
CHAPTER 9: CONSTRUCTION PHASE PROCESS

- 9.1 Overview**
- 9.2 Construction Management**
- 9.3 Preventing Contractor Legal Claims**
- 9.4 Construction Schedule and Delays**
- 9.5 Testing and Inspections**
- 9.6 District Payments to Contractors**
- 9.7 Request for Reimbursement of Progress Payments**
- 9.8 Contract Change Orders**
- 9.9 Construction Contract Closeout**
- 9.10 Appropriation Expiration Dates**
- 9.11 Equipment Commissioning**
- 9.12 Post Occupancy Evaluation**

9.1 Overview

Construction management begins during the project design phase. This chapter covers the construction management process from bid award through DSA certification and post occupancy review. The construction management process involves applying effective management techniques to the construction of a project through completion, controlling time, cost, and quality. See Chapter 6 for more information on Construction Management.

For state funded projects the construction management budget is funded in the Construction phase and is not released until after bid award. If districts wish to have the construction manager participate earlier than just the oversight of the actual construction, they should budget additional funds in the Working Drawing phase of the project.

9.2 Construction Management

Construction management is the management of the construction of a project, as defined by the contract documents and described in the architectural plans (working drawings) and specifications, through the steps of construction:

- 1) Award of contract (Bid Award)
- 2) Pre-notice-to-proceed meetings and submittals
- 3) Notice to Proceed
- 4) Ongoing construction administration
- 5) Ongoing quality control, testing and inspection
- 6) Administration of contract changes
- 7) Dispute and claims negotiation and resolution
- 8) Construction close-out
- 9) Equipment commissioning and occupancy
- 10) Post-occupancy evaluations

The objectives of construction management are to:

- Complete the project in accordance with the contract documents
- Maintain the scope, budget, schedule and quality level

-
- Establish clear records, warranties, and instructions for the operation of the project
 - Prevent contractor delays, disputes and claims
 - Assure quality construction
 - Minimize contract changes and owner caused delays

A construction manager (CM) typically directs the construction management process to accomplish these objectives. The CM has the authority and responsibility to represent the district in dealings with the contractor. And the CM coordinates the Inspector of Record (IOR), architect, and special design or testing consultants during the construction phase.

9.2.1 Participants and Responsibilities of the Construction Team

Owner's representative — The project manager, construction manager, staff or consultant, has the authority and responsibility to represent the district in dealings with the contractor. This person also coordinates the direction of the inspector, architect, and special design or testing consultants during the construction phase.

District project/construction manager — This person should be experienced in current construction technology and procedures.

Architect or engineer — Produces the construction documents who along with their sub-consultants have design responsibilities during construction which include providing clarification, reviewing contractor submittals, drafting changes, reviewing the work, and providing other services to the extent of their contract.

Inspector of Record (IOR) — The IOR must be approved by DSA and is responsible for verifying contractor compliance with code and monitoring construction quality. There may be an additional IOR if some of the fabrication is done off site to certify the work performed off site.

Special testing consultants/Testing Lab — Tests various materials and systems during construction.

Educational program representative — A building committee or user department representative who represents the end users of the facility during construction keeps the users informed on the progress of the work and represents them if changes are made in the project. This person should understand the construction process and be able to

assist the construction manager in minimizing user generated change orders. Often this role is filled by a committee of end users. (Change orders are explained later in this chapter.)

Contractor's superintendent — The contractor's on-site manager represents the contractor to the district.

9.2.2 Bid Award

Although the construction process begins with bid award, contract documents written prior to bid must be in place to protect against all possible problems. Construction management includes determining why the low bidder was able to bid low and act accordingly. Frequently, the lowest bidder is aware of one or more of the following conditions:

- The contractor has access to cheaper materials or labor
- The contractor sees ways to claim extras based on errors or omissions in the contract documents
- The contractor expects to make claims based on district caused delays
- The contractor has means or methods that are faster and/or more efficient
- The contractor sees ways to reduce quality to cut costs

9.2.3 Construction Organizational Meeting and Submittals

Prior to the start of construction, the construction team should meet to clarify the reporting procedures. If “partnering” (see refer to section 9.3.1. for details), a formal agreement among members of the construction team to meet objectives of all parties involved, is to be used, all parties must concur with the formal agreement and establish specific roles for each participant. The contractor provides:

- The executed contract
- Performance and payment bonds at 100
- Insurance (unless owner provided)
- Proof of license, and/or substitutions at this time
- Any documents that provide the baseline for measuring progress and payment
- The “schedule of values” (a prorated calculation of construction costs)

-
- Construction schedule.

9.2.4 Notice to Proceed

The formal “notice-to-proceed” establishes the start date of construction and gives the contractor permission to commence work.

9.2.5 Ongoing Construction Administration

Construction administration by the owner’s representative, project manager and/or construction manager, includes interaction with:

- Contractors on meetings, submittals, clarifications, change orders, payments, schedule, inspections, records, contract close-out procedures and all other aspects of construction
- District representatives on progress and expenditure reports, change orders, code approval reviews, and decisions
- The architect and the IOR on their work

Aspects of construction administration such as ongoing quality control testing and inspections, contract change orders, disputes and claims, contract close-out procedures, equipment commissioning, and post-occupancy procedures are discussed in the remaining parts of this chapter.

9.3 Preventing Contractor Legal Claims

There are several ways to prevent legal claims by the contractor:

- The drawings and specifications should be understandable, complete and as error free as possible. However, a concise procedure should be clearly communicated to resolve any ambiguity in the documents including a clarification process and the order of precedence of the documents.
- The owner’s representative should maintain a good working relationship with the contractor. This includes regularly scheduled meetings, established lines of communication and decision, timely responses to contractor items, and fair negotiations. Regularly scheduled project meetings are the key to maintaining good working relationships. The inspector also should maintain a good working relationship with the contractor.
- The owner’s representative should carefully monitor the schedule, payments and inspection reports to assure that payments are coordinated with the work

performed and the schedule is maintained. The submittals, change orders and all other transactions should also be carefully monitored and logged.

- The owner’s representative should monitor the payment of sub-contractors to ensure the sub-contractors are receiving timely reimbursement for their work.
- There should be a mechanism for informal dispute resolution in addition to written procedures for resolving formal claims by the contractor. Industry best practices strongly encourage early resolution of potential disputes; consider addressing claims weekly rather than allowing the relationship and quality of work to worsen.
- All the appropriate bonds, insurance, termination clauses and other legal safeguard documents should be in place.

9.3.1 Mediation and Arbitration

Mediation and arbitration can be effective resolution methods for handling disputes prior to formal legal action. However, arbitration’s most significant disadvantage is that arbitrators tend to “split the difference.” If arbitration is used, the district should be certain that the general conditions of the contract outline the arbitration procedures in detail, including any rights to discovery and recovery of legal fees.

If a dispute escalates to a formal claim, the district must consult legal counsel experienced in construction litigation; and, on state-funded projects, the Chancellor’s Office must be notified if there is a possibility that the claim will exceed the construction contingency or delay the project.

For claims of \$375,000 or less, PCC § 20104 et seq. requires the contractor to submit its claims with sufficient supporting documentation. Subject to requesting additional substantiation, the district must respond to the claim within the time frame set forth in the code. If the district response is not satisfactory to the contractor, a “meet and confer” process is required before the contractor may submit a Gov. Code § 900 et seq. claim. If the meet and confer process does not resolve the claim, the contractor may file its GC claim and on denial of that claim can proceed to file a lawsuit on its claim.

Under PCC §20104.4, even after the lawsuit is filed, there is a mandatory mediation unless waived by the parties. Whether or not the mediation alternative is used, the lawsuit, per PCC §20104.4, will not proceed through the judicial system until after a judicial arbitration is conducted. Unlike arbitration usually provided for by contract or agreement by the parties, judicial arbitration arises by operation of law and is not

conclusive and binding. Instead, if a party is dissatisfied with the result of judicial arbitration, relief may be sought through a trial de novo by a court. If the right to a trial de novo is requested after judicial arbitration, PCC §20104.4(b)(3) provides that the filing party will pay the attorney fees of the other party arising from the trial de novo if the filing party does not obtain a more favorable judgment.

9.4 Construction Schedule and Delays

The construction contract should include the following conditions to reduce the potential for construction delays:

- The contractor should submit a construction schedule for the district to review and approve as a condition of the contractor's first payment
- The district should receive monthly updates of the construction schedule as a condition of progress payments
- The district, as owner, will own the "float" (extra time and associated costs) that may accrue during construction
- Acceptable delays and the number of non-compensatory days of delay (bad weather days) that will be allowed should be clearly defined
- Each change order should identify its impact on the construction schedule, thereby encouraging timely completion of the project
- The contractor should coordinate the construction schedule with the work completed and contractor payments

The construction schedule is critical to the project and may have a direct impact on construction costs under the following conditions:

- If the district delays the contractor, causing the contractor to spend extra time, then the contractor may claim additional costs
- If the contractor delays the district by not finishing on the agreed upon completion date, the district may claim additional costs in the form of liquidated or actual damages

PCC §7102 effectively prohibits enforcement of any contract clause limiting liability for delays to a time extension. Under §7102, if a delay is caused by the owner (district) and the delay is unreasonable under the circumstances involved and outside the contemplation of the parties at the time of contract formation, a "no damages for delay" clause will not be enforced to preclude the contractor's recovery of delay damages.

Although a “no damages for delay” clause will not be enforced, to limit the extent of potential delay damages, districts should consider including terms in the contract documents which define and limit the items of delay damages and the manner in which such damages are quantified.

Monitoring the schedule and responding promptly to critical path items are considered crucial to the prevention of delay claims. The progress of each subcontractor should be discussed at weekly meetings.

9.5 Testing and Inspections

All inspectors for school projects under the jurisdiction of DSA (K-12 and community colleges) must pass the DSA Project Inspector Examination to become certified; and, in accordance with Title 24 of the California Code of Regulations and the Field Act, community colleges are required to have a DSA approved inspector on major capital construction and Americans with Disability Act construction projects. The inspector’s job is to ensure contractor compliance with code requirements and complete quality work in accordance with the contract. See Chapter 6 for more information on state cost guidelines for testing and inspection.

DSA approves an inspector to work on a particular project based on the inspector’s experience. The DSA approved inspector is considered an agent of DSA and under the supervision of the DSA field inspector; however, the district may elect to have the inspector report to the construction manager on a daily basis.

Typical cost overruns for inspection occur when:

- Deferred DSA approvals take more time and inspection than expected
- The inspector works extra hours because of changes in construction schedules or construction or design problems
- The inspector incurs unexpected travel expenses going to fabrication sites away from sites or out-of-state
- Contract changes require extra DSA fees, approvals and inspections
- More than one inspector is required because of the nature of the construction

Districts can control inspection cost overruns by:

- Limiting design of items that will have deferred DSA approvals

-
- Charging the contractor for inspections exceeding those in a baseline schedule, and
 - Minimizing change orders

In addition to a project inspector, specialized testing and inspection may be required for concrete, welding, roofing or other applications. The extent of these tests should be explained in the specifications and included in the contract. The cost of testing may be reduced by bidding the lab testing and by including a testing schedule in both the contractor's and the lab's agreements.

9.6 District Payments to Contractors

At the beginning of the project, the contractor submits a construction schedule to the district; this schedule includes the estimated cost per trade and monthly cash flow needs of the contractor for the duration of the project. This schedule becomes the baseline for establishing the contractor's progress payments. As major phases or construction activities are accomplished, progress payments are made by the district.

Districts typically require a contractor to submit monthly reports and record documents as a condition of each progress payment. Prior to making each payment, the district should carefully evaluate each payment request by checking the amounts requested against the schedule of cost per trade and the construction schedule. These payments should accurately represent the percent completed for each trade. Monthly reports submitted by the contractor should identify the conditions and extent of payment for off-site materials, on-site equipment and materials not yet installed in the project. These monthly reports ideally would be used to generate the Quarterly Reports (refer to Appendix O for detail) that the district submits to the Chancellor's Office on state funded capital outlay projects.

9.6.1 Prompt Pay Act

The payment process prescribed by PCC § 20104.50 is referred to as the "prompt pay act." Under §20104.50, there is a 30-day period during which districts must make payment of a "proper" progress payment application. Failure to make payment within this 30-day period will subject the district to the legal rate of interest under the Code of Civil Procedure §685.010 (presently at 10% per annum) and liability for attorney fees incurred by the contractor to recover the "late" payments. PCC §20104.50 requires that a district return, within 7 days, any application for progress payments not deemed to be

“proper.” The return of an improper application must state in writing the reason(s) why the application is improper. If the return of an improper application occurs more than 7 days after receipt, the 30-day period to make payment is reduced by the number of days beyond 7 days in which an improper application is returned to the contractor.

To ensure payment by the contractor to subcontractors and suppliers, districts may require, as an express condition precedent to any disbursement of progress payment, the contractor’s delivery of Conditional Waivers and Releases conforming with Civil Code §8132 for itself and all subcontractors and suppliers receiving a portion of the pending application. In addition, to ensure that the prior payment has been properly disbursed, the contractor can be required to submit Unconditional Waivers and Releases covering the prior progress payment. Districts should consider the inclusion of a requirement that Certified Payrolls be submitted as a condition to disbursement of payment (see Lien Release Forms at <http://www.cslb.ca.gov/Resources/GuidesAndPublications/LienReleaseForms.pdf>).

The contract should specify any circumstances under which a district is entitled to retain withholdings from progress payments which would otherwise be due the contractor. Aside from withholdings for Stop Notices required by Civil Code 9450, districts may consider express contractual rights to withhold from progress payments back charges and other conforming work which has not been remedied.

After a district makes a progress payment on a state funded project, the district can use the payment documentation as a basis for submitting a claim for reimbursement to the Chancellor’s Office. In accordance with requirements of CGC, §13332.11, claims against a specific state appropriation can only be processed after the PWB and/or the DOF has taken action to approve that particular phase of the project.

Section 13332.11. (a) (1) Except as otherwise specified in paragraph (2), funds appropriated for capital outlay shall not be expended by any state agency, including, but not limited to, the University of California, the California State University, the California Community Colleges, and the Judicial Council, until the Department of Finance and the State Public Works Board have approved preliminary plans for the project to be funded from a capital outlay appropriation.

(2) Paragraph (1) shall not apply to any of the following:

(A) Amounts for acquisition of real property in fee, or any other lesser interest.

(B) Amounts for equipment or minor capital outlay projects.

(C) Amounts appropriated for preliminary plans, surveys, and studies.

(b) Notwithstanding subdivision (a), approvals by the State Public Works Board and the Department of Finance for the University of California and the California Community Colleges shall apply only to the allocation of state capital outlay funds appropriated by the Legislature, including land acquisition and equipment funds.

(c) Any appropriated amounts for working drawings or construction where the working drawings or construction have been started by any state agency prior to approval of the preliminary plans by the State Public Works Board shall be reverted to the fund from which the appropriation was made, as approved by the Department of Finance. A major project for which a capital outlay appropriation is made shall not be put out to bid until the working drawings have been approved by the Department of Finance. A substantial change shall not be made to the approved preliminary plans or approved working drawings without written approval by the Department of Finance. The Department of Finance shall approve any proposed construction bid alternates.

(d) The Department of Finance shall approve the use of funds from a capital outlay appropriation for the purchase of any significant unit of equipment.

(e) The State Public Works Board may augment a major project in an amount of up to 20 percent of the total of the capital outlay appropriations for the project, irrespective of whether any such appropriation has reverted. For projects authorized through multiple fund sources, including, but not limited to, general obligation bonds and lease-revenue bonds, to the extent otherwise permissible, the Department of Finance shall have full authority to determine which of the fund sources will bear all or part of an augmentation. The board shall defer all augmentations in excess of 20 percent of the amount appropriated for each capital outlay project until the Legislature makes additional funds available for the specific project.

(f) In addition to the powers provided by Section 15849.6, the State Public Works Board may further increase the additional amount in Section 15849.6 to include a reasonable construction reserve within the construction fund for any capital outlay project without augmenting the project. The amount of the construction reserve shall be within the 20 percent augmentation limitation. The board may use this amount to augment the project, when and if necessary, after the lease-revenue bonds are sold to ensure completion of the project.

(g) Augmentations in excess of 10 percent of the amount appropriated for each capital outlay project shall be reported to the Chairperson of the Joint Legislative Budget Committee, or his or her designee, 20 days prior to board approval, or not sooner than whatever lesser time the chairperson, or his or her designee, may in each instance determine.

(h) (1) The Department of Finance may change the administratively or legislatively approved scope for major capital outlay projects.

(2) If the Department of Finance changes the approved scope pursuant to paragraph (1), the department shall report the changes and associated cost implications to the Chairperson of the Joint Legislative Budget Committee, the chairpersons of the respective fiscal committees, and the legislative advisers of the State Public Works Board 20 days prior to the proposed board action to recognize the scope change.

(i) The State Public Works Board shall defer action with respect to approval of an acquisition project, when it is determined that the estimated cost of the total acquisition project, as approved by the Legislature is in excess of 20 percent of the amount appropriated, unless it is determined that a lesser portion of the property is sufficient to meet the objectives of the project approved by the Legislature, and the Chairperson of the Joint Legislative Budget Committee, or his or her designee, is provided a 20-day prior notification of the proposed reductions in the acquisition project, or whatever lesser period the chairperson, or his or her designee, may in each instance determine.

(j) The Department of Finance shall report to the Chairperson of the Joint Legislative Budget Committee, the chairpersons of the respective fiscal committees, and legislative advisers of the State Public Works Board 20 days prior to the proposed board approval of preliminary plans when it is determined that the estimated cost of the total capital outlay construction project is in excess of 20 percent of the amount recognized by the Legislature.

(k) Nothing in this section shall be construed to limit or control the Department of Transportation or the California Exposition and State Fair in the expenditure of all funds appropriated to the department for capital outlay purposes.

Approvals of each phase of each project are evidenced by signed DF14D "Requests to Proceed or Encumber Funds." The Chancellor's Office, Facilities Planning Unit completes the DF14D request in FUSION and notifies the district after DOF has approved the request. See Appendix P for more information on DF 14Ds.

The district must not proceed with any phase of the project until the DOF has approved that action with a signed DF14D. Districts proceeding with a project before receiving approval will be determined to be out of process, will forfeit further state funding and may be required to repay any state funds previously received for the project.

9.7 Request for Reimbursement of Progress Payments

Due to the phased nature of most capital outlay projects and the limited life of all state capital outlay appropriations, districts should request reimbursements timely so that all payments may be processed before the appropriations revert.

Beginning with appropriations in the 2007-08 Budget Act (Ch.171, Stats. 2007) and including all subsequent Budget Acts, all state Capital Outlay Program claim submittals shall be done using the FUSION database PROJECT Module only. See Section 9.10, Appropriation Expiration Dates.

9.7.1 Electronic Reimbursement Claims Process for State Funded Capital Outlay Projects

State bond funds are provided to community college districts using a Cost Reimbursement Claim procedure. Under this procedure, a district is required to submit electronically the following to the Chancellor's Office:

- A completed FUSION generated capital outlay claim form for each phase of each project being claimed. An expenditure recap sheet that provides the critical information contained on the contractor's invoice and the districts warrant that funded the payment. The recap sheet requires a description of the services purchased and identification of the individual payment made.
- Supporting documentation as needed to provide evidence of payments made to contractor. (If the description is for activities or items not normally part of the project referenced, the Chancellor's Office Staff will require the submission of the specific contractor invoices and district warrants that support the reimbursement claim form).

Reimbursement claims guidelines can be obtained through FUSION's Home Page — [eManual](#). The FUSION created claim can be prepared by staff, but final submittal is done by the district's Chief Business Officer (CBO). The CBO must be registered with the Chancellor's Office to receive authorization for reimbursement claim submission along with a four-digit password to submit claims electronically in FUSION. The capital

outlay reimbursement process requires separate claim forms for each phase of a project.

Reimbursement claims should not be submitted more frequently than monthly and for claim amounts less than \$5,000 unless a claim request is submitted as a final claim.

A project's anticipated progress payment schedule or prorated costs prepared by the contractor may indicate the need for the contractor to receive a "cash advance."

Seeking state funds to assist a district with financial hardship can now be requested under the Grant Financing Program on a case by case basis. Guidelines on Grant Financing Grant Claims can be obtained through FUSION e-Manual.

9.8 Contract Change Orders

Change order management is a critical aspect of any construction project. A change order is work that is added to, deleted from, or alters the original scope of work of a contract. The change order process should be addressed as comprehensively as possible in the contract documents especially as they concern Notices, Pricing, and Terms. In addition, the district is responsible for tracking change orders, including total cost, in the quarterly reports section of FUSION.

Notices: The contract documents should specify the manner, method and timing of contractor's notice of changes, and include provisions for notice of changes that do not strictly conform with the contractual language, and any claims for time or money are waived by the contractor.

Pricing: The contract documents should detail any alternative means available for pricing a change order. Alternatives should include time and material, fixed price, unit price, or application of an estimating manual. Regardless of the mechanism used to price a change, there should be some limitations on the extent to which indirect costs can be deemed part of the change.

It is easy to estimate the direct costs of labor and materials needed to incorporate a change into the project. However, estimating indirect costs that relate to the change order, such as project management oversight of the change, may be difficult. The contract documents need to consider and define the items which can be contractually included in pricing a change order. A good idea is to impose limits in the contract regarding how much direct costs can be marked up for profit and overhead.

Terms: Once scope and pricing of a change are agreed upon, a written change order must be prepared. Ideally, the change order will include a provision stating that the price and time adjustments reflected in the change order represent full and final payment for all direct and indirect costs with the contractor's waiver and release of any costs not included in the change order.

Note: Districts should be alert that contractors may claim additional funds for cumulative costs and time should the value of change orders become significant.

The total dollar amount of change orders should be kept within the amount specified for construction contingency; any costs in excess of construction contingency must be paid by the district. **On state-funded projects, change orders may not change the scope of the project without prior Chancellor's Office and DOF consent.** Regardless of the reasons for the change order, change orders in excess of 10% of the value of the contract also must be approved by the district board. If change orders are expected to exceed the project's contingency amount, the district may seek an increase within the appropriation on state-funded projects; however, to accomplish an increase within an appropriation, bid award must have resulted in bid savings and the bid savings and encumbrance period of the construction appropriation must be available. The Chancellor's Office must be notified in advance and must be provided with a complete list of all change orders to the contract with costs, time and explanations of work provided and scope modifications, if any. These requests require both Chancellor's Office and DOF approval and will be decided on a case-by-case basis. As a general policy, the only change orders that will be considered by the state when requesting an increase in the appropriation amount for state-funded projects are those that arose as the result of design changes required by regulatory agencies or unforeseen site conditions. Change orders initiated by either the architect or the district to enhance or modify the project will not be funded with an augmentation of state funds. Also, any single change order in excess of 10% of the construction cost amount is not allowed except in an emergency.

Change orders that affect the contract terms must be recorded with DSA and communicated to other concerned agencies. The additional fees charged by DSA or any other regulatory agency involved in the change order should be tracked as part of the cost of the change order. In the past, districts have been caught unaware by additional fees levied by DSA after the budget has been expended. See Chapter 8 for details on bid augmentation.

9.9 Construction Contract Closeout

The contractor generally owns the job until it is completed; unless there is a change of contractor during construction or until the owner has designated the project substantially complete for purposes of occupancy and has issued a “punch list.” The punch list, in essence, becomes the uncompleted contract. The district representative, project manager, construction manager, architect and inspector should agree on the list. Final commissioning and occupancy of the building must be coordinated to allow the contractor to continue work and complete the punch list.

9.9.1 Stop Notice

Subcontractors and suppliers are afforded the “Stop Notice” remedy if unpaid by the contractor. Per Civil Code §8200-8216, a Preliminary 20-day notice must be filed, unless the claimant is in direct privity of contract with the prime contractor, before a Stop Notice remedy may be sought. Once served with a Stop Notice, the district is obligated to withhold from funds otherwise due the contractor an amount equal to the principal amount of the Stop Notice and additional amounts necessary to cover litigation costs. Likewise, the Chancellor’s Office may be obligated to enforce the Stop Notice if received and suspend reimbursement of all claims, including approved but pending reimbursement claims on state-funded projects. The withholding for a Stop Notice should be made out of progress payments then or thereafter due the contractor and not from the amount retained by the district to ensure the contractor’s completion. Absent judgment on the Stop Notice, the district can generally release withheld Stop Notice funds only if: a) the Stop Notice claimant releases the Stop Notice; b) the contractor posts a Stop Notice Release Bond conforming with Civil Code §9364; or (c) the contractor prevails on a “summary proceeding” initiated under Civil Code §9400 et seq.

If the contractor misses the required completion date and the contract includes liquidated damages, the district must levee the liquidated damages against the contractor’s retention and final payment.

Prior to making the final payment on the contract, the district should ensure that:

- 1) All closeout submittals are received from the contractor including “as built” and “record” drawings, operations manuals, warranties, certification that subcontractors have been paid and any other documentation required in the specifications

-
- 2) The final payment to the contractor has been approved by the district board and the Chancellor's Office Legal Affairs Division

9.9.2 Notice of Completion

The district should promptly record a "Notice of Completion" when all of the scope of work items have been completed, furnished or installed. This excludes punch list items of a corrective nature, but includes punch list items that are incomplete scope items. A properly recorded Notice of Completion limits the period for service of a valid Stop Notice to 30 days after the effective date of recordation. If a Notice of Completion is not recorded or if the notice is recorded prematurely, the time for service of a valid Stop Notice is 90 days from the date of completion.

The district must file the Notice of Completion and make all final payments prior to the appropriation expiration date for state construction funds (typically five years after the appropriation or reappropriation date). The Notice of Completion must be recorded at least three months prior to the appropriation expiration date to allow sufficient time for processing the final payment. Retention amounts cannot be paid to the contractor until 35 days after the Notice of Completion is recorded; and, the final payment request must be received at least 45 days prior to the appropriation expiration date.

In addition to closing out the construction contract, the construction manager must:

- Verify that all the required documents have been received from the testing agencies and closeout their contracts
- Verify the final inspection by DSA and payment of any additional fees to DSA and closeout the inspection contract
- Coordinate equipment and systems commissioning
- Coordinate occupancy
- Closeout the construction portion of architect and consultant contracts, coordinating the architect's role in commissioning
- Project Closeout of the construction phase with the Chancellor's Office on state-funded projects (see Section 9.9.4 for Project Closeout)

PCC §7107 requires that the final payment, including retention, be released within 60 days of project completion. For purposes of PCC §7107, completion is defined as: a) beneficial use and occupancy; b) acceptance; c) cessation of work for 100 continuous days or more not due to the fault of the contractor; or d) cessation of work for 30

continuous days or more and a filed Notice of Cessation or a Notice of Completion. Failure to make payment within this 60-day period subjects the district to interest liability of 2 percent per month on the improperly withheld amount and contractor's attorney's fees to recover the improperly withheld amount. If there is a dispute, the district may withhold from the final payment an amount not greater than 150 percent of the disputed amount; the amount exclusive of this limitation must be released within the 60-day period.

9.9.3 DSA Certification

The Division of the State Architect (DSA) updated its project certification process in August of 2014. The following features of the certification process have been developed:

Project Inspection Card

The project inspector signs off the applicable blocks and sections of the DSA 152: Project Inspection Card in compliance with DSA procedure PR 13-01 as work is completed rather than at the end of construction. A stop work order may be issued for failure to complete a section of the DSA 152.

Electronic Document Submittal

DSA launched a secure, cloud-based tool ([DSAbox](#)) allowing stakeholders to submit and collaborate on documents in real time. Stakeholders can see when a document was submitted to DSA and can access that document at any time.

Post Construction

As outlined in DSA procedure [PR 13-02](#), once aware that a project is fully constructed, occupied, or otherwise in use, DSA works with the design/construction team collaboratively to finalize all certification requirements/documents.

On day 60 following the construction/occupation/use of the project, if the project has not been certified, DSA will issue form DSA 301-N: Notification of Requirement for Certification to all parties associated with the project. Form DSA 301-N lists project deficiencies and the parties responsible for those deficiencies.

The parties then have 60 days to resolve deficiencies identified on form DSA 301-N in order to certify the project. At the end of the second 60-day period (day 120 following the construction/occupation/use of the project), if the project is not certified, DSA issues

form [DSA 301-P: Notification of Requirement for Certification](#) to all parties associated with the project. Like form DSA 301-N, form DSA 301-P is a list of deficiencies for the project and the parties responsible for those deficiencies.

Form DSA 301-P will be posted in the publicly viewable Certification Box (see below). Any party responsible for a deficiency may submit the missing documentation to the Certification Box. Districts and/or design professionals may submit form DSA 302: Response to 301-P to document how they've attempted to resolve deficiencies.

Certification Box

Projects that are occupied without certification are placed in the [Certification Box](#). Unlike DSAbbox, which is a place for stakeholders to access project documents, the Certification Box is open to the public.

9.9.4 Project Closeout — Required on All State-Funded Projects

State administrative regulations require that all projects financed with state bonds comply with Project Closeout procedures (refer to Appendix M for details). The Project Closeout procedures on state-funded projects are administered through the FUSION system. The main objectives of the project closeout procedures are to ensure the following:

- The project is complete with all state funds claimed and all disputes regarding project costs, if any, resolved;
- The project scope is consistent with that approved by the DOF and the Legislature;
- FUSION has been updated to show final Project Costs per the JCAF 32 and final Quarterly Report;
- The final JCAF31 in FUSION is consistent with the project as depicted in the district's certified Space Inventory; and
- The district followed Public Contract laws and regulations in the construction of the project.

Project Closeout Procedures

There are two phases in the Project Closeout process which require two Change Requests in the FUSION Project module.

-
- 1) Project “Online” Change Request: Formal notification from the district that the facility is “Online” (i.e., occupied/in use) and the space created by the project, if any, included in the district’s Space Inventory.
 - 2) Project “Completed” Change Request: Formal notification from the district that the project is “Completed,” i.e., all state funds have been claimed, all disputes resolved, and the district has received a “Certification & Close of File” letter on the project from DSA.

Project “Online” Change Request

- Create a new Change Request in the FUSION PROJECT module.
- Designate project as “Online” by clicking the “Online” box in the project’s title screen.
- Revise the JCAF31 to reflect the final project space. This should be consistent with the project space entered into the district’s Space Inventory (note: this final JCAF31 will provide a record of the project space. FUSION will remove the space from the district’s 5-Year Plan when the Change Request is approved).
- Attach a side-by-side comparison of the project space as approved at Working Drawings and as entered into the JCAF31 and the district’s Space Inventory.
- Attach a copy of the Notice(s) of Completion to the Change Request.
- Submit the Change Request to the Facilities Planning Unit (FPU) for approval.
- E-mail the district’s FPU Specialist to alert them that a Change Request is pending approval.

Project “Completed” Procedures:

- Project “Online” Change Request has been reviewed and approved
- Create a Change Request in the FUSION PROJECT module.
- Designate the project as “Completed” by clicking the “Completed” box in the project’s title screen.
- Attach a letter on district letterhead to the Change Request certifying:
 - The project is complete and all reimbursement claims are settled;
 - The project was constructed as approved by DOF and the Legislature and as depicted in the district’s certified Space Inventory Report
 - The district followed Public Contract law in the construction of the project

-
- Per the State Treasurer's Office, the district will retain all project financial records for period of no less than 35 years, including DF 14D forms, expenditure records and claims information.
 - Revise the JCAF32 to reflect actual project costs (both state and local) and the actual project calendar.
 - Complete the final Quarterly Report for the project. The project costs should be consistent with the final JCAF32.
 - Check that the JCAF32 costs and the Quarterly Report costs are consistent with the claims shown in FUSION.
 - Attach the following PDF files to the Project "Completed" Change Request:
 - DSA "Certification & Close of File" letter;
 - DSA 6 forms (including: DSA6; DSA6 A/E; and DSA-168);
 - Space Inventory Report 17 page(s) from the district's latest certified Space Inventory; and
 - Final list of equipment ***purchased*** (for projects receiving release of equipment after 6/1/2012).
 - Submit the change request to FPU for approval.
 - E-mail the district's Specialist to alert them that a Change Request is pending approval.

9.9.5 Quarterly Reports — Required on All State-Funded Projects

The State Administrative Manual (SAM) Section 6864 requires each state agency with a capital outlay appropriation to submit to the Department of Finance a Quarterly Report by the 15th of each month following the close of a quarter (refer to Appendix O for detail).

The Quarterly Reports on state-funded projects are administered through the FUSION system. The Quarterly Report is located in the FUSION Project Module, organized by district/campus and project name. District staff familiar with preparing and submitting Claims will find the Quarterly Report tab on the same pull down menu as the Claims tab in the Project Module.

The Quarterly Report is completed by district staff and consists of the following information:

- Current local financing budget by phase

-
- Current project to date local expenditures by phase (FUSION is already capturing and reporting state expenditures)
 - Number of Change Orders
 - Current project to date cost of Change Orders
 - Actual Completion Date of project (not entered until reached)
 - Beneficial Occupancy Date (not entered until reached)
 - Close Fiscal Accounts Date (not entered until reached)
 - Comments explaining delays, major change orders, etc. as necessary
 - There is a provision for attaching documents to the Quarterly Report if necessary

In order to assist District staff in populating the FUSION Quarterly Reports, the programmers developed a self-help tool that can be found in the eManual portion of FUSION.

The California Community Colleges Capital Outlay Quarterly Report reflects the status of projects within each specified quarter and is submitted to meet reporting requirements for existing facility projects as outlined in SAM Section 6864. The report includes information on funding and transfers, original and revised construction start and completion dates, percentage of completion, as well as comments on project status as it relates to design, Public Works Board and other agency approvals, change orders and scheduling revisions.

9.10 Appropriation Expiration Dates

Funds for state capital outlay projects are appropriated through the state budget process. However, before appropriated funds can be used for a capital outlay project they must be encumbered for use through the DF14D process. The Chancellor's Office prepares a DF14D for DOF approval of each applicable project phase:

- Preliminary Plans
- Working Drawings
- Construction
- Equipment

Once approved by DOF, the funds become available to the district for project use for a limited time. The state budget control language (Section 1.80) attached to each budget summarizes the general operating parameters for that year's appropriations. Timelines for encumbrance and usage are strict. If these timelines are missed, the state appropriation will "revert" and no longer be available to the district for project completion. See Appendix P for details.

9.10.1 Preliminary Plans and Working Drawings

Preliminary plans and working drawings for state funded projects are typically authorized together. These appropriations must be encumbered by DF14D during the budget year they are authorized or the appropriation will revert and the funds will be lost. Appropriations for preliminary plans may be encumbered by DF14D as soon as the budget is passed. Working drawing funds are encumbered by DF14D only after the PWB approves the preliminary plans. All district claims for reimbursement of preliminary plans or working drawing funds must be processed by the Chancellor's Office before April 30 of the third fiscal year following appropriation.

9.10.2 Construction

Construction funds for state funded capital outlay projects are typically appropriated the year after PW funds are appropriated. A DF14D requesting to proceed to bid must be approved by DOF before the end of the budget year construction is appropriated or the construction fund appropriation will revert. Construction funds must be encumbered by a DF14D within three years or the appropriation reverts. Once encumbered, all district claims for reimbursement of construction funds must be processed by the Chancellor's Office before April 30 of the fifth fiscal year following appropriation.

9.10.3 Group 2 Equipment

Group 2 Equipment funds are typically appropriated at the same time construction funds are appropriated. Appropriations for group 2 equipment must be encumbered before the end of the third fiscal year following authorization or the appropriation reverts. Group 2 equipment funds can be encumbered only after the IOR certifies that construction is more than fifty percent complete and the district requests release of the equipment funds. Equipment funds may be encumbered earlier, with DOF approval, if additional time is needed to order the equipment or the equipment needs to be installed before construction is completed. All district claims for reimbursement Group 2 equipment

funds must be processed by the Chancellor’s Office before April 30 of the fifth fiscal year following authorization of such an appropriation.

Capital Outlay Appropriation Time Periods

Type of Appropriation	Encumber Funds (Years)	Additional Time to Finalize Claims (Years)	Total Time (Years)
Preliminary Plans	1	2	3
Working Drawings	1	2	3
Construction, Request to Bid	1	n/a	1
Construction, Bid Award*	3	2	5
Group 2 Equipment	3	2	5

***Must obtain approval to proceed to bid before the end of the fiscal year of construction appropriation.**

9.11 Equipment Commissioning

As construction nears completion, the district plays a very active role in the commissioning of Group 1 — Fixed Equipment in the building and the procurement and activation of Group 2 — Movable Equipment. Equipment is installed, activated, tested, and adjusted until the equipment and related support systems are working as specified. For some support systems, this may have to be done after occupancy to see how the system responds to operational use and common activities.

Depending on relationships with the contractor, it may be possible to coordinate the procurement and installation of equipment concurrently with the completion of the contractor’s work. If not, it may take 30 or more days for the installation and commissioning of equipment, support systems, and software.

Commissioning typically includes:

- Balancing the heating, ventilation, and air conditioning (HVAC) systems
- Training staff on HVAC and/or EMS controls
- Checking alarms and emergency lights
- Running equipment to check for leaks and other problems

-
- Modulating acoustics, lighting, and security systems
 - “Baking-out” the building to prevent indoor air pollution
 - Training faculty and staff on operation of equipment
 - Coordinating the use of fiber optic and twisted pair cabling communication systems and the associated equipment
 - Installing computers and software, phones, and video equipment
 - Testing cameras and sound equipment
 - Installing furniture, lab equipment, other educational equipment
 - Installing office equipment and partitions

Commissioning is often a massive coordination problem involving a myriad of equipment and suppliers, design consultants and additional contractors. There are numerous requests and frequently insufficient funds in the project. To the extent that this process can be pre-planned and properly funded during the design phase, commissioning becomes easier. See Chapter 8 for more information on equipment planning and design.

9.12 Post Occupancy Evaluation

A post-occupancy evaluation is done by the architect, the project or construction manager, and operations and maintenance staff. Unfortunately, this review is frequently ignored. **The primary purpose of this evaluation** is to discover potential problems before warranties expire.

Design and construction are not considered complete until the project, with all its systems, has been running well for several months. The contractor warranty normally extends for 1 year; 1 year is the presumed period of time to uncover design and construction conditions that warrant correction. For some systems, the warranty period is longer.

Post-occupancy evaluations should be timed to the warranties. Normally the architect's contract will require reviews at six months and one year after construction completion. It is important to review the project with the architect and occupants to see what has worked and what has not, not only to gain experience for future projects but to make sure any errors are caught before the warranty period ends.

If a contractor error is discovered during the warrantee period, the contractor must fix the problem. If a design error is found before the architect receives the last payment, the architect can be required to correct the design. If the problem is discovered after the warrantee expires, the district may be responsible for correcting the problem and should immediately notify, in writing, the contractor and manufacturer to preserve the warranty/claim period.

9.12.1 Patent or Latent Design and/or Construction Defects

Districts should consult with their legal counsel, if patent and/or latent design or construction defects are discovered. A statute of limitation establishes time limits beyond which lawsuits alleging design or construction defects are barred; the California statutes overlap and may be unclear and confusing about their application to a particular set of facts.

A defect is considered patent if it was readily discoverable or apparent by reasonable inspection. If not, the defect is latent (or hidden). The distinction is important because the two defects have different time limits for filing a lawsuit.

It is important to note that there are different time limits for filing lawsuits, bringing a claim and/or seeking resolution with the individuals engaged in performing or furnishing design, specifications, surveying, planning, supervision or construction observation services, if the defect is patent or latent.

This is provided for informational purposes only and does not purport to be a legal opinion. For specific information regarding statutes of limitation see the California Code of Civil Procedure §337.1 and §337.15 or consult your legal counsel.

9.12.2 Project Team Evaluation

Evaluation of the total project includes assessing the overall performance of the architect, construction manager and contractor. If their work has been unsatisfactory, the district can eliminate them from future work. The contractor can be barred from future local and/or local and state funded projects if the problems were severe enough to warrant a ruling by the district's board. However, if the architect, construction manager, inspector, contractor and others did a good job, this is the time to write letters of recommendation and encourage their participation in future projects.