California Department of Transportation

MANUAL CHANGE TRANSMITTAL		NO. **08-1**
TITLE: Department of Transportation *Construction Manual*	APPROVED BY: Mark Leja Chief Division of Construction	DATE ISSUED: 09/30/08
SUBJECT AREA Index and other areas of the *Construction Manual*	ISSUING UNIT Division of Construction	
SUPERSEDES CPD 01-12, CPB 03-7, CPB 03-9, CPB 07-4, and CPD 08-10	DISTRIBUTION All Requested Manual Holders	

The purpose of this manual change transmittal is to provide updates and corrections to the 2001 edition of the Caltrans *Construction Manual*. Please update your manual in accordance with the table below. The relevant pages are indicated in the table.

The Publication's unit is gradually converting the *Construction Manual* from PageMaker to InDesign. As a result of reformatting, you will notice more pages included in this transmittal then necessary to show the changes.

Section(s)	Remove Old Page(s)	Insert New/Revised Page(s)
Update: Golden Rod, Chapter 3, Section 511, "Differing Site Conditions," to add a subsection.	3-5.i	3-5.i
Update: Chapter 3, Section 511, "Differing Site Conditions," is revised to include a new subsection 3-511D, "Management Review Committee." (CPD 01-12)	3-5.1 thru 3-5.9	3-5.1 thru 3-5.10
Update: Golden Rod, Chapter 3, Section 705, "Public Safety," is revised for subsections previously added.	3-7.i thru 3-7.ii	3-7.i thru 3-7.ii
Update: Chapter 3, Section 705A (1), "Temporary Vertical and Horizontal Clearance Changes," is revised to include contractor requirements from the *Standard Specifications*. Sections 3-707B, "Railroad Insurance" and 3-707B (2), "Responsibility," to change branch to coordinator.	3-7.1 thru 3-7.16	3-7.1 thru 3-7.16

Section(s)	Remove Old Page(s)	Insert New/Revised Page(s)
Update: Chapter 3, Section 801, "Subcontracting," to include the reasons for substitution. Also, to add procedures for Before, During, and After the Hearing Process. Tables 3-8.1 & 2 were eliminated. Sections 3-804 thru 3-805A (2) and 3-806B are revised for sentence structure. Section 3-805A (3) is updated for "55-day beginning of work" specification changes. Section 3-805A (4) is revised to delete the procedure for districts to send copies of CEM-2701 to Headquarters. Section 3-807, "Termination of Control," is revised for changes in maintaining the termination database.	3-8.1 thru 3-8.39	3-8.1 thru 3-8.37
Update: Golden Rod, Chapter 3, Section 9, "Measurement and Payment."	3-9.i thru 3-9.ii	3-9.i thru 3-9.iii
Update: Chapter 3, Sections 3-904B(4), "Labor," 3-904(5), "Equipment," and 3-904C, "Markup for Subcontracted Work," to delete the percentage of markup and reference the contract instead. Sections 3-911, "Payment of a Progress Estimate After Contract Acceptance," and 3-914A, "Material to Submit," to delete forms FHWA-47M and CEM-2402S.	3-9.5 thru 3-9.41	3-9.5 thru 3-9.40
Update: Golden Rod, Chapter 5, Section 1, "Project Records and Reports."	5-1.i thru 5-1.iv	5-1.i thru 5-1.vi
Update: Chapter 5, Section 101B, "Construction Forms," by adding 12 new forms and descriptions: CEM-3501, 3502, 3511, 3512, 3513, 3703, 5501, 5502, 6302 and TL-0625, 6013, and 6014 descriptions. Form number H-ESP-16 is corrected. CEM-2402S and FHWA-47 have been deleted. Form websites have been updated. Stock numbers have been deleted from forms that are no longer available at the Caltrans Warehouse. Section 5-102C, "Description of Categories," is updated to change cat. 32, 35, 39 and add cat. 55. Content corrections for cat. 37, 38, 41, 60 and 61 have been made.	5-1.1 thru 5-1.74	5-1.1 thru 5-1.75

Section(s)	Remove Old Page(s)	Insert New/Revised Page(s)
Update: Golden Rod, Chapter 8, Section 2, "Equal Employment Opportunity."	8-2.i	8-2.i
Update: Chapter 8, Section 2, "Equal Employment Opportunity," is revised to include Title 6 and Title 7, procedures from CPB 03-7 and CPB 03-9. Section 8-209, "Contracts Containing Fed. Requirements Training Special Provision," is a revised procedure changing the goal for the number of apprentices/trainees to a requirement. (CPD 08-10)	8-2.1 thru 8-2.3	8-2.1 thru 8-2.7
Golden Rod, Appendix I, "Forms Used for Contract Administration."	A-1.i thru A-1.iv	deleted
Appendix – Sample Forms: With CEM forms now available on the internet and intranet, ALL sample forms will be deleted from the manual. Appendix references in individual CEM form descriptions in Section 5-1 have been deleted. Links to non-construction forms have been added to Section 5-1.	A1 thru A125	deleted
Index	I.1 thru I.16	I.1 thru I.18

Section 5 Control of Work

3-501 General

3-502 Authority of Engineer
3-502A Resident Engineer

3-503 Plans and Working Drawings
3-503A Trench Excavation Safety Plans

3-504 Order of Work

3-505 Superintendence

3-506 Lines and Grades

3-507 Inspection

3-508 Removal of Rejected and Unauthorized Work

3-509 Equipment and Plants

3-510 Alternative Equipment

3-511 Differing Site Conditions
3-511A Type 1
3-511B Type 2
3-511C Procedure
3-511D Management Review Committee

3-512 Character of Workers

3-513 Final Inspection
3-513A Work for Other Agencies or Owners

3-514 Cost Reduction Incentive
3-514A Procedure

Section 5 Control of Work

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3-501 General

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Section 5, "Control of Work," of the *Standard Specifications,* details how contract work will be controlled. The proper performance of the contractor and the engineer ensure control. During the manufacture of products and the execution of the project, the contractor performs all actions necessary to ensure that the work has the required attributes. The engineer samples, tests, and inspects the work to determine if the characteristics conform to the contract requirements.

3-502 Authority of Engineer

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The term "engineer," as used in Section 5-1.01, "Authority of Engineer," of the *Standard Specifications,* means the "chief engineer" acting through authorized representatives. The authorized representatives must act in accordance with the chief engineer's policies and procedures and, in the absence of written instruction, must exercise judgment within their span of control and ability. Section 1-1.18, "Engineer," of the *Standard Specifications* defines the term "engineer."

The engineer will focus on the details and methods of performing the work only if one or more of the following conditions exist:

- The details and methods of performing the work are specified.
- The essential attribute or end result cannot be measured.
- Public safety or convenience is involved.

Otherwise, the details and methods must be left to the contractor's discretion.

3-502A Resident Engineer

The resident engineer, subject to delegation of authority within the district, is the authorized representative of the chief engineer on the project; therefore, contacts and correspondence should be between the contractor and the resident engineer.

Resident engineers must report their assignments to all interested parties by submitting Form CEM-0101, "Resident Engineer's Report of Assignment." Submit this form at the earliest possible time.

Good working relationships between the resident engineer and the contractor encourage an effective, efficient project and can minimize misunderstandings and disputes.

3-503 Plans and Working Drawings

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The contract may require that plans and working drawings be submitted to the engineer for approval. Caltrans has established a formal procedure for the approval of such plans for those facilities designed by the Office of Structure Design. For the procedures for buildings, see Section 132 of the *Bridge Construction Records and Procedures Manual,* Volume II. Review these procedures when applicable to resident engineers. Similar procedures are used for pumping plants and electrical and mechanical equipment. The district must establish similar procedures for those facilities designed in the district.

In addition, the contract may require that plans and calculations be submitted to the resident engineer for review and approval for falsework, shoring, and bridge demolition. For guidelines for the review and approval process see Sections 120, 122, and 124 of the *Bridge Construction Records and Procedures Manual*, Volume II.

3-503A Trenching Excavation Safety Plans

For each location, the contractor must submit a specific plan describing how workers will be protected from the hazards of ground caving in.

Simply stating that the *Construction Safety Orders* will be followed does not constitute a plan.

3-504 Order of Work

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If the plans or special provisions do not contain a specified sequence of operations, contractors may select their own schedules, provided the planned order of work meets any dates specified for completion and openings of portions of the work to traffic.

Occasionally, the contractor may submit a proposed modification of the specified order of work that will be more satisfactory for the work's operation. If, in the resident engineer's opinion, Caltrans will benefit as much or more by adopting this proposal as it would under the specified plan, the contractor's plan may be implemented with a contract change order requested by the contractor. Caltrans must receive a monetary adjustment if the contractor has any reduced costs from the change. Also, a contractor may benefit if a change is proposed and accepted under a change order for a cost reduction incentive. See Section 3-514, "Cost Reduction Incentive," of the *Construction Manual* (manual) and Section 5-1.14, "Cost Reduction Incentive," of the *Standard Specifications*.

The resident engineer must recheck the specified plan of operations during the work's progress. Changes in circumstances may necessitate altering the planned sequence and schedule. Stage construction is often a part of the contract on major projects, and revised progress schedules may be required as the stages of work develop.

3-505 Superintendence

3-505 Superintendence

As required by Section 5-1.06, "Superintendence," of the *Standard Specifications*, contractors, including those in a joint venture, must name in writing one authorized representative. Resident engineers must insist contractors meet this requirement promptly. In case of disagreement among the contractors' representatives, the resident engineer can then contractually refuse to deal with more than one representative.

3-506 Lines and Grades

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Section 5-1.07, "Lines and Grades," of the *Standard Specifications* requires the engineer to establish any lines and grades necessary to permit satisfactory completion of the specified work. For information on construction surveys, see Chapter 12, "Construction Surveys," of the *Caltrans Surveys Manual*.

To establish line and grade, the district surveys unit must set the construction marks and stakes.

3-507 Inspection

3-507 Inspection

The resident engineer and assistant resident engineers have a primary duty to obtain compliance with the *Standard Specifications*, special provisions, and plans within the tolerances specified in these documents. When tolerances are not specified, the engineer must use judgment in determining the allowable deviation consistent with the usage of the trades involved.

Standard Specifications Section 5-1.08, "Inspection," allows the resident engineer access for inspection to work pertaining to contract items or work included on approved contract change orders. The access must be safe, and the resident engineer must take full advantage of this access.

Cal/OSHA establishes standards for safe access to work, and Caltrans enforces them under Section 7-1.06, "Safety and Health Provisions," of the *Standard Specifications*. When the contract specifies that the cost for access is included in various items of work, no separate payment is allowed.

Approved contract change orders do not include the cost of providing access for inspection related to extra work or other changed work. The contractor's costs for inspection on extra work or other changed work may be billed as separate compensation on extra work bills. Costs should be billed to the nearest tenth of an hour. When contractors bill inspection costs for access on changed work with other extra work, they should bill only the increased cost of providing inspection and not all of the inspection access costs under the original item work.

The resident engineer and assistant resident engineer must never operate the contractor's equipment. The contractor's own equipment operators should operate equipment during inspections.

3-508 Removal of Rejected and Unauthorized Work

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Section 5-1.09, "Removal of Rejected and Unauthorized Work," of the *Standard Specifications*, specifies the contractor's responsibility for rejected or unauthorized work.

Unauthorized work includes excavation outside planned slopes and below the grading plane. Unless an approved contract change order authorizes such excavation, do not permit it.

Section 3-603, "Defective Materials," in this manual discusses the rejection of material that fails to meet specified requirements. Rejected material must be removed and replaced. When rejected material is remedied, it may remain in place only when the engineer gives written approval. In most cases, this approval requires a contractor-requested contract change order. For instance, a contract change order would be necessary to approve a contractor's proposal to remedy out-of-specification aggregate base by adding additional aggregate to material deposited previously. A contract change order is necessary in this situation because the remedy requires a change in specifications. However, the engineer's written approval is not required when the remedy is specified, such as the remedy for damaged galvanizing of pipe or guardrail.

For all material used in the work, make the payment in accordance with the specifications. As an alternative to removal and replacement, do not allow defective material to remain in place without contract payment. Any such action must be provided for in the specifications under "operating range" and "contract compliance" or provided by an approved contract change order.

3-509 Equipment and Plants

3-509 Equipment and Plants

Section 5-1.10, "Equipment and Plants," of the *Standard Specifications*, requires each piece of equipment to have a number stamped or stenciled upon it. The identifying number should be further referenced to the license plate issued for the piece of equipment. This additional reference is especially important in the case of tractor and trailer combinations where the tractor may pull different trailers on separate occasions.

The engineer must use the identifying numbers to keep records of working and idle time for both the equipment and operators, including, among other items, contract items, extra work, move in and out, and plant erecting. Some items of work will require more complete records than other items. The resident engineer must determine which items of work need these records and how much detail will be necessary. Records of this kind are also required for costs when the quantity of certain contract items runs over 125 percent or under 75 percent of the estimated quantity.

Caltrans personnel must not instruct the contractor's employees in equipment operation. The resident engineer must be very careful in this area because the contractor may interpret suggestions as the engineer's direct orders. Caltrans personnel must also not adjust the contractor's equipment or ride on equipment other than that designed for personnel transportation or as required to inspect specific features of the work.

3-510 Alternative Equipment

3-510 Alternative Equipment

In lieu of specified equipment, Section 5-1.11, "Alternative Equipment," of the *Standard Specifications*, provides for the use of new or improved equipment subject to satisfactory performance as determined by the engineer.

Contract change orders must cover all modifications under Section 5-1.11. Do not adjust cost for such changes.

3-511 Differing Site Conditions

3-511 Differing Site Conditions

When a differing site condition occurs, Section 5-1.116, "Differing Site Conditions," of the *Standard Specifications* provides recourse for Caltrans and the contractor. When a differing site condition arises, the resident engineer or structure representative should contact the district materials unit or Geotechnical Services at:

http://www.dot.ca.gov/hq/esc/geotech/

Following are two types of differing site conditions that exist, followed by the procedure to recover damages or savings for a differing site condition claim:

3-511A Type 1

Type 1 consists of subsurface or latent physical conditions materially different from those indicated in any of the following:

- The contract.
- The log of test borings.
- Other records of geotechnical data obtained by Caltrans' investigation of subsurface conditions.

- The “materials information.”
- Other records of data to the extent they were available to the contractor prior to the opening of the bids.
- An examination of site conditions above ground.

3-511B Type 2

Type 2 consists of unknown physical conditions of an unusual nature that are materially different from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract.

3-511C Procedure

For the contractor to recover damages for a differing site condition claim, the following things must be done:

- Before the bid, the contractor must investigate the site and carefully examine the following items:
  1. Plans.
  2. Specifications.
  3. “Materials information.”
  4. Log of test borings.
  5. Other records of geotechnical data (cores and other physical data) obtained by Caltrans’ investigation of subsurface conditions.
  6. Other records of data to the extent they were available to the contractor.

This investigation is required by Section 2-1.03, “Examination of Plans, Specifications, Contract, and Site of Work,” of the *Standard Specifications*.

- The conditions encountered must either be materially different from those represented by the bid documents, other records of data available to the contractors before bid, and a site investigation or be materially different from those normally encountered or inherent in the industry.
- The contractor must provide the resident engineer with written notice of the conditions before disturbing them.
- The resident engineer must investigate the conditions and determine if they differ materially and cause an increase or decrease in the cost or time to do the work.

The resident engineer must remain alert to the possibility that a differing site condition may result in a credit to the state. If such a condition is encountered, the resident engineer must promptly notify the contractor in writing.

The specifications for differing site conditions do not apply to situations covered in Section 8-1.09, “Right of Way Delay”; Section 8-1.10, “Utilities and Non-Highway Facilities”; or Section 19-1.04, “Removal and Disposal of Man-Made Objects,” of the *Standard Specifications*.

Differing site conditions are not considered “changes in character,” because the conditions do not result from ordered changes. However, determine and give compensation or credit due for differing site conditions in the same manner as you would for changes in character. For how compensation is made for changes in character and for a sample contract change order, see Section 5-3, “Contract Change Orders,” of this manual.

3-511D Management Review Committee

If you disagree with the contractor's claim of a differing site condition claim then a management review committee is formed to clarify Caltrans' position on the dispute. The management review committee consists of the deputy district director, construction (chairman), the structure construction area manager, and the construction field coordinator.

The process consists of three primary steps:

1. Within five days of receipt of a supplemental notice of potential claim pertaining to a differing site condition dispute, the resident engineer prepares a draft response to the potential claim and submits the response to the deputy district director, construction.
2. The management review committee reviews the resident engineer's draft response and provides any comments within 10 days of receipt of the supplemental notice of potential claim. The committee or the contractor can initiate further communication with the other party during this period to clarify information related to the differing site condition dispute.
3. Within 20 days of the supplemental notice of potential claim, the resident engineer will incorporate any response from the management review committee into the potential claim response and submit the response to the contractor.

3-512 Character of Workers

3-512 Character of Workers

Section 5-1.12, "Character of Workers," of the *Standard Specifications*, covers the issue of character of workers. In addition, Caltrans policy calls for a work environment with zero tolerance for violence, threats, harassment, and intimidation. This policy also applies to any subcontractor or employee of a contractor in their dealings with Caltrans personnel. Caltrans may discharge a worker from the project for engaging in any of the above-mentioned activities.

Discuss the decision to remove a worker with the worker's supervisor before issuing a directive to do so. The contractor may request reinstatement of the worker. If requested, the resident engineer's supervisor conducts a meeting with the resident engineer, the contractor's authorized representative, and, at the contractor's discretion, the affected worker. The reason for removal and the contractor's request for reinstatement are discussed at the meeting.

None of these procedures affects the authority of the resident engineer to direct the removal of a worker from the project.

3-513 Final Inspection

3-513 Final Inspection

As a project's completion approaches, the resident engineer must schedule appropriate reviews with maintenance, traffic, and safety personnel.

To resolve any potential problems on interstate projects, request field engineer from the Federal Highway Administration to review the project before the day of final inspection. Your objective is to prevent last-minute delays in contract acceptance.

According to Section 5-1.13, "Final Inspection," of the *Standard Specifications*, the engineer must do a final observation of the contract work during the final inspection. The district director or an engineer from the district construction, such as the district construction deputy director, construction engineer, structure construction engineer, or resident engineer, must make the final inspection.

Maintain a record of the final inspection in the resident engineer's daily report. The record should state something along the following lines:

> "I made a final inspection of the project today and determined that all contract work has been completed."
>
> Or,
>
> "(Name) made the final inspection today and concurred that all contract work has been completed."

Time the final inspection so that the recommendation for contract acceptance will not be delayed pending the inspection. Before the final inspection, give the contractor a written list of items needing attention.

3-513A Work for Other Agencies or Owners

When any work performed under the contract is for other agencies or owners, as a courtesy ask for the concurrence of these entities in the acceptability of the work. Include the concurrence of others such as local agencies, other state agencies, utility companies, and school districts.

Also ask for concurrence from another party or agency if it finances a state highway project or a portion of the project. The district must arrange a joint field inspection with the owner or agency. In writing and in advance (usually 30 days), notify the owner or agency when the facility will be ready for final inspection. Time the inspection so that concurrence for acceptance is available at the time of recommending to the director the acceptance of the contract or relief from responsibility for maintenance. However, do not withhold recommendations for acceptance or relief merely because an outside agency will not concur.

The letter notifying the owner or agency of readiness for inspection should include the following:

- A reference to the agreement.
- A statement that the inspection is to determine whether work is in compliance with plans, the agreement, or both.
- The date of the inspection.
- A request that when an inspection reveals no deficiencies, the agency's authorized representative responsible for performing the inspection will confirm in writing that the agency agrees to accept the work.
- A statement that failure by the agency to inspect or confirm acceptance in writing will be deemed acceptance of the work as constructed.

If the size or complexity of the work warrants such an action, an agency representative and the resident engineer should make a preliminary joint inspection to correct minor deficiencies before the final inspection described above.

The resident engineer must record in writing preliminary and final joint field inspections, noting what actions were necessary to complete the work to the satisfaction of the agency representative. If the agency representative is satisfied with the completeness but declines concurrence in writing, record this situation.

3-514 Cost Reduction Incentive

Caltrans encourages contractors to develop and implement innovative approaches to construction projects. When new approaches result in construction cost savings, Caltrans and the contractor may share the savings in construction cost. Section 5-1.14, "Cost Reduction Incentive," of the *Standard Specifications* specifies the method and procedure for sharing construction cost savings. A contractor's proposal made in accordance with Section 5-1.14 is called a cost reduction proposal.

The special provisions may allow for the contractor and engineer to organize and participate in a "value analysis" workshop. The workshop's purpose is to identify value-enhancing opportunities that would reduce the total project cost, time of construction, or traffic congestion. Items identified in the workshop could be developed into cost reduction proposals.

Section 5-1.14 applies only to the actual cost of construction. Savings in construction engineering, maintenance, operations, safety, and traffic services, among other items, are not eligible for sharing with the contractor.

3-514A Procedure

Handle cost reduction proposals using the following procedure:

- After discussing the merits of a potential cost reduction proposal with the resident engineer, the contractor may submit a written proposal for approval. The initial written proposal may be preliminary in nature, but for Caltrans to evaluate the anticipated cost savings or other value enhancement, the proposal must provide enough of the information required by Section 5-1.14, "Cost Reduction Incentive," of the *Standard Specifications*. Thus, the proposal must include information regarding the following:
    1. Construction effects related to staging, right-of-way, or environment.
    2. Required permits or permit modifications.
    3. Maintenance or enhancement of essential functions or characteristics of the project such as service life, reliability, economy of operation, ease of maintenance, desired appearance, conformity to design, safety and other applicable standards, and the time within which the engineer must make a decision on the proposal.
- With assistance from the resident engineer, the construction engineer must coordinate Caltrans' evaluation of the written proposal by the date requested by the contractor.
- Consider the following factors in determining whether a proposal is acceptable. Do not include any cost benefit resulting from these factors in the actual computation of net savings in construction costs.
    1. Any engineering, environmental, legal, or administrative considerations making the proposal impractical or unacceptable.
    2. The relationship of net savings to the cost of evaluating and implementing the proposal.
    3. Any total benefit to the public including construction savings or reduced engineering costs.
    4. Improved operations.

5. Reduced maintenance.
6. Improved safety and traffic service or other values that clearly favor the proposal.

- Compute a cost reduction proposal's net savings because of the changed work in accordance with the methods detailed in Section 4-1.03C, "Changes in Character of Work," of the *Standard Specifications*. The net savings must result from the difference in the actual cost of doing the work in accordance with the contract plans and specifications as originally planned and the actual cost of doing the work based on designs, methods, labor, equipment, and materials as changed by the proposal. In determining the net savings, exclude from consideration the contractor's engineering and other costs incurred in preparing the proposal. Also exclude Caltrans' cost of evaluating the proposal, including any portion of this effort the contractor paid for.
- If the submitted proposal appears acceptable, but Caltrans' anticipated engineering costs are high, the contractor must stipulate in writing a willingness to share such costs before the proposal will be evaluated further. This willingness must be stipulated whether or not the proposal is ultimately adopted. Such a letter from the contractor provides the district with the authority to deduct engineering costs from progress payments. To record Caltrans engineering costs, proceed as follows:
  1. For the phase 3 expenditure authorization, establish a subjob number. Establish this number regardless of the proposal's subsequent approval or rejection. Charge all time spent evaluating the proposal to the subjob number.
  2. To provide the means of segregating costs, the district must immediately prepare and submit the subjob number for the master file. After executing the change order for the cost reduction proposal, do not charge construction engineering to the subjob number.
  3. In conformance with Section 5-1.14, "Cost Reduction Incentive," of the *Standard Specifications*, you may deduct from progress payments a portion of Caltrans' engineering costs for evaluating the cost reduction proposal. Use the following method to determine the deduction. If Caltrans' engineering costs (A) exceed Caltrans' share (B) of the total computed net savings, deduct the difference (A minus B) from progress payments. Inform the contractor of the reason for any deductions.
- If the submitted proposal provides for a substantial benefit to the public but no net savings, the engineer may still proceed with issuing a contract change order based on public benefit. However, the contract change order would not be written as a contract change order for a cost reduction proposal but as an engineer-requested contract change order.
- If the district construction deputy director (or, if applicable, the Division of Construction contract reviewer) determines that a preliminary written proposal is acceptable, the contractor may submit a complete proposal. The proposal must contain all information required by Section 5-1.14, "Cost Reduction Incentive," of the *Standard Specifications.* This information must be in sufficient detail to enable a final review and approval. The information provided should answer all questions that arose from Caltrans' review of the preliminary proposal. It must also include applicable calculations, revised plans, and revised specifications.

To resolve issues, the contractor and the resident engineer may need to have additional meetings and discussions. Before forwarding the proposal for final review by the appropriate units, ensure that the proposal is complete.

- In accordance with Section 5-1.14, "Cost Reduction Incentive," of the *Standard Specifications*, prepare a contract change order to authorize the cost reduction proposal. For guidance in preparing a contract change order for a cost reduction proposal, see Section 5-313, "Cost Reduction Proposals," in this manual. Carefully consider the contract change order's clauses covering payment to the contractor. In the contract change order, resolve all compensation and other issues related to the proposal. Before starting the authorized work, the contractor must execute and the engineer must approve the contract change order.

Section 7 Legal Relations and Responsibility

3-701 Laws to Be Observed

3-701A Reporting Apparent Attempts at Fraud on Construction Contracts
3-701B Labor Code Requirements and Fair Labor Standards Act
3-701C Contractor's Licensing Laws
3-701D Vehicle Code
3-701D (1) Weight Limitations
3-701E Trench Safety
3-701F Falsework Erection or Removal
3-701G Air Pollution Control
3-701H Water Pollution
3-701I Use of Pesticides
3-701J Sound Control Requirements

3-702 Load Limitations

3-703 Safety and Health Provisions

3-704 Public Convenience

3-704A Convenience of the Public and Public Traffic
3-704B Contingency Plans for Reopening Lane Closures
3-704C Maintenance and Improvement of Passageway Through Construction
3-704D Relief From Responsibility for Damage by Public Traffic
3-704E Maintenance Within Construction Limits

3-705 Public Safety

3-705A Clearance and Bridge Permit Rating Changes (Temporary)
3-705A (1) Temporary Vertical and Horizontal Clearance Changes
3-705A (2) Temporary Bridge Permit Rating Changes
3-705B Clearance and Bridge Permit Rating Changes (Permanent)
3-705B (1) Permanent Vertical and Horizontal Clearance Changes
3-705B (2) Permanent Bridge Permit Rating Changes

3-706 Preservation of Property

3-707 Indemnification and Insurance
3-707A Evidence of Insurance
3-707B Railroad Insurance
3-707B (1) Insurance Approvals
3-707B (2) Responsibility
3-707B (3) Insurance Renewal

3-708 Disposal of Material Outside the Highway Right-of-Way

3-709 Relief From Maintenance and Responsibility

3-710 Acceptance of Contract

3-711 Rights in Land and Improvements
3-711A Nonoperating Right-of-Way (Airspace)

Section 7 Legal Relations and Responsibility

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3-701 Laws to Be Observed

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According to the specifications, the contractor must be familiar with and comply with all laws, regulations, and ordinances that affect the labor, materials, or conduct of the work. However, the specifications do not intend or require that the resident engineer exercise police enforcement power. If the engineer learns that the contractor has violated a work-related law or regulation, the engineer must bring the matter to the contractor's attention in writing.

3-701A Reporting Apparent Attempts at Fraud on Construction Contracts

Resident engineers are confronted occasionally with situations where contractors or their subcontractors or suppliers attempt to obtain improper additional payment.

These matters may differ in magnitude and intent, and minor situations may be resolved satisfactorily at the project level. However, certain fraudulent acts, such as presenting false weight certificates, padding the number of loads of a commodity delivered, tampering with scales or falsifying test or inspection reports may require special investigation and appropriate action. Such investigations are confidential and begin with a discussion between the resident engineer and the construction engineer. To request a special investigation, write a letter to the construction field coordinator.

3-701B Labor Code Requirements and Fair Labor Standards Act

For the resident engineer's duties with regard to Labor Code requirements and the Fair Labor Standards Act, see Chapter 8, "Employment Practices," of the *Construction Manual* (manual).

3-701C Contractor's Licensing Laws

According to the specifications, all contractors and bidders must be licensed. For bidders and prime contractors, the Office of Contract Awards and Services in the Office of Office Engineer verifies compliance with the specifications. If you become aware that a prime contractor or subcontractor is not licensed for the work being performed, notify the California Contractors State License Board.

3-701D Vehicle Code

In any areas open to public traffic within the project's limits, the contractor is not exempt from Vehicle Code requirements. Equipment that fails to comply with the Vehicle Code must not be operated on detours or any other roadway open to public traffic.

3-701D (1) Weight Limitations

Except for special conditions described in Section 7-1.02, "Load Limitations," of the *Standard Specifications*, all equipment hauling materials over roads or streets open to public traffic to, from, or within the project must comply with weight limitations required by the Vehicle Code. To enforce weight limitations for overloads hauled over public roads and streets, follow the procedure outlined below. The permitted tolerance described below is selected to make Caltrans actions compatible with

routine enforcement procedures used by the California Highway Patrol (CHP). Here is the procedure to follow:

- The assistant resident engineer receiving a weight slip indicating an overload may accept a load that is not more than 90 kg over the legal gross weight. However, advise the contractor immediately that if the violation continues, Caltrans will refuse to accept such loads and will notify the CHP.
- When a weight slip indicates that a load is more than 90 kg over the legal gross weight, reject the load and notify the CHP that overloads are being hauled.
- Prohibit rejected material from being used in the work unless the load is reduced to or below the legal maximum weight (not including the tolerance) and is again weighed to establish a new weight.
- Record the identification of rejected weight slips in the daily report.

The objective of the above procedure is to discourage hauling overloads. Minor variations in the above procedure are acceptable provided the objective is met.

3-701E Trench Safety

The Office of Structure Construction's *Trenching and Shoring Manual* provides technical guidance for analyzing designs of trenching and shoring systems. It also contains information regarding California's legal requirements for trench safety.

3-701F Falsework Erection or Removal

Detailed instructions for reviewing falsework for bridges or other major structures are contained in the Office of Structure Construction's *Falsework Manual*. When the erection or dismantling of falsework is over or adjacent to a traveled way, project personnel must do the following:

- Before the erection or removal of falsework, determine the exact method of operation the contractor proposes to use.
- If any possibility exists that a material or equipment failure or human error could endanger the public, ensure traffic is rerouted or temporarily stopped during critical portions of the erection and removal operations.
- Normally, the contract will provide necessary detours or other restrictions such as the time of day when certain operations may be performed. In the absence of specific contract requirements, require the contractor to take the necessary measures in accordance with Section 7-1.09, "Public Safety," of the *Standard Specifications.*
- Ensure unplanned detours are paid for in accordance with Section 4-1.04, "Detours," of the *Standard Specifications*.
- Notify the Transportation Permits Branch of the upcoming reduction of vertical clearance. See "Impaired Clearance (temporary)" later in this section.

3-701G Air Pollution Control

See Chapter 7, "Environmental," of this manual.

3-701H Water Pollution

See Chapter 7, "Environmental," of this manual.

3-701I Use of Pesticides

The resident engineer's duties regarding pesticide use are included in Section 4-20, "Erosion Control and Highway Planting," of this manual.

3-701J Sound Control Requirements

See Chapter 7, "Environmental," of this manual.

3-702 Load Limitations

3-702 Load Limitations

Section 7-1.02, "Load Limitations," of the *Standard Specifications* permits overloads within the project limits under certain conditions. The special provisions may also provide conditions under which the contractor may haul overloads. However, the contractor must provide any necessary protective measures and repair any damage resulting from overloads.

The resident engineer, in accordance with Caltrans policy for overloads, will handle requests for nonrepetitive overloads on completed work within the contract limits. You can obtain details from the Transportation Permits Branch. The *Bridge Construction Records and Procedures Manual* contains procedures for allowing certain overloads on structures.

3-703 Safety and Health Provisions

3-703 Safety and Health Provisions

The contractor must conform to all Division of Occupational Safety and Health standards. See Section 2-1, "Safety," of this manual for guidelines for administering the contract's safety requirements.

3-704 Public Convenience

3-704 Public Convenience

The following five sections provide guidelines for enforcing the provisions in Section 7-1.08, "Public Convenience," of the *Standard Specifications* and contain discussion of other topics related to the passage of public traffic through construction projects.

3-704A Convenience of the Public and Public Traffic

The contractor has a contractual obligation to provide for the convenience of the public and public traffic. Section 7-1.08 requires that operations be conducted in such a way as to prevent the least possible obstruction and inconvenience to the public. The public consists of anyone passing through or affected by construction operations, including pedestrians and residents, as well as vehicular traffic.

The resident engineer must ensure the contractor has made adequate provisions for public convenience when the specifications leave the manner of providing for convenience to the contractor's discretion. The resident engineer must also ensure the contractor does not unnecessarily delay or interfere with traffic for the contractor's own benefit or convenience.

The "least possible obstruction and inconvenience" will always depend on judgment. What is permissible should be that which is accepted as good practice in the industry, complies with the specifications, and does not materially diminish the degree of convenience and free passage through the area that existed before construction. For instance, do not accept a trench that lies adjacent to a traffic lane for the entire length of the project and that was excavated just to suit the contractor's convenience. A length of trench sufficient to accommodate an orderly and workmanlike progression of operations is reasonable. Likewise, it is physically impossible to carry on a series of operations between an existing roadway and adjoining properties that have

access to the roadway without temporarily disrupting the access. However, whether permanent or temporary, restore the access as soon as possible without waiting for the work to be completed past all the adjacent access points.

The intent of Section 7-1.08, "Public Convenience," of the *Standard Specifications* is to ensure public convenience, not a minimum construction cost. Frequently, the contractor can achieve both through careful planning and skillful operation.

3-704B Contingency Plans for Reopening Lane Closures

The special provisions for contracts that allow lane closures require the contractor to prepare a contingency plan for reopening closed lanes. The contractor's contingency plan must include two elements:

1. A critical path analysis of the operation. This analysis must include a detailed review of each segment of the operation, including placing and removing traffic control.
2. Actions to be taken if the operation is not proceeding as planned and needs to be terminated early. Early termination can consist of either stopping the contractor's operation so that lanes can be reopened within the specified time limits or stopping the contractor's operation to reopen the lanes before the time specified for reopening.

When an operation is terminated before the time the specifications allow because of circumstances beyond the contractor's control, consider granting time, compensation, or both, within the terms of the contract. If the operation is terminated before completion of the planned work because of circumstances within the contractor's control or because of equipment breakdown, do not allow compensation and charge a working day as appropriate.

3-704C Maintenance and Improvement of Passageway Through Construction

Normally, paved detours will be provided for the passage of public traffic during construction. On low volume roads where the cost of detour construction is unreasonably high, the contract may provide for traffic to pass through the work during the grading and structural section operations. Section 7-1.08 specifies the responsibility of the contractor for providing reasonably smooth and even surfaces for passage of public traffic through the work. This section also specifies Caltrans' responsibility for paying for the cost of maintaining the surface that would carry public traffic. Any ordered construction to provide improved conditions for the convenience of the traveling public is considered to be detour construction and is paid for as provided in Section 4-1.04, "Detours," of the *Standard Specifications*. Also, any ordered construction or improvement of facilities required for pedestrians or the resident public, not otherwise provided for in the contract, is to be paid for in a like manner.

3-704D Relief From Responsibility for Damage by Public Traffic

Only in some cases will Caltrans pay to repair damage to completed permanent facilities caused by public traffic. Section 7-1.08 covers such exceptions. Completed permanent facilities are any features constructed by the contractor that will become a permanent part of the project. Caltrans will not pay for damage to temporary facilities, such as falsework and forms.

The facility need not be 100 percent complete for the contractor to be compensated, but it must be functional. Caltrans must not pay for damage from public traffic to

facilities that are not considered functional yet. For instance, guardrail posts or guide marker posts or a bridge still supported by falsework would not be considered functional. However, for a concrete barrier that only requires a specified light abrasive blast finish, Caltrans may pay for damage caused by public traffic because the barrier is functional.

The specification for relieving the contractor of responsibility for damage to completed permanent facilities only applies when a section of surfacing or the deck of a structure has been completed and opened to public traffic. Such relief is also dependent on the resident engineer's written order.

Here are some guidelines for administering the specification:

- Whenever the resident engineer orders the pavement or deck of a structure opened to public traffic, the contractor is relieved of responsibility for damage to the completed permanent facilities caused by public traffic. The contractor will be relieved of responsibility whether the opening to public traffic occurs before the scheduled opening time, occurs as the natural sequence of events, or occurs as the result of a contract specification. The contractor will be relieved of responsibility for damage to completed permanent facilities caused by public traffic whether traffic is placed on new alignment not previously used by traffic or new resurfacing opened after daily closures. Compensation for damage caused by public traffic is appropriate if the completed surfacing consists of an asphalt concrete base or leveling course.
- If the contractor requests an opening ahead of the normal schedule, the following applies:
    1. When the opening does not conform to the specified order of work, it must be covered by a contract change order approved by headquarters, in accordance with Section 5-3, "Contract Change Orders," of this manual. If Caltrans will not compensate the contractor for damage to completed permanent facilities, the contract change order must state this fact.
    2. When the opening does not conform to the specified order of work, the resident engineer will normally base approval or disapproval of the contract change order on an evaluation of the benefit to public traffic. If the benefit is substantial, it is appropriate to approve the contract change order and compensation in accordance with Section 7-1.08, "Public Convenience," of the *Standard Specifications*. If measurable benefits accrue to the contractor, ensure the contract change order provides a credit to Caltrans.
    3. If the benefits to public traffic are borderline or negligible, it is appropriate to approve the contract change order under the condition that the contractor be responsible for damage caused by public traffic. The contractor must acknowledge the condition in writing. Again, if measurable benefits accrue to the contractor, include a credit to Caltrans in the contract change order.
    4. If good reason exists for doing so, the resident engineer can refuse to approve a proposed opening.
- Except as provided for in Section 7-1.15, "Relief From Maintenance and Responsibility," of the *Standard Specifications*, Caltrans will not relieve the contractor from responsibility for damage to completed permanent facilities if the contractor never does the following:

1. Moves public traffic from the existing traveled way.
2. Places public traffic on new pavement.

- When the contractor temporarily routes public traffic closer to the facilities than the traffic will be after completion of the work, the contractor will be relieved of responsibility for damage to the completed permanent facilities caused by public traffic. For example, Caltrans will relieve the contractor of responsibility if damage occurs to a completed guardrail at the edge of the shoulder when public traffic is temporarily placed on the shoulder to facilitate construction.

3-704E Maintenance Within Construction Limits

If the highway in question is a state highway, Caltrans' maintenance forces must maintain the highway as a maintenance expense. A clear understanding must exist between the maintenance area supervisor or area superintendent and the resident engineer about which portions of the highway Caltrans' maintenance forces will continue to maintain during the project's construction. The following guidelines should be used when discussing roadway maintenance:

- If new work is required along an existing highway, the owner (Caltrans or the local authority) will continue to maintain the highway, or portions of it, until the contractor takes possession by erecting signs or begins contract item work. The owner will resume maintaining the highway or portions of it when the contractor is relieved from maintenance responsibility, as provided for in Section 7-1.15, "Relief of Maintenance and Responsibility," of the *Standard Specifications*.
- Often, on widening or improvement projects, existing highway facilities will be located outside of the actual areas of work where alterations, modifications, or replacements are not planned. In these cases, except for repair of damage due to the contractor's operations, the owner will maintain the highway. If the new work consists of widening the existing highway's pavement or roadbed and the contractor's operations are restricted to a portion of the width of the roadway, the owner will continue maintaining the balance of the width.
- If damages caused by the public occurs to any existing facility within the construction limits, and the work required to repair the damage is similar to the work being done by the contractor, it is preferable to have the repairs done by the contractor.
- In case of emergency conditions within construction limits the maintenance area supervisor and the resident engineer should determine who should respond so that the condition is addressed in the quickest and safest manner.
- Pay as extra work any work the contractor does to maintain and repair damage to existing facilities (except for damage caused by the contractor).

3-705 Public Safety

3-705 Public Safety

The contract must bear all expenses associated with those devices primarily intended to protect traffic from hazards arising because of the contractor's operations. Typical items classified as public safety devices include barricades, signs, and lights placed to guard the public against damage. The contractor must protect traffic from falling rocks, falling trees, collision with equipment (whether idle or in operation), open trenches, and other excavations.

Some of the factors affecting public safety include the disposition, placement, movements, and actions of workers and equipment, and the placement and handling of materials.

Under the specifications, the engineer can point out the contractor's failure to carry out any of the specification requirements. The specifications do not relieve the contractor of the cost of protecting the public simply because the engineer has or has not called attention to an unsafe situation.

3-705A Clearance and Bridge Permit Rating Changes (Temporary)

The following guidelines apply to situations where temporary changes exist in vertical or horizontal clearance for vehicular traffic or where temporary changes exist in bridge permit ratings.

3-705A (1) Temporary Vertical and Horizontal Clearance Changes

Whenever the operation will reduce clearances available to public traffic, the specifications require the contractor to notify the resident engineer at least 18 days and not more than 90 days before the anticipated start of an operation that will change the vertical or horizontal clearance available to public traffic (including shoulders). At least fifteen days before implementing proposed vertical and horizontal clearance changes, notify the Transportation Permits Branch by fax of the proposed changes and their duration. If the clearance change is on a local jurisdiction roadway, notify the affected agency in writing at the same time. When vertical clearance is temporarily reduced to 15.5 feet or less, place low-clearance warning signs in accordance with Part 2 of the California MUTCD and the specifications.

3-705A (2) Temporary Bridge Permit Rating Changes

Fifteen days before implementing proposed bridge permit rating changes, the structure representative must notify the resident engineer in writing and the bridge rating engineer by fax of the proposed ratings and their duration. The bridge rating engineer must then immediately notify the Transportation Permits Branch of any rating changes.

Within three days of the removal of the temporary bridge permit rating, the structure representative must notify the resident engineer in writing and the bridge rating engineer by fax. The bridge rating engineer must then immediately notify the Transportation Permits Branch.

3-705B Clearance and Bridge Permit Rating Changes (Permanent)

The following guidelines apply to situations where permanent changes exist in vertical or horizontal clearance for vehicular traffic or where permanent changes exist in bridge permit ratings.

3-705B (1) Permanent Vertical and Horizontal Clearance Changes

Fifteen days before implementing proposed permanent vertical and horizontal clearance changes, the resident engineer must notify the Transportation Permits Branch by fax of the proposed changes. Also, to confirm the necessary information, the resident engineer must consult the Transportation Permits Branch before actual field measurements.

3-705B (2) Permanent Bridge Permit Rating Changes

Fifteen days before implementing the proposed bridge permit rating changes, the structure representative must notify the resident engineer in writing and the bridge

rating engineer by fax of the proposed bridge permit ratings. The bridge rating engineer must then immediately notify the Transportation Permits Branch of any rating changes.

3-705B (3) Notification Procedure

Submit changes to be reported in accordance with the above procedures to either the North Region or South Region construction/maintenance liaison in the Transportation Permits Branch. The North Region liaison is responsible for districts 1, 2, 3, 4, 5 (except San Luis Obispo and Santa Barbara Counties), 6 (except Kern County), and 10. The South Region liaison is responsible for districts 5 (San Luis Obispo and Santa Barbara Counties only), 6 (Kern County only), 7, 8, 9, 11, and 12.

To submit changes, use the following forms, maintained by the Office of Traffic Safety Program and Research:

- Form TR-0019, "Notice of Change in Clearance or Bridge Weight Rating"
- Form TR-0020, "Notice in Change in Vertical or Horizontal Clearance"
- Form TR-0029 "Notice of Change in Clearance or Bridge Weight Rating"

The Transportation Permits Branch will, within one business day, send a fax to the resident engineer confirming receipt of the change.

3-706 Preservation of Property

3-706 Preservation of Property

The contract makes the contractor responsible for the preservation of all property involved in the project, including that which is not in sight. It is in the best interests of all parties for the engineer to be diligent in determining and pointing out the existence of all such property of which Caltrans has knowledge, especially that which is not in sight. For information about locating and protecting underground utilities, see Section 3-809, "Utility and Non-Highway Facilities," of this manual.

The plans and specifications may require that certain trees, shrubs, and other vegetation be preserved. The resident engineer must ensure the contractor is aware of all plant life to be saved.

The resident engineer must also ensure the contractor does all that is required under the contract to protect and preserve property. However, the contractor's responsibility includes only that which is necessary to protect against damage by the construction activity. If any permanent protection is ordered, such as rubble tree wells in the planned slope, pay for this work as you would for any other ordered additional work.

3-707 Indemnification and Insurance

3-707 Indemnification and Insurance

The following are guidelines for enforcing and administering the requirements in the *Standard Specifications* for contractors' insurance and for railroad insurance as required by the special provisions.

<u>3-707A Evidence of Insurance</u>

At or before the preconstruction conference, the contractor must provide the resident engineer with evidence of insurance, as required by Section 7-1.12B, "Insurance," of the *Standard Specifications*. The resident engineer must do the following:

- Ensure the evidence of insurance conforms to the specified requirements.
- Ensure the contractor's required insurance does not lapse during the life of the project.
- If the contractor fails to maintain insurance coverage, request the contractor to immediately obtain the necessary coverage. If the contractor fails to do so, the resident engineer may consider contacting the insurance carrier to make arrangements to maintain the required coverage and charge the expense to the contractor.
- If the above procedures do not result in obtaining coverage, contact the Division of Construction for guidance.

3-707B Railroad Insurance

State highway construction occasionally requires that a contractor's operations be performed on or near a railroad's operating properties. This proximity varies from minor side encroachments to work involving the direct crossing of a railroad's tracks. Section 13, "Railroad Relations and Insurance Requirements," of the special provisions defines the relationships between Caltrans, the contractor, and the railroad.

When work must be performed on or near a railroad's operating properties, the contractor must provide insurance to ensure the financial ability to meet legal liability for damage, and to cover the losses that a railroad might sustain because of the contractor's operations.

Although contract specifications regarding railroad insurance have been standardized, occasional changes occur because of special situations. Requirements for railroad protective liability insurance vary depending on the railroad company involved. In Section 13 of the special provisions, the Division of Right of Way and Land Surveys, Railroad Agreements Coordinator, will normally issue special instructions for irregular situations.

3-707B (1) Insurance Approvals

Deliver all railroad insurance policies and copies provided to cover the prime contractor in accordance with Section 13 of the special provisions. Allow a minimum of four weeks for the railroad's notice of approval of the insurance. In cases of emergencies, you can obtain verbal release and authority to start work after the railroad has received all the documents.

3-707B (2) Responsibility

The resident engineer must ensure the specified insurance is in force at all times when work is being performed that requires such insurance.

Prohibit work that involves encroachment on railroad property, either by a prime contractor or a subcontractor, until the following conditions have been met:

- The railroad or the Division of Right of Way and Land Surveys, Railroad Agreements Coordinator, has advised the resident engineer that the contractor, subcontractor, or both, have furnished the specified insurance.
- The resident engineer has a copy of the certificate of insurance.

3-707B (3) Insurance Renewal

Approximately four weeks before the expiration date of an insurance certificate furnished by either a contractor or subcontractor, the resident engineer must notify the contractor, by letter, of the expiration date. If work is to continue on railroad property, request the contractor to obtain renewal insurance. At that time, determine whether work on the railroad property has been completed.

Renewals may be accomplished by endorsing the extension of existing certificates or by issuing new certificates.

Allow sufficient time for railroad approval after the submission of a new railroad protective policy.

3-708 Disposal of Material Outside the Highway Right-of-Way

3-708 Disposal of Material Outside the Highway Right-of-Way

Do not allow the contractor to dispose of material outside the right-of-way until the contractor has met all the requirements in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the *Standard Specifications*. When these requirements have been met, give the contractor written permission for disposal sites not covered by an agreement between the property owner and Caltrans.

When disposal of material on a property outside the highway right-of-way is not covered by an agreement between the property owner and Caltrans, the resident engineer should provide the contractor with a copy of the model agreement titled, "Agreement for the Authorization between a contractor working on state facilities and a real property owner for the placement of construction related material outside of the State Right-of-Way." The contractor may use this sample agreement or provide an equivalent agreement.

After the contractor and property owner complete an agreement and obtain all the necessary permits, licenses, and environmental clearances, the contractor must submit the signed agreement to the resident engineer for approval. The resident engineer must provide written approval to the contractor for the disposal of the material after review and verification of the adequacy of the contractor's agreement, necessary permits, licenses and environmental clearances that were submitted. A sample written approval and a sample agreement are located at the end of this section of the manual.

The agreement between the contractor and the property owner regarding disposal of material outside of the right-of-way is not required for the disposal of waste material to a commercial landfill or treatment facility. To verify the permit status of the landfill or treatment facility, the resident engineer should access the California Water Resources Control Board or Department of Toxic Substances Control websites at:

http://www.waterboards.ca.gov/water_issues/programs/#permit

http://www.dtsc.ca.gov/HazardousWaste/

Alternatively, contact the facility to obtain a copy of the facility's permit.

Approval of the disposal of materials outside the highway right-of-way guards against disposal that would harm the highway or cause environmental damage, disposal site damage, or unsightliness.

3-709 Relief From Maintenance and Responsibility

3-709 Relief From Maintenance and Responsibility

Under conditions specified in Section 7-1.15, "Relief From Maintenance and Responsibility," of the *Standard Specifications*, the contractor may be relieved from maintaining and protecting certain completed portions or sections of the work.

Caltrans policy recommends relief only for those portions of the work specifically mentioned in the specifications unless exceptions are fully justified in the request for relief.

For completed roadways, the specified length of 0.5 km is the minimum practical length of completed main roadway upon which a recommendation can be made for relief from maintenance and responsibility. However, shorter units of completed work, such as on-ramps, off-ramps, frontage roads, or approaches to undercrossings and overcrossings, may also be eligible for relief from maintenance and responsibility. Do not recommend relief from maintenance and responsibility on 0.5 km sections that contain exceptions within that length unless you provide a valid reason presented with and supporting the recommendation.

Exceptions, if any, must be defined by longitudinal sections of highway or certain specified areas. For example, it is unacceptable to recommend relief from maintenance for a total project except for the inlet ditch to the right of stations 20 to 25. It is acceptable to recommend relief for the total project except for stations 15 to 27 (the section of highway that could be affected by the uncompleted ditch to the right of stations 20 to 25).

The following describes what constitutes a "bridge or other structure of major importance":

- For purposes of relief from maintenance and responsibility, a bridge is as defined in Section 1, "Definitions and Terms," of the *Standard Specification*s. A structure will be considered a bridge if it is so identified in the plans or other portions of the contract.
- Other structures that are to be considered of major importance are culverts in excess of 2000 mm in diameter or of approximate equivalent area.
- A facility not meeting the above criteria will be considered of major importance only if its final cost exceeds 5 percent of the original total bid for contract items (including mobilization).

  Projects with noncontiguous locations may be accepted location by location provided the work at each requested location is completed in all aspects. Noncontiguous areas of work outside of the right-of-way on major projects may also be accepted, provided that the procedures outlined in Section 3-513A, "Work for Other Agencies or Owners," of this manual have been followed.

Relief from maintenance and responsibility relieves the contractor of responsibility for repair of damage from the elements. Before recommending any request for relief from maintenance and responsibility, determine that the requested work will not be damaged as a result of incomplete adjoining work. For instance, a roadway section may be complete while an upstream culvert remains incomplete. Water flowing past the uncompleted culvert may damage a portion of the requested roadway section.

Before recommending relief from maintenance and responsibility, analyze each situation critically to determine if it qualifies in all respects. The project's proper completion must not be jeopardized by indiscriminate recommendations for relief

from maintenance and responsibility. Once the contractor is relieved from maintaining and protecting a portion of the work, the contractor cannot be required to do more work on it except by agreement or to remedy defective work or materials.

If you have any doubts about the requested area's eligibility, deny the contractor's request for relief from maintenance and responsibility. Inform the contractor in writing so no doubt exists as to the status of the contractor's request and the nature of uncompleted work. The *Standard Specifications* clearly state that the portion of work must be complete in all respects before it becomes eligible for relief from maintenance and responsibility.

For landscape projects, a special provision is usually included to allow the granting of relief from maintenance and responsibility for items not directly connected with plant establishment work or highway planting and irrigation systems. Under the special provision, relief from maintenance and responsibility could be granted for typical items of work such as asphalt concrete placed as island paving or sidewalks and seal coats placed on islands, curbs, and fences. In many cases, these items would not have a direct bearing on the success or failure of plant establishment, and it is unreasonable to require the contractor to maintain these items.

However, to be consistent with the policy for non-landscape contracts, this type of relief from maintenance and responsibility will not be granted item by item, but only for an entire group of items. Any item that protects the planting or is involved in plant establishment should not be submitted for relief from maintenance and responsibility. Items typical of this category include planter boxes, sprinkler systems, header boards, or mesh.

Roadside rests will not be accepted item by item, but they may be recommended as completed units.

Relief from maintenance and responsibility denotes recognition of work that is completed. Therefore, any recommendations for this action on work for other public agencies or owners also require the concurrence of these agencies and owners. Before recommending relief from maintenance and responsibility on such portions of the work, complete the procedures outlined in Section 3-513A, "Work for Other Agencies or Owners," of this manual. In the communication recommending relief, include a statement that the agency authorities concur, or in the absence of such concurrence, include a justification for relief.

For requests for relief from maintenance and responsibility, use Form CEM-0501, "Relief from Maintenance."

The resident engineer must conduct a maintenance review of areas for which relief from maintenance and responsibility is to be granted. For guidelines on maintenance reviews, see Section 3-5, "Control of Work," of this manual.

3-710 Acceptance of Contract

3-710 Acceptance of Contract

On the day that project work is completed in accordance with all the requirements of the *Standard Specifications*, special provisions, plans, and approved contract change orders, send to the district construction office a fax recommending acceptance of the contract by the district.

For recommendations of acceptance, use Form CEM-6301, "Contract Acceptance."

Follow the same procedure for the acceptance of emergency contracts.

3-711 Rights in Land and Improvements

3-711
Rights in Land and Improvements

Generally, the contractor may use the right-of-way for purposes that are reasonably necessary to perform the required work. The contractor has no right to make use of the property, or to allow others to make use of it, when such use is not reasonably necessary to perform the required work. For example, residency trailers must not be placed within the right-of-way although one trailer may be allowed for yard security purposes. Prohibit any use of a Caltrans right-of-way that conflicts with the above requirement. Discuss unusual or complicated situations with the construction field coordinator.

As stated in Section 7-1.19, "Rights in Land and Improvements," of the *Standard Specifications*, the contractor may enter into a rental agreement to use state-owned property outside the right-of-way.

3-711A Nonoperating Right-of-Way (Airspace)

Usable property under bridges or viaducts or other property that cannot be sold as excess, but can be leased, has been classified as nonoperating right-of-way (also known as "airspace"). Each district involved with the development of such property has established an inventory. The special provisions will normally cover the use, or prohibition against use, of nonoperating right-of-way by the contractor. On those occasions when the use of an airspace parcel is not part of the contract and a contractor later requests such use, the contractor must negotiate a lease for the parcel. A standard form is used for the lease and calls for payment based on fair market value. No special consideration will be given because the lessee is performing Caltrans work. Also, all of the normal provisions requiring insurance and parcel protection will be enforced.

Example 3-7.1

AGREEMENT BETWEEN A CONTRACTOR WORKING ON STATE FACILITIES AND A REAL PROPERTY OWNER FOR THE PLACEMENT OF CONSTRUCTION-RELATED MATERIAL OUTSIDE THE STATE RIGHT-OF-WAY

Contract No.: _____

County/Route/Kilometer post: _____

The contractor, _____, ("Contractor") has entered into Contract No. _____ ("Contract"), with the State of California, Department of Transportation ("Department"), for work that is described as follows: _____ _____ _____ ("Project").

The owner, _____, ("Owner") of the real property ("Property") located at_____ _____ (for example, address, location, county and parcel number(s), project station(s), offsets, and other property location information) agrees to allow the placement of approximately _____ cubic yards of _____ (such as soil, asphalt grindings and other material) ("Material") generated from the Project on the Owner's Property by the Contractor.

Owner agrees that the Contractor has assumed ownership of the Material that is being deposited on the Property from the Department.

Contractor and Owner agree to obtain and furnish to the Department's engineer, all necessary permits, licenses and clearances prior to placing Material on the Property.

By submission of this agreement to the Department's engineer, Contractor and Owner are acknowledging that they have been informed, or otherwise apprised, of all restrictions, laws and permit requirements associated with the transporting and placement of the Material on the Property and have agreed to abide by the same. These laws include but are not limited to:

- Local Ordinances - Grading permits for the placement, filling, excavation, storage or disposal of soil or earthen material.
- California Fish and Game Code (Section 1602), "Lake or Stream Bed Alteration Agreement" - A permit required prior to the placement of material in a location where it can pass into waters of the state, directly or indirectly through causes such as erosion or maintenance.

Example 3-7.1

- California Fish and Game Code (Section 5650) - A prohibition against the deposition of petroleum products (including asphalt), or any material deleterious to fish, plants, or birds where it can pass into the waters of the state.
- Federal Clean Water Act (Section 301 and 402), "General Permit for Discharges of Storm Water Associated with Construction Activity"—A permit is required prior to soil disturbance of an area of one acre or more.
- Federal Clean Water Act (Section 404), "Permit for Discharge of Dredged or Fill Material"—A permit from the United States Army Corps of Engineers may be required for the discharge of fill material into waters of the United States including wetlands.

Owner and Contractor agree that the Material will be transported, deposited and left in a manner that will not cause injury or harm to any person or property. If an injury or harm does occur to any person or property or should any environmental impacts or litigation arise as a result of the transportation, deposition, or the final form in which the Material is left on the Property, the Owner and Contractor regardless of manner or form, agree to indemnify, defend, protect, and hold harmless the Department in any action in law or equity.

Pursuant to the Contract, Owner acknowledges Contractor will submit this agreement to the Department as evidence that the Owner has authorized the placement of the Material on the Property. Owner acknowledges that the Contractor is not authorized to make any representations or agreements on behalf of the Department. Contractor and Owner agree that the Department is released from any and all obligations to Owner made by Contractor under this agreement.

Owner and Contractor acknowledge that they have had the opportunity to receive independent legal advice with respect to the meaning, implications and advisability of entering into and executing this agreement.

Date: _____ _____

(Signature of Property Owner)

Date: _____ _____

(Signature of Contractor's Authorized Representative per Std Spec 5-1.06)

Example 3-7.2

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94273-0001
PHONE (916) 654-2157
FAX (916) 654-6345
TTY 711

Flex your power!
Be energy efficient!

Date

Address

Attn:

Subject: Approval of Disposal of Material Outside the Highway Right-of-Way

Dear _____:

In accordance with the provisions of Section 7-1.13, "Disposal of Material Outside the Highway Right-of-Way," of the *Standard Specifications*, approval is granted for disposal of _____ cubic yards of _____ (type of material) ("Material") to (property owners') property. Pursuant to the submitted agreement, (contract) and (property owner) have represented all necessary permits, licenses, and clearances were obtained and submitted prior to the disposal of the Material and have released the Department of Transportation (Department) from any obligations from its disposal. The agreement also includes (contractor's and (property owner's) promise to hold the Department harmless from all claims for injury to persons or damage to property resulting from the disposal.

The Department does not warranty or guaranty that the Material is of any type or is suitable for any particular purpose.

In accordance with the provisions of Section 7-1.12, "Indemnification and Insurance," of the *Standard Specifications*, _____ (contractor) shall defend, indemnify, and save harmless the state from any and all claims, demands, causes of action, damages, costs, expenses, actual attorneys' fees, losses or liabilities, in law or in equity, of every kind and nature whatsoever, arising out or in connection with _____ (contractor's) performance of this contract.

Sincerely,

Resident Engineer

c:
bc:

Section 8 Prosecution and Progress

3-801 Subcontracting

3-801A Amount of Work Subcontracted

3-801B Calculating the Amount of Work Subcontracted

3-801C The Subletting and Subcontracting Fair Practices Act

3-801C (1) Subcontracting in the Bidding Process

3-801C (2) Substitution Process

3-801C (3) Hearing Process for Substitutions

3-801C (3a) Before the Substitution Hearing

3-801C (3b) During the Substitution Hearing

3-801C (3c) After the Substitution Hearing

3-801C (4) Violations of the Subletting and Subcontracting Fair Practices Act

3-801C (5) Hearing Process for Substitution Violations

3-801C (5a) Before the Violation Hearing

3-801C (5b) During the Violation Hearing

3-801C (5c) After the Violation Hearing

3-801D Procedure for Approval or Acknowledgment of Subcontractors

3-802 Beginning of Work

3-802A Work Before Contract Approval

3-803 Progress Schedule

3-804 Temporary Suspension of Work

3-805 Time of Completion

3-805A Weekly Statement of Working Days

3-805A (1) The Record Section (Upper Block)

3-805A (2) Time Extensions (Center Block)

3-805A (3) Computation of Extended Date for Completion (Lower Block)

3-805A (4) Final Weekly Statement of Working Days

3-805A (5) Examples

Examples 3-8.1 First Working Day/Begin Work

Examples 3-8.2 Begin Work Before First Working Day

Examples 3-8.3 Contract Change Order Time Extension

Examples 3-8.4 Approval of a Time Extension

Examples 3-8.5 Non-Working Day Due to "Maintaining Traffic" and Suspension

Examples 3-8.6 Type 2 Plant Establishment. Highway Work Not Complete

Examples 3-8.7 *Type 2 Plant Establishment. Non plant establishment work completed*
Examples 3-8.8 *Final Weekly Statement of Working Days*
Examples 3-8.9 *Contract in Overrun*
Examples 3-8.10 *Calendar Day Project*
3-805B Progress of Work

3-806 Liquidated Damages
3-806A Overrun in Contract Time
3-806A (1) *Case 1*
3-806A (2) *Case 2*
3-806A (3) *Case 3*
3-806A (4) *Case 4*
3-806B Shortage of Material

3-807 Termination of Control
3-807A Work Completed by the Surety
3-807B Work Not Completed by the Surety
3-807B (1) *Section 1*
3-807B (2) *Section 2*
3-807B (3) *Section 3*
3-807B (4) *Section 4*
3-807B (5) *Section 5*
3-807C Billing

3-808 Right of Way Delays

3-809 Utility and Non-Highway Facilities
3-809A General
3-809B Duties of the Utility Relocation Resident Engineer

3-810 Termination of Contract
3-810A Federal-Aid Contracts on the National Highway System

Section 8 Prosecution and Progress

Section 8 Prosecution and Progress

3-801 Subcontracting

3-801 Subcontracting

Contractors can use subcontractors on their projects provided the subcontractor and the prime contractor comply with the applicable contract specifications and with state and federal laws and regulations. When projects use subcontractors, the resident engineer must focus primarily on the following:

- Always know which subcontractors are working on the project.
- Of the contract amount, ensure that prime contractor performs at least 30 percent or the percentage allowed by the special provisions.
- Ensure that listed subcontractors are not improperly removed or replaced.
- Ensure the prime contractor achieves the subcontracting level pledged to meet requirements of the disadvantaged business enterprise (DBE), the disabled veteran business enterprise (DVBE) and small business when the contract was awarded. For more information on the DBE and DVBE subcontracting requirements, see Section 8-3, "Disadvantaged Business," of the *Construction Manual*.
- Ensure adherence to the provisions of the Public Contract Code.

In the same manner as for other contractual obligations, construction personnel must review the contract and administer the subcontracting provisions.

3-801A Amount of Work Subcontracted

Section 8-1.01, "Subcontracting," of the *Standard Specifications*, requires that the prime contractor perform no less than the percentage of work specified in the contract using the contractor's own organization.

The percentage of work subcontracted is calculated for first-tier subcontractors only. A contractor's organization must include only workers employed and paid directly by the prime contractor and only equipment owned or rented by the prime contractor, with or without operators.

The following examples portray common situations encountered when attempting to determine if work should be considered as subcontracted:

- The contractor pays a unit price or lump sum for work performed at the jobsite. The contractor purchases cement for cement-treated base, and the price per ton includes spreading on the project. Consider the work as subcontracted.
- Materials are purchased "FOB" to the jobsite from a commercial source. (FOB is the abbreviation for "free on board" and means the price includes delivery to the jobsite.) Do not consider the delivery as subcontracted work.
- Materials are purchased FOB at a location off the project and delivered by a commercial freight line. Do not consider the hauling as subcontracted work.
- Materials are obtained at a location off the project and hauled to the project by a truck broker or independent trucker. Do not consider the hauling as subcontracted work.

In unusual cases, the resident engineer should discuss the situation with the construction engineer. If the situation then indicates that additional information is necessary but only available through an inspection of the contractor's records, discuss with Division of Construction personnel the possibility of an audit.

3-801B Calculating the Amount of Work Subcontracted

The contractor must submit Form CEM-1201, "Subcontracting Request," stating what portion and dollar amount of an item will be subcontracted. The resident engineer must verify the amount. Any rational method of determining the amount will be acceptable. For example, methods using the following would be acceptable:

- The percent of an area, volume, or length.
- The portion applicable to material cost.
- The portion of labor and equipment cost.

When an entire item is subcontracted, the amount is the prime contractor's bid price, not the amount of the subcontract. When a portion of an item is subcontracted, the value of the work subcontracted will be based on the percentage of the contract item bid price.

To ensure that the contractor is not requesting approval for a subcontractor other than those listed in the bid documents, the resident engineer must check the DBE, DVBE, and small business commitment listings and the list of subcontractors. If a discrepancy is noted, the resident engineer must advise the contractor and ask for an explanation. The resident engineer must not approve the subcontracting request until the contractor provides an acceptable explanation.

3-801C The Subletting and Subcontracting Fair Practices Act

3-801C (1) Subcontracting in the Bidding Process

Sections 4100 through 4114 of the Public Contract Code are called the "Subletting and Subcontracting Fair Practices Act" (Act) and apply to Caltrans construction projects. This act is designed to prevent prime contractors from "bid shopping" for subcontractors after bids are opened and the low bidder is known.

The Act requires that subcontracted work in excess of 0.5 percent of the contractor's bid amount or $10,000 (whichever is greater), must be listed in the prime contractor's bid proposal. When a prime contractor fails to list a subcontractor in its bid, the law requires that the prime contractor must perform the work with its own forces. The prime contractor may not add an unlisted subcontractor by requesting a substitution. The only exceptions to this rule are when a change order caused a deviation in the work, [Public Contract Code 4107 (c)], or there is a public emergency or necessity which has been documented as required by Public Contract Code 4109.

For building projects such as a maintenance station or other off-highway project, all subcontracted work in excess of 0.5 percent of the contractor's bid amount must be listed.

The resident engineer must ensure that the listed subcontractor performs the work or that the contractor complies with the Act regarding substitution.

Listed subcontractors can be substituted only if the procedures in the Act have been followed.

3-801C (2) Substitution Process

To replace a subcontractor listed in the bid documents, the prime contractor must submit a written request based on the reasons identified in Public Contract Code Section 4107:

- When the subcontractor listed in the bid, after having had a reasonable opportunity to do so, fails or refuses to execute a written contract for the scope of work specified in the subcontractor's bid and at the price specified in the subcontractor's bid, when that written contract, based upon the general terms, conditions, plans, and specifications for the project involved or the terms of that subcontractor's written bid, is presented to the subcontractor by the prime contractor.
- When the listed subcontractor becomes bankrupt or insolvent.
- When the listed subcontractor fails or refuses to perform the subcontract.
- When the listed subcontractor fails or refuses to meet the bond requirements of the prime contractor, as set forth in Public Contract Code Section 4108.
- When the prime contractor demonstrates to Caltrans that the name of the subcontractor was listed as the result of an inadvertent clerical error. This reason can only be used within two days of bid opening and for an inadvertent clerical error pursuant to Public Contract Code Section 4107.5.
- When the listed subcontractor is not licensed pursuant to the Contractors License Law.
- When Caltrans determines that the work performed by the listed subcontractor is substantially unsatisfactory and not in substantial accordance with the plans and specifications or that the subcontractor is substantially delaying or disrupting the progress of the work.
- When the listed subcontractor is ineligible to work on a public works project, pursuant to Section 1777.1 or 1777.7 of the Labor Code.
- When Caltrans determines that a listed subcontractor is not a responsible contractor.

For more detail on the authorized reasons for substituting listed subcontractors, see Sections 4107 and 6109 of the Public Contract Code.

When the prime contractor requests a substitution, proceed as follows:

- Send the request to the district construction office for review.
- The district construction office must send a written notice to the listed subcontractor by certified mail, overnight mail or faxed confirmation of the prime contractor's request to substitute the subcontractor and the reasons for the request. The notice must provide the subcontractor with five working days to submit a written objection to the substitution.
- If the listed subcontractor does not file a timely written objection, the resident engineer must approve the substitution. The resident engineer must approve the new subcontractor, following the guidelines under "Procedure for Approval or Acknowledgment of Subcontractors" in this section. If the removed subcontractor's firm was a listed DBE, DVBE, or small business refer to Section 8-3, "Disadvantaged Business," of this manual for additional information.
- If the listed subcontractor submits timely written objections to the substitution, the district must conduct a hearing. Normally, the hearing officer is the district

construction deputy director. The prime contractor and the subcontractor objecting to the substitution must receive written notice of the hearing a minimum of five working days before the hearing is conducted. The written notice should include a request that any substantiating documents be provided before the hearing. See the following Section 3-801C(3) below for more information on hearings.

3-801C (3) Hearing Process for Substitutions

The intent of the substitution hearing is for both parties to have the opportunity to explain to the hearing officer why a substitution should or should not occur. Substitution hearings should be informal.

3-801C (3a) Before the Substitution Hearing

- Documents should be obtained from both parties to substantiate the reason(s) for substitution.
- Review all information submitted by both parties. If the hearing officer believes legal or other assistance may be required during the substitution or hearing process, the district must contact the construction field coordinator, who will arrange for such assistance as appropriate.
- The hearing officer must develop a line of questioning to ensure that sufficient evidence exists on which to base a decision about the request.

3-801C (3b) During the Substitution Hearing

- Tape or video recording can be used to assist in taking notes; however, it is not required.
- The hearing officer should allow each party sufficient time to present its position and offer a counter argument on the substitution request. Any additional supporting information presented by either party should be listed in the notes of the hearing.

3-801C (3c) After the Substitution Hearing

- The hearing officer will issue written findings and a decision on the substitution request. As soon as possible after the hearing, the prime contractor and the objecting subcontractor must receive a copy of the decision by certified mail return receipt.
- Send the Division of Construction a copy of the final decision.

3-801C (4) Violations of the Subletting and Subcontracting Fair Practices Act

The following presents typical examples of some of the more common violations of the Act by a prime contractor:

- Subcontracting work in excess of the threshold requirements that was not listed as subcontracted work.
- Using a subcontractor that was not listed.
- Substituting subcontractors without the consent of Caltrans.
- Performing work that a subcontractor was designated in the bid documents to perform.

If these or any other violations occur, proceed as follows:

- Discuss the apparent violations with the construction engineer and the district labor compliance officer.

- If the construction engineer and district labor compliance officer agree that an apparent violation has occurred, send the prime contractor a certified letter stating the following:

> It has come to our attention that you are in apparent violation of the Subletting and Subcontracting Fair Practices Act, Public Contract Code, Sections 4100 through 4114, for work being performed on item(s) ____ of State Contract No. ____.
>
> You will be assessed a penalty of $ ____ as provided in the Subletting and Subcontracting Fair Practices Act. If you wish to dispute this penalty, you should request a hearing. Caltrans will schedule a hearing on this apparent violation and the penalty to be assessed. Should you request a hearing, you will be given five days notice of the time and place thereof, in accordance with Section 4110 of the Public Contract Code. If you do not request a hearing, the penalty will be assessed as a permanent deduction on the next progress pay estimate.

Send copies of the letter to the subcontractor and to the district labor compliance officer.

At the contractor's request, the district must schedule a hearing using the same scheduling procedure as described in the substitution process.

Occasionally, the contractor will list subcontractors not required to be listed by the Act. In this case, changes require only an updated subcontracting request to identify the new subcontractor. Refer to Section 3-801D, "Procedure for Approval or Acknowledgment of Subcontractors," of this manual for the process. If the subcontractor is a DBE, DVBE, or small business refer to Section 8-3, "Disadvantaged Business," of this manual for additional information.

3-801C (5) Hearing Process for Substitution Violations

Section 4110 of Public Contract Code requires Caltrans to conduct a hearing for violations of the Subletting and Subcontracting Fair Practices Act. The intent of the violation hearing is to determine whether a penalty should be assessed against the prime contractor for violation of the Act. Each party is entitled to present their respective arguments on the alleged violations. The hearing should follow the process outlined below.

<u>3-801C (5a) Before the Violation Hearing</u>

- Retain a neutral decision-maker. In the interests of keeping the process as short as possible, this person would preferably be a Caltrans employee completely out of the chain of command for the project at issue.
- Hire a certified court reporter to transcribe the proceedings. Contact the Division of Construction, Labor Compliance Program Manager for assistance with this process.
- If necessary, subpoena third parties (for example, the subcontractor, supplier or others). Contact the Division of Construction, Labor Compliance Program Manager for assistance with this process.

<u>3-801C (5b) During the Violation Hearing</u>

- The resident engineer and district labor compliance officer should testify under oath as to the facts which led Caltrans to conclude there was an issue or apparent

violation. They should be prepared to provide copies of all documents or other evidence relied on to reach that conclusion (for example, correspondence, diaries, and payroll records). Caltrans should provide the original documents relied on. Conclusions drawn from the documents can be verbally summarized as testimony.

- The hearing officer will conduct direct and cross examination of witnesses under oath.
- The hearing officer will accept any documents provided by each party and have the court reporter place them into the record as part of the certified transcript. The hearing officer will verbally verify documents were received by noting what they are and assigning them an exhibit number.
- The hearing officer will ensure that the only issue addressed at the hearing is the violation of the Act (for example, not a DVBE violation or labor compliance issue).

3-801C (5c) After the Violation Hearing

- The hearing officer must evaluate the evidence provided at the hearing and render a decision on the violation within 10 days of the hearing.
- If the prime contractor is found to be in violation of the Act, the contractor must be assessed a penalty, taken as an administrative deduction, ranging from 0 to 10 percent of the subcontract amount. The hearing officer will determine the penalty amount, which will vary depending on the circumstances involved. The hearing officer's finding is the final Caltrans administrative decision on the application and enforcement of the Act.
- The decision must be sent to the contractor and, if applicable, the subcontractor. A copy must also be sent to the Division of Construction. The Division of Construction may refer the violation to the Contractors State License Board pursuant to Section 4111 of the Subletting and Subcontracting Fair Practices Act.
- The resident engineer must ensure that the penalty amount is deducted from the next estimate.

3-801D Procedure for Approval or Acknowledgment of Subcontractors

The resident engineer has the responsibility of approving subcontractors on federally funded projects or acknowledging subcontractors on state-financed projects.

In general, approving or acknowledging subcontractors is necessary only for first-tier subcontractors.

To request subcontracting, the contractor must submit Form CEM-1201, "Subcontracting Request," to the resident engineer. When the contract was awarded, the contractor received a blank Form CEM-1201, along with other documents. The resident engineer should provide to the contractor additional blank forms when necessary. The last page of the form contains instructions for completing the form.

Upon receipt of Form CEM-1201, the resident engineer completes the lower portion of the form and, before approving the contractor's request, must do the following:

- Check the contractor's portion of the form.
- Verify that subcontractors are not on the Department of Industrial Relation's Debarred Contractors list on the Caltrans Labor Compliance intranet website.

http://pd.dot.ca.gov/construction/LaborCompliance/index.htm

- Complete lines 1 through 9. Lines 2 and 6 will contain running balances, depending on the percentage of work required so process requests in order of request number. Complete the remainder of the form as outlined on the form.
- Verify that subcontractors comply with DBE, DVBE and small business goals submitted by the contractor before the contract award. Ensure that no conflict exists between DBE, DVBE, and small business requirements and the listing requirements of the Act.
- If the contractor's request meets all the requirements, sign, date, and distribute the form as indicated on the form.

The special provisions for most contracts considered non-highway related (building contracts) waive the requirements of Section 8-1.01, "Subcontracting," of the *Standard Specifications*. The effect of this waiver is that a subcontractor who is listed in the bid proposal may perform the work without advance notification to the resident engineer, and the requirements about the prime contractor performing a specified percentage of the work are not applicable. However, contracts that contain federal funding still require that subcontractors receive prior approval and that prime contractors perform a specified percentage of the work. Such federally funded contracts must be processed as discussed above.

3-802 Beginning of Work

3-802 Beginning of Work

This section covers the subject of when the contractor begins work. This subject is not to be confused with the beginning of contract time and the preparation of Form CEM-2701, "Weekly Statement of Working Days," which is covered below in Section 3-805, "Time of Completion."

The contract normally requires the contractor to begin work on a project within 15 calendar days after receiving notice that the contract has been approved. The special provisions may modify the 15-day requirement.

The resident engineer must determine when to record the beginning of work, based on judgment and experience. For example, setting up 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 work. Record the date the contractor begins work on Form CEM-2701 in 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.

Adequately 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.

When the district decides that failure to begin work will result in unsatisfactory progress, discuss the situation with the construction field coordinator.

3-802A 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 operations.

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 8-1.03, "Beginning of Work," 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 8-1.03 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 7-1.14, "Cooperation," 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 operations and that the work of the others will take precedence over the contractor's operations.
- When obvious conflicts are apparent, a permit should not be issued.
- The limits of the area in which work will be performed.
- The operation or operations 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 operations 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, "Contract Change Orders," of this manual. After the executed contract documents have been delivered as specified, contract change orders may be approved in the normal manner.

The district must not process requests for relief from maintenance or for contract acceptance until after the contract's approval.

3-803 Progress Schedule

3-803 Progress Schedule

When the special provisions require a progress schedule, the resident engineer must make every effort to obtain a reasonable schedule at the beginning of the contract. Any communication regarding the progress schedule must be recorded in the daily report. Notify the contractor in advance if a progress payment will be withheld for failure to submit a satisfactory schedule.

Schedules should do the following to satisfy general specification requirements:

- Separate the major items into activities that are likely to become the controlling operation or operations.

- Accurately show progress of the work, determine controlling items of work, and analyze time impacts from contract 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.

The resident engineer must require an updated or revised progress schedule regularly or when significant changes occur in the project.

The special provisions may require a progress schedule using the critical path method (CPM). The special provisions will contain all the requirements for such a schedule. Resident engineers should also refer to the CPM training publications, *Introduction to Construction Scheduling Manual* and *Advanced Construction Scheduling Manual*, located on the Division of Construction's intranet website on the contract administration page:

http://pd.dot.ca.gov/construction/contractmanagement/cmpage.htm

3-804 Temporary Suspension of Work

3-804 Temporary Suspension of Work

Temporary suspension of work, covered under Section 8-1.05, "Temporary Suspension of Work," of the *Standard Specifications*, falls into two general categories:

1. The contractor's failure to carry out orders or to perform any provision of the contract. Any letter ordering 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.
2. Unsuitable weather or conditions unfavorable for the suitable prosecution of the work. This type of suspension may result from anticipated heavy traffic because of a holiday or a special event.

   a. Suspension of an item or operation

      A suspension that affects one or several items may be ordered. Usually this suspension is used when either the work or the public will be affected adversely by continued operation.

      Although this type of suspension is an option available only to the engineer, consider the contractor's opinion on such a suspension.

   b. Suspension of the entire project

      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, the engineer's authority to suspend is limited to the reasons stated in Section 8-1.05, "Temporary Suspension of Work," of the *Standard Specifications*. When an entire project is suspended for reasons that do not fall under the scope of Section 8-1.05, the suspension must have the contractor's concurrence.

During any suspension, advise the contractor of the conditions under which maintenance will be performed.

During a suspension, preferably use the contractor to perform the necessary work 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. This order 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 are expected soon for resuming work, the resident engineer must notify the contractor in writing. The letter must state the date when working days are expected to be resumed and must allow sufficient time to permit the contractor to remobilize the necessary labor and equipment. Generally speaking, a period of ten working days is considered reasonable.

The district construction office must forward to the Division of Construction copies of the letters notifying the contractor of suspension and resumption of work.

Because of an ordered suspension of work, the contractor may be due additional compensation, contract time, or both, that was not provided for elsewhere in the specifications. The specification allowing such compensation applies only to situations where the work is suspended for an unreasonable period. A one-day suspension because of traffic generated by a planned major event is not unreasonable. However, a suspension resulting from an unplanned major incident could be reason for granting additional compensation, time, or both.

3-805 Time of Completion

3-805 Time of Completion

This section discusses the method of tracking contract time and uses the terms "days," "working days," and "controlling operation." Section 1, "Definitions and Terms," of the *Standard Specifications*, defines "days." Section 8-1.06, "Time of Completion," of the *Standard Specifications*, defines "working days" and "controlling operation." 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. On most projects situations arise that extend the date for completion beyond the "computed date for completion." This extension is called the "extended date for completion."

The "computed date for completion" can be extended in two ways:

- A day that normally would be charged as a working day is not charged. The number of working days remains the same. The result of this situation is that the "computed date for completion" is extended by one working day. This method of extending the date for completion is used when work is suspended or when working days are not charged for the reasons given in paragraphs (b) and (c) in Section 8-1.06, "Time of Completion," of the *Standard Specifications*.
- The number of working days in the contract is increased, resulting in an extension of the date for completion. However, the actual working day or days on which an event occurred that resulted in an extension of time are charged as working days. This method of extending the date for completion is called a time extension. Reasons for time extensions are specified in Section 8-1.07, "Liquidated Damages;" Section 8-1.09, "Right of Way Delays;" and Section 8-1.10, "Utility and Non-Highway Facilities," of the *Standard Specifications*.

3-805A Weekly Statement of Working Days

The resident engineer must 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 middle 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. When working days are not being charged because of a work suspension, the weekly statement does not need to be submitted until working days are charged again. The first weekly statement after resumption of work will show the total suspension days to date.

Form CEM-2701 consists of three basic sections:

3-805A (1) The Record Section (Upper Block)

This section is used to record all working days; nonworking days as defined in Section 8-1.06, "Time of Completion," of the *Standard Specifications;* and working days on which no productive work was performed on the controlling operation. In this section, tabulate every elapsed working and nonworking day during the life of the project.

Each day, the resident engineer must determine whether to charge a working day, and, if necessary, discuss the decision with the contractor. The "current controlling operation" 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, the resident engineer will request that the contractor update the next progress schedule to provide an accurate representation. The resident engineer will note on Form CEM-2701 the operation that, in the resident engineer's opinion, is currently controlling. If the contractor does not concur, the entry will give the contractor an opportunity to protest formally, in accordance with Section 8-1.06, "Time of Completion," of the *Standard Specifications*.

If the controlling operation is an activity 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. The following list provides examples of this type of situation:

- The grade may still be too wet to work because of previous days of inclement weather.
- Earthwork may be saturated and unstable from previous days of inclement weather, requiring the rebuilding of haul roads, removal of saturated material from the tops of fills, or other earthwork repair with no progress toward contract completion, although a full crew may have worked the entire day.

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 operation, a weather nonworking day should be granted.

If a nonworking day is granted because of requirements in Section 10, "Maintaining Traffic," of the special provisions, state the reason as "traffic restriction" in the "Remarks" section of Form CEM-2701.

A temporary short-term suspension for reasons such as anticipated heavy traffic for an event or holiday must be noted in the "Weather, Weather Conditions, or Other Conditions" section and explained in the "Remarks" section. Do not show any charges for working or nonworking days. Include the suspension day in the "Days contract

suspended to date" line on Form CEM-2701 under the heading "Computation of Extended Date for Completion."

In the column "Working Days No Work Done on Controlling Operation," record any working day on which no work is done on the project or on the controlling operations. If the resident engineer knows the reasons for lack of work, the resident engineer should note them in the "Remarks" section and on the resident engineer's daily report.

3-805A (2) Time Extensions (Center Block)

This section is used for recording extensions of time for causes specifically set forth in Section 8-1.07, "Liquidated Damages"; Section 8-1.09, "Right of Way Delays"; and Section 8-1.10, "Utility and Non-Highway Facilities," of the *Standard Specifications* or for applicable requirements in the special provisions.

Analyze possible time extensions while the circumstances are still fresh in the minds of the inspection and contractor's crews.

In the "CCO" column under "Days Approved," record working days granted for contract change orders. In the "Other" column, record all other time extensions covered by the above-mentioned sections not included in contract change orders.

Use the following procedure for approving an "other day":

- Under "Remarks," acknowledge the receipt of a letter from the contractor requesting a time extension.
- Forward the contractor's letter to the construction engineer with a cover letter containing the following information:
  1. Number of days requested and the contractor's justification for the request.
  2. Cause of delay.
  3. Statement describing the controlling operation(s) delayed and the duration of the delay.
  4. Resident engineer's recommendation.
  5. Supporting data.
  6. On federal oversight projects, comments from the area engineer of the Federal Highway Administration.
- The construction engineer or appropriate approving engineer (depending on district policy) will note approval, if appropriate, on the resident engineer's letter and return a copy to the resident engineer or notify the resident engineer of other steps to be taken.
- If the time extension is approved, the resident engineer will enter it on Form CEM-2701, "Weekly Statement of Working Days," as an approved extension, with a statement under "Remarks" similar to that shown on Example 3-8.4 in this section.

The Division of Construction must approve "other days" granted after the completion of the final weekly statement of working days.

If contract time has expired, the resident engineer may consider time extensions for causes described in the fifth paragraph of Section 8-1.07, "Liquidated Damages"; in Section 8-1.09, "Right of Way Delays"; and in Section 8-1.10, "Utility and Non-Highway Facilities," of the *Standard Specifications.* The director must approve all

other time extensions for causes occurring after the contract working days have expired.

In considering time extensions for any of the specific causes designated in the contract, deduct all nonworking days within the extension period, and ensure that the extension is made only for the working days charged to the contract during the extension. For additional information on time extensions after contract completion, see "Liquidated Damages" later in this section.

3-805A (3) Computation of Extended Date for Completion (Lower Block)

In the lower section of the form, summarize the information the contractor will receive.

The "first working day" is the calendar day specified in Section 4, "Beginning of Work, Time of Completion, and Liquidated Damages," of the contract's special provisions. This day is usually the 15th calendar day after contract approval. If the contractor starts work before the 15th day after contract approval, the first working day is the day the contractor starts work. However, when the project has a "55-day beginning of work" specification and if required submittals are approved early, this 55-day specification allows the contractor to start earlier than the specified day after contract approval without counting working days.

Several methods are used to specify the first working day. The resident engineer must 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 five-day and seven-day calendars are available online at the following address:

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.

3-805A (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, see Section 3-806, "Liquidated Damages," later in this section.

3-805A (5) Examples

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

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

(JOB STAMP)

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. 2/2001)

REPORT NUMBER 1

CONTRACTOR

WEEK ENDING (*month, day, year*) 04/09/99

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Operation[2]
4/5/99	Monday				
4/6/99	Tuesday	First working day - clear	1		1
4/7/99	Wednesday	Clear	1		1
4/8/99	Thursday	Contractor began work - clear	1		
4/9/99	Friday	Clear	1		
Days this week			4		2
Days previously reported					
Total days to date			4		2

Time Extensions[3]	CCO Numbers[4]	Days Approved	
		CCO	Other
Days this report			
Days previously reported			
Total days to date			

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		528	4/6/99
2. Working days specified in contract	140		
3. COMPUTED DATE FOR COMPLETION **(line 1 + line 2 - 1)**		667	10/25/99
4. Days contract suspended to date	0		
5. Total time extension days approved to date *(CCO plus other)*	0		
6. Total Nonworking days to date[6]	0		
7. Subtotal **(line 4 + line 5 + line 6)**	0		
8. EXTENDED DATE FOR COMPLETION **(line 3 + line 7)**		667	10/25/99
9. Revised working days for contract **(line 2 + line 5)**	140		
10. Total working days to date	4		
11. WORKING DAYS REMAINING **(line 9 - line 10)**	136		

CONTROLLING OPERATIONS (S)

Construction area signs

REMARKS

Contract approved March 22nd, 1999

(Refer to Section 4 of the special provisions to determine the first day of work)

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, resident engineer

Example 3-8.2 Begin Work Before First Working Day

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

(JOB STAMP)

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. 2/2001)

REPORT NUMBER 1

CONTRACTOR

WEEK ENDING (*month, day, year*) 04/09/99

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Operation[2]
4/5/99	Monday	Clear - Contractor began work			
4/6/99	Tuesday	First working day - clear	1		
4/7/99	Wednesday	Clear	1		
4/8/99	Thursday	Clear	1		
4/9/99	Friday	Clear	1		
Days this week			4		
Days previously reported					
Total days to date			4		

Time Extensions[3]	CCO Numbers[4]	Days Approved CCO	Days Approved Other
Days this report			
Days previously reported			
Total days to date			

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		528	4/6/99
2. Working days specified in contract	140		
3. COMPUTED DATE FOR COMPLETION (line 1 + line 2 - 1)		667	10/25/99
4. Days contract suspended to date	0		
5. Total time extension days approved to date (*CCO plus other*)	0		
6. Total Nonworking days to date[6]	0		
7. Subtotal (line 4 + line 5 + line 6)	0		
8. EXTENDED DATE FOR COMPLETION (line 3 + line 7)		667	10/25/99
9. Revised working days for contract (line 2 + line 5)	140		
10. Total working days to date	4		
11. WORKING DAYS REMAINING (line 9 - line 10)	136		

CONTROLLING OPERATIONS (S)

Construction area signs

REMARKS

Contract approved March 22th, 1999

(Refer to Section 4 of the special provisions to determine the first day of work)

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, resident engineer

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

(JOB STAMP)

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. 2/2001)

REPORT NUMBER 5

CONTRACTOR

WEEK ENDING (*month, day, year*) 05/07/99

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Operation[2]
05/03/99	Monday	Cloudy	1		1
05/04/99	Tuesday	Rain		1	
05/05/99	Wednesday	Clear - embankment too wet		1	
05/06/99	Thursday	Clear	1		
05/07/99	Friday	Clear	1		
Days this week			3	2	1
Days previously reported			16	3	4
Total days to date			19	5	5

Time Extensions[3]	CCO Numbers[4]	Days Approved	
		CCO	Other
Days this report	CCO #2	2	
Days previously reported			
Total days to date		2	

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		528	4/6/99
2. Working days specified in contract	140		
3. COMPUTED DATE FOR COMPLETION **(line 1 + line 2 - 1)**		667	10/25/99
4. Days contract suspended to date	0		
5. Total time extension days approved to date *(CCO plus other)*	2		
6. Total Nonworking days to date[6]	5		
7. Subtotal **(line 4 + line 5 + line 6)**	7		
8. EXTENDED DATE FOR COMPLETION **(line 3 + line 7)**		674	11/3/99
9. Revised working days for contract **(line 2 + line 5)**	142		
10. Total working days to date	19		
11. WORKING DAYS REMAINING **(line 9 - line 10)**	123		

CONTROLLING OPERATIONS (S)

Embankment Construction

REMARKS

April 21st and 22nd 1999 granted for CCO #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, resident engineer

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

(JOB STAMP)

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. 2/2001)

REPORT NUMBER 10

CONTRACTOR

WEEK ENDING (*month, day, year*) 06/11/99

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Operation[2]
6/7/99	Monday	Clear	1		
6/8/99	Tuesday	Clear	1		
6/9/99	Wednesday	Cloudy	1		
6/10/99	Thursday	Clear	1		
6/11/99	Friday	Clear	1		
Days this week			5		
Days previously reported			38	5	5
Total days to date			43	5	5

Time Extensions[3]	CCO Numbers[4]	Days Approved CCO	Days Approved Other
Days this report			2
Days previously reported		2	
Total days to date		2	2

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		528	4/6/99
2. Working days specified in contract	140		
3. COMPUTED DATE FOR COMPLETION (line 1 + line 2 - 1)		667	10/25/99
4. Days contract suspended to date	0		
5. Total time extension days approved to date (*CCO plus other*)	4		
6. Total Nonworking days to date[6]	5		
7. Subtotal (line 4 + line 5 + line 6)	9		
8. EXTENDED DATE FOR COMPLETION (line 3 + line 7)		676	11/5/99
9. Revised working days for contract (line 2 + line 5)	144		
10. Total working days to date	43		
11. WORKING DAYS REMAINING (line 9 - line 10)	101		

CONTROLLING OPERATIONS (S)

Settlement periods for bridge abutment fills

REMARKS

A review of our records indicates that the controlling operation of embankment construction was delayed by a labor dispute on May 6-7, 1999. In accordance with Section 8-1.07 of the Standard specifications and your letter dated June 3, 1999, two days are granted

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, resident engineer

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

(JOB STAMP)

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. 2/2001)

REPORT NUMBER 13

CONTRACTOR

WEEK ENDING (*month, day, year*) 07/02/99

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Operation[2]
6/28/99	Monday	Clear	1		
6/29/99	Tuesday	Clear	1		
6/30/99	Wednesday	Clear	1		
7/1/99	Thursday	Clear - Suspension			
7/2/99	Friday	Clear - Traffic nonworking day		1	
Days this week			3	1	
Days previously reported			53	5	5
Total days to date			56	6	5

Time Extensions[3]	CCO Numbers[4]	Days Approved CCO	Days Approved Other
Days this report			
Days previously reported		2	2
Total days to date		2	2

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		528	4/6/99
2. Working days specified in contract	140		
3. COMPUTED DATE FOR COMPLETION (line 1 + line 2 - 1)		667	10/25/99
4. Days contract suspended to date	1		
5. Total time extension days approved to date (*CCO plus other*)	4		
6. Total Nonworking days to date[6]	6		
7. Subtotal (line 4 + line 5 + line 6)	11		
8. EXTENDED DATE FOR COMPLETION (line 3 + line 7)		678	11/9/99
9. Revised working days for contract (line 2 + line 5)	144		
10. Total working days to date	56		
11. WORKING DAYS REMAINING (line 9 - line 10)	88		

CONTROLLING OPERATIONS (S)

Paving Main Street connector.

REMARKS

Work was suspended on July 1st in accordance with Section 8-1.05, “Temporary Suspension of Work,” of the Standard Specifications due to city holiday weekend preparations.

Section 10-1.14, “Maintaining Traffic,” of the special provisions prohibits work on Friday, Saturday, and Sunday when a designated legal holiday falls on Monday. See Section 8-1.06 of the Standard Specifications

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, resident engineer

Example 3-8.6 Type 2 Plant Establishment. Highway Work Not Complete

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (JOB STAMP)

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. 2/2001)

REPORT NUMBER 83

CONTRACTOR

WEEK ENDING (*month, day, year*) 3/5/99

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Operation[2]
10/4/99	Monday	Partly cloudy	1		
10/5/99	Tuesday	clear	1		
10/6/99	Wednesday	Clear	1		
10/7/99	Thursday	Clear	1		
10/8/99	Friday	cloudy	1		
Days this week			5	0	0
Days previously reported			382	16	23
Total days to date			387	16	23

Time Extensions[3]	CCO Numbers[4]	Days Approved CCO	Days Approved Other
Days this report			
Days previously reported	#16, #21	14	2
Total days to date		14	2

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		255	3/2/98
2. Working days specified in contract	400		
3. COMPUTED DATE FOR COMPLETION (line 1 + line 2 - 1)		654	10/5/99
4. Days contract suspended to date			
5. Total time extension days approved to date (*CCO plus other*)	16		
6. Total Nonworking days to date[6]	16		
7. Subtotal (line 4 + line 5 + line 6)	32		
8. EXTENDED DATE FOR COMPLETION (line 3 + line 7)		686	11/22/99
9. Revised working days for contract (line 2 + line 5)	416		
10. Total working days to date	387		
11. WORKING DAYS REMAINING (line 9 - line 10)	29		

CONTROLLING OPERATIONS (S) Striping and signs

REMARKS

Status of plant establishment and working days

1. Plant establishment period started 9/23/99
2. There are 250 plant establishment days in this contract 250
3. Working days previously credited 7
4. Working days credited this week 5
5. Total plant establishment days credited to date 12
6. Plant establishment days remaining 238

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, resident engineer

Example 3-8.7 Type 2 Plant Establishment. Non-Plant Establishment Work Completed

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (JOB STAMP)

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. 2/2001)

REPORT NUMBER 92

CONTRACTOR

WEEK ENDING (*month, day, year*) 12/10/99

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Operation[2]
12/6/99	Monday	Clear	1		
12/7/99	Tuesday	Partly cloudy	1		
12/8/99	Wednesday	Partly cloudy Relief of maint. For all non-P.E. work	1		
12/9/99	Thursday	Rain	1		
12/10/99	Friday	rain	1		
Days this week			5		
Days previously reported			424	16	23
Total days to date			429	16	23

Time Extensions[3]	CCO Numbers[4]	Days Approved CCO	Days Approved Other
Days this report			
Days previously reported	16, 21	14	2
Total days to date		14	2

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		255	3/2/98
2. Working days specified in contract	650		
3. COMPUTED DATE FOR COMPLETION (line 1 + line 2 - 1)		904	10/2/00
4. Days contract suspended to date			
5. Total time extension days approved to date (*CCO plus other*)	16		
6. Total Nonworking days to date[6]	16		
7. Subtotal (line 4 + line 5 + line 6)	32		
8. EXTENDED DATE FOR COMPLETION (line 3 + line 7)		936	11/17/00
9. Revised working days for contract (line 2 + line 5)	666		
10. Total working days to date	429		
11. WORKING DAYS REMAINING (line 9 - line 10)	237		

CONTROLLING OPERATIONS (S)

Plant establishment

REMARKS

Relief of maintenance for all non-plant establishment work on 12/8/99. 21 calendar days overrun in contract time for non-plant establishment work.

Status of plant establishment

1.	250 day Plant establishment period started	9/23/99
2.	working days previously credited	49
3.	working days credited this week	5
4.	Total plant establishment days credited to date	54
5.	Plant establishment days remaining	196

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, resident engineer

Example 3-8.8 Final Weekly Statement of Working Days

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

(JOB STAMP)

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. 2/2001)

REPORT NUMBER 34

CONTRACTOR

WEEK ENDING (*month, day, year*) 5/26/00

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Operation[1]
5/15/00	Monday	Clear	1		
5/16/00	Tuesday	Clear	1		
5/17/00	Wednesday	Clear - contract accepted	1		
5/18/00	Thursday				
5/19/00	Friday				
Days this week			3		
Days previously reported			152	26	10
Total days to date			155	26	10

Time Extensions[2]	CCO Numbers[4]	Days Approved CCO	Days Approved Other
Days this report			
Days previously reported		18	2
Total days to date		18	2

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		528	4/6/99
2. Working days specified in contract	140		
3. COMPUTED DATE FOR COMPLETION (line 1 + line 2 - 1)		667	10/25/99
4. Days contract suspended to date	101		
5. Total time extension days approved to date (*CCO plus other*)	20		
6. Total Nonworking days to date[6]	26		
7. Subtotal (line 4 + line 5 + line 6)	147		
8. EXTENDED DATE FOR COMPLETION (line 3 + line 7)		814	5/24/00
9. Revised working days for contract (line 2 + line 5)	160		
10. Total working days to date	155		
11. WORKING DAYS REMAINING (line 9 - line 10)			

CONTROLLING OPERATIONS (S)

Final clean up and punch list

REMARKS

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, resident engineer

Example 3-8.9 Contract in Overrun

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

(JOB STAMP)

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. 2/2001)

REPORT NUMBER 80

CONTRACTOR

WEEK ENDING (*month, day, year*) 02/12/99

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Operation[2]
2/8/99	Monday	Clear	1*		
2/9/99	Tuesday	Clear	1*		
2/10/99	Wednesday	Cloudy	1*		
2/11/99	Thursday	Rain	1*		
2/12/99	Friday	Holiday	1*		
Days this week					
Days previously reported			314	59	27
Total days to date			314	59	27

Time Extensions[3]	CCO Numbers[4]	Days Approved CCO	Days Approved Other
Days this report			
Days previously reported		14	
Total days to date		14	

Computation of Extended Date for Completion	Number of Days	Numbered Day*	Date
1. First working day		115	8/5/97
2. Working days specified in contract			
3. COMPUTED DATE FOR COMPLETION (line 1 + line 2 - 1)		414	10/16/98
4. Days contract suspended to date			
5. Total time extension days approved to date (*CCO plus other*)	14		
6. Total Nonworking days to date[5]	59		
7. Subtotal (line 4 + line 5 + line 6)	73		
8. EXTENDED DATE FOR COMPLETION (line 3 + line 7)		487	2/3/99
9. Revised working days for contract (line 2 + line 5)	314		
10. Total working days to date	314		
11. WORKING DAYS REMAINING (line 9 - line 10)			

CONTROLLING OPERATIONS (S)

Functional tests

REMARKS

*WORKING and NON-WORKING Days are shown for record only since the contract time has elapsed. There is a total of 9 calendar days overrun through February 12, 1999.

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, resident engineer

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

(JOB STAMP)

WEEKLY STATEMENT OF WORKING DAYS

CEM-2701 (REV. 2/2001)

REPORT NUMBER 7

CONTRACTOR

WEEK ENDING (month, day, year) 03/04/01

Date	Day	Weather, Weather Conditions or Other Conditions[1]	Working Day	Nonworking Day	Working Day No Work Done on Controlling Operation[2]
2/26/01	Monday	Clear	1		
2/27/01	Tuesday	Suspended		1	
2/28/01	Wednesday	Cloudy	1		
3/01/01	Thursday	Rain		1	
3/02/01	Friday	Wet Grade, no work		1	
3/03/01	Saturday	Partly cloudy	1		
3/04/01	Sunday	Clear	1		
Days this week			4	3	
Days previously reported			36	11	
Total days to date			40	14	

Time Extensions[3]	CCO Numbers[4]	Days Approved CCO	Days Approved Other
Days this report	#8	4	
Days previously reported		3	
Total days to date		7	

Computation of Extended Date for Completion	Number of Days	Numbered Day[5]	Date
1. First working day		N/A	1/10/01
2. Working days specified in contract	80		
3. COMPUTED DATE FOR COMPLETION (line 1 + line 2 - 1)		N/A	3/30/01
4. Days contract suspended to date			
5. Total time extension days approved to date (CCO plus other)	7		
6. Total Nonworking days to date[6]	14		
7. Subtotal (line 4 + line 5 + line 6)	21		
8. EXTENDED DATE FOR COMPLETION (line 3 + line 7)		N/A	4/20/01
9. Revised working days for contract (line 2 + line 5)	87		
10. Total working days to date	40		
11. WORKING DAYS REMAINING (line 9 - line 10)	47		

CONTROLLING OPERATIONS (S)

Earthwork

REMARKS

Contract Change Order #8 approved 3/02/01

Contract work suspended 2/27/01 because of anticipated heavy traffic due to the annual Snow Maiden Festival.

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, resident engineer

3-805B Progress of Work

After each progress estimate, update Form CEM-2601, "Construction Progress Chart." The Contract Administration System uses the formula contained on this form to determine progress. For a description of this process, see 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.

Whenever the contractor fails to prosecute the work adequately, as evidenced by the plot of actual progress and the resident engineer's concurrence, the resident engineer must notify the contractor of the apparent lack of progress. If the resident engineer judges that the work on the original schedule will not be completed by the original due date, the resident engineer must request that the contractor submit a revised schedule showing how the balance of the work will be carried out.

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 Division of Construction will initiate the notification.

If the district believes the lack of progress on a contract justifies a meeting, request the Division of Construction to arrange 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 "Termination of Control" in this section.

3-806 Liquidated Damages

3-806 Liquidated Damages

Section 8-1.07, "Liquidated Damages," of the *Standard Specifications* covers various items such as director's days, time extensions, and shortage of materials. Liquidated damages is defined in Section 1, "Definitions and Terms," of the *Standard Specifications* and is also referenced in Section 4, "Beginning of Work, Time of Completion, and Liquidated Damages," of the special provisions.

3-806A Overrun in Contract Time

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:

3-806A (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.

3-806A (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 contract change orders. Time extensions resulting from contract change orders should have been resolved before the contract's completion in accordance with instructions covered elsewhere in this manual. For those instances where extenuating circumstances result in unresolved time for contract change orders after completion, complete all deferred-time contract 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.

3-806A (3) Case 3

The district intends to change the status of time from that shown on the final "Weekly Statement of Working Days" as a result of "other day" time extensions still under consideration on the date of the contract's acceptance. Obtain concurrence for making such changes from the Division of Construction. Report the recommended disposition of each item of unresolved time in a form sufficiently clear and complete that no interpretation or further explanation is needed. Upon receipt of the recommendations, the Division of Construction 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	7-05-00	842
First working day	7-20-00	853
Working days specified in contract		140
Computed date for completion	2-13-01	993
Total time extensions, contract change order, final Form CEM-2701		5
Total time extensions, other, final Form CEM-2701		15
Nonworking days, final Form CEM-2701		45
Additional contract change order days (if applicable)		14
Additional time extensions recommended (if applicable)		10
Extended date for completion	6-20-01	982
Date contract completed	6-20-01	882
Remaining overrun		0

After the disposition of overruns has been determined, the district will advise the contractor directly.

Place copies of all memoranda in the project files to serve 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.

3-806A (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 to be 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.

Time extensions for reasons other than those specifically enumerated in the contract are made at the discretion of the director and are to be deferred until completion of the contract. When the director grants additional days at this stage, the days are referred to as "director days." Forward requests for director days to the Division of Construction together with the district's recommendation and reasons. The request should contain sufficient information and justification to allow the construction field coordinator to complete Form CEM-2702, "Overrun in Contract Time." Director days are approved by the Division of Construction chief. Do not record these director days on the "Weekly Statement of Working Days."

3-806B Shortage of Material

Section 8-1.07, "Liquidated Damages," of the *Standard Specifications* strictly defines and limits a shortage of materials for which a time extension may be granted. Before a time extension may be granted, several determinations must be made:

- Whether a timely notice of delay exists.

  The contractor's notice of delay, whether a protest of a "Weekly Statement of Working Days" or a separate letter, must be received no later than 15 days after the material shortage first caused the work delay.

- The effect on the controlling item of work.

  If the delay does not affect the controlling item of work, advise the contractor accordingly in writing. If the contractor requests to be allowed to substitute the unavailable material with available material, the resident engineer must seek assistance from those responsible for the design. Contract change orders are to be processed as contractor-requested changes.

- Whether 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 also 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 becomes a time-controlling factor. 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 and in the letter to the district recommending the time extension. 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.

For information on approving a time extension because of a shortage of material, see Section 3-805A (2), "Time Extension," of this manual. Time extension days will generally be recorded as "other days."

3-807 Termination of Control

3-807 Termination of Control

Section 8-1.08, "Termination of Control," of the *Standard Specifications* explains the contractual requirements for terminating the contractor's control. 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. 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. Normally, when Caltrans terminates the contractor's control, the surety (bonding company) assumes responsibility for completing the contract.
- 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.

With agreement from the construction engineer, the construction field coordinator, and the senior structure 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 8-1.08, "Termination of Control," 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 five 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 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 five 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 five-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 five-day notice letter in the most conspicuous place within the project limits. If the contractor does not remedy the defaults within the five days, 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 construction field coordinator will notify the district of the effective starting date of the notice and will transmit any further instructions deemed necessary.

All five-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 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 could 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.

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

3-807A Work Completed by the Surety

As requested by the surety, the 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 hired by the surety. The hired 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 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 construction field coordinator will review the agreement and forward it to the Legal Division. Both the construction field coordinator and the Legal Division will recommend 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 the 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.

3-807B 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 the 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 surety for its acceptance 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 contract 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.
- Contract 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:

3-807B (1) Section 1

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

Subsection C 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.

3-807B (2) Section 2

Section 2 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 Caltrans' maintenance forces.

3-807B (3) Section 3

Section 3 lists the contract change orders and related costs to correct any defects left in the original work by the original contractor.

3-807B (4) Section 4

Section 4 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.

3-807B (5) Section 5

In Section 5, show the amounts determined in Sections 1, 2, 3, and 4, and add 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.

3-807C Billing

The resident engineer will send the detailed billing, as described above, to the Division of Accounting Services, 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.

3-808 Right-of-Way Delays

3-808 Right-of-Way Delays

Section 8-1.09, "Right of Way Delays," of the *Standard Specifications* covers provisions relating to right-of-way delays. The contract contains these provisions from the *Standard Specifications*.

Resident engineers must monitor the progress of any work that may cause a right-of-way delay. To avoid or mitigate the effects of delays, initiate action such as the following:

- Adequately perform all duties related to the engineer as covered in "Utility and Non-Highway Facilities" below.
- Initiate requests to the district utility coordinator to modify agreements that would allow the contractor's forces to perform work under contract change order. Section 8-1.10, "Utility and Non-Highway Facilities," of the *Standard Specifications* covers such work by the contractor.
- Initiate any changes in the order of work that would eliminate or mitigate a right-of-way delay, provided that any cost involved would not exceed the estimated cost resulting from a delay.

If a right-of-way 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 8-1.09, "Right of Way Delays," 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.

3-809 Utility and Non-Highway Facilities

3-809A General

An engineer must be assigned to coordinate and inspect utility relocation that is being done to clear the right-of-way before construction. A resident engineer, once formally assigned to a project, assumes primary responsibility for coordinating and inspecting this kind of utility relocation. Either the resident engineer or an assigned assistant resident engineer must make all contacts with utility facility owners to schedule work and coordinate with the contractor's operations. The district right of way unit, acting through the district utility coordinator, is responsible for making changes to "Notice to Owner" forms and to right-of-way agreements. The district right of way unit must also make all decisions about financial liability between Caltrans and owner for utility work. All change orders involving utility work must be sent to the district utility coordinator for concurrence.

3-809B Duties of the Utility Relocation Resident Engineer

The utility relocation resident engineer must perform the following duties:

- Review all documents about utility relocation work, including the "Notice to Owner," encroachment permits, special provisions, contract plans, and correspondence about utilities not shown on the plans.
- Check the location of proposed or existing utility installations for possible conflicts with proposed construction.
- Determine whether Caltrans or utility forces must establish necessary lines and grades. If Caltrans forces are responsible, ensure that necessary lines and grades are properly established so that relocation crews can efficiently pursue the work. For possible conflicts, compare all facilities with available plans. Also, spot-check survey marks at critical locations for possible conflicts. Require changes where necessary.
- Submit to the district utility coordinator any changes or any notices of newly discovered facilities. These changes or new discoveries should be entered on the contract plans or in the special provisions whenever such entries can be made before contract advertising. Notify the project resident engineer of any such changes or new facilities that cannot be included in the contract.
- Include utility owners and the district utility coordinator in preconstruction conferences with the contractor. On larger projects with a number of utility relocations, it is advisable to schedule a separate meeting for each owner. In these meetings, discuss the following items:
    1. Special provision requirements.
    2. The contractor's schedule as it affects relocation work, project safety, and traffic control.

3. Any potential problems.

Keep records of such meetings, and confirm any decision through letters to all parties.

- Before allowing any change in the planned location of a utility facility or any excavation to determine the location of underground utility facilities, ensure such action complies with the "Policy on high and low risk underground facilities within highway rights of way," in Appendix LL of the *Project Development Procedures Manual*.
- The district utility coordinator will advise the resident engineer when utility relocation work warrants full-time inspection. Keep records of utility relocation work on Form CEM-4601, "Assistant Resident Engineer's Daily Report." When inspection is full time, keep the records as complete as possible for the following:
  1. Number of workers
  2. Equipment description
  3. Hours worked
  4. Materials salvaged
- When inspection is part-time, record all detail consistent with observed activity. At a later date, the district right of way unit will request these records to verify the utility owner's final bill.
- Keep the contractor advised of any utility work that will require a change in the contractor's operations. Keep detailed records of any alleged or actual right-of-way delays related to utilities. Make recommendations to the district on any requests for time extensions or other adjustments resulting from such delays. See Section 3-805A (2), "Time Extensions (Center Block)," of the *Construction Manual* for procedures for time extensions.
- The contractor is required to notify the resident engineer in writing of discovery of any underground facility not indicated on the plans or in the special provisions. In the absence of such written notification from the contractor, you should document the location of the underground facility and include this documentation in written confirmation with the contractor.
- Whenever the contractor has not received prior indication of an existing facility, change orders, including the repair of any accidental damage, will be considered for approval. However, Caltrans will not pay for the repair of any accidental damage caused by negligence after the contractor was notified of the existence of a utility facility.
- Whenever underground facilities are discovered that are not in the plans or the special provisions, notify the district utility coordinator. The various parties involved can then reach an agreement with the utility owner about satisfactory protection before the Caltrans contractor begins any physical work. If the contractor must protect the utility facility, prepare a change order to cover the payment for such work. "Protection work," as used in contract administration, must include any work necessary to ensure the utility's service, reliability, or both, and continue at approximately the same level as before any disturbance from construction operations. This work may include exploration to find exact locations, placement of barricades or warning devices, shoring, or even temporary

bypass facilities or permanent relocation. However, this protection work will not include facility repairs for damage resulting from negligent equipment operation around properly protected facilities.

- Notify the district utility coordinator immediately of any utility facility that is in conflict with the planned work. Follow up the notification in writing. Include drawings or plan sheets showing the location of the existing facility, the affected work, recommended action, and the estimated date when the conflict will begin to affect the contractor's operations and time of completion. The district utility coordinator must arrange any relocation work necessary to resolve the conflict.
- Determine whether facilities shown on the plans or specifications are being adequately protected from damage as required by the contract. Notify the contractor in writing of any inadequacies.
- When judging the extent of compliance the specifications require, take into account the type of facility involved. Consider such things as the consequence of a potential accident. When these consequences involve life and limb, do not permit work in such areas unless the contractor has made physical checks of the facility location. When working around hazardous facilities, do not assume takeoffs from plans (either Caltrans' or those from an owner) are accurate.

3-810 Termination of Contract

3-810 Termination of Contract

Section 8-1.11, "Termination of Contract," 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 in Caltrans' best interest not 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 contract change order, accept the contract, and provide additional payment to the contractor, if necessary, in accordance with Section 9-1.08, "Adjustment of Overhead," of the *Standard Specifications*.

Termination of contracts is comparatively rare. Section 4412 of the Government Code covers contracts terminated for convenience in the best interest of Caltrans. The Division of Construction must ensure that all necessary steps are taken in handling contracts terminated for Caltrans' convenience. 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, notifying the contractor that Caltrans will terminate the contract as soon as any work the resident engineer requested is complete. A copy of the letter will be sent to the arbitration engineer in the Division of Construction who will input the information into the termination database. When all work is complete, the district must accept the project.

The contractor will be paid all reasonable costs as computed according to Section 8-1.11, "Termination of Contract," 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 9-1.07B, "Final Payment and Claims," of the *Standard Specifications*.

3-810A Federal-Aid Contracts on the National Highway System

For full oversight and state-authorized federal-aid contracts on the National Highway System, the resident engineer or construction engineer must contact the Division of Construction's 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 (23CFR 635.125). For additional information, refer to the *Construction Coordinator's Termination Desk Guide* on the Division of Construction's intranet.

Maps of the National Highway System may be accessed on the following Federal Highway Administration website:

http://www.fhwa.dot.gov/hep10/nhs/index.html

Section 9 Measurement and Payment

3-901 General

3-902 Payment Methods

3-903 Measurement and Payment of Contract Item Quantities

3-903A Method of Measurement
3-903B Accuracy
3-903C Source Documents
3-903D Audit Trail
3-903E Weighing and Metering Procedures
3-903E (1) Personnel
3-903E (2) Responsibilities
3-903E (2a) Resident Engineers
3-903E (2b) District Weights and Measures Coordinator
3-903E (2c) Assistant Resident Engineers
3-903E (2d) Contractors
3-903E (2e) Division of Construction Weights and Measures Coordinator
3-903F Adjustments in Compensation
3-903G Final Pay Items

3-904 Payment for Extra Work

3-904A Agreed Price
3-904B Force Account
3-904B (1) Authorization for Force Account Payment
3-904B (2) Approval of Labor, Equipment, and Material
3-904B (3) Billing for Extra Work at Force Account
3-904B (4) Labor
3-904B (5) Equipment
3-904B (5a) Approval of Equipment
3-904B (5b) Equipment Rental Rates
3-904B (5c) Equipment Not on the Work
3-904B (5d) Owner-Operated Equipment
3-904B (5e) Dump Truck Rental
3-904B (5f) Time in Operation
3-904B (5g) Standby Time

3-904B (6) Material
3-904B (7) Work Performed by Special Forces
3-904C Markup for Subcontracted Work
3-904D Extra Work Records
3-904E Force Account Records
3-904F Tentative Agreements
3-904G Interest on Payments

3-905 Adjustment of Overhead Costs

3-906 Stop Notice

3-907 Partial Payments
3-907A Contract Items
Example 3.9.1 Quantity Calculations
3-907B Adjustments in Compensation
3-907C Extra Work
3-907D Materials on Hand
3-907D (1) Materials at the Project
3-907D (2) Materials Not at the Project

3-908 Deductions

3-909 Retentions
3-909A Calculating Progress—Projects with Single Time
3-909B Calculating Progress for Landscape Projects

3-910 Payment After Acceptance
3-910A Negative Estimates
3-910B Payment Offset
Example 3.9.2 Offset Process Flowchart

3-911 Payment of a Progress Estimate After Contract Acceptance

3-912 Proposed Final Estimate

3-913 Semifinal Estimate

3-914 Final Estimate
3-914A Material to Submit
Example 3.9.3 Form Letter for Submitting Proposed Final Estimate to the Contractor
Example 3.9.4 Acceptance Statement Form
Example 3.9.5 Sample of the Proposed Final Estimate

Example 3.9.6 *Sample of Project Record Estimate, Summary of Payment*
Example 3.9.7 *Schedule B—Extra Work and Adjustment of Compensation*
Example 3.9.8 *Schedule of Extra Work*
Example 3.9.9 *Schedule of Deductions*
Example 3.9.10 *Sample Notice of Opportunity for Offset Hearing*

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.

3-903E (2d) Contractors

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

- The contractor and materials suppliers must maintain scales and meters within the accuracy required by the 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 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.

3-903E (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 Division of Measurement Standards.
- Keeps the district weights and measures coordinators informed of the latest equipment and techniques being developed throughout the industry.

3-903F Adjustments in Compensation

An adjustment in compensation is a monetary increase or decrease applied to the contract price of a contract item. The adjustment is a change to the contract and must be made by contract change order. Adjustments in compensation are either unit

adjustments to the unit price of a contract item or they may be a lump sum increase or decrease applied to a contract item.

Section 4-1.03B, "Increased or Decreased Quantities," Section 4-1.03C, "Changes in Character of Work," and Section 9-1.08, "Adjustment of Overhead Costs," of the *Standard Specifications*, provide for adjustments in compensation. The special provisions may also provide for adjustments in compensation. One example is the special provision section titled "Compensation Adjustments for Price Index Fluctuations."

For more discussion about determining adjustments in compensation, see Section 3-4, "Scope of Work," and Section 5-3, "Contract Change Orders," of this manual.

3-903G Final Pay Items

Section 9-1.015, "Final Pay Items," of the *Standard Specifications*, defines and specifies the procedure for calculating pay quantities for final pay items.

3-904 Payment for Extra Work

3-904 Payment for Extra Work

For a definition and discussion about extra work, see Section 3-4, "Scope of Work," of this manual. Before payment can be made for extra work, the resident engineer must issue an approved contract change order. Section 5-3, "Contract Change Orders," of this manual, includes a discussion and examples of contract change orders providing for extra work. This section also discusses the two methods specified for paying for extra work: agreed price and force account.

3-904A Agreed Price

See Section 5-306C (2a), "Extra Work at Agreed Prices," in this manual, for guidelines for determining agreed prices and writing contract change orders that authorize agreed price payment.

The resident engineer may prepare Form CEM-4902, "Extra Work Bill (Short Form)," to make payments for extra work at the agreed price. The contractor's signature on the extra work bill is not required. For information on preparing extra work bills and entering data into the automated progress pay system, see Section 5-1, "Project Records and Reports," of this manual.

3-904B 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 9-1.03, "Force Account Payment," of the *Standard Specifications* specifies the force account method of payment. Section 5-3, "Contract Change Orders," of this manual contains examples of contract change orders with payment for extra work at force account. The following are the procedures for paying for extra work at force account:

3-904B (1) Authorization for Force Account Payment

On the authorizing contract change order, always show the amount to be paid for extra work at force account as an estimated amount. For the format for contract change orders, see Section 5-3, "Contract 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 contract change order.

3-904B (2) Approval of Labor, Equipment, and Material

Section 9-1.03, "Force Account Payment," of the *Standard Specifications* states that labor, equipment, and materials used in the performance of extra work paid for on a force account basis are subject to the approval of the resident engineer. Normally the contractor will use labor and equipment that is on the site and used for work in progress. The contract 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.

3-904B (3) Billing for Extra Work at Force Account

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

- The contractor must submit Form CEM-4902, "Extra Work Bill (Short Form)," covering extra work under each contract change order each day that extra work is performed. The resident engineer must ensure that the contractor has a supply of the forms. See Section 5-103E (1), "Preparing Form CEM-4902, Extra Work Bill," of this manual for detailed instructions for the use of Form CEM-4902.
- Field construction personnel must do the following when reviewing extra work bills:
  1. Compare extra work bills against daily extra work 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 daily extra work reports and tentative agreements, see Section 3-904D, "Extra Work Records" and Section 3-904F, "Tentative Agreements," later in this section.
  2. The contractor must include everything to be paid for on the extra work 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 extra work 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. Return any extra work bill with incorrect wage rates to the contractor. 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 return the reports to the contractor for correction. 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 an extra work bill must sign (not initial) and date the correction.
  8. Maintain a log of extra work bills received and returned to the contractor.

The resident engineer must sign the extra work bill to authorize payment for extra work. The resident engineer's signature accepting an extra work bill for progress payment certifies that payment is in accordance with contract requirements and established administrative procedures.

3-904B (4) Labor

For the specification for paying for labor at force account, see Section 9-1.03A, "Work Performed by Contractor," of the *Standard Specifications* or as modified 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 extra work 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 contract item work.

When seven-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 contract item work in the same day, prorate subsistence payments and travel allowances between the contractor and Caltrans. Base the prorated amount on the first eight hours worked. Do not pay per diem for time worked after the first eight hours in any one day.

3-904B (5) Equipment

For equipment used for extra work paid on force account, see Section 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:

3-904B (5a) Approval of Equipment

The resident engineer must approve equipment for use on force account work. Before giving approval, determine whether available and suitable equipment is already at the jobsite or whether equipment not presently at the jobsite is required. For example, a piece of equipment on the jobsite that can perform a given operation satisfactorily may be larger than necessary. Determine whether it will be economical to use the oversized equipment at its rate or to obtain equipment of the proper size. Obtaining equipment from off-site necessitates payment for move-in and move-out expenses and for minimum rental periods. See Section 9-1.03A(3b), "Equipment not on the Work," of the *Standard Specifications*. The determination may also be based on other factors, such as public safety and the urgency of the work.

Apply these considerations to equipment at the jobsite when the equipment has accessories or attachments that are not necessary for the extra work. Payment for such equipment is to be made in accordance with the conditions under which it is approved. Pay for equipment as approved by the resident engineer, and not necessarily as it is equipped. For short or intermittent periods of use, such as eight hours or less, normally approve equipment with unneeded attachments or accessories and pay for them. For longer operations, allow the contractor the option of furnishing equipment with needed accessories only or of accepting payment without compensation for unnecessary attachments or accessories.

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.

3-904B (5b) Equipment Rental Rates

Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership) contains rates for most of the equipment used on Caltrans projects. However, the Division of Construction has also established rates for some equipment that is not in the Labor Surcharge and Equipment Rental Rates book. These rates are available on the Caltrans Division of Construction website. To establish rates that are not listed in the *Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)* 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 rental 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 work, 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 9-1.03A(3b), "Equipment not on the Work," of the *Standard Specifications*. The higher rate will constitute a change to the contract and must be established by a contract 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 9-1.03A(3b), "Equipment not on the Work," 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 contract change order that provides for the proposed rate. State in the contract change order whether the table titled "Hours Equipment is in Operation" is applicable. The table appears in Section 9-1.03A(3b), "Equipment not on the Work," of the *Standard Specifications*. If the equipment is used for contract item work, use the normally established rental rates for the entire time the equipment is used for extra work. Include in the contract change order a clause similar to the following: "In the event this equipment is subsequently used on contract item work, this rate is void."
  4. Include justification for approval in the contract 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.

3-904B (5c) Equipment Not on the Work

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 at the site that must be brought in especially for the extra work. The resident engineer must make decisions regarding the type of equipment and scheduling its use. Section 9-1.03A(3b), "Equipment not on the Work," of the *Standard Specifications*, specifies the requirements for paying for the use of such equipment. This specification does not apply when the contractor uses equipment for any contract item work. Change any previous payment as "equipment not on the work" to payment as "equipment on the work" when such equipment is used for contract 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.

3-904B (5d) Owner-Operated Equipment

Section 9-1.03A(3c), "Owner-Operated Equipment," of the *Standard Specifications*, specifies the method for paying for owner-operated equipment, except dump trucks, on a force account basis. Determine the operator's hourly rate of pay in accordance with Section 9-1.03A(3c). To determine the correct rate, request assistance, if necessary, from the district labor compliance officer.

3-904B (5e) Dump Truck Rental

Section 9-1.03A(3d), "Dump Truck Rental," of the *Standard Specifications*, specifies the method for paying for dump truck rental on a force account basis. Section 9-1.03A(3d) covers both renting owner-operated dump trucks and renting dump trucks from a truck broker.

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 to 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.

3-904B (5f) Time in Operation

Field engineers must determine the rental time to pay for equipment in accordance with Section 9-1.03A(3a), "Equipment on the Work," 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 at the site for eight hours on a force account operation. It is actually used for only a few periods during the eight 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 contract item work intermittently, prorate the eight hours between the extra work and the item work.
- An air compressor is at the site for eight hours. It is used for the first two hours, but after those hours, it is no longer needed. Pay the rental for only two 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 two hours and a tamper intermittently for two hours, pay two hours for each tool. If the pavement breaker is needed for the first hour and the tamper for a second hour, pay one 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 approve (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.

3-904B (5g) Standby Time

Pay standby charges for commercial delivery at the invoice rate.

3-904B (6) 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 extra work bill. In the statement, explain how the unit prices were verified. Any invoice the contractor submits must represent the material actually used.

3-904B (7) Work Performed by Special Forces

Section 9-1.03B, "Work Performed by Special Forces or Other Special Services," of the *Standard Specifications*, allows specialist billing for extra work paid for on

a force account basis. Districts must establish procedures to pre-approve specialist billing. Specialist billing must not be used to circumvent competitive bidding or the normal force account method for determining payment. In general, specialists are to be used only for minor portions of the work. Any major work is to be covered under a change order specifying the method of payment.

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 contract 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, require billings in accordance with Section 9-1.03A, "Work Performed by Contractor," of the *Standard Specifications*, or negotiate an agreed price to establish a payment basis.
- Allow the contractor to hire a specialist only if an established firm with established rates would do the work.
- Decide whether force account work requiring a fabricating or machining process off the project should be billed as specialist work. Such work may qualify as specialist work even though a project contractor or subcontractor performs the work.
- Pay for the transportation of fabricated or manufactured items and all work at the jobsite in accordance with Section 9-1.03A.

3-904C Markup for Subcontracted Work

Section 9-1.03A, 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:

- Extra work at the agreed price in accordance with Section 4-1.03D, "Extra Work," of the *Standard Specifications*.
- Work performed before item elimination in accordance with Section 4-1.03B(3), "Eliminated Items," of the *Standard Specifications*.
- Contract item adjustment due to increased or decreased quantities in accordance with Section 4-1.03B(1), "Increases of More Than 25 percent," and Section 4-1.03B(2), "Decreases of More Than 25 Percent," of the *Standard Specifications*.
- Change in character adjustment in accordance with Section 4-1.03C, "Changes in Character of Work," of the *Standard Specifications*.

3-904D Extra Work 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 contract 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.

3-904E Force Account Records

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

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:

> 6/26/00-10:15 a.m.-CCO No. 17-Placing Riprap Lt. of Sta. 500.
>
> Crew of two laborers and foreman with a D-6 crawler tractor with sideboom and operator laid about 50 sq. m of salvaged rubble riprap. Estimate crew and tractor worked about 4 hours.

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:

> 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.)

3-904F 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 day or no later than the morning following the day 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 contract 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.

3-904G Interest on Payments

The specifications provide for interest to be paid on late progress payments, payments after acceptance, extra work payments, and claim payments.

Keep a log of the dates when extra work bills are received, returned for correction, and resubmitted. In a timely manner, process all extra work bills, and fully document reasons for returning or not paying extra work bills.

Make any necessary interest payments by contract change order as adjustment in compensation at lump sum.

3-905 Adjustment of Overhead Costs

3-905 Adjustment of Overhead Costs

Section 9-1.08, "Adjustment of Overhead Costs," of the *Standard Specifications*, provides for an adjustment in compensation. Make the adjustment when the final estimate is less than 90 percent of the original total bid price. Prepare a contract change order to be unilaterally approved in the district. Make the payment for the adjustment in the same manner as for any other adjustment in compensation.

The following is an example of a calculation to determine an overhead 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

3-906 Stop Notice

3-906 Stop Notice

Refer to the Division of Accounting Services Disbursing Office all inquiries regarding bills for labor, material, or equipment rental not paid by Caltrans' contractor. Detailed information for payments and stop notice contacts can be found on the Division of Accounting Services "Contractor Payments and Information" website:

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

3-907 Partial Payments

3-907 Partial Payments

Section 9-1.06, "Partial 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 force account work, for which timely submittal of extra work bills has been made, and include

other extra work or adjustment of compensation billings for which work has been performed. Billings for extra work at agreed price and adjustments of compensation are completed by the resident engineer by filling out Form CEM 4902, "Extra Work Bill (Short Form)," and submitting them for processing.

Resident engineers must transmit to the district construction office the documents and information required to prepare progress payment vouchers. The last 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 Services.

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. 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. See Section 3-903C, "Source Documents," in this manual for a discussion of source documents. Example 3-9.1, "Quantity Calculations," on the next page is a sample of a source document.

The quantity shown on the estimate for a contract 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.

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

3-907A Contract Items

Include all contract item work completed satisfactorily in accordance with the contract in partial payments.

Do not include for partial payment preparatory or organizational work such as assembling equipment, shop work, falsework, 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 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.

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 I.M. Engineer	DATE
	CHK. BY U.R. Wright	DATE

Field Measurement: ✓
Field Counted:
Final Pay Item:

Estimated Quantity: 450
Unit of Measure: meter
Unit Price: $20.00
75% = 337.50
125% = 562.50

Remarks or Other Calculations:

152.4 meters placed on 5-03-01 at Maple St. onramp

Material Inspection/Release: Certificates of compliance obtained on 4-29-01.

PAY THIS ESTIMATE: 152.4 ✓
PREVIOUSLY PAID: 140.2 ✓
TOTAL TO DATE: 292.6 ✓

Posted by
Office Engineer 05/19/01

Posted to
CEM-6004, page 4, line 5

Reference to intermediate source documents items bid on a unit basis with a fixed final pay quantity, such as structure concrete (bridge) 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:

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 contract 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. Structure Concrete (Final Pay Quantity)

   Base the payment on the estimated proportionate number of units of the final pay quantity that are in place. When structure concrete has been placed but

items such as removing forms and falsework, curing, finishing, and other similar items have not been completed, withhold a number of units sufficient to cover the cost of this work.

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. See the *Bridge Construction Records and Procedures Manual* for additional instructions.

For lump sum items, 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 7-1.16, "Contractor's Responsibility for the Work and Materials," of the *Standard Specifications*.

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

3-907B Adjustments in Compensation

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

If you anticipate that adjustments in compensation in accordance with Section 4-1.03B, "Increased or Decreased Quantities," or Section 4-1.03C, "Changes in Character of Work," of the *Standard Specifications* will result in decreases in final payment, withhold an amount sufficient to cover the value of the decrease.

3-907C Extra Work

Do not pay for extra work until the contract change order is approved.

3-907D 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. Structural Steel. Structural steel used in steel structures as described in Section 55, "Structural Steel," 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 jobsite) 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. 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:

3-907D (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.

3-907D (2) Materials Not at the Project

For materials not delivered to the jobsite, 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. Following is the procedure:

- 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 CEM-5101 and the above verification, the resident engineer can approve the partial payment. The contractor must submit a new 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.

3-908 Deductions

3-908 Deductions

Deductions (as opposed to retentions) are those amounts held back for specific purposes. The resident engineer must identify, initiate, and control all 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, the Contract Administrative System 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 retention 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 retention.

3-909 Retentions

3-909 Retentions

Retentions are made in accordance with the terms of the contract. For contracts without any federal funding, the Contract Administrative System (CAS) will calculate and withhold the retention, including any retention for unsatisfactory progress, without any specific action by construction personnel. On any estimate that shows satisfactory progress, the system will release all retentions previously made for unsatisfactory progress.

On federal aid contracts, retention will not be withheld by Caltrans except for unsatisfactory progress under very limited conditions. Federal rules also prohibit prime contractors from withholding retention from subcontractors.

Occasionally a contract will contain a nonstandard format for contract time or other circumstance resulting in satisfactory progress even though it is mathematically unsatisfactory. When this situation occurs, the resident engineer must waive the retention for unsatisfactory progress and document the reason for doing so. To waive the retention, check "Override Unsatisfactory Progress" on Form CEM-6101, "Project Record-Estimate Request."

In general, the retention 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 below.

If the contractor requests a reduction of retention after 95 percent of the work has been completed, forward the written request to the disbursing officer in the Division of Accounting. The Contract Administrative System will reduce the retention when all the requirements specified in Section 9-1.06, "Partial Payments," of the *Standard Specifications,* have been met.

3-909A Calculating Progress—Projects with Single Time

Retentions are usually determined by unsatisfactory progress. On projects without any federal funding, 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. The calculation of both the percent of work complete and the percent of time elapsed for contracts with federal funding is stated in the special provisions.

For contracts with federal funding, unsatisfactory progress is determined as follows.

- Progress is considered *unsatisfactory* when the following occurs:

1. The number of working days charged to the contract exceeds 75 percent of the working days in the current time of completion, and
2. The percent of working days elapsed exceeds the percent of work completed by more than 15 percentage points.

When both conditions are met, the Contract Administrative System will withhold 10 percent of the amount due on the current monthly estimate.

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." The Contract Administrative System calculates this percentage (except on projects with Type 1 plant establishment).

The Contract Administrative System 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 (contract change order plus other)," on Form CEM-2701, "Weekly Statement of Working Days."

Occasionally the resident engineer has information indicating that the percent of time elapsed is different from that which the Contract Administrative System 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 in the preceding paragraph. 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." The Contract Administrative System will calculate satisfactory or unsatisfactory progress based on this figure.

3-909B Calculating Progress for Landscape Projects

See Section 20-4.08, "Plant Establishment Work," of the *Standard Specifications*, and Section 4-2003C (8), "Plant Establishment Work," of the *Construction Manual*, for specifications and administrative guidelines for plant establishment time requirements. 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.

Determine the percent 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 time extension days approved to date (contract change order plus other)" on Form CEM-2701 and minus the length of the plant establishment period.

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

On projects without federal funding, compare these two percentages to the curve on Form CEM-2601, "Construction Progress Chart." On projects with federal funding, compare these two percentages to the requirements specified in the special provisions. If progress is satisfactory, check the "Override Unsatisfactory Progress" on Form CEM-6101, "Project Record-Estimate Request."

After the start of Type 1 plant establishment, the resident engineer will decide if the progress is satisfactory. In general, consider progress considered 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.

3-910 Payment After Acceptance

3-910 Payment After 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." Section 5-4, "Disputes," of the *Construction Manual* lists the time line for completing payment steps after the acceptance process.

3-910A Negative Estimates

Negative estimates reflect an overpayment made to the contractor, and should be avoided whenever possible. To reduce the processing time associated with negative estimates; contact the Division of Construction's progress pay coordinator to begin the process of generating a negative estimate.

The resident engineer is responsible for the accuracy of all payment estimates, including progress payment, after acceptance, semifinal, and final estimates. Verify the correctness of the contract item quantities and ensure the data submitted conforms to Caltrans policies. The district progress pay coordinator should hold the negative payment estimate for processing until approved by the deputy district director of construction, or delegate, and the Division of Construction field coordinator. The Division of Construction field coordinator discusses and resolves negative payment estimates with district construction to determine the best course of action. The Division of Construction progress pay coordinator processes only those negative estimates approved by the Division of Construction field coordinator.

When a negative payment estimate is approved for processing, the Division of Accounting creates an accounts receivable and directly bills the contractor for the amount due. The Division of Accounting provides a monthly listing of all pending accounts receivable and their status to the progress pay coordinators and expects that further action is taken as directed by district construction and the Division of Construction. Accounts receivable debts are automatically sent to collections after 90 calendar days. A collection fee is charged to the district's capital outlay support in either a phase 3 project expenditure authorization, or an overhead expenditure authorization. If the bill is not collectable, the nonrecoverable debt is charged against the district's capital funding allocation (phase 4) expenditure authorization. If, for any reason, you believe that the accounts receivable should not go to collections, notify the district progress pay coordinator and the Division of Construction's progress pay coordinator. Once notified, the Division of Construction's progress pay coordinator, with the Division of Construction field coordinator's concurrence, will notify the Division of Accounting to hold the accounts receivable from going to collections.

Section 3-910B, "Payment Offset," describes another method available to the resident engineer and the Division of Accounting to resolve overpayment to the contractor.

3-910B Payment Offset

A payment offset is a levy against future monies due to the contractor on other contracts Caltrans has awarded to the contractor. Offsets may be taken to retain adequate funds for stop notices, labor compliance violations, claim settlements, and determinations made by an arbitrator. The offset process, outlined in the flowchart on the next page, should be completed within 90 calendar days of contract acceptance.

Send a "Notice of Opportunity for Offset Hearing" pursuant to Government Code Section 12419.5 (see Example 10) to the contractor, offset resident engineer, bonding company, and offset bonding company. The contractor has 20 calendar days to inform the resident engineer that an offset hearing was requested. If an offset hearing is requested, the hearing officer should conduct the offset hearing within ten calendar days of receipt of the request. The hearing officer should examine the facts of the specific case, and validate the offset process. The hearing officer is the district director or designee. The designee must be at least a supervising transportation engineer or career executive appointment one manager. A summary of the facts of the account receivable, minutes of the offset hearing, and final determination report are prepared by the resident engineer. Notify the contractor, offset resident engineer, and bonding companies of the final determination of the hearing, including the date and amount of the offset. If the hearing officer determines the offset is warranted, or if the contractor does not request a hearing, request that the Division of Construction execute an offset. If the hearing officer determines that offset is not warranted, process a progress payment to clear the accounts receivable in the Construction Administration System. In the case of an arbitration settlement, the Division of Construction will recommend the district execute an offset. The Division of Accounting executes only those offsets authorized by the Division of Construction.

A payment offset may affect not only the contractor, but also multiple resident engineers, districts, and bonding companies. When choosing a contract to offset against, the following criteria, in preferential order should be considered:

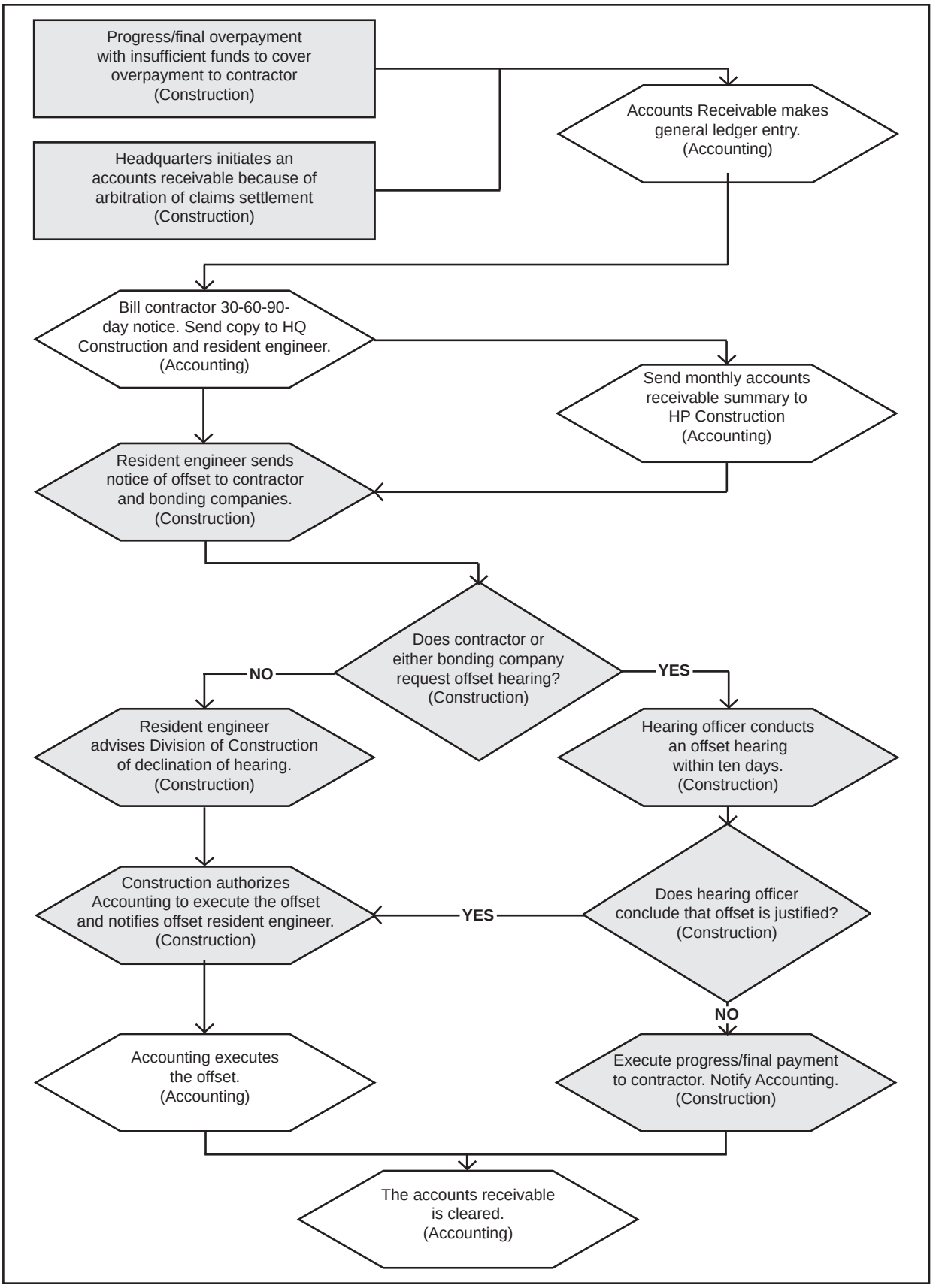
1. Active contract with adequate retention to cover the offset.
2. Both contracts are bonded by the same bonding company.
3. Both contracts are administrated by the same resident engineer in the same district.

The bonding companies from both contracts and the contractor are given the opportunity to request an offset hearing. Any legal arguments presented by the contractor or its bonding companies should be referred to the Legal Division for review and advice to the hearing officer

During the offset hearing, the contractor should provide convincing factual evidence to refute the account receivable. The hearing officer should consider the size of the offset, progress of the work, percent complete and financial health of the contractor.

When justified by evidence of financial hardship, contractor proposed repayment plans to clear the account receivable may be coordinated with the Division of Accounting. The status of claims and disputes should not have an influence on the decision to execute an offset.

Example 3-9.2 Offset Process Flowchart



3-911 Payment of a Progress Estimate After Contract Acceptance

3-911 Payment of a Progress Estimate After Contract Acceptance

A progress payment after acceptance must adhere to Section 9-1.07A, "Payment Prior to Proposed 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 retained 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. The deduction will be in the same amount as for any progress estimate. See Section 8-1, "Labor Compliance," of this manual.
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. See Section 8-2, "Equal Employment 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 adjustments of contract unit prices

   The deduction, regardless of the number of outstanding items, will be the lesser of 5 percent of the "Subtotal Amount Earned Without Mobilization" or $10,000.

In addition to the steps listed above for determining amounts to be paid or deducted for a progress 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 and that they will result in a delay of final payment.

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.

3-912 Proposed Final Estimate

3-912 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 5-4, "Disputes," of this manual.
- Soon after the contract is accepted, meet with the contractor to discuss submitting the required information to complete the contract. If the contractor does not submit the required data within four weeks after acceptance, you must notify the contractor in writing that Caltrans will issue the proposed final estimate and deduct the appropriate amount.
- Before the processing of the proposed final estimate, ensure all extra work bills submitted by the contractor are processed and ready for payment. Ensure the estimate's issuance is not delayed for force account billings that remain outstanding.
- If the contractor has not submitted required information in a timely manner, Section 5-4, of this manual dictates that 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 9-1.03C, "Records," 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 contract change order, and have it unilaterally approved. To determine compensation, refer to Section 4-1.03B, "Work Performed by

Special Forces or Other Special Services," or Section 4-1.03C, "Changes in Character of Work," of the *Standard Specifications*.

b. If the established cost is necessary to make force account payment on an existing contract change order, include this established cost as a lump sum payment on a supplemental contract change order. Also, unilaterally approve this supplemental contract 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 under the heading "Payment of a Progress Estimate After Contract Acceptance" in this section.) 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 nonsubmittal 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 1, at the end of this section.

  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 2, at the end of this section.

  3. The proposed final estimate report showing the status of item payments generated by the Contract Administration System along with the "schedule of extra work" and "schedule of deductions" reports. Samples of these reports are shown in Examples 3-9.5 through 3-9.9, at the end of this section.

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 withheld 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 contract 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 as follows:

  1. If the returned Acceptance Statement has no exceptions (claims) and all documents required under the contract have been received, prepare and process the final estimate.
  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 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.
- When the Acceptance Statement is not returned within the specified 30 days, ensure it has not been lost in transit and then proceed as follows:

1. If all documents have been received, prepare and process the final estimate.
2. If some documents are still outstanding, request advice from the construction field coordinator about further action.
3. 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 kilopost).

A final estimate is, therefore, being processed for issuance to you as provided in Section 9-1.07B, "Final Payment and Claims," of the *Standard Specifications.*

Sincerely,

District Construction Office

4. 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 9-1.07B, "Final Payment and Claims," 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.

5. 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 4-1.03A, Section 9-1.04 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.

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

3-913 Semifinal Estimate

3-913 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.

3-914 Final Estimate

3-914 Final Estimate

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 construction field coordinator to proceed.

As soon as the district approves the final estimate, it must use a transmittal letter (see Example 3-9.3 to send it to the contractor. The letter must state the following: "Submitted herewith in accordance with Section 9-1.07B 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 Services will mail to the contractor the corresponding copy of the progress payment voucher.

3-914A Material to Submit

Before payment of a final estimate, the Division of Construction's 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."

Example 3-9.3 Form Letter for Submitting Proposed Final Estimate to the Contractor

Subject: Proposed Final Estimate

In accordance with the provisions of Section 9-1.07B, "Final Payment and Claims," of the *Standard Specifications*, attached (in triplicate) is a proposed final estimate for

_____ _____

(Contract) (Dist. Co. Rte. K.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 9-1.07B of the *Standard Specifications*, which states:

"The contractor shall submit written approval of the proposed final estimate or a written statement of all claims arising under or by virtue of the contract so that the engineer receives the written approval or statement of claims no later than close of business of the thirtieth day after receiving the proposed final estimate. If the thirtieth day falls on a Saturday, Sunday or legal holiday, then receipt of the written approval or statement of claims by the engineer shall not be later than close of business of the next business day. No claim will be considered that was not included in the written statement of claims, nor will any claim be allowed as to which a notice or protest is required under the provisions in Sections 4-1.03, 'Changes'; 8-1.06, 'Time of Completion'; 8-1.07, 'Liquidated Damages'; 5-1.116, 'Differing Site Conditions'; 8-1.10, 'Utility and Non-Highway Facilities'; and 9-1.04, 'Notice of Potential Claim,' unless the contractor has complied with the notice or protest requirements in those sections."

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 9-1.07B of the *Standard Specifications*.

If claims are submitted in connection with this contract, you will be expected to comply fully with the fourth paragraph of Section 9-1.07B of the *Standard Specifications*. The engineer will base the determination of claims upon the investigation of your statement, in which you will be expected to present your position fully as to the contractual basis of the claim, compliance with contract requirements such as Section 4-1.03A, "Procedure and Protest," or Section 9-1.04, "Notice of Potential 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 9-1.07B of the *Standard Specifications*, in case neither approval nor a statement of claims is received within 30 days, 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 3-9.4 Acceptance Statement Form

Subject: Acceptance Statement

Attachment to transmittal letter

Dated_____ Contract Identification:

I have examined the quantities of contract 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 3-9.5 Sample of the Proposed Final Estimate

PROGRAM CAS145 PAGE 1
DATE 01/02/01 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION 03-441804
TIME 02:40 PM ESTIMATE NO. 06
BID OPENING 02/08/00 P R O J E C T R E C O R D - E S T I M A T E WORK PERFORMED THROUGH 11/17/00
R.E. NAME: ZINK, PHIL DATE OF THIS ESTIMATE 01/02/01
LOCATION PROPOSED FINAL ESTIMATE
03-PLA-65-13.4/14.7

M & M ELECTRIC
1600 AUBURN BLVD
SACRAMENTO, CA 95815

IN PLACER COUNTY IN LINCOLN FROM
0.1 KM NORTH OF SIXTH STREET TO
0.2 KM NORTH OF SEVENTH STREET

FED. AID NO. ACST-P065(60)E ,P-P065(60)E

SIGNALS AND LIGHTING

ITEM NO.	ITEM DESCRIPTION	UNIT	CONTRACT PRICES	ORIGINAL AUTH. AMT	THIS ESTIMATE QUANTITY	THIS ESTIMATE $ AMOUNT	TOTAL ESTIMATE QUANTITY	TOTAL ESTIMATE $ AMOUNT
001 (S)	CONSTRUCTION AREA SIGNS	LS	1,050.0000	1,050.00			1.000	1,050.00
002 (S)	TRAFFIC CONTROL SYSTEM	LS	2,500.0000	2,500.00			1.000	2,500.00
003 (S)	PORTABLE CHANGEABLE MESSAGE SIGN	EA	3,000.0000	6,000.00			2.000	6,000.00
004	REMOVE ROADSIDE SIGN	EA	75.0000	225.00			3.000	225.00
005 (S)	COLD PLANE ASPHALT CONCRETE PAVEMENT	M2	5.0000	8,400.00			1,683.000	8,415.00
006	REMOVE CONCRETE SIDEWALK AND DRIVEWAY	M3	1,500.0000	750.00			3.060	4,590.00
007	REMOVE CONCRETE (CURB AND GUTTER)	M3	1,500.0000	1,200.00			1.570	2,355.00
008 (S)	ROADWAY EXCAVATION	M3	1,000.0000	6,000.00			5.500	5,500.00
009 (S)	ASPHALT CONCRETE (TYPE A)	TONN	125.0000	875.00			4.580	572.50
010 (S)	ASPHALT CONCRETE (OPEN GRADED)	TONN	135.0000	8,235.00			79.240	10,697.40
011 (S)	PLACE ASPHALT CONCRETE (MISCELLANEOUS AREA)	M2	150.0000	2,100.00			13.520	2,028.00
012 (S)	CLASS 4 CONCRETE (BACKFILL)	M3	250.0000	650.00			0.900	225.00
013	ROADSIDE SIGN - ONE POST	EA	230.0000	230.00			1.000	230.00

Example 3-9.6 Sample of Project Record Estimate, Summary of Payment

```
PROGRAM CAS145                                                                                                                  PAGE  2
DATE 01/02/01                          STATE OF CALIFORNIA  -  DEPARTMENT OF TRANSPORTATION                                  03-441804
TIME 02:40 PM                                                                                                          ESTIMATE NO. 06
BID OPENING 02/08/00                     P R O J E C T   R E C O R D  -  E S T I M A T E                   WORK PERFORMED THROUGH 11/17/00
R.E. NAME:  ZINK, PHIL                                                                                     DATE OF THIS ESTIMATE  01/02/01
-----------------------------------------------------------------------------------------------------------------------------------------
ITEM                                                    CONTRACT     ORIGINAL          THIS ESTIMATE                  TOTAL ESTIMATE
NO.              ITEM DESCRIPTION                UNIT     PRICES     AUTH. AMT      QUANTITY      $ AMOUNT          QUANTITY      $ AMOUNT
-----------------------------------------------------------------------------------------------------------------------------------------
     SUBTOTAL CONTRACT ITEMS                                                                          0.00                          124,938.82
          ADJUSTMENT OF COMPENSATION                                                                  0.00                                0.00
          EXTRA WORK                                                                                  0.00                            4,613.30
     SUBTOTAL AMOUNT EARNED                                                                           0.00                          129,552.12
          ORIGINAL CONTRACT AMOUNT                                      120,019.00
     TOTAL WORK COMPLETED                                                                             0.00                          129,552.12
          MATERIALS ON HAND ON SITE                                                                                                     0.00
          MATERIALS ON HAND ELSEWHERE                                                                                                   0.00
          DEDUCTIONS                                                                            15,000.00                                 0.00
     TOTAL                                                                                      15,000.00                          129,552.12
               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
  03/29/00       30   07/17/00  06/27/00  11/17/00        76          24              0            0           100%            100%
                                                                                    ZINK, PHIL
                                                                                    RESIDENT ENGINEER
```

Example 3-9.7 Schedule B—Extra Work and Adjustment of Compensation

```
PROGRAM CAS145     E X T R A  W O R K  A N D  A D J U S T M E N T  C O M P E N S A T I O N
DATE 01/02/01            SCHEDULE B 01/02/01                                  PAGE NUMBER   1
TIME 02:40 PM                                                          CONTRACT NO.  03-441804
ZINK, PHIL                                                                ESTIMATE NO:  6
-------------------------------------------------------------------------------------------
 CCO  BRIEF                        ITEMS                                AMOUNT          AMOUNT
 NO.  DESCRIPTION                  AFFECTED          WORK TYPE          AUTHORIZED      EXPENDED
-------------------------------------------------------------------------------------------

001  TRAFFIC CONTROL (FLAGGING)                E.W. @ F.A.(+)        $500.00
                                               E.W. @ U.P (+)      $5,995.00          $940.80
002  REPLACE B-3 CURB/REPLACE PCC  6,15,16                          $4,513.75
      ELEC FOUND
003  REPLACE VIHICLE SIGNAL                    E.W. @ F.A.(+)        $700.00
004  REPL SIGNAL POLE & ARM                    E.W. @ L.S.(+)      $2,830.00        $2,122.50
005  REPLACE PED PUSH BUTTONS &                E.W. @ L.S.(+)      $1,550.00        $1,550.00
                                                              ---> TOTAL AC =
                                                              ---> TOTAL EW =        $4,613.30
```

Example 3-9.8 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 01/02/01                                                    EST. NO.06
TIME 02:40 PM
R.E. NAME: ZINK, PHIL                                             03-441804
-------------------------------------------------------------------------------
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
-------------------------------------------------------------------------------
*** THERE ARE NO EXTRA WORK PAYMENTS THIS ESTIMATE ***
```

Example 3-9.9 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 01/02/01                                                    EST. NO.06
TIME 02:40 PM
R.E. NAME: ZINK, PHIL                                             03-441804
-----------------------------------------------------------------------------
DEDUCTION DESCRIPTION           AMOUNT  EST          THIS          TOTAL
                                        NO.       ESTIMATE       ESTIMATE
-----------------------------------------------------------------------------
EQUAL EMPLOYMENT OPPORTUNITY
MISSING PR-1391              -7,622.53   02
RECEIVED FORM PR1391          7,622.53   03
MISSING CEM 2402            -10,000.00   05
CEM 2402                     10,000.00   06
                                                 10,000.00           0.00
LABOR COMPLIANCE VIOLATION
MISS P/R - RIOLO,O/O         -7,622.53   02
MISSING PAYROLLS             -4,327.59   03
MISSING PAYROLLS             -5,000.00   05
RETURN EST #2, EST#3         11,950.12   05
PAYROLLS                      5,000.00   06
                                                  5,000.00           0.00
                         TOTAL DEDUCTIONS        15,000.00           0.00
```

Example 3-9.10 Sample Notice of Opportunity for Offset Hearing

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) xxx-xxxx
FAX (916) xxx-xxxx

Flex your power!

Be energy efficient!

October 1, 2001

Prime Contractor
Address
City, State Zip

Bonding Company
Address
City, State Zip

Offset Bonding Company
Address
City, State Zip

Dear Sirs:

This notice is to advise you of your rights upon determination of offset by the resident engineer in the amount of $XX,YYY.SS to clear an accounts receivable billing for contract number PP-RRRRRR, awarded to you by the California Department of Transportation, for highway construction on Route XX, YYY County, near ZZZZZ.

You have the right to request an offset hearing pursuant to this offset, as provided for by *Government Code*, Section 12419.5.

Unless your written request for an offset hearing is received within 20 calendar days of the date of this notice, this offset will be taken against contract number SS-VVVVVV, effective DD-MM-YY. Contract number SS-VVVVVV was awarded to you by the California Department of Transportation, for highway construction on Route XX, YYY County, near ZZZZZ.

If you request an offset hearing, one will be scheduled within approximately ten working days upon receipt of your written request. Under the procedures outlined under Section 8790.3 of the *State Administrative Manual*, you are entitled to an opportunity to present any valid objection you may have to the use of the offset procedure. At the hearing, you will be provided opportunity to present facts that discredit the accounts receivable, the appropriateness of this offset action, or other evidence you believe is relevant to the determination of the appropriateness of this offset action.

If you have questions regarding this notice, you may contact me at (BBB) ZZZ-RRRR.

Sincerely,

NAME

Resident Engineer

Attachment / Enclosure

bc: Division of Construction
District Division Chief Construction
Offset District Division Chief Construction
Headquarters Construction Coordinator
Offset Resident Engineer
Headquarters Accounting Division

initials (author's name / typist)

Section 1 Project Records and Reports

5-101 Forms Used For Contract Administration

5-101A General

5-101B Construction Forms

Form CEM-0101,	*Resident Engineer's Report of Assignment*
Form CEM-0501,	*Relief from Maintenance*
Form CEM-0601,	*Construction Safety Report*
Form CEM-0602,	*Project Safety Program Statement*
Form CEM-0603,	*Major Construction Incident Notification*
Form CEM-1101,	*Documents Bond of State Highway Oversight Projects*
Form CEM-1201,	*Subcontracting Request*
Form CEM-1202,	*Contractor Action Request—Change of Name/Address Assignment of Contract Monies*
Form CEM-1203,	*Contractor Action Request—Assignment of Contract Performance*
Form CEM-2001,	*National Pollution Discharge Elimination System Annual Certification*
Form CEM-2002,	*Notification of Construction (NOC)*
Form CEM-2003,	*Notificationof Completion of Construction (NCC)*
Form CEM-2004,	*Notitfication of Completion of Construction (Desert Areas)*
Form CEM-2101,	*COZEEP Daily Report*
Form CEM-2102,	*COZEEP/MAZEEP Task Order*
Form CEM-2103,	*COZEEP/MAZEEP Cancellation Form*
Form CEM-2401,	*Substitution Report for Disadvantaged Business Enterprise/ Disabled Veteran Business Enterprise*
Form CEM-2402(F),	*Final Report- Utilization of Disadvantaged Business Enterprises (DBE), First—Tier Subcontractors*
Form CEM-2403(F),	*Disadvantaged Business Enterprises (DBE) Certification Status Change*
Form CEM-2404(F),	*Monthly DBE Trucking Verification*
Form CEM-2501,	*Fringe Benefit Statement*
Form CEM-2502,	*Contractor/Subcontractor Payroll*
Form CEM-2503,	*Statement of Compliance*
Form CEM-2504,	*Employee Interview: Labor Compliance/EEO*
Form CEM-2504	*(Spanish), Entrevista de Empleado: Labor Compliance/EEO*
Form CEM-2505,	*Owner—Operator Listing Statement of Compliance*
Form CEM-2506,	*Labor Compliance—Wage Violation*

Form CEM-2507,	*Labor Violation: Case Summary*
Form CEM-2508,	*Contractor's Payroll Source Document Review*
Form CEM-2509,	*Checklist—Source Document Review*
Form CEM-2510,	*Truck Owner-Operator Certification of Ownership*
Form CEM-2601,	*Construction Progress Chart*
Form CEM-2701,	*Weekly Statement of Working Days*
Form CEM-2702,	*Overrun in Contract Time*
Form CEM-3101,	*Notice of Materials to be Used*
Form CEM-3501,	*Hot Mix Asphalt Production Report*
Form CEM-3502,	*Hot Mix Asphalt Placement Report*
Form CEM-3511,	*Contractor Job Mix Formula Proposal*
Form CEM-3512,	*Contractor Hot Mix Asphalt Design Data*
Form CEM-3513,	*Caltrans Hot Mix Asphalt Verification*
Form CEM-3701,	*Test Result Summary*
Form CEM-3702,	*Relative Compaction Summary*
Form CEM-3703,	*Caltrans Production Start-Up Evaluation*
Form CEM-4101,	*Materials Release Summary*
Form CEM-4102,	*Material Inspected and Released on Job*
Form CEM-4202,	*Material Plant Safety Checklist*
Form CEM-4204,	*California Test 109 Sticker*
Form CEM-4401,	*Solid Waste Disposal and Recycling Report*
Form CEM-4501,	*Resident Engineer's Daily Report/Assistant Resident Engineer's Daily Report*
Form CEM-4601,	*Assistant Resident Engineer's Daily Report*
Form CEM-4701,	*Drainage System Summary*
Form CEM-4801,	*Quantity Calculations*
Form CEM-4900,	*Contract Change Order*
Form CEM-4901,	*Contract Change Order Input*
Form CEM-4902,	*Extra Work Bill (Short Form)*
Form CEM 4902A,	*Extra Work Bill—Title Page*
Form CEM-4902B,	*Extra Work Bill—Labor Charges*
Form CEM-4902C,	*Extra Work Bill—Equipment Charges*
Form CEM-4902D,	*Extra Work Bill—Material Charges*
Form CEM-4903,	*Contract Change Order Memorandum*
Form CEM-5101,	*Request for Payment for Materials on Hand*
Form CEM-5501,	*Partnering Facilitator Evaluation—Kick-Off*
Form CEM-5502,	*Partnering Facilitator Evaluation—Close-Out*
Form CEM-6002,	*Contract Administration System (CAS) –Report Requests*
Form CEM-6003,	*Progress Pay—Estimate Project Initiation or Update*
Form CEM-6004,	*Contract Transactions Input*

Form CEM-6101, *Project Record—Estimate Request*
Form CEM-6201, *Notice of Potential Claim*
Form CEM-6201A, *Initial Notice of Potential Claim*
Form CEM-6201B, *Supplemental Notice of Potential Claim*
Form CEM-6201C, *Full and Final Documentation of Potential Claim*
Form CEM-6202, *Disputes Review Board (DRB) Establishment*
Form CEM-6203, *Dispute Review Board (DRB) Update Report*
Form CEM-6204, *Dispute Review Board (DRB) Issue Report*
Form CEM-6205, *Dispute Review Board (DRB) Completion Report*
Form CEM-6301, *Contract Acceptance*
Form CEM-6302, *Final Materials Certification*
Form CEM-9001, *Construction Manual Proposed Change*

5-101C Materials Engineering and Testing Services Forms

Form TL-0015, *Quality Assurance-Nonconformance Report*
Form TL-0016, *Quality Assurance-Nonconformance Resolutiont*
Form TL-0028, *Notice of Materials to be Inspected*
Form TL-0029, *Report of Inspection of Material*
Form TL-0038, *Inspection Request Form*
Form TL-0101, *Sample Identification Card*
Form TL-0502, *Field Sample of Portland Cement Concrete Sample Card*
Form MR-0518, *Job Cement Samples Record*
Form TL-0608, *Notice of Materials to be Furnished*
Form TL-0624, *Inspection Release Tag*
Form TL-0625, *Materials Suitability Tag*
Form TL-0649, *Inspector's Report of Material on Hand*
Form TL-3096, *Pavement Core Record*
Form TL-6013, *Materials Suitability Documentation Report*
Form TL-6014, *Materials Suitability Report*
Form TL-6037, *Fabrication Progress Report*

5-101D Other State Forms

Form DAS-1, *Apprentice Agreement*
Form DPD-3013, *Request for Construction Staking*
Form LA-16, *Product, Material, or Method Report (For Highway Planting or Erosion Control)*
Form LA-17, *Report of Chemical Spray Operations*

5-101E Traffic Operations Forms

Form TR-0019, *Notice of Change in Clearance or Bridge Weight Rating*
Form TR-0020, *Notice of Change in Vertical or Horizontal Clearance*
Form TR-0029, *Notice of Change in Clearance or Bridge Weight Rating*

5-101F Federal Forms
Form FHWA-1022, United States Department of Transportation Notice
Form FHWA-1391, Federal-Aid Highway Construction Contractors Annual EEO Report
Form DOL SF-308, Request for Wage Determination and Response to Request
Equal Employment Opportunity Is The Law—Poster
Form FHWA-1495, Wage Rate Information Federal-Aid Highway Project

5-102 Organization of Project Documents
5-102A General
5-102B Indexing
5-102C Description of Categories
5-102D Category Numbers and Headings
5-102E Alphabetical Listing of Categories

5-103 The Contract Administration System
5-103A General
Table 5-1.1 The Contract Administration System, System Interface
5-103B Project Initiation and Update
5-103B (1) Completing Form CEM-6003, "Project Pay-Estimate Project Initiation or Update"
5-103B (1a) Project Key
5-103B (1b) Card type C05 (each field is independent and can be updated separately)
5-103B (1c) Card type C06 to C08
5-103B (1d) Card type C09 to C14
5-103B (1e) Card type C15
5-103B (2) Processing
5-103C Contract Transactions
5-103C (1) Transaction Types
5-103C (1a) Contract Item Transactions
5-103C (1b) Miscellaneous Transactions
5-103C (1c) Contract Change Order Transactions
5-103C (2) Completing Form CEM-6004, "Contract Transaction Input"
5-103C (2a) Contract Item Entries
5-103C (2b) Miscellaneous Transactions
5-103C (2c) Contract Change Order Transactions
5-103C (2d) General
5-103C (2e) Audit Trail
Examples 5-1.1 Quantity Calculation
Examples 5-1.2 Contract Transaction Input

5-103C (3) Computer Processing
5-103D Contract Change Orders
5-103D (1) Completing Form CEM-4901, "Contract Change Order Input"
5-103D (1a) File
5-103D (1b) Update
5-103D (1c) Replace
5-103D (1d) Delete
5-103D (2) Edits
5-103E Extra Work Billing
5-103E (1) Preparing Form CEM-4902, Extra Work Report Bill (Short Form)
5-103E (1a) Basic Information (Title Page)
5-103E (1b) Equipment
5-103E (1c) Other Expenses Subject to Labor Markup
5-103E (1d) Material or Work Done by Specialists, Lump Sum, or Unit Price Payments
5-103E (1e) Signature of Prime Contractor's Representative
5-103E (2) Processing Form CEM-4902
5-103E (3) Corrections to Extra Work Bills
5-103F Generating Estimates
5-103F (1) Procedure
5-103F (1a) Preparing Form CEM-6101, "Project Record Estimate Request"
5-103F (1b) Estimate Parameters
5-103F (1c) Deductions
5-103F (2) Computer Processing
5-103F (2a) Estimate Edits
5-103F (2b) Estimate Output
5-103F (3) Potential Problems
5-103G Approval of Estimates
5-103G (1) The Resident Engineer
5-103G (2) The District Director
5-103G (3) Flagging an Estimate for Payment
5-103H Reports Available Through the Contract Administration System
5-103H (1) District (XX) Estimate Status
5-103H (2) Project Management
5-103H (2a) The Project File Status Report
5-103H (2b) The Exceptional Contracts Report
5-103H (3) District (XX) Project Status
5-103H (4) Progress Payment-Work Done by Office of Structures Construction (Copies)
5-103H (5) Project Record-Estimate (Copies)

5-103H (6) Status of Contract Items
5-103H (7) Project Record Item Sheet
5-103H (8) Status of Contract Change Orders
5-103H (9) Contract Change Order Master Listing
5-103H (10) Bridge Quantities by Structure
5-103H (11) District (XX) Status of Anticipated Changes
5-103H (12) Project Record-Estimate (Dummy)
5-103H (13) Contract Contents Report
5-103H (14) Contract Contents Report-Contract Item Records
5-103H (15) Contract Contents Report-Contract Progress
5-103H (16) DEWRs in Holding File
5-103H (17) Daily Extra Work Report
5-103H (18) Rental Rates and Codes for Miscellaneous Equipment
5-103H (19) Reports for the Office of Structure Construction
5-103I Field Audits by Accounting Office

5-104 Final Construction Project Records

5-104A General
5-104B Public Access to Project Records
5-104C Disposition of Construction Project Records
5-104D As-Built Plans
5-104D (1) District Procedure on As-Built Plans
5-104D (2) Procedure on As-Built Plans for Bridges and Structures
5-104D (3) Projects Not on State Highways

Section 1 Project Records and Reports

5-101 Forms Used For Contract Administration

5-101A General

One of the duties of the resident engineer is to keep accurate and complete records of the work. This section includes a list of forms used in administering a construction project and maintaining records. Use forms not related directly to contract administration, such as personnel documents and accounting forms, in accordance with instructions contained in other Caltrans manuals.

The Division of Construction issues new or revised construction forms. All Division of Construction forms have a prefix of CEM and a number that is related to the form's uniform filing system category. If an existing form no longer meets the need that it was designed for, use the following procedure to implement a change:

- Complete Form CEM-9001, "Construction Manual Proposed Change," and send it to the Division of Construction forms coordinator. Explain the reason for the proposed change and attach a draft of the proposed revised form.
- The Division of Construction will review the proposed change and make a decision regarding any future revision.

Not all forms issued by the Office of Materials Engineering and Testing Services (METS) are listed in this manual. If a test method includes a specific form, contact METS.

A list of forms issued by the Division of Structure Construction is shown in Volume I, Section 16 of the *Bridge Construction Records and Procedures Manual*.

5-101B Construction Forms

All Division of Construction forms are available on the Caltrans Electronic Form System's (CEFS) intranet website:

http://cefs.dot.ca.gov/

or on the Division of Construction's internet site at:

http://www.dot.ca.gov/hq/construc/

Following is a list and descriptions of the Division of Construction forms:

Form CEM-0101, Resident Engineer's Report of Assignment

When assigned to a new project, the resident engineer must use Form CEM-0101, "Resident Engineer's Report of Assignment." This provides contact information. Distribute copies of the report according to instructions on the form and any district instructions.

It is not necessary or desirable to hold the form until all information is available. Submit partial information with a note that a supplemental form will follow.

Form CEM-0501, Relief from Maintenance

The resident engineer uses Form CEM-0501, "Relief from Maintenance," to recommend that the contractor be relieved from maintenance and responsibility in accordance with Section 7-1.15, "Relief from Maintenance and Responsibility," of the *Standard Specifications.* For more information see Section 3-709, "Relief from Maintenance and Responsibility," of this manual.

Form CEM-0601, Construction Safety Report

The resident engineer or the project safety coordinator uses Form CEM-0601, "Construction Safety Report," to document monthly project safety reviews.

Form CEM-0602, Project Safety Program Statement

The resident engineer uses Form CEM-0602, "Project Safety Program Statement," to list the Code of Safe Practices which apply to the project. This form may also be used to designate an employee as the project safety coordinator.

Form CEM-0603, Major Construction Incident Notification

The resident engineer uses Form CEM-0603, "Major Construction Incident Notification," to report major construction incidents. Instructions for completion are included on the last page of the form.

Form CEM-1101, Documents Bond of State Highway Oversight Projects

The local agency and Caltrans project manager complete Form CEM-1101, "Documents Bond of State Highway Oversight Projects." The project manager submits the form to the encroachment permits unit when local agencies have failed, in the past, to produce and submit required documents at the completion of a previous contract they administered on the state highway system. For details on the use of this form, see Section 4-101, "Projects with Documents Bond," of the Caltrans *Oversight Engineer Field Guidelines*.

Form CEM-1201, Subcontracting Request (Stock # 7541-3514-7)

The contractor submits Form CEM-1201, "Subcontracting Request." The resident engineer uses the form to calculate the percentage of work to be performed by the contractor. Section 3-8, "Prosecution and Progress," of this manual describes the procedures. The resident engineer must approve this form before the contractor can begin on the applicable subcontracted work. Before approval, verify that subcontractors are not on the Debarred Contractors list on the Division of Construction's website.

Form CEM-1202, Contractor Action Request—Change of Name/Address - Assignment of Contract Monies

The contractor submits Form CEM-1202, "Change of Name/Address -Assignment of Contract Monies," to the resident engineer to request a change in the contractors name or address or to request an assignment of monies due or to become due the contractor under the contract in accordance with Section 8-1.02, "Assignment," of the *Standard Specifications.*

Form CEM-1203, Contractor Action Request—Assignment of Contract Performance

The original contractor or the contractor's surety submits Form CEM-1203, "Assignment of Contract Performance," to the resident engineers in accordance with Section 8-1.02, "Assignment," of the *Standard Specifications.*

Form CEM-2001, National Pollution Discharge Elimination System Annual Certification

The resident engineer uses Form CEM-2001, "National Pollution Discharge Elimination System Annual Certification," to file the annual storm water permit certification by July 1 of each year. See Chapter 7, "Environmental," for details on the storm water permit certification.

Form CEM-2002, Notification of Construction (NOC)

The resident engineer, with the assistance of the district construction storm water coordinator, fills out Form CEM-2002, "Notification of Construction (NOC)." The Caltrans National Pollutant Discharge Elimination System Permit requires Caltrans to submit the notification to the Regional Water Control Board. Instructions are included on the last page of the form.

Form CEM-2003, Notification of Completion of Construction (NCC)

Submits Form CEM-2003, "Notification of Completion of Construction (NCC)," for projects requiring a storm water pollution prevention plan to the Regional Water Quality Control Board upon completion of construction. Usually, the resident engineer submits the notification. However, districts may elect to have the storm water coordinator, project manager, construction engineer, or other responsible staff submit this form. This form is not required for water pollution control plan projects. Directions are on the last page of the form.

Form CEM-2004, Notification of Completion of Construction (Desert Areas)

The resident engineer or district storm water coordinator submits Form CEM-2004, "Notification of Completion of Construction (Desert Areas)," for projects requiring a storm water pollution prevention plan for region 6 or 7 of the California Regional Water Quality Control Board.

Form CEM-2101, COZEEP Daily Report

Jointly, the California Highway Patrol and Caltrans use Form CEM-2101, "COZEEP Daily Report," to report highway patrol resources used for the Construction Zone Enhanced Enforcement Program. Chapter 2, "Safety and Traffic," of this manual describes the use of Form CEM-2101.

Form CEM-2102, COZEEP/MAZEEP Task Order

The resident engineer uses Form CEM-2102, "COZEEP/MAZEEP Task Order," to request highway patrol support for the Construction Zone Enhanced Enforcement Program. The use of this form is described in Section 2, "Safety and Traffic," of this manual.

Form CEM-2103, COZEEP/MAZEEP Cancellation Form

The resident engineer uses Form CEM-2103, "COZEEP/MAZEEP Cancellation Form," to cancel any previously requested highway patrol support for the Construction Zone Enhanced Enforcement Program. The use of this form is described in Section 2, "Safety and Traffic," of this manual.

Form CEM-2401, Substitution Report for Disadvantaged Business Enterprise/Disabled Veteran Business Enterprise

The contractor fills out Form CEM-2401, "Substitution Report for Disadvantaged Business Enterprise/Disabled Veteran Business Enterprise." The resident engineer uses the form to approve disadvantaged business enterprise (DBE) subcontractor substitutions. For more information on substituting subcontractors refer to Sections 3-8, "Prosecution and Progress," and 8-3, "Disadvantaged Business," of this manual.

Form CEM-2402(F), Final Report- Utilization of Disadvantaged Business Enterprises (DBE), First - Tier Subcontractors

The contractor fills out and certifies Form CEM-2402(F), "Final Report- Utilization of Disadvantaged Business Enterprises (DBE), First - Tier Subcontractors." The resident engineer verifies the form. It describes work performed and materials provided by disadvantaged business enterprise subcontractors. See Section 8-3, "Disadvantaged Business," of this manual for details.

Form CEM-2403(F), Disadvantaged Business Enterprises (DBE) Certification Status Change

The contractor fills out and certifies Form CEM-2403(F), "Disadvantaged Business Enterprises (DBE) Certification Status Change." The resident engineer uses this form to verify the actual dollar amount paid to DBE subcontractors on federally funded projects that have a change in certification status during the course of the contract. See Section 8-3, "Disadvantaged Business," of this manual for details.

Form CEM-2404(F), Monthly DBE Trucking Verification

The contractor must submit Form CEM-2404(F), "Monthly DBE Trucking Verification," before the 15th of each month. It lists the dollar amount paid to the DBE trucking companies for truck work performed by DBE certified truckers and for any fees or commissions for non-DBE truckers utilized each month on the project. Instructions for filling out this form are located on the last page of the form.

Form CEM-2501, Fringe Benefit Statement

The contractor completes Form CEM-2501, "Fringe Benefit Statement," for labor compliance purposes. See Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2502, Contractor/Subcontractor Payroll

When it is requested, furnish "Form CEM-2502, Contractor/Subcontractor Payroll," to the contractor. It is used to fulfill the payroll submittal requirements of the contract. See Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2503, Statement of Compliance

The contractor may use Form CEM-2503, "Statement of Compliance," for the required statement of compliance with payroll submittals. See Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2504, Employee Interview: Labor Compliance/EEO
(Stock # 7541-3512-3)

Use Form CEM-2504, "Employee Interview: Labor Compliance/EEO," to record information from interviews of contractors' employees. Directions to interviewer are on the back of the form. See Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2504, (Spanish), Entrevista de Empleado: Labor Compliance/EEO

Same as previous. Form printed in Spanish.

Form CEM-2505, Owner - Operator Listing Statement of Compliance

If they do not include this data on their certified payrolls, contractors may use Form CEM-2505, "Owner - Operator Listing Statement of Compliance," for reporting payments made to owner-operators. See Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2506, Labor Compliance – Wage Violation

The district labor compliance officer uses Form CEM-2506, "Labor Compliance – Wage Violation," to document labor compliance wage violations. See Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2507, Labor Violation: Case Summary

The district labor compliance officer uses Form CEM-2507, "Labor Violation: Case Summary," in conjunction with Form CEM-2506 to summarize labor violation cases. See Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2508, Contractor's Payroll Source Document Review

The district labor compliance officer uses Form CEM-2508, "Contractor's Payroll Source Document Review" to document the verification of the contractors' payroll source document review. See Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2509, Checklist – Source Document Review

The district labor compliance officer uses Form CEM-2509, "Checklist – Source Document Review," during the contractor's payroll source document review. See Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2510, Truck Owner-Operator Certification of Ownership

The truck owner-operator uses Form CEM-2510, "Truck Owner-Operator Certification of Ownership," to identify the vehicle used and certify ownership or lease of the vehicle. The Form CEM-2510 should be submitted once per project to the district labor compliance office unless changes to the data would necessitate a new form. See Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2601, Construction Progress Chart

The resident engineer maintains Form CEM-2601, "Construction Progress Chart," for each project. See Section 3-8, "Prosecution and Progress," of this manual for details.

Form CEM-2701, Weekly Statement of Working Days (Stock # 7541-3528-7)

The resident engineer uses Form CEM-2701, "Weekly Statement of Working Days," to track contract time on construction contracts. The last page of the form and Section 3-8, "Prosecution and Progress," of this manual contain instructions for filling out the weekly statement of working days.

Form CEM-2702, Overrun in Contract Time

The Division of Construction uses Form CEM-2702, "Overrun in Contract Time," to approve "director days." For more information see Section 3-8, "Prosecution and Progress," of this manual.

Form CEM-3101, Notice of Materials to Be Used (Stock # 7541-3511-1)

The contractor must use Form CEM-3101, "Notice of Materials to Be Used," to list all materials to be used on the project. See Section 6-2, "Acceptance of Manufactured Material and Sampling Methods," of this manual for details on the use of this form. Instructions to the contractor are on the last page of the form.

Form CEM-3501, Hot Mix Asphalt Production Report

The plant inspector uses Form CEM-3501, "Hot Mix Asphalt Production Report," to document daily hot mix asphalt production processes and report any plant, material and production deficiency to the resident engineer.

Form CEM-3502, Hot Mix Asphalt Placement Report

The paving inspector uses Form CEM-3502, "Hot Mix Asphalt Placement Report," to document daily hot mix asphalt placement processes and report any material and construction deficiencies to the resident engineer.

Form CEM-3511, Contractor Job Mix Formula Proposal

The contractor uses Form CEM-3511, "Contractor Job Mix Formula Proposal," to submit to the resident engineer, before the work begins, the hot mix asphalt mix formula they have tested and intend to use on the project. Form CEM-3511 states job mix formula target values for aggregate sieves and the percent of asphalt binder, as well as, source information for all materials.

Form CEM-3512, Contractor Hot Mix Asphalt Design Data

The contractor uses Form CEM-3512, "Contractor Hot Mix Asphalt Design Data," to document the testing data developed by the mix design laboratory. See Section 4-39, "Hot Mix Asphalt," of this manual for more information.

Form CEM-3513, Caltrans Hot Mix Asphalt Verification

On Form CEM-3513, Caltrans verifies that the proposed job mix formula complies with the specifications. The resident engineer signs and returns Form CEM-3513 to the contractor. See Section 4-39, "Hot Mix Asphalt," of this manual for more information.

Form CEM-3701, Test Result Summary

Resident engineers may use Form CEM-3701, "Test Result Summary" to summarize acceptance tests on each material. See Category 37, "Initial Tests and Acceptance Tests," in Section 5-102, "Organization of Project Documents," of this manual for details.

Form CEM-3702, Relative Compaction Summary

Resident engineers may use Form CEM-3702, "Relative Compaction Summary," to summarize compaction test results in the same manner that Form CEM-3701 is used for other tests.

Form CEM-3703, Caltrans Production Start-Up Evaluation

Resident engineers use Form CEM-3703, "Caltrans Production Start-Up Evaluation," to record the testing results at the beginning of production. Refer to Section 4-39, "Hot Mix Asphalt," of this manual for more information.

Form CEM-4101, Materials Release Summary

Resident engineers use Form CEM-4101, "Materials Release Summary," to summarize the materials released by METS and materials inspected at the jobsite.

Form CEM-4102, Material Inspected and Released on Job

Resident engineers use Form CEM-4102, "Material Inspected and Released on Job," to list certain materials that may arrive on the jobsite without a Form TL-0029, "Report of Inspection of Material." See Section 6-3, "Field Tests," of this manual for details.

Form CEM-4202, Material Plant Safety Checklist

The materials plant inspector uses Form CEM-4202, "Material Plant Safety Checklist," when checking a materials plant for safety.

Form CEM-4204, California Test 109 Sticker

The district weights and measures coordinator affixes Form CEM-4204, "California Test 109 Sticker" to each scale tested in accordance with California Test 109. Obtain the form from the Division of Construction weights and measures coordinator. See Section 3-903E, "Weighing and Metering Procedures," of this manual for details.

Form CEM-4401, Solid Waste Disposal and Recycling Report

The contractor completes and certifies the information reported on CEM-4401, "Solid Waste Disposal and Recycling Report." The resident engineer reviews then submits the approved form to the district recycling coordinator with a copy to the statewide recycling coordinator in headquarters Division of Design. The use of this form is described in Section 7-109, "Solid Waste Disposal and Recycling Reporting," of this manual.

Form CEM-4501, Resident Engineer's Daily Report/Assistant Resident Engineer's Daily Report (Stock # 7541-3506-1)

The resident engineer and the assistant resident engineers use Form CEM-4501, "Resident Engineer's Daily Report/Assistant Resident Engineer's Daily Report," to record project activities daily. For more information see Section 5-0, "Conduct of the Work," of this manual.

Form CEM-4601, Assistant Resident Engineer's Daily Report (Stock # 7541-3504-6)

Assistant resident engineers use Form CEM-4601, "Assistant Resident Engineer's Daily Report," to record daily individual contract item activity. It is also used to record extra work activity and to verify contractors' personnel listed on payrolls. For more information see Section 5-0, "Conduct of the Work," of this manual.

Form CEM-4701, Drainage System Summary

Resident engineers and assistant resident engineers use Form CEM-4701, "Drainage System Summary," to record progress and summarize activity on drainage contract items. See Category 47, "Drainage Systems," in Section 5-102, "Organization of Project Documents," of this manual for details.

Form CEM-4801, Quantity Calculations (Stock # 7541-3520-0)

Resident engineers and assistant resident engineers use Form CEM-4801, "Quantity Calculations," for the basic source document for most contract item quantity calculations.

Form CEM-4900, Contract Change Order

Resident engineers use Form CEM-4900, "Contract Change Order," for contract change orders. See Section 5-3, "Contract Change Orders," of this manual for information about contract change orders.

Form CEM-4901, Contract Change Order Input (Stock # 7541-3516-2)

Resident engineers and assistant resident engineers use Form CEM-4901, "Contract Change Order Input," to input contract change orders for the project record and estimate data. See Section 5-103D, "Contract Change Orders," of this manual for details.

Form CEM-4902, Extra Work Bill (Short Form) (Stock # 7541-3500-8)

Contractors use Form CEM-4902, "Extra Work Bill (Short Form)," for billing extra work. Details for use are on the last page of the form and are also included in Section 5-103E, "Extra Work Billing," of this manual. The resident engineer may approve contractor-designed forms. With prior approval from the Division of Construction, the contractor may submit extra work bill data on a computer report identical to Form CEM-4902 for all Caltrans projects.

*Form CEM 4902A, Extra Work Bill—Title Page (*Stock # 7541-3496-7)

Contractors use Form CEM 4902A, "Extra Work Bill - Title Page," for billing extra work. It is the first page of the 4-part extra work bill. It identifies the project, contract change order number, method of payment and performer of work. This form also provides for manual calculation of the bill. Details for use are on the last page of the form and are also included in Section 5-103E, "Extra Work Billing," of this manual. The resident engineer may approve contractor-designed forms. With prior approval from the Division of Construction, the contractor may submit extra work bill data on a computer report identical to Form CEM-4902A for all Caltrans projects.

Form CEM-4902B, Extra Work Bill—Labor Charges (Stock # 7541-3497-9)

Contractors use Form CEM-4902B, "Extra Work Bill - Labor Charges," for billing extra work. It is used to enter labor charges and other expense subject to labor markup. This form is used with CEM-4902A, "Extra Work Bill Title Page." Details for use are on the last page of the form and are also included in Section 5-103E, "Extra Work Billing," of this manual. The resident engineer may approve contractor-designed forms. With prior approval from the Division of Construction, the contractor may submit extra work bill data on a computer report identical to Form CEM-4902B for all Caltrans projects.

Form CEM-4902C, Extra Work Bill—Equipment Charges

Contractors use Form CEM-4902C, "Extra Work Bill—Equipment Charges," for billing extra work. It is used to enter equipment charges to the extra work bill. This form is used with CEM-4902A, "Extra Work Bill - Title Page." Details for use are on the back of the form and are also included in Section 5-103E, "Extra Work Billing," of this manual. The resident engineer may approve contractor-designed forms. With prior approval from the Division of Construction, the contractor may submit extra work bill data on a computer report identical to Form CEM-4902C for all Caltrans projects.

Form CEM-4902D, Extra Work Bill—Material Charges

Contractors use Form CEM-4902D, "Extra Work Bill - Material Charges," for billing extra work. It is used to enter material charges to the extra work bill. This form is used with CEM-4902A, "Extra Work Bill - Title Page." Details for use are on the last page of the form and are also included in Section 5-103E, "Extra Work Billing," of this manual. The resident engineer may approve contractor-designed forms. With prior approval from the Division of Construction, the contractor may submit extra work bill data on a computer report identical to Form CEM-4902D for all Caltrans projects.

Form CEM-4903, Contract Change Order Memorandum

Resident engineers use Form CEM-4903, "Contract Change Order Memorandum" in conjunction with Form CEM-4900, "Contract Change Order," to report the necessary engineering and administrative data relative to the change. See Section 5-3, "Contract Change Orders," of this manual for details.

Form CEM-5101, Request for Payment for Materials on Hand

Contractors use Form CEM-5101, "Request for Payment for Materials on Hand," to request payment for materials on hand. Instructions for the form and administrative procedures are covered in Section 3-9, "Measurement and Payment," of this manual.

Form CEM-5501 Partnering Facilitator Evaluation - Kick-Off

When partnering is implemented on a Caltrans construction project, the resident engineer uses Form CEM-5501 to gather project team evaluations of the partnering facilitator's performance following the kick-off partnering workshop.

Form CEM-5502, Partnering Facilitator Evaluation - Close-Out

The resident engineer uses Form CEM-5502 to gather project team evaluations of the partnering facilitator's performance following the close-out partnering workshop.

Form CEM-6002, Contract Administration System (CAS)—Report Requests

Use Form CEM-6002, "Contract Administration System (CAS)—Report Requests," to obtain reports available from the contract administration system. See Section 5-103, "The Contract Administration System," of this manual for details.

Form CEM-6003, Progress Pay—Estimate Project Initiation or Update

Use Form CEM-6003, "Progress Pay—Estimate Project Initiation or Update," to add new information or to change information in the contract administration system. For details see Section 5-103B, "Project Initiation and Update," of this manual.

Form CEM-6004, Contract Transactions Input

Use Form CEM-6004, "Contract Transactions Input," to input estimate data into the contract administration system for the project record and estimate. See Section 5-103C, "Contract Transactions," of this manual for details.

Form CEM-6101, Project Record—Estimate Request

The resident engineer uses Form CEM-6101, "Project Record—Estimate Request," to request that an estimate be run. See Section 5-103F (1), "Procedure," of this manual for details.

Form CEM-6201, Notice of Potential Claim

Contractors use Form CEM-6201, "Notice of Potential Claim," to submit notices of potential claims to the resident engineer. For details on the use of this form see Section 5-4, "Disputes," of this manual.

Form CEM-6201A, Initial Notice of Potential Claim

Contractors use Form CEM-6201A , "Initial Notice of Potential Claim," to submit an early notice of a potential claim issue. For details on the use of this form, see Section 5-4, "Disputes," of this manual.

Form CEM-6201B, Supplemental Notice of Potential Claim

Contractors use Form CEM-6201B, "Supplemental Notice of Potential Claim," to submit a detailed description along with the necessary attachments of the nature, circumstances, and estimated costs of a potential claim as a follow up to Form CEM-6201A, "Initial Notice of Potential Claim."

Form CEM-6201C, Full and Final Documentation of Potential Claim

Contractors use Form CEM-6201C, "Full and Final Documentation of Potential Claim," to submit a complete documentation of a potential claim after completion of the work for which Forms CEM-6201A and CEM-6201B have been submitted. For details on the use of this form, see Section 5-4, "Disputes," of this manual.

Form CEM-6202, Dispute Review Board (DRB) Establishment

Resident engineers complete and submit Form CEM-6202, "Dispute Review Board (DRB) Establishment Report," to the Division of Construction after the initial DRB meeting has been held. For details on the use of this form, see Section 5-4, "Disputes," of this manual.

Form CEM-6203, Dispute Review Board (DRB) Update Report

Resident engineers complete and submit Form CEM-6203, "Dispute Review Board (DRB) Update Report," to the Division of Construction yearly beginning on the anniversary of the contract first working day. For details on the use of this form, see Section 5-4, "Disputes," of this manual.

Form CEM-6204, Dispute Review Board (DRB) Issue Report

Resident engineers complete and submit Form CEM-6204, "Dispute Review Board (DRB) Issue Report," to the Division of Construction when Caltrans has sent a response to DRB recommendation and the contractor's response has been received or has been accepted by default. For details on the use of this form see Section 5-4, "Disputes," of this manual.

Form CEM-6205, Dispute Review Board (DRB) Completion Report

Resident engineers complete and submit Form CEM-6205, "Dispute Review Board (DRB) Completion Report," to the Division of Construction 30 days after receipt of the contractor's exceptions to the proposed final estimate. For details on the use of this form see Section 5-4, "Disputes," of this manual.

Form CEM-6301, Contract Acceptance

Resident engineers use Form CEM-6301, "Contract Acceptance," to document acceptance and the various quantities delivered by the contract. Instructions are on the back of the form. For details on the use of this form see Section 3-710, "Acceptance of Contract," of this manual.

Form CEM-6302, Final Materials Certification

Resident engineers use Form CEM-6302, "Final Materials Certification," to document that tests on acceptance samples indicate the materials incorporated in the construction work, and the construction operations controlled by sampling and testing, were in conformity with the approved plans and specifications.

Form CEM-9001, Construction Manual Proposed Change

Caltrans personnel may use Form CEM-9001, "Construction Manual Proposed Change," to submit a recommendation for a change to the *Construction Manual*. Forms should be sent to the Division of Construction, Publications Unit.

5-101C Materials Engineering and Testing Services Forms

Office of Structural Materials, under Materials Engineering and Testing Services (METS), is responsible for TL forms. They may be ordered by stock number from district warehouses or stockrooms. Find forms without stock numbers on the Office of Structural Material's intranet website.

http://onramp.dot.ca.gov/hq/esc/mets/structure_materials/index.shtml

Form TL-0015, Quality Assurance-Nonconformance Report

METS uses Form TL-0015, "Quality Assurance-Nonconformance Report," when METS personnel discover that structural material or quality control procedures do not meet specific contract requirements. METS sends a copy of TL-0015 to the resident engineer.

Form TL-0016, Quality Assurance-Nonconformance Resolution

METS uses Form TL-0016, "Quality Assurance-Nonconformance Resolution," to document the resolution to an outstanding Form TL-0015. METS sends a copy of TL-0016 to the resident engineer.

Form TL-0028, Notice of Materials to be Inspected at the Jobsite

METS uses Form TL-0028, "Notice of Materials to be Inspected at the Jobsite," to assign inspection duties. METS sends a copy of TL-0028 to the resident engineer.

Form TL-0029, Report of Inspection of Material

METS uses Form TL-0029, "Report of Inspection of Material," to confirm that material has been inspected, to which the inspector has attached inspection release tags or other means of identification. METS sends a copy of TL-0029 to the resident to the resident engineer, who will compare it with inspection tags or markings on delivered materials.

Form TL-0038, Inspection Request Form

METS uses Form TL-0038, "Inspection Request Form," to document requests by the vendor or fabricator for bid items that require inspection.

Form TL-0101, Sample Identification Card

Use Form TL-0101, "Sample Identification Card," to submit samples to METS or district materials laboratories for testing materials other than field samples of concrete (compressive strength) and cement samples.

Form TL-0502, Field Sample of Portland Cement Concrete Sample Card (Stock #7541-6018-8)

Use Form TL-0502, "Field Sample of Portland Cement Concrete Sample Card," to submit compressive strength samples of concrete. Refer to Section 6-3, "Field Tests," for details on marking of samples.

Form MR-0518, Job Cement Samples Record (Stock # 7541-6019-0)

Use Form MR-0518, "Job Cement Samples Record," to submit cement samples for testing. Instructions for the use of this form are found in Section 6-2, "Acceptance of Manufactured Material and Sampling Methods," of this manual.

Form TL-0608, Notice of Materials to be Furnished

METS uses Form TL-0608, "Notice of Materials to be Furnished," to inform all parties that METS will inspect and release material before its sent to the jobsite. A TL-0038,"Inspection Request form is included with the TL-0608 that is sent to the vendor and fabricator.

Form TL-0624, Inspection Release Tag

When a METS Inspector has inspected material, the inspector will attach Form TL-0624, "Inspection Release Tag," with lot numbers, inspector's initials, and date of inspection. For materials where it is not practicable to attach tags, the inspector will mark lot numbers on the material in lieu of attaching the tags.

Form TL-0625, Materials Suitability Tag

METS uses Form TL-0625, "Materials Suitability Tag," as part of the Blue Tag process to verify that a quality assurance inspector has inspected the material and released it to the jobsite. The blue tag attached to the material includes the contract number, state lot number, Blue Tag number, inspector's initials, and date of inspection. For materials where it is not practicable to attach tags, the inspector will mark lot numbers of materials in lieu of attaching the tags.

Form TL-0649, Inspector's Report of Material on Hand

METS uses Form TL-0649, "Inspector's Report of Material on Hand," to verify that material has been inspected and is in acceptable condition. See Section 3-9, "Measurement and Payment," of this manual for details.

Form TL-3096, Pavement Core Record

The district materials unit uses Form TL-3096, "Pavement Core Record," to record the data on cores that are taken to determine pavement thickness. See Section 4-40, "Portland Cement Concrete Pavement," of this manual for details.

Form TL-6013, Materials Suitability Documentation Report

METS structural material representative, in consultation with the resident engineer and design staff as needed, completes TL-6013, "Materials Suitability Documentation

Report," as part of the Blue Tag process. This form documents the decision to release material that is tagged with TL-6025 and is listed in TL-6014.

Form TL-6014, Materials Suitability Report

Form TL-6014 is completed by the METS quality assurance inspector and is used to list the material to be released with TL-0625, "Materials Suitability Tag." The report includes material description, Blue Tag number and description of the nonconformance.

Form TL-6037, Fabrication Progress Report

METS uses Form TL-6037, "Fabrication Progress Report," to notify resident engineers of progress being made on fabrication of various items. See Section 3-9, "Measurement and Payment," for details.

5-101D Other State Forms

Following is a list of state forms used in contract administration that are not issued by the Division of Construction or METS. With the exception of the DAS-1 form, all of these forms are available on the Caltrans Electronic Forms System's intranet website at: http://cefs.dot.ca.gov/

Form DAS-1, Apprentice Agreement

Form DAS-1, "Apprentice Agreement," provides evidence of registration of the contractor's apprenticeship program. Contractors obtain Form DAS-1 from the California Department of Industrial Relations, Division of Apprenticeship Standards

http://www.dir.ca.gov/das/forms.htm

Form DPD-3013, Request for Construction Staking (Stock #7541-4542-7)

The contractor uses Form DPD-3013, "Request for Construction Staking," to request construction staking. The resident engineer and the survey party chief add information to the request. It serves as a record of construction staking and any charges to the contractor for restaking. For information on construction surveys and use of Form DPD-3013, see Chapter 12, "Construction Surveys," of the Caltrans Surveys Manual.

Form LA-16, Product, Material, or Method Report (For Highway Planting or Erosion Control)

Use Form LA-16, "Product, Material, or Method Report (For Highway Planting or Erosion Control)," to report new products, materials, or methods for erosion control and highway planting. Send the completed report to the district landscape architect and to the Landscape Architecture Program. See Section 4-2001, "General," of this manual for details.

Form LA-17, Report of Chemical Spray Operations

The contractor uses Form LA-17, "Report of Chemical Spray Operations," to submit the required weekly pesticide application report. See Section 4-2003C (2), "Pesticides," of this manual for details.

5-101E Traffic Operations Forms

The following forms are from the Division of Traffic Operations and used to change clearances or Bridge Weight Rating, and located at:

http://www.dot.ca.gov/hq/traffops/permits/

Form TR-0019, Notice of Change in Clearance or Bridge Weight Rating

Use Form TR-0019, "Notice of Change in Clearance or Bridge Weight Rating," to report permanent changes to vertical or horizontal clearance for vehicular traffic or permanent changes in bridge permit ratings on divided roadways. See Section 3-705B, "Clearance and Bridge Permit Rating Changes (Permanent)," of this manual for details.

Form TR-0020, Notice of Change in Vertical or Horizontal Clearance

Use Form TR-0020, "Notice of Change in Vertical or Horizontal Clearance," to report permanent changes to vertical or horizontal clearance for vehicular traffic. See Section 3-705B, "Clearance and Bridge Permit Rating Changes (Permanent)," of this manual for details.

Form TR-0029, Notice of Change in Clearance or Bridge Weight Rating

Use Form TR-0029, "Notice of Change in Clearance or Bridge Weight Rating," to report permanent changes to vertical or horizontal clearance for vehicular traffic or permanent changes in bridge permit ratings on undivided roadways. See Section 3-705B, "Clearance and Bridge Permit Rating Changes (Permanent)," of this manual for details.

5-101F Federal Forms

Following is a list of some federal forms that are used in contract administration. Obtain the forms from the United States Department of Transportation, Federal Highway Administration's website:

http://www.fhwa.dot.gov/

Form FHWA-1022, United States Department of Transportation Notice

The contractor must post Form FHWA-1022 "United States Department of Transportation Notice," on each federal-aid highway project in one or more places where it is readily available to all personnel associated with the project. The resident engineer must also post the notice at the Caltrans field office.

Form FHWA-1391, Federal-Aid Highway Construction Contractors Annual EEO Report

The contractor must submit Form FHWA-1391 "Federal-Aid Highway Construction Contractors Annual EEO Report," on all federal aid contracts over $10,000. All subcontractors on federal aid projects whose subcontracts exceed $10,000 must also submit the report. Contractors and subcontractors include project employment data for the last full week of July on the report.

Form DOL SF-308, Request for Wage Determination and Response to Request

On federal-aid contracts, request wage rate determinations on the United States Department of Labor Form SF-308, "Request For Wage Determination and Response to Request." Obtain the form from the United States Department of Transportation, Federal Highway Administration's website:

http://www.dol.gov/ESA/programs/dbra/sf308.htm

Equal Employment Opportunity Is The Law—Poster

The contractor must post the "Equal Employment Opportunity Is The Law Poster" on each federal-aid highway project in one or more places where it is readily available

to all personnel associated with the project. The resident engineer must also display the poster at the Caltrans field office. Obtain the poster from the United States Department of Transportation, Federal Highway Administration's website listed at the beginning of this section or the district labor compliance officer.

Form FHWA-1495 Wage Rate Information Federal-Aid Highway Project

The contractor must post Form FHWA-1495 "Wage Rate Information Federal-Aid Highway Project," with the Secretary of Labor minimum wage rate schedule attached, at the jobsite where the workers can easily see it. The form is available on the FHWA website listed at the beginning of this section.

5-102 Organization of Project Documents

5-102
Organization of Project Documents

5-102A General

This section describes the uniform filing system for organizing project records and reports. The system uses numbered categories for filing project documents. Use the uniform filing system on all projects.

There are 63 categories in the filing system. There are several unassigned categories. Use them for project documents that do not fit in assigned categories. If necessary, divide a category into subcategories.

Assign the appropriate category numbers to documents filed at a separate location (such as a field office hanging file). The filing system will then be correct when records are brought together after project completion.

Obtain preprinted category labels, stock number 7690-0150-6, from the district warehouse.

5-102B Indexing

Use a category index, similar to the sample shown at the end of this section, or an index of categories that is supplied with the labels, for each project. Post the index in a prominent location.

When the location of a category is separate from the main file, indicate its location on the index under appropriate heading.

5-102C Description of Categories

The discussion below describes the documents that should be included in each category and, for some categories, a recommended order of the documents in the categories.

Category 1, Project Personnel

Include all personnel related records in this category. Suggested subcategories are listed below. On smaller projects, some of the listed subcategories may be combined when the amount of detail shown is not warranted.

- Form CEM-0101, "Resident Engineer's Report of Assignment"
- Attendance Report
- Overtime Records
- Monthly Time Sheets
- Overtime Requests and Authorizations

- Absence Requests
- Personnel Transfer Records
- Personnel Roster
- Travel Expense Claims and Records
- Individual Personnel File. Use this for a file on each individual containing emergency telephone numbers, experience or training records, among other things.

Category 2, Project Office Equipment and Supplies

In this category, file those documents relating to equipment and supplies. Include records of equipment and supplies that have been received or returned. The subcategories listed below outline the scope of this category.

- Equipment Inventory
- Shipping Records (related shipping and receiving records should be stapled together)
- Receiving Records
- Transfer Requests
- Local Requests
- Automotive Records
- Cash Expenditure Vouchers
- Purchase Orders
- Bills of Lading

Category 3, Equipment and Personnel Cost Reports

In this category, file construction engineering cost reports.

Category 4, Service Contracts

In this category, file those documents related to the project office utilities and services. File requests for service along with all correspondence relating to project office service contracts in an appropriate subcategory. File the receiving records for bills for utilities and services in a “date received” sequence.

It is recommended that a separate subcategory be used for each company or each service agreement. File purchase orders for supplies in Category 2, “Project Office Equipment and Supplies.”

The subcategories that may be included in this category are as follows:

- Rent
- Electricity
- Gas
- Telephone
- Water
- Additional service agreements, as required

Do not confuse this category with Category 16, “Utility Agreements,” Category 17, “Utility Work Performed,” or a subcategory of Category 52, “Charges to Contract Allotment.” These are part of the project’s construction operations. Category 4 includes only those transactions connected with the resident engineer’s office.

Category 5, General Correspondence

In this category, file those letters that do not relate to any other category or subcategory in use. File correspondence concerning a subject that directly relates to some other category in that category. For example file correspondence developed in connection with a contract change order in the contract change order category file.

File correspondence filed in any subcategory in chronological order.

When the volume of correspondence builds up, segregate and divide it into more detailed subject subcategories. When appropriate, transfer correspondence from Category 5 to a more specific category. For example, a property owner may object to certain conditions on the project. After considerable correspondence, The resident engineer writes a contract change order to solve the problem. At this point, the resident engineer should transfer all of the correspondence related to the contract change order to the contract change order category file.

A letter might cover subjects in different categories. When the letter relates directly to two subjects, file a copy in each category or cross-reference to the location of the original. Cross-referencing need be only a note describing the letter filed in the appropriate category.

The following are examples of the subcategories in Category 5. The number of subcategories will depend on the volume of correspondence. Show all subcategories in the index.

- To district office
- From district office
- To contractor
- From contractor
- Property owners
- Utility companies
- Any additional subcategories that may be required depending on the volume of the correspondence.

Category 6, Safety

File project documents relating directly to safety in this category. Suggested subcategories are shown below:

- Employee Safety
- Contract Documents Relating to Safety
- Correspondence with the Division of Occupational Safety and Health (Cal/OSHA)
- A copy of the contractor’s Code of Safe Practices in use for the project

Category 7, Public Relations

File the various documents covering the subject of public relations in this category.

Category 8, Construction Surveys

Use this category for filing all survey documents that do not directly or solely relate to another category.

File Form DPD-3013, "Request for Construction Staking," in this category. Create subcategories for requests on which staking has been completed and for those where staking has not been completed. Cross-file staking requests that include restaking charges in Category 54, "Deductions from Payment to Contractor."

Category 9, Welding

In this category, file documents relative to welding in accordance with instructions in Section 180, "Welding," of the *Bridge Construction Records and Procedures Manual*.

Category 10, Extra Category Number

Use this extra category number for project documents that do not fit in presently established categories. When used, enter the name of the category on the index sheet.

Category 11, Information Furnished at Start of Project

In this category, file documents related to planning, design, contract funding, advertising, and opening bids. Do not file documents in this category that apply solely or directly to other established categories. This category should contain the following items. Create subcategories as necessary because of the volume of documents.

- Project Report
- Preliminary Report
- Project Expenditure Authorization, (including Supplemental Allotments)
- Detailed Estimate of Project Cost
- Notice of Award of Contract
- Bid Summary Sheets
- Federal Detail Estimate
- Executed Contract, Special Provisions, and Plans
- Notice of Approval of the Contract.
- Environmental Permits
- Encroachment Permits and Cooperative Agreements
- Bidder Inquiry Information

Category 12, Contractor

Use this category to file the various documents that the contractor is required to submit. Do not use it for general correspondence or documents appropriate to another specific category. The following subcategories suggest the scope of the category:

- Contractor's organization including the designation of the contractor's authorized representative as required by Section 5-1.06, "Superintendence," of the *Standard Specifications*
- Contractor's equipment list

- Contractor's borrow agreements
- List of subcontractors and other project documents concerning subcontracting
- Shop plans, if not filed under another appropriate category
- Falsework plans
- Insurance documents as required in Section 7-1.12, "Indemnification and Insurance," of the *Standard Specifications*

Category 13, Signs and Striping

In this category, file all documents relayed to signing, delineation, and handling public traffic during construction. Suggested subcategories are listed below.

- Layout of Construction Signs
- Detour Design, Striping and Signing
- Traffic Striping Diagrams

Category 14, Photograph Records

File routine photographs and their identification in this category. File photographs relating to claims in Category 62, "Disputes." It is a good practice to take photographs on a monthly basis to document the work during construction. Maintain videotapes and digital photo files in an organized manner. Note the location of these items in this category file.

Suggested subcategories for this category are:

- Before Construction
- During Construction
- After Construction

Category 15, Accidents

In this category, file documents related to accidents. Subcategories may include:

- Caltrans Employee Accident and Injury Reports.
- Caltrans Vehicle Accident Reports.
- California Highway Patrol Accident Reports.
- Local Police Accident Reports.
- Records and Investigations of Public Traffic Accidents.
- Records and Investigations of Contractor Accidents.

Category 16, Utility Agreements

In this category, file those documents that relate to work to be done to utility facilities in connection with the project.

Create subcategories for the various utility companies. Set up second level subcategories when required by the number of documents. The following are examples of subcategories within this category:

- 16.1.1 PG&E Co.—Agreements
- 16.1.2 PG&E Co.—Relocations

- 16.1.3 PG&E Co.—Encroachment Permit
- 16.2 AT&T Co.
- 16.3 Southern Pacific RR Co.

Category 17, Utility Work Performed

In this category, file daily reports and other records of utility facility work. Create the same the primary subcategories as those used in Category 16.

Create second level subcategories when required by the number of documents and the amount of work. For example, where the work would develop just daily reports and receiving records of one utility relocation, these documents could be kept in one subcategory in chronological order. When the same utility company has more than one relocation a more detailed breakdown may be advisable.

Category 18, Agreements

In this category, file agreements (except utility agreements) with third parties or other state or county agencies. The number and levels of subcategories will depend upon the agreements and the nature and extent of the work involved. A list of suggested subcategories follows:

- Right-of-Way Agreements—Without Obligations
- Right-of-Way Agreement—With Obligations
- Forest Service Agreements
- Borrow Agreements (between Caltrans and owner)
- Disposal Agreements (between Caltrans and owner)
- Service Agreements (these are utility service agreements such as for highway lighting)
- Disposal Permits
- Records of Royalty Payments
- Encroachment Permits

File an encroachment permit relating to a utility facility agreement under Category 16, “Utility Agreements.” File an encroachment permit relating to a right-of-way agreement in this category.

Where there are several right-of-way agreements requiring some degree of control, such as right-of-way agreements with obligations, maintain a summary to show the status of these agreements. An example of the status summary headings is shown below:

- The agreement number.
- The location of work to be performed.
- A brief description of work to be done and by whom.
- When the work is completed.
- The contract change order number if the required work is being done by contract change order.

Category 19, Hazardous Waste and Hazardous Materials

File any information regarding the discovery and removal of hazardous waste in this category.

Category 20, Water Pollution Control Plan or Storm Water Pollution Prevention Plan

File all correspondence regarding water pollution control plans (WPCP) or storm water pollution prevention plans (SWPPP) in this category. A list of suggested subcategories follows:

- Approved WPCP or SWPPP
- Amendments to WPCP or SWPPP
- Notification of Construction
- Correspondence
- Inspections by Contractor
- Inspections by Caltrans
- Notices of Noncompliance
- Annual Certification of Compliance
- Notice of Completion of Construction

Category 21, Construction Zone Enhanced Enforcement Program

File documents relating directly to the Construction Zone Enhanced Enforcement Program (COZEEP) in this category. Suggested subcategories are shown below:

- Form CEM-2103, "COZEEP/MAZEEP Cancellation Form."
- Form CEM-2102, "COZEEP/MAZEEP Task Order."
- Form CEM-2101, "COZEEP Daily Report."

Category 22, Traffic Management Information

Use this category to file information related to traffic management. Possible subcategories include:

- Contractor lane closure requests
- Lane closure requests submitted to the traffic management center
- Approved lane closures
- Contractor contingency plans
- Traffic count data

Category 23, Extra Category Number

Use this extra category number for project documents that do not fit in presently established categories. When using an extra category, enter the category number and title in the index.

Category 24, Disadvantaged Business Enterprises and Disabled Veteran Business Enterprises

Use this category for the following:

- Disadvantaged business enterprises (DBE) and disabled veteran business enterprises (DVBE) correspondence.
- The contractor's DBE/DVBE utilization plan.
- DBE and DVBE substitution requests and approvals.
- DBE and DVBE monthly reports.
- Certified rosters.
- Form CEM-2402(F) "Final Report-Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors."
- Other DBE and DVBE related documents.

Category 25, Labor Compliance and Equal Employment Opportunity

In this category, file required labor compliance and equal employment opportunity information. See Sections 8-1, "Labor Compliance," and 8-2, "Equal Employment Opportunity," of this manual for details.

Category 26, Progress Schedule

In this category, file the progress schedule, critical path method submittals, and other related information.

Category 27, Weekly Statement of Working Days

In this category, file Form CEM-2701, "Weekly Statement of Working Days." Also file correspondence relating to contract time in a subcategory of this category.

Category 28, Weekly Newsletter

In this category, file periodic newsletters and reports that are prepared during the project. Include those weekly reports of a general nature pertaining to the progress of the contract.

Category 29, Materials Information and Preliminary Tests

In this category, file materials information and preliminary test reports. Suggested subcategories follow:

- Materials information
- Report of foundation investigation
- Report of tests on aggregate base (preliminary tests)
- Report of tests on aggregate subbase (preliminary tests)

Category 30, Basement Soil Test Results

In this category, file basement soil test results taken to determine structural section adequacy (taken during design phase).

Category 31, Notice of Materials to Be Used

In this category, file Form CEM-3101, "Notice of Materials to Be Used." Create a system for checking that notices have been received.

Make Form CEM-3101's that contain information for structure items available for use by the structure representative. Consider filing the Form CEM-3101's listing structure items in a separate subcategory of this category.

Category 32, Notice of Materials to be Inspected at the Jobsite

In this category, file Form TL-0028, "Notice of Materials to be Inspected at the Jobsite."

Category 33, Notice of Materials to be Furnished

In this category, file Form TL-0608, "Notice of Materials to be Furnished."

Category 34, Treated Base

In this category, file documents for cement-treated base, cement-treated permeable base, and asphalt-treated permeable base. Do not include those documents that are to be filed in other specific categories such as 37 and 48.

Use subcategories similar to the examples shown below. Create a numbering system that identifies the category, item and subcategory. For example, 34.26.3 indicates Category 34 "Treated Bases," 26 is the contract item number of the material and also identifies the subcategory, and the 3 is the second level subcategory identifying the particular document.

- 34.26.1 Mix design data, cement-treated base
- 34.26.2 Plant records, cement-treated base
- 34.26.3. Spread records, cement-treated base
- 34.27.1 Mix design data, cement-treated permeable base
- 34.27.2 Plant records, cement-treated permeable base
- 34.27.3 Spread records, cement-treated permeable base
- 34.28.1 Mix design data, asphalt-treated permeable base
- 34.28.2 Plant records, asphalt-treated permeable base
- 34.28.3 Spread records, asphalt-treated permeable base
- 34.4 Certificates of Compliance for materials used in treated bases

Category 35, Hot Mix Asphalt

In this category, file documents related to hot mix asphalt, except those to be filed in other specific categories such as in 37 and 48. Following are suggested subcategories:

- Form CEM-3501, " Hot Mix Asphalt Production Report"
- Form CEM-3502, "Hot Mix Asphalt Placement Report"
- Form CEM-3511, "Contractor Job Mix Formula Proposal"
- Form CEM-3512, "Contractor Hot Mix Asphalt Design Data"
- Form CEM-3513, "Caltrans Hot Mix Asphalt Verification"
- Certificates of Compliance for materials used in hot mix asphalt

Category 36, Portland Cement Concrete (other than structure items)

In this category, file documents related to portland cement concrete. Do not include documents that are to be filed in other specific categories such as 37, 43 and 48. For structure items, the project documents are to be filed in Category 43. See the *Bridge Construction Records and Procedures Manual* for details. Following are suggested subcategories for this category:

- 36.1 Portland cement concrete Pavement
- 36.1.1 Mix Designs
- 36.1.2 Plant Records
- 36.1.3 Certificates of Compliance for materials used in concrete pavement
- 36.2 Portland cement concrete, Class A Structure and minor concrete
- 36.2.1 Mix Designs
- 36.2.2 Plant Records
- 36.2.3 Certificates of Compliance for materials used in Class A structure concrete and minor concrete

Category 37, Initial Tests and Acceptance Tests

In this category, file initial tests and acceptance tests. File documents in each subcategory chronologically unless there is a specific reason for doing otherwise.

Use subcategories similar to the examples shown below. Create a numbering system that identifies the category, item and subcategory. For example, 37.21.3 indicates Category 37 "Acceptance Tests," 21 is the contract item number of the material and also identifies the subcategory, and the 3 is the second level subcategory identifying the particular test result.

- Form CEM-3701, "Test Results Summary"
- Form CEM-3702, "Relative Compaction Summary"
- Form CEM-3703, "Caltrans Production Start-Up Evaluation"
- Embankment

  37.10.1 Relative Compaction
- Structure Backfill

  37.14.1 Sand Equivalent

  37.14.2 Relative Compaction
- Aggregate Subbase

  37.21.1 Relative Compaction

  37.21.2 Moisture

  37.21.3 Sieve Analysis

  37.21.4 Sand Equivalent

  37.21.5 Record of Thickness (summarized in the order that the measurements are made)
- Aggregate Base

37.22.1 Relative Compaction

37.22.2 Moisture

37.22.3 Sieve Analysis

37.22.4 Sand Equivalent

37.22.5 Record of Thickness (summarized in the order that the measurements are made)

- Hot Mix Asphalt

37.31.1 Aggregate Gradation

37.31.2 Asphalt Binder Content

37.31.3 Maximum Theoretical Density (%)

37.31.4 Sand Equivalent (min)

37.31.5 Stabilometer Value (min)

37.31.6 Air Voids content

37.31.7 Crushed Particles

37.31.8 Moisture Content

37.31.9 Los Angeles Rattler

37.31.10 Fine Aggregate Angularity

37.31.11 Flat and Elongated Particle

37.31.12 Voids in Mineral Aggregate

37.31.13 Voids with Asphalt

37.31.14 Dust Proportion

37.31.15 Smoothness

37.31.16 Asphalt Binder

37.31.17 Asphalt Rubber Binder

37.31.18 Asphalt Modifier

37.31.19 Crumb Rubber Modifier

37.31.20 Certificates of Compliance for Materials Used in Hot Mix Asphalt

- Portland Cement Concrete Pavement

37.42.1 Sand Equivalent

37.42.2 Cleanness Value

37.42.3 Sieve Analysis

37.42.4 Modulus of Rupture

37.42.5 Penetration Values

37.42.6 Cement Content

37.42.7 Profilograph Summary

37.42.8 Coefficient of Friction

37.42.9 Other related items

Bills of lading and copies of sample identification tags may be filed in this category temporarily and discarded when their respective test reports are filed.

File test results for items assigned to Office of Structure Construction personnel in this category in accordance with instructions contained in the *Bridge Construction Records and Procedures Manual*.

Category 38, Quality Control and Quality Assurance

In this category, include all documents relating to quality control and quality assurance. Create a subcategory system to include the following:

- The contractor's quality control plan
- The contractor's quality control tests
- Hot Mix Asphalt Inspection and Testing Summary
- HMA Pay
- Copies of related correspondence

Category 39, Materials Testing Qualification of Employees

In this category, file copies of certifications of the employees performing acceptance tests.

Category 40, Field Laboratory Assistant Reports to Resident Engineer

In this category, file chronologically any reports made out by the project's materials tester. For more than one type of report, such as a report and a summary form, provide separate subcategories.

Category 41, Report of Inspection of Material

In this category, file the following forms:

- Form TL-0015, "Quality Assurance-Nonconformance Report"
- Form TL-0016, "Quality Assurance-Nonconformance Resolution"
- Form TL-0029, "Report of Inspection of Material"
- Form TL-6013, "Material Suitability Documentation Report"
- Form TL-6014, "Material Suitability Report"
- Form TL-0624, "Inspection Release Tag"
- Form TL-0625, "Materials Suitability Tag"
- Form CEM-4101, "Materials Release Summary"
- Form CEM-4102, "Material Inspected and Released on Job"

Create subcategories within Category 41 for each contract item requiring inspection at the source by an Office of Materials Engineering and Testing Services inspector. Place a summary sheet (use Form CEM-4101, "Materials Release Summary") in each subcategory containing the date of inspection, quantity inspected, cumulative quantity, and lot numbers. The summary sheet documents that materials used in the work have been inspected.

Staple Form TL-0624, "Inspection Release Tag," removed from materials received on the project, to Form TL-0029, "Report of Inspection of Material," on a letter-size sheet of paper and file it in the appropriate subcategory. The sheet should include the name of the engineer who removed it and the date removed. When lot numbers are marked on the items, note the observed lot number on the related Form TL-0029.

Form TL-0625, "Materials Suitability Tag," should be attached to the TL-6014, "Materials Suitability Report," received from the Office of Materials Engineering and Testing Services and filed.

When the Form TL-0029 includes material for more than one item, include a reference on the summary sheet showing the file location of the TL-0029.

File test reports (usually on Form CEM-4102, "Material Inspected and Released on Job") that cover material sampled on the job in lieu of source inspection in the appropriate subcategory of this category, not in Category 37.

File reports of inspection or certificates of compliance for materials assigned to the structure representative in this category in accordance with instructions contained in *Bridge Construction Records and Procedures Manual*.

Category 42, Material Plants

In this category, file Form CEM-4202, "Material Plant Safety Checklist" and all other project documents pertaining to material plant inspections.

Category 43, Concrete and Reinforcing Steel

In this category, file documents relative to concrete and reinforcing steel in accordance with instructions in the *Bridge Construction Records and Procedures Manual*.

Category 44, Recycle Materials and Diversion of Solid Waste

In this category, file a completed copy of Form CEM-4401, "Solid Waste Disposal and Recycling Report." The contractor completes the Form CEM-4401 and the resident engineer reviews the form within the reporting time constraints. The use of this form is described in Section 7-109, "Solid Waste Disposal and Recycling Reporting," of this manual.

Category 45, Resident Engineer's Daily Reports

In this category, file Form CEM-4501, "Resident Engineer's Daily Report/Assistant Resident Engineer's Report" and the structure representative's daily report.

Category 46, Assistant Resident Engineer's Daily Reports

In this category, file Form CEM-4601, "Assistant Resident Engineer's Daily Report."

Subcategories may be used. They may vary depending on the complexity of the project and the desires of the district. The resident engineer and the structure representative must agree on the subcategories before the start of work. Follow the procedures described below to establish the subcategories.

1. Reports Covering Contract Items

   Create a subcategory for each major operation so that all items affecting the major operations are grouped together. An example of a system for a relatively large project follows on the next page.

Modify the above breakdown to conform to the size and nature of the project. Make the breakdown narrow enough so that reports covering any particular contract item may be obtained with ease. Review the breakdown to ensure it includes all contract items.

Make as many daily reports as necessary to cover all contract item work in the appropriate subcategories.

As indicated in the example below, set up a separate subcategory for each structure.

Category and Subcategory Number		Contract items Involved in the Operation
46.2	Clearing and Grubbing	5
46.3	Rdwy. Exc., Ditch Exc.	8,13,11,15,22
	Aggregate Subbase	
46.4	Salvage Fence, Fence	2,78,79,80
	Gates	
46.5	Guard Railing, Markers, Barricades	1,4,82,83,87
46.6	AB,CTB	23,24
46.7	Hot Mix Asphalt Slurry Seals, Dikes	28,29,30,31,32
46.8	Concrete Paving	35,36,37
46.9	Curbs and Sidewalks, Slope Paving,	73,74,76,77
	Curb Drains, Spec. Gutter Drains	
46.10	Minor Str., Precast MH and DI,	42,69,70,46,75
	Reinf. Steel, Misc. Iron and Steel	
46.11	RCP, CMP, SSP Arch, Drainage Gates,	9,11,58
	Under/Down Drain, Str Exc., Str. Backfill	
46.2	Preparing Slopes, Straw	16,17,18,19,20
46.13	Permanent Signing	52,53,54,55
46.14	Hwy. lighting and sign illumination	88
46.15	Finishing Roadway	21
46.16	Structure #1	89,90,91
46.17	Structure #2	89,90,91

2. Reports Covering Extra Work

Pending receipt of the contractor's billing, file chronologically the original and one copy of Form CEM-4601, "Assistant Resident Engineer's Daily Report," covering extra work in a subcategory of this category. After receiving the extra work bill report and approving payment, record the extra work bill number on both copies of the daily report covering the extra work.

Keep one copy of the daily report in this chronological file and use it to detect future billings for the same work. File the second copy with the daily extra work report in Category 49.

Extra work bills for material should show the date the material was supplied or placed and referenced to the invoice so that the particular material may be readily identified. Keep a summary of invoices paid and use it as a check against duplicate payment.

The specific system used for filing resident engineer's and assistant resident engineer's daily reports is optional (except for extra work). However, Category 45 and 46 must be used and the file index must clearly show the specific system being used.

Category 47, Drainage Systems

To maintain a record of contract items for drainage systems, use Form CEM-4701, "Drainage System Summary."

Use a Form CEM-4701 for each drainage system shown on the drainage quantity plan sheet. The preliminary work required to set up each system summary includes entering the contract number, the system number, planned station and description of the system, and the preliminary or planned quantities which are entered from the drainage quantity plan sheet.

The assistant resident engineer describes progress on each drainage system in the daily report and enters estimates of work completed on the "Progress Record" portion of the drainage system summary.

Enter the quantity of work completed during an estimate period or near the end of the estimate period for each item in the "Estimate of Work Completed" portion of the drainage system summary. The quantities of work completed may then be entered on the Form CEM-6004, "Contract Transactions Input," and paid on the next estimate. Use the extra column next to the item quantity column to identify the Form CEM-6004 page and line number where the quantity was entered.After all items for a particular drainage system have been calculated and checked, the final quantities are entered in the row labeled, "Actual Q."

To keep track of and reduce the number of drainage system summaries that have to be checked at the end of each estimate period, divide the category into the following subcategories:

- 47.1 Before Work Starts
- 47.2 Staked and Being Worked On
- 47.3 Drainage System Complete, Final Quantities Not Complete
- 47.4 Final Quantities Completed

Example:

> 47.1 Before Work Starts.
>
> Place the preliminary drainage summaries in this subcategory in numerical order. Each drainage system summary will remain in this subcategory until work starts on that system.
>
> 47.2 Staked and Being Worked On.
>
> When a drainage system is staked, transfer the drainage summary sheet from index 47.1, "Before Work Starts," to index 47.2, "Staked and Being Worked on." Transfer the individual quantity calculation sheets with the drainage summary.
>
> 47.3 Drainage System Complete, Final Quantities not complete
>
> After all work is completed on a particular drainage system, transfer the summary sheet with its calculation sheets to this subcategory. Removing the summary from the preceding index (47.2, Staked and Being Worked On), precludes having to go through completed structure summaries at the end of each estimate period when making entries of work completed. Determination of pay quantities should be made as soon as possible after work on the system is complete.
>
> 47.4 Final Quantities Completed
>
> After all quantity calculations for a drainage system are completed and the adjusted quantities entered into the project record, transfer the summary sheet and its calculation sheets to this subcategory.

Since all drainage quantity calculation sheets will remain filed in Category 47, some item-numbered folders in Category 48 may have no documents.

Category 48, Contract Item Quantity Documents

In this category, file source documents supporting contract item quantities. List the subcategories in Category 48 by contract item number order. Identify individual calculation sheets for the various contract items in the following manner. A quantity sheet with the number 48-14-2 indicates that it is sheet number 2 covering contract item number 14 and filed in Category 48, "Contract Item Quantity Documents." Some drainage item quantity documents may be filed in Category 47.

Category 49, Contract Change Orders

In this category, file contract change orders and supporting documents in numerical order.

Subcategories of this category are change order numbers in numerical order. Contained within each subcategory are:

- The Form CEM-4900, "Contract Change Order," Form CEM-4903, "Contract Change Order Memorandum," and any accompanying correspondence.
- Form CEM-4901, "Contract Change Order Input."
- Daily extra work bills and reports matched with assistant resident engineer's daily reports

Two additional subcategories may be:

- The *Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)* book(s) applicable to the contract.
- Equipment rental rates and memos covering rates not shown in the *Labor Surcharge and Equipment Rental Rates Book*.

Category 50, Adjustment in Compensation Calculations

In this category, file project documents and calculations to support adjustments in compensation.

After a contract change order is written, the supporting project documents may be transferred to the contract change order file or remain in this category. Provide cross references between categories 49 and 50 when the supporting documents and calculations remain in Category 50.

List the subcategories under this category by contract item numbers.

Category 51, Materials on Hand

In this category, file Form CEM-5101, "Request For Payment for Materials on Hand," the related evidence of purchase, and any other project documents supporting material on hand payments.

Category 52, Charges to Total Contract Allotment

In this category, file the documents related to and supporting charges to the contract allotment for materials and services supplied by Caltrans.

Divide the category into the subcategories indicated below:

- State Furnished Material and Expenses.

  In this subcategory, file the contractor's letters requesting delivery of state furnished materials. Also, file the receiving records or other records of material furnished by Caltrans. When state furnished material is received as evidenced by a shipping record and a receiving record, file the related shipping and receiving records together.

- Service Contracts.

  In this subcategory file, supporting documents and records of project related services. These are not the service contracts connected with the project office.

Category 53, Credit to Contract

In this category, include a subcategory to keep a record of any salvaged or surplus material. Also set up a subcategory for copies of daily extra work reports which cover repair of damage to state property by third parties (see "Reports of Damage to State Highway Property" in the *Caltrans Safety Manual*).

Credit received for salvaged or surplus material or repair of damage is not applied to the contract allotment and the project is not given credit for any additional money to spend.

Category 54, Deductions From Payment to Contractor

In this category, file documents related to deductions from payments to contractors. Possible subcategories include the following:

- Royalties on material.

- Materials bought for the contractor by Caltrans.
- Laboratory testing done for the contractor (see Section 2.01, “General,” of the *Standard Specifications*).
- Engineering and inspection charged to the contractor (see Section 3-506, “Lines and Grades,” of this manual for restaking charges).
- Costs of damaged or missing state-owned signs.
- Railroad flagging charges.
- Noncompliance with the equal employment opportunity provisions of the contract.
- Liquidated damages (See Section 3-908, “Deductions,” of this manual.
- Any other deductions. (See Section 3-9, “Measurement and Payment” of this manual.)

Categories 55, Partnering

This category is for filing all documents related to partnering meetings, workshops, and evaluations. Subcategories may include:

- Form CEM-5501, “Partnering Facilitator Evaluation - Kick-Off ”
- Form CEM-5502, “Partnering Facilitator Evaluation - Close-Out”

Categories 56 through 58, Extra Category Numbers

These are extra numbers that may be used for project documents that do not fit in presently established categories. When used, enter them on the index sheets.

Category 59, Bridge Estimate Data

In this category, file the bridge estimate data as covered in the *Bridge Construction Records and Procedures Manual*.

Category 60, Contract Administration System Inputs and Reports

This category contains documents resulting from the contract administration system. Possible subcategories are:

- Form CEM-6002, “Contract Administration System (CAS) - Report Requests”
- Form CEM-6003, “ Progress Pay - Estimate Project Initiation or Update”
- Form CEM-6004, “Contract Transactions Input”

The following contract administration system reports are cumulative, usually requested after each progress estimate payment using CEM-6002. Only the most current results needs to be retained.

- Status of Contract Items
- Project Record Item Sheets
- Status of Contract Change Orders
- Contract Change Order Master Listing

Category 61, Estimate and Project Status

In this category, file monthly Project Record - Estimate Request documents.

The suggested subcategories of this category are:

- Project Contingency Fund Status
- Estimate

The following documents may be filed by estimate number in numeric order:

- Form CEM-6101, "Project Record - Estimate Request"
- Estimate Verification Form
- Progress Payment Voucher
- Estimate Processing Results
- Project Record-Estimate and Project Status

Category 62, Disputes

In this category, file notes, photographs, information, and other project documents that may be necessary to establish facts with respect to a dispute. Include any documents that may be related to a dispute in this category or briefly describe and cross-reference them.

Number notices of potential claims in chronological order. These numbers may then be used for subcategories.

The scope of this category may vary considerably, depending upon the nature and circumstances of the dispute. The following types of documents indicate the type of information that should be included:

- Form CEM-6201, "Notice of Potential Claim"
- Acknowledgment of the contractor's dispute
- Disputes Review Board Agreement
- Contractor's claim for a time extension (cross-reference to Category 27)
- Acknowledgment of the contractor's claim for time extension
- Other correspondence relating to disputes
- Photographs pertaining to disputes

Category 63, Project Completion Documents

In this category, file documents related to the completion of the project. The following are suggested subcategories:

- Form CEM-6301, "Contract Acceptance"
- Form CEM-6302, "Final Materials Certification"
- Punchlist

5-102D Category Numbers and Headings

Category No.	Heading
1	Project Personnel
2	Project Office Equipment and Supplies
3	Equipment and Personnel Cost Reports
4	Service Contracts
5	General Correspondence
6	Safety
7	Public Relations
8	Construction Surveys
9	Welding
10	(Extra category number)
11	Information Furnished at Start of Project
12	Contractor
13	Signs and Striping
14	Photograph Records
15	Accidents
16	Utility Agreements
17	Utility Work Performed
18	Agreements
19	Hazardous Waste and Hazardous Materials
20	Water Pollution Control Plan or Storm Water Pollution Prevention Plan
21	Construction Zone Enhanced Enforcement Program
22	Traffic Management Information
23	(Extra Category Number)
24	Disadvantaged Business Enterprises and Disabled Veteran Business Enterprises
25	Labor Compliance and Equal Employment Opportunity
26	Progress Schedule
27	Weekly Statement of Working Days
28	Weekly Newsletter
29	Materials Information and Preliminary Tests
30	Basement Soil Test Results
31	Notice of Materials to Be Used (CEM-3101)

32	Notice of Materials to be Inspected (TL-0028)
33	Notice of Materials to be Furnished (TL-0608)
34	Treated Base
35	Hot Mix Asphalt
36	Portland Cement Concrete (other than structure items)
37	Initial Tests and Acceptance Tests
38	Quality Control Quality Assurance
39	Materials Testing Qualifications of Employees
40	Field Laboratory Assistant Reports to Resident Engineer
41	Report of Inspection of Material
42	Material Plants
43	Concrete and Reinforcing Steel
44	Recycle Materials and Diversion of Solid Waste
45	Resident Engineer's Daily Reports
46	Assistant Resident Engineer's Daily Reports
47	Drainage Systems
48	Contract Item Quantity Documents
49	Contract Change Orders
50	Adjustment in Compensation Calculations
51	Materials on Hand
52	Charges to Total Contract Allotment
53	Credit to Contract
54	Deductions from Payment to Contractor
55	Partnering
56-58	(Extra category numbers)
59	Bridge Estimate Data
60	Contract Administration System Inputs and Reports
61	Estimate and Project Status
62	Disputes
63	Project Completion Documents

5-102E Alphabetical Listing Of Categories

Heading	Category No.
Accidents	15
Adjustment of Compensation Calculations	50
Agreements	18
Assistant Resident Engineer's Daily Reports	46
Basement Soil Test Results	30
Bridge Estimate Data	59
Treated Base	34
Charges to Total Contract Allotment	52
Concrete and Reinforcing Steel	43
Construction Surveys	8
Construction Zone Enhanced Enforcement Program	21
Contract Administration System Inputs and Reports	60
Contract Change Orders	49
Contract Item Quantity Documents	48
Contractor	12
Credit to Contract	53
Daily Reports, Assistant Resident Engineer's	46
Daily Reports, Resident Engineer's	45
Deductions from Payment to Contractor	54
Disadvantaged Business Enterprises and Disabled Veterans Business Enterprises	24
Disputes	62
Drainage Systems	47
Estimate and Project Status	61
Equipment and Personnel Cost Reports	3
Extra Categories	10, 23, 56, 57, 58
Field Laboratory Assistant Reports to Resident Engineer	40
General Correspondence	5
Hazardous Waste and Hazardous Materials	19
Hot Mix Asphalt	35
Information Furnished at Start of Project	11
Initial Tests and Acceptance Tests	37
Labor Compliance and Equal Employment Opportunity	25

Materials on Hand 51
Material Plants 42
Materials Information and Preliminary Tests 29
Materials Testing Qualifications of Employees 39
Notice of Materials to be Furnished (Form TL-0608) 33
Notice of Materials to be Inspected (Form TL-0028) 32
Notice of Materials to Be Used (Form CEM-3101) 31
Partnering 55
Photograph Records 14
Portland Cement Concrete (other than structure items) 36
Progress Schedule 26
Project Completion Documents 63
Project Office Equipment and Supplies 2
Project Personnel 1
Public Relations 7
Quality Control Quality Assurance 38
Recycle Materials and Diversion of Solid Waste 44
Report of Inspection of Material (TL-0029) 41
Resident Engineer's Daily Reports 45
Safety 6
Service Contracts 4
Signs and Striping 13
Traffic Management Information 22
Utility Agreements 16
Utility Work Performed 17
Water Pollution Control Plan or Storm Water Pollution Prevention Plan 20
Weekly Newsletter 28
Weekly Statement of Working Days (Form CEM-2701) 27
Welding 9

5-103 The Contract Administration System

5-103A General

This section describes the Contract Administration System, sometimes referred to as "the progress pay system." The primary purpose of this computer system is to help administer Caltrans construction projects. Various functional units within construction update and maintain records on individual contracts in the contract administration system from the award and approval of the contract through to the completion and final payment.

Contract administration system is one of three subsystems of the Project Information System and Analysis (PISA). The three subsystems of PISA make up the primary computer system that Caltrans uses for tracking contract capital costs. These subsystems are: planning and design, bidding and award, and project construction. In essentially a straight line, each module of PISA passes data to the next module as a project progresses from conception to completion. See Table 5-1, "Contract Administration System, Systems Interface," for a general overview of how the contract administration system relates to the other components of the Caltrans computer system used for tracking and paying contract capital costs.

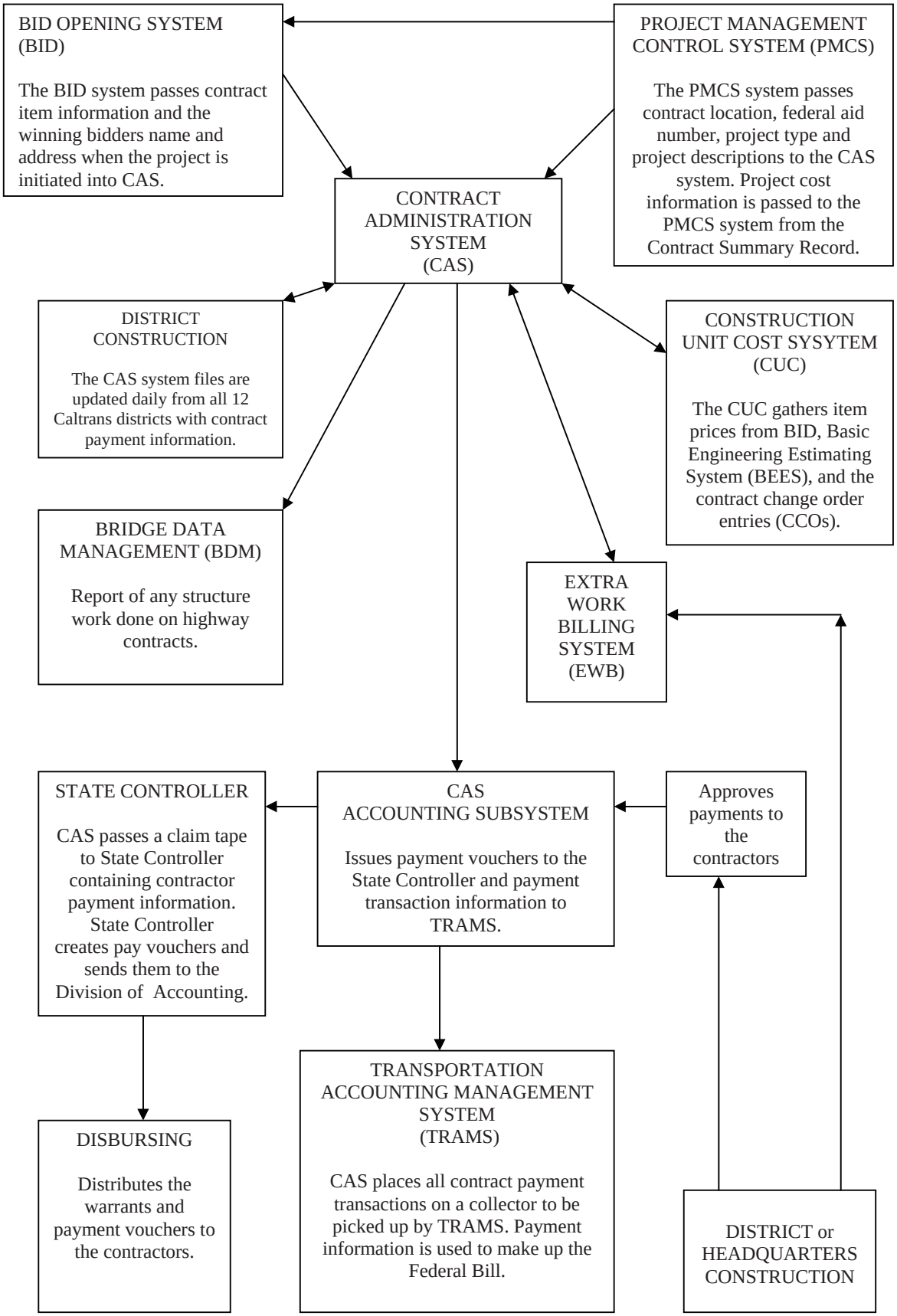
Contract administration system is also composed of separate modules, each of which accomplishes a distinct function. The following are the most common of contract administration systems many modules:

- Project initiation and update
- Contract transactions
- Contract change order
- Daily extra work report
- Project record estimate
- Reports
- Online update and inquiry

Resident engineers use these modules to do the following:

- Account for quantities from source documents
- Account for change orders and payments for extra work
- Determine the status of the projects' financing
- Authorize payments to contractors

Table 5-1.1 Contract Administration System, Systems Interface



5-103B Project Initiation and Update

When Caltrans has determined the lowest responsible bidder, the Office of Office Engineer will transfer project data from the Bid Opening System to the contract administration system. Usually, this data transfer will occur before awarding the contract and before determining the total allotment. When this information about the award and total allotment becomes available, the Division of Construction will then update the computer file (by adding to or changing existing information).

Immediately after the new contract information in the computer file has been transferred from the Bid Opening System, the data is available to the district for processing. The district must then update the file with district information such as the resident engineer's name and address, the bridge representative's name, and the project's password. To perform the update, the district uses Form CEM-6003, "Project Pay—Estimate Project Initiation or Update" which is explained in more detail under the heading "Filling Out Form CEM-6003," below.

The result of the district's file update will be a dummy Form CEM-6101, "Project Record-Estimate Request," and a contract contents report, which lists contract items. The form and report should be checked thoroughly and any discrepancies brought immediately to the attention of the Division of Construction progress pay coordinator.

During a contract's life, the contractor may request a local address change or a legal name style address change. The district must maintain the accuracy of local address information in the contract administration system using Form CEM-6003, "Project Pay-Estimate Project Initiation or Update." The State Controller mails progress payment checks to the legal name style address. Only the Division of Construction's progress pay coordinator is authorized to make changes to the legal name style address from Form CEM-1202, "Contractor Action Request - Change of Name/ Address- Assignment of Contract Monies," verified by the resident engineer with the Division of Construction field coordinators concurrence.

5-103B (1) Completing Form CEM-6003, "Project Pay-Estimate Project Initiation or Update"

The purpose of Form CEM-6003 is to add new information, or to change information, in the computer file. The computer program will accept such changes only for contracts in your own district.

Except for the "Project Key," complete only the data fields that you wish to update. The computer program will ignore blank fields and will place the data from the completed fields in the file whether or not such information is already on file. Fields left blank on the input form do not change what is in the file.

Ensure the data you enter on the form conforms to these rules, listed by data field as follows:

5-103B (1a) Project Key

Enter the letter "U" under "FB," and in the remaining spaces, enter the district and contract number.

5-103B (1b) Card type C05 (each field is independent and can be updated separately)

For the following data fields under card type C05, do the following:

- Resident engineer's phone number.

- Responsible unit: The responsible unit may range from 501 to 545. Warning: Until this number is in the computer file, progress pay estimates cannot be processed.
- Date work started: Enter the date the contractor began work on the jobsite. If work has not begun, leave this field blank and submit an update when work begins.
- Estimated date for completion: Enter your best estimate, not the calculated completion date. When progress estimate requests are submitted, this date is updated.
- Password: Use of this feature is optional. Enter any combination of six characters. The characters may be alphabetic, numeric, or one of the following special characters: *, /, =, (,), +, -, @, #, %, &. Once established, this password is required when you file, among other things, contract item payments, using Form CEM-6004, "Contract Transactions Input." The password will restrict access to the computer files.
- Suspension or reactivation: If a contract is suspended, enter the date of suspension and "S" in the "SR" column. When the suspended contract is reactivated, enter the date of reactivation and "R" in the "SR" column. You only have 30 calendar days from the suspension or reactivation date to enter this information into the computer.
- Plant establishment: For projects requiring retentions be held at 5 percent for the contract's life, enter an "X" in the "PE" column.
- Begin construction date: Enter the date that contract time begins, usually 15 calendar days after the approval date. This is the date used to calculate the number of working days that determine satisfactory progress and the percent of time elapsed.

5-103B (1c) Card type C06 to C08

Resident engineer's mailing address: On the first line, enter the resident engineer's last name first, followed by a comma. Then enter a space and the first name, followed by a space and middle initial (SMITH, John C.). On the second and third lines, enter the mailing address of the construction field office. Warning: The computer program treats all three lines as a single "data field." If you need to change this field, you must reenter all three lines.

5-103B (1d) Card type C09 to C14

Only the Division of Construction progress pay coordinator can change the legal name style address in the contract administration system.

To change the contractor's local address: Enter the contractor's name on line C09, and as necessary, continue the name on lines C10 through C12. Leave unused lines blank.

Enter the contractor's local address on lines C13 and C14. Also enter the contractor's local phone number on line C14.

Warning: You must enter the entire name and address each time you wish to update any or all of these lines. You cannot update a single line.

5-103B (1e) Card type C15

For the following data fields under card type C15, do the following:

- Structure representative's name: If the contract requires structure work, enter the structure representative's name even if it is the same name as the resident engineer's. Enter only the last name and first initial (SMITH, J.)
- Structure responsible unit: This unit is the source unit that the Office of Structure Construction uses to code its time sheet. The unit may range from 550 to 599.
- Original authorized amount for structure work: At the contract's start, the resident engineer and the structure representative must determine the initial value of the required structure work. This value should include any portion of the contract item for mobilization that will be claimed as structure work. Warning: If this amount is not on file, the Office of Structure Construction cannot obtain any reports for this contract.
- Structure mobilization percentage: Enter, to the nearest whole percent, the portion of the contract item for mobilization that will be claimed as structure work.
- Structure completion: Enter a "C" to indicate the completion of structure work.

5-103B (2) Processing

The contract administration system analyzes the changes made to the computer file and does the following:

- The contract administration system notes whether the district is updating the "Responsible Unit" field for the first time. If so, the contract administration system prints a dummy Project Record-Estimate form and a Contract Contents Report.
- If this update is not the first update, the contract administration system prints only the first page of the Contract Contents Report. The contract administration system prints the dummy Project Record-Estimate form only if the contractor's name and address field has been changed.
- The contract administration system also prints a listing of update requests, which is a summary report of all fields that have been updated in this run.

5-103C Contract Transactions

The majority of all data submitted to the contract administration system will be contract transactions from the resident engineer on Form CEM-6004, "Contract Transactions Input." Contract transactions are divided into the following three categories:

- Contract item transactions: These consist of five types of transactions that refer to contract items.
- Miscellaneous transactions: These consist of four types of transactions to handle general project needs.
- Contract change order transactions: These consist of three types of transactions that refer to contract change orders.

The Contract Transaction Processing Module processes this total of 12 transaction types. Together with the services that the CCO and DEWR Processing Modules perform, these modules are sufficient to generate contract records that provide control of progress payments and track the financial status of the contract.

5-103C (1) Transaction Types

The following describes, by category, the 12 possible transaction types:

5-103C (1a) Contract Item Transactions

The contract administration system provides five different ways to refer to a contract item in Form CEM-6004, "Contract Transactions Input." Another way is by including the item as part of a contract change order. This will cause the approved quantity to be adjusted automatically. Thus, you do not have to account for status changes due to contract change orders. You can reference contract items through the following contract item transactions:

- Contract item payment: Make item payments by posting line entries to Form CEM-6004 in any random order. Indicate bridge items by entering "B" in the proper column. If you use the report titled *Bridge Quantities by Structure*, you will also need to enter the structure number in accordance with instructions in Volume I, Section 6, of the *Bridge Construction Records and Procedures Manual*.
- Contract item quantity balance: You may adjust the authorized quantity if necessary by submitting quantity balances as line entries on Form CEM-6004. You might need to make this type of transaction for various reasons. For example, a need might exist because of an incorrect engineer's estimate for a contract item that would have a major impact on the contingency balance. This transaction type adjusts the authorized final cost for your project, as we will show in our later discussion of progress pay estimates.
- Contract item anticipated change: This transaction's purpose is to give the engineer a method to allocate project funds to a specific contract item based on knowledge of anticipated additional or decreased work. Such transactions affect the estimated final quantity for the item and also the estimated final cost for the project. The effect of these transactions is cumulative. If additional work is authorized by contract change order, a reversing entry is necessary.
- Contract item final balance: When work is completed on a contract item, you should enter this fact into the system. This entry will mark the item in the computer file as "Complete." On all subsequent progress pay estimates, the authorized quantity and the estimated final quantity will default to the amount paid to date, thus automatically balancing out the item. Additional item payments may be made, and the system will continue to balance the contract items.
- Contract item final balance ("Reopen"): This transaction allows you to reverse the status of the contract item from "Complete" to "Active." For example, you would use "Reopen" to change an incorrect entry that showed the item was complete.

5-103C (1b) Miscellaneous Transactions

The four transaction types listed below comprise "miscellaneous transactions," the second category of contract transactions:

- Anticipated change: Use this transaction to record anticipated additional or decreased work when it is not possible or desirable to tie the anticipated change to a specific contract item or contract change order. These transactions are not cumulative and will affect the project's estimated final cost only on the next progress pay estimate to be generated.

- Material on hand payments: These transactions are placed in the computer file, and their sum will appear on the next progress pay estimate that generates payment. For more information about materials on hand, see Section 3-9, "Measurement and Payment," of this manual.
- State-furnished materials allotment transfer: Use this transaction to increase or decrease the value of the state-furnished materials allotment for your contract. The construction allotment will automatically adjust. To increase the state-furnished materials allotment, enter a positive number. (This type of entry will decrease the contingency balance.)
- Total allotment changes: Use this transaction to enter into the system any supplemental allotment that increases (or decreases) your contract's total allotment. The total allotment in the computer file will adjust automatically as will the construction allotment. The construction allotment is defined as the total allotment less the state-furnished materials allotment.

5-103C (1c) Contract Change Order Transactions

The three transaction types listed below comprise "contract change order transactions," the final category of contract transactions:

- Contract change order anticipated change: This transaction has the same effect as does the contract item anticipated change except that a contract change order is being changed.
- Contract change order final balance: This transaction has the same effect as does a contract item balance. When work on a contract change order is finished, mark it "Complete" by entering this transaction. As with contract items, additional extra work bills may be paid, and the system will continue to balance the contract change order.
- Contract change order final balance ("Reopen"): This transaction allows you to reverse the status of the contract change order from "Complete" to "Active."

5-103C (2) Completing Form CEM-6004, "Contract Transactions Input"

The resident engineer will use Form CEM-6004 more often than any other form in the contract administration system. Page 2 of the form provides instructions for completing it, and this section contains a complted sample of the form. See Example 5-1.2, "Contract Transaction Input."

We cannot overemphasize the importance of legible entries that conform to the instructions for completing the form. Also, because of the high volume of transactions, make your entries on Form CEM-6004 as soon as the information becomes available. Partially filled pages are acceptable.

The sample form in this section shows some transactions. Note that leading zeros are not required in the numeric fields and that the plus sign is not required in the +/- columns. The following instructions are for the fields common to all transactions:

- Enter the district, contract number, password (if used), and page number. When assigning a page number, be careful because duplicate numbers will cause all transactions on the page to be rejected. You must complete these fields.
- Enter the posting date.
- Enter the source document description. If the transaction type refers to a project source document, (for example, a calculation sheet or a scale sheet), enter into

the form's description column an adequate description of the source document. The source document must cross reference to Form CEM-6004. Post the page number, line number, and posting date from Form CEM-6004 to the source document. See Example 5-1.1, "Quantity Calculation," for a typical source document.

- Note: The last six characters of the source document description can be the structure number if this item concerns structure work.
- Mark the structure field with the character "B" if this transaction concerns "structure work." Otherwise, leave the space blank. If you use the report titled *Bridge Quantities by Structure* you will also need to enter the structure number in accordance with the instructions in Volume I, Section 6, of the *Bridge Construction Records and Procedures Manual.*

The form's remaining fields are divided into two sections, "ontract Item Entries," and "All Other Entries." If you make any entry in one or more fields of one of the sections, all fields in the other section must be left blank. A single line entry cannot serve double duty.

5-103C (2a) Contract Item Entries

Each type of contract item transaction has its own format. Fill in the various fields as shown on page 2 of Form CEM-6004. The following are the rules for making contract item entries:

- Quantity balance transactions:
  1. Lump sum items cannot be quantity balanced. If you attempt to quantity balance them, the transaction will be rejected.
  2. If the quantity balance is greater than the bid quantity, a warning message is issued.
  3. If the value of the quantity balance exceeds $100,000, a warning message is issued.
  4. The new authorized quantity is calculated. If it is negative, the transaction will be rejected.
  5. If the new authorized quantity is less than the total payment for the next estimate, a warning message is issued. Take appropriate action on this warning, such as estimating the final quantity and inputting the increase, covering the increase by change order, or requesting the computer to final balance the item. Such action is necessary to keep the project's status of funds current.
- For item final balance and item final balance ("Reopen"), the item status is set to "Complete," or "Active," respectively. The system does not check to see if the item is a lump sum item or a final pay item.
- Item anticipated quantity change:
  1. If the anticipated quantity change is greater than the bid quantity, a warning message is issued.
  2. If the value of the anticipated quantity change exceeds $100,000, a warning message is issued.

3. A new estimated final quantity is calculated. If this estimated final quantity is negative, a warning message is issued.
4. If the new estimated final quantity is less than the total payment for the next estimate, a warning message is issued.

- Item payment:
  1. Any transactions for the item "Mobilization" are rejected.
  2. Any transactions for a void item will be rejected.
  3. If the payment quantity is greater than the bid quantity, a warning message is issued.
  4. If the value of the payment quantity exceeds $100,000, a warning message is issued.
  5. The new total payment for the next estimate is calculated. If the total is negative, the transaction is rejected. (Negative transactions under "This Estimate" will be accepted.)
  6. If the contract item is a lump sum item and the total payment for the next estimate would exceed 100 percent, the transaction is rejected.
  7. If the contract item is not a lump sum item, the new total payment for the next estimate is compared to 125 percent of the bid quantity and the authorized quantity. Warning messages are issued if the total payment is more than one or both of these.

If the system issues any warning or rejection messages while it processes transactions for a contract item, the complete status of the item will be printed on the Contract Transactions Input Edit report before the system begins processing the next contract item. Use this printout to determine the reason the system issued the message.

- Percentages for lump sum quantity payments must be expressed as decimals. Only three decimal places are available. If 5 percent is to be paid, it must be entered as 0.050; (5.00 is 500 percent).

5-103C (2b) Miscellaneous Transactions

The following are the rules for making miscellaneous transactions:

- Anticipated changes:
  1. If the amount anticipated exceeds $100,000, a warning message is issued.
  2. If the amount anticipated exceeds 10 percent of the construction allotment, a warning message is issued.
- Material on hand payments:
  1. If the amount exceeds $100,000, a warning message is issued.
  2. If the amount is negative, a warning message is issued. (The system assumes that this is a correcting entry to a previous transaction accepted by the system and not yet processed for payment.)
  3. A total is calculated for payment for the next estimate. This is the sum of all transactions since the last estimate. If the total is negative, a warning message is issued.
- State-furnished materials allotment transfer:

1. If the amount of the transfer exceeds $100,000, a warning message is issued.
2. A new total is calculated for the state-furnished materials allotment. If it is negative, the transaction is rejected.

- Total allotment changes:
  1. If the amount exceeds $100,000, a warning message is issued.
  2. If the amount exceeds 10 percent of the total allotment, a warning message is issued.
  3. If the amount of the change is negative, a warning message is issued.
  4. A new total allotment is calculated. If the amount is negative, the transaction is rejected.
  5. If the new total allotment is less than the total paid to date on the last estimate, a warning message is issued.

5-103C (2c) Contract Change Order Transactions

The following are the rules for contract change order transactions:

- For the contract change order anticipated change, the new estimated final cost is computed for the contract change order and reported. The system does not do any checking.
- Contract change order final balance and final balance ("Reopen"):
  1. The contract change order status is set to "Complete," or "Active," respectively. The system does not do any checking.
  2. For a contract change order final balance ("Reopen"), the word "Reopen" must be left-justified.

5-103C (2d) General

The Contract Transactions Processing Module will sort your transactions into order, will edit each transaction for reasonableness and conformance to this manual, and will either accept or reject each transaction. From this processing, the system will issue a report titled "Contract Transactions Input Edit." This report will list the disposition of each line entry that you submitted. A comprehensive set of warning messages exists. Do not ignore warning messages on the report.

Do not use the same page and line numbers again.

You will find a summary on the last page of the Contract Transactions Input Edit report. The summary lists each Form CEM-6004 page that was processed and the numbers of transactions on that page that were accepted, for which warnings were issued, or that were rejected. Any missing line numbers on the page (breaks in the sequence of line numbers) will be printed. Use this list to ensure that all the transactions were entered into the system.

Examine the remainder of the report. You must respond to rejected entries and possibly to warnings.

5-103C (2e)Audit Trail

In any accounting procedure, it is necessary to link transactions to the specific source documents that generate the transactions. This linking is called an audit trail. Contract change orders and daily extra work reports carry unique identifying numbers that Contract Administration System uses in its processing. Here, a good audit trail is automatic. However, contract transactions are different since there is no automatic reference to a unique source document.

The Contract Administration System provides methods of cross-reference. You are responsible for an adequate audit trail. Note that Form CEM-6004 is an intermediate document in this respect.

Example 5-1.1 Quantity Calculation

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 I.M. Engineer	DATE
	CHK. BY U.R. Wright	DATE

Field Measurement:
Field Counted: ✓
Final Pay Item:

Estimated Quantity: 450
Unit of Measure: meter
Unit Price: $20.00
75% = 337.50
125% = 562.50

Remarks or Other Calculations:

152.4 meters placed on 5-03-01 at Maple St. onramp ✓

Material Inspection/Release: Certificates of compliance obtained on 07-09-08.

PAY THIS ESTIMATE:	152.4 ✓
PREVIOUSLY PAID:	140.2 ✓
TOTAL TO DATE:	292.6 ✓

Office Engineer 08/08/08

CEM-6004, page 4, line 5

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

CONTRACT TRANSACTIONS INPUT

CEM-6004 (Rev. 10/1983) CT#7541-3515-0

Dist: 07 | Contract No.: 138 1U4 | Password: | **CAS0AT** | Page No.004

LINE NO.	DATE MO.	DATE DAY	SOURCE DOCUMENT DESCRIPTION	BRIDGE ITEM NO.	CONTRACT ITEM ENTRIES QUANTITY (UNITS)	CODE	ceo NO.	ALL OTHER ENTRIES AMOUNT($)	TYPE		
01	05	19	48-14-17 b	014	1,2 7300 00					Time	URW
02	05	19	MAIL BOX ON ELM ST	028	1500 00	Q				Time	URW
03	05	19	ANT. ELIM. AC ON FL	038	1,5 0000 00	A				Time	URW
04	05	19	BAL. COMPL. ITEM 6	006		F				Time	URW
05	05	19	48-8-2	008	1 5240 00					Time	URW
06	05	19	RESTORE STATUS	039	REOPEN	F				Time	URW
07	05	19	REV GRADE FR2 LINE					15, 000 00	ANI	Time	URW
08	05	19	51-4-2					2, 174 37	MHS	Time	URW
09	05	19	52-4-1					2, 000 00	SFM	Time	URW
10	05	19	11-3-1					3 15, 000 00	TAC	Time	URW
11	05	19	DELET DRAINAGE				029	10, 000 00	ACC	Time	URW
12	05	19	BAL. COMPL. CCO 18				018		BAL	Time	URW
13	05	19	RESTORE STATUS				005	REOPEN	BAL	Time	URW
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											

IN CASE OF QUESTION CONTACT: NAME _____

PHONE

93 95682

Example 5-1.2 Contract Transaction Input

5-103C (3) Computer Processing

The contract item totals listed below are kept for contract work and also for structure work so that the totals can be reported separately when appropriate. Records of the financial status of the contract items are maintained as follows:

- Bid quantity: This quantity cannot be changed.
- Approved quantity: This item is the total of the bid quantity and the algebraic sum of the quantity changes due to contract change orders that have been filed.
- Authorized quantity: This item is the total of the approved quantity and the algebraic sum of the quantity balances that the engineer entered.
- Anticipated final quantity: This item is the total of the authorized quantity and the algebraic sum of the anticipated quantity changes that the engineer entered.
- Item status flag: This flag is a file mark that indicates whether a contract item is "Active," "Deleted," or "Completed."

5-103D Contract Change Orders

The Contract Administration System maintains separate records for each approved contract change order on a project. As each contract change order is approved, it must be entered into the Contract Administration System through the use of Form CEM-4901, "Contract Change Order Input."

The method of entering each contract change order into the system may vary from district to district, but can be done as follows:

- The resident engineer writes a contract change order and completes Form CEM-4901. For approval procedures, see Section 5-3, "Contract Change Orders," of this manual The approval date must be entered on Form CEM-4901, and the Form CEM-4901 data is then entered into the contract administration system.
- The result of entering the form data for each contract change order will consist of a contract change order report and a disposition report.
- The resident engineer should review the contract change order report and correct any errors. The contract administration system automatically makes the following changes to the contract records:
    1. The authorized final cost, the estimated final cost, the authorized contingency balance, and the estimated final contingency balance are adjusted to new values.
    2. The totals for changes in extra work, adjustment of compensation, and contract items are adjusted to new values.
    3. Each affected contract item will have the approved quantity adjusted to reflect the change.
- Immediately after Form CEM-4901 has been processed, the contract administration system will accept extra work bills and anticipated changes that refer to the contract change order.
- When the contract administration system processes a supplemental contract change order, the daily extra work reports in the holding file (due to insufficient funds in the original contract change order) will be made available for payment.

5-103D (1) Completing Form CEM-4901, "Contract Change Order Input"

Use Form CEM-4901 to perform the following functions:

- File a new contract change order in the computer file.
- Update (change existing information) a contract change order in the computer file.
- Replace a filed contract change order with another contract change order.
- Delete a contract change order from the computer file.

Completing the form depends on which of the above functions you desire.

5-103D (1a) File

Enter the contract and contract change order numbers at the top of the form. The original contract change order is supplement "zero"; enter the zero on the form. Ignore the function and override boxes at the top of the form.

The remainder of the form is divided into five sections labeled "Card Type 1," "Card Type 2," "Card Type 3," "Card Type 4," and "Card Type 5." Complete only those sections that are applicable.

Card Type 1: This section is required. Complete each entry in the section. If the entry for the field "Net Money Change This CCO" is zero, enter $0.00. The field "Time Extension Days" should include the number of working days added (or deleted), zero (0), or be coded "DEF" (instead of a number) if the contract change order was written with a deferred time adjustment clause. Enter a category code on every contract change order. Left-justify this code.

Card Type 2: If extra work or adjustment of compensation is not part of your contract change order, leave these fields blank. Otherwise, define the payment method by making three entries for each change:

- Make the first entry by checking either the "EW" or "AC" box to indicate extra work or adjustment of compensation.
- Make the second entry by choosing one of the "FA," "LS," or "UP" boxes to indicate whether payments will be made by force account, lump sum, or unit price.
- Make the third entry by entering the dollar amount of the change (increase or decrease).

If multiple items of work in the change order are using the same pay method, they must be totaled. Also, you can enter each pay method only once per change order. If there is more than one type of extra work or adjustment of compensation on the contract change order, continue making successive line entries.

Card Type 3: If you have no changes for contract item prices, do not complete this section of the form. Otherwise, furnish the item number and increase or decrease the quantity for each changed item.

Card Type 4: If all or part of the work to be done under the contract change order is structure work, enter the net dollar amount involved. This amount will contribute to the contract change order changes line of the structure totals shown on the next estimate.

If this section of the form does not apply or the amount is zero, leave the section blank.

Card Type 5: This section is required.

For federal participation, enter the FHWA funding participation determination on every contract change order. If participation is in part, indicate the breakdown for participation-in-part funding.

For federal segregation, if more than one funding source exists, show the percentage allotted to each federal funding source.

5-103D (1b) Update

Use this function in the following way to replace any incorrect information in Card Type 1 or Card Type 4:

- Enter the contract and contract change order numbers.
- Place the letter "U," in the function box at the top right of the form.
- Enter the correct information in the appropriate fields. All information in Card Type 1 is always required.
- Leave all other fields on the form blank.
- The module for processing contract change orders will identify the fields that you have completed and will change this information in the computer file.

5-103D (1c) Replace

If a contract change order has been stored with incorrect information that cannot be corrected by the update function, use the replace function in the following way:

- Complete the entire form exactly as you would for the file function, using correct information.
- Place "R," in the function box at the top right of the form.

The module for processing contract change orders will replace the data stored in the computer file with the new contract change order.

If payments have already been recorded against a payment method that you are trying to eliminate, it is not possible to immediately replace an old contract change order with a new one. The same holds true if the payment to date exceeds the authorized amount. In these cases, the system requires that you do the following:

- Enter corrections for the extra work bills that reverse payments to date to zero for the particular method of payment to be eliminated. For payments exceeding the authorized amount, enter corrections for the extra work bills to reduce payments below the authorized amount.
- Submit the replace request.
- After the contract change order has been replaced, reenter the extra work bills that were reversed.

When possible, use the update function instead of the replace function.

5-103D (1d) Delete

You can eliminate a contract change order from the computer file as follows:

- Enter the contract and contract change order numbers.
- Place the letter "D," in the function box at the top right of the form.

As with the replace function, a contract change order cannot be deleted until all payments have been reduced to zero through correcting entries on the daily extra work reports.

5-103D (2) Edits

The following lists some of the edits that a contract change order must pass through before the system will accept it:

- The contract change order number and the change order supplement number must be filled in or the change order will be rejected.
- The contract change order description cannot be blank, or the contract change order will be rejected.
- The net change amount cannot exceed the construction allotment. If the net change amount does exceed the construction allotment, the system will issue a warning message but will still file the contract change order.
- The approval date must be after the bid opening date and less than or equal to "today's" date; otherwise, the contract change order will be rejected.
- If the time extension days exceed 10 percent of the working days in the contract, the system issues a warning message but will still file the contract change order.
- If any payment method appears more than once on the input cards, the contract change order will be rejected.
- If you enter any contract item change for a void item, the system will reject the contract change order.
- Lump sum items may appear on contract change orders only as a deletion of that item. Any increase or decrease in a lump sum item will be rejected.
- You can enter a contract item on a contract change order as an increase and also as a decrease. If the item appears a third time, the system will reject the contract change order.
- If the contract item "mobilization" appears on a contract change order, the contract change order will be rejected.
- If the quantity change entry for a contract item exceeds the bid quantity, a warning message will be issued.
- The net dollar amount for the structure work on the contract change order must be greater than the sum of the negative changes and less than the sum of the positive changes, or the contract change order will be rejected.
- The net dollar change for the contract change order must equal the sum of the dollar amount in Card Type 2 and the extended dollar amounts for the quantities in Card Type 3, or the contract change order will be rejected.
- If the contract change order is already on file, the system will reject this duplicate entry. Additionally, if this contract change order's number exceeds by five the largest contract change order number on file, or if the supplement's number is more than two above the latest supplement on file for this contract change order, the system will reject the contract change order. However, if you checked the override field on the input field, the system will bypass such responses.
- If the contract is completed, a warning is issued.

If you request the replace or delete function, more extensive processing is done. The system checks to see if it can maintain the payment to date under a payment method.

If the system cannot maintain the payment to date in this way, it rejects the request to replace or delete. A rejection notice is generated along with an explanation of what must be done to resolve this unacceptable situation.

The following is an example of this type of problem:

- A contract change order is entered for extra work at force account and accepted by the system.
- Subsequently, extra work bill payments are recorded against the contract change order.
- A request is entered to delete the contract change order from the computer file. In this case, the system will reject the delete request because the payment method would be eliminated. There are no other supplements to this contract change order. The system requires that entries to correct extra work bills be to reverse payments to date to zero. In such a case, the system would accept a delete request. In the more complicated cases where supplements to a contract change order exist, the system makes similar demands.

At this point, the processing of the contract change order is complete. However, when a supplemental contract change order is processed, the daily extra work reports in the holding file (due to insufficient funds in the original contract change order) will be made available for payment. The system produces a report, called a "DEWR Release From the Holding File." This report shows the action the system took.

5-103E Extra Work Billing

This module's purpose is to compute the amount of payment for extra work performed under a contract change order. This includes the following:

- Editing input information
- Retrieving and updating the contract change order
- Performing logic edits
- Conducting audit checks
- Performing computations
- Filing the extra work bill for payment
- Producing an edit report and daily extra work report

In addition to these functions, this module allows for entering corrections to filed extra work bills. Extra work bills or corrections to filed extra work bills will not be rejected because of insufficient funds (subject to the limitations in Section 3-904, "Payment for Extra Work," of this manual). Instead, the system will place the extra work bills or the corrections to filed extra work bills in a holding file to await the resident engineer's further action. Usually, the resident engineer must write a supplemental contract change order to provide additional funds; the supplemental contract change order will make the appropriate extra work bills available for payment.

Use Form CEM-4902, "Extra Work Bill (Short Form)," to enter basic information related to extra work performed under a contract change order. The following describes the procedures for obtaining the information from the contractor, entering the information into the computer, and producing the daily extra work reports.

5-103E (1) Preparing Form CEM-4902, Extra Work Bill (Short Form)

The contractor may enter extra work bills on the Form CEM-4902, "Extra Work Bill (Short Form)." Or, if more entries are required for equipment, labor, or material, the contractor must use the four part forms CEM-4902A, CEM-4902B, CEM-4092C, and CEM-4902D.

The contractor initiates forms containing force account payment and submits them to the resident engineer. The resident engineer initiates forms containing payment at agreed prices. The backs of the forms contain the basic instructions for completing the forms. The following information supplements the instructions on the forms:

5-103E (1a) Basic Information (Title Page)

Do the following for the basic information:

- The contract change order number: Right-hand justify this number; for instance, contract change order 1 is 001, contract change order 10 is 010.
- Report number: The contractor should leave the report number blank. Duplicate numbers will be rejected (except for corrections to previous bills).
- Date performed: A separate extra work bill must exist for each day on which force account work is performed (except for work done by a specialist). Enter the date the work was performed in these spaces. For extra work bills covering invoices only, enter the date on which the material was used. If this entry is not practical, enter the current date. You must enter a date in this field. You may enter the acronym "VAR" in the date performed field if the pay method is lump-sum unit-price or if equipment and labor are not present on the bill.
- Date of report: Enter the date on which the report is prepared.
- Payment method: Ensure the method selected matches one of the methods authorized by the contract change order.
- Bridge: Place the letter "T" in this box if toll bridge work is involved and you want to apply a 10 percent markup to equipment and material and a 25 percent markup to labor.
- Fifty percent flagging: You must include on the extra work bill the total hours spent on flagging because the computer will make payment of only 50 percent of the total. For flagging that is not subject to the 50 percent split, submit separate extra work bills.
- Labor surcharge: The contractor should enter this surcharge as a whole number; for instance, "15 percent" is entered as "15." The contractor should obtain the applicable percent from the effective *Labor Surcharge & Equipment Rental Rates (Cost of Equipment Ownership)* book. This surcharge is for regular hours. The system will apply the overtime surcharge based on the regular hour surcharge.
- Work performed by: This field should contain the name of the organization (the contractor, subcontractor or other) that performed the work. If the extra work bill is for an invoice only, enter the name of the organization to which the invoice was addressed. Submit a separate daily extra work bill for each organization's work.

5-103E (1b) Equipment

Do the following for equipment:

- Equipment identification number: Enter this number (Required.) It can be any number that the contractor assigned to the equipment for specific identification.
- Equipment description: Enter the description, which consists of four items: the "Class," "Make," "Code," and "Attach" (attachments). The equipment description must come from the applicable *Labor Surcharge & Equipment Rental Rates (Cost of Equipment Ownership)* book. Make a copy of this publication available to the contractor. You can obtain from the Division of Construction's website a listing of miscellaneous equipment, for equipment not shown in the *Labor Surcharge & Equipment Rental Rates (Cost of Equipment Ownership)* book.
- For equipment that is neither in *Labor Surcharge & Equipment Rental Rates (Cost of Equipment Ownership)* book nor available from the web site's miscellaneous listing, the contractor must request a rate from the resident engineer. The resident engineer will obtain an approved rate from the Division of Construction's rental rate engineer.
- Equipment for which a contract change order has established the rental rate will not have an equipment description and must be included as a unit price payment on the material charges portion of Form CEM-4902, lines 24–33 of the daily extra work report.
- The following explains the procedures for "Class," "Make," "Code," and "Attach," within equipment description:

  1. Class: This portion of the equipment description will be found in the Labor Surcharge & Equipment Rental Rates (Cost of Equipment Ownership) book under the heading for a particular class. For instance, after "Hydraulic Cranes and Excavators, Crawler Mounted" you will find the class "HCECL."
  2. Make: For the equipment illustrated under "Class" above, you will find the "Make" portion of the equipment description in the left-hand column. For instance, after "Bantam" you will find the make "BANT."
  3. Code: For the equipment illustrated under "Class" and "Make" above, you will find the "Code" portion of the equipment description in the "Code" column. For instance, after "Model C-266" you will find the code "0680."
  4. Attach: You will find this portion of the equipment description in the front of the Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership) book. The rate for the equipment under "Class," "Make," and "Code" above includes all attachments and accessories. Therefore, leave this column blank.

Enter all equipment descriptions beginning at the left of each field. Include all letters, numbers, dashes, or other symbols as they are shown in the *Labor Surcharge & Equipment Rental Rates (Cost of Equipment Ownership)* book.

- Regular hours for which payment is to be made: Enter the regular hours for which payment is to be made. Regular hours may not exceed 8 unless you are entering a daily rate item. If the date the work was performed is various, you may enter up to 99 in the regular hours field. Various is used for equipment at day rates.

- Overtime hours: Enter the overtime hours worked. Overtime hours may not exceed 16.

5-103E (1c) Other Expenses Subject to Labor Markup

This portion of the form is for travel expenses that cannot be entered as "Subsistence" under "Labor."

If the units and rate are already entered, the computer will calculate the amount. Otherwise, enter the amount, and this figure will be used.

Note: If you use the "Unit" and "Rate" fields, leave the "Amount" field blank. If you enter an amount in the "Amount" field, don't make an entry in the "Unit" and "Rate" fields.

5-103E (1d) Material or Work Done by Specialists, Lump Sum, or Unit Price Payments

The following explains the procedures for completing the Form CEM-4902 material section:

- Material: Note that the material entry will not be processed unless there is a value in both the "Units" and the "Unit Cost or Net Pay" fields. Do the following for material:
  1. Invoice date: Preferably, enter the date of the invoice to help in checking for duplicate billing. However, if entering the invoice date is not practical, enter the date the material was used.
  2. Invoice description: Enter a brief description of material.
  3. Units: Normally, enter the unit one (1.00) for materials used.
  4. Unit cost or net pay: In this column, enter the amount for which payment is due. Normally, this amount is the cost of the material plus tax, if applicable, less any discount offered.
- Work Done by Specialists: Enter this item in the same manner as described under "Material" above.
- Lump Sum: Follow the procedures below for this entry:
  1. Vendor name and invoice number: You do not need to make any entries in the vendor column or the invoice number column.
  2. Date: Enter the date the work was performed. When entering this date is not practical, enter the current date.
  3. Invoice description: Enter "per CCO No._____."
  4. Units: Enter the units to be paid as a percentage of the lump sum amount, expressed in decimals. For instance, express 75 percent as 0.75. This figure must never exceed a total of 1.000.
  5. Unit cost or net pay: Enter the lump sum amount from the contract change order.
- Unit price payments: Enter this item in the same manner as described under "Lump Sum" above.
- Units: enter the number of units to be paid.
- Unit cost or net pay: enter the unit cost from the contract change order.

5-103E (1e) Signature of Prime Contractor's Representative

For all force account payments, the contractor or contractor's authorized representative must sign the extra work bill. For agreed price payments, the signature is not required.

5-103E (2) Processing Form CEM-4902

The resident engineer receives Form CEM-4902, "Extra Work Bill (Short Form)," from the contractor, reviews the form, and if it is satisfactory, signs the extra work bill and approves it for entry into the contract administration system. When reviewing the submitted extra work bill, the resident engineer must be guided by the policy contained in Section 3-9, "Measurement and Payment," of this manual. The following explains how the system will process Form CEM-4902:

- You must request the contract administration system print a copy of the extra work bill after it has been entered into the system before it will be paid.
- Computer programs will perform the following processes:
  1. Edit all information for acceptability. For example, numeric data must be in numeric form, or the program will issue a warning.
  2. Select information from the equipment database, for example, rates, descriptions, and attachments.
  3. Validate the contract number, contract change order number, report number, type of work (payment method), dates, corrections, labor surcharge, and equipment description.
  4. Audit right-of-way delay and the hours equipment and labor are used for work.
  5. Compute extensions, markups and summaries.
  6. Ensure the authorized amount (for instance 100 percent or $15,000) is not exceeded.
  7. File a validated extra work bill for payment at the estimate time.
  8. Produce a daily extra work report. This report will contain all the information as entered on the extra work bill plus equipment descriptions, extensions, markups, total payment, and contract information.
  9. Produce an edit report. This report will contain processing results. These results are tabulated by contract change order within a contract. If the system rejects an entry, the rejection messages will be included on the daily extra work report. If the system accepts the extra work bill, all warning messages will be contained on the edit report.
- After the reports have been printed and the district construction office has received them, the district will forward copies to the resident engineer. Daily extra work reports are printed in two parts, one for the contractor, one for the resident engineer.

5-103E (3) Corrections to Extra Work Bills

You can make corrections to the extra work bill after it has been entered into the system, but there is a limit of four corrections per extra work bill. See *Entry of Extra Work Bills Manual (CASEWBM)*

5-103F Generating Estimates

CAS produces the following five types of estimates on demand:

- Monthly progress estimate
- Progress estimate after acceptance
- Supplemental progress estimate
- Semifinal estimate
- Final estimate

The resident engineer will regularly request the monthly progress and the progress after acceptance estimates while the remaining three types of estimates usually will be requested in cooperation with, or by, the district construction office.

Supplemental progress estimates may only be run between the completion of the monthly progress estimate run and the 15th of the following month.

Producing an estimate is completely automatic, based on data previously stored in the computer.

In addition, the contract administration system will produce two other types of estimates that do not generate payments. These estimates are simply statements of the current status of the computer files. The following are the two types:

- Status purpose only estimate
- Proposed final estimate

5-103F (1) Procedure

Before requesting the first monthly progress estimate, enter the date work started and the responsible unit on Form CEM-6003, "Progress Pay-Estimate Project Initiation or Update." The Division of Construction progress pay coordinator enters the approval date. If the approval date is not in the computer file, the system will reject the estimate request.

The procedure for processing an estimate involves the following steps:

- Preparing Form CEM-6101, "Project Record-Estimate Request," and verifying the estimate. Transmit these to the district office.
- Computer processes your estimate and prints the reports.
- The district construction office verifies the estimate results.
- Returning the estimate reports to the resident engineer.

The schedule for completing the pay process and making payment to the contractor is rigid. This rigid schedule means all people involved must adhere to their individual schedules. District construction offices will advise resident engineers of the schedules.

5-103F (1a) Preparing Form CEM-6101, "Project Record-Estimate Request"

To request an estimate, prepare Form CEM-6101, "Project Record-Estimate Request." Complete this form accurately in accordance with the following:

5-103F (1b) Estimate Parameters

For the estimate parameters follow the instructions below.

- Enter the contract number.
- Enter the estimate number. This number must be one greater than the last estimate that was successfully processed and paid.
- Enter the work period's ending date in the estimate for the form's "Work Performed Through" field. For a progress estimate or a supplemental progress estimate, enter the 20th day of the month. For all other types of estimates, use the date of completion.
- If this is a monthly progress estimate, place an "X" in the matching box on the form; otherwise, leave the box blank.
- If this is a progress estimate after acceptance, place an "X" in the matching box on the form; otherwise, leave the box blank.
- Enter the estimated date of completion. This date should be the resident engineer's best estimate, not necessarily the computed date. If this estimate is not a progress estimate, enter the date of completion.
- Enter the values as of the "date work performed through" for chargeable working days, weather nonworking days, approved time extension days (contract change order), and approved time extension days (other) in the four matching fields of the form. The system will check the chargeable working days and weather nonworking days against the working days calendar and inform you of possible entry errors. However, it cannot check the two types of time extension days. These values affect the system's computation of percent time elapsed.
- If you have a landscape contract that is in the plant establishment period, check one of the two boxes to indicate whether progress is satisfactory or unsatisfactory. These boxes are not for highway contracts that contain "Type 2" plant establishment periods. If you are unsure of this status, contact the district construction office after reading the special provisions.
- The system determines whether contract progress is satisfactory or unsatisfactory. Occasionally, a situation arises where, even though progress is mathematically unsatisfactory, the resident engineer wishes to override the system and record satisfactory progress. To accomplish this override, place an "X" in the field, "Override Unsatisfactory Progress." Also see the second bullet below this one about projects with dual time limits.

  For some contracts, the standard manual formula does not apply for computing percent time elapsed. For such contracts, interpret the special provisions, and determine this percentage. Enter the percent in the box on the form; this will override the system's calculation.
- If you have checked "Override Unsatisfactory Progress" (see the bullet two up from this one that discusses overriding the system) or entered a number in percent time elapsed (see the previous bullet), enter a short explanation in the 25 spaces immediately below these fields on the form. Typical entries might be "CCO days pending" or "Nonstandard time format."

- If the estimate is a supplemental progress estimate, proposed final estimate, semifinal estimate, or final estimate, check the appropriate box. Note that on a supplemental progress estimate the date for "Estimate for Work Performed Through" and all of the working day information should be the same as the date for the last estimate.
- If this estimate is a rerun (a recalculation) of a prior successful estimate, check the recalculation box. Note that, if the last estimate processed was a status purpose only estimate, you are not rerunning an estimate this month; instead, you are trying to run the estimate that did not generate payment. Normally, the district office will enter requests to rerun an estimate.

5-103F (1c) Deductions

If you wish to take one or more deductions or to return one or more deductions from a prior estimate, enter them on Form CEM-6101,"Project Record-Estimate Request." If you wish to rerun an estimate or to pay an estimate after a status only estimate, you still must enter the deductions again because any deduction stored in the computer file and carrying this estimate number will be erased automatically. You can enter five types of deductions on this form. Each deduction entered requires an alpha code to be placed in the form's type field and an entry in the description field. Use a minus sign to take a deduction and a plus sign to return a previous deduction. The following lists the rules by type of description:

- Administrative deductions: Enter "ADM" in the type field. Both plus and minus deductions are allowed.
- Equal employment opportunity deductions: Enter "EEO" in the type field. Both plus and minus deductions are allowed, but plus deductions should be adjustments or reversals of deductions taken on prior estimates. If you wish to take an EEO deduction on this estimate, leave the amount field blank. The system will compute the deduction amount for you. Only one "blank" EEO deduction, normally entered by the labor compliance officer, can appear on the form. Note: The system will not accept EEO deductions if the contract item payment for this estimate is zero. It may be necessary to enter the minimum amount of $1000.
- Labor compliance violation deductions: The labor compliance officer usually makes these entries on the form. The officer will enter "LCV" in the type field. The rules for LCV deductions are identical to those for EEO deductions. Note: "LCV" deductions will not be taken if the contract item payment for this estimate is zero. It may be necessary to enter the minimum amount of $1000.
- Liquidated damages deductions: Enter "LIQ" in the type field. Both plus and minus deductions are allowed. Plus deductions reverse earlier deductions.
- Other outstanding documents deductions: Enter "OOD" in the type field. If you wish to take this deduction, leave the amount field blank. The system will compute the amount for you. Take this deduction only once per contract. The system will maintain the correct deduction on subsequent estimates by generating "OOD" in the type field with a description, "MAINTAIN OOD DEDUCT." You can reverse the deduction at any time by entering a plus amount that exactly reverses the OOD deductions to date from the previous estimate. Negative OOD deduction amounts are never allowed on the input form.

After carefully preparing Form CEM-6101, "Project Record-Estimate Request," promptly send it to the district office. The specific deadline for submittal may vary by district.

5-103F (2) Computer Processing

Once you have made your entries on Form CEM-6101,"Project Record-Estimate Request," and transferred them to the computer, the system edits the estimates and then produces reports showing the results of the system's processing.

5-103F (2a) Estimate Edits

Once Form CEM-6101,"Project Record-Estimate Request," has been entered into the contract administration system it will do the following:

- Edit Form CEM-6101 for consistency with previous estimates and with the working days calendar stored in the computer.
- Identify and summarize all daily extra work reports entered in the system and eligible for payment since the last estimate.
- Identify and summarize all contract transactions entered in the system since the last estimate.
- Identify and balance the contract change orders that require balancing.
- Identify and balance the contract items that require balancing.
- Make calculations for the item "Mobilization" (if necessary), for the various deductions and retentions, for percent time elapsed, for percent complete, and for various status totals, such as authorized final cost. The system also determines whether the contractor's progress is satisfactory.
- Edit any deduction submitted for processing on Form CEM-6101,"Project Record-Estimate Request." Special attention is given to three of the deductions as follows:
    1. If the resident engineer has submitted an EEO deduction, the contract administration system computes the amount as 10 percent of the contract item payment on this estimate, or a minimum of $1,000 or a maximum of $10,000, and places the deduction on file.
    2. If the resident engineer has submitted an LCV deduction, the system performs the same calculation as for EEO deductions described above.
    3. If the resident engineer has submitted an OOD deduction, the system will compute the deduction under the following conditions:
        a. The contract has been completed, or retention is being reduced because the percent complete exceeds 95 percent. If one of these conditions is not met, the deduction will be rejected.
        b. The total of all OOD deductions from prior estimates must be zero, or the deduction will be rejected. An OOD deduction should be taken only once for a contract.
        c. If the first two conditions are met, the amount of the deduction is calculated as 5 percent of the total work completed to date less mobilization, or $10,000, whichever is less.

- Further deduction processing as follows:
  1. If the total to date for an OOD deduction is negative, the system will check whether the value for has changed since the last estimate for total work completed to date less mobilization. If the value has changed, the system will generate a new OOD deduction with a description, "MAINTAIN OOD DEDUCT," and an amount equal to the difference between the amount demanded by the formula and the amount of the total to date for this type of deduction. Thus, an OOD deduction, once submitted, will be maintained at the formula's value unless it is exactly reversed by a positive deduction entry on Form CEM-6101,"Project Record-Estimate Request."
  2. For each type of deduction, you cannot give back more than has been taken. If you make this error, the estimate will fail. Messages are produced stating which deduction is in error.
  3. At this point in the processing, the final values are computed for total work completed and total payment to the contractor. If there are "Limitation of Payment" dates and amounts in the special provisions for this contract, the Division of Construction progress pay coordinator will have entered them in the computer. The system will check the period ending date of this estimate and will generate or return any split-year-financing deductions that are necessary under the contract's terms.
  4. If retention is being released on this estimate and the total to date for liquidated damages is zero, the system will issue a warning message.
  5. The system automatically computes overbid item deductions as required. These deductions are taken and returned at the appropriate times.
- Makes calculations for the progress payment voucher, including retentions and payments to escrow accounts.
- Determining the success of the estimate's processing.
- If processing is successful, the contract administration system prints your estimate.
- If this estimate is for a zero or negative progress payment, the system prints a status purpose only estimate.
  1. If the total authorized final cost is greater than the construction allotment, the contract administration system will issue a severe warning.
  2. If the total payment to date to the contractor on this estimate is greater than the construction allotment, the estimate will fail.

5-103F (2b) Estimate Output

Once CAS has processed the estimates, it produces the following reports:

- Schedule of extra work
- Schedule of deductions
- Project record estimate
- Project status
- Work done by office of structures

- Progress payment voucher

Only two copies of the estimate will be sent to the field, one for the resident engineer and one for the contractor. The contractor also must receive the first three reports listed above and the last report listed above.

In addition to the estimate documents listed above, the contract administration system also produces a report called "Estimate Processing Results." This report is the tool by which the resident engineer can check the "estimate package." This report has the following sections:

- Edit messages: The system can produce many possible messages. If your estimate is rejected, the exact reason will be found here. To assist in preventing overpayments, among other problems, warning messages have been set based on carefully chosen tolerances. You must read these messages carefully.
- Transaction selection: The system will print a list of the exact pages and lines of contract transactions that were used to produce the estimate. This list enables you to verify that all the contract transactions you submitted were used to produce the estimate.
- Contract change order processing: This lists any balancing of contract change orders by the system. Occasionally, the list contains warning messages, too.
- Contract item processing: This part of the report does the same things as described in the bullet above, but for contract items instead of contract change orders.
- Contract transactions list: This list identifies all contract transactions used to generate your estimate. If you question any line item on the project record-estimate, examine the detailed records to see how the system derived its totals.
- Structure totals: This item summarizes all structure work the system found while processing the estimate.

5-103F (3) Potential Problems

For the unwary, several points in the estimate process can cause errors. These problems result from misunderstanding what constitutes an estimate and how the estimate number should be increased from estimate to estimate.

On the title page of the project record-estimate and in the estimate processing results, the system will print the type of estimate generated. If the estimate is one of the five types listed previously under the heading "Generating Estimates," a valid estimate was generated.

The progress pay system requires that the estimate number be increased only by valid estimates. Thus, if you request estimate number 3 to be processed, but the system generates a status purpose only estimate, a valid estimate was not generated. Request estimate number 3 again for the next estimate.

Another potential problem involves two types of contract transaction: materials on hand and anticipated changes. These transactions apply to a specific estimate period. If the estimate generated by the system is a status purpose only estimate, these transactions have not been "used." They will appear on the next valid estimate generated. If their appearance on the next estimate is not satisfactory, you must use reversing entries before requesting the next estimate from the system.

If the estimate has failed for any reason, the system will print, with one exception, as many of the estimate reports as possible to help you analyze the problem. The one

exception, the progress payment voucher, is only printed for successful estimates that are eligible for payment according to the system's standards.

Processing the estimate is done by a series of computer programs that perform the following functions:

- Input edit of the CEM-6101, "Project-Record Estimate Request."
- Select from the computer file the extra work bills that will be used to generate this estimate.
- Select from the computer file the contract transactions that will be used to generate this estimate.
- Process the contract change orders.
- Process contract items.
- Process deductions.
- Conduct miscellaneous computations.
- Generate reports.

5-103G Approval of Estimates

The authority to approve an estimate depends on the type of estimate being run. The following is the general outline and method for approving contract estimates.

5-103G (1) The Resident Engineer

After an estimate has been run, the resident engineer must approve it before the process of payment is continued. To expedite payment, the resident engineer can approve through a memo, form letter, or telephone call with subsequent written confirmation to the district office.

5-103G (2) The District Director

At the time the estimate was produced, so was Form FA 729A, "Progress Payment Voucher." If the estimate is a final estimate, an individual who has been formally delegated by the district director to do so must sign the form.

5-103G (3) Flagging an Estimate for Payment

Flagging an estimate in the computer system for payment indicates that Form FA 729A has been verified and approved.

For payments on after acceptance estimates, semifinal estimates, and final estimates, the Division of Construction progress pay coordinator must flag the estimates in the computer system for payment after the district's flagging.

5-103H Reports Available Through the Contract Administration System

The Contract Administration System (CAS) provides reports that must be requested specifically. Normally, resident engineers must request reports through the district construction office. Use Form CEM-6002, "Contract Administration System (CAS)-Report Requests," to obtain the reports. The following are the instructions for completing Form CEM-6002.

5-103H (1) District (XX) Estimate Status

This report, which is also available statewide, provides information on the pay status of each contract in the district. For each contract, the report includes the following:

- Contract number
- Date of last estimate processed (if there was one)
- Number of the estimate
- Number of days elapsed since the estimate was processed
- Type of estimate
- Pay status and date paid (if paid)
- Date on which the payment voucher was approved
- Resident engineer's name and phone number
- Responsible unit
- Password

5-103H (2) Project Management

The project management report is for use by the district office and Division of Construction managers. This report consists of the following two separate reports that are produced whenever "Project Management" is requested.

5-103H (2a) The Project File Status Report

This report lists all contracts in the district (or statewide) that are on the computer's active list. For each contract, the report provides the following information:

- Contract number
- Status
- Date bids were opened
- Date of award
- Date of approval
- Date of acceptance
- Bid amount
- Name of contractor

After bid opening, projects are added to the list automatically. After the final estimate and approvals from the districts and the disbursing office, the Division of Construction removes the projects from the list.

5-103H (2b) The Exceptional Contracts Report

This report lists all contracts for which the following applies:

- More than 60 days have elapsed since the bid opening.
- More than 10 days have elapsed since the completion date and the contract needs an acceptance date.

- More than 45 days have elapsed since completion, but the proposed final estimates have not been run.
- More than 180 days have elapsed since completion, but the final estimates have not been run.

5-103H (3) District (XX) Project Status

This report is for use by construction managers. It lists all active contracts, and for each contract, provides the following information:

- Contract number
- Contractor's name and county-route-kilopost
- Date of the last estimate
- Percent complete
- Percent of time elapsed
- Construction allotment
- Total amount paid to date
- Estimated final cost
- Estimated final contingency balance

5-103H (4) Progress Payment-Work Done by Office of Structure Construction (Copies)

This report is for use by the Office of Structure Construction. For details, see Volume I, Section 6, of the *Bridge Construction Records and Procedures Manual*.

5-103H (5) Project Record-Estimate (Copies)

A request for estimate copies will produce all of the documents that were produced automatically during the previous estimate's run. Normally, therefore, you should not need to order copies through this program. For the estimate, the report contains the following information:

- Schedule of extra work
- Schedule of deductions
- Project record-estimate
- Project status
- Progress payment voucher

5-103H (6) Status of Contract Items

Normally, the district office requests this report monthly for all ongoing contracts. The report must be filed in Category 60, "Contract Administration System Inputs and Reports."

For this report, the system prints one line of information for each contract item and summarizes the net effect of all contract transactions that have been entered against the item. This report allows the resident engineer to review each item and determine whether quantity balances and anticipated changes, among other things, are necessary.

If any particular number on the report seems questionable, the project record item sheets provide supporting detail. For example, if the approved quantity differs from the bid quantity, the project record item sheets describe, under the item number, any changes due to contract change orders.

When applicable, take particular care to flag an item "COMPLETE" (using the item final balance transaction on Form CEM-6101) so that an accurate project status will be produced. Remember, flagging an item "COMPLETE" does not mean that contract item transactions will no longer be accepted; it means only that you have commanded the system to keep the item in balance at all times.

5-103H (7) Project Record Item Sheet

Normally, the district office requests this report monthly for all ongoing contracts. The report must be filed in Category 60.

With the following exceptions, the project record item sheets list every contract transaction entered into the system since the beginning of the contract:

- Item and contract change order final balance transactions will appear only on the report following the next estimate. Thereafter, they are dropped from the report.
- Miscellaneous anticipated change transactions also appear only on the report following the next estimate.

The report lists the contract transactions first by the estimate number on which they were paid and then by the page and line number of the input form. The total to date will be printed.

This is a cumulative report. Do not retain previous issues of this report in the project files. However, one issue of the report, usually the one requested immediately after all final quantities have been paid, must be retained in the project's files.

5-103H (8) Status of Contract Change Orders

Normally, the district office requests this report monthly for all ongoing contracts. The report must be filed in Category 60, "Contract Administration System Inputs and Reports."

This report is similar to the status of contract items, which allows the engineer to review each contract change order.

Use the report to determine when supplemental contract change orders will be necessary to complete the work. The report also facilitates a review of those contract change orders where a credit is due Caltrans.

When applicable, flag contract change orders "COMPLETE" (using the contract change order final balance transaction) so that an accurate project status can be produced. Similar to flagging a contract item, flagging a contract change order "COMPLETE" means only that you have commanded the system to keep the contract change order in balance at all times.

5-103H (9) Contract Change Order Master Listing

Normally, the district office requests this report monthly for all ongoing contracts. The report must be filed in Category 60.

This report summarizes all contract change orders stored in the computer file. It also contains the contract change order time extension and contract change order category code. The report lists each individual supplement with all the information the system contains. Do not retain previous issues in the project's files. However, one issue, usually the one requested immediately after final payment has been made on all contract change orders, must be retained in the project's files.

5-103H (10) Bridge Quantities by Structure

This report is for use by Office of Structure Construction personnel. It is available on all projects for which Form CEM-6003, "Progress Pay-Estimate Project Initiation or Update," has been filed. The filing of this form indicates a structure work amount and structure numbers have been entered for the contract transaction in accordance with the instructions in Volume 1, Section 6 of the *Bridge Construction Records and Procedures Manual*.

5-103H (11) District (XX) Status of Anticipated Changes

This report is for use by the district and Division of Construction managers.

5-103H (12) Project Record-Estimate (Dummy)

A request for this item will produce the same form that was produced automatically when Form CEM-6003, "Progress Pay-Estimate Project Initiation or Update" was filed.

This form is identical to a project record-estimate, except that it does not contain an estimate number or dates and no entries appear under "This Estimate" or "Total Estimate." It is a blank estimate form, valuable only if it became necessary to make an estimate manually.

5-103H (13) Contract Contents Report

This report contains information that is currently in the file as a result of automatic entries or entries from Form CEM-6003 "Progress Pay-Estimate Project Initiation or Update."

Most of the information in this report is included already in other reports and forms that are produced automatically. Therefore, you do not need to request it routinely.

5-103H (14) Contract Contents Report-Contract Item Records

This report provides the following information:

- Contract item number
- Contract item index number
- Item description
- Unit of measure
- Bid price
- Bid quantity
- Bid amount
- Amount overbid
- Void items
- Plant establishment items

Most of the information in this report is included already in other reports and forms that are produced automatically. Therefore, you do not need it for routine contract administration.

5-103H (15) Contract Contents Report-Contract Progress

For each contract item, this report includes a detailed analysis of the current and prior quantities and payment status. It also summarizes all other payments or deductions as well as data on contract time. The information in this report is included already in various other reports that are produced automatically. Therefore, you do not need it for routine contract administration.

5-103H (16) DEWRs in Holding File

This report lists extra work bills that are in the holding file for all contracts in the district. If there are reports in the holding file, process supplemental contract change orders to provide additional funds. The system will then automatically release the bills for the next estimate.

5-103H (17) Daily Extra Work Report

Copies of daily extra work reports are produced under the procedure outlined earlier in this section under "Extra Work Billing." You can obtain copies by using the second page of the report request form.

5-103H (18) Rental Rates and Codes for Miscellaneous Equipment

This report provides a listing of equipment codes and related descriptive information for equipment that is not included in the *Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)* book.

5-103H (19) Reports for the Office of Structure Construction

In addition to the reports discussed above, the contract administration system provides reports for the Office of Structure Construction. For details, see Volume I, Section 6, of the *Bridge Construction Records and Procedures Manual*.

5-103I Field Audits by Accounting Office

In accordance with instructions from the Division of Administrative Services, personnel from the Accounting Office will periodically review record-keeping procedures for construction projects. The accounting reviewer will prepare a report of the findings, a copy of which will be sent to the deputy district director of construction and the resident engineer.

District construction must then report back to the Accounting Office, stating what actions it took in response to the report's recommendations. If the district's actions result in a dispute, the deputy district director of construction will resolve the dispute

5-104 Final Construction Project Records

5-104

Final Construction Project Records

5-104A General

Construction project records consist of all material in the construction files, whether in the field office, the district construction office, or the Division of Construction office. This section contains guidelines for the disposition of construction project records after Caltrans makes the final payment. This section also provides guidelines for allowing public access to construction project records and for producing a set of

as-built plans for each completed construction project. In addition to construction project records, the district keeps a project history file. For information about this history project file, see Chapter 7, "Uniform File System," of the *Project Development Procedures Manual*.

5-104B Public Access to Project Records

The California Public Records Act permits anyone to obtain any written information relating to the conduct of the public's business that is prepared, owned, used, or retained by any state agency, regardless of the physical form or characteristic of the writing. Although the act includes exemptions for certain categories of records, most construction project records fall within the description of documents that must be produced upon proper demand. Except for preliminary drafts or notes that are not retained in the ordinary course of business, permanent project records that are reasonably identified are subject to inspection and copy.

Records exempt from disclosure include the following:

- Estimated project cost before bidding.
- Contract claim analysis.
- Personal information, such as home addresses, telephone numbers, medical records, and similar files, the disclosure of which would constitute an unwarranted invasion of personal privacy.
- Accident reports. If accident reports produced by another agency are requested, such as accident reports by the California Highway Patrol, refer the requester to the other agency.

If copies of payroll records are requested, see Section 7-1.01A(3), "Payroll Records," of the *Standard Specifications* for the procedures to follow.

Resident engineers should refer all requests for copies of any records to the district construction office and follow procedures established in the district for copying and charging for record copies.

Allow contractors and subcontractors to review records used to determine contract payment in the construction field office.

5-104C Disposition of Construction Project Records

District construction personnel who are responsible for the disposition of construction project records must coordinate their activities with the district records officer.

The district construction office must establish a procedure for handling construction project records. This procedure must meet Caltrans record keeping policy and achieve the following objectives:

- Relieve the resident engineer of the responsibility for storing the records before or at the time final payment is made.
- Avoid unnecessary long-term storage of duplicate copies.
- Before the records are destroyed, transfer material that has historical value to the project history file.

- Retain construction project records as follows:
  1. For projects that involve federal participation, retain the records for a minimum of three years after submission of the final voucher.
  2. For projects that do not involve federal participation, retain the records for a minimum of three years after the date on which the final estimate is scheduled for payment.
  3. For projects on which some legal question exists, such as a pending claim, a labor compliance case, or litigation, retain the records for three years after settlement. The district construction office must send a memorandum to the district records officer to hold these records until further notice.

When the district no longer needs the records in categories 1, 2, 3, 4, 7, and 28, destroy them. Do not retain them as part of the project construction records.

After records from the resident engineer's office are sent to the district construction office, eliminate duplicate records.

Copies of Form CEM-6301, "Contract Acceptance," and the final Form CEM-2701, "Weekly Statement of Working Days," are sent to the progress pay coordinator in the Division of Construction.

When records are sent from the district construction office to the State Record Center or to another district, prepare a transmittal list specifying the contents of each box. In a separate file in the district construction office, retain a copy of the transmittal list.

The Division of Construction also retains project records to ensure that adequate records are available to defend Caltrans in civil suits, especially those related to contractor's claims. After projects have been completed, the Division of Construction transfers files listed in the current "records retention schedule" for the Division of Construction to the State Records Center.

The *Bridge Construction Records and Procedures Manual* should be referenced for bridge and structure's related records that are transmitted to the Office of Structure Construction at the completion of the project for permanent storage.

5-104D As-Built Plans

Districts are responsible for all as-built road plans, and the Office of Structure Design is responsible for all as-built structure plans. To handle as-built plans, use the following procedure:

The district design unit will give the resident engineer full-size prints of all road plans. Prints of structure plans will be supplied to the structure representative. The plans may also be transmitted in electronic form when field forces have the capability of computer-aided drafting and design (CADD). As-built information is recorded on the full-size drawings or recorded on a set of contract plans using CADD.

Each sheet of as-built plans must be clearly identified as such. All sheets upon which changes are made must contain the name of the resident engineer or structure representative.

5-104D (1) District Procedure on As-Built Plans

The district will maintain a set of original project plan sheets. Field changes will be made on full-size prints or in a field CADD system and afterwards transferred to the

original CADD files in the district office. The set of plans, with changes delineated by the district design unit, becomes the as-built plans.

To attain uniformity in final project plans, include the following data on the as-built plans:

- Contract change order number.
- Revisions in alignment and right of way.
- Grade revisions in excess of 30 mm.
- Changes in length, size, flow line elevations, and station of culverts. When alternate types of culverts are permitted, show which alternate was used.
- Drainage changes.
- Location of sewers, conduits, and other features.
- Location of monuments, bench marks, freeway fences, and gates.
- Revision of typical cross sections.
- Changes in pavement lanes, tapers, ramps, frontage roads, road connections, driveways, sidewalks, islands, and median openings.
- Curb and gutter changes.
- Electrical conduits, pull boxes, and service points.
- Revision in location of utility crossings and irrigation crossovers.

Do not show the following on as-built plans:

- Construction quantities.
- Property fences.
- Miscellaneous small features, such as markers and delineators, which are readily changed by maintenance forces.

The resident engineer must complete the as-built plans as soon as possible after work is completed, but no later than 60 days after contract acceptance.

After the district design unit has completed the transfer of as-built information on the final as-built drawings, the unit will return the plans to the resident engineer for review and signature of final approval. For the processing and disposition of as-built plans after the construction review, see Chapter 15, "Final Project Development Procedures," of the *Project Development Procedures Manual*.

5-104D (2) Procedure on As-Built Plans for Bridges and Structures

The Office of Structure Construction must handle structure as-built plans in the following manner:

- From the resident engineer, obtain full-size prints of all sheets with "Structure" signature blocks. If these prints are not available from the resident engineer, the structure representative must contact the Office of Structure Design.
- The structure representative will make the as-built corrections to these prints and forward them to the Sacramento office of the Office of Structure Construction. These corrected prints must be forwarded to the Sacramento office as soon as possible after completion of the structures, but no later than 30 days after the completion of the project.

- For prints of projects consisting solely of roadside rests or maintenance facilities, the Sacramento office of the Office of Structure Construction must forward the prints directly to the Office of Structure Design, documents unit. All other projects must be forwarded to the Office of Structure Maintenance and Investigations, which determines which sheets should be microfilmed for the structure files. In identifying prints to be processed, the Office of Structure Maintenance and Investigations must include all sheets prepared by the Office of Transportation Architecture. This office will then forward all the prints to the Office of Structure Design, documents unit.
- Those prints not identified for filing by the Office of Structure Maintenance and Investigations will be forwarded to the appropriate district office for the preparation of as-built plan sheets. The Office of Structure Design will make the as-built corrections on the original plan sheets. If the original plan sheet is not presently stored in the Office of Structure Design, it may be obtained from the district.

On state projects that do not have a representative from the Office of Structure Construction, the resident engineer must make the as-built changes on the full-size prints bearing "Structure" signature blocks. As soon as possible after completion of the structures, forward the prints to the Office of Structure Construction in Sacramento. The procedure outlined above must then be followed.

When the corrections have been made, the as-built plan sheets will be forwarded to headquarters microfilm services unit for microfilming and distributing.

On projects funded by others, where the local entity or private entity is the sponsor, follow the procedure for as-built plans for bridges and structures described in the Office of Special Funded Projects' *Information and Procedures Guide and* the *Encroachment Permits Manual.*

For additional guidelines and details for completing structure as-built plans, see the *Bridge Construction Records and Procedures Manual*.

5-104D (3) Projects Not on State Highways

On all district-administered projects not on state highways, the information to be included on as-builts will remain the same as for contracts on state highways. The district will be fully responsible for completing as-built project plans and forwarding them to the local agencies. If the district desires for its own records, these plans may be sent to headquarters microfilm services unit for microfilming before being returned to the local government.

The engineer responsible for structure work will place as-built corrections on structure plans of all state and federally funded projects for local roads and streets. On Caltrans administered contracts, follow normal Caltrans procedures for processing these plans. On locally administered contracts, the engineer responsible for structure work will provide the Office of Structure Design, Local Assistance Section, a set of original tracings or duplicates of reproducible quality with as-built corrections. After microfilming, return these tracings or duplicates to the local agency.

Section 2 Equal Employment Opportunity

8-201 General

8-202 Laws, Regulations, and Specifications

8-203 Preconstruction Conference

8-204 Reports to Other Agencies

8-205 Onsite Interviews

8-206 Federal-Aid Project Equal Employment Opportunity Posters

8-207 Employee Complaints—Discrimination Complaint Processing

8-208 Equal Opportunity Complaints and Contract Administration

8-209 Contracts Containing "Federal Requirements Training Special Provision"

8-210 Contractor's Annual Equal Employment Opportunity Report—Form FHWA-1391, Federal-Aid Highway Construction Contractors Annual EEO Report

8-211 Deducting Payment for Failure to Submit Reports Section 2 Equal Employment Opportunity

Example 8-2.1 Sample Letter to the Complainant (Employee)
Example 8-2.2 Sample Letter to the Contractor

Section 2 Equal Employment Opportunity

Section 2 Equal Employment Opportunity

8-201 General

8-201 General

This section presents the guidelines for administration of the nondiscrimination and equal employment opportunity (EEO) provisions of the contract. The total EEO program is complex and involves functional units outside of construction. The guidelines in this section apply primarily to activities and responsibilities resulting from contractual requirements and are not necessarily complete insofar as the total responsibilities and activities for either Caltrans or the contractor.

8-202 Laws, Regulations, and Specifications

8-202 Laws, Regulations, and Specifications

California requirements for public works contractors on the subjects of nondiscrimination and EEO are located in the Government Code, Sections 12990 and following, and in the regulations of the Fair Employment and Housing Commission in Title 2, California Code of Regulations, Sections 8100, "Contractor Nondiscrimination and Compliance," and following. Section 7-1.01A(4), "Labor Nondiscrimination," of the *Standard Specifications*, and the "Labor Nondiscrimination" section of the contract special provisions call the contractor's attention to these and other requirements. Federal requirements applicable to federal-aid projects are located in the required federal contract provisions under "Section II. Nondiscrimination." Under the terms of the contract, the contractor has responsibility for compliance by its subcontractors.

Caltrans also complies with the nondiscrimination laws and regulations set forth in Title 6 and Title 7 of the Civil Rights Act of 1964. Title 6 is a federal law that prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance. Title 7 is a federal law that protects individuals from discrimination in employment practices on the basis of race, color, religion, sex, or national origin.

8-203 Preconstruction Conference

8-203 Preconstruction Conference

The resident engineer or district labor compliance officer must discuss the EEO and fair practices provisions of the contract at the preconstruction meeting and advise the contractor of requirements as stated in Title 6 of the Civil Rights Act of 1964. See Section 5-0, "Conduct of the Work," of the *Construction Manual* for details on preconstruction conferences.

8-204 Reports to Other Agencies

8-204 Reports to Other Agencies

Terms of the contract require contractors and certain subcontractors to submit information and reports directly to the United States Department of Labor's director, Office of Federal Contract Compliance Programs, and to the administrator, Office of Compliance Programs, California Department of Fair Employment and Housing. Normally, no copies of these reports are sent to Caltrans. The law also requires contractors to send notices of their status as EEO employers to the labor unions or other worker organizations with which they have agreements.

8-205
Onsite Interviews

8-205 Onsite Interviews

District labor compliance officers or project personnel conduct onsite interviews with employees of the contractor and subcontractors. Conduct employee interviews for labor compliance and EEO at the rate of at least two per month per contract until all the contractor's employees have been interviewed at least once during the life of the contract. Record interviews on Form CEM-2504, "Employee Interview: Labor Compliance/EEO," or Form CEM-2504 (Spanish), "Entrevista de Empleado: Labor Compliance/EEO," if applicable. EEO interviews are done in conjunction with the labor compliance interviews as a means of verifying that the contractors and subcontractors are in compliance with the EEO and the labor nondiscrimination contract provisions as mandated by state and federal statutes and regulations.

When an employee's responses to the EEO questions in Form CEM-2504 indicate possible irregularities, the district labor compliance officer must forward a copy of that interview to the Division of Construction labor compliance unit for further action.

8-206
Federal-Aid Project Equal Employment Opportunity Posters

8-206 Federal-Aid Project Equal Employment Opportunity Posters

Check to see that the contractor has posted the company's EEO policy and the "Equal Employment is the Law" poster at each construction location as required by the contract specifications. The resident engineer must ensure the EEO policy and poster is posted in a prominent location for all employees on the project to review for the duration of the contract.

The district labor compliance officer verifies that these posters are displayed at offsite locations during source document reviews. If the contractor is found to be in noncompliance, the district labor compliance officer provides additional posters to effect compliance. The district labor compliance officer will then write a memo to the resident engineer for inclusion in the project file, advising the resident engineer of the contractor's compliance status.

The "Equal Employment Opportunity is the Law" poster must also be posted in the resident engineer's office.

8-207
Employee Complaints—Discrimination Complaint Processing

8-207 Employee Complaints—Discrimination Complaint Processing

Any complaint that implicates the contractor's employment practice is generally a Title 7 EEO complaint. EEO complaints may originate from contractor's employees either because of a direct complaint or as a result of a contractor employee interview. The resident engineer documents all EEO complaints in a diary, a letter to the project files, or on Form CEM-2504, "Employee Interview: Labor Compliance/EEO." The public, contractors, suppliers, vendors, or employees may present these complaints. Complaints regarding EEO are directed to the resident engineer, who files the original complaint in the project records and directs a copy of the complaint to the district labor compliance officer.

The district labor compliance officer sends the complainant a letter notifying them of their rights under the Civil Rights Act of 1964. The letter also provides a complete list of resolution options. Those options include:

- Use of the employer's internal EEO program for investigation and resolution.
- Filing a complaint directly with the California Department of Fair Employment and Housing (DFEH).

- Filing a complaint directly with the United States Equal Employment Opportunity Commission (EEOC).

A copy of the following items should be included in the letter:

- Form DFEH-159 "Guide for Complainants and Respondents," a DFEH brochure, available on the internet:

  http://www.dfeh.ca.gov

- Instructions on "Filing a Charge of Employment Discrimination," an EEOC informational guide is available on the internet:

  http://www.eeoc.gov/charge/overview_charge_filing.html

For a sample letter to the complainant, see Example 8-2.1 at the end of this section.

In addition, the district labor compliance officer sends a notification letter to the prime contractor that an employee has alleged discrimination and that the employee was given notice of available recourse. The labor compliance officer shall not divulge the employee's name. The letter reminds the contractor of its obligation to conduct an investigation pursuant to contract requirements. For a sample letter to the contractor, see Example 8-2.2 at the end of this section.

The district labor compliance officer refers the issue to the Division of Construction. The referral includes copies of the letter to the complainant, the letter to the contractor, and the employee interview form. Further district construction actions should be taken only on the advice and guidance of the Division of Construction.

8-208 Equal Opportunity Complaints and Contract Administration

8-208 EEO Complaints and Contract Administration

Any complaint implicating that the practices of Caltrans have the effect of discrimination is considered a Title 6 complaint. Title 6 complaints may originate from a direct complaint made by the public or by a contractor. Title 6 complaints that occur during construction should be referred to the district labor compliance officer. The district labor compliance officer refers the issue to the Division of Construction. The Division of Construction ensures that proper evaluation or investigation is conducted and refers the complaint to Civil Rights. Civil Rights, Discrimination Complaint Investigations Unit conducts investigations of Title 6 complaints.

During construction, amendments to the contract may occur by contract change orders. Some contract change orders may invoke Title 6 complaints or violate the principles of environmental justice. Environmental justice is the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. Examples include new traffic detours, changes in the length or limits of the project, mitigation measure changes, materials changes, changes in contract-mandated material borrow or disposal sites, or setup of portable hot asphalt concrete or concrete plants.

The resident engineer administers significant contract changes and takes affirmative measures to ensure nondiscrimination and preservation of environmental justice. Since most Title 6 mitigation measures are associated with complex projects in urban areas, the resident engineer may conduct community meetings, prepare press

releases, or hire public relations consultants to keep communities informed and advised on project scope and schedule. The design project engineer and the project manager evaluate the impacts of any significant change including compliance with Title 6 requirements. The project manager coordinates functional support units to mitigate Title 6 compliance deficiencies that result from significant contract amendments. The design project engineer should concur with significant contract amendments that have a Title 6 impact. The Division of Construction Program Area Administrator analyzes the facts and findings and suggests corrective actions to remedy Title 6 violations.

8-209 Contracts Containing "Federal Requirements Training Special Provision"

8-209 Contracts Containing "Federal Requirements Training Special Provision"

The training special provision is used on federal-aid projects when it is determined that the project is of sufficient size and duration to support full training periods. The intent of the training special provision is to enhance contractors' EEO programs through on-the-job training. Training and upgrading of minorities and women is the primary objective of the training special provision. However, the contractor may not use the training program to discriminate against any applicants for training. The TSP states the number of apprentices or trainees the contractor is required to use on the project and provides guidance on actions the contractor must take to meet the training provision. In addition, the special provision provides for reimbursement to the contractor at 80 cents per hour for each apprentice or trainee used on the project.

Before the work involving the apprentices or trainees begins, the resident engineer requests that the contractor submit training plan with the number of apprentices or trainees in each classification, the training program to be used, and the start date for training in each classification. Apprentices and trainees must be employed under programs currently approved by the United States Department of Labor, Bureau of Apprenticeship Training (DOL). Contractors must submit to the resident engineer evidence of apprentice or trainee registration in an approved training program. Contractors may use trainees only when the trainee wage schedule for the specific classification is listed in the federal wage determination applicable to the contract.

Training programs not currently approved by DOL may be accepted as long as the program meets the EEO requirements of the federal contract special provisions. Contractors must submit a request for approval for these programs from the resident engineer before their use on the project. The resident engineer must submit the contractor's request to the district labor compliance officer who must forward the request to the Division of Construction for verification of conformance with United States Code, Chapter 1, Part 230, Subpart A, Section 230.111 (d). If the training program meets the requirements, the Division of Construction will submit the program to the Federal Highway Administration with a recommendation for approval. Upon approval from the Federal Highway Administration, the Division of Construction will notify the district labor compliance officer and resident engineer. The resident engineer will notify the contractor of approval of the training program.

The resident engineer must write a contract change order, as specified in the special provisions, to provide the appropriate compensation for the apprentices or trainees. The total amount of this contract change order should reflect the contractor's plan for use of apprentices or trainees. No markup will be applied to the specified hourly rate.

During construction progress, the resident engineer requires periodic reports from the contractor demonstrating the contractor's performance with the requirements of the TSP. Reporting periods should be tailored to the duration of the project. For example, a year-long project should require at least quarterly reports. The resident engineer reviews the reports for conformance with the contractor's training plan prior to approving reimbursement for training hours. The resident engineer must not reimburse the contractor unless the reports have been provided. The resident engineer may reimburse the contractor for training in excess of the required number of apprentices or trainees as long as evidence of registration in a DOL program is provided. When an apprentice or trainee quits the project, the contractor must provide the resident engineer with the reason. A contractor will have fulfilled the TSP requirements if applicable training has been provided to the specified number of apprentices or trainees.

8-210 Contractor's Annual Equal Employment Opportunity Report—Form FHWA-1391, Federal-Aid Highway Construction Contractors Annual EEO Report

8-210 Contractor's Annual Equal Employment Opportunity Report FHWA Form–1391

The United States Code of Federal Regulations, Title 23, Section 230.121 requires all prime contractors and subcontractors, regardless of tier, to submit the FHWA Form–1391. The form shows the composition of the contractor's workforce by race and gender for each job category. The requirement is applicable to all prime contractors and subcontractors, regardless of tier, who have Federal-aid contracts that exceed $10,000 and that worked all or any part of the last full week of July. Contractors are subject to a progress pay deduction for failure to submit a satisfactory form. The applicable procedures and amounts are listed in Sections 8-211, "Deducting Payment for Failure to Submit Reports," of the *Construction Manual*.

8-211 Deducting Payment for Failure to Submit Reports

8-211 Deducting Payment for Failure to Submit Reports

The authority for initiating a deduction is contained in the special provisions, Section 14, "Federal Requirements for Federal-Aid Construction Projects," of federal-aid construction contracts. EEO deductions should be made in those situations when the contractor or subcontractor fails to submit the required training plans, fails to post the necessary EEO information, or when the contractor or subcontractor fails to provide the FHWA Form–1391, "Federal-Aid Highway Construction Contractors Annual EEO Report."

Contractors found in noncompliance are to be advised, in writing, of the specific deficiencies prior to making a deduction. Refer to Section 5-103F (1c) Deductions of the *Construction Manual* for instructions on taking the deduction.

Example 8-2.1 Sample Letter to the Complainant (Employee)

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94273-0001
PHONE (916) 654-2157
FAX (916) 654-6345
TTY 711

Flex your power!
Be energy efficient!

[The telephone and fax numbers must be those of the signature block regardless of who signs the letter. REMOVE THIS NOTE BEFORE PREPARING THE LETTER.]

[Date]

[Employee's Name]
[Address]
[City, State, Zip]

Re: [Caltrans Contract Number, Federal ID Number, and Project Description]

Dear [Employee's Name]:

This letter confirms our discussion on [Date] where you informed us that you believe you have experienced discrimination and allege [Company Name] discriminated against you based on (race, color, national origin, sex, age or disability).

The district labor compliance officer reviewed the allegations and notified [Company Name] in writing, that you have been provided a complete list of resolution options, including the use of the employer's internal equal employment opportunity program for investigation and resolution.

The California Department of Transportation (Department) monitors discrimination complaints against sub-recipients of state or federal financial assistance. However, the Department has no statutory or regulatory authority to conduct an investigation of alleged discrimination complaints between the contractor and the contractor's employee. The Department has no authority to gather evidence, subpoena documents, depose witnesses, or file equal employment opportunity cases on behalf of a contractor's employee. The Department ensures that the contractor conducts an equal employment opportunity investigation, and documents oversight activities in the project records.

You are advised that filing a complaint with the California Department of Fair Employment and Housing or the United States Equal Employment Opportunity Commission must be filed within specific statutory deadlines from the date of the alleged discriminatory act.

If you have questions relating to the information referenced above, please contact [Labor Compliance Officer's Name] at [Labor Compliance Officer's Telephone Number].

Sincerely,

[District Labor Compliance Officer's Name]
District Labor Compliance Officer
District [Number] Construction

Enclosures Form DFEH-159, "Guide for Complainants and Respondents"
"Filing a Charge of Employment Discrimination," available online at:
http://www.eeoc.gov/charge/overview_charge_filing.html

c: Division of Construction

Example 8-2.2 Sample Letter to the Contractor

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94273-0001
PHONE (916) 654-2157
FAX (916) 654-6345
TTY 711

Flex your power!
Be energy efficient!

[The telephone and fax numbers must be those of the signature block regardless of who signs the letter. REMOVE THIS NOTE BEFORE PREPARING THE LETTER.]

[Date]

[Contractor's Name]
[Address]
[City, State, Zip]

Re: [Caltrans Contract Number, Federal ID Number, and Project Description]

Dear [Contractor's Name]:

The California Department of Transportation (Department) has been notified that a current or former employee of [Company Name] filed *(or)* plans to file a formal complaint of discrimination. The current or former employee is alleging discrimination based on (race, color, national origin, sex, age, or disability).

The district labor compliance officer reviewed the allegations and provided the complainant a complete list of resolution options, including the use of the employer's internal equal employment opportunity program for investigation and resolution.

The Department complies with nondiscrimination laws and regulations, including Title 7 of the Civil Rights Act of 1964. Title 7 of the Civil Rights Act of 1964 states, "It shall be an unlawful employment practice for an employer: (1) to fail or refuse to hire or to discharge any individual or otherwise to discriminate against any individual with respect to their compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, sex, or national origin or (2) to limit, segregate, or classify their employees or applicants for employment in any way which would deprive or tend to deprive any individual of employment opportunities or otherwise adversely affect their status as an employee, because of such individual's race, color, religion, sex, or national origin." The Department ensures that its activities or programs are nondiscriminatory.

No one may intimidate, threaten, coerce, or engage in other discriminatory conduct against anyone because he or she has either taken action or participated in an action to secure rights protected by the nondiscrimination statutes. Any individual alleging such harassment, retaliation, or intimidation may file a complaint with the California Department of Fair Employment and Housing or with the United States Equal Employment Opportunity Commission.

If you have any questions, relating to the information referenced above, please contact the Office of Civil Rights at (916) 324-1700.

Sincerely,

[District Labor Compliance Officer's Name]
District Labor Compliance Officer
District [Number] Construction

c: Division of Construction
Office of Civil Rights
Subcontractors (if applicable)

A

A

Abbreviations 3-1.1
AC See Asphalt Concrete
Acceptance of contract 3-7.12
Acceptance of materials 6-2.1
Acceptance records 6-1.4
Acceptance tests 6-1.2
Access to the work 3-5.3
Additives, chemical, water 4-17.1
Adhesive 4-95.1
Adjustment in compensation 3-9.5, 5-3.6
Adjustment of overhead costs 3-9.15
Administration 1-0.1
Aerially Deposited Lead 7-1.20
Aggregate bases 4-26.1
Aggregate subbases 4-25.1
Air entrainment 4-90.11
Air pollution control 3-7.2, 7-1.13
Alternative equipment 3-5.4
Apprentices 8-1.7
Approach slabs 4-51.1
Arbitration 5-4.25
Asbestos sheet packing 6-1.25, 6-2.8
Asphalt
    Membrane waterproofing 4-54.1
    Mopping 6-1.26
    Plank 6-1.25
Asphalt binder 4-39.1
Asphalt concrete 4-39.1, 6-1.16
Asphalt rubber latex joint filler 6-2.6
Asphalt treated permeable base 4-29.2, 6-1.21
Asphaltic emulsions 4-94.1
Asphalts 4-92.1
Audits 5-4.23
Authority of engineer 3-5.1
Automotive 1-4.2
Award and execution of contract 3-3.1

B

B

Backflow preventers, irrigation systems 4-20.15
Bars, raised (precast) 6-1.27
Barbed wire 4-80.1, 6-1.25, 6-2.8
Barricades 4-12.2

Barriers 4-83.1
Barriers, railings and 4-83.1
Basement soil 6-1.23
Bases
    Aggregate 4-26.1
    Asphalt treated permeable 4-29.2, 6-1.21
    Cement treated 4-27.1, 6-1.20
    Cement treated permeable 4-29.2, 6-1.21
    Lean concrete 4-28.1, 6-1.18
Bearing devices, structures 4-51.3
Beginning of Work 3-8.7
Bid Openings 3-2.1
Bids 3-2.1
Bitumen ratio 4-37.6
Bituminous adhesive, pavement markers 4-85.1
Bituminous seals 4-39.1, 6-1.24
Blasting 4-19.2
Board of Review 5-4.15
Board of Review Report 5-4.29
Bolted connections 4-56.2
Borrow
    Excavation 4-19.13
    Imported 4-19.9
Brick 6-1.26, 6-2.8
Bridge removal 4-15.2
Bridge deck finishing 4-42.2
Bridge railing 4-83.1
Budgeting 1-3.3
Buy America requirements 3-6.2

C

C

Cable railing 4-83.4
Calibration program for equipment 6-3.1
California Manual on Uniform Test Method 1-3.4, 2-2.1
California test methods 6-3.3
California test number:
    109 ..... 6-3.6, 3-9.3
    110 ..... 6-3.3
    115 ..... 6-3.2
    121 ..... 6-3.6
    202 ..... 6-3.2
    223 ..... 4-90.10
    226 ..... 4-20.3
    231 ..... 6-3.6

California test number (*continued*):
312 ..... 6-3.3, 6-1.20
338 ..... 4-27.2, 6-3.3, 6-1.20
339 ..... 4-37.3
375 ..... 6-1.17
504 ..... 6-3.2, 4-90.13
518 ..... 6-3.4, 4-72.3
523 ..... 4-40.4
526 ..... 6-3.3, 4-42.2, 4-40.8
529 ..... 4-90.14
533 ..... 6-3.4
540 ..... 6-3.4
541 ..... 4-41.2
Carpobrotus cuttings 4-20.8
Cash expenditure voucher 1-5.2
Cast-in-place
Concrete pipe 4-63.1
Concrete 4-50.1
Cement mortar 4-65.2
Cement treated
Permeable base 4-29.2
Permeable material 4-68.2, 4-29.1
Cement treated bases 4-27.1
Certification of environmental compliance 7-1.22
Certification of samplers and testers 6-1.3
Chain link fence 4-80.1
Chain link railing 4-83.4
Changeable message signs, portable 4-12.3
Channelizers 4-12.2
Character of workers 3-5.6
Claims 5-4.3
Payments 5-4.20
Resolution process 5-4.13
Cleaning up, final 3-4.1
Clearance and Bridge Permit Rating Changes 3-7.7
Clearing and grubbing 4-16.1
Coating tests 6-1.2
Compliance, Certificates of 3-6.2
Compressive strength samples & tests 6-3.4
Concrete
Compressive strength 6-3.4
Curbs and sidewalks 4-73.1
Pavement, portland cement 4-40.1
Railing 4-83.4

Concrete (*continued*):
Removal 4-15.2
Retaining walls 4-51.1, 6-1.11
Structures 4-51.1
Concrete barriers 4-83.4
Concrete structures 4-51.1
Cones, traffic 4-12.3
Construction area signs 4-12.2
Construction area traffic control devices 4-12.1
Contract acceptance ..... See Acceptance of contract
Contract change order 5-3.1
Contract change order memorandum 5-3.17
Contract change order category code 5-3.18
Contract change order requirements for FHWA 5-3.26
Control of
Materials 3-6.1
Work 3-5.1
Controlling operation 3-8.10, 3-8.11
Copeland Act 8-1.20
Corrugated metal pipe 4-66.1
Cost reduction incentive 3-5.8
COZEEP 2-2.11
Critical path method 3-8.10
CTB 4-27.1
Culverts, concrete 4-62.1
Curb ramps (wheelchair ramps) 4-73.1
Curbs and sidewalks 4-73.1
Curing compound 6-2.9

D

D

Daily extra work 5-1.25
Damage, responsibility for 3-7.4
Damages, liquidated 3-8.26
Dampproofing 4-54.1
Davis Bacon Act 8-1.21
DBE 3-8.1, 8-3.1
Decreased quantities, increased and 3-4.2
Defective materials 3-6.2
Delays, right of way 3-8.33
Delineation 2-2.9
Delineators, markers 4-82.1
Details, shop 4-56.1
Detours 3-4.5
Differing site conditions 3-5.4

Disadvantaged business enterprise(s) (DBE) 8-3.1
Disposal of material outside the highway right-of-way 3-7.10
Disposal, Staging and Borrow Sites (DSB) 7-1.2
Dispute Review Board (DRB) 5-4.8
Disputes 5-4.1
Drain hole 4-86.7
Drainage inlets 4-51.1
Drainage pumping equipment 4-74.1
Drains
    horizontal 4-68.1
    overside 4-69.1
    subsurface 4-68.1
Dry sieve analysis 6-3.3
Dump truck rental 3-9.11
Dust control 4-10.1
Dust palliative 4-18.1
DVBE 8-3.1

E

Earthwork 4-19.1
    slipouts and slides 4-19.7
    slope rounding 4-19.8
    slopes, embankment 4-19.12
    local borrow 4-19.9
Edge drains 4-68.1
Electrical 4-86.1
Eliminated items 3-4.3
Emergency contract administration 5-5.1
Employee complaints 8-2.2
Emulsions, asphaltic 4-94.1
Engineering fabrics 4-88.1
Entrained air 4-90.11
Environmental Commitments Record 7-1.1
Environmental Compliance Certification 7-1.22
Environmental Hazards and Safety Procedures 7-1.16
Environmental Quality Act 7-1.2
Epoxy 4-95.1
Equal employment opportunity 8-2.1
Equipment and Plant 3-5.4
Equipment rental rates 3-9.9
Erosion control 4-20.1
Erosion control and highway planting 4-20.1
Excavation 4-19.1
Execution of contract 3-3.1

Execution of contract, award and 3-3.1
Expansion joint armor 4-51.3
Extra Work 5-3.5

F

F

Fabrication, out of state 3-6.3
Facilities, existing highway 4-15.1
Fair Labor Standards Act 3-7.1
False Information Act 8-1.21
Falsework 3-7.2, 4-51.1
    Lighting 4-86.9
Federal-Aid Contracts on the National Highway System 3-8.37
Fences 4-80.1
Field
    Inspection 6-3.1
    Laboratory 6-3.1
    Office 1-4.1
    Testing Equipment 6-3.1
Filter fabric 4-88.1
Final cleaning up 3-4.1
Final inspection 3-5.6
Finishing bridge decks 4-42.2
Finishing roadway 4-22.1
Flagging 4-12.1
Flashing arrow signs 4-12.2
Flashing beacons, portable 4-12.2
Fog seal coat 4-39.9
Force account payment 3-9.6, 5-3.1
Foreign materials 3-6.2
Form
    CEM-0101, Resident Engineer's Report of Assignment 5-1.1
    CEM-0501, Relief from Maintenance 5-1.2
    CEM-0601, Construction Safety Report 5-1.2
    CEM-0602, Project Safety Program Statement 5-1.2
    CEM-0603, Major Construction Incident Notification 5-1.2
    CEM-1101, Documents Bond of
        State Highway Oversight Projects 5-1.2
    CEM-1201, Subcontracting Request 5-1.2
    CEM-1202, Contractor Action Request—Change of
        Name/Address, Assignment of Contract Monies 5-1.2
    CEM-1203, Contractor Action Request-Assignment of Contract Performance .. 5-1.2,
    CEM-2001, National Pollution Discharge Elimination System
        Annual Certification 5-1.3
    CEM-2002, Notification of Construction (NOC) 5-1.3
    CEM-2003, Notification of Completion of Construction (NCC) 5-1.3

Form *(Continued)*:

CEM-2004, Notification of Construction (Desert Areas) 5-1.3
CEM-2101, COZEEP Daily Report 5-1.3
CEM-2102, COZEEP/MAZEEP Task Order 5-1.3
CEM-2103, COZEEP/MAZEEP Cancellation Form 5-1.3
CEM-2401, Substitution Report for Disadvantaged Business Enterprise/Disabled Veteran Business Enterprise 5-1.4
CEM-2402(F), Final Report - Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors 5-1.4
CEM-2403(F), Disadvantaged Business Enterprises (DBE) Certification Status Change 5-1.4
CEM-2404(F), Monthly DBE Trucking Verification 5-1.4
CEM-2501, Fringe Benefit Statement 5-1.4
CEM-2502, Contractor/Subcontractor Payroll 5-1.4
CEM-2503, Statement of Compliance 5-1.4
CEM-2504, Employee Interview: Labor Compliance/EEO 5-1.4
CEM-2504, (Spanish), Entrevista de Empleado: Labor Compliance/EEO 5-1.5
CEM-2505, Owner - Operator Listing Statement of Compliance 5-1.5
CEM-2506, Labor Compliance – Wage Violation 5-1.5
CEM-2507, Labor Violation: Case Summary 5-1.5
CEM-2508, Contractor's Payroll Source Document Review 5-1.5
CEM-2509, Checklist – Source Document Review 5-1.5
CEM-2510, Truck Owner-Operator Certification of Ownership 5-1.5
CEM-2601, Construction Progress Chart 5-1.5
CEM-2701, Weekly Statement of Working Days 5-1.5
CEM-2702, Overrun in Contract Time 5-1.5
CEM-3101, Notice of Materials to be Used 5-1.6
CEM-3501, Hot Mix Asphalt Production Report 5-1.6
CEM-3502, Hot Mix Asphalt Placement Report 5-1.6
CEM-3511, Contractor Job Mix Formula Proposal 5-1.6
CEM-3512, Contractor Hot Mix Asphalt Design Data 5-1.6
CEM-3513, Caltrans Hot Mix Asphalt Verification 5-1.6
CEM-3701, Test Result Summary 5-1.6
CEM-3702, Relative Compaction Summary 5-1.6
CEM-3703, Caltrans Production Start-Up Evaluation 5-1.6
CEM-4101, Materials Release Summary 5-1.7
CEM-4102, Material Inspected and Released on Job 5-1.7
CEM-4202, Material Plant Safety Checklist 5-1.7
CEM-4204, California Test 109 Sticker 5-1.7
CEM-4401, Solid Waste Disposal and Recycling Report 5-1.7
CEM-4501, Resident Engineer's Daily Report/Assistant Resident Engineer's Daily Report 5-1.7
CEM-4601, Assistant Resident Engineer's Daily Report 5-1.7

Forms *(Continued):*
CEM-4701, Drainage System Summary 5-1.7
CEM-4801, Quantity Calculations 5-1.8
CEM-4900, Contract Change Order 5-1.8
CEM-4901, Contract Change Order Input 5-1.8
CEM-4902, Extra Work Bill (Short) 5-1.8
CEM 4902A, Extra Work Bill - Title Page 5-1.8
CEM-4902B, Extra Work Bill - Labor Charges 5-1.8
CEM-4902C, Extra Work Bill - Equipment Charges 5-1.9
CEM-4902D, Extra Work Bill - Material Charges 5-1.9
CEM-4903, Contract Change Order Memorandum 5-1.9
CEM-5101, Request for Payment for Materials on Hand 5-1.9
CEM-6002, Contract Administration System (CAS)—
Report Requests 5-1.9
CEM-6003, Progress Pay - Estimate Project Initiation
or Update 5-1.9
CEM-6004, Contract Transactions Input 5-1.10
CEM-6101, Project Record - Estimate Request 5-1.10
CEM-6201, Notice of Potential Claim 5-1.10
CEM-6201A, Initial Notice of Potential Claim 5-1.10
CEM-6201B, Supplemental Notice of Potential Claim 5-1.10
CEM-6201C, Full and Final Documentation
of Potential Claim 5-1.10
CEM-6202, Disputes Review Board (DRB) Establishment 5-1.10
CEM-6203, Disputes Review Board (DRB) Update Report 5-1.10
CEM-6204, Disputes Review Board (DRB) Issue Report 5-1.10
CEM-6205, Disputes Review Board (DRB)
Completion Report 5-1.11
CEM-6301, Contract Acceptance 5-1.11
CEM-6302, Final Materials Certification 5-1.11
CEM-9001, Construction Manual Proposed Change 5-1.11
Materials Engineering and Testing Services Forms
TL-0015, Quality Assurance-Noncomformance Report 5-1.11
TL-0016, Quality Assurance-Nonconformance Resolution 5-1.11
TL-0028, Notice of Materials to be Inspected at the Jobsite 5-1.11
TL-0029, Report of Inspection of Material 5-1.11
TL-0038, Inspection Request Form 5-1.12
TL-0101, Sample Identification Card 5-1.12
TL-0502, Field Sample of Portland Cement Concrete
Sample Card 5-1.12
MR-0518, Job Cement Samples Record 5-1.12
TL-0608, Notice of Materials to be Furnished 5-1.12
TL-0624, Inspection Release Tag 5-1.12
TL-0625, Material Suitability Tag 5-1.12
TL-0649, Inspector's Report of Material on Hand 5-1.12

TL-3096, Pavement Core Record 5-1.12
TL-6013, Materials Suitability Documentation Report 5-1.12
TL-6014, Materials Suitability Report 5-1.13
TL-6037, Fabrication Progress Report 5-1.13
Other State Forms
DAS-1, Apprentice Agreement 5-1.13
DPD-3013, Request for Construction Staking 5-1.13
LA-16, Product, Material, or Method Report 5-1.13
LA-17, Report of Chemical Spray Operations 5-1.13
Traffic Operations Forms
TR-0019, Notice of Change in Clearance or Bridge Weight Rating 5-1.14
TR-0020, Notice of Change in Vertical or Horizontal Clearance 5-1.14
TR-0029, Notice of Change in Clearance or Bridge Weight Rating 5-1.14
Federal Forms
FHWA-1022, United States Department of Transportation Notice 5-1.14
FHWA-1391 Federal-Aid Highway Construction Contractors Annual EEO Report 5-1.14
DOL SF-308 Request for Wage Determination and Response to Request 5-1.14
Equal Employment Opportunity is the Law Poster 5-1.14
FHWA-1495, Wage Rate Information Federal-Aid Highway Project 5-1.15
Forms used for contract administration 5-1.1
Full Oversight Projects 5-0.9,5-3.26,5-4.12
Funds/Funding 5-2.1, 9-1.1

G

Geo-synthetics 6-1.26
Glass beads 4-84.1
Grading plane 3-5.3
Grates, frames and miscellaneous metal 4-75.1
Groove and grind pavement 4-42.1
Guard railing, metal beam 4-83.1
Guide posts 6-1.2

H

Handrailing 4-83.4
Hazardous Spills 7-1.20
Hazardous Waste 7-1.16
Hearing Process for Substitition 3-8.4
Highway facilities, existing 4-15.1
Highway planting 4-20.1

Hook details 4-52.1
Horizontal drains 4-68.1
Hydraulic jacks 6-3.3
Hydroseeding 4-20.2

I

I

Imported borrow 4-19.9, 6-1.23
Increased and decreased quantities 3-4.2
Indemnification and insurance 3-7.8
Independent assurance sampling and testing 6-1.3
Inspection, access 3-5.3
Interviews, onsite 8-2.2
Items
    Eliminated 3-4.3
    Final pay 3-9.6

J

J

Jacking
    Corrugated steel pipe 4-66.2
    Pavement 4-41.1
    Reinforced concrete pipe 4-65.2
Job categories, alphabetical list of 5-1.32
Job categories, numerical list of 5-1.30
Joint filler expansion 6-1.26
Joint sealing compounds 6-1.26, 6-2.6

L

L

Labor surcharge 3-9.8
Labor Code 8-1.1, 3-7.1
Labor compliance 8-1.1
Laws, Regulations and Specifications 8-2.1
Laws to be observed 3-7.1
Lean concrete base 4-28.1
Legal relations and responsibility 3-7.1
Licensing laws, contractor 3-7.1
Lime stabilization 4-24.1
Lines and grades 3-5.2
Liquid asphalts 4-93.1, 6-1.4
Liquidated Damages 3-8.24
Load limitations 3-7.3
Local
    Funding 9-1.1
    Roads 3-4.5
Local borrow 4-19.9

Local material 3-6.4
Log of test borings 3-5.4

M

Maintenance and responsibility, relief from 3-7.11
Maintenance Within Construction Limits 3-7.6
    Manholes 4-70.1
Management Review Committee 3-5.6
Manual on Uniform Traffic Control Devices ..... (See California)
Markers
    and Delineators 4-82.1
    Object 4-82.1
    Pavement 4-85.1
Median barriers 4-83.3
Mesh-reinforcing 6-1.27
Metal beam guard railing 4-83.1
Metal railing 4-83.2
Methods of Payment 5-3.5
Mineral admixtures 4-90.14
Minor B projects 3-2.1
Minor concrete 4-90.5
Minor structures 4-51.2
Miscellaneous
    Iron and steel 4-75.1
    Metal 4-75.1
Miscellaneous facilities 4-70.1
Mix design 4-90.7
Mobilization 4-11.1
Monuments 4-81.1

N

Negative Estimates 3-9.24
Night work 2-2.8, 7-1.8
Noise Control 7-1.11
Non-highway facilities, utility 3-8.36
Notices, stop 3-9.15
Nuclear Gauges 1-4.2, 6-3.6

O

Object markers 4-82.1
Obliterating roads and detours 4-15.1
Office Engineer, Office of 3-3.1
Operation, controlling 3-8.12, 5-0.5

Order of work 3-5.2, 3-7.5
Overhead claims 5-4.21
Overhead costs, adjustment of 3-8.8, 3-9.15, 5-3.6, 5-3.14
Overhead sign structures 4-56.2
Overside drains 4-69.1
Oversight 9-2.1
Owner-operated equipment 3-9.11, 5-5.6, 8-1.11
Owner-operators 5-1.4, 8-1.10, 8-1.11, 8-1.14

P

P

Palliative, dust 4-18.1
Partial payments 3-9.15
Pavement
- Asphalt concrete 4-39.1
- Joints, longitudinal 4-39.9
- Joints, transverse 4-39.9
- Grind 4-42.1
- Groove 4-42.1
- Jacking 4-41.1
- Portland cement concrete 4-40.1
- Subsealing 4-41.1

Pavement markers 4-85.1
Pavement recesses 4-85.2
Pavement reinforcing fabric 4-88.1
Payment
- extra work 3-9.15
- Final 3-9.24
- Force account 3-9.6
- Measurement and 3-9.1
- Offset 3-9.25

Payroll records 8-1.5
PCC pavement (see also portland cement concrete)
- Joints, contact 4-40.8
- Joints, weakened plane 4-40.7
- Slip-form 4-40.2
- Thickness deficiency 4-40.10
- Tie bars for 4-40.3
- Water supply for 4-90.5
- Weakened plane joints 4-40.7

Penetration treatment 6-1.24
Perforated pipe 4-68.1
Permeable base
Asphalt treated 4-29.2
- Cement treated 4-29.2

Permits 7-1.13
Encroachment 3-7.9, 3-8.8, 3-8.34
List of potential permits 7-1.12
Pervious backfill material 4-19.11
Pesticides 4-20.6
Pigmented curing compound 6-1.10
Piling 4-49.1
Pipe
Alternative pipe and pipe arch culverts 4-62.1
Cast-in-place concrete 4-63.1
Corrugated metal 4-66.1
Corrugated metal, aluminum 4-66.1
Corrugated metal, steel 4-66.1
Plastic 4-64.1
Reinforced concrete 4-65.1
Structural metal plate 4-67.1
Plans
Intent of ..... 3-4.
Working drawings 3-5.1
Plant establishment work 4-20.12
Plant pumping equipment 4-74.1
Plant stakes, highway planting 4-20.10
Plants
Highway planting and erosion control 4-20.1
Watering 4-20.11
Plastic pipe 4-64.1, 4-20.1
Pollution control
Air 7-1.6
Stormwater 7-1.6
Water 7-1.6
Polysulfide 6-1.26
Polyurethane 6-1.26
Portable
Changeable message signs 4-12.3
Delineators 4-12.2
Portland cement concrete 4-90.1
Admixtures 4-90.3, 6-1.9
Compressive strength 6-3.4
Portland cement concrete pavement 4-40.1
Potential claim, notice of 5-4.2, 5-4.6, 5-4.14, 5-4.22
Precast raised traffic bars 6-2.8
Preconstruction Conference 5-0.3
Preliminary Construction Claim Findings 5-4.28
Preliminary tests 6-1.1, 5-1.19
Preparing planting areas 4-20.9

Preservation of property 3-7.8
Preservative treatment of lumber, timber and piling 4-58.1
Prestressing concrete 4-50.1
Prevailing wage 8-1.16
Priority tests 6-1.2
Procedure and protest 3-4.2
Profile index 4-42.2
Profilograph 6-3.3
Progress
    Calculating 3-9.23
    Of work 3-8.25
    Prosecution 3-8.1
    Schedule 3-5.2, 3-8.8, 3-8.34, 5-1.22
Progress pay estimate project initiation of update 3-8.7, 5-1.60, 5-1.70
Project certification 6-1.5
Project records 5-1.1
    Categories, alphabetical list of 5-1.36
    Categories, numerical list of 5-1.34
Property, preservation 3-7.8
Proposal requirements and conditions 3-2.1
Proposed final estimate 3-9.28
Prosecution and progress 3-8.1
Public access to project records 5-1.69
Public convenience 3-7.3
Public interest 3-6.6
Public relations 1-2.1
Pull boxes 4-86.7

Q R

Q

Quality Assurance Program 3-9.3, 6-1.3, 9-1.3

R

Railings (Type K), temporary 4-12.2, 4-83.1
Railings and barriers 4-83.1
Reinforced concrete pipe 4-65.1
Reinforcing bars 4-52.1
Reinforcing fabric 4-88.1
Relative compaction 6-3.6
Relief from maintenance and responsibility 3-7.11
Remote control valves 4-20.15
Removal of rejected and unauthorized work 3-5.3
Removal, bridge 4-15.2
Rental
    Dump truck 3-9.11

Equipment 3-9.9
Responsibility for damage 3-7.4
Retaining walls, concrete 4-51.1, 6-1.11
Retentions 3-9.22
Retroreflective pavement markers 4-85.1
Right-of-way delays 3-8.35
Rights in land and improvements 3-7.13
Roadside signs 4-56.1
Roadway excavation 4-19.1
Rock slope protection 4-72.1
Rock slope protection fabric 4-88.1
Root protectors, highway planting 4-20.5
Rubber 6-1.2

S

Safety and health provisions 2-1.1
Sample 6-1.1
Sampling & testing 6-1.1
Scale sheets 3-9.4
Scales 6-3.2
Scales and balances 6-3.2
Scope of work 3-4.1
Screens and sieves 6-3.2
Seal coats 4-37.1
Seed 4-20.2
Seed Sampling 4-20.5
Semifinal estimate 3-9.33
Shop details 4-56.1
Shoring 4-19.1
Shortage of materials 3-8.28
Shotcrete 4-53.1
Sidehill embankment 4-19.5
Sidewalks 4-73.1
Sieve analysis 6-3.2
Sign structures 4-56.1
Signals, lighting and electrical systems 4-86.1
Signs 4-56.1
Silos, asphalt concrete 4-39.8
Slides and slipouts 4-19.7
Slipouts and slides 4-19.7
Slope
Embankment 4-19.12
Paving 4-72.4
Protection 4-72.1

Rounding 4-19.8
Slotted pipe, edge drains 4-68.4
Slurry seal 4-37.5, 6-1.24
Surface Mining and Reclamation Act of 1975 (SMARA) 7-1.4
Soil, basement 6-1.23
Solid Waste Disposal & Recycling Report ..... 7-1..22
Sound control requirements 3-7.3
Source documents 3-9.2
Special forces 3-9.13
Special services 3-9.13
Speed zones 2-2.7
Stakes and marks 3-5.3
State Contract Act 1-1.5
State-furnished materials 3-6.1
State Right of Way, contractor's use 7-1.5
Stop notices 3-9.15
Straw, erosion control 4-20.2
Striping 4-84.1
Structural metal plate pipe, arches and pipe arches 4-67.1
Structural steel 4-51.1
Structure backfill 4-19.11, 6-1.25
Structure excavation 4-19.3
Structure excavation and backfill 4-19.3
Styrofoam filler 6-2.8
Subbases, aggregate 4-25.1, 6-1.22
Subcontracting 3-8.1
Subsealing pavement 4-41.1
Subsistence and travel allowance 3-9.8, 8-1.6
Substitution process 3-8.3
Substitution request-DBE/DVBE 8-3.7
Subsurface drains 4-68.1
Superintendence 3-5.2
Surcharge, labor 3-9.8
Surety
Work completed 3-8.30
Work not completed 3-8.31
Survey monuments 4-81.1
Suspension of work, temporary 3-8.9

T

T

Tack Coat 4-39.4,4-92.1
Tapered notch wedge 4-39.1,4-39.9
Temporary railing (Type K) 4-12.2
Temporary suspension of work 3-8.9

Termination of contract 3-8.36
Termination of control 3-8.29
Test borings, log of 3-5.4
Test/testing 6-3.1
Test cylinders 6-3.4
Thermoplastic traffic stripes and pavement markings 4-84.1
Thrie beam barrier 4-83.2
Tile 6-2.8
Timber piles 3-8.27
Timber structures 4-57.1
Time of completion 3-8.10
Title 6 and Title 7 ..... 8-2.1
Traffic cones 4-12.3
Traffic control devices, construction area 4-12.1
Training 1-3.1
Training Special Provision 8-2.4
Treated permeable bases 4-29.1
Trenches 4-19.5
Truck rental, dump 3-9.11

U

Underdrains 4-68.1
Unsuitable material
    Earthwork 4-19.6
    Removing 4-19.6
Use of materials found on the work 3-4.6
Use of pesticides 4-20.6
Utility and non-highway facilities 3-8.34
Utility relocation 3-8.34

V

Vehicle Code 3-7.1
Vehicle detectors 4-86.9
Violation Hearing 3-8.5

W

Wage, prevailing 8-1.16
Water 4-17.1
Water pollution control 7-1.6
Water pollution control plan 7-1.10
Water supply 4-17.1
Waterproofing 4-54.1, 6-1.27
Waterproofing, asphalt membrane 4-54.1

Waterstops, concrete structures 4-51.4
Weekly Statement of Working Days 3-8.10
Weep holes
    Concrete slope protection 4-72.4
    Concrete structures 4-51.4
Weigh sheets 4-20.3
Weights and measures 3-9.2
Weights and measures coordinator 3-9.5
Weight limitations 3-7.1
Welded steel pipe 4-70.1
Welded wire fabric 4-52.1, 6-2.8
Wheelchair ramps
    curb ramps, concrete 4-73.1
Windrows 4-39.9
Wire mesh, fences 4-80.1
Wire mesh reinforcing 6-1.27
Wiring 4-20.17
Working drawings 3-5.1

Z

Z

Zero balance 3-8.32
Zero tolerance 3-5.6