

**2016 MnROAD/NCAT Cracking Group Construction
Weekly Construction Update
For the week of August 1, 2016**

Sensor lead wire conduit was installed in the subbase on Monday, August 1 in Cells 17 and 19. This was the first of three days scheduled for sensor installation and placement. Another three day pause for sensor placement and installation will occur after Class 6 aggregate base placement and before asphalt paving.

No work was performed on Tuesday, August 2 by the contractor as this is part of the three day sensor installation for MnROAD staff.

Digital test rolling was conducted on Wednesday, August 3 by MnDOT personnel. This equipment incorporates a laser-based deflection measuring device to continuously record the subbase deflection. Data recorded by the digital test roller was imported into the software program Veta, which generated the adjusted deflection plot below in Figure 1.

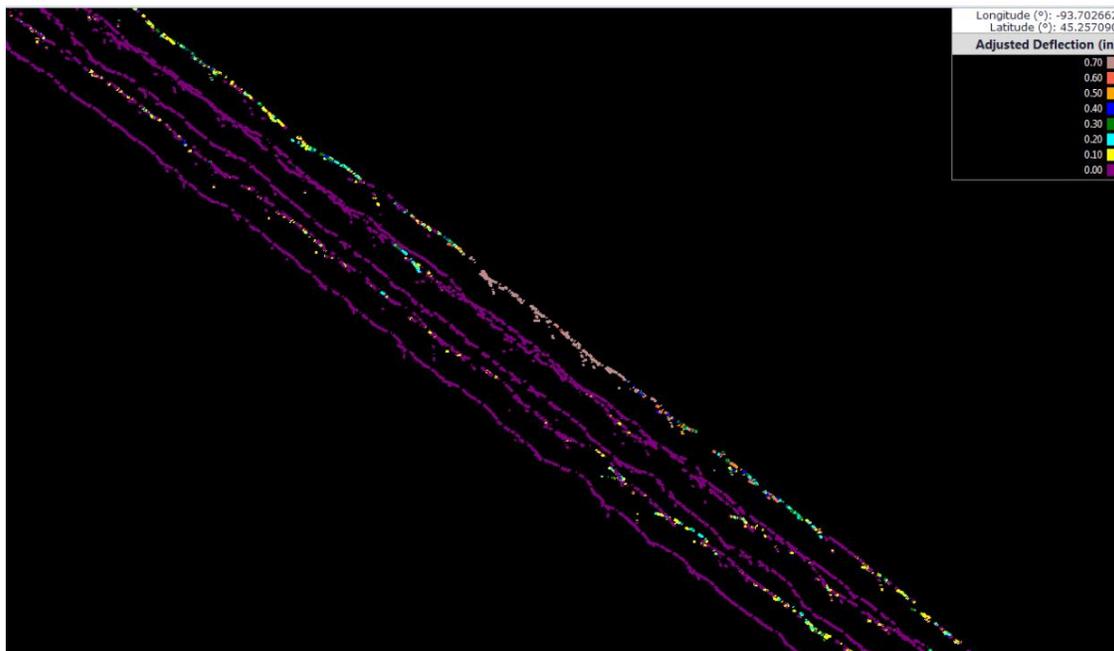


Figure 1: Digital Test Rolling Adjusted Deflection Plot



Figure 2: TR 10 Setup with Digital Test Rolling Equipment



Figure 3: Laser Mounted on Steer Axle Measure Deflection of Subbase

The weekly construction meeting was held on Thursday, August 4. An updated construction schedule was distributed by Harddrives, Inc.. Based on the updated plan discussed, placement of Class 6 aggregate base will begin on Monday, August 15, followed by tolerancing and the second pause for sensor placement. A pre-activity meeting for paving and trial mix paving are tentatively scheduled for Monday, August 15. Paving of Cells 16-19 is planned to happen from Tuesday, August 16 to Friday, August 19. The location for test strips was determined to be the access road curving behind the pole barn. MnROAD staff will determine begin and end locations for the test strips as well as thickness and length. Milling of Cells 20-23 is planned to begin on Monday, August 22.

A pre-activity meeting for aggregate base placement was held after the weekly construction meeting. The proposed method is to construct two 6 inch lifts and compact with both a rubber tire and drum roller. Sampling and testing requirements were also discussed, along with the acceptance process.

During upcoming paving, samples of loose mix will be collected and distributed to NCAT and other organizations that requested mix during production. Over 100, 3.5 gallon pails will be collected per cell and distributed per requested amount to various organizations, with some retained by MnDOT for research purposes. MnDOT staff have been hard at work labelling a total of 878 buckets.



Figure 4: Student Workers Foo and Thomas Labeling Buckets for Loose Mix Sampling

Tolerancing of subbase was conducted on Friday, August 5. This work was done by New Look Contracting, with the equipment on site including a grader. Conduit was clearly marked and successfully survived grading of the subbase. Hauling and placement of Class 6 aggregate base is scheduled to begin Monday.



Figure 5: Tolerancing of Subbase



Figure 6: Tolerancing of Subbase



Figure 7: Conduit Marked for Sensor Installation