

## Reflective Cracking Testing Notes

**Date:** March 31, 2015

**Project:** Reflective Cracking Indoor Phase IV

**Weather:**

	6:54 AM	3:54 PM
Temperature (°F):	35.1	52.0
Dew Point (°F):	24.1	30.0
Humidity (%):	64	43
Visibility (Miles):	10.0	10.0
Wind (MPH):	Calm	12.7 S
Conditions:	Clear	Overcast

**Working Hours:** 7:00 AM – 4:30 PM

**Sub-Contractor(s):** None

**Personnel:** SRA

**Equipment:** (1) core drill with 6" I.D. core bit, (1) shop vacuum, hand tools

**Reflective Cracking Testing Notes:**

The 18 mil test cycle continued on the South section of the Phase IV test item. The inner vertical edge of the South test section is now showing a bottom-up crack propagation reaching 1.5 inches in length, seen in Figure 1. The outer vertical edge of the South test section shows no cracking, as shown in Figure 2. Surface gauge SG1-S-2.5 on the inner vertical edge reads twice the strain that the outer surface vertical gage SG6 reads, as shown in Figure 3. Also, embedded gauge EG5-S-0.0 is showing little strain at the outer edge while the center and inner areas show high strain values, as shown in Figure 4.

An SRA technician began obtaining asphalt cores from the Phase IV test item for material characterization purposes. A total of (37) cores ((35) from the middle and (2) from the East end) were drilled and extracted from the 7 inch thick P-401 test section atop the sampling slab to the West of the test rig. A portable core drill with a 6 inch inner diameter (I.D.) core bit was used to drill the cores. A shop vacuum was used to remove excess water during coring and clean out the core holes upon completion. The core samples were left adjacent to the reflective cracking test area after extraction.



Figure 1. South Inner Vertical Edge - Crack. Figure 2. South Outer Vertical Edge - No Crack.

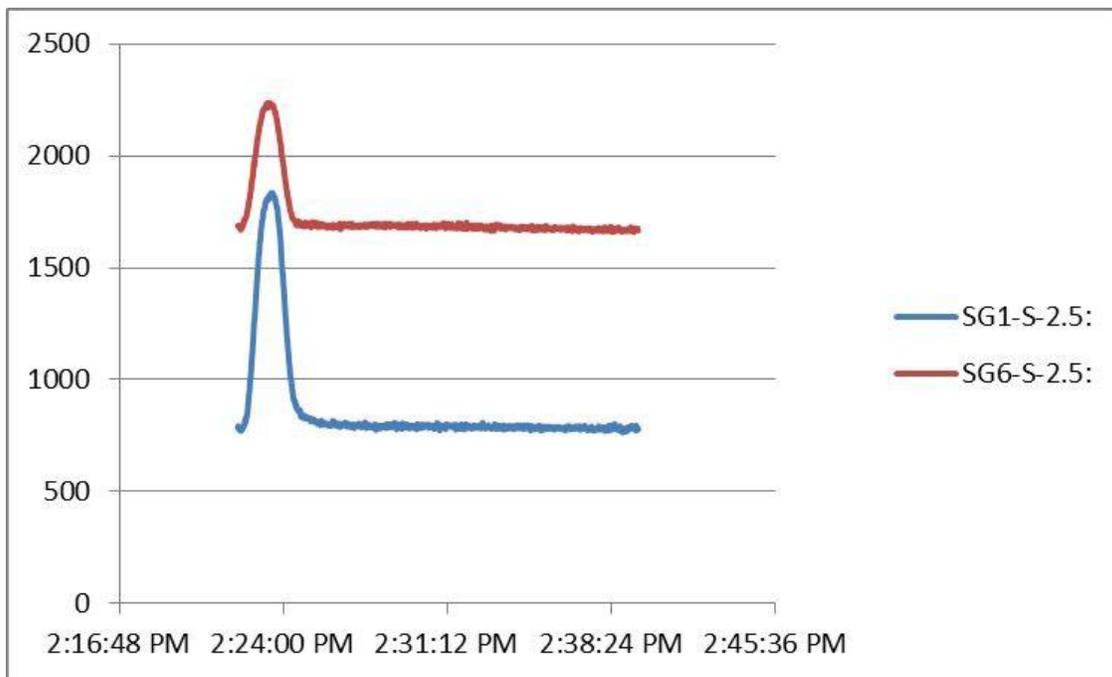


Figure 3. Comparison of South Outer Vertical Edge (SG6) to Inner Vertical Edge (SG1).

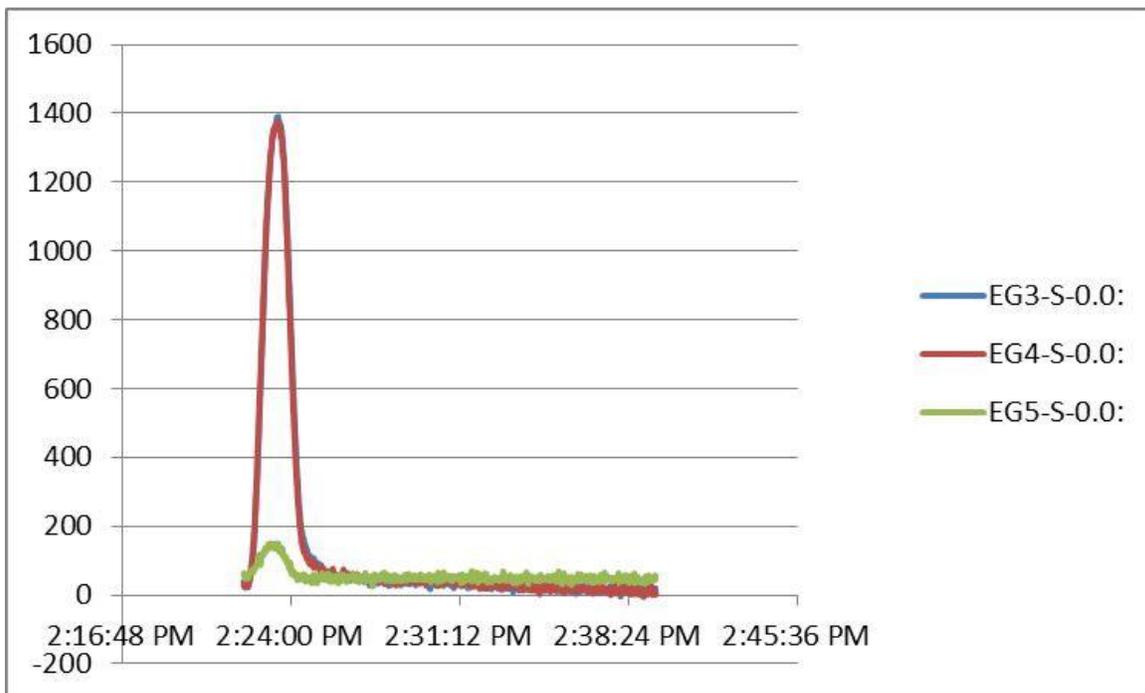


Figure 4. South Outer Edge (EG5) Low Strain Reading.