



**SAS Superstructure**

Location: 04-SF-80-13.2 / 13.9

Client Name: CalTrans

Run date 22-Nov-14

Time 7:52 AM

**Daily Diary Report by Bid Item**

Contract No.: 04-0120F4

Diary #: 817 Const Calendar Day: 304 Date: 04-Apr-2013 Thursday

Inspector Name: Bruce, Matt Title: Transportation Engineer

Inspection Type: Continuous

Shift Hours: 07:00 am 05:30 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 50 - 60 12 PM 50 - 60 4PM 50 - 60

Precipitation 0.15"

Condition Mostly rain with PM clouds

Working Day  If no, explain:

**Diary:**

Dispute

**Work description.**

- Inspected the stressing operation to verify the Pjack load in tower foundation anchor rods with Sami Daouk, see his diary for the ABF ironworker names. Today Boltight pump number 59836-0577000106 with gauge number 29901041/18 was used for verifying the loads in all rods mentioned below. Similarly Boltight jacks RN7194, RN7197 and RN 7208 was used for this stressing operation. Sami took the majority of measurements on the anchor rods stressed today from the top surface of the bearing plate to the end of the anchor rod before and after load verification of the anchor rods.

Stressing operations began today in the North tower shaft on rods N48 & N49 at 7:10am. Operations were substantially completed in the North tower shaft, East diaphragm, into the East tower shaft. As in previous days all 3" anchor rods were stressed to 105% of Pjack. The majority of the nuts were found to be loose today and three stressing cycles were run to Pjack at 13.2ksi. The practice to verify the load in the anchor rods by checking the anchor rod nut at 5.0ksi, 10.0ksi, and then to 13.2ksi before conducting 2 more cycles straight up to 13.2ksi or 105% Pjack was done for all rods today.

After completing stress verification on anchor rods N48 and N49, there was a leak observed while verifying anchor rods N45 to N47. This leak was fixed and the remaining anchor rods in the North shaft were completed at 8:15am. Prior to mobilizing stressing equipment in the East diaphragm ABF ironworkers had to remove access planks used for Electroslag repairs. Stressing operations commenced at 9:30am on anchor rods c(E)13,14, & 15.

It was known that anchor rods b1(E)05,06,11,&12 were never stressed due to access for electroslag welding. ABF ironworkers cleaned,filed down, sprayed WD40, used a thread chaser and dye to prepare the threads of these four rods. However the jack "puller" couldnt be fastened all the way to the jack "tensioner or jack ram" on rod b1(E)11. The rods in this pair 11 and 12 would be addressed at a later date since it was taking too much time to get the jack puller onto rod 11. It was observed that while stressing anchor rods b1(E)09 and 10 that the pump was not working properly. The ABF ironworker foreman bled off the compressed air hose to release the condensation in the hose, which appeared to resolve the issue of the pump. The pressure cycles observed while stressing anchor rods b1(E)05 and 06 for the first time were 4.0ksi, 8.5ksi, 13.1ksi, and 13.2ksi. Elongations for anchor rod 5 was 223-239 = 16mm, and for rod 6 the change in length was from 227-243 = 16mm.

After finishing in the East diaphragm, the decision was made by the ABF ironworker foreman to try and resolve the force in the N36-38 set of rods. It took 8 iterations going to 13.2ksi to finally lock the N37 nut down and verify an additional 2 times up to 13.2ksi to see if the rod/nut held. The measured increase in anchor rod N37 elongation after locking the nut was 200-206 = 6mm. Once again it is my opinion that these three rods/nuts should be checked again to see if the load is retained after a few days.



## Daily Diary Report by Bid Item

Job Name: 04-0120F4

Inspector Name Bruce, Matt

Diary #: 817

Date: 04-Apr-2013

Thursday

At 3:45pm ABF ironworker crews mobilized in the East tower shaft on rods E73-75. While conducting the first cycle of load verification in anchor rods E70, E71, and E72 the red line of the jack "puller" was seen on rod E72. The first cycle was tried again with the same result then the jack was then taken off of this rod and rods E70 and E71 were verified separately. A couple more attempts were conducted with the jack back on rod E72 connected in series with E70 and E71. The nut for E72 has seized up and will not turn either way on the rod. This rod will have be addressed at another time.

It also should be noted that ABF engineer Andre Markarian was not present at all for the stressing operations today.

### Attachment



Jack puller redline seen while stressing anchor rod E72 on the left with E71 on the right, notice the difference in ram stroke.



ABF ironworkers trying to place the jack puller onto the tensioner or jack ram for rod b1(E)11 today.