

Contributed to Maine Memory Network by the Maine State Archives
Date: Nov. 9, 1961
Description: Intermediate Construction Inspection Report for the Waldo Hancock Bridge

I also reviewed a copy of a progress test made on the bituminous wearing surface placed on the bridge superstructure. In addition I reviewed certificates for cement. I also asked the Resident Engineer if he had received the results of the tests that were to be run on the reinforcing steel which I had recommended be sampled during an earlier inspection. He informed me that these results have not yet been received. Mr. Whitten indicated that he would follow up these tests to see if they have been made to date. We had suggested during a previous inspection that some of the reinforcing steel which appeared to be Norwegian steel that has shown up on some other projects should be tested.

b. Progress: At the present time the contractor plans to place concrete up to the construction joint in the west abutment and then suspend his operations for the winter. It would not be practical to go above this point because of the extreme care and expense involved in placing winter concrete. He does hope to get the abutment constructed up to the point where it will be ready for the placing of steel beams next spring, however.

c. Overruns and Underruns: The Resident Engineer anticipates an overrun in the traffic officer item of the project, as has been indicated in a previous inspection report. The Engineer's estimate allowed 10,000 man hours for this item, and the Resident Engineer informed me that over 8,000 man hours have already been used, and the project is only 33% complete.

The Resident Engineer also anticipates a slight overrun in the bituminous concrete wearing surface. He stated that the estimate for the wearing surface placed to date was 142 tons, whereas 168 tons were actually placed. He has been unable to explain this overrun but does not feel that it is unusual. Apparently the thickness in the wearing surface due to some irregularities in the concrete deck perhaps has varied somewhat from the plan dimension of $1\frac{1}{2}$ inches.

d. Change Orders and Extra Work Orders: None are anticipated at the present time.

e. General: During our inspection Mr. Bunker, Mr. Whitten, and I carefully inspected the completed portion of the widened superstructure. We noted during our inspection that a good number of the slab panels indicate cracks in the safety walk surface in the area which overlies the steel angle attached to the existing railing. This location is 2 to 3 inches from the outside edge of the safety walk. The reason for these cracks appears to be the fact that the bridge does carry traffic during the placing of concrete and being a suspension bridge is subject to considerable vibration and movement. Such movement could cause this type of cracking, and it appears that it has in this case. Since the cracking seemed to be of considerable magnitude, I suggested to Mr. Whitten that perhaps we ought to review the design details for this particular portion of the superstructure in the hope that perhaps we could come up with an alternate design which would satisfactorily serve the purpose that the safety walk would and yet avoid this cracking which seems to be inherent. He agreed and will urge the designers in the Bridge Division to do so this winter prior to the start of construction next spring. I recommended to Mr. Whitten that some scheme could perhaps be devised which would completely separate the safety walk concrete from the steel angle attached to the existing railing, thereby preventing vibration from affecting the thin concrete slab in this area.

Submitted by:

Robert W. Howe
Division Bridge Engineer

cc: State(2)✓

RWHove:slc