A significant amount of rain fell at MnROAD over the weekend. Data from two weather stations located at the site reported a total of about 3 inches of rain fell on Saturday, July 23. Thankfully Sunday saw no rain and allowed the grade to dry some before work resumed on Monday.

On Monday, July 25, rubber tire rolling of shoulders was conducted to attempt to increase strength of soft spots before test rolling.

After an inspection of the site, it was found that moisture was present on the top of the subbase even though a rainfall event had not occurred in the previous 3 days. A meeting was scheduled for Wednesday, July 27 to discuss and seek a solution to mitigate the issue. New vaults were installed by MnROAD staff in cells 17 and 19 on Tuesday, July 26. After excavation of the vault location, aggregate was brought in to level the vault and provide a source for drainage.

Figure 1: Moisture on Subbase
A construction meeting was held Wednesday, July 27 to discuss subbase moisture issues. The issue of soft spot areas of concern was discussed in detail, and it was determined to pursue localized repairs of the subbase in especially bad areas. These areas were located and marked on Thursday, July 28. Proposed repairs will consist of excavating 12 inches of subbase material, followed by backfill with salvaged aggregate base from the stockpile area. The goal is to increase strength in the areas identified likely not to pass test rolling. A total of 12 areas were marked for excavation and fill. The work was completed that evening by New Look Contracting, Inc. Test rolling was scheduled for Friday, July 29.

![Figure 2: Location of Soft Areas for Excavation](image)

Test rolling was completed with the 10-ton test rolling (TR10) setup conducted on Friday, July 29. The test roller was weighed and documented with Kory Eichhorst present. Testing was done from shoulder point of intersection (PI) to opposite shoulder PI. Approximately 10% of the area between the PI and edge of pavement failed test rolling. These areas included the last 150 feet of the west side of the project and areas that were corrected on Thursday. It was found that all material within paving limits passed. It will be determined on Monday, August 1 how to proceed.
Figure 3: Test Rolling of Subbase

Figure 4: TR 10 Test Roller Setup