



Memo

Date: Thursday, October 31, 2024

Project: Marion-Wareham Bridges over Weweantic River along Route 6 – Project Info No. 605311

To: MassDOT

From: Don Hendon

Subject: Changes made to the Hydraulic Report

The following is a list of all changes made from the preliminary draft hydraulic report to the final hydraulic report. Changes were either made at the request of MassDOT or updated values based on latest data.

- 1 Executive Summary
 - 1.1 Language was added noting the addition of the 25-year runs.
 - 1.2 Language removed concerning countermeasure options which were prohibited due to the constraints of environmental permits.
 - 1.3 Noted report is based on the 2013 MassDOT LRFD Bridge Manual revised in 2020.
- 2 Tables 19 & 20
 - 2.1 The maximum water surface elevations from the storm event with an annual exceedance probability of 4-percent (25-year) with the addition of the chosen relative sea level rise of 5.1-feet were added to the tables.
- 3 Section 5.8 Scour Summary
 - 3.1 Language was added noting the addition of the 25-year runs.
- 4 Section 6 Scour Countermeasure Recommendations
 - 4.1 Updated design event for scour countermeasures.
 - 4.2 Language removed concerning countermeasure options which were prohibited due to the constraints of environmental permits.
- 5 Section 7 Conclusions and Recommendations
 - 5.1 Language removed concerning countermeasure options which were prohibited due to the constraints of environmental permits.
- 6 Tables 38 & 39
 - 6.1 Changed Scour Design Flood Annual Chance (Return Frequency) from 50-year with RSLR to the 25-year scour values due to those values being higher.