

Exhibit 19-C Construction Review Checklist (Post)

Review Type: Post-Construction

A. PROJECT INFORMATION

Date of Review:

1. Federal Aid Project No. :

2. District:

3. Agency:

4. Project Description:

5. Project Location:

County:

City:

Street(s):

6. Project Type:

7. Funding Source(s):

8. Caltrans Reviewer(s):

9. Caltrans Construction Oversight Engineer:

10. Caltrans DLAE:

11. FHWA Participant(s) (if applicable):

12. Local Agency Participant(s):

13. Contract Award Amount:

B. PROJECT STAFFING

1. Local Agency Employee in Responsible Charge of project:

2. Project Resident Engineer (RE):

Does RE work for (check one):

Local Agency

or

Consultant

3. Is RE a licensed PE? (Y/N) If yes, PE License No:
4. If not, who is the licensed PE who delegated this responsibility?
5. If RE is a consultant, name of consultant firm:
6. Is there a listing of all projects staff with their respective titles on file? (Y/N)
7. Is the project adequately staffed? (Y/N)
8. Is there an emergency contact information sheet on file containing names and contact information for local agency/consultants/contractors? This typically a contact list of key personnel to be contacted in the event of an emergency on the project (e.g. traffic accident). This form is typically shared with fire, police and other emergency groups as necessary. (Y/N)
9. Comments:

C. GENERAL PROJECT RECORDS

1. Are project records being kept in an organized manner with an index that describes each file category? (Y/N)
2. Are there sufficient categories to organize all required project documents? (Y/N)
3. Comments:

D. PROJECT STATUS AND CONTRACT TIME

1. What was the original number of contract working days?
2. Was this duration in working days (WD) or calendar days (CD)?
3. Did the agency utilize the weekly statement of working days (WSWD) or other acceptable methods of tracking contract time? (Y/N)
4. Was the controlling operation of work clearly noted on the WSWD? (Y/N)
5. Is the final WSWD (or other contract time document) on file? (Y/N)
6. What was the date of the first working day?
7. What was the date the project was accepted (the final working day)?

- 8. Did the contract overrun the original number of days? (Y/N)
- 9. Were contract time extensions (number of days) granted? (Y/N)
 - If YES, how many Non-Working Days
 - CCO Additional Days
 - Overall Contract Suspensions
- 10. Is there adequate written documentation on file to support the additional time granted? (Y/N)

11. Comments:

E. RESIDENT ENGINEER REPORTS AND ASSISTANCE RESIDENT ENGINEER DAILY DIARIES (REPORTS)

- 1. Are daily reports up-to-date? (Y/N) [i.e. no more than a week gap]
- 2. Do daily reports contain the following information? (Y/N)
 - Full names of labor force?
 - Identify employer (prime contractor v. subcontractor)?
 - Labor Classifications?
 - Equipment types and model numbers?
 - Breakdown of hours worked by contract item and CCO work?
 - Idle or down time?
- 3. Do daily reports adequately capture daily occurrences, locations of work, overall operations, work performed in the field, and significant conversations with the contractor? (Y/N)
- 4. Do the daily report clearly identify the author and when developed (e.g. author’s printed name, author’s signature and date)? (Y/N)
- 05. Are resident engineer (RE) diaries up-to date (either daily or weekly)? (Y/N)

06. Comments:

F. QUALITY ASSURANCE PROGRAM/MATERIALS TESTING

1. Does the local agency have a copy of their QAP in the project records? (Y/N)
2. Is the approval date on the QAP less than 5 years old? (Y/N)
3. Does the QAP for this contract contain acceptance testing frequency tables? (Y/N)
4. If so, have these frequency tables been modified from the Caltrans sample QAP? (Y/N)
5. Which test methods do the contract documents specify?
(CT/ASTM/AASHTO/Other)
6. Are these acceptance sampling and test record data sheets in the project files? (Y/N)
7. Based on the contract work and the QAP, what tests were performed?
8. What entity performed the acceptance testing on this project?
9. Is there a log of acceptance testing results in the project files? (Y/N)
10. Did the acceptance testing conform to the frequency requirements of the QAP? (Y/N)
11. Are copies of up-to-date acceptance testers certifications in the project files? (Y/N)
12. If using CT methods, were the acceptance testers certified by Caltrans? (Y/N)
13. If using other test methods (ASTM,etc...), were the acceptance testers certified? (Y/N)
If so, by whom?
14. Is the material laboratory's current certification/accreditation in the project files? (Y/N)
15. Was the acceptance testing coordinated with and monitored by the RE/Inspector? (Y/N)
16. Did the RE/Inspector see copies of the test results in a timely manner (within 3 days)? (Y/N)
17. If there are failing tests, were there corresponding passing tests or resolution explanation? (Y/N)
18. Do the project records contain copies of mix designs and their formal approvals? (Y/N)
19. Were delivery tickets/loads slips being collected and initialed at the time and point of delivery? (Y/N)

- 20. Do delivery tickets/loads slips contain a product or mix identification number that corresponds to the approved mix design? (Y/N)
- 21. Were deduction taken for waste, rejected loads, or unused materials in the last load? (Y/N)
- 22. Were there any materials accepted into the project via source inspection? (Y/N)
- 23. Do materials certificates of compliance contain the following necessary information? (Y/N)
 - Project ID or Number?
 - Specific lot number?
 - Citation of spec no's in compliance with?
 - Signature by manufacture?
- 24. Are the required Buy America statements/certifications included in certificates of compliance for iron and steel incorporated into the work? (Y/N)
- 25. Is the materials certificate (Exhibit 17-G of the LAPM) signed and on file? (Y/N)

26. Comments:

G. CONTRACT CHANGE ORDERS

- 1. Is there a log of all contract change orders (CCO's) on file? (Y/N)
- 2. Are all CCO's properly justified via documentation that shows the reason for change? (Y/N)
- 3. If any of the change orders were paid at an agreed lump sum or at agreed until price(s), are there records on file supporting the establishment of those lump sum agreed prices (e.g. independent cost estimate by agency, force account analysis)? (Y/N)
- 4. If any of the change orders were written and paid for at force account (time and materials), do the daily RE/inspector reports provide sufficient detail to support the payment of time and materials on the related change order work? (Y/N)
- 5. If any of the change order adjusted the unit bid price (adjustment in compensation) of an item(s), is there a force account cost analysis to adequately support the adjustment(s)? (Y/N)
- 6. If any of the change orders provide a contract time adjustment, are there records on file supporting the time adjustment (e.g. a time impact analysis)? (Y/N)
- 7. If any of the change orders contain revised or new engineering drawings or specifications,

- have the change order drawings or specifications been stamped by a professional engineer with a valid California PE license? (Y/N)
- 8. Were all contract change orders approved prior to beginning work on the contract change orders? (Y/N)
- 9. If not, A. Was the agency's prior authorization process followed and documented? (Y/N)
B. Was the contractor given written authorization to proceed with the work? (Y/N)
C. Was the change order ultimately approved in a timely manner? (Y/N)
- 10. Is the local agency monitoring authorized contract change order amounts versus available contingency balances? (Y/N)
- 11. Comments:

H. PROJECT PAYMENTS

- 1. Do progress payments provide suitable backup/documentation to support quantities and dollars amounts paid for contract item work and change order work (ie. quantity calculation sheets, quantity notations in daily reports/diaries, etc...)? (Y/N)
- 2. Are there separate quantity calculation sheets for each item being paid on each progress payment? (Y/N)
- 3. Does each quantity calculation sheet identify the specific portion of the work to which it applies (location information, stations/offset, etc...)? (Y/N)
- 4. Does each quantity calculation sheet include the measurements and calculations by which the quantity was determined? (Y/N)
- 5. Are quantity calculation sheets signed and dated? (Y/N)
- 6. Are quantity calculation sheets being checked by a separate individual? (Y/N)
- 7. Are quantities paid to date being monitored and checked against estimated quantities? (Y/N)
- 8. Comments:

I. LABOR COMPLIANCE AND EEO

- 1. Were Federal (US Department of Labor) wages rates physically included in the signed contract? (Y/N)
- 2. Is FHWA Form 1273 physically included in the signed contract? (Y/N)
- 3. Did the agency check (at ten days before bid opening) to see if the wage rates changed from when the project was first advertised? (Y/N)
- 4. Were all payrolls received for all covered work from the prime and the subcontractor? (Y/N)
- 5. Are payrolls properly certified (wet ink signature, statements) by the contractor/ subcontractor? (Y/N)
- 6. Were payrolls spot-checked for proper hours/wages rates, and initialed by the checker? (Y/N)
- 7. Were proper deductions or other actions taken for missing or uncorrected payrolls? (Y/N)
- 8. Were required federal jobsite posters (<http://www.fhwa.dot.gov/programadmin/contracts/poster.cfm>) in good shape and posted in plain view of workers? (Y/N)
- 9. Were employee interviews (Exhibit 16-N of LAPM) being conducted at an acceptable frequency? (Y/N)
- 10. Do the employee interviews include the appropriate signature and dates? (Y/N)

11. Comments:

J. DBE

- 1. Who is the local agency's labor compliance/DBE officer?
- 2. What was the DBE goal for this contract? (%)
- 3. What was the contractor's DBE commitment for this contract? (% in Exhibit 15-G)
- 4. If the contractor did not meet the goal for this contract, was a Good Faith Effort (GFE) analysis performed by the agency and is a copy filed in the project records? (Y/N)

- 5. Did the prime contractor submit and the RE approve the Subcontracting Request Form (Exhibit 16-B of the LAPM) prior to any subcontractor work being performed? (Y/N)
- 6. If DBE trucking was part of the DBE commitment for this project, are the contractor's monthly DBE trucking verification forms on file? (Y/N)
- 7. Did the contractor utilize all of the listed DBE subcontractors on this project? (Y/N)
- 8. If not, are the contractor's substitution request and the agency's approval on file? (Y/N)
- 9. Did any contract change orders affect the amount of DBE work? (Y/N)
- 10. Did the contract submit the final report of DBE utilization (Exhibit 17-F of the LAPM)? (Y/N)
- 11. Did the RE review and sign the above Exhibit 17-F? (Y/N)
- 12. Did the prime contractor fulfill his original DBE commitment (per Exhibit 15-G)? (Y/N)
- 13. If no (question 12), is a valid explanation/justification provided in the project file? (Y/N)
- 14. If no (question 12), was payment for the committed to DBE work withheld? (Y/N)

15. Comments:

K. TRAINEES (APPRENTICES)

- 1. Are training (apprentices) provisions a part of this contract? (Y/N)
- 2. If so, what is goal (number of trainees) for this contract? (Y/N)
- 3. If a goal, is the contractor's submitted training plan and agency approval on file? (Y/N)
- 4. Does the plan include the following? (Y/N)
 - A. The number of apprentices for each classification?
 - B. The starting date for each apprentice?
 - C. The apprentice's registration in an approved program?

5. Comments:

L. ENVIRONMENTAL COMMITMENTS

- 1. Is the environmental document for this project on file? (Y/N)
- 2. Were all environmental mitigation commitments met and documented in the environmental commitment record (ECR) and in the project file? (Y/N)
- 3. Comments:

M. TRAFFIC MANAGEMENT PLAN

- 1. Does the approved PS&E include a traffic management plan (TMP) or does it contain provisions for the contractor to develop/submit the TMP? (PS&E/C) (Y/N)
- 2. If the traffic management plan is contractor-submitted, is a formal agency approval contained in the project files? (Y/N)
- 3. Are the traffic management plan requirements being followed? (Y/N)
- 4. Comments:

After-acceptance review scheduled date (estimate):

Follow up items for major deficiencies:

Deficiency Description	Course of Action	Action Dates

Additional Items for Bridge Projects:

Concrete Records:

- 1. Are all approved concrete mixes on file? (Y/N)
- 2. Are all letters of concrete mix approvals on file? (Y/N)
- 3. Are samples and testing notations included on pour records or diaries? (Y/N)

4. Comments:

Bridge CCO's:

1. For bridge design changes, has the bridge designer authorized the change? (Y/N)

2. Comments:

Approved Falsework Plans:

1. Is there a falsework log on file showing falsework submittal history? (Y/N)

2. Are the falsework plans properly stamped? (Y/N)

3. Do the falsework plans include erection and stripping operations? (Y/N)

4. Are the falsework calculations on file and complete? (Y/N)

5. Are there records of camber and falsework deflection calculations performed by a RE? (Y/N)

6. Are there records of falsework soffit and deck grades supplied to the contractor by the Engineer, which accommodate falsework settlements and deflections bridge camber requirements? (Y/N)

7. Is there a letter from the contractor certifying that the erected falsework substantially meets approved falsework plans dated prior to concrete pours of bridge soffit and deck? (Y/N)

8. Are there any records of observed falsework settlement during and after the concrete pour? (Y/N)

9. Comments:

Prestressing:

1. Are the initial shop drawings for prestressing (submitted by the contractor) on file? (Y/N)

2. Are the initial plans properly stamped? (Y/N)

- 3. Is the final set of shop drawings for prestressing on file? (Y/N)
- 4. Are the final plans properly stamped? (Y/N)
- 5. Is there a record in the diaries to indicate that the prestressing ducts were checked for any obstruction after the soffit/deck pours and prior to placing the strand? (Y/N)
- 6. Are there records of actual prestressing in the file? (Y/N)
- 7. Are there records indicating the contractor's pressures gauges and jack(s) were certified and valid at time of prestressing ? (Y/N)
- 8. Is there proper documentation of both i) actual strand elongation vs. theoretical elongation and ii) load cell readings vs. contractor gauge readings? (Y/N)
- 9. Do the records show grouting was performed and include a copy of the certificate of compliance for the cements used? (Y/N)

10. Comments:

Profilographs (if there is a new bridge deck or if the existing bridge deck has been modified and finish surface requirements are included in the contract):

- 1. Are there records showing profilographs were taken before and after deck grinding? (Y/N)
- 2. Are all the profilograph records on file? (Y/N)
- 3. Comments:

Shoring Plans (if there is/was shoring on the project):

- 1. Are the shoring plans properly stamped? (Y/N)
- 2. Do the project records include complete shoring calculations? (Y/N)
- 3. Comments:

Welding (if there is welding in the contract)

- 1. Does the contract require the contractor to have a Quality Control Plan for welding? (Y/N)
- 2. If yes, is the contractor's welding Quality Control Plan on file? (Y/N)

3. Comments:

Summary: