



CITY OF REEDLEY QUALITY ASSURANCE PROGRAM

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CITY OF REEDLEY
Quality Assurance Program

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CITY OF REEDLEY

Quality Assurance Program

I. Introduction

The City of Reedley (hereinafter called the “City”) has prepared this Quality Assurance Program to provide assurance that the materials incorporated into each construction project conform to the contract specifications. This Program shall be updated every five (5) years or more frequently should testing frequency or methods change. The following terms and definitions are used in this Program:

- Acceptance Testing (AT) – Sampling and testing, or inspection, of project materials to determine compliance with contract specification criteria.
- Certificate of Compliance – A signed document from the materials manufacturer committing that the delivered goods meet the contract specifications.
- Independent Assurance Program (IAP) – A program that verifies that AT is being performed correctly by certified testers using qualified laboratories and calibrated equipment.
- Quality Assurance Program (QAP) – A sampling, testing and inspection program to provide assurance that the materials and workmanship incorporated into the construction project conform to the contract specifications. The main elements of a QAP are the Material Acceptance Program and IAP.
- Source inspection – AT of manufactured or prefabricated materials at locations other than the job site, generally at the manufactured location.

II. Laboratory Qualification

The City will use a private consultant materials testing laboratories to perform AT on Federal-aid and other designated projects. The materials laboratory shall be under the responsible management of a California registered Engineer with experience in sampling, inspection, and testing of construction materials. Said Engineer shall certify the results of all tests performed by laboratory personnel under the engineer’s supervision. The materials laboratory shall contain certified test equipment capable of performing the tests conforming to this QAP. Laboratories shall comply with Section VII, *Independent Assurance Program*, of this document.

The materials laboratory used by the City shall provide documentation that the laboratory complies with the following requirements:

1. Correlation Testing Program – The materials laboratory shall be a participant in one or more of the following testing programs:
 - a. AASHTO Materials Reference Laboratory (AMRL).
 - b. Cement and Concrete Reference Laboratory (CCRL).
 - c. Caltrans' Reference Samples Program (RSP).
2. Certification Personnel – The materials laboratory personnel shall be certified by one or more of the following:
 - a. Caltrans District Materials Engineer.
 - b. Nationally recognized non-Caltrans organizations such as the American Concrete Institute, Asphalt Institute, National Institute of Certification of Engineering Technologies, etc.
 - c. Other recognized organizations approved by the State of California and/or recognized by local governments or private associations.
3. Laboratory and Testing Equipment – The materials laboratory shall only use laboratory and testing equipment that is in good working order and shall be calibrated at least once each year by an impartial means using devices of accuracy traceable to the National Institute of Standards and Technology. A decal shall be firmly affixed to each piece of equipment showing the date of the last calibration. All testing equipment calibration decals shall be checked as part of the IAP.

III. *Materials Acceptance Program*

Material incorporated into the work shall be accepted by one or more of the following methods, as specified in the contract specifications and this document:

1. *Field Sampling and Acceptance Testing*
2. *Source Inspection and Testing*
3. *Manufacturer's Certificate of Compliance* (with attachments if required)
4. *Visual Inspection* (for minor quantities)

IV. Field Sampling and Acceptance Testing (AT)

General

AT shall be performed by certified materials personnel utilizing accredited materials laboratories and properly calibrated equipment. The certifications and accreditations shall be specific to the tests being performed. Test results for materials incorporated into the work shall be in compliance with the contract specifications. All testing methods and procedures shall comply with Caltrans Methods or a nationally recognized testing standard (i.e., AASHTO, ASTM, etc.) as specified in the contract specifications.

Acceptance Sampling and Testing Locations and Frequencies

Sample locations and frequencies shall be in accordance with the contract specifications. If testing methods or procedures are not identified in the contract specifications, samples shall be taken at the locations and at the frequencies specified in Appendix A, *Exhibit 16-R Sampling and Testing Frequency Table*.

When sampling products such as Portland Cement Concrete (PCC), cement-treated base (CTB), hot mix asphalt (HMA), and other such materials, the time of such sampling shall be varied with respect to the time of day the sample is taken, insofar as possible, in order to avoid a predictable sampling routine.

Reporting Acceptance Test Results

The laboratory shall report test results to the Resident Engineer as soon as possible by FAX, telephone, or email. Copies of complete material test result reports, including data and calculation sheets, shall be provided to the Resident Engineer with the following requirements:

- When the aggregate is sampled at materials plants, test results for Sieve Analysis, Sand Equivalent, and Cleanness Value should be submitted to the Resident Engineer within 24 hours after sampling.
- When materials are sampled at the job site, test results for compaction and maximum density should be submitted to the Resident Engineer within 24 hours after sampling.
- When soils and aggregates are sampled at the job site:
 1. Test results for Sieve Analysis, Sand Equivalent, and Cleanness Value should be submitted to the Resident Engineer within 72 hours after sampling.
 2. Test results for "R" Value and asphalt concrete extractions should be submitted to the Resident Engineer within 96 hours after sampling.

V. Testing of Manufactured Materials

Source Inspection and Testing

Some manufactured or pre-fabricated structural materials will be inspected or tested prior to arrival at the jobsite, generally at the manufacturer's location (a.k.a. source inspected.)

Structural items categorized as "catastrophic consequences of failure" or "significant safety concern" may be source inspected. Materials that might be source inspected include: structural steel, precast pre-stressed concrete girders and pilings; RCP greater than 60", joint seals, bearing pads, lighting and signal poles, sign structures, electrical items.

The Resident Engineer may reject source inspected material at the job site if deemed not acceptable, including:

- Material damage in shipment or installation
- Defective material (source inspection is usually a random sampling and may not have checked 100% of the material.)

Manufacturer's Certificates of Compliance

The Engineer may permit the use of certain materials before sampling or testing if accompanied by a certificate from the manufacturer. Said Certificate of Compliance shall be submitted by the Contractor before the material is incorporated into the work and shall include the following information:

- Name of Company
- The project name and/or contract number
- Identify the lot (or heat) number for each lot delivered
- State that the material complies with the contract specs. (w/ spec. number)
- Signature of responsible officer of the company
- Test data and other documents when required in contract specification

No Certificates of Compliance will be accepted unless given to the Resident Engineer at the time of delivery of the material. Any material that is delivered to the job site and no Certificates of Compliance is submitted to the Resident Engineer at the time of delivery may be subject to rejection at the discretion of the Resident Engineer. The Resident Engineer may perform sampling and testing on such materials at any time. All Certificates of Compliances shall conform to the requirements of the contract specifications.

List of Materials Accepted by Certificate of Compliance

This agency uses one of the 2010 Caltrans Standard Specifications. A list of manufactured materials that can be accepted on the basis of Certificate of Compliance during construction is found in Appendix B, *Exhibit 16-T1: Materials Requiring a Certificate of Compliance per Caltrans Standard Specifications*. This list may be supplemented or amended by the contract Special Provisions or Technical Provisions.

VI. Visual Inspection (For Minor Quantities)

Relatively minor quantities of construction materials may be accepted without testing unless otherwise specified in the contract or by the City of Reedley. The following 3 conditions must be met:

1. Visual examination of the material is performed.
2. The manufacturer or supplier has recently furnished similar materials found to be satisfactory using normal sampling and testing requirements.
3. The manufacturer (or supplier in the case of HMA or concrete) provides certification that the material furnished complies with the contract specifications.

The following list suggests approximate maximum quantities of materials that may be accepted under the conditions indicated above:

- Aggregates other than for use in Portland Cement Concrete, not to exceed 100 tons per day, nor 500 tons per project
- Bituminous mixtures not to exceed 50 tons per day. If the project total is less than 500 tons, sample at Engineer's discretion
- Bituminous material not to exceed 100 gallons per project

VII. Independent Assurance Program (IAP)

The IAP shall be provided by the City's certified materials laboratory or consultant's certified materials laboratory. The purpose of the IAP is to verify that sampling and testing procedures are being performed in accordance with the appropriate standards and that all testing equipment is in good working condition and properly calibrated.

IAP personnel shall be certified in all required testing procedures, as part of the IAP, and shall not be involved in any aspect of the AT.

IAP shall be performed on every type of materials test required for the project. Proficiency tests shall be performed on Sieve Analysis, Sand Equivalent, and Cleanness Value tests. All other types of Independent Assurance tests shall be witness tests.

Poor correlation between acceptance tester's results and other test results may indicate probable deficiencies with the acceptance sampling and testing procedures. When unresolved discrepancies exist, a complete review of the AT shall be performed by the IAP personnel, or by an independent materials laboratory chosen by the City. IAP samples and tests are not to be utilized for determining compliance with contract requirements. Compliance with contract requirements is determined solely by the AT.

VIII. Project Certification

Upon completion of a Federal-aid project, a "Materials Certificate" (Local Assistance Procedures Manual (LAPM) Exhibit 17-G) shall be completed and signed by the Resident Engineer and included in the City's construction records. All materials incorporated into the work which did not conform to specifications must be explained and justified on the "Materials Certificate", including changes by virtue of contract change orders.

The City shall include a "Materials Certificate" in the Report of Expenditures submitted to Caltrans District Director, Attention: District Local Assistance Engineer (DLAE).

IX. Records

All material records of samples and tests, material releases and certificates of compliance for the construction project shall be incorporated into the Resident Engineer's project file. If the project is a Federal-aid project the following requirements shall apply:

- The files shall be organized and indexed per the City's Project File Template and shall include the following:
 1. Copy of Quality Assurance Plan
 2. Independent Assurance
 - Certs. of Proficiency – Testers and Samplers (LAPM Exhibit 16-D)
 - Cert. of Qualification for Testing Laboratory (TL-0113)
 3. Notice of Materials to be Used (LAPM Exhibit 16-I)
 4. Acceptance Testing Summary Logs and Test Results
 5. Certificates of Compliance, including Buy American Certificates
 6. Source inspection records and reports
 7. Materials Certificate (LAPM Exhibit 17-G)

- It is recommended that the complete project file be available at a single location for inspection by City, Caltrans, and the Federal Highway Administration (FHWA) personnel
- The project files shall be available for at least three (3) years following the date of the final project voucher
- The laboratory shall use a "Log Summary" to facilitate reviews of material sampling and testing completed by the laboratory, and assist the Resident Engineer in tracking the frequency of testing. LAPM Exhibit 16-H or similar can be used to satisfy this requirement

When two or more projects are being furnished identical materials simultaneously from the same plant, it will not be necessary to take separate samples or perform separate tests for each project; however, copies of the test reports are to be provided for each of the projects to complete the records.

X. Acknowledgements/References

California Department of Transportation, "Quality Assurance Program (QAP) Manual for Use by Local Agencies", dated January 20, 2011.

California Department of Transportation, "Local Assistance Procedures Manual", dated January 2022.


Code of Federal Regulations Title 23, Part 637, Section 637.205.

2018 Caltrans Standard Plans & Specifications.

FHWA Greenbook Standard Plans & Specifications.

American Society for Testing and Materials (ASTM).

American Association of State Highway and Transportation Officials.

APPROVED BY: 
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 City Engineer, City of Reedley

Date: 08/10/2022



Exhibit 16-R Sampling and Testing Frequency Table for projects OFF the SHS

<i>Sample for Local Agency QAPs</i>			
Sampling and Testing Frequency Table <i>for projects OFF the SHS.</i>			
HOT MIX ASPHALT (HMA) / ASPHALT CONCRETE (AC)			
Quality Characteristic	Test Method	Minimum Sampling and Testing Frequency	Location/Time of Sampling
Aggregate Gradation (Sieve)	CT 202	1 Per 1000 Tons or Part Thereof ; Minimum 1 per day during production/placement of at least 300 tons per day.	At Plant Per CT 125 (a)
Sand Equivalent	CT 217		
Asphalt Binder Content	CT 382		
In-Place Density and Relative Compaction (Nuclear)	Nuclear (b) CT 375 or ASTM D2950 (c)	1 Per 1000 Tons or Part Thereof ; Minimum 1 per day during production/placement of at least 300 tons per day. (b)	Random Locations Per CT 375 (c)
Theoretical Maximum Specific Gravity and Density (Rice)	CT 309	1 Per Day During Production/Placement of At Least 300 Tons Per Day	Loose Mix Behind Paver Per CT 125
HMA Moisture Content	CT 226 or CT 370		
Stabilometer Value (d)	CT 366		
Asphalt Binder	Sample per Section 92	Sample 1 min. per day for production over 300 tons per day; See (f) regarding testing.	At Plant Per CT 125
Smoothness	12-foot Straightedge	As necessary to confirm contract compliance.	Final Pavement Surface

- (a) Exact tonnage of sample location to be determined by Random Sampling Plans
 (b) Compaction determined by Nuclear Density Device. Core testing required if compaction fails the nuclear test
 (c) Correlation between core densities and nuclear device required only if compaction fails the nuclear test
 (d) Report the average of 3 tested briquettes from a single split source
 (e) Use CT 309 to determine maximum theoretical density in lieu of CT 367 calculated maximum theoretical density
 (f) No testing required unless warranted by concern ; sample and store until completion of project

SUBGRADE (DISTURBED BASEMENT SOIL) OR EMBANKMENT

Quality Characteristic	Test Method	Minimum Sampling and Testing Frequency	Location/Time of Sampling
Maximum Density and Relative Compaction	CT 216/CT 231	1 Min. Test per 5000 sq ft under vehicle traveled way and shoulder 1 Min. Test Per 300 linear foot under sidewalk	Random locations as determined by the Engineer in place after compaction.

AGGREGATE BASES AND SUBBASES, IMPORTED BORROW

Quality Characteristic	Test Method	Minimum Sampling and Testing Frequency	Location/Time of Sampling
Sieve Analysis	CT 202	1 Min. Test Per Material Source	Sample from site stockpile/plant prior to placement.
R-Value	CT 301		
Sand Equivalent	CT 217		
Maximum Density and Relative Compaction	CT 216/CT 231	1 Min. Test per 5000 sq ft	Random locations as determined by the Engineer in place after compaction.

STRUCTURE BACKFILL, SELECT BACKFILL

Quality Characteristic	Test Method	Minimum Sampling and Testing Frequency	Location/Time of Sampling
Sieve Analysis	CT 202	1 Min. Test Per Material Source	Sample from site stockpile/plant prior to placement
R-Value	CT 301		
Sand Equivalent	CT 217		
Maximum Density and Relative Compaction	CT 216/CT 231	1 Min. Test Per 2 Vertical Lifts of Placement	Random locations as determined by the Engineer in place after compaction.

PORTLAND CEMENT CONCRETE (PCC) - STRUCTURAL AND SIGNAL/LIGHTING FOUNDATIONS

COARSE AGGREGATE			
Quality Characteristic	Test Method		
Sieve Analysis	CT 202	1 min. test per 500 cu yds and per each material source ; 1 min. test on smaller projects; if bridge, 1 min. set per separate pour per abutment/pier/deck.	Sample from site stockpile/plant prior to placement
Cleaness Value	CT 227		
FINE AGGREGATE			
Quality Characteristic	Test Method		
Sieve Analysis	CT 202	1 min. test per 500 cu yds and per each material source ; 1 min. test on smaller projects; if bridge, 1 min. set per separate pour per abutment/pier/deck.	Sample from site stockpile/plant prior to placement
Sand Equivalent	CT 217		
WET MIX			
Quality Characteristic	Test Method	Minimum Sampling and Testing Frequency	Location/Time of Sampling
Slump/Penetration	CT 533	2 per day	Sample from truck/work site
Cylinders	CT 539/540	1 min. set of 3 per day; if bridge, 1 min. set per separate pour of abutment/pier/deck.	

Appendix B

Exhibit 16-T1: Materials Requiring a Certificate of Compliance per Caltrans Standard Specifications

Caltrans 2018 Standard Specifications	Material	Additional Info and/or Attachments Required*
6-1.04 BUY AMERICA		
6-1.04B	Crumb rubber	COC
6-1.04C	Steel and iron materials	COC + cert. mill test reports
11-2 WELDING QUALITY CONTROL		
11-2.03D	Welding	COC
12-3 TEMP. TRAFFIC CONTROL DEVICES		
12-3.03A(3)	Plastic traffic drums	COC
12-3.20A(3)	Type K temporary railing	COC
12-3.23A(3)	Attenuator	COC
12-3.32A(3)	Portable CMS	COC
13-2 WATER POLLUTION CONTROL PROGRAM		
13-9 TEMP. CONCRETE WASHOUTS		
13-9.01C	Fabric bags for gravel-filled bags	COC
	Plastic liner	COC
13-10 TEMP. LINEAR SEDIMENT BARRIERS		
13-10.01C	Fiber rolls	COC
	Silt fence fabrics	COC
	Sediment filter bags	COC
	Foam barriers	COC
	Fabric for gravel-filled bags	COC
16-2.03 TEMP. HIGH-VISIBILITY FENCES		
16-2.03A(3)	High-visibility fabric	COC
18 DUST PALLIATIVES		
18-1.01C	Dust suppressant	COC
	Dust control binders	COC
	Fibers	COC
20 LANDSCAPE		
20-2 IRRIGATION		
20-2.08A(3)	Polyethylene pipe	COC
	Plastic pipe supply line	COC

* For those materials requiring additional information on or with the COC, see specification.

Caltrans 2018 Standard Specifications	Material	Additional Info and/or Attachments Required*
20-3 PLANTING		
20-2.08A(3)	Sod	COC
	Soil amendment	COC
20-5 LANDSCAPE ELEMENTS		
20-5.03A(1)(c)	Filter fabric	COC + product data
20-5.03D(1)(c)	Solidifying emulsion	COC + product data & samples
20-5.04A(3)	Wood mulch	COC + sample & authorization
21-2 EROSION CONTROL WORK		
21-2.01C(1)	Straw	COC
	Weed-free straw	COC + cert. of quarantine
	Fiber	COC
	RECP	COC
	Fasteners	COC
	Hydraulically applied erosion control materials	Submit records
21-2.01C(2)	Compost	Submit reports
21-2.01C(3)	Seed	Submit reports
21-2.01C(4)	Tackifier	COC
	Bonded fiber matrix	COC
24 STABILIZED SOILS		
24-1.01C(1)	Stabilizing agent	COC + sample
24-3 CEMENT STABILIZED SOIL		
24-3.01C	Cement	COC + sample
36-2 BASE BOND BREAKER		
36-2.01C	Base bond breaker	COC
37 BITUMINOUS SEALS		
37-1.01C	Asphalt binder	COC + test results
	Asphalt emulsion	COC + test results
37-3 SLURRY SEALS AND MICRO-SURFACINGS		
37-3.01A(3)	Asphaltic emulsion	COC + samples & test results
	Polymer modified asphaltic emulsion	COC + samples & test results
	Micro-surfacing emulsion	COC + sample & test results
37-2.04 ASPHALT RUBBER BINDER CHIP SEALS		
37-2.04A(3)	Asphalt rubber binder ingredients	COC + permits & submittals

* For those materials requiring additional information on or with the COC, see specification.

Caltrans 2018 Standard Specifications	Material	Additional Info and/or Attachments Required*
37-5 PARKING AREA SEALS		
37-5.01C	Parking area seal material	COC + sample & test results
37-6 CRACK TREATMENTS		
37-6.01C	Crack treatment materials	COC or sample & test results
39-2 HOT MIX ASPHALT		
39-2.01A(3)(f)	Liquid antistrip	COC + sample & production data
39-2.03A(3)(c)	Crumb rubber modifier	COC + test results
	Asphalt modifier	COC + test results
39-2.05A(1)(c)	Asphaltic emulsion	COC + test results
40 CONCRETE PAVEMENT		
40-1.01C(2)	Tie bars	COC
	Splice couplers for threaded bars	COC
	Dowel bars	COC
	Tie bar baskets	COC
	Joint filler	COC
	Epoxy-powder coating	COC
41 EXISTING CONCRETE PAVEMENT		
41-5 JOINT SEALS		
41-5.01C	Liquid joint sealant	COC + SDS & instructions
	Backer rods	COC + SDS & instructions
	Compression joint seal	COC + SDS & instructions
	Lubricant adhesives	COC + SDS & instructions
41-10 DRILL AND BOND BARS		
41-10.01C	Tie bars	COC
	Dowel bars	COC
	Dowel bar lubricant	COC
	Chemical adhesive	COC
	Epoxy powder coating	COC
48-2 FALSEWORK		
48-2.01C(1)	Structural composite lumber	COC + submittals
49-2 DRIVEN PILING		
49-2.02A(3)(d)	Steel pipe piles	COC + tests & mill reports
49-2.03A(3)	Structural shape steel piling	COC + test reports

* For those materials requiring additional information on or with the COC, see specification.

Caltrans 2018 Standard Specifications	Material	Additional Info and/or Attachments Required*
51 CONCRETE STRUCTURES		
51-1.01C(3)	Bonding materials	COC or sample & authorization
51-2 JOINTS		
51-2.01A(3)	Polyethylene material for snowplow deflectors	COC
51-2.02B(1)(c)	Sealant	COC + test reports & samples
51-2.02C(1)(c)	Elastomeric joint seal	COC + test reports
	Lubricant-adhesive	COC + test reports
51-2.02D(1)(c)	Joint seal materials	COC + authorization
51-2.02E(1)(c)(iii)	Joint seal assembly materials	COC
51-2.02F(1)(c)(iv)	Material used in the joint seals	COC + test reports
51-2.04A(3)	Waterstop material	COC + a statement
51-3 BEARINGS		
51-3.02A(3)(c)	Elastomer for bearing pads	COC + test reports
51-4 PRECAST CONCRETE MEMBERS		
51-4.01C(1)	Concrete box culvert	COC
52 REINFORCEMENT		
52-1.01C(3)	Reinforcement (rebar)	COC + mill test report
52-2 EPOXY-COATED REINFORCEMENT		
52-2.02A(3)(c)	Epoxy-coated reinforcement	COC + submittals
	Patching material	COC + a statement
52-5.01C(4)	Headed bar reinforcement	COC + test reports
52-6 SPLICING		
52-6.01C(5)	Service or butt splice material	COC + submittals
54 WATERPROOFING		
54-3 PREFORMED MEMBRANE WATERPROOFING		
54-3.01C	Preformed membrane sheet	COC + report
54-5 DECK SEAL		
54-5.01C	Preformed membrane sheet	COC + report
57-2 WOOD STRUCTURES		
57-2.01A(3)	Timber and lumber	COC + report
	Glued laminated timbers/decking	COC
57-3 PLASTIC LUMBER STRUCTURES		
57-3.01C(1)	Plastic lumber	COC + test report & sample

* For those materials requiring additional information on or with the COC, see specification.

Caltrans 2018 Standard Specifications	Material	Additional Info and/or Attachments Required*
58-2 MASONRY BLOCK		
58-2.01C(7)	CMUs	COC
	Aggregate for grout	COC
	Grout	COC
59 STRUCTURAL STEEL COATINGS		
59-1.01C	Blast cleaning material	COC + SDS
59-5 THERMAL SPRAY COAT STRUCTURAL STEEL		
59-5.01C(1)	Wire feedstock	COC
60-3.04B POLYESTER CONCRETE OVERLAYS		
60-3.04B(1)(c)	Methacrylate resins	COC + samples & test report
	Polyester resins	COC + samples & test report
	Aggregates	COC + samples & test report
61-2 CULVERT AND DRAINAGE PIPE JOINTS		
61-2.01C	Joint systems	COC + test results & reports
	Couplers	COC
64 PLASTIC PIPE		
64-1.01C	Plastic pipe	COC + report
65-2 REINFORCED CONCRETE PIPE		
65-2.01C	RCP, direct design method	COC + report
66 CORRUGATED METAL PIPE		
66-1.01C	Corrugated steel materials	COC
	Corrugated aluminum materials	COC
67-3 METAL LINE PLATE PIPE		
67-3.01C	Metal liner plate pipe	COC + mill test reports
68 SUBSURFACE DRAINS		
68-1.01C	Subsurface drain	COC
68-2 UNDERDRAINS		
68-2.01C	Pipe	COC
	Tubing	COC
	Fittings	COC
68-7 GEOCOMPOSITE DRAIN SYSTEMS		
68-7.01C	Geocomposite drain	COC + flow capability graph

* For those materials requiring additional information on or with the COC, see specification.

Caltrans 2018 Standard Specifications	Material	Additional Info and/or Attachments Required*
69 OVERSIDE DRAINS		
69-1.01C	Steel pipe piles	COC
	Aluminum	COC
	Plastic	COC
70-6 GRATED LINE DRAINS		
70-6.01C	Grated line drains	COC + docu. & inspec. report
71-3.09 MACHINE SPIRAL WOUND PVC PIPELINERS		
71-3.09A(1)(c)	Reel of PVC strip	COC + report
72-16 GABIONS		
72-16.01C	Gabion basket	COC
	PVC coating	COC + identify
75-3 MISCELLANEOUS BRIDGE METAL		
75-3.01C(1)	Anchorage devices	COC
75-3.01C(2) BRIDGE DECK DRAINAGE SYSTEM		
75-3.01C(2)	Fiberglass pipe and fittings	COC
80-3 CHAIN LINK FENCES		
80-3.01C	Protective coating system	COC
	Posts and braces	COC + test results
81 MISCELLANEOUS TRAFFIC CONTROL DEVICES		
81-2 DELINEATORS		
81-2.01C	Metal target plates	COC
	Enamel coating	COC
81-3 PAVEMENT MARKERS		
81-3.01C	Pavement markers	COC
82 SIGNS AND MARKERS		
82-2 SIGN PANELS		
82-2.01C	Aluminum sheeting	COC
	Retroreflective sheeting	COC
	Screened-process colors	COC
	Nonreflective, opaque, black film	COC
	Protective overlay film	COC

* For those materials requiring additional information on or with the COC, see specification.

Caltrans 2018 Standard Specifications	Material	Additional Info and/or Attachments Required*
82-5 MARKERS		
82-5.01C	Metal target plates	COC
	Enamel coating	COC
	Retroreflective sheeting	COC
83-3 CONCRETE BARRIERS		
83-3.01C	Type 60K portable concrete barrier	COC or test reports
84-2 TRAFFIC STRIPES AND PAVEMENT MARKINGS		
84-2.01C	Thermoplastic	COC + autho., SDS & data sheet
	Paint	COC + autho., SDS & data sheet
	Glass beads	COC + autho., SDS & data sheet
	Thermoplastic primer	COC + test results
DIVISION X ELECTRICAL WORK		
86-1.01C(6)	Signal heads	COC + test data
	Visors	COC + test data
87-2 LIGHTING SYSTEMS		
87-2.01C	High mast lighting luminaires	COC + test data
90 CONCRETE		
90-1.01C(3)	Cementitious materials	COC + app. signature
	Blended cement	COC + app. signature
90-1.01C(4)	Admixture	COC + authorization
90-1.01C(5)	Curing compound	COC + test samples
90-2 MINOR CONCRETE		
90-2.01C	Minor concrete	COC + weighmaster cert
90-3 RAPID STRENGTH CONCRETE		
90-3.01C(3)	Aggregate	COC + certified weight
	Cementitious materials	COC + certified weight
	Admixtures	COC + certified weight
90-4 PRECAST CONCRETE		
90-4.01C(2) and 90-4.01D(2)(a)	Cementitious materials	COC + app. signature
	Precast members (each)	COC + app. signature
	Curing compound	COC + test samples
94 ASPHALTIC EMULSIONS		
94-1.01C	Asphaltic emulsion	COC + reports

* For those materials requiring additional information on or with the COC, see specification.

Materials Requiring a Certificate of Compliance per Caltrans Standard Specifications

Caltrans 2018 Standard Specifications	Material	Additional Info and/or Attachments Required*
95 EPOXY		
95-1.01C	Epoxy	COC
96 GEOSYNTHETICS		
95-1.01C(1)	Geosynthetic	COC + test samples

* For those materials requiring additional information on or with the COC, see specification.