

Job Stamp

04-0120F4
SFOBB SAS

Const. Calendar: 866

Project Work Day No.: 1076

Date	04/27/2009			
Inspectors	Start	06:30	Stop	12:00
Hours				
Shift Hours		06:30		16:30

AKM

ASSISTANT RESIDENT ENGINEER'S

**CONTRACTOR – ABFJV, Subs SDI and CMC-RS**

EQUIPMENT AND/OR LABOR:		HOURS - ITEM NO.										REMARKS			
		#34 Prestressing Cast-in-Place Concrete (Pier W2)												IDLE OR DOWN	Name
Equip. #	NO. MEN	DESCRIPTION (Of Equipment or Labor)													
1	1	Field Superintendent	8											Ralph Craig	SDI
2	1	Ironworker Foreman	8											Erin Jones	SDI
3	1	Ironworker Journeyman	8											Darrin Kurz	SDI
4	1	Ironworker Journeyman	8											James Carriker	SDI
5	1	Ironworker Journeyman	8											Randy Hill Jr.	SDI
HPU-E-30-10K-02	1	A-Frame Ram Support									8				SDI
HPU-D-110-3K-02	1	Hydraulic Pumping Unit									8				SDI
SPH.60.3K.06	1	Strand Pushing Unit									8				SDI
CH600-B-110	1	600 Ton Ram									8				SDI
CH820-B-03	1	820 Ton Ram									8				SDI
B-117	1	110 Ton Ram	8												SDI
B-36	1	110 Ton Ram	8												SDI
HPU-E-10K-21	1	Hydraulic Pump	8												SDI
CH150-5-4	1	150 Ton Ram									8				SDI
	1	150 Ton Ram									8				SDI
	1	Grout Mixer									8				SDI

**Weather:** Overcast with cool to mild temperatures with high winds up to 20mph – Hi 59°F Low 46°F (per weather.com forecast)

**Description of Operations @ W2 Cap Beam:**

**ABF**

- Continued bushing the concrete surfaces of the W2W continuity tendon blockouts and Panel AA of the W2W deviation saddle.
- Continued to remove vertical/battered strongbacks (double channels and tubing) and timber forms (plywood and 4"x6"s) on the the west end of the cap beam.
- Continued to vacuum and blow out water in the ducts of the long vertical PT bars at W2E.
- Moved scaffolds to enable CMC-RS ironworkers to begin placing #19 male end hooked bar couplers at the W2W construction joint with the OBG.
- Surveyors assisted CMC-RS ironworkers with the rebar layout for the W2W construction joint.

## SDI

- Mobilized grout mixing equipment on top of the south end of the cap beam. Placed strand pushing equipment, rams and A-Frame on the ground.
- Blew VPI powder into transverse tendon ducts CBT-23 to 36. After this was done these ducts were pressure tested to identify any leaks in the tendon. There were no air pressure drops noticed.
- Cut the strand tails and installed grout caps over the anchor heads on both ends of the cap beam for transverse tendons CBT-23 to 36. Some elongations were below the specified  $\pm 7\%$  tolerance but not by much. I authorized cutting the strand tails for the following reasons:
  - 1) Applying a load over  $100\% P_{jack}$  will increase the strain in the strand. The increase in load may cause the strands to fail or rupture since the friction on these ducts was high.
  - 2) The elongation from an increased load wouldn't be enough to clear the previous wedge teeth marks. Therefore potentially causing slip on deformed portions of the strand.
  - 3) Overall the global system was strong as a whole and is redundant. The applied negative moments for these tendons would be resisted more by the stronger tendons redistributed from the weaker tendons (elongations out of tolerance).

\* My reasons for cutting the strand tails were discussed and agreed upon with TY-Lin designer James Duxbury last week.

- Stressed the long vertical bars 50 through 98 in the sequence specified at W2W and VB-3E or number 85 in the sequence at W2E. The B-36 and B-117 rams and corresponding pressure gauges labeled "A" were used depending on the bar length. Saman and myself witnessed this operation.

### Notes:

- 1) The sequence of stressing first stage transverse tendons CBT-11 to 36 was specified by the latest revision in Submittal 150 dated July 13<sup>th</sup>, 2007.
- 2) A strain indicator (serial number 59432) was used to monitor the  $100\% P_{jack}$  (165 kips) load on VB-27W and VB-108W.

## CMC-RS

- Began to place the male portion of the #19 hairpins hooked bars at the W2W construction joint with the OBG, see Lalit's diary for additional details and labor.

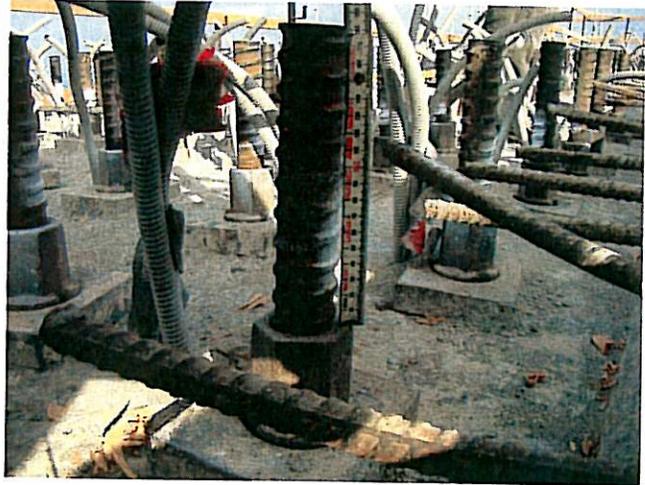
### **Office work:**

- Continued to review elongations for transverse tendons stressed today and compile a summary spreadsheet of the data.
- Continued to review the elongations for the long vertical bars.
- Began to write today's diary.
- Picked up the Nikon DTM-851 from California Surveying and Drafting Supply in Dublin.

### **Inspector:**

Matt Bruce Matt Bruce Transportation Engineer (D)

EA	04-0120F4
Co-Rte-KP (PM)	SF-080-13.2/13.9 (8.2/8.7)
Structure Rep.	Rick Morrow



File Name:	Apr-27-2009 W2 Cap 001		
Date:	04-27-09	By Int:	M Bruce
Description:	SDI ironworkers stressing VB-117W.		

File Name:	Apr-27-2009 W2 Cap 003		
Date:	04-27-09	By Int:	M Bruce
Description:	Elongation of VB-117W was measured to be 27mm.		