



Daily Diary Report by Bid Item

Contract No.: 04-0120F4

Diary #: 668 Const Calendar Day: 102 Date: 14-Sep-2012 Friday
 Inspector Name: Bruce, Matt Title: Transportation Engineer
 Inspection Type: Continuous
 Shift Hours: 06:00 am 04:30 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 60 - 70 4PM 60 - 70
 Precipitation 0.00" Condition Cloudy and fog in the AM to mostly sunny in the PM

Working Day If no, explain:

Diary:

Dispute

Work description.

- Surveyed the tower before the start of shift where the current deflection was 348mm to the West. The theoretical deflection of the tower tie back system at this point of load transfer is supposed to be 357mm to the West. The total distance that the tower has moved/been released since load transfer began is 178mm to the East of the pullback distance from plumb. The survey was done at the end of Step 2d (ADJ), with work starting on Step 2e (ADJ) this morning.

The survey was done under uniform ambient conditions where the time of survey (taking shots on the tower) was conducted from 6:50am to 7:50am. The survey took longer than usual due to the dense fog pocket surrounding the tower head where the mini prism targets are located. The fog is a major deterrent when trying to use the total station, therefore the fog needed to pass in order to take the shots. The official time of sunrise per weather.com was 6:51am. The ambient temperature during the survey was 53F under cloudy skies. The wind speed was measured from the West at 6mph with a barometric pressure of 30.08"Hg.

- Processed the surveying data for todays measurements taken of the tower tie-back release.

- Measured the axial compression of the OBG deck at the E2 cap beam. The bipod was used with the mini prism tip to define the change in the offset distance. The west China 2.0m offset punchmarks were used as reference on the OBG at the following locations:

B1W, B3W, B2W, and S2W

The average delta from the 1.781m West offset mark placed on the E2 concrete cap beam surface was 92mm West. The survey was done at the end of Step 2d (ADJ), with work starting on Step 2e (ADJ) this morning. The theoretical distance from the Pier E2 CL at this stage of load transfer is 161mm East, the measured distance was 149mm East.

The survey was done under uniform ambient conditions where the time of survey was conducted from 8:30am to 8:40am. The official time of sunrise per weather.com as mentioned above was 6:51am. The ambient temperature during the measurements was 54F under cloudy skies. Steel temperature was taken at 9:00am at EPPCL60 which was 56F. This indicates that the measurements were done under uniform ambient conditions before the sun heats up the steel causing thermal expansion/elongation.

- Processed todays measurements taken of the OBG axial compression.

- Measured the bolt elongations with the Caltrans CT-1 Extensometer for the following cable bands:

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34S, 50N, 12N, & 100N

The measurements were taken by myself, John Lyons, Douglas Wright, and Alex Schmitt. John took all of the readings on the digital dial and recorded the number. Alex, Doug, and myself positioned/handled the Extensometer on the cable band bolts.

It should be noted that two sets of measurements were taken on cable band 34S. One set of measurements was taken just prior to these cable band bolts being stressed. Then one set of measurements was taken immediately after the ABF crews retensioned the bolts. We also took gap measurements with the digital calipers of the cable band just before and after stressing operations. Since the cable band halves are closing up these gaps are being monitored closely. The Extensometer crew was "on-call" for the stressing of this cable band and therefore had to wait until the crew reached this location on the South Sidespan. See Alex Schmitt and Brian Wolcott's diaries for more details regarding stressing cable band 34S and taking Extensometer measurements.

- Continued to compose outstanding diaries for the week due to the important information gathered and composing my thoughts immediately.

- Discussed Extensometer measurements and upcoming operations with the tool amongst fellow Caltrans engineers.

Attachment



The Mainspan cable geometry as load transfer progresses during Phase 1 Step 3.



Gap measurement taken on the bottom uphill side of E34 after the ABF ironworkers stressed this cable band.



The changed geometry of the North Sidespan cable as Phase 1 Step 3 of load transfer is in progress.



Setup of the bipod on the west 1.781m offset line (E2 concrete cap beam concrete surface) to the west 2.0m China OBG punchmarks.

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Measured movement of the OBG axial compression today as load transfer progresses.



ABF ironworkers stressing cable band E34, note the bolts with red tape were not stressed due to the minimal gaps.



Steel temperature of 56F taken at EPPCL60 after the OBG axial compression measurements.



Foggy conditions near the top of the tower temporarily prevented getting shots with the total station for the tower release.