engineer may approve the use of the rented equipment at the rental invoice price in accordance with Section 9-104D, "Equipment Rental," of the *Standard Specifications*. If both contractor-owned and rented equipment on the job site are suitable and available for use, the contractor-owned equipment should be used.

Some equipment includes accessories as an integral part of the basic machine. When accessories are an integral part of the machine, the rates in the *Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)* book indicate that the accessory is included in the quoted rate. Do not make deductions for accessories on such integral equipment. For unusual situations, consult the Division of Construction. When the accessories are not integral and not necessary for the effort of the extra work, payment is only for the equipment required.

3-903I (2) Equipment Rental Rates

The *Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)* book contains the cost of ownership rates for most of the equipment used on Caltrans projects. However, the Division of Construction has also established cost of ownership rates for some equipment that is not in the book. These rates are available on the Caltrans Division of Construction website. To establish rates that are not listed in the book or on the website, use the following procedure:

- Obtain a complete description of the equipment, including the manufacturer, model number, horsepower, size or capacity, and accessory equipment.
- If the equipment is nonstandard or unusual, request the following data from the contractor:
  1. Type of equipment (such as segmented, self-propelled, rubber-tired roller, telescoping hydraulic crane, articulated, or rubber-tired roller)
  2. Trade name
  3. Model and serial numbers
  4. Year manufactured
  5. Size, capacity, or both
  6. Type and amount of power
  7. Whether crawler, rubber-tire, or other
  8. Manufacturer or distributor (if local, give address)
  9. Initial cost of the basic machine and attachments
  10. Operating requirements, costs, or both, if available or unusual
  11. Name of owner
- Transmit this information to the Division of Construction. The Division of Construction will establish a cost of ownership rate, codes, and effective time period and advise the district by mail, e-mail, or fax. Use this document as the authority to pay the rate established.
- The contractor must be advised of the codes so that its billings can include them.
- For equipment not on the job site, and in special circumstances, the *Standard Specifications* permit a rate to be paid that is in excess of the rate listed in *the Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)* book. When the contractor proposes a rental rate in excess of the listed rate, ensure the equipment meets all the conditions listed in Section 91.04D(1) [*9-1.03A(3b*)], "General," of the *Standard Specifications*. The higher rate will constitute a change to the contract and must be established by a change order. Use the following procedures to determine the rate:
  1. Obtain a written statement from the contractor. The statement must include the proposed rate and the justification that Section 9-1.04D(1) [*9-1.03A(3b)*], "General," of the *Standard Specifications* requires.
  2. Decide whether the conditions of use and ownership of the equipment meet all the specified criteria for payment of the higher rate.

3. Submit a change order that provides for the proposed rate. State in the change order whether the table titled "Equipment Rental Hours" is applicable. The table appears in Section 9-1.04D(3) [*9-1.03A(3b)*], "Equipment Not On the Job Site Required for Original-Contract Work," of the *Standard Specifications*. If the equipment is used for bid item work, use the normally established rental rates for the entire time the equipment is used for extra work. Include in the change order a clause similar to the following: "In the event this equipment is subsequently used on bid item work, this rate is void."
4. Include justification for approval in the change order memorandum, and attach the contractor's letter.

- Equipment for which the rental rate is not shown in the Labor Surcharge and *Equipment Rental Rates (Cost of Equipment Ownership)* book, but for which the Division of Construction established a rental rate, is eligible for the higher rate, providing all necessary conditions are met.

3-903I (3) Time in Operation

The engineer in the field must determine the rental time to pay for equipment in accordance with Section 9-1.04D(2) [9-1.03A(3a)], "Equipment on the Job Site," of the *Standard Specifications*.

In general, consider equipment to be in operation when all of the following conditions exist:

- The equipment is at the site of the extra work or being used to perform the extra work.
- The equipment is not inoperative due to breakdown.
- The force account work being performed requires the equipment.

Use the following examples as guidelines for determining rental time to be paid for equipment.

- An air compressor is on the job site for 8 hours on a force account operation. It is actually used for only a few periods during the 8 hours, but it is impractical to use it on other work during the standby periods. Pay for the compressor and all accessories used intermittently for the entire period. The engine does not have to be running continuously during the period to qualify for payment. If the air compressor was also used on bid item work intermittently, prorate the 8 hours between the extra work and the bid item work.
- An air compressor is on the job site for 8 hours. It is used for the first 2 hours, but after those hours, it is no longer needed. Pay the rental for only 2 hours whether the contractor chooses to remove it or chooses to leave it at the site of the work. Apply the same reasoning if the time of operation occurred at any other time of the day. In this example, if a pavement breaker was needed intermittently for 2 hours and a tamper intermittently for 2 hours, pay 2 hours for each tool. If the pavement breaker is needed for the first hour and the tamper for a second hour, pay 1 hour for each. Advise the contractor when equipment is no longer needed at the site. In the daily report, record this notice and the time.
- A skip loader is used to load dump trucks. The operation is not balanced because one of the dump trucks broke down. However, the resident engineer allows the operation to continue because it is critical. The skip loader is used only about one-

half time intermittently during the shift. Make payment for the loader for the entire shift. In a situation such as this one, the resident engineer must try to do whatever is necessary to balance the operation. When balancing cannot be achieved, the resident engineer must decide whether suspending an operation is more economically feasible than allowing it to continue.

Sometimes two pieces of equipment perform extra work at force account, yet the work does not require full-time use of both. In such instances, it is appropriate to accept (but not order) the use of only one operator for both pieces of equipment. Determine the rental time in the same manner as if each piece of equipment had a full-time operator and was used intermittently.

On extra work at force account, pay the same time for a foreman's pickup truck that you would pay for the foreman.

3-903I (4) Equipment Not on the Job Site

In general, the contractor schedules extra work paid for on a force account basis and uses equipment available on the project. However, circumstances may require use of equipment not on the job site that must be brought in especially for the extra work. The resident engineer should make decisions regarding the type of equipment and its scheduled use. Sections 9-1.04D(3) [*9-1.03A(3b)*], "Equipment Not On the Job Site Required for Original-Contract Work," and 9-1.04D(4) [9-1.03A(3b)], "Equipment Not On the Job Site Not Required for Original-Contract Work," of the *Standard Specifications* specify the requirements for paying for the use of such equipment. These specifications apply when the contractor uses or does not use equipment for bid item work. Change any previous payment as "equipment not on the job site" to payment as "equipment on the job site" when such equipment is used for bid item work.

Order the equipment removed from the project, pay move-out and possible subsequent move-in costs, or continue paying for the equipment during a suspension in extra work. Temporary removal of the equipment to the contractor's shop or a storage area off the project is not removal from the project. To end payment for the equipment, the resident engineer must order its removal.

3-903I (5) Non-Owner-Operated Dump Truck Rental

Section 9-1.04D(5) [*9-1.03A(3d)*], "Non-Owner-Operated Dump Truck Rental," of the *Standard Specifications* specifies that the resident engineer must establish the hourly rate to be paid for dump truck rental. The actual hourly rate paid by the contractor or the truck broker may be the established rate if it is consistent with rates paid for the same trucks on other work. For help in establishing hourly rates, compare with rates paid for similar equipment on other Caltrans work.

3-903I (6) Standby Time

Pay standby charges for commercial delivery at the invoice rate.

3-903J Extra Work Performed by Specialists

Section 9-1.05 [*9-1.03B*], "Extra Work Performed by Specialists," of the *Standard Specifications*, allows extra work to be performed by a new subcontractor that neither the contractor nor its current subcontractors can perform. In general, these new subcontractors are considered specialists and are to be used only for minor portions of the work. The specifications also allow for the specialist work to be paid for by invoice if itemized billing is not that industry's established practice.

Do the following when considering the use of specialists:

- Before work begins, decide whether the work is normally done by any of the contractor's forces. The contractor's forces include any firms or organizations performing bid item work, including subsidiaries of such firms or organizations and subsidiaries of the contractor. Subsidiaries of a subcontractor are considered to be a part of the subcontractor's organization. If you decide that the contractor's forces can perform the work expediently, do not authorize the use of the specialist.
- Allow the contractor to hire a specialist only if an established firm with established rates would do the work.
- Districts must establish procedures to pre-approve invoiced billing. Invoiced billing must not be used to circumvent the force account method for determining payment.

3-904 Payment Adjustments

3-904 Payment Adjustments

A payment adjustment is a monetary increase or decrease applied to the unit price of a bid item. The adjustment is a change to the contract and must be made by change order. Payment adjustments are either unit adjustments to the unit price of a bid item or they may be a lump sum increase or decrease applied to a bid item.

Payment adjustments are provided for in Sections 9-1.06 [*4-1.03B*], "Changed Quantity Payment Adjustments"; 9-1.15 [*4-1.03C*], "Work-Character Changes"; "9-1.17C "Proposed Final Estimate"; and 9-1.17D(2)(b) [*9-1.08*], "Overhead Claims," of the *Standard Specifications*. Other payment adjustments may be required depending on the bid items, such as hot mix asphalt and concrete pavement.

Do not pay for payment adjustments until change orders authorizing the adjustments have been approved.

If you anticipate that payment adjustments in accordance with Section 9-1.06 [*4-1.03B*], "Changed Quantity Payment Adjustments," or Section 9-1.15 [*4-1.03C*], "Work-Character Changes," of the *Standard Specifications* will result in decreases in final payment, withhold an amount sufficient to cover the value of the decrease.

For more discussion about determining payment adjustments, refer to Section 5-3, "Change Orders," of this manual.

3-904A Changed Quantity Payment Adjustments

When the total pay quantity of a bid item varies from the bid item list by more than 25 percent, the variation may be the result of more or fewer units than shown in the bid item list required to complete the planned work. The variance may also result from ordered changes or a combination of both of these factors. When the variation exceeds 25 percent, adjust the compensation in accordance with Section 9-1.06 [*4-1.03B*], "Changed Quantity Payment Adjustments," of the *Standard Specifications*, or document in the contract records the reason for not making a payment adjustment. When the accumulated increase or decrease in bid item units shown on a change order exceeds 25 percent of the bid item list, the overrun or underrun must be acknowledged and provided for in the current change order. Refer to Section 5-306C, "Methods of Payment," of this manual for more information on change orders. Provide for this overrun or underrun through one of the following options, whichever is applicable:

- Adjust the contract price in accordance with Section 9-1.06 [*4-1.03B*], "Changed Quantity Payment Adjustments," of the *Standard Specifications*.
- Defer any payment adjustment due to the overrun or underrun.
- State in writing that the bid item is not subject to adjustment. Refer to Section 5-3, "Change Orders," of this manual for a discussion and examples of change orders providing for payment adjustments resulting from increased or decreased quantities.

3-904A (1) Increases of More Than 25 Percent

It is usually appropriate to defer adjustment if work on the bid item has not been completed. Additional change orders may affect the quantity, or the number of units required to complete planned work may not be known. However, as soon as unit costs and final quantities can be reasonably determined, calculate any required unit adjustment and provide for it through a change order. When work on the bid item is completed, apply the unit adjustment to the total number of units in excess of 125 percent of the quantity shown on the bid item list.

Unless requested by the contractor in writing, the engineer does not have to adjust the contract price of an item if the bid item cost of the work in excess of 125 percent of the quantity shown on the bid item list is less than $5000. However, before exercising this right, ensure Caltrans will not gain any economic benefit from an adjustment. On the other hand, make an adjustment if it would decrease cost and the amount of the decrease would exceed the cost of making the adjustment.

3-904A (2) Decreases of More Than 25 Percent

If a bid item underruns the quantity shown on the bid item list by more than 25 percent, inform the contractor in writing as soon as work on the item has been completed. Unless the contractor requests an underrun adjustment in writing, no adjustment will be made.

3-904A (3) Eliminated Items

Section 9-1.06D [*4-1.03B(3)*], "Eliminated Items," of the *Standard Specifications* applies only to bid items eliminated in their entirety. Advise the contractor as soon as it is known that an item will be eliminated. Caltrans will not be responsible for costs incurred for material ordered after notification.

In the change order providing for the elimination of a bid item, ensure it covers the disposition of surplus material. Refer to Section 3-904A (4) for how to handle surplus material resulting from an eliminated item that cannot be returned to the vendor.

3-904A (4) Surplus and Salvaged Material

Minor differences between quantities of material required to complete the planned work and quantities shown in the bid item list or shown in quantity summaries on the contract plans are normal operating differences. Caltrans is not liable for a surplus of material resulting from these operating differences.

If the final quantity of an item is less than 75 percent of the quantity shown on the bid item list, include any actual loss due to excess material in the costs as computed in accordance with Section 9-1.06C [*4-1.03B(2)*], "Decreases of More Than 25 Percent," of the *Standard Specifications*.

Do not make any allowance for material the contractor keeps.

Caltrans recognizes that certain materials or manufactured items required for the planned construction may be unique and not usable by the contractor, the supplier, or for other projects or customers. If such materials or items become surplus by reason of an ordered change, resulting in a direct and unavoidable loss to the contractor, such loss must be compensated. Determine compensation on the basis of actual cost as provided in Section 9-1.06D "Eliminated Items," of the *Standard Specifications*. The guidelines below describe how to dispose of material that the contractor cannot economically dispose of.

A determination to salvage items made surplus by ordered changes should be based on economic benefit to Caltrans, conservation of the energy and materials required to fabricate the items, or both. Base economic benefit on the following:

- The item's condition is adequate to perform its function satisfactorily. Damage does not necessarily make an item unsuitable for salvage. Caltrans has the capability to repair some items, so investigate this approach before deciding to dispose of a damaged item. Also consider repair costs when determining the cost-effectiveness of salvaging.
- The value equals or exceeds the difference in the cost of salvaging (including hauling) and the cost of removal and disposal.

Also, an item should be salvaged if it meets one or more of the following conditions:

- It is a stock item with a definite, foreseeable use. Stock items include all items that Caltrans normally uses.
- It is not a stock item, but can be put to immediate use or has a definite, foreseeable use. This classification would include items that can be reinstalled in the immediate project or could be installed on future projects.
- It is part of an electrical installation owned jointly with another agency, and the other agency requests its salvage.
- It can be used immediately for some other beneficial purpose.

Most districts maintain a district salvage yard or other designated areas for receiving salvaged material. Each district also has a district recycle coordinator. Before the delivery of potentially salvageable items, make arrangements with the appropriate person. Materials should not be salvaged until such arrangements are made.

3-904B Payment Adjustments for Price Index Fluctuations

Section 9-1.07 "Payment Adjustments for Price Index Fluctuations," of the *Standard Specifications* specifies payment adjustments for various bid items that contain paving asphalt. The payment adjustment occurs when the California statewide crude oil price index fluctuation exceeds the threshold as described in the contract specifications. Compensation is adjusted when the paving asphalt price fluctuates from the month of the bid date to the month in which the contract item containing paving asphalt was placed. Refer to the example in Section 5-3, "Change Orders," of this manual.

It is important to make timely payments for price index fluctuations. Increases in the cost of paving asphalt may place financial burdens on contractors and can cause projects to exceed allocated supplemental and contingency funds. The resident engineer is responsible for the following:

- Initiating a change order within 30 days of contract approval.
- Verifying that monthly payment adjustments for paving asphalt are included in monthly estimates when items that contain paving asphalt are used.
- Monitoring monthly expenditures and estimating future months of expenditures of payment adjustments for paving asphalt to avoid exhausting the project supplemental funds and contingency balance.
- Notifying the construction engineer and project manager if you anticipate the project contingency balance will be depleted so that appropriate action can be taken.
- At the time of bid the contractor has the option to opt out of payment adjustments for price index fluctuations. Form DES-OE-0102.12A, "Opt Out of Payment Adjustments for Price Index Fluctuations," is included in the bid book. To determine if the contractor has opted out, review the bid book for the project. If the opt out form in the bid book is not completed, then all of the requirements apply to the project.

3-904C Work-Character Changes

Before work can be considered a "work-character change," there must have been an ordered change to the plans or specifications. If such an ordered change materially increases or decreases the unit cost of a bid item, then a work-character change has occurred. Work-character changes are not to be confused with "differing site conditions." For a discussion of differing site conditions, refer to Section 3-5, "Control of Work," of this manual.

When calculating the adjustment for a change in work-character, the original bid price bears no relation to the adjustment unless it can be demonstrated that the bid price actually represents the cost of the work. Section 5-3, "Change Orders," of this manual contains examples of calculations and sample change orders.

3-905 Time-Related Overhead

Section 9-1.11, "Time Related Overhead," of the *Standard Specifications* applies to projects that have a time-related overhead bid item. This section includes a description of time-related overhead and what is considered home and field office overhead. The contractor includes time-related overhead costs in the time-related overhead bid item. Overhead that is not related to time is included in the various other bid items. Any contract time adjustments made by change order will result in an equivalent adjustment to the time-related overhead bid item quantity.

The markups for force account work performed by the prime contractor on time-related overhead projects are modified in Section 9-1.11C, "Payment," of the *Standard Specifications*.

Refer to Section 5-408, "Overhead Claims," of this manual for information regarding claims for overhead for projects without a time-related overhead bid item.

3-905A Audit Examination and Reports

When the time-related overhead bid item quantity exceeds 149 percent of the quantity at time of bid, consult with your district management before ordering the contractor to provide an audit of its overhead costs. Refer to Section 5-409, "Audits," of this manual for more information.

3-905B Payment

Time-related overhead is paid on the monthly progress payment for each working day charged during the pay period. The quantity of time-related overhead will be adjusted only as a result of critical delays that revise the current contract completion date. Adjustments to contract time are handled as follows:

- If contract time is adjusted by change order, and there are no revisions to working days charged to date, payments for the adjusted time occurs when the original bid item quantity is exceeded.
- If you have charged nonworking days that you later determine to be a critical delay, write a change order to make a time adjustment and promptly pay for the revised working days charged to date.

3-906 Progress Payments

3-906 Progress Payments

Section 9-1.16 [*9-1.06*], "Progress Payments," of the *Standard Specifications* requires Caltrans to make an estimate of work completed each month. Such estimates are designated as progress pay estimates. Each progress pay estimate must include payment for work completed up to and including the 20th day of the month. Include payment for change order bills that are submitted timely. Also include payment for extra work performed at agreed price and payment adjustments. Billing for this work must be submitted by the resident engineer during the pay period in which the work was performed.

Resident engineers must transmit to the district construction office the documents and information required to prepare progress payment vouchers. All documents must be in the district office no later than the date established by the district (usually no later than the end of the first working day after the 20th of each month).

District construction must arrange a schedule with the Division of Construction that will accommodate the Division of Accounting.

A monthly estimate and payment must be made if any amount of money is due the contractor.

Show all quantities submitted for payment on source documents. Typically, Form CEM-4801, "Quantity Calculations," is used for this purpose. Form CEM-4801 is shown in Example 3-9.1. The estimate must reflect the totals on the source documents. A source document is defined as the basic document executed to record or calculate quantities, percentages of lump sums, or extra work for payment. Refer to Section 3-902C, "Source Documents," in this manual for a discussion of source documents. Example 3-9.1, "Quantity Calculations," is a sample of a source document.

The quantity shown on the estimate for a bid item must agree with the sum of the quantities to date on all of the source documents for that item.

The resident engineer is responsible for the accuracy of a progress pay estimate. By approval, the resident engineer verifies that the quantities are correct and that data submitted conforms to the policies of Caltrans. All entries on Form CEM-6004, "Contract Transactions Input," must be checked by other construction personnel for errors such as transposition and wrong numbers.

The resident engineer must review and approve each monthly estimate before district construction office staff can process it for payment. To expedite handling, the resident engineer need not sign the estimate itself to indicate approval. Approval may be by

telephone. Confirm telephone approval by sending a memo or a "pre-verification of pay estimate" form letter to the district construction office.

Refer to Section 5-103, "The Contract Administration System," of this manual for technical details on the production of estimates.

3-906A Bid Items

Include all bid item work completed satisfactorily in accordance with the contract in progress payments. Do not include in progress payments preparatory or organizational work such as assembling equipment, shop work, forming, or crushing or stockpiling of aggregate (unless provided for in the special provisions). Do not pay for material placed or installed for which you have not obtained the required evidence of acceptability (Form TL-0029, "Report of Inspection of Material"; Form TL-0624, "Inspection Release Tag"; Certificate of Compliance; or acceptance tests).

For items bid on a unit basis, include in progress payments work that is substantially complete. Withhold a sufficient number of units to cover the value of the incomplete incidental work. In each case, a source document must be on file showing the details of the quantity's determination.

Refer to intermediate source documents for items that are bid on a unit basis with a fixed final pay quantity, such as structural concrete and bar reinforcing steel (bridge), to show how partial payment was estimated. Withhold units of work to cover the value of incomplete incidental work. Base the withheld amount on a force account analysis of the remaining incidental work.

The following examples are listed to illustrate the procedure for partial payments:

1. Mobilization Item

   The Contract Administrative System (CAS) will automatically calculate and enter partial payments for the item, "Mobilization."

2. Maximum Value Items

   Handle items for which maximum payment is limited until after a time fixed in the contract as follows:

   a. Include on the estimate the quantities completed in the same manner as for any other bid item. The quantity will be extended at the bid price and added to the total of work done.

   b. The system will make a deduction for any overbid.

   c. The system will return the deduction at the time set forth in the contract.

3. Roadway Excavation

   In normal situations, material is excavated, hauled, placed in final position in embankment, and compacted, but slope finishing is not done. This is considered incidental work, and a quantity may be withheld to cover the value of the work remaining.

4. Aggregate for Subbase and Base

   Material may be produced, hauled, placed, and compacted, but final trimming to tolerance has not been performed. This is incidental work, and a quantity may be withheld to cover the value.

5. Portland Cement Concrete Pavement

   Concrete may be in place and cured but not ground to meet surface tolerance. Grinding is incidental work, and units may be withheld to cover the estimated cost.

6. Sewers and Irrigation Systems

   Pipe may be placed and backfilled but not tested. Withhold units to cover this work.

7. Fence

   Posts and wire or mesh may be in place and securely fastened but bracing wires not completed. Withhold units to cover this incidental work.

8. Structural Concrete, Bridge (Final Pay Quantity)

   Bridge construction generally requires erecting falsework to carry dead loads of concrete (or steel) members until they become self-supporting. When falsework supports the superstructure concrete of box girder or slab bridges, make partial payments for the bid item.

   When the soffit plywood is complete in place, make a partial payment equivalent to 35 percent of the projected superstructure concrete volume.

   Withhold 5 percent for removal of the falsework materials and the final surface finishing of concrete.

9. Bar Reinforcing Steel

   Pay for bar reinforcing steel that is complete and in place in the forms. It does not have to be encased in concrete before payment is made.

10. Structural Steel (Final Pay Quantity)

    Steel placed is paid by units erected and in place. Withhold units to cover incidental work such as additional bolting and welding.

For work that includes an item for "furnishing," make no payment for furnishing until all contract requirements have been met, including acceptability of the material and delivery to the project. However, payment may be made for materials on hand, as covered below, for items that qualify and are listed in the special provisions. Refer to the *Bridge Construction Records and Procedures* manual for additional instructions.

For lump sum bid items, if a schedule of values is required, refer to Section 3-906B of this manual. Otherwise, pay a percentage of the lump sum bid price as work progresses. Use for this calculation the ratio of the number of working days an item of work has been in progress divided by the estimated total number of working days required to complete the item work. Be aware that such a simplified method might not reflect the value of the work actually completed. Reach an equitable agreement with the contractor for the basis of determining progress payments on lump sum items.

If any work or material on hand paid for on a previous monthly estimate loses value through loss, damage, or failure to function, deduct units representing the lost value from the following monthly estimate. Another example is storm damage requiring repair or replacement in accordance with Section 5-1.39B [*7-1.16*], "Damage Caused by an Act of God," of the *Standard Specifications*.

Do not pay for item work added by change order until the change order is approved. However, payment for bid item overruns that are not the result of a change in the contract may be included in the monthly estimate.

3-906B Schedule of Values

A schedule of values is required for specific lump sum bid items such as electrical systems. Refer to Section 86, "Electrical Systems," of the *Standard Specifications* for more information. Building construction will also be a lump sum bid item and will require a schedule of values as specified in the special provisions. Structure Construction will provide a technical review to ensure progress payments can be based on the value of the work in place.

3-906C Extra Work

Do not pay for change order work until the change order is approved. Refer to Section 3-403, "Changes and Extra Work," Section 3-906D, "Interest" and Section 5-3, "Change Orders" of this manual, for further information on change orders providing for extra work.

3-906D Interest

Section 9-1.03, "Payment Scope," of the *Standard Specifications* provide for interest to be paid on unpaid and undisputed progress payments, payments after acceptance, extra work payments, claim payments, and awards in arbitration.

Keep a log of the dates when change order bills are received, rejected, and resubmitted. In a timely manner, process all change order bills, and fully document reasons for rejecting change order bills.

Make any necessary interest payments for late payments by change order as a payment adjustment at lump sum. Refer to Section 5-3, "Change Orders," of this manual for more information.

3-906E Materials on Hand

Pay for acceptable materials on hand provided that all specified conditions have been met. Follow the procedure described below:

- Give the contractor Form CEM-5101, "Request for Payment for Materials on Hand."
- The contractor must initiate payment by submitting in duplicate a properly completed Form CEM-5101. Make no payment for any material if the contractor has not requested payment on the state-furnished form. The contractor must submit a request one week before the end of the estimate period for each estimate. Each request must represent the current status of materials on hand at the time the request is made. Do not honor a request if it does not represent the actual amount on hand.
- Upon receipt of a request for payment for materials on hand, the resident engineer must check that it is filled out properly, includes only eligible material listed in the special provisions, and that the contractor attached evidence of purchase. When the contractor's supporting evidence of purchase shows that a discount has been allowed, reduce the payment for materials on hand by the amount of the discount.

- Before processing a materials on hand request, inspect all materials for acceptability. Materials must have a Certificate of Compliance or Form TL-0029, "Report of Inspection of Material." Form TL-0029 is evidence that the material was inspected at the source. In general, accept only completely fabricated units, ready for installation on the project with the following exceptions:

  1. Piling—Steel plate used for steel pipe piling and driven steel shells filled with concrete and reinforcement as described in Section 49, "Piling," of the *Standard Specifications* may be considered acceptable as raw material. However, pay for such material as raw material only until shop fabrication of the pile is 100 percent complete. After shop fabrication is complete, the estimated fabricated value may be paid, subject to other specified restrictions and administrative guidelines.

  2. Structural Steel—Structural steel used in steel structures as described in Section 55, "Steel Structures," of the *Standard Specifications* may be considered acceptable as raw material. However, pay for such material as raw material only until shop fabrication of a usable member (such as a girder or other shape ready for shipment to the job site) is 100 percent complete. After shop fabrication is complete, the estimated fabricated value may be paid, subject to other specified restrictions and administrative guidelines.

  3. Sign Structures—Structural steel used in overhead sign structures as described in Section 56, "Signs," of the *Standard Specifications* may be considered acceptable as raw material. However, pay for such material as raw material only, until shop fabrication of a usable member (such as a sign frame or other member) is 100 percent complete. After shop fabrication is complete, pay for the estimated fabricated value, subject to other specified restrictions and administrative guidelines.

- Verify proper storage of materials listed on Form CEM-5101 in accordance with the following procedures:

3-906E (1) Materials at the Project

For all valid requests for material located at or near the project, determine whether the materials are stored in conformance with the contract. To conform to this requirement, the contractor may have to store materials in fenced areas with locked gates, in locked warehouses, or in areas where it is improbable that materials would be lost from any cause. In addition to having controlled storage, the contractor is required by the *Standard Specifications* to provide proper storage and handling so that the materials do not become damaged. Call any indication of improper storage to the contractor's attention. Withhold payment for materials on hand until the materials are properly stored.

Do not pay for material accepted on the basis of certificates of compliance until such certificates have been received.

The resident engineer or an assistant resident engineer must review Form CEM-5101 to verify that the request is acceptable.

3-906E (2) Materials Not at the Project

For materials not delivered to the job site, obtain evidence, and establish the fact of purchase, proper storage, acceptability, accessibility and other factors. The Office of

Materials Engineering and Testing Services (METS) maintains representatives in the major industrial areas and provides inspection in all other areas for this purpose. The following is the procedure for requesting METS assistance:

- If it is not practical for the resident engineer or assistant resident engineers to verify quantity, quality, location and proper storage, send the duplicate copy of the Form CEM-5101 to METS.
- Upon receipt of Form CEM-5101, METS will immediately notify the appropriate inspection office or offices. The METS representative will notify the resident engineer directly using Form TL-0649, "Inspector's Report of Material on Hand," or TL-6037, "Fabrication Progress Report," that the material has been inspected and that it is in acceptable condition and properly stored. METS will use Form TL-6037 for structural steel, precast prestressed concrete members, or sign structures. For other products, METS will use Form TL-0649.

METS may also indicate on its correspondence, the percent complete of shop fabrication on various structural components. This figure is given for the purpose of reporting progress on the affected items. Do not use it to increase payment for materials on hand during fabrication.

- Upon receipt of the Form CEM-5101 and the above verification, the resident engineer can approve the partial payment. The contractor must submit a new Form CEM-5101 for each estimate, and the above procedure must be followed. However, it is possible METS may not be able to respond in time for payment on the estimate. METS gives priority to new or changed requests. Therefore, for requests that have not changed since a previous submittal, resident engineers may approve subsequent payments in the absence of any METS reports to the contrary.

On the monthly progress pay estimate, enter the total value of acceptable material as material on site regardless of storage location.

The maximum payment for materials on hand should be such that, when the estimated placing and other remaining costs of the work are added, the contract price is not exceeded. The purpose of this is to prevent payment of more than the contract price for the materials and to leave sufficient funds in the item to complete the work.

3-906F Withholds

3-906F (1) Progress Withholds

Progress withholds are usually determined by noncompliant (unsatisfactory) progress. Whenever a contractor's performance is unsatisfactory, the resident engineer notifies the contractor of the apparent failure.

3-906F (1a) Noncompliant Progress

Progress is determined by comparing the contractor's actual progress with the curve on Form CEM-2601, "Construction Progress Chart." This requires calculation of the percent of work completed and the percent of time elapsed. If the plot of these percentages falls on or above the curve on Form CEM-2601, progress is considered satisfactory. Otherwise, it is considered unsatisfactory except under extenuating circumstances. Refer to Section 9-1.16E(2), "Progress Withholds," of the *Standard Specifications* for noncompliant progress conditions.

After each progress estimate, update Form CEM-2601. The Contract Administration System (CAS) uses the formula contained on this form to determine progress. For a description of this process, refer to Section 5-1, "Project Records and Reports," of this manual.

The contractor's progress is usually considered unsatisfactory when the contractor's progress curve falls below the curve of the contract progress chart or when successive points on the contractor's progress curve indicate the contractor's progress rate will soon fall below the curve.

The percentage of work completed (except on landscape projects with Type 1 plant establishment) is determined by dividing the amount on the line titled "Total Work Completed" on the "Project Record Estimate" by the "Authorized Final Cost" on the "Project Status." CAS calculates this percentage. Calculations for percentage of work completed for Type 1 plant establishment are shown in Section 3-906F (1b) of this manual.

CAS computes the percent of contract time elapsed by dividing the number of working days elapsed to the date of the progress estimate, by the original working days specified in the contract plus "Total time extension days approved to date," on Form CEM-2701, "Weekly Statement of Working Days."

Whenever the contractor fails to prosecute the work adequately, evidenced by the plot of actual progress and your concurrence, you must notify the contractor of the apparent lack of progress. If you judge that the work on the remaining work activities will not be completed by the "computed date for completion" as defined in Section 3-804, "Time" of this manual, you must request that the contractor submit a revised schedule showing how the balance of the work will be carried out.

Occasionally the resident engineer has information indicating that the percent of time elapsed is different from that which CAS will calculate. The usual reason for this is that pending time extensions have not yet been approved and entered into the system. The percent of time elapsed can be calculated using the anticipated time extension in the formula described above. The resident engineer must document the calculated percent of time elapsed as well as the reasons therefore. Enter the calculated percent of time elapsed in the appropriate place on Form CEM-6101, "Project Record-Estimate Request." CAS will calculate satisfactory or unsatisfactory progress based on this figure.

Whenever the district believes the contractor's bonding company should be notified of unsatisfactory progress, advise the Division of Construction of the reasons supporting such an action. If appropriate, the district will initiate the notification.

If the district believes the lack of progress on a contract justifies a meeting, the district arranges a conference to be attended by the contractor's representatives, the bonding company, and Caltrans. If appropriate, the Division of Construction will arrange the conference. For more information, refer to Section 3-808, "Contractor's Control Termination," of this manual.

3-906F (1b) Plant Establishment Work

For specifications and administrative guidelines for plant establishment time requirements refer to Section 20-9 [*20-4.08*], "Plant Establishment Work," of the *Standard Specifications*, and Section 4-2002C (8), "Plant Establishment Work," of this manual. In general, a withhold for unsatisfactory progress should be waived only for

landscape projects or on other projects only after a corrected entry has been made for "percent time elapsed" as covered for Type 1 and Type 2 plant establishment.

For projects with Type 2 plant establishment, the percent of time elapsed and percent of work completed is determined in the normal manner as described above.

For projects with Type 1 plant establishment, compute the percent of time elapsed and the percent of work completed as follows for the periods before the start of plant establishment. After the start of Type 1 plant establishment, the resident engineer will decide if the progress is satisfactory. In general, consider progress satisfactory if the contractor entered the plant establishment period on time and carries out plant-establishment work on time. Progress will be considered unsatisfactory if there will be an overrun in contract time due to a delayed start of Type 1 plant establishment.

Determine the percentage of work completed by dividing the value of work accomplished by the authorized contract amount minus the authorized plant establishment work.

$$\% \text{ Complete} = \frac{\$ \text{ Value Completed Work}}{(\$ \text{ Total Auth. Contract Amt.} - \$ \text{ Plant Estab. Work})}$$

Determine the percent of time elapsed by dividing the number of working days elapsed to the time of the estimate on Form CEM-2701 by the total contract time limit plus "Total change order days approved to date" on Form CEM-2701 and minus the length of the plant establishment period.

$$\% \text{ Time} = \frac{\text{Working Days Elapsed}}{(\text{Orig. Cont. Time} + \text{Time Ext. to date} - \text{Plant Estab. Period})}$$

Compare these two percentages to the curve on Form CEM-2601, "Construction Progress Chart." If progress is satisfactory, check the "Override Unsatisfactory Progress" on Form CEM-6101, "Project Record-Estimate Request."

3-906F (2) Stop Notice Withholds

Refer to the Division of Accounting all inquiries regarding bills for labor, material, or equipment rental not paid by Caltrans' contractor. Detailed information for construction payments, legal withholds, labor compliance withholds, levies and liens, including stop notice contacts can be found on the Division of Accounting "Major Construction Payment and Information" website:

http://www.dot.ca.gov/hq/asc/oap/payments/

3-906F (3) Penalty Withhold

For penalty withholds, refer to Section 7-1.02 [*7-1.01*], "Laws," and Section 9-1.16E(5), "Penalty Withholds," of the *Standard Specifications*. Penalty withholds may become a deduction if appropriate. Withholds may be required per Section 7-104, "Air, Water, and Noise Pollution Control"; Section 7-105, "Permits"; and Section 8-102, "Labor Compliance Responsibilities," of this manual.

3-906G Deductions

Deductions (as opposed to withholds) are those amounts held back for specific purposes. The resident engineer must identify, initiate, and control all deductions. Refer to Section 5-103F (1c), "Deductions," of this manual for information on administering deductions.

Make a deduction from payment to the contractor as soon as the liability for the event requiring a deduction has been determined. It is preferable to base deductions on known amounts resulting from agreements or actual billings, but, if necessary, they can be estimated.

Resident engineers must keep source documents and summary sheets in the appropriate contract records to cover all deductions. In the absence of any information to the contrary, CAS will carry deductions forward from the previous month.

Whenever the contractor's progress is unsatisfactory and the project has progressed to a point where a reasonably accurate estimate of possible liquidated damages can be made, the resident engineer must deduct an amount sufficient to cover probable liquidated damages. Make the deduction in lieu of any withhold for unsatisfactory progress. Enter the amount and description of deductions on Form CEM-6101, "Project Record-Estimate Request," and check "Override Unsatisfactory Progress," to prevent the withhold.

3-906H Supplemental Progress Payments

Resident engineers are responsible for the completeness and accuracy of each progress payment. Supplemental progress payments are used to correct omissions or make adjustments to a previously processed progress payment estimate for work performed within that pay estimate period. Supplemental progress payments may be run only between the completion of the original monthly progress payment and the 15th of the following month.

Refer to Section 5-103F, "Generating Estimates," of this manual for the process of generating a supplemental progress payment.

3-906I Negative Estimates

The resident engineer is responsible for the accuracy of all payment estimates, including progress payment, after acceptance, semifinal, and final estimates. Negative estimates reflect an overpayment made to the contractor. When a negative estimate is necessary, you must prepare a brief justification and submit it with the estimate request to the district construction office. The district construction office must obtain concurrence from the deputy district director of construction, or delegate, and the Division of Construction's field coordinator before running the negative estimate.

When a negative estimate is approved for processing, the Division of Accounting bills the contractor for the amount due. If, for any reason, you believe that the contractor should not be billed, notify the district construction office and the Division of Construction progress pay coordinator. Once notified, the Division of Construction progress pay coordinator, with the Division of Construction field coordinator's concurrence, will notify the Division of Accounting not to bill the contractor.

Section 3-907E, "Payment Offset," of this manual describes another method available to the resident engineer and the Division of Accounting to resolve overpayment to the contractor.

3-907 Payment After Contract Acceptance

3-907 Payment After Contract Acceptance

Caltrans makes final payment as soon as possible after the contract is accepted and the contractor submits the required documents requested by the resident engineer. Any estimate covering a payment after contract acceptance is identified either as "after acceptance," "semifinal," or "final."

Soon after the contract is accepted, meet with the contractor to discuss submitting required information to complete the contract. If the contractor does not submit required data within 4 weeks after acceptance, you must notify the contractor in writing that Caltrans will issue the proposed final estimate and deduct the appropriate amount. Section 5-405, "Claims Resolution Process," of this manual lists the timeline for completing payment steps after the acceptance process.

3-907A Payment Before Final Estimate

A payment after acceptance but before the proposed final estimate must adhere to Section 9-1.17B [*9-1.07A*], "Payment Before Final Estimate," of the *Standard Specifications*. The purpose of this type of progress payment is to release all money due the contractor that exceeds any amounts withheld under the contract. When determining amounts to be paid or deducted for this type of estimate, the following applies:

1. Include payment for the following:
   a. Any work completed since the previous estimate
   b. Any errors that may have been discovered and corrected
   c. Any labor compliance deficiencies that have been cleared
2. Include payment for any overbids on maximum value items, including the mobilization item. You do not need to take any additional action for this step.
3. When delinquent or inadequate payrolls exist, make a deduction from the payment.
4. When the contractor has failed to correct deficiencies in its equal employment opportunity program, make a deduction from the payment. These deficiencies include failure to submit Form CEM-2402F, "Final Report—Utilization of Disadvantaged Business Enterprises, First-Tier Subcontractors."

   The deductions will be in the same amount as for any progress estimate. Refer to Section 8-1, "Labor Compliance," Section 8-2, "Equal Opportunity," and Section 8-3, "Disadvantaged Business," of this manual.
5. To cover any outstanding documents required under this contract, make a deduction from the payment. These outstanding documents include the following:
   a. Reduced prints of working drawings
   b. Outstanding payrolls that are not yet delinquent
   c. Or any information upon which to base the proposed final estimate, such as payment adjustments of contract unit prices

   The deduction, regardless of the number of outstanding items, will be the lesser of 10 percent of the "Subtotal Amount Earned Without Mobilization," or $10,000, and at least $1000.

In addition to the steps listed above for determining amounts to be paid or deducted for an estimate after contract acceptance, the resident engineer must also do the following:

1. Notify the district of what deductions are applicable.

2. Compound the deductions when a combination of the following situations, which were outlined above, occur:

   a. The contractor has delinquent or inadequate payrolls.

   b. The contractor failed to correct deficiencies in its equal employment opportunity program.

   c. The contractor failed to honor requirements related to disadvantaged business enterprises.

3. Also compound permanent deductions. Permanent deductions include items such as material royalties, railroad flagging charges, material testing, out-of-specification material, or restaking charges. Also considered permanent are deductions for anticipated liquidated damages. (When warranted, anticipated liquidated damages can be made on progress estimates. However, anticipated liquidated deductions will need to be made permanent on the after-acceptance estimate. To do so, release anticipated liquidated damages; then take actual liquidated damages under liquidated damages on the after-acceptance estimate.)

4. When you make deductions for outstanding items, advise the contractor in writing of the specific missing items.

5. Before processing an after-acceptance estimate, run the following two reports, "Status of CCO," and "CCO master listing." These reports will show any adjustment of compensation credit or deferred time not yet taken.

3-907B Proposed Final Estimate

The purpose of the proposed final estimate is to obtain formal agreement regarding final payment. For this type of estimate, follow these guidelines:

- Submit the proposed final estimate to the contractor within the time frame outlined in Section 5-405, "Claim Resolution Process," of this manual.
- Before processing the proposed final estimate, ensure all change order bills submitted by the contractor are processed and ready for payment. Ensure the estimate's issuance is not delayed for change order bills that remain outstanding.
- If the contractor has not submitted required information in a timely manner, the proposed final estimate must still be issued. In this situation, the following guidelines apply:

  1. Any time before a proposed final estimate is issued, the district may exercise an option described in Section 9-1.04C [*9-1.03C*], "Materials," of the *Standard Specifications*. This section identifies the conditions under which Caltrans may establish the cost of materials when valid copies of vendors' invoices are not forthcoming. When the district decides to establish such costs, use the following procedure:

     a. If the established cost is necessary to determine compensation, complete the pending change order, and have it unilaterally approved. To determine compensation, refer to Section 9-1.06 [*4-1.03B*], "Changed Quantity Payment Adjustments," or Section 9-1.15 [*4-1.03C*], "Work-Character Changes," of the *Standard Specifications.*

b. If the established cost is necessary to make force account payment on an existing change order, include this established cost as a lump sum payment on a supplemental change order. Also, unilaterally approve this supplemental change order.

2. On the proposed final estimate, you may list (in the amount the district determines to be payable) any force account billings that have not been paid because of a dispute. Upon return of the proposed final estimate, the contractor must reiterate the disputed extra work, which must be handled like any other claim. Do not list in the proposed final estimate any force account billings the contractor has not yet submitted. It is the contractor's responsibility to either submit these bills before the proposed final estimate or list them as exceptions to the proposed final estimate.

3. The district will show the required deduction on the proposed final estimate in the same manner as for any other deduction when the contractor has the following outstanding items:

   a. Delinquent or inadequate payrolls

   b. Deficiencies in its equal employment opportunity program

   c. Violations of requirements related to disadvantaged business enterprises

   (These items are also described in Section 3-907A, "Payment Before Final Estimate," of this manual.) When such deductions are shown, include a statement similar to the following on the letter that accompanies the proposed final estimate: "The amount of $_____, which has been deducted for non-submittal of documents required by the contract, will be paid when all such documents have been received."

- Submit Form CEM-6101, "Project Record-Estimate Request," to the district office with the proposed final estimate box checked to initiate the proposed final estimate.

- The proposed final estimate is to be prepared and sent to the contractor by the district construction office. It should include the following:

  1. A letter transmitting the proposed final estimate to the contractor. This letter should include the statements shown in Example 3-9.2, "Form Letter for Submitting Proposed Final Estimate to the Contractor."

  2. A form for the contractor's acceptance of the amounts listed in this estimate. Ensure the form contains wording similar to the wording in Example 3-9.3, "Acceptance Statement Form."

  3. The proposed final estimate report showing the status of item payments generated by CAS along with the "schedule of extra work" and "schedule of deductions" reports. Samples of these reports are shown in Examples 3-9.4 through 3-9.8.

  4. If deductions for items such as staking charges, laboratory charges, railroad flagging charges, and overruns of contract time are not finalized and shown on the reports, a list of their estimated maximum amounts must be attached.

- Use separate correspondence, not the proposed final estimate, for funds deducted for labor violations and wage restitution (as opposed to outstanding or inadequate payrolls).
- When money is due on the proposed final estimate, ensure the semifinal estimate processed immediately after reflects the same "totals" as the proposed final estimate. If you follow this approach, the contractor will submit claims based on our "statement of total amount earned," rather than some "revised" number.
- To establish the beginning of the 30 days during which the contractor may submit written claims, send the proposed final estimate by certified mail, "return receipt requested," or overnight delivery.
- From the issuance of the proposed final estimate to the receipt of the contractor's response, do not enter into any negotiations, written or verbal, concerning the proposed final estimate or potential claims, except as described in the next bullet. During this time, negotiating or communicating with the contractor (or issuing change orders) may negate the finality of the proposed final estimate. If the finality is negated, the contractor may have 30 days from the most recent communication to respond.
- If you discover an error that requires a decrease in a quantity, send a letter to the contractor stating the discovery of an error, and specify the item and amount of the change. Also, state that the error will be addressed after the contractor returns the proposed final estimate. If the contractor discovers and brings to your attention any errors or discrepancies, handle this situation through separate correspondence covering only the affected items. For example, if the contractor disputes the quantity of an item, send a letter to the contractor stating that the item must be listed as an exception to the proposed final estimate. In the letter, also state that the item will be analyzed after the return of the proposed final estimate and exceptions, also known as the "Acceptance Statement."
- When the contractor returns the "Acceptance Statement," proceed in accordance with the appropriate option below:
    1. If the returned Acceptance Statement has no exceptions (administrative claims or contract claims) and all documents required under the contract have been received, prepare the final estimate. Refer to Section 3-907D, "Final Payment and Claims," of this manual for more information.
    2. If the returned Acceptance Statement has no exceptions, but some documents are still outstanding, continue pressing the contractor, in writing, for the missing documents. If amounts due the contractor exceed the deductions by more than $300, prepare and process a semifinal estimate.
    3. If the documents have not been received in approximately 60 days, request advice from the Division of Construction field coordinator about further action.
    4. If the Acceptance Statement is returned with exceptions, initiate the claims procedure as outlined in Section 5-4, "Disputes," of this manual.
    5. If the Acceptance Statement is returned requesting a payment adjustment in accordance with Section 9-1.17C [*9-1.07B*], "Proposed Final Estimate," of the *Standard Specifications*, determine if the payment adjustment is warranted. If

the payment adjustment is warranted, make the payment in the same manner as for any other adjustment and unilaterally approve in the district. The following is an example of a calculation to determine this payment adjustment:

Example:

Contractor's original bid (including mobilization)	$100,000
Ninety percent of Contractor's bid	$ 90,000
Final estimate of total work (including mobilization, extra work, and less permanent deductions)	$ 85,000
Difference	$ 5,000
Adjustment of Overhead Costs (10 percent of difference)	$ 500

6. When the Acceptance Statement is not returned within the specified 30 days, ensure it has not been lost in transit and then proceed in accordance with the appropriate option below:
   a. If all documents have been received, prepare and process the final estimate.
   b. If some documents are still outstanding, request advice from the Division of Construction's field coordinator about further action.
   c. If the contractor includes in the Acceptance Statement any claim that is postmarked or hand-delivered more than 30 days after the date the contractor received the proposed final estimate, the claim is considered untimely and will not be processed. On a hand-delivered claim, record the date the claim arrived, who delivered it, and who received it. Retain the envelope for a claim that arrived through the mail to establish the date the claim was sent. Inform the contractor of the late filing by using a letter worded in a similar way to the letter below. This notification will constitute the final administrative action on a late claim.

Notification to Inform the Contractor of a Late Filing:

Contractor _____,

The statement of claim included in your letter dated _____, was submitted to us more than 30 days after you received copies of the proposed final estimate for Contract No. _____, (County Route and Mile-Post).

A final estimate is, therefore, being processed for issuance to you as provided in Section 9-1.17C [*9-1.07B*], "Proposed Final Estimate," of the *Standard Specifications*.

Sincerely,

District Construction Office

d. If the contractor includes claims with the return of the proposed final estimate, the district should immediately acknowledge the receipt of the claims by sending a written statement similar to the following:

Acknowledgment of the Receipt of Claims

Your written statement of claims has been received. The engineer will base the determination of your claims upon the investigation of your statement.

The investigation of your claim statement will begin immediately. If it is determined that additional information is required, you must furnish it within 15 days of the request in accordance with Section 9-1.17D(2) [*9-1.07B]*, "Claim Statement," of the *Standard Specifications*. You may request in writing an extension of time to a specific date. Our purpose is to provide you with the engineer's final determination on claims in the minimum possible time, consistent with the assurance that all the facts are available for consideration.

e. If the initially submitted claim statement is obviously deficient in information, use a paragraph similar to the following example in lieu of the second paragraph above:

Notification of Deficiency of Information:

Your initial submission appears to be deficient as to the following:
[Select appropriate item or items.]

1. Statement of contractual basis for claim
2. Information as to compliance with Section 4-1.05A [*4-1.03A*], "General," Section 5-1.43 [*9-1.04*], "Potential Claims and Dispute Resolution," of the *Standard Specifications*, or both
3. Breakdown of amount claimed due
4. Other, as applicable

Please submit any further information you wish to have considered by [date, approximately 15 days after the contractor will receive the letter]. If you will require additional time to prepare your supplementary statement, please request an extension in writing specifying the date to which the extension is requested. The engineer intends to make the final determination on claim matters in the minimum possible time, consistent with the assurance that all the facts are available for consideration.

f. Examine claims expeditiously. For detailed instructions, refer to Section 5-4, "Disputes," of this manual.

3-907C Semifinal Estimate

A semifinal estimate is any estimate prepared after issuing the proposed final estimate and before preparing the final estimate. The primary purpose of a semifinal estimate is to make timely payment for all nondisputed items that have not been paid on a previous estimate. However, semifinal estimates can also be issued to make payment if some, but not all claims, have been resolved.

The proposed final estimate need not show a zero balance for money owed to the contractor. If the proposed final estimate does identify money owed to the contractor, immediately run a semifinal estimate after the proposed final estimate. Do not wait for any response from the contractor to the proposed final estimate. Do not issue any other estimates until 30 days after issuing the proposed final estimate.

Normally, use the same procedures to issue a semifinal estimate as those to issue a progress estimate.

3-907D Final Payment and Claims

Submit a final estimate only after one of the following conditions has been met:

- The contractor has submitted all required documents and complete agreement on payment has been reached.
- The district directors' determination of claim has been issued.
- The contractor does not respond to the proposed final estimate in the specified time but has submitted all required documents.
- Or, the district has been advised by the Division of Construction field coordinator to proceed.

Refer to Section 5-405, "Claims Resolution Process," of this manual for more information. As soon as the district approves the final estimate, it must use a transmittal letter. The letter must state the following: "Submitted herewith in accordance with Section 9-1.17D(3) [*9-1.07B*], "Final Determination of Claims," of the *Standard Specifications* is a copy of the final estimate for your Contract No."

A copy of the transmittal letter is to be sent to the resident engineer to be retained in the project files.

The district transmits only the final estimate because the disbursing office of the Division of Accounting will mail to the contractor the corresponding copy of the progress payment voucher.

3-907D (1) Material to Submit with the Final Estimate

Before payment of a final estimate, the Division of Construction progress pay staff must ensure that administrative details have been completed. For this purpose, the district must forward the following data before or with all final estimates:

- Submit the proposed final estimate as originally submitted to the contractor, including transmittal letters.
- Submit the Acceptance Statement returned by the contractor. If the contractor has refused to sign the statement, submit it with an explanation of the contractor's refusal.
- Submit a transmittal letter containing, but not limited to, the following:

1. A list of the forms and attachments being transmitted or an explanation as to why a form or attachment is missing. Include letters from the Division of Construction authorizing the submittal of the final estimate without certain documents and stating the action taken or to be taken as a result of the missing documents.
2. A statement about the use of materials agreements. If there are no materials agreements, state this.
3. A statement that reduced prints of all shop drawings for highway bridges and railroad bridges have been received from the contractor. If such drawings are not required, please state so.
4. Correspondence or documents explaining or authorizing the differences between the proposed final estimate and the final estimate.
5. Form CEM-2402F, "Final Report—Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors."

3-907E Payment Offset

A payment offset is a method of obtaining monies due to Caltrans on one contract by levying against future payments being made to a contractor on another Caltrans contract. Offsets may be taken to obtain adequate funds for any amount due and for determinations made by an arbitrator. The offset process should be completed within 90 calendar days of contract acceptance except when an offset for a determination by an arbitrator is required.

Many stakeholders are involved in the payment offset process. The following should be considered when choosing an active contract to apply an offset against:

1. There should be sufficient payments pending.
2. Bonded by the same bonding company if possible.
3. Administrated within the same district.

To begin the payment offset process, send a letter to the contractor, bonding company, and offset bonding company. The contractor and the bonding companies have 20 calendar days from receipt of the letter to request a meeting to discuss the offset.

If the contract or bonding companies do not request a meeting, execute the offset. If a meeting is requested, a meeting will be held within 10 calendar days of receipt of the request. The meeting is conducted by the district director or as delegated to at least a supervising transportation engineer.

The resident engineer prepares a summary of the facts, minutes of the meeting, and a final determination report. If the offset is warranted, notify the district administering the contract being offset, the contractor, and bonding companies of the final determination, and the amount of the offset. If the contractor or the bonding companies do not request a hearing, execute the offset. If the hearing officer determines that an offset is not warranted, continue through the collections process administered by the Division of Accounting. The Division of Accounting executes only those offsets authorized by the Division of Construction.

3-908 Arbitration

3-908
Arbitration

If the contractor has diligently pursued and exhausted the administrative procedures specified in the contract, the contractor is entitled to file for arbitration of its claims 240 days after contract acceptance even if the district director determination of claims has not been issued.

The Caltrans Legal Division handles all construction contract arbitrations. Refer to Section 5-409, "Arbitration," of this manual for more information.

Example 3-9.1: Quantity Calculations

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

QUANTITY CALCULATIONS

CEM-4801 (REV 11/1992) CT# 7541-3520-0

JOB STAMP	ITEM	FILE NO.
07-1381U4 07-LA-210-47.5/57.3 Fed. No. (NONE)	8 - Temp. Railing (Type K)	48-8-2
	LOCATION Ramp 3	SEGREGATION YES ☐ NO ☒
	CALC. BY A. Sistantre	DATE 09/17/2012
	CHK. BY R. Engeer	DATE 09/18/2012

Field Measurement:	X	Estimated Quantity:	1,500
Field Counted:	NO	Unit of Measure:	feet
Final Pay Item:	NO	Unit Price:	$8.00/foot

75% of item = 1,125 feet

125% of item = 1,875 feet

Remarks of other calculations:

500 feet placed on September 10, 2012 at Maple Street offramp, Station 3+00 RT

Material Inspection/Release: Certificate of compliance obtained on September 5, 2012.

Pay this estimate:	500 feet
Previously paid:	250 feet
Total to date:	750 feet

POSTED BY	DATE	POSTED TO
O. E. Ngineer	09/20/2012	CEM 6004, page 4 line 5

CEM4801

ADA Notice For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

Example 3-9.2: Form Letter for Submitting Proposed Final Estimate to the Contractor

Subject: Proposed Final Estimate

In accordance with the provisions of Section 9-1.17D(1) [9-1.07B], "General" of the *Standard Specifications*, attached (in triplicate) is a proposed final estimate for

_____ _____

(Contract) (Dist. Co. Rte. M.P)

Please review the proposed final estimate and, if satisfactory, indicate your approval in the space provided on the attached Acceptance Statement. Return three copies of the Acceptance Statement to this office. One copy is for your files.

Please note the following portion of Section 9-1.17D(1) [*9-1.07B*], "General" of the *Standard Specifications*, which states:

"If you accept the proposed final estimate or do not submit a claim statement before the 31st day of receiving the estimate, the Engineer furnishes the final estimate to you and the Department pays the amount due within 30 days. This final estimate and payment is conclusive except as specified in Sections 5-1.27 [9-1.03C], "Records"; 6-3.06, "Guarantee"; and 9-1.21 [9-1.09], "Clerical Errors." If you submit a claim statement before the 31st day of receiving the Engineer's proposed final estimate, the Engineer furnishes a semifinal estimate to the Contractor and the Department pays the amount due within 30 days. The semifinal estimate is conclusive as to the amount of work completed and the amount payable except as affected by the claims or as specified in Sections 5-1.27 [9-1.03C], "Records"; 6-3.06, "Guarantee"; and 9-1.21 [9-1.09], "Clerical Errors"

Your promptness in returning the signed copies, indicating your approval, will expedite payment of the final estimate. Alternatively, a signed qualified approval by reason of a written statement of claims will expedite payment of a semifinal estimate. A statement of claims must include a notarized certificate containing the language required in Section 9-1.17D(2)(c) [*9-1.07B*], "Declaration," of the *Standard Specifications*.

If claims are submitted in connection with this contract, you will be expected to comply fully with Section 9-1.17D(2) [*9-1.07B*], "Claim Statement," of the *Standard Specifications*. The engineer will base the determination of claims upon the investigation of your statement, in which you are expected to present your position fully as to the contractual basis of the claim; compliance with contract requirements such as Section 5-1.43 [*4-1.03A*], "Potential Claims and Dispute Resolution," subsections A through D, or Section 9-1.17D [*9-1.04*], "Final Payment and Claims," of the *Standard Specifications*, if applicable; a breakdown of the total amount claimed; and all other information you consider to be in support of your claim.

As further provided in Section 9-1.17D(1) [*9-1.07B*], "General," of the *Standard Specifications*, in case neither approval nor a statement of claims is received, postmarked or hand delivered, before the 31st day, a final estimate in the amount of this proposed final estimate will be issued. Your date of receipt of this proposed final estimate establishes the beginning of the specified 30 days.

Sincerely,

District Construction Office

Example 3-9.3: Acceptance Statement Form

Subject: Acceptance Statement

Attachment to transmittal letter

Dated _____ Contract Identification_____

I have examined the quantities of bid items and amounts indicated as payment for extra work and the deductions on the proposed final estimate dated _____. I agree to accept the total of $_____ as indicated, as the total amount earned for all work performed on the above contract, except as may be indicated below.

_____
Contractor

Exceptions (check one)

_____
By

[ ] None

[ ] As indicated per attached letter dated _____

_____
Title

_____
Date

Example 3-9.4: Sample of the Proposed Final Estimate

PROGRAM CAS145 PAGE 1
DATE 06/13/12 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION 04-888884
TIME 10:46 AM ESTIMATE NO. 29
BID OPENING 11/10/09 P R O J E C T R E C O R D - E S T I M A T E WORK PERFORMED THROUGH 05/21/12
R.E. NAME: MAYA, TYKE DATE OF THIS ESTIMATE 06/13/12
LOCATION PROPOSED FINAL ESTIMATE
04-SON-128-41.8/44.7

COASTAL MOUNTAIN CONSTRUCTORS, INC.
8884 GOLDENEYE COURT
SANTA ROSA, CA 95402

IN SONOMA COUNTY ABOUT 9 KM EAST OF
PETALUMA FROM ADOBE ROAD TO 0.2 KM
WEST OF ARNOLD DRIVE

FED. AID NO. ACHS-P128(42)E ,STP-P128(42)E

CONSTRUCT RETAINING WALLS

ITEM NO.	ITEM DESCRIPTION	UNIT	CONTRACT PRICES	ORIGINAL AUTH. AMT	THIS ESTIMATE QUANTITY	THIS ESTIMATE $ AMOUNT	TOTAL ESTIMATE QUANTITY	TOTAL ESTIMATE $ AMOUNT
001	PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	2,500.0000	2,500.00			0.900	2,250.00
002	SMALL BUSINESS UTILIZATION REPORT	EA	250.0000	2,250.00			6.000	1,500.00
003	TIME-RELATED OVERHEAD	WDAY	410.0000	180,400.00			440.000	180,400.00
004	TEMPORARY FENCE (TYPE BW)	M	8.2000	30,094.00			3,844.860	31,527.85
005	TEMPORARY FENCE (TYPE ESA)	M	6.2000	11,718.00			1,986.150	12,314.13
006	TEMPORARY SHORING	M2	137.0000	104,120.00			44.400	6,082.80
007	TEMPORARY CREEK DIVERSION SYSTEM (LOCATION 1)	LS	16,000.0000	16,000.00			1.000	16,000.00
008	TEMPORARY CREEK DIVERSION SYSTEM (LOCATION 2)	LS	18,500.0000	18,500.00			1.000	18,500.00
009	TEMPORARY CREEK DIVERSION SYSTEM (LOCATION 3)	LS	16,000.0000	16,000.00			1.000	16,000.00
010	TEMPORARY CREEK DIVERSION SYSTEM (LOCATION 4)	LS	23,000.0000	23,000.00			1.000	23,000.00
011	TEMPORARY CREEK DIVERSION SYSTEM (LOCATION 5)	LS	16,000.0000	16,000.00			1.000	16,000.00
012	TEMPORARY CREEK DIVERSION SYSTEM (LOCATION 6)	LS	23,000.0000	23,000.00			1.000	23,000.00
013	CONSTRUCTION SITE MANAGEMENT	LS	2,500.0000	2,500.00			1.000	2,500.00
014	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	2,500.0000	2,500.00			0.905	2,262.50
015	TEMPORARY SILT FENCE	M	8.0000	35,040.00			4,507.200	36,057.60
016	TEMPORARY GRAVEL BAG BERM	M	5.5000	14,080.00			295.000	1,622.50
017	TEMPORARY CONSTRUCTION ENTRANCE	EA	1,700.0000	10,200.00			15.000	25,500.00
018	TEMPORARY COVER	M2	3.1000	7,967.00			988.000	3,062.80
019	TEMPORARY CHECK DAM	M	6.4000	832.00			1,457.000	9,324.80
020	MOVE-IN/MOVE-OUT (TEMPORARY EROSION CONTROL)	EA	825.0000	4,950.00			9.000	7,425.00
021	TEMPORARY DRAINAGE INLET PROTECTION	EA	118.0000	7,080.00			70.000	8,260.00
022	TEMPORARY HYDRAULIC MULCH (BONDED FIBER MATRIX)	M2	0.7500	12,900.00			48,149.850	36,112.39

Example 3-9.5 Sample of the Project Record Estimate, Summary of Payment

```
PROGRAM CAS145                                                                                                          PAGE  7
DATE 06/13/12                          STATE OF CALIFORNIA  -  DEPARTMENT OF TRANSPORTATION                            04-888884
TIME 10:46 AM                                                                                                     ESTIMATE NO. 29
BID OPENING 11/10/09                     P R O J E C T   R E C O R D  -  E S T I M A T E          WORK PERFORMED THROUGH 05/21/12
R.E. NAME:  MAYA, TYKE                                                                            DATE OF THIS ESTIMATE  06/13/12
-------------------------------------------------------------------------------------------------------------------------------
ITEM                                                    CONTRACT     ORIGINAL          THIS ESTIMATE                TOTAL ESTIMATE
NO.            ITEM DESCRIPTION                UNIT      PRICES     AUTH. AMT       QUANTITY     $ AMOUNT       QUANTITY     $ AMOUNT
-------------------------------------------------------------------------------------------------------------------------------
    SUBTOTAL CONTRACT ITEMS WITHOUT MOBILIZATION                                                     678.00                 9,895,807.47
         ADJUSTMENT OF COMPENSATION                                                               16,640.84               416,295.18
         EXTRA WORK                                                                               31,368.17             2,150,540.17
    SUBTOTAL AMOUNT EARNED WITHOUT MOBILIZATION                                                   48,687.01            12,462,642.82
151 MOBILIZATION                                LS   440,000.0000    440,000.00                                 1.000    440,000.00
         ORIGINAL CONTRACT AMOUNT                                  10,972,373.50
    TOTAL WORK COMPLETED                                                                          48,687.01            12,902,642.82
         MATERIALS ON HAND ON SITE                                                                                                0.00
         MATERIALS ON HAND ELSEWHERE                                                                                              0.00
         DEDUCTIONS                                                                              -10,000.00               -12,130.00
    TOTAL                                                                                         38,687.01            12,890,512.82
              ITEMS FOR WHICH CONTRACT PRICE EXCEEDS MAXIMUM VALUE
                                   N O N E
DATE CONTR CONTRACT DATE WORK   BEGIN    JOB COM-    WORKING   WEATHER NON-   C.C.O.      OTHER       PERCENT     PERCENT TIME
 APPROVED    DAYS    STARTED   CONSTR   PLETED ON    DAYS     WORKING DAYS   DAYS        DAYS       COMPLETED      ELAPSED
  01/06/10    565    01/20/10 01/20/10  05/21/12     440          0            0           0          100%          100%
                                                                                MAYA, TYKE
                                                                                RESIDENT ENGINEER

     PROGRAM CAS145
     DATE 06/13/12
```

Example 3-9.6: Schedule B – Extra Work and Adjustment of Compensation

```
PROGRAM CAS145   S C H E D U L E   O F   E X T R A   W O R K    PAGE NO.  1
DATE 06/13/12                                                    EST. NO.29
TIME 10:46 AM
R.E. NAME: MAYA, TYKE                                      04-888884
-----------------------------------------------------------------------
CCO REPORT       REPORT TYPE OF WORK(+) WORK  BR CONTR
NO. NUMBER       AMOUNT PERFORMED   (-) DATE  WK RPT.NO C O M M E N T S
-----------------------------------------------------------------------
001 0583         299.24 E.W. @ F.A.(+) 050312 N 1039.0
    0584       1,040.25                050312 N 1040.0
    0585       2,005.32                051512 N 1045.0
010 0103      16,640.84 A.C. @ U.P.(+) 123111 N 100RS0
035 0003       5,742.24 E.W. @ F.A.(+) 061411 N 0662.0
054 0005      21,651.92 E.W. @ F.A.(+) 121911 N ABL2 0
058 0003         629.20 E.W. @ F.A.(+) 050112 N 1041.0
              48,009.01  TOTAL THIS ESTIMATE
           2,518,826.34  TOTAL PREVIOUS ESTIMATE
           2,566,835.35  TOTAL TO DATE
```

Example 3-9.7 Schedule of Extra Work

```
PROGRAM CAS145   S C H E D U L E   O F   E X T R A   W O R K    PAGE NO.  1
DATE 06/13/12                                                    EST. NO.29
TIME 10:46 AM
R.E. NAME: MAYA, TYKE                                      04-888884
-----------------------------------------------------------------------
CCO REPORT       REPORT TYPE OF WORK(+) WORK  BR CONTR
NO. NUMBER       AMOUNT PERFORMED   (-) DATE  WK RPT.NO C O M M E N T S
-----------------------------------------------------------------------
001 0583         299.24 E.W. @ F.A.(+) 050312 N 1039.0
    0584       1,040.25                050312 N 1040.0
    0585       2,005.32                051512 N 1045.0
010 0103      16,640.84 A.C. @ U.P.(+) 123111 N 100RS0
035 0003       5,742.24 E.W. @ F.A.(+) 061411 N 0662.0
054 0005      21,651.92 E.W. @ F.A.(+) 121911 N ABL2 0
058 0003         629.20 E.W. @ F.A.(+) 050112 N 1041.0
              48,009.01  TOTAL THIS ESTIMATE
           2,518,826.34  TOTAL PREVIOUS ESTIMATE
           2,566,835.35  TOTAL TO DATE
```

Example 3-9.8: Schedule of Deductions

```
PROGRAM CAS145   S C H E D U L E   O F   D E D U C T I O N S    PAGE NO.  1
DATE 06/13/12                                                    EST. NO.29
TIME 10:46 AM
R.E. NAME: MAYA, TYKE                                      04-888884
-----------------------------------------------------------------------
DEDUCTION DESCRIPTION          AMOUNT  EST          THIS          TOTAL
                                       NO.        ESTIMATE       ESTIMATE
-----------------------------------------------------------------------
ADMINISTRATIVE
RESTAKING CHARGE REQ 62      -1,065.00   18
RESTAKING CHARGE REQ 65      -1,065.00   22
                                                      0.00      -2,130.00
LABOR COMPLIANCE VIOLATION
MISSING PAYROLLS            -10,000.00   20
RETURN PAYROLL DEDUCTION     10,000.00   21
MISSING PAYROLLS            -10,000.00   29
                                                -10,000.00     -10,000.00
                         TOTAL DEDUCTIONS       -10,000.00     -12,130.00
```