

California High-Speed Rail Authority



RFP No.: HSR 13-57

**Request for Proposals for Design-Build
Services for Construction Package 2-3**

**Book I, Part C.7 - Design-Build Services
Scope of Work**

**ATTACHMENT 6
TECHNICAL CONTRACT SUBMITTAL LIST**

Attachment 6 - Technical Contract Submittal List

This list is intended to provide the Contractor with a summary of the Technical Contract Submittal requirements of the Contract Documents. Contractor shall use this list as the basis to prepare its list of submittal requirements per the Contract Documents. Contractor shall submit the technical contract submittal list to the Authority for SONO within 30 days of NTP.

CONTRACT REFERENCE (CP1)				SUBMITTAL TITLE/PACKAGE	DUE DATE	SUBMITTAL TO AUTHORITY (APPROVAL, SONO, INFORMATION)
NO.	DESIGNATION	SECTION NO./ CHAPTER	ARTICLE			
1	Scope of Work		4.9.1	Design Baseline Report	NTP + 180 days	APPROVAL
2	Scope of Work		4.9.5	Aesthetic Design and Review for Non-Station Structure Report (as part of Design Baseline Report)	NTP + 180 days	APPROVAL
3	Scope of Work		4.4	Design and Code Analysis Report	Design Submittal	SONO
4	Scope of Work		4.5	Safety and Security Certification Plan	NTP + 60 days	SONO
5	Scope of Work		4.8	Value Engineering Report	After Approval of Design Baseline Report	SONO
6	Scope of Work		4.9.2	Hydrology and Hydraulics Reports	Design Submittal	SONO
7	Scope of Work		4.9.3	Geotechnical Reports (GDR and GEDR) and all technical memoranda	Design Submittal	SONO
8	Scope of Work		4.9.3	GBR-C	Prior to beginning of construction	APPROVAL
9	Scope of Work		4.9.3	Geotechnical Investigation Plan (GIP)	Prior to commencement of field work	SONO
10	Scope of Work		4.9.4	Type Selection Report, including Type Selection Memo, Major Reports, and Supporting Reports	After Approval of Design Baseline Report	APPROVAL
11	Scope of Work		4.9.5	Structures Reports	Design Submittal	SONO
12	Scope of Work		4.9.6	Certifiable Elements and Hazards Log	Quarterly	SONO
13	Scope of Work		4.9.7	Safety and Security Certification Package	When Certifiable Items Lists for each element is completed for milestone payment	SONO
14	Scope of Work		4.9.8	Final Design Report	Design Submittal	SONO
15	Scope of Work		4.11	Nominal 60% Construction Drawings (all sheets represented) and Specifications (outline)	Design Submittal (60% Design)	SONO
16	Scope of Work		4.11	Nominal 90% Construction Drawings (all sheets included) and Specifications (all specs included)	Design Submittal (90% Design)	SONO
17	Scope of Work		4.11	Survey Reports (signed and sealed) - Refer to Standard Specifications	Design Submittal	SONO
18	Scope of Work		4.12	Copy of Third-Party Design Submittals and Approvals	Design Submittal	Per V&V Document (Book 3)
19	Scope of Work		4.13	Ready for Construction Submittals (signed and sealed)	Prior to beginning of construction	APPROVAL
20	Scope of Work		4.14	Design Variance Requests	As needed, but Prior to incorporation into RFC	APPROVAL
21	Scope of Work		4.15.1	Site-Specific Health and Safety Plan	NTP + 60 days	SONO
22	Scope of Work		4.15.1	Site-Specific Security Plan	NTP + 60 days	SONO
23	Scope of Work		4.15.2	Hazardous Materials Remediation Plan	Prior to performing the hazardous material removal work	APPROVAL
24	Scope of Work		4.15.4	Construction-Phase Submittals - Refer to Standard Specifications	Per Standard Specifications	Per Standard Specifications

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NO.	DESIGNATION	SECTION NO./ CHAPTER	ARTICLE			
25	Scope of Work		4.15.5	As-Builts (signed and sealed)		SONO
26	Scope of Work		4.15.6	Environmental Compliance Plan		SONO
27	Scope of Work		5.1	Demolition Plan	Prior to demolition work	SONO
28	Scope of Work		5.4	Trackbed Analysis Report	Design Submittal	SONO
29	Scope of Work		5.17.1	Contractor RAM Program Plan (CRMP) - Final	NTP + 60 days	SONO
30	Scope of Work		5.17.1	Contractor RAM Program Plan (CRMP) - Draft	NTP + 90 days	SONO
31	Scope of Work		5.17.1	RAM Allocation Report	Baseline Design Report Submittal	SONO
32	Scope of Work		5.17.1	Historical Product Maintainability Report (HPMR)	Baseline Design Report Submittal	SONO
33	Scope of Work		5.17.1	Maintenance Manuals	Final Design Report Submittal	SONO
34	Scope of Work		5.17.1	Reliability-Centered Maintenance (RCM)	Final Design Report Submittal	SONO
35	Scope of Work		5.17.1	Preventive Maintenance Analysis (PMA)	Final Design Report Submittal	-
36	Scope of Work		5.17.1	Corrective Maintenance Analysis (CMA)	Final Design Report Submittal	-
37	Scope of Work		5.17.1	Maintainability Demonstration Plan and Procedure (MDPP)	Final Design Report Submittal	SONO
38	Scope of Work		5.17.1	Maintainability Demonstration Test Report (MDTR)	Before or with Substantial Completion approval request	SONO
39	Scope of Work		5.18	Design Life and Durability Report	Final Design Report Submittal	SONO
40	Design Criteria Manual, Rev. 0	CH 7 - Civil	7.8.1.5	An alternative method of providing vehicular access to the trackside from the Authority facility	Baseline Design Report Submittal	APPROVAL
41	Design Criteria Manual, Rev. 0	CH 7 - Civil	7.8.4.3	Case 2 Concrete Barrier Wall Design Drawings	Design Submittal	APPROVAL
42	Design Criteria Manual, Rev. 0	CH 7 - Civil	7.10.3	Design drawings for temporary structures for the support and maintenance of surface traffic adjacent to and/or over the construction site	Construction Submittals	SONO
43	Design Criteria Manual, Rev. 0	CH 9 - Utilities	9.5.3	Request for access to non-CHST utilities from the Authority's right-of-way	Design Submittal	SONO
44	Design Criteria Manual, Rev. 0	CH 9 - Utilities	9.5.5.4	Utility protection and monitoring plan (provided to the utility owner)	Construction Submittals	INFORMATION
45	Design Criteria Manual, Rev. 0.1	CH 10 - Geotechnical	10.4/ 10-C.3	Qualifications of boring, in-situ testing inspection staff as well as rock mapping staff and the blasting specialist	Design Submittal	SONO
46	Design Criteria Manual, Rev. 0.1	CH 10 - Geotechnical	10.6.4.3	Results of the Drivability Analysis	Design Submittal	SONO
47	Design Criteria Manual, Rev. 0.1	CH 10 - Geotechnical	10.6.4.3	Indicator pile and testing results	Construction Submittals	SONO
48	Design Criteria Manual, Rev. 0.1	CH 10 - Geotechnical	10.12.4.4	Verification of Numerical Program	Design Submittal	SONO
49	Design Criteria Manual, Rev. 0.1	CH 10 - Geotechnical	10-C.3	Rock Mapping Records	Design Submittal	INFORMATION
50	Design Criteria Manual, Rev. 0.1	CH 10 - Geotechnical	10-C.5.1	Blasting Plan	Design Submittal	SONO
51	Design Criteria Manual, Rev. 0.1	CH 11 - Seismic	11.3	Seismic Analysis and Design Plan	Design Submittal	APPROVAL

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NO.	DESIGNATION	SECTION NO./CHAPTER	ARTICLE			
52	Design Criteria Manual, Rev. 0.1	CH 12 - Structures	12.6.8.6	Rail Stress and Fastener Design and Analysis Plan	Design Submittal	APPROVAL
53	Design Criteria Manual, Rev. 0.1	CH 12 - Structures	12.8.1.1	Bridge Type Selection Submittals as described in the Caltrans OFSP Procedures	Design Submittal	APPROVAL
54	Design Criteria Manual, Rev. 0.1	CH 12 - Structures	12.8.7	Complex and Non-Standard Aerial Structures Load Path Report	Design Submittal	APPROVAL
55	Design Criteria Manual, Rev. 0.1	CH 12 - Structures	12.11.3	A list of a minimum of five successful waterproofing system projects of similar design and complexity completed within the past five years	Construction Submittals	SONO
56	Design Criteria Manual, Rev. 0	CH 13 - Tunnels	13.8.1	Examples of where the load design method has been used before for tunnel design, and verification of the assumptions made about the behavior of the ground or the lining	Design Submittal	INFORMATION
57	Verification, Validation and Self-Certification		2.1	Verification and Validation Plan - Draft	NTP + 60 days	APPROVAL
58	Verification, Validation and Self-Certification		2.1	Verification and Validation Plan - Final	NTP + 90 days	APPROVAL
59	Verification, Validation and Self-Certification		2.1	Verification and Validation Plan - Update	Design Submittal	APPROVAL
60	Verification, Validation and Self-Certification		2.2	RM Tool - Licenses	NTP + 30 days	INFORMATION
61	Verification, Validation and Self-Certification		2.2	RM Tool - Database	Monthly	SONO
62	Verification, Validation and Self-Certification		3.2	Key personnel resumes	During mobilization & prior to hiring	SONO
63	Verification, Validation and Self-Certification		3.4	ICE/ISE management plan - draft	NTP + 60 days	APPROVAL
64	Verification, Validation and Self-Certification		3.4	ICE/ISE management plan - final	NTP + 90 days	APPROVAL
65	Verification, Validation and Self-Certification		3.4	ICE/ISE monthly progress & status report	Monthly	INFORMATION
66	Verification, Validation and Self-Certification		3.4	ICE/ISE quarterly progress & status report	Quarterly	INFORMATION
67	Verification, Validation and Self-Certification		2.2, 2.3, 2.4, 2.5	V&V Submittal (RM tool data copy, RVTM, CIL and V&V report)	Baseline Design Report Submittal	SONO
68	Verification, Validation and Self-Certification		3.1	Contractor Self Certification	Baseline Design Report Submittal	SONO
69	Verification, Validation and Self-Certification		3.4	ICE/ISE Assessment Report and Certificate	Baseline Design Report Submittal	SONO
70	Verification, Validation and Self-Certification		2.2, 2.3, 2.4, 2.5	V&V Submittal (RM tool data copy, RVTM, CIL and V&V report)	Milestone Design Submittals	SONO
71	Verification, Validation and Self-Certification		3.1	Contractor Self Certification	Milestone Design Submittals	SONO
72	Verification, Validation and Self-Certification		3.4	ICE/ISE Assessment Report and Certificate	Milestone Design Submittals	SONO
73	Verification, Validation and Self-Certification		2.2, 2.3, 2.4, 2.5	V&V Submittal (RM tool data copy, RVTM, CIL and V&V report)	Design Submittal	SONO
74	Verification, Validation and Self-Certification		3.1	Contractor Self Certification	Design Submittal	SONO
75	Verification, Validation and Self-Certification		3.4	ICE/ISE Assessment Report and Certificate	Design Submittal	SONO
76	Verification, Validation and Self-Certification		2.2, 2.3, 2.4, 2.5	V&V Submittal (RM tool data copy, RVTM, CIL and V&V report)	Construction Submittals	SONO
77	Verification, Validation and Self-Certification		3.1	Contractor Self Certification	Construction Submittals	SONO

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NO.	DESIGNATION	SECTION NO./ CHAPTER	ARTICLE			
78	Verification, Validation and Self-Certification		3.4	ICE/ISE Assessment Report and Certificate	Construction Submittals	SONO
79	Verification, Validation and Self-Certification		2.2, 2.3, 2.4, 2.5	V&V Submittal (RM tool data copy, RVTM, CIL and V&V report)	As-Built Submittals	SONO
80	Verification, Validation and Self-Certification		3.1	Contractor Self Certification	As-Built Submittals	SONO
81	Verification, Validation and Self-Certification		3.4	ICE/ISE Assessment Report and Certificate	As-Built Submittals	SONO
82	Standard Specifications Site Surveys	02 21 13	1.3.E	Mapping or Digital Terrain Model (DTM) products developed from photogrammetry or scanning technology	As needed	SONO
83	Standard Specifications Site Surveys	02 21 13	1.3.G	Survey report of all found or set monuments controlling land boundaries	As needed	SONO
84	Standard Specifications Site Surveys	02 21 13	1.3.H	Survey report of all field ties made for items such as existing features, locations of potholes, geotechnical borings, horizontal and vertical clearances to major structures or facilities, and catenary wire sag	As needed	SONO
85	Standard Specifications Field Engineering	02 21 23	1.3.A	A survey plan for establishing, controlling, and checking the layout for all work. with a plan sheet showing the horizontal distance, azimuth, and angle from the control points	As needed	SONO
86	Standard Specifications Field Engineering	02 21 23	1.3.B	Survey showing actual as-built conditions for all work indicating its conformance to the Contract Documents	As needed	SONO
87	Standard Specifications Field Engineering	02 21 23	1.3.C	Submit for each element of work constructed survey showing actual as-built conditions.	As needed	SONO
88	Standard Specifications Photographic Documentation	02 21 33	1.3	Photographs and digital video recording of project site:	1. Before commencement of clearing, demolition, and subsurface work. 2. Upon completion of clearing and demolition. 3. Upon completion of subsurface work. 4. Monthly during performance of the Work, or more frequently as needed. 5. At all construction milestones 6. Upon completion of the Work.	SONO
89	Standard Specifications Photographic Documentation	02 21 33	1.5.C	Format and quality of uploaded recordings to Authority's web portal.	As needed	SONO
90	Standard Specifications Photographic Documentation	02 21 33	1.8.A	Aerial photographs of the entire Jobsite.	As needed	SONO
91	Standard Specifications Existing Conditions Assessment	02 22 00	1.3.A	Preconstruction Condition Survey Report.	As needed	SONO
92	Standard Specifications Portland Cement Concrete	03 05 15	1.6.B	Manufacturer's product data for proposed concrete admixtures	As needed	SONO
93	Standard Specifications Portland Cement Concrete	03 05 15	1.6.C	Aggregate source	As needed	SONO

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NO.	DESIGNATION	SECTION NO./ CHAPTER	ARTICLE			
94	Standard Specifications Portland Cement Concrete	03 05 15	1.6.E	Batch Tickets	As needed	-
95	Standard Specifications Portland Cement Concrete	03 05 15	2.1.C.1	Source of Special Aggregates	As needed	SONO
96	Standard Specifications Portland Cement Concrete	03 05 15	2.1.D	Concrete Admixture and Cementitious Materials	As needed	SONO
97	Standard Specifications Prestressed Concrete	03 05 18	1.6.A	Test results and certifications re. Post-Tensioning System	As needed	SONO
98	Standard Specifications Prestressed Concrete	03 05 18	1.6.E	Product Data	As needed	SONO
99	Standard Specifications Prestressed Concrete	03 05 18	1.6.J	Prestressing Firm Qualifications	As needed	SONO
100	Standard Specifications Prestressed Concrete	03 05 18	1.7.C	Certification of independent laboratory if outside the U.S.	As needed	SONO
101	Standard Specifications Falsework	03 11 14	1.4.A	Shop drawings and supporting calculations for falsework	As needed	SONO
102	Standard Specifications Concrete Anchors	03 15 23	1.6.H.4	Failed Anchor Documentation	As needed	SONO
103	Standard Specifications Cast-In-Place Concrete	03 30 00	1.5.C.1	Site Mock-ups	As needed	SONO
104	Standard Specifications Concrete Finishing	03 35 00	1.5.C and D	Site Mock-ups	As needed	SONO
105	Standard Specifications Precast Concrete	03 40 00	1.6.E	Mock-ups	As needed	SONO
106	Standard Specifications Precast Concrete	03 40 00	1.6.F	Control Samples	As needed	SONO
107	Standard Specifications Precast Concrete Segmental Construction	03 43 00	1.6.A	Shop drawings and calculations for precast concrete segmental construction, Casting manual, Erection Manual, etc.	As needed	SONO
108	Standard Specifications Bridge Bearings	07 95 63	1.4.D	Product Data	As needed	SONO
109	Standard Specifications Bridge Expansion Joint Assemblies	07 95 66	1.4.A	Product data and shop drawings for the expansion joint system	As needed	SONO
110	Standard Specifications High-Performance Coatings	09 96 00	1.6.A	Product Data and Manufacturer's Certification	As needed	SONO
111	Standard Specifications High-Performance Coatings	09 96 00	1.6.H	Independent Coating inspector's qualifications	As needed	SONO
112	Standard Specifications High-Performance Coatings	09 96 00	1.6.J	Independent Coating Inspector's Reports	As needed	SONO
113	Standard Specifications High-Performance Coatings	09 96 00	1.6.L	Reports	As needed	SONO

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NO.	DESIGNATION	SECTION NO./ CHAPTER	ARTICLE			
114	Standard Specifications Geotechnical Instrumentation and Monitoring	31 09 13	1.5.A	Shop Drawings	Minimum of 60 days prior to installation	SONO
115	Standard Specifications Geotechnical Instrumentation and Monitoring	31 09 13	1.5.B	Documentation	Prior to installation and during monitoring as stated	SONO
116	Standard Specifications Geotechnical Instrumentation and Monitoring	31 09 13	1.5.C	Certifications	Minimum of 60 days prior to installation	SONO
117	Standard Specifications Geotechnical Instrumentation and Monitoring	31 09 13	1.5.D	Monitoring Documentation	Within 12 hours after monitoring any instrument	SONO
118	Standard Specifications Geotechnical Instrumentation and Monitoring	31 09 13	1.5.E	Mix Designs	Prior to start of work	SONO
119	Standard Specifications Geotechnical Instrumentation and Monitoring	31 09 13	1.5.F	Closure Report	Upon removal of instrumentation	SONO
120	Standard Specifications Geotechnical Instrumentation and Monitoring	31 09 13	1.4 F. thru I, L and M.	Design information as required by referenced paragraphs including all proposed remedial measures.	Minimum of 60 days prior to installation	APPROVAL
121	Standard Specifications Dewatering	31 23 19	1.5B	Procedures for detection of movement and records of movement detection	As needed	SONO
122	Standard Specifications Dewatering	31 23 19	1.5D	Copies of permits required for performing the work of this Section	As needed	SONO
123	Standard Specifications Dewatering	31 23 19	1.5E	Records of monitoring and movement	One day after the reading	SONO
124	Standard Specifications Reinforced Slopes and Earth Structures	31 38 13	1.B.B	Design Submittal	Minimum of 60 days prior to start of earth structure system construction	APPROVAL
125	Standard Specifications Ground Anchors	31 39 13	1.5.A	Calculations for design of the tendons, unbonded lengths, bonded lengths, bearing plates, bearing stiffeners, and wedge plates	As needed	SONO
126	Standard Specifications Ground Anchors	31 39 13	1.5.H	Test data and results for all testing required	As needed	SONO
127	Standard Specifications Ground Anchors	31 39 13	1.5.I	Driller's qualifications	As needed	SONO
128	Standard Specifications Ground Anchors	31 39 13	1.5.J	Anchor Tieback Design Engineer's qualifications	As needed	SONO
129	Standard Specifications Ground Anchors	31 39 13	1.5.K	Details of destressing and removal of temporary anchors	As needed	SONO

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130	Standard Specifications Temporary Excavation Support and Protection	31 50 13	1.5.A	A written procedure, along with detailed drawings, of the proposed excavations and excavation support systems	As needed	SONO
131	Standard Specifications Temporary Excavation Support and Protection	31 50 13	1.5.B	Detailed drawings for support systems	As needed	SONO
132	Standard Specifications Temporary Excavation Support and Protection	31 50 13	1.5.C	Design calculations	As needed	SONO
133	Standard Specifications Temporary Excavation Support and Protection	31 50 13	1.5.D	Professional Engineer's Certification	As needed	SONO
134	Standard Specifications Temporary Excavation Support and Protection	31 50 13	1.5.E	Check calculations and related documents prepared, signed, and sealed by an independent civil or structural engineer currently registered in the State of California	As needed	SONO
135	Standard Specifications Temporary Excavation Support and Protection	31 50 13	1.5.F	Copies of permissions from adjacent property owners for extending excavations and support systems beyond Authority property	As needed	SONO
136	Standard Specifications Temporary Excavation Support and Protection	31 50 13	1.5.G	Proposed engineer's resume showing required experience	As needed	SONO
137	Standard Specifications Driven Piles	31 62 00	1.5.C	Pile tip elevation	Prior to ordering production piles	SONO
138	Standard Specifications Driven Piles	31 62 00	1.5.H	Specialty Consultant Qualifications	As needed	SONO
139	Standard Specifications Driven Piles	31 62 00	1.6.D	Replacing damaged piles or driven out of position	As needed	SONO
140	Standard Specifications Drilled Concrete Piers and Shafts	31 63 29	1.6.A	Qualifications of the Drilled Shaft Entity	As needed	SONO
141	Standard Specifications Planting	32 90 00	1.5.G	Plant Substitution	NTP + 30 days	SONO
142	Standard Specifications Trenching and Backfilling for Utilities	33 05 28	2.2.B.3	Legends	As needed	SONO

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