



SAS Superstructure

Location: 04-SF-80-13.2 / 13.9

Client Name: CalTrans

Run date 21-Nov-14

Time 11:19 PM

Daily Diary Report by Bid Item

Contract No.: 04-0120F4

Diary #: 564 Const Calendar Day: 972 Date: 07-May-2012 Monday

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 60 - 70 12 PM 70 - 80 4PM 70 - 80

Precipitation 0.00" Condition Mostly sunny

Working Day If no, explain:

Diary:

Dispute

Work description.

- Checked the rotational camber marks and lines with the assistance of Doug Wright and Victor Altamirano on the North Sidespan. Specifically the items inspected were the arc length for rotational camber of the cable bands, straightness of the line between the measured arcs, and a rough check on the 1.5m offset distance from the centerline marks. Overall the marks placed by ABF surveyors were acceptable for cable band placement. This inspection was done in conjunction with ABF surveyors who laid out the marks just prior to Caltrans inspection. The lay-out work on the North Sidespan started approximately at 8:00am and was completed at 10:30am. After the work was completed I signed/approved the ABF buy-off sheet given to me by Zach approving the layout of the entire North Sidespan.

- Witnessed the stressing operation of the 6 bolts for cable band 106N with Victor and Tai-Lin. See Tai-Lin or Victor's diary for the crew of ironworkers. The following Boltight equipment was used:

Pump - Serial Number = 0507574

Jack - Identification Number(s) = RN4040, RN4037, RN4057
RN4054, RN4061, RN4038

Before stressing began ABF superintendent Danny Dunn instructed the ironworkers who would be involved with the cable band bolt stressing operation. In my opinion he gave the proper instructions to the crew of three ironworkers to perform a quality job on this task. Some key points included the following:

- 1.) Consistently clean the hydraulic connections every time before assembling
- 2.) Be aware of the Boltight jack stroke which is 10mm where a red line on the piston will indicate that the limit has been reached
- 3.) After each iteration of stressing where either the jack needs to be recycled or after reaching Pjack. The same amount of turns need to be applied to the gearbox which turns the socket and tightens the cable band bolt nut down to the washer and cable band.
- 4.) Ensuring that the jacks are properly aligned on the jack bridge and the cable band bearing surface. It should be noted that this was an issue at the W2 cap beam when stressing the deviation saddle anchor rods where improper bearing of these components broke the jacks used and the Pjack required wasn't achieved

ABF engineers present were Ben Jones and Andre Markarian assisting superintendents Danny Dunn and Scott Smith with this operation. The ABF crew tried to equalize the gaps between the cable band halves to the best of their ability. The orientation of the nut on bolt 106N3 had to be reoriented to properly install the jack bridge/socket on the cable band casting. See Tai-Lin Liu's diary for the cable band bolt elongations after performing stressing on cable band 106N. I measured the female and male halves after stressing where the Uphill measurements were 14.00mm at the bottom of the cable band and 15.60mm at the top of the cable band. Similarly the Downhill measurements were 11.96mm at the bottom of the cable band and



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15.33mm at the top of the cable band.

- Attended an impromptu meeting for cable band inspection from 3:15pm to 4:45pm. The intent of this meeting was for the Team Cable members to assess the operations today for installation and stressing of the cable band bolts. The major items discussed were the female/male cable band halve gap distances, longitudinal distance from the 1.5m offset lines, rotation of the cable band to the line, and the stressing results on cable band 106N.

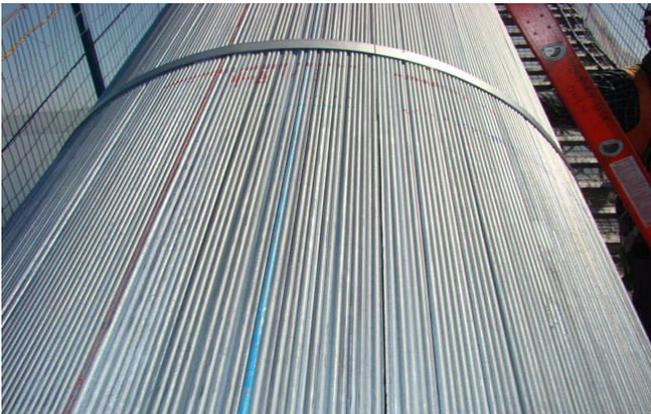
Attachment



Pjack at 105% of the required load where the pressure on the gauge was approximately 17,400psi.



ABF surveyors using a straight edge to lay-out the rotational camber centerline for cable band 40 on the north sidespan.



Black line drawn on the compacted cable to indicate rotational camber centerline of a North sidespan cable band.



Cable bands 102, 104, and 106 were installed on the North Mainspan cable on Saturday during the day after the marks were approved early in the morning

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Cable bands placed at the North west-loop, also the south west-loop cable has been compacted and is ready for cable band placement.



Typical marks seen at the 1.5m offsets for the top dead center and the rotational camber of the cable band.



ABF ironworkers in the process of closing the female and male halves for cable band 104N and aligning to the control marks on the cable.



Turning the gear box with a socket wrench which tightens the cable band bolt nut down after stressing is done and before releasing the load.



ABF surveyors in the process of laying out the rotational camber centerline for cable band 40 on the north sidespan.



Cable band 102N was placed to the rotational camber centerline where the gap of the two halves on top was 26mm prior to stressing operations.

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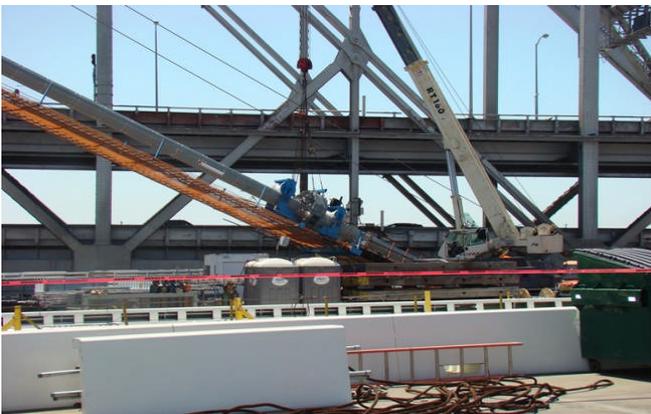
Date: 07-May-2012 Monday



Preparing to stress the cable band bolts for cable band 102N.



Installing the Boltight jacks and bridges on the outboard side of cable band 102N.



Compaction of the south sidespan cable was completed approximately at 10:00am this morning and the equipment was ready to be demobilized.



Caltrans engineers checking the cable band rotational camber on the compacted cable layed-out by ABF surveyors. Also note the access for the work.