



SAS Superstructure

Location: 04-SF-80-13.2 / 13.9

Client Name: CalTrans

Run date 22-Nov-14

Time 11:17 AM

Daily Diary Report by Bid Item

Contract No.: 04-0120F4

Diary #: 477 Const Calendar Day: 241 Date: 31-Jan-2013 Thursday

Inspector Name: Wright, Doug Title: Transportation Engineer

Inspection Type: Continuous

Shift Hours: 06:50 AM 06:10 PM Break: 00:30 Over Time: 02:00

Federal ID:

Location:

Reviewer: Schmitt, Alex Approved Date: Status: Submit

04-0120F4
04-SF-80-13.2/13.9
Self-Anchored
Suspension Bridge

Weather

Temperature 7 AM 12 PM 4PM
Precipitation Condition

Working Day [checked] If no, explain:

Diary:

Dispute

CCO #291 replace CB bolts

Overview of Cable work today:

The following work was ongoing today on the Cable:

- Cable wrapping
- Painting of suspender ropes & main Cable
- CCO-291 work for replacing cable band (CB) bolts

Today I was inspecting Tony Costa's crew on CCO-291 work of replacing CB bolts. See the diaries of L. Woo, S. Soheilifard, & A. Iranmenesh for additional details of Cable field work.

- I arrived at the pier-7 office at 06:50, & I arrived on the bridge at 07:00.
- Tony Costa, Casey Lux, Ryan Evancheck, & Robert Larue each worked 10 hours on CCO-291 today. Favco operator Nick Shafer worked 2 hours on CCO-291 today. Rene Esquivel & Ethan Kent worked 1 hour on CCO-291 today.
- Note: The new bolt-tight jacks & pump were being used to tension the new bolts. They were using pump #12928327 / 2

CCO-291 work for replacing CB bolts at PP 44S:

Work on replacing the CB bolts at PP 44S was completed today. The following were the steps done to complete the work.

- These bolts were being replaced 3 at a time. 3 bolts were de-tensioned & removed, & then new bolts were installed & tensioned to 24,000 psi (about 1.1 MN).
- Note: There was no difficulty removing the bolts today. The difficulty experienced yesterday while removing some bolts appears to be a localized issue near the bottom uphill of the CB where the CB has evidence of bending.
- Note: there was some rust noted on the CB bolts near the head of the bolts similar to PPs 40N & 40S the past 2 days.
- Bolts 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, & 21 were replaced yesterday. All of the rest of the bolts were replaced today.
- All of the new bolts were tensioned simultaneously to 29,000 psi (about 1.4 MN). The pressure was cycled up 3 times to try to minimize seating losses.
- Extensometer measurements were taken by A. Schmitt, B. Brignano, & J. Lyons. I calculated the new elongations & load on each of the new bolts. The minimum load on the new bolts was about 1.1 MN, the maximum load was about 1.4 MN, & the average was about 1.3 MN. This information was given to



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Roman Granados & Warren Collins.

- Note: I did a final inspection after the tensioning was completed. The wrapping wire appeared to maintain good tension at the terminations at the CB. There was no caulking applied at this CB yet, so there was no possible damage to the caulking.

CCO-291 work for replacing CB bolts at PP 34S:

Work on replacing the CB bolts at PP 34S was completed today. The following were the steps done to complete the work.

- Old CB bolt numbers 2, 4, & 6 were de-tensioned & removed. The gap between CB halves opened to about 4.5mm when the bolts were de-tensioned.
- Note: there was some rust noted on the CB bolts near the head of the bolts.
- New CB bolt numbers 2, 4, & 6 were installed.
- 4mm thick shims were installed in the gap between the CB halves. See attached photo.
- The new CB bolt numbers 2, 4, & 6 were tensioned to 24,000 psi (about 1.1 MN).
- Then one-by-one, each old bolt was removed & the corresponding new bolt was installed & tensioned to 24,000 psi (about 1.1 MN).
- During the morning break, extensometer measurements were taken by A. Schmitt, J. Lyons, & I. Alex calculated the new elongations & load on each of the new bolts. The minimum load on the new bolts was about 800 kN, & the average was about 1 MN.
- New CB bolt numbers 2, 4, & 6 were de-tensioned. The gap between CB halves opened up slightly more to about 5mm when the bolts were de-tensioned.
- 17 of the new bolts (all except 2, 4, & 6) were tensioned simultaneously to 26,900 psi (about 1.3 MN).
- The shims previously installed near bolt numbers 2, 4, & 6 were removed.
- New CB bolt number 2, 4, & 6 were tensioned at 26,900 psi (about 1.3 MN).
- All of the new bolts were tensioned simultaneously to 26,900 psi (about 1.3 MN). The pressure was cycled up 3 times to try to minimize seating losses.
- Extensometer measurements were taken by A. Schmitt, M. Bruce, & J. Lyons. I calculated the new elongations & load on each of the new bolts. The minimum load on the new bolts was about 1.06 MN, the maximum load was about 1.3 MN, & the average was about 1.15 MN. This information was given to Roman Granados, Warren Collins, & Tai-Lin Liu for analysis.
- At 16:00, Tony's crew finished the work of CB bolt replacement. After this time, the crew started to re-install stanchion posts.
- At 17:20, I left the bridge.
- From 17:30 until 17:45, Warren Collins & Bob Brignano to give them an update on the field work for the CB bolt replacement.
- From 17:45 until 18:10, I wrote my diary for the day & checked email.

04-0120F4 Bid Item: 067 C-SUS-SCC.067 Install Suspender Clamps, Separators, Collars

AMERICAN BRIDGE/FLUOR, A JV

Labor

Trade	Class	Name	RT Hrs	OT Hrs	DT Hrs	Total	Remarks	Dispute
Contractor: AMERICAN BRIDGE/FLUOR, A JV								
Ironworker	JNM	RENE ESQUIVEL	1.00	0.00	0.00	1.00	1 hour on CCO-291 doing stanchion removal at PP 36S	<input type="checkbox"/>
Ironworker	APP	ETHAN KENT	1.00	0.00	0.00	1.00	1 hour on CCO-291 doing stanchion removal at PP 36S	<input type="checkbox"/>
Operator	OTH	NICOLAUS SHAFER	2.00	0.00	0.00	2.00	Favco operator, 2 hours on CCO-291	<input type="checkbox"/>
Ironworker	JNM	RYAN EVANCHIK	8.00	0.00	0.00	8.00	10 hours on CCO-291	<input type="checkbox"/>
Ironworker	JNM	Robert Larue	8.00	0.00	0.00	8.00	10 hours on CCO-291	<input type="checkbox"/>
Ironworker	APP	AUGIE SOLIS	0.00	0.00	0.00	0.00		<input type="checkbox"/>
Ironworker	JNM	CASEY LUX	8.00	0.00	0.00	8.00	10 hours on CCO-291	<input type="checkbox"/>
Ironworker	FOR	ANTHONY COSTA	8.00	0.00	0.00	8.00	10 hours on CCO-291	<input type="checkbox"/>

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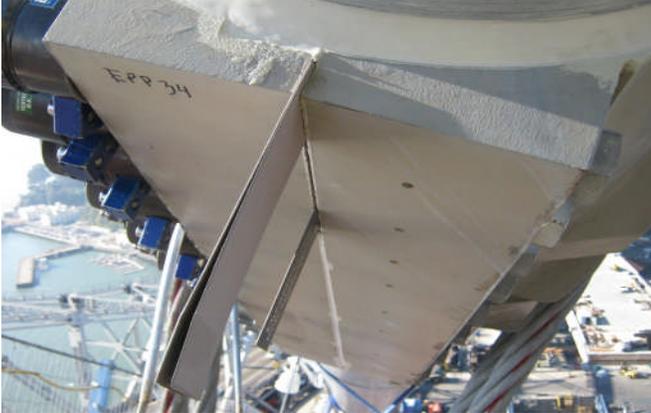
Inspector Name Wright, Doug

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Attachment



4mm thick shims temporarily installed between CB halves at PP 34S