

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

OFFICE ENGINEER

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November 5, 2013

04-SF-280-R5.2/R6.0

04-4A5104

Project ID 0400001138

NHPI-280-1(136)E

Addendum No. 3

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN THE CITY AND COUNTY OF SAN FRANCISCO at various locations.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on Wednesday, December 4, 2013, instead of the date of Wednesday, November 13, 2013.

This addendum is being issued to set a new bid opening date as shown herein and revise the project plans, the *Notice to Bidders and Special Provisions*, the *Bid book*, and *Information Handout*.

Project plan sheets 3, 4, 8, 9, 11, 12, 13, 25, 31, 32, 33, 34, 40, 41, 42, 43, 44, 45, 46, 47 are replaced and attached for substitution for the like-numbered sheets.

In the Special Provisions, Section 2-1.06B Supplemental Project Information is replaced as attached.

In the Special Provisions, Section 5-1.20D, is added as attached.

In the Special Provisions, Section 10-1.02, is added as attached.

In the Special Provisions, Section 12-4.02A, the fifth paragraph is deleted.

In the Special Provisions, Section 12-4.05, the lane closure Chart Nos. 1, 2, 3, 4, 5, 6, 7, 8, and 9 are replaced as attached.

In the Special Provisions, Section 12-4.05, the lane closure Chart Nos. 10, 11, 12, and 13 are added as attached.

In the Special Provisions, Section 14-8.02, is added as attached.

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In the Special Provisions, Section 15-2.04E, the introduction for the eleventh paragraph is replaced as follows:

"Replace second paragraph in section 15-4.01A(2) with:"

In the Special Provisions, Section 15, the following paragraph is added before the last paragraph.

"Replace paragraph 2 in section 15-4.01C(3)(a) with:

Before removing portions of hinge reconstruction concrete elements, make an 1/2-inch deep saw cut along neat lines around the perimeter of the concrete to be removed on both the interior girder cell surfaces and exterior box girder surfaces of the work."

In the Special Provisions, Section 51, is replaced as attached.

In the Special Provisions, Section 52, is added as attached.

In the Special Provisions, Section 90-3.02A, is replaced as attached.

In the *Information Handout* "Right of Way Appraisal Map" is added as attached.

In the *Bid* book, in the "Bid Item List," Item 30, 36, 37 are replaced as attached.

To *Bid* book holders:

In the *Bid* book, page 4 of the "Bid Item List" is replaced as attached. The attached Bid Item List is to be used in the bid.

Inquiries or questions in regard to this addendum must be communicated as a bidder inquiry and must be made as noted in the *Notice to Bidders* section of the *Notice to Bidders and Special Provisions*.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the *Bid* book.

Submit bids in the *Bid* book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

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This addendum and attachments are available for the Contractors' download on the Web site:

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/04/04-4A5104

If you are not a *Bid* book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,



for REBECCA D. HARNAGEL
Chief, Office of Plans, Specifications & Estimates
Office Engineer
Division of Engineering Services

Attachments

Add to section 2-1.06B:

The Department makes the following supplemental project information available:

Supplemental Project Information

Means	Description
Included in the <i>Information Handout</i>	1) Asbestos And Lead-Containing Paint survey Report for the I-280 Southern Freeway Viaduct Bridge 34-0046, San Francisco CA, Dated December 2011. 2) ROW Appraisal Map
Available as specified in the <i>Standard Specifications</i>	1) Bridge as-built drawings
Available for inspection at the District Office Telephone no.: (510) 286 -5209	Asbestos And Lead-Containing Paint Survey Report for the I-280 Southern Freeway Viaduct Bridge 34-0046, San Francisco CA, Dated December 2011.

Replace section 5-1.20D with:

5-1.20D Occupied Improvements within the Right-of-Way

Occupied improvements are within the right-of-way at:

1. Portion of building "C" and building "F" as shown.

You will have access to above locations only between April 22, 2014 to October 2, 2014.

Do not take any action that will result in unnecessary inconvenience or disproportionate injury to or that is coercive in nature to the occupants of the improvements.

Add to section 10-1.02:

You are restricted to work only on the hinge "ES-83" during first continuous complete freeway, route 280SB closure from 9:00PM Thursday , May 22, 2014 to 5:00AM Tuesday, May 27, 2014.

Provide a 60 days notice to the Engineer prior to all three complete continuous freeway, route 280 NB & route 280 SB closures.

Replace "Reserved" in section 12-4.05B with:

Chart no. 1 Freeway/Expressway Lane Requirements																									
County: SF							Route/Direction: 280/NB							PM: R5.18 – R6.06											
Closure limits: From Cesar Chavez St off-ramp to Indiana St on-ramp																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Thu	1	1	1	1	1	2															2	2	1	1	
Fri	1	1	1	1	1	2															2	2	2	1	
Sat	1	1	1	1	1	1	1	2												2	2	2	2	1	
Sun	1	1	1	1	1	1	1	2	2	2									2	2	2	2	1	1	

Legend:

1 Provide at least 1 through freeway lane open in direction of travel

2 Provide at least 2 adjacent through freeway lanes open in direction of travel

Work allowed within the highway where shoulder or lane closure is not required

REMARKS:

- Do not use with Chart no. 3.
- Do not use with Chart no. 4.

Replace "Reserved" in section 12-4.05B with:

Chart no. 2 Freeway/Expressway Lane Requirements																									
County: SF							Route/Direction: 280/SB							PM: R6.05 – R5.76											
Closure limits: From 25 th /Cesar Chavez St off-ramp to 25 th /Cesar Chavez St on-ramp																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Thu	1	1	1	1	1	1	2																	2	2
Fri	1	1	1	1	1	1	2																		2
Sat	2	1	1	1	1	1	1	2	2																2
Sun	2	1	1	1	1	1	1	2	2															2	2

Legend:

1 Provide at least 1 through freeway lane open in direction of travel

2 Provide at least 2 adjacent through freeway lanes open in direction of travel

Work allowed within the highway where shoulder or lane closure is not required

REMARKS:

- Do not use with Chart no. 3.
- Do not use with Chart no. 4.

Replace "Reserved" in section 12-4.05C with:

Chart no. 3 Complete Freeway/Expressway Closure Hours																									
County: SF										Route/Direction: 280/NB										PM: R4.07 – R7.54					
Closure limits: From NB 280 to NB 101 connector to end of NB 280																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Tue	C	C	C	C	C																				
Wed																									
Thu																				2	1	C	C	C	
Fri	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sat	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sun	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

Legend:

1 Provide at least 1 through freeway lane open in direction of travel

2 Provide at least 2 adjacent through freeway lanes open in direction of travel

C Freeway or expressway may be closed completely

No complete freeway or expressway closure is allowed

REMARKS:

1. This chart may be used for a continuous complete closure from 9:00 PM Thursday, July 3, 2014 to 5:00 AM Tuesday, July 8, 2014; and from 9:00 PM Thursday, August 28, 2014 to 5:00 AM Tuesday, September 2, 2014.
2. Use with Detour-1.
3. Use with Chart nos. 5, 7, and 8.
4. Do not use with Chart no. 1.
5. Do not use with Chart no. 4.

Replace "Reserved" in section 12-4.05C with:

Chart no. 4 Complete Freeway/Expressway Closure Hours																									
County: SF							Route/Direction: 280/SB							PM: R7.54 – R5.76											
Closure limits: From start of SB 280 to 25 th St/Cesar Chavez St on-ramp																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Tue	C	C	C	C	C																				
Wed																									
Thu																				2	1	C	C	C	
Fri	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sat	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sun	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

Legend:

1 Provide at least 1 through freeway lane open in direction of travel

2 Provide at least 2 adjacent through freeway lanes open in direction of travel

C Freeway or expressway may be closed completely

No complete freeway or expressway closure is allowed

REMARKS:

1. This chart may be used for a continuous complete closure from 9:00 PM Thursday, May 22, 2014 to 5:00 AM Tuesday, May 27, 2014.
2. Use with Detour-2.
3. Use with Chart nos. 9 and 10.
4. Do not use with Chart no. 2.
5. Do not use with Chart no. 3.

Replace "Reserved" in section 12-4.05D with:

Chart no. 5 Complete Connector Closure Hours/Connector Lane Requirements																									
County: SF							Route/Direction: 280/NB							PM: R4.52											
Closure limits: Connector from NB 101 to NB 280																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Tue	C	C	C	C	C																				
Wed																									
Thu																							C	C	C
Fri	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sat	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sun	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

Legend:

C Connector may be closed completely

Work allowed within the highway where shoulder or lane closure is not required

REMARKS:

1. This chart may be used for a continuous complete closure from 9:00 PM Thursday, July 3, 2014 to 5:00 AM Tuesday, July 8, 2014; and from 9:00 PM Thursday, August 28, 2014 to 5:00 AM Tuesday, September 2, 2014.
2. Use with Detour-1.
3. Use with Chart no. 3.
4. Do not use with Chart no. 1.

Replace "Reserved" in section 12-4.05E with:

Chart no. 6 Complete Ramp Closure Hours/Ramp Lane Requirements																									
County: SF							Route/Direction: 280/NB							PM: R5.18											
Closure limits: Cesar Chavez St off-ramp																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Thu	1	1	1	1	1																1	1	1	1	
Fri	1	1	1	1	1																1	1	1	1	
Sat	1	1	1	1	1	1	1														1	1	1	1	1
Sun	1	1	1	1	1	1	1	1	1	1										1	1	1	1	1	1
Legend:																									
<input type="checkbox"/> 1 Provide at least 1 ramp lane, not less than 11 feet in width, open in direction of travel <input type="checkbox"/> Work allowed within the highway where shoulder or lane closure is not required																									
REMARKS:																									
1. Do not use with Chart no. 3. 2. Do not use with Chart no. 4.																									

Replace "Reserved" in section 12-4.05E with:

Chart no. 7 Complete Ramp Closure Hours/Ramp Lane Requirements																									
County: SF							Route/Direction: 280/NB							PM: R6.06											
Closure limits: Indiana St on-ramp																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Tue	C	C	C	C	C																				
Wed																									
Thu																							C	C	C
Fri	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sat	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sun	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

Legend:

C Ramp may be closed completely

Work allowed within the highway where shoulder or lane closure is not required

REMARKS:

1. This chart may be used for a continuous complete closure from 9:00 PM Thursday, July 3, 2014 to 5:00 AM Tuesday, July 8, 2014; and from 9:00 PM Thursday, August 28, 2014 to 5:00 AM Tuesday, September 2, 2014.
2. Use with Chart no. 3.
3. Do not use with Chart no. 1.

Replace "Reserved" in section 12-4.05E with:

Chart no. 8 Complete Ramp Closure Hours/Ramp Lane Requirements																									
County: SF							Route/Direction: 280/NB							PM: R6.64											
Closure limits: 18 th St on-ramp																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Tue	C	C	C	C	C																				
Wed																									
Thu																							C	C	C
Fri	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sat	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sun	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

Legend:

C Ramp may be closed completely

Work allowed within the highway where shoulder or lane closure is not required

REMARKS:

1. This chart may be used for a continuous complete closure from 9:00 PM Thursday, July 3, 2014 to 5:00 AM Tuesday, July 8, 2014; and from 9:00 PM Thursday, August 28, 2014 to 5:00 AM Tuesday, September 2, 2014.
2. Use with Chart no. 3.
3. Do not use with Chart no. 1.

Replace "Reserved" in section 12-4.05E with:

Chart no. 9 Complete Ramp Closure Hours/Ramp Lane Requirements																									
County: SF							Route/Direction: 280/SB							PM: R7.54											
Closure limits: King St/5 th St on-ramp																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Tue	C	C	C	C	C																				
Wed																									
Thu																							C	C	C
Fri	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sat	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sun	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

Legend:

C Ramp may be closed completely

Work allowed within the highway where shoulder or lane closure is not required

REMARKS:

1. This chart may be used for a continuous complete closure from 9:00 PM Thursday, May 22, 2014 to 5:00 AM Tuesday, May 27, 2014.
2. Use with Chart no. 4.
3. Do not use with Chart no. 2.

Replace "Reserved" in section 12-4.05E with:

Chart no. 10 Complete Ramp Closure Hours/Ramp Lane Requirements																									
County: SF										Route/Direction: 280/SB										PM: R6.52					
Closure limits: Mariposa St on-ramp																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Tue	C	C	C	C	C																				
Wed																									
Thu																							C	C	C
Fri	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sat	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sun	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

Legend:

C Ramp may be closed completely

Work allowed within the highway where shoulder or lane closure is not required

REMARKS:

1. This chart may be used for a continuous complete closure from 9:00 PM Thursday, May 22, 2014 to 5:00 AM Tuesday, May 27, 2014.
2. Use with Chart no. 4.
3. Do not use with Chart no. 2.

Replace "Reserved" in section 12-4.05E with:

Chart no. 11 Complete Ramp Closure Hours/Ramp Lane Requirements																									
County: SF							Route/Direction: 280/SB							PM: R6.05											
Closure limits: 25 th St/Cesar Chavez St off-ramp																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Thu	C	C	C	C	C	C	C																	C	C
Fri	C	C	C	C	C	C	C																		C
Sat	C	C	C	C	C	C	C	C	C																C
Sun	C	C	C	C	C	C	C	C	C															C	C
Legend:																									
<input type="checkbox"/> C Ramp may be closed completely <input type="checkbox"/> Work allowed within the highway where shoulder or lane closure is not required																									
REMARKS:																									
1. Do not use with Chart no. 3. 2. Do not use with Chart no. 4. 3. Use with Detour-3.																									

Replace "Reserved" in section 12-4.05E with:

Chart no. 12 Complete Ramp Closure Hours/Ramp Lane Requirements																									
County: SF							Route/Direction: 280/SB							PM: R5.76											
Closure limits: 25 th St/Cesar Chavez St on-ramp																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Thu	C	C	C	C	C	C	C																	C	C
Fri	C	C	C	C	C	C	C																		C
Sat	C	C	C	C	C	C	C	C	C																C
Sun	C	C	C	C	C	C	C	C	C															C	C
Legend:																									
<input type="checkbox"/> C Ramp may be closed completely <input type="checkbox"/> Work allowed within the highway where shoulder or lane closure is not required																									
REMARKS:																									
1. Do not use with Chart no. 3. 2. Do not use with Chart no. 4. 3. Use with Detour-4.																									

Replace section 12-4.05H with:

12-4.05H City Street Closures

Chart no. 13 Complete City Street Closure Hours/City Street Requirements and Hours of Work																									
Location: SF							Direction: NB/SB							Street: Shelby Street											
Closure limits: Between Evans Ave and Huston Ave																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Thu	R	R	R	R	R	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	R	R
Fri	R	R	R	R	R	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	R	R
Sat	R	R	R	R	R	R	R	R	N	N	N	N	N	N	N	N	N	N	N	N	N	R	R	R	R
Sun	R	R	R	R	R	R	R	R	N	N	N	N	N	N	N	N	N	N	N	N	N	R	R	R	R
Legend:																									
R		Provide at least 1 through traffic lane, not less than 10 feet in width, for use by both directions of travel (Reversing Control)																							
N		No work allowed																							
REMARKS: The number of through traffic lanes in each direction of travel is 1.																									

Replace the 1st paragraph of section 14-8.02 with:

Do not exceed 86 dBA LMax at 50 feet from the job site activities from 10:00 p.m. to 6:00 a.m. except you may perform the following activities during the hours and for the days shown in the following table:

Noise Restriction Exceptions

Activity	Hours		Days	
	From	To	From	Through
Bridge Demolition	10:00 PM	6:00 AM	Monday	Sunday
Concrete Placement	10:00 PM	6:00 AM	Monday	Sunday
False work Erection	10:00 PM	6:00 AM	Monday	Sunday
Temporary Support Work	10:00 PM	6:00 AM	Monday	Sunday
Sand Blasting	10:00 PM	6:00 AM	Monday	Sunday

Add to section 14-8.02:

Provide one Type 1 sound level meter and 1 acoustic calibrator to be used by the Department until Contract acceptance. Provide training by a person trained in noise monitoring to 1 Department employee designated by the Engineer. The sound level meter must be calibrated and certified by the manufacturer or other independent acoustical laboratory before delivery to the Department. Provide annual recalibration by the manufacturer or other independent acoustical laboratory. The sound level meter must be capable of taking measurements using the A-weighting network and the slow response settings. The measurement microphone must be fitted with a windscreen. The Department returns the equipment to you at Contract acceptance. Work specified in this paragraph is paid for as noise monitoring.

Add to section 51-1.01A under paragraph 1:

Concrete is structural concrete, bridge for:

Bridge no.	Description of work
Southern Freeway Viaduct (Br No 34-0046)	Hinge reconstruction work shown including: 1. Bridge soffit 2. Girders 3. Deck slabs 4. Hinge seat and diaphragm

Structural concrete, bridge also includes:

Bridge no.	Description of work
Southern Freeway Viaduct (Br No 34-0046)	1. Work plan for implementation of hinge reconstruction and Type K temporary railing placement work, deck placement work plan and concrete placement shop drawings. 2. Furnish and place metal doors and frames for soffit access openings to comply with section 75-1.03A and remove forms to comply with section 51-1.03C(2)(b). 3. Roughen concrete surface approximately 1/4" amplitude by abrasive blasting, water blasting or mechanical equipment. 4. Furnish and place elastomeric pads to comply with section 51-3.02. 5. Vent holes. 6. Concrete for hinge reconstruction is mass concrete and must comply with section 51-6. 7. Before bridge removal (portion) work, shoot existing deck grades extending to at least 15 feet beyond the removal areas at both the outside edge of traveled way lines to establish the existing deck grade lines. Sign and seal survey and give copy of the survey and stations to the Engineer. 8. Mobile concrete testing laboratory to perform concrete compressive strength tests on site. 9. Provide certified personnel to take samples and perform compressive strength tests.

Replace the 2nd paragraph of section 51-1.01C(1) with:

Submit a deck placement work plan for concrete bridge decks. The placement plan must also include:

1. Method and materials to be used to temporarily seal expansion joints before the permanent joint seal work can be performed.
2. Methods to achieve the water method cure.
3. Method to apply curing compound method and estimate the time when compound is fully set.

Submit concrete placement work plan for hinge concrete placement. The placement work plan must include:

1. A plan view of the different concrete lifts on both sides of the hinge for each location.
2. Volumes of concrete for each lift
3. Methods to achieve the water method cure.

Submit and complete the following before performing hinge reconstruction work and Type K temporary railing placement work shown:

1. Shop plans with design calculations for the temporary support systems at each hinge.
2. Removal plans for each hinge to be removed to comply with section 15-4.
3. Concrete mix design, certified test data, and trial batch reports to comply with sections 51 and 90. Concrete placement work plan.
4. Splicing requirements for bar reinforcing steel to comply with section 52-6.
5. Shop plans with supporting calculations for protective covers, falsework and formwork to comply with sections 15-4.01C(2)(b), 48-2 and 51-1.03C(2).
6. The Department must accept soffit access opening frames and doors, corrosion protection cable type restrainers, and equalizing bolts to comply with sections 75-1.03E(2) and 75-1.03A. The material must be on or near the site.
7. Work plan for implementation of hinge reconstruction work and Type K temporary railing placement work. Deck placement work plan.
8. Thermal control plan with design calculations and implementation to comply with section 51-6.
9. Listing of all preliminary work to be performed before the proposed holiday weekend road closure.

During the first holiday weekend full-width bridge closure on SB 280, reconstruct hinge and place the Type K temporary railing on SB 280 at hinge near Bent ES-83. At least 10 days before the first holiday weekend full-width bridge closure submit the construction sequence for the remaining three hinge locations to be reconstructed and Type K temporary railing placed during each of the two remaining holiday weekend full-width bridge closures.

Have the necessary materials, equipment and other resources to reconstruct the hinge and place the Type K temporary railing on site before the beginning of each holiday weekend full-width bridge closure.

Submit a preliminary detailed work plan for implementation of hinge reconstruction and Type K temporary railing placement work during each holiday weekend full-width bridge closure until traffic opening within 15 days after contract approval. Submit the final work plan, for authorization by the Engineer, no less than 45 days before the first holiday weekend full-width bridge closure. The preliminary and the final work plans are informational submittals.

Add to section 51-1.01C(6) Work Plan for Implementation of Hinge Reconstruction and Type K Temporary Railing Placement Work:

Submit a work plan for implementation of hinge reconstruction and Type K temporary railing placement work including detailed procedures, sequences and all features required to perform and complete said work in a safe and controlled manner during each holiday weekend full-width bridge closure. Include the following for each holiday weekend full-width bridge closure:

1. Methods, construction sequences and timelines by the hour, from the beginning to the end of the various types of work to be performed, and the length of time to complete each operation.
2. Methods and equipment, including:
 - 2.1. Bar reinforcing steel
 - 2.2. Splicing bar reinforcing steel to existing
 - 2.3. Salvage and the reuse of metal bridge railing and posts
 - 2.4. Soffit access opening frames and doors
 - 2.5. Equilizing bolts
 - 2.6. Corrosion protection cable type restrainers
 - 2.7. Type K temporary railing
 - 2.8. Concrete
3. Methods and systems to meet temperature acceptance criteria for mass concrete
4. Contingency plan for equipment and/or material failures and/or a delay in concrete delivery or placement
5. Contingency plan for placed concrete that does not achieve its required compressive strength for the various lifts

Replace "Reserved" in section 51-1.01D(1) with:

51-1.01D(1)(a) Prequalification of Mix Design

Prequalify hinge reconstruction concrete for the compressive strengths of 1,200 psi, 3,250 psi and 3,600 psi under section 90-1.01D(5)(b) and the following:

1. Fabricate at least 15 test cylinders to be used to determine the three separate ages of break.
2. Immediately after fabrication of the 15 test cylinders, store the cylinders in a temperature medium of 70 +/- 3 degrees F until the cylinders are tested.
3. Determine the first age of break to attain an average strength of 1,200 psi of the 5 test cylinders. The average strength of the 5 test cylinders must be at least 1,200 psi. Not more than 2 test cylinders may have a strength of less than 1150 psi.
4. Determine the second age of break to attain an average strength of 3,250 psi of the 5 test cylinders. The average strength of the 5 test cylinders must be at least 3,250 psi. Not more than 2 test cylinders shall have a strength of less than 3,090 psi.
5. Determine the third age of break to attain an average strength of 3,600 psi of the 5 test cylinders. The average strength of the 5 test cylinders must be at least 3,600 psi. Not more than 2 test cylinders shall have a strength of less than 3,420 psi.

If more than one concrete mix design is used, determine the minimum number of cylinders to be cast from the designated lifts and required compressive strength for those lifts noted above and obtain authorization from the Engineer before proceeding.

The age of break will be used only to determine the compressive strength curve versus time and will not be used as a basis to determine the times when each concrete lift will attain its required compressive strength or as a basis when vehicles will be allowed on the hinge. Actual breaks from concrete cylinders taken in the field during production work will determine if and when the concrete achieves the designated required strength for each lift, and if attained or exceeded, the Contractor can then proceed to the next concrete lift or operation as authorized by the Engineer.

51-1.01D(1)(b) Preconstruction Meetings

Schedule and hold a preconstruction meeting for hinge concrete construction (1) at least 5 business days after authorization by the Engineer of the work plan for implementation of hinge concrete construction and Type K temporary railing placement work, (2) after prequalification of mix design and (3) at least 10 days before the start of hinge concrete construction. Provide a meeting facility that is within 5 miles of the job site or at another location accepted by the Engineer. Select a date and time that is acceptable to the Engineer and so that all participants will attend.

The meeting must include the Engineer, you and your representatives, concrete supplier, pumping contractor, testing lab supervisor, bar reinforcing steel supervisors, and any subcontractors involved in hinge concrete construction.

Members of the hinge concrete construction team must visit and examine the site of the work contemplated including limited space, staging areas, turnaround areas, equipment set-up areas, concrete truck and cleanout areas. Provide a proposed layout of the site and the designated areas to all attendees before the preconstruction meeting.

The purpose of this meeting is to:

1. Determine how the hinge reconstruction job will be executed. Identify and determine individual responsibilities of the hinge concrete construction team
2. Review contract material requirements
3. Review the construction sequences and processes, materials testing and acceptance testing, and safety requirements of hinge concrete work

The Engineer will assign someone to take minutes and a listing of the attendees, their company and phone numbers. The listing will be distributed to all at the meeting and a copy of the minutes will be sent out within 2 business days.

The Engineer and the Contractor will conduct the meeting. Be prepared to discuss:

1. Contractual relationships and delineation of responsibilities among you and the subcontractors
2. Contacts and communication protocol between you and your representatives, the subcontractors, and the Engineer
3. Review specification requirements for concrete
 - 3.1. Prequalification concrete including shrinkage
 - 3.2. Special materials
 - 3.3. Thermal control plan and design calculations and implementation
 - 3.4. Concrete placement shop drawings
 - 3.5. Deck placement work plan
4. Construction sequences and processes for:
 - 4.1. Timeline and critical path activities of the work plan of implementation of hinge reconstruction and Type K temporary railing placement work
 - 4.2. Bridge removal
 - 4.3. Formwork
 - 4.4. Bar reinforcement placement, splicing, and methods for replacement if rebar is damaged/unusable
 - 4.5. Concrete supplying, placing, finishing, and curing
5. Materials testing - Verification testing and acceptance testing
 - 5.1. AASHTO accredited laboratory for concrete to be used - ACI certified technician - Compressive strength tests for each layer of concrete placed
 - 5.2. Quality Control - Verification testing
 - 5.2.1. Rapid Strength Concrete (RSC)
 - 5.2.2. Reinforcement splices
 - 5.3. Quality Assurance - Acceptance testing

6. Safety requirements, including Cal/OSHA and confined space safety to comply with section 7-1.02K(6)(d)
7. SWPPP
 - 7.1. Cleanout areas

51-1.01D(1)(c) Mobile Laboratory

Use a mobile laboratory for concrete that complies with ASTM C 1077 to perform quality control tests to verify the early age compressive strengths of each concrete lift for hinge replacement at the various locations during the designated holiday weekend closures. The mobile laboratory for concrete must have a current AASHTO accreditation for: AASHTO T22 or ASTM C 39.

Provide proof that mobile laboratory is accredited.

An AASHTO accredited laboratory for concrete in close proximity may be used instead of the AASHTO accredited mobile laboratory for concrete.

51-1.01D(1)(d) Quality Control Testing

Quality control testing must comply with the Department's Independent Assurance Program.

51-1.01D(1)(e) Laboratory Personnel

Use an ACI certified "Concrete Laboratory Technician, Grade 1" to perform quality control sampling and testing of hinge concrete used in the production work to verify that compressive strength assumptions have been met before proceeding to the next lift or operation.

The ACI certified technician must cast a sufficient number of concrete cylinders for each concrete lift at each location to:

1. Test for compressive strength at a minimum of 6, 12, 24 and 72 hours of age intervals.
2. Verify and report to the Engineer the time when the actual cylinder breaks showed compressive strengths equal to or exceeding the required compressive strengths noted below for each concrete lift or operation, in order for you to proceed with the next lift or operation.

Test for compressive strength under California Test 521.

The ACI certified technician will notify the Contractor and the Contractor will notify the Engineer or the Engineer's designated representative in writing of the following;

1. Designate approximate times that the concrete cylinder breaks will be performed for the various compressive strengths
 - 1.1. First lift 1200 psi
 - 1.2. Second lift (if deck is not included) 1200 psi
 - 1.3. Third lift with deck 3250 psi
 - 1.4. 3600 psi for release of temporary supports
2. Identify Cylinder Number with
 - 2.1. Time the cylinder was made
 - 2.2. Concrete lift it came from including date and time lift placement began and ended
 - 2.3. Where cylinder was taken - discharge from truck or other location.
 - 2.4. Time of break
 - 2.5. Age of concrete at break
 - 2.6. Compressive strength at break
3. Submit compressive strength test results for each concrete cylinder break for each concrete lift in writing to the Engineer. The Engineer will determine from the reported test results whether the Contractor can proceed with the next lift or operation.

Provide a summary of all compressive strength test results signed and sealed by the manager of the laboratory within 2 business days of test completion for each hinge reconstruction location.

Replace "Reserved" in section 51-1.02A:

Structural concrete for the hinge reconstruction work:

1. Allow use of RSC to comply with section 90-3.
2. Allow use of Type III cement.
3. Method to apply curing compound method and estimate the time when compound is fully set.
4. Comply with the shrinkage limitations for bridge deck concrete in section 90-1.02A.
5. If RSC is used, aggregate must be either:
 - 5.1. Innocuous
 - 5.2. Such that when tested under ASTM C 1567 using the proposed aggregates and the cementitious materials with proportional admixtures the expansion is less than 0.10 percent. Include test data with the mix design submittal. Test data must be dated within 3 years of the contract award date. The test data must be for the same mix design and based on aggregate from the same proposed source and proportion.

Add to section 51-1.02B:

Aggregate for hinge concrete must be the one-inch combined aggregate grading complying with section 90-1.02C(4)(d).

Replace the 1st two paragraphs in section 51-1.03B with:

Vehicles weighing over 1,000 lb are not allowed on any bridge span until the concrete attains a compressive strength of at least 2,400 psi. Vehicles weighing over 4,000 lb are not allowed on any span until the concrete attains a compressive strength of at least 3,250 psi.

Vehicles exceeding the weight limitations in Veh Code Div 15 that cross bridges as allowed in section 5-1.37B must not make repetitive crossings of any span until the concrete attains a compressive strength of at least 3,600 psi.

Replace the 5th paragraph in section 51-1.03D(1) with:

Place concrete for hinge reconstruction in at least 2 operations. The last concrete operation must include placing the deck.

When the optional construction joint location shown is selected to be used by the Contractor, the soffit portion of the girder stem and hinge seat may be placed in the first concrete operation to these limits unless otherwise shown on the concrete placement shop drawings.

Before the subsequent concrete operation is placed, the first concrete operation must attain a minimum compressive strength of 1200 psi and be water cured until the placement of the next lift.

Abrasive blast clean the contaminated surfaces from the first concrete operation and after placing the bar reinforcing steel for the subsequent concrete operation, place the subsequent concrete.

When the optional construction joint location is as shown, the final concrete operation consists of placing the remaining portions of the girder stem, diaphragm and deck.

Texture the deck concrete surface longitudinally by longitudinal tining under 51-1.03F(5)(b)(iii), except do not perform initial texturing.

Replace the 2nd paragraph in section 51-1.03H with:

Curing the various hinge concrete surfaces must consist of the following:

1. Immediately after finishing the concrete surface located at the first optional construction joint location shown or otherwise indicated in the concrete placement shop drawings, cure the top concrete surface using the water method to comply with section 90-1.03B(2). Water cure this concrete surface until the next lift is placed.
2. If more than 2 concrete lifts are to be used, repeat Item 1.
3. Immediately after finishing the final concrete lift, which includes the concrete deck surface, cure the bridge deck surface using the water method. Water cure the deck surface until the concrete achieves a compressive strength of 3,250 psi.
4. Remove freestanding water and apply curing compound (no.1) to the bridge deck surface to comply with section 90-1.03B(3).
5. Do not release formwork until the bridge deck concrete achieves a minimum compressive strength of 3,250 psi.
6. The deck must achieve a minimum compressive strength of 3,250 psi and the curing compound on the deck surface must be fully set before directly opening up to traffic.

Placing, finishing and curing the concrete parapet surface must comply with section 83-1.02F, When placed, the concrete parapet must also achieve a minimum compressive strength of 3,250 psi and the metal railing completely installed before directly opening up to traffic.

When the bridge deck concrete achieves a minimum compressive strength of 3,600 psi, the temporary supports can be released.

Add to section 51-1.04:

Payment for providing preconstruction meeting facilities for the parties involved in hinge concrete work is included in the payment for structural concrete, bridge.

Add to section 51-2.01A(1):

Joint seals for movement ratings of 1-1/2" and 2" must be Type B joint seals.

52 REINFORCEMENT

Add to section 52-6.03A:

Remove ends of bars to be spliced that have been damaged during bridge removal (portion) activities to a sound and uniform bar section. Do not use a cutting torch.

Replace any damaged retained and cut bar reinforcing steel in kind that have been damaged by your activities.

Replace para 1 in section 90-3.02A with:

RSC for hinge reconstruction work must be the following:

Concrete complying with section 90-1. You may use Type III portland cement.

BID ITEM LIST

04-4A5104

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21	150620	REMOVE GATE	EA	1		
22	157560	BRIDGE REMOVAL (PORTION)	LS	LUMP SUM	LUMP SUM	
23	159010	RECONSTRUCT METAL RAILING (BRIDGE)	LF	192		
24	160102	CLEARING AND GRUBBING (LS)	LS	LUMP SUM	LUMP SUM	
25	210010	MOVE-IN/MOVE-OUT (EROSION CONTROL)	EA	2		
26	210300	HYDROMULCH	SQFT	20,400		
27	210350	FIBER ROLLS	LF	890		
28	210430	HYDROSEED	SQFT	20,400		
29	480300	TEMPORARY SUPPORT	LS	LUMP SUM	LUMP SUM	
30 (F)	510053	STRUCTURAL CONCRETE, BRIDGE	CY	453		
31	519091	JOINT SEAL (MR 1 1/2")	LF	54		
32	519100	JOINT SEAL (MR 2")	LF	162		
33 (F)	520102	BAR REINFORCING STEEL (BRIDGE)	LB	154,618		
34 (F)	044417	MISCELLANEOUS METAL (RESTRAINER - CORROSION PROTECTION CABLE TYPE)	LB	7,600		
35 (F)	750501	MISCELLANEOUS METAL (BRIDGE)	LB	3,420		
36	800103	TEMPORARY FENCE (TYPE CL-6)	LF	1,800		
37	802620	16' CHAIN LINK GATE (TYPE CL-6)	EA	3		
38	044418	TYPE 1 BARRIER RAILING (REINFORCED CONCRETE PARAPET)	LF	192		
39	840504	4" THERMOPLASTIC TRAFFIC STRIPE	LF	770		
40	850101	PAVEMENT MARKER (NON-REFLECTIVE)	EA	32		