

Job Stamp
04-0120F4
SFOBB SAS

Const. Calendar:	510		
Project Work Day No.:	720		
Date	05/06/2008		
Inspectors	Start	01:00	Stop 09:00
Hours			
Shift Hours		01:00	10:00

ASSISTANT RESIDENT ENGINEER'S CONTRACTOR – ABFJV, Subs RPS and Conco

Weather: Night was overcast with moist air and cool temperature. At sunrise the foggy marine layer turned to partly overcast skies with mild to cool temperature - Hi 64F Lo 51F (per weather.com forecast)

Description of Operations @ W2 Cap Beam:

ABF

- Foreman Nigel Lohse directed Conco during the concrete placement as where the hose was to be placed and for how long.
- A crew was dedicated to watch forms during the concrete placement to watch for any leaks/blow-outs.

Conco

- Placed approximately 270m³ of Self Consolidating Concrete (SCC) in the longitudinal/transverse diaphragms and the east/west walls to an target elevation of 53.492m.
- Sprayed curing compound on exposed concrete surfaces after concrete placement was completed.

Time (military)	Temperature (°F)	Location where temperature was taken*	Comments
03:20	Initially 55 and rose to 62-64	5	Start of concrete placement. The leading edge of SCC wasn't bleeding.
03:36	65-66	3	Leading edge of SCC wasn't bleeding.
03:44	66	1	
03:56	67	Center of the longitudinal and transverse diaphragms.	Hose was 3' from the concrete surface due to rebar conjection. ABF foreman Nigel Lohse was informed to be cautious of placement around the ducts. Caltrans spotlight ran out of batteries.
04:10	N/A	6	2 nd Pump located on the west started.
04:20	75-78	4	Informed Lalit about high concrete temperatures.
04:38	70-73	7	David confirmed that the temperature at the hopper was 70-73°F.
04:51	73-74	6	Lalit informed me that the temperature at the hopper was 72°F at 04:56.
05:06	Pamela asked ABF foreman Nigel Lohse if they were going to wet the forms before concrete placement. He told her that the forms were sprayed with water the day before, and that BB plywood has form oil already applied to the surface.		
05:16	I went downstairs to calibrate/confirm infared thermometer measurements with Massoud's thermometer. This was done when there was no concrete being placed. ABF engineer Branden Bedwell was getting different measurements with his infared thermometer (-)10°F. He was shooting the gun from the top of the forms, whereas I was shooting the gun closer to the fresh concrete surface by climbing down the rebar in the forms.		
05:21	75	5	
05:31	Noticed leak in longitudinal diaphragm forms near the jacking saddle on the north end and mentioned it to ABF engineer Branden Bedwell, see photo below.		
05:44	80	4	Tried to call David and Lalit to inform them about the high temperature.
05:50	77	7	
06:06	76	6	
06:16	78	4 Near north jacking saddle support block.	

REC'D *08 MAY-31 #004898

Time (military)	Temperature (°F)	Location where temperature was taken*	Comments
06:24	72	Northwest jacking saddle support block.	
06:30	Needed to "awake" SCC near the jacking saddle opening in the longitudinal diaphragm before placement of next layer.		
06:38	76	7	
06:44	77	7	
06:46	Longitudinal diaphragm was at red tape (pour line) approximately at 53.492m.		
06:55	Conco laborers began spraying curing compound at the longitudinal diaphragm. As placing locations 1-6 approached the final grade, the laborer was spraying the curing compound when completed.		
07:00	76	6	
07:01	75	South jacking saddle support block.	
07:23	East wall, longitudinal diaphragm, transverse diaphragm were completed and curing compound was still being applied.		
07:24	72	4	
07:28	67	8	It was difficult to get hose (steel) down the forms in the sloped area. Concrete was segregating on transverse #36 bar. ABF was cautioned to place the hose where concrete wouldn't segregate.
07:40	75	9	ABF was told to be cautious of the ducts while placing concrete.
07:51	74	8	Completed placement at this location before moving to SW wall or location 9.
08:03	73-75	9	
08:12	SW wall was completed and I informed ABF forman Nigel Lohse that if any more concrete was placed it might not provide enough cover for duct placement for CBT 3 and 7.		
08:30	I left the jobsite as no curing mats were placed.		

* Temperatures were obtained with the Fluke-63 Infrared Thermometer. The Fluke-63 was calibrated the day before, during and after the concrete placement with a mercury thermometer.

Notes:

1. Aaron Prchlik, Pamela Gagnier, and myself were watching the concrete placement at the forms. My diary is for the concrete placement that I observed. Each of us watched different sections since there was two pumps operating at the same time and because access was difficult.
2. While I was down in the forms there was one occasion where I asked to see the concrete being placed at the end of the hose. I asked because the end of the hose was submerged in the concrete, and I felt that the concrete might have been segregating. Conco obliged my request however ABF foreman Nigel Lohse used expletives to say they wouldn't raise then hose. Conco followed Nigel's command to place (submerge) the hose back into the concrete.
3. Overall the concrete placement went well as the leading edge of the concrete didn't bleed or segregate. The concrete appeared to flow smoothly and went around the rebar.
4. See attached diagram for locations of hose placement.

Safety:

ABF only provided ladders and no scaffolds hence fall protection had to be used to see the concrete placement. Access to inspect the concrete placement difficult as there were many trip hazards and some tie-off points were not adequate to support a fall. Caltrans verbally mentioned in at least 2 meetings with ABF April 28th and 30th our concern about the access.

RPS

- Addressed any issues prior to concrete placement, see Pamela's diary for details. Also one ironworker was available during the concrete placement if needed.

Inspector:

Matt Bruce *Matt Bruce* Transportation Engineer (D)

EA	04-0120F4
Co-Rte-KP (PM)	SF-080-13.2/13.9 (B.2/8.7)
Structure Rep.	Rick Morrow

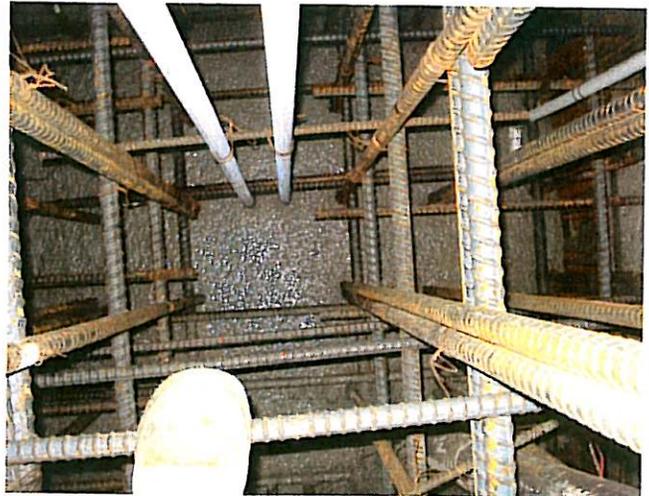
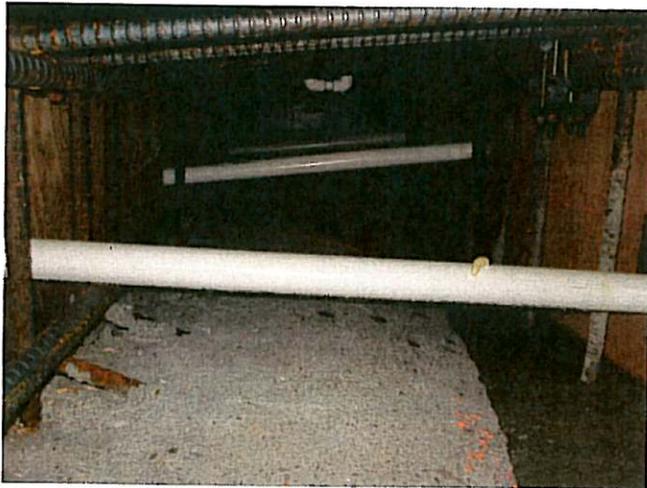


File Name:	DSC01590
Date:	05-06-08
By Int:	M Bruce

Description: Dehumidification bolts close to the jacking saddle opening, where the top bolt isn't normal to the vertical form. ABF was informed several times about this issue prior to placing concrete.

File Name:	DSC01598
Date:	05-06-08
By Int:	M Bruce

Description: SCC from the second truck, which failed the slump flow test.



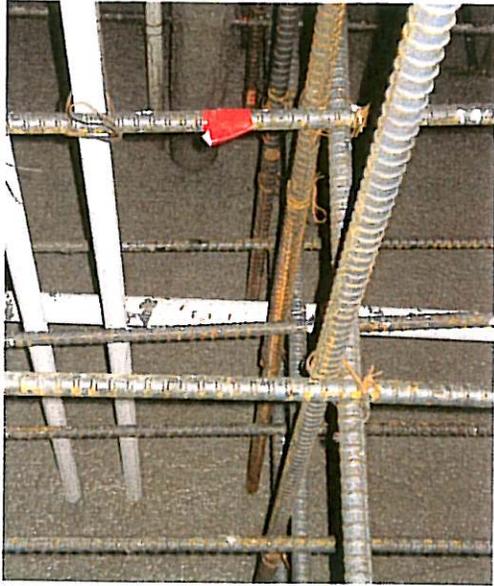
File Name:	DSC01602
Date:	05-06-08
By Int:	M Bruce

Description: SCC placement in the east wall. The leading edge of the previously placed SCC in the east longitudinal diaphragm can be seen on the right hand side of the photo.

File Name:	DSC01606
Date:	05-06-08
By Int:	M Bruce

Description: Photo taken of the SCC placement near the diaphragm intersection. When the spotlight went out and when I couldn't climb down the rebar in the forms, the digital camera was used periodically to get a visual of the SCC placement.

EA	04-0120F4
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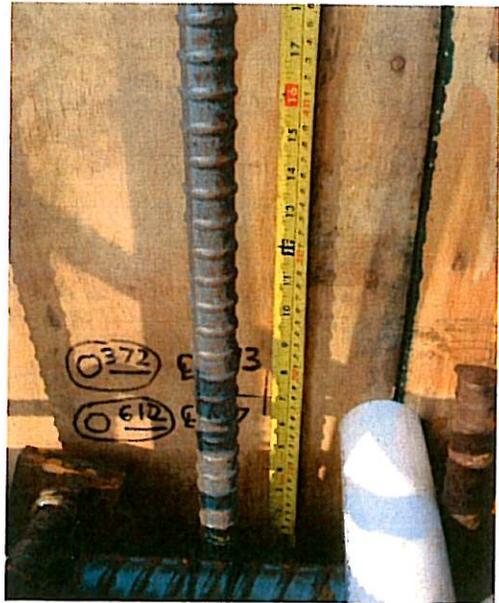
File Name:	DSC01615		
Date:	05-06-08	By Int:	M Bruce
Description: SCC placement in the longitudinal diaphragm.			



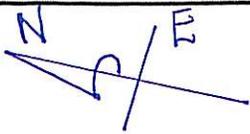
File Name:	DSC01619		
Date:	05-06-08	By Int:	M Bruce
Description: Leak in longitudinal diaphragm forms near the jacking saddle.			



File Name:	DSC01635		
Date:	05-06-08	By Int:	M Bruce
Description: Curing compound at the longitudinal diaphragm near the jacking saddle opening.			

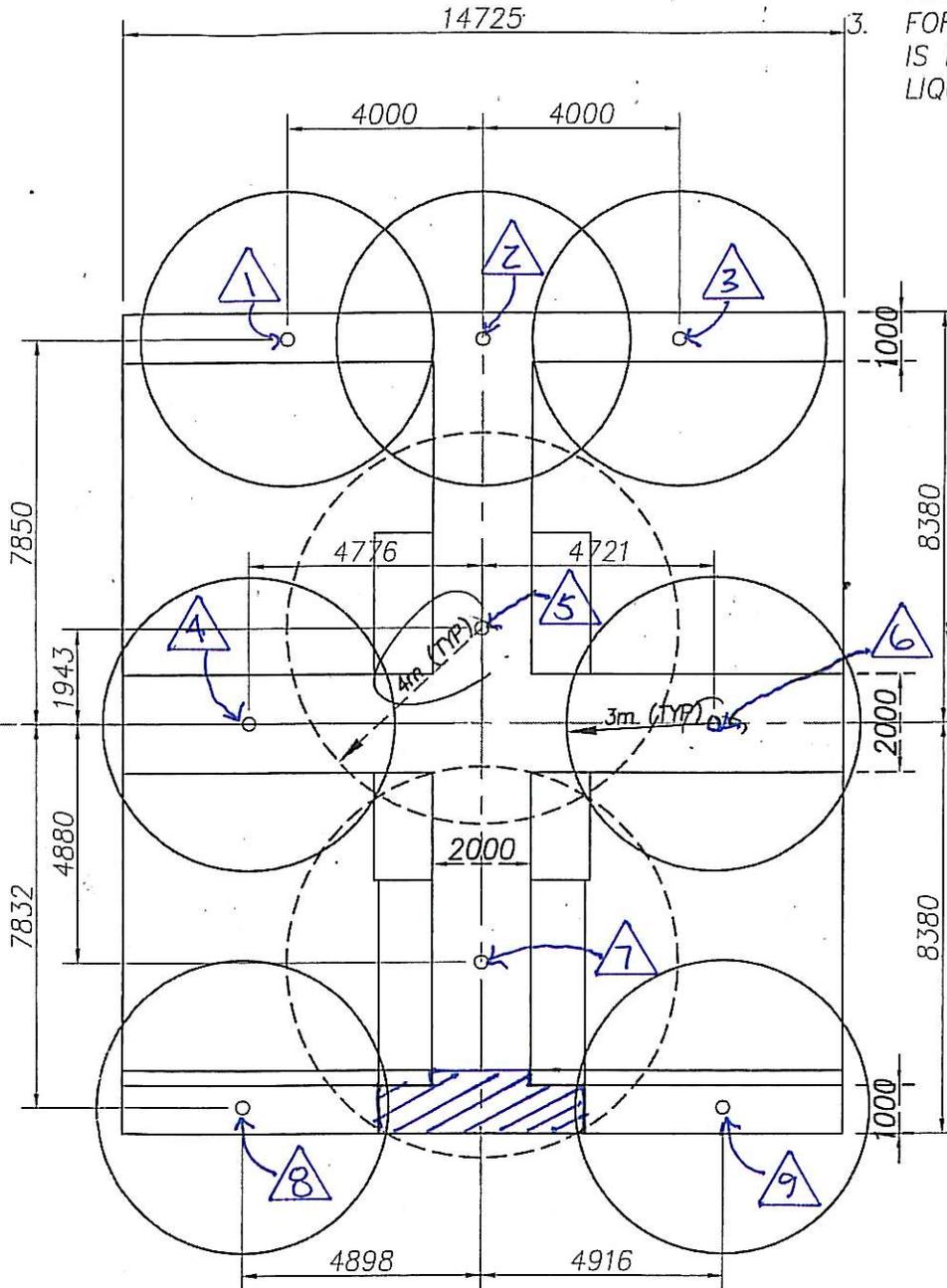


File Name:	DSC01638		
Date:	05-06-08	By Int:	M Bruce
Description: ABF layout of transverse tendons CBT3 and CBT7 approximately at the midpoint of the west wall. ABF foreman Nigel Lohse wanted to pour concrete higher which may not provide enough cover for these ducts.			



GENERAL NOTES:

1. ONE PLACING PUMP WILL BE USED ON POUR 2.
2. MAX PLANNED SCC FLOW IS 4m
3. FORMWORK (NOT SHOWN) IS DESIGNED FOR FULL LIQUID HEAD.



POUR 2 HOSE LOCATIONS

PRELIMINARY

SAN FRANCISCO OAKLAND BAY BRIDGE
EAST SPAN SEISMIC SAFETY PROJECT
SELF ANCHORED SUSPENSION BRIDGE
(SUPERSTRUCTURE AND TOWER)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
CONTRACT NO. 04-0120F4



DISTRICT	COUNTY	ROUTE	KILOMETER POST
04	SF	80	13.2 / 13.9

Made By: _____ Date: _____
Checked By: _____ Date: _____
In Charge Of: R. CROCKETT
AB Job No. 660110

W2 CAP BEAM
SELF-CONSOLIDATED CONCRETE FLOW MOCK UP
POUR 2 DISCHARGE HOSE LOCATIONS

Scale:

Sheet No.
x of n