

## Reflective Cracking Daily Construction Notes

**Date:** November, 2012

**Project:** Reflective Cracking Indoor Phase 2

**Temperature:** N/A

### **Reflective Cracking Construction Notes:**

To support the upcoming full-scale reflective cracking test, a one-page plan was developed to facilitate the required instrumentation. The following is a status report on completing the three major components of this effort.

#### 1. Data Acquisition System (IOtech and CR-1000):

- It was decided that a CR-1000 and multiplexer would be needed to monitor 16 crack detectors to free up some channels on the IOtech. The CR-1000 and multiplexer arrived at the FAA on 10-9-2012, currently working to complete this part of the installation.
- All the new connectors for the IOtech have been installed (see figure 3).
- Both IOtech and CR-1000 need to be programmed.

#### 2. Bridge Completion and Breakout Box Enclosure:

- All the cable routing from the enclosure to sensor bed was completed (see figure 1).
- All the cable routing from the enclosure to the IOtech is completed (see figure 2)
- All enclosure terminal blocks and wiring connections are completed (see figure 4).
- Need cables from enclosure to CR-1000. Waiting for CR-1000.
- Precision resistors need to be installed prior to testing the dynatest gages and prior to paving.
- The precision resistors for bridge completion are due to arrive toward the end of October, 2012.

#### 3. Pavement Sensors List:

- An Instrumentation layout drawing was completed for the two-strip asphalt overlay.
- Prior to paving, asphalt strain gage locations have been identified and marked on the pavement.
- Sensor cable routing was determined.
- The LVDTs in concrete and asphalt strain gages need to be assessed and calibrated before the scheduled asphalt paving date of November 5, 2012.
- After paving, the other sensors will be installed, connected, tested, and calibrated by mid November.



Figure 1. Enclosure to sensor bed cables.



Figure 2. Enclosure to the IOtech cables.

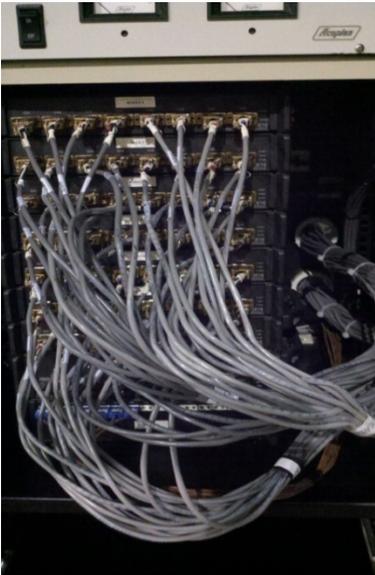


Figure 3. IOtech new connectors.



Figure 4. Bridge Completion and Breakout Box Enclosure.

