

Appendix 6-B

Summary Hydraulic Analysis Form

Revised September 2026

If you require assistance accessing this information or require it in an alternative format, contact the Michigan Department of Transportation's (MDOT) Americans with disabilities Act (ADA) coordinator at Michigan.gov/MDOT-ADA.

Table 6-B-1. Summary of Hydraulic Analysis

FLOOD DATA	DISCHARGE (CFS)	EXISTING WATER SURFACE ELEV. AT U/S FACE OF STRUCTURE (FT)	EXISTING VELOCITY AT D/S FACE OF STRUCTURE (FPS)	PROPOSED WATER SURFACE ELEV. AT U/S FACE OF STRUCTURE (FT)	PROPOSED VELOCITY AT D/S FACE OF STRUCTURE (FPS)	CHANGE IN WATER SURFACE ELEV. OF PROPOSED STRUCTURE (FT)
1% (10-YR)	XXX	XXX	XXX	XXX	XXX	XXX
2% (50-YR)	XXX	XXX	XXX	XXX	XXX	XXX
1% (100-YR)	XXX	XXX	XXX	XXX	XXX	XXX
0.2% (500-YR)	XXX	XXX	XXX	XXX	XXX	XXX

PROPOSED BRIDGE AREA BELOW THE LOW CHORD: XXX SQUARE FEET

Table 6-B-2. Summary of Scour Analysis

FLOOD DATA	FLOOD EVENT	CONTRACT. ELEV. (ft)	ABUT. A ELEV. (ft)	ABUT. B ELEV. (ft)	PIER 1 ELEV. (ft)	PIER 2 ELEV. (ft)	PIER 3 ELEV. (ft)
1% (100-YR)	DESIGN	XXX	XXX	XXX	XXX	XXX	XXX
0.2% (500-YR)	CHECK	XXX	XXX	XXX	XXX	XXX	XXX
XXX	OVERTOP	XXX	XXX	XXX	XXX	XXX	XXX

B.AP.03 SCOUR VULNERABILITY CODE: XXX

Notes:

- A. Drainage area contribution to this crossing is XX square miles.
- B. Existing bridge area below the low chord is XXX sft.
- C. Existing overtopping elevation is XXX ft.
- D. Proposed overtopping elevation is XXX ft.
- E. Do not use broken concrete for riprap.
- F. Water surface and/or energy grade elevations shown on the hydraulic table are used for comparison purposes only and are not used for establishing a regulatory floodplain. The elevations may be used provided they are verified with the Water Resources Division, Michigan Department of Environment, Great Lakes, and Energy.
- G. The B.AP.03 code is based on properly installing the countermeasure and filter as shown on plans and per specifications. The Hydraulic Unit reviews and approves any deviation. <<USE THIS NOTE ONLY FOR COUNTERMEASURE INSTALLATIONS THAT ARE USED TO ADDRESS POTENTIAL SCOUR AND TO MAINTAIN BRIDGE STABILITY FOR NEW OR EXISTING BRIDGES, OR BRIDGES WITH UNKNOWN FOUNDATIONS >>