

Information for File #2014-02744-SEW

Applicant: Minnesota Department of Transportation (MnDOT), District 3; c/o Mr. Robert Nibbe

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Primary County: Sherburne and Wright Counties

Location: Sections 23 and 35, Township 123N., Range 30W. at Clearwater, Minnesota

Information Complete On: February 20, 2015

Posting Expires On: March 5, 2015

Authorization Type: Section 404 Clean Water Act via LOP-5-MN

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbor Act of 1899 and Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 07-01. We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act. Our jurisdictional review and final jurisdictional determination could result in modifications to the scope of the project's regulated waterbody/wetland impacts and compensatory mitigation requirements identified above.

PROJECT INVOLVES:

- 1) *Threatened or Endangered Species:* The project is not expected to affect any species listed as threatened or endangered under the federal Endangered Species Act. The Blandings turtle, a state-listed threatened species, may be located within the project limits. MnDOT would follow Minnesota Department of Natural Resources' guidelines to avoid and minimize impacts to the Blandings turtle.
- 2) *FEMA 100-Year Floodplain:* The project crosses approximately 1,150 feet of the Mississippi River's 100-year floodplain (see map number 27141C0195F). The new bridge would include four piers in the river, and two piers on land in the floodplain. The bridge would be approximately 28 feet above the 100-year flood elevation, and the new bridge piers would line up with the existing bridge piers. No impacts to adjacent wetlands would occur. The project would not have a significant increase in flood level headwater or tailwater elevations, and no significant increased risk of flooding would result from the project. The project would not result in new access to the floodplain from TH 24. Thus, MnDOT determined the project would not have significant impacts on the floodplain.
- 3) *A Listed State-Impaired Water:* The project crosses a section of the Mississippi River (ID number 07010203-510) that is listed on the Minnesota Pollution Control Agency's 2012 303(d) list as impaired for aquatic consumption by mercury in fish tissue. This section of the river is also impaired for aquatic life for fishes biosassessments and for aquatic recreation by fecal coliform. About 0.4 mile upstream of the project, the Clearwater River enters the Mississippi River. This section of the Clearwater River is listed as impaired for aquatic life by fishes bioassessments and dissolved oxygen levels.

- 4) *Linear Project*. The project would occur on approximately 0.96 mile of TH 24 from approximately 200 feet northeast of CSAH 75 to approximately 2,800 feet northeast of the existing TH 24 bridge over the Mississippi River (Bridge 6557).

PROJECT DESCRIPTION AND PURPOSE:

MnDOT proposes to discharge dredged and fill material in approximately 131 linear feet (0.55 acre) of the Mississippi River in conjunction with the replacement of the TH 24 bridge (Bridge 6557) over the Mississippi River on the east side of Clearwater. The bridge is considered structurally deficient due to structural and geometric concerns, and it has an overall sufficiency rating of 56 out of 100. MnDOT's policy is to replace bridges with sufficiency ratings of less than 70. Recent inspections reveal that the bridge deck and superstructure have moderate deterioration, and the substructure has minor to moderate deterioration. The existing concrete nine-span bridge was built in 1958, is approximately 1,143 feet long and 38.3 feet wide. The bridge supports two 12-foot wide travel lanes with 3-foot wide shoulders and a 3-foot wide walkway on the side of either shoulder. The width of the bridge's shoulders and walkways do not meet current state design and safety standards. In the project area, TH 24 is a two-lane principal arterial with a current ADT of about 15,600 vehicles per day, and a projected 2035 ADT of 17,300. The road approaches on either side of the bridge consist of two 12-foot wide lanes with 10-foot wide shoulders.

Bridge 6557 would be replaced with a new 1,175-foot long, 60.42-foot wide multi-span concrete beam bridge (Bridge 71004) that consists of seven spans and six piers, including four piers constructed in the Mississippi River bed. The bridge would be constructed immediately downstream of the existing bridge, and the new bridge piers would be placed to line up with the existing piers. The new bridge would carry two 12-foot wide travel lanes with 10-foot wide shoulders and a 12-foot wide, barrier-separated multi-use recreational trail on the downstream side of the bridge. The trail would connect to the Mississippi River Trail on the west side of the river and to the 10-foot shoulder on the south side of TH 24 on the east side of the river. Riprap would be placed along 81 linear feet of both river banks to protect the bridge abutments from scour. The road approaches would need to be slightly re-aligned to accommodate the new bridge location. Approximately 0.22 mile of the road approach on the west side of the bridge and approximately 0.54 mile of the road approach on the east side of the bridge would be reconstructed. The approaches would include two 12-foot wide travel lanes with 10-foot wide shoulders. Left turn lanes would be added at intersections with 106th Street, Walnut Street South, and the Minnesota Department of Natural Resources' public boat access. A stormwater pond would be constructed in an upland area located in the southeast quadrant of the bridge to treat water from the road approaches and a portion of the bridge deck.

The new bridge would be constructed from the water using a barge, cranes, and other equipment. Traffic would continue on the existing bridge as the new bridge is being constructed. The old bridge would be demolished once the existing bridge is completed. MnDOT would conduct a survey of the river bottom prior to beginning the project so the preconstruction contours and elevations of the river bed could be re-established upon project completion. After the bridge replacement work was completed, all temporary fills and temporary structures would be removed from the river. MnDOT would use soundings or an underwater camera to ensure that all temporary fill and debris from the bridge demolition would be removed from the river upon project completion.

NAME, AREA AND TYPES OF WATERS (INCLUDING WETLANDS) SUBJECT TO LOSS:

As proposed, the project would result in a total of 0.55 acre of impacts to the Mississippi River, including 0.084 acre of permanent impacts and 0.47 acre of temporary impacts. See the attached Tables 1 and 2 for specific impact information. The project would not impact any wetlands in the project.

Permanent impacts would occur due to the placement of riprap along 81 linear feet of both river banks for scour protection, and due to the installation of four bridge piers in the river bed. Each pier would consist of two octagon-shaped stems that occupy 62 square feet and are 14 feet long. Permanent impacts to the river would also occur for the placement of 64 square feet of riprap at the outlet of the proposed stormwater pond in the southeast quadrant of the bridge crossing, and for the placement of 46 square feet of riprap at the outlet of a storm drain on the southwest quadrant of the river crossing.

Temporary impacts would occur for the construction of a temporary causeway, a temporary barge dock, and temporary cofferdams. The causeway would be used to provide a dry surface for equipment access, and would be built out to Pier 5. The causeway would be constructed from the west bank of the river, and would consist of clean riprap. It would be 498 feet long and 30 feet wide, and would include three 8-foot long, 21-foot wide fingers that would extend to Piers 3, 4, and 5, affecting 0.35 acre of the river bed. Cofferdams would be used to construct the four piers in the river. The cofferdams would surround the footing for each pier, and would be 46 feet long by 21 feet wide. The cofferdams and footings would result in a 0.02 acre temporary impact at each pier in the river. Upon completion of the pier installation, the footings would be beneath the river bed, the cofferdams would be removed, and the affected area would be restored to match the surrounding, un-impacted river bottom elevations and contours. Finally, a temporary 58-foot long, 30-foot wide barge dock consisting of clean riprap would be constructed from the east bank of the river to allow access to the barge needed for bridge construction. MnDOT estimates the causeway and barge dock would be in place for up to 730 days, while the cofferdams would be in place for up to 180 days.

COMPENSATORY MITIGATION:

The applicant did not propose compensatory mitigation for the permanent and temporary impacts to the Mississippi River associated with the construction of the new TH 24 bridge.

DRAWINGS: See attached figures labeled “2014-02744-SEW, Tables 1-2 of 2, and Figures 1-5 of 5”.

2014-02744-SEW, Table 1 of 2: Permanent Mississippi River Impacts

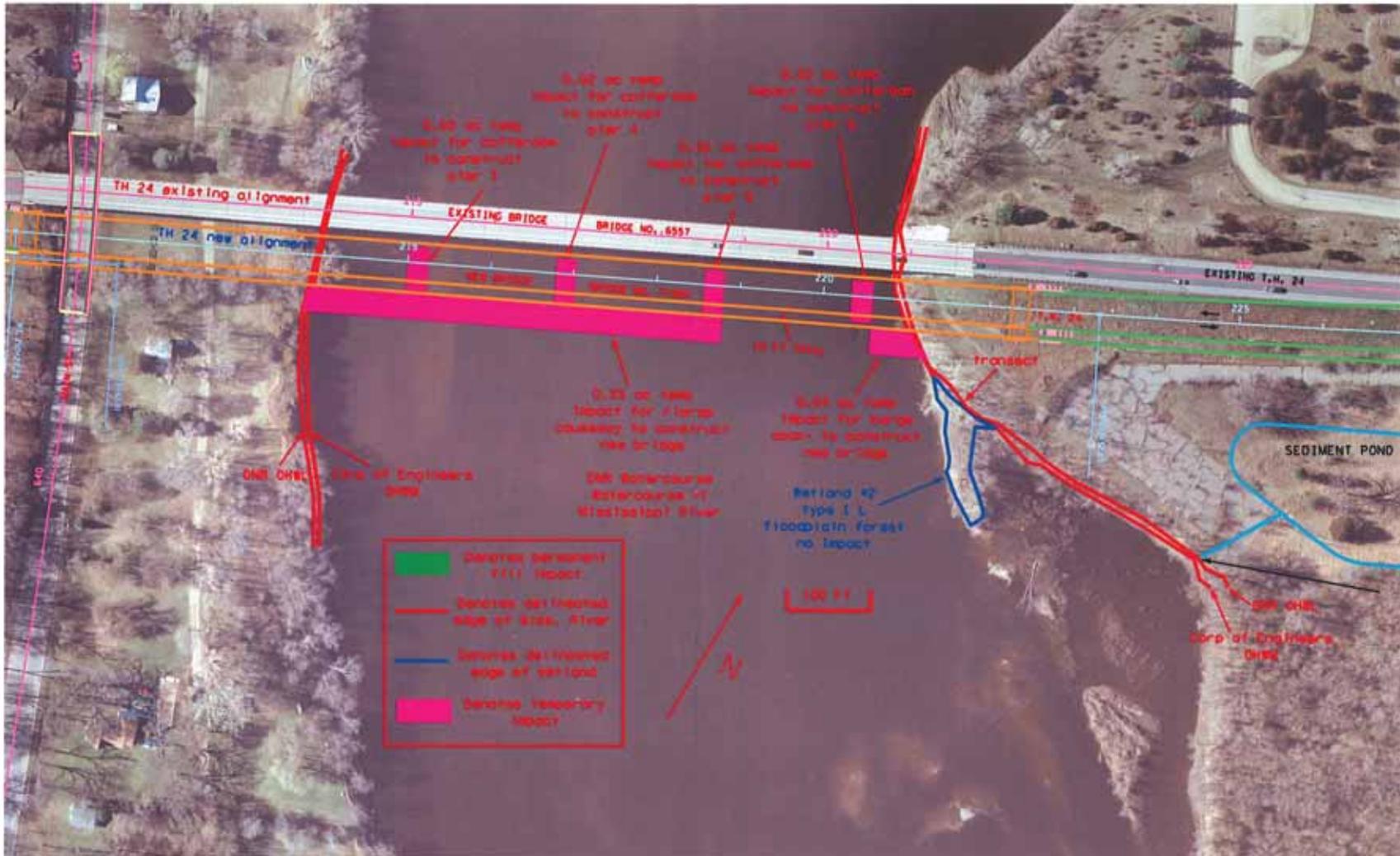
Permanent Fills	Size of Impact (linear feet)	Size of Impact (acre or square feet)
Riprap - west bank	81	0.04 ac
Riprap - east bank	81*	0.03 ac
Bridge Piers (Piers 3, 4, 5, and 6)	28*	496 sf
Riprap - storm drain outlet	10	46 sf
Riprap - stormwater pond outlet	10	64 sf
TOTAL	101 linear feet	0.084 acre
*this impact is the same on opposite sides of the river, so the linear footage is not included twice in the total		
**the 28 linear-foot impact is within the same length that would be affected by the permanent riprap, so is not included in the total. Each pier would affect 28 linear feet of the river.		

2014-02744-SEW, Table 2 of 2: Temporary Mississippi River Impacts

Temporary Fills	Impact (linear feet)	(acre or square feet)	Impact (days)
Rock causeway	38*	0.35	730 days
Barge dock	30**	0.04	730 days
Cofferdams to construct pier footings (Piers 3, 4, 5, and 6)	46***	0.08	180 days
TOTAL	30	0.47	n/a
*8 feet of this impact is within the same length that would be impacted by the permanent riprap, so 8 feet is not included in the total			
**this impact would occur along the same additional 30 feet of the river that would be impacted by the causeway (though on the opposite side of the river), so it is not counted twice			
***the 46 linear-foot impact is within the same length that would be affected by the permanent riprap, so is not included in the total. Each cofferdam would affect 46 linear feet of the river.			

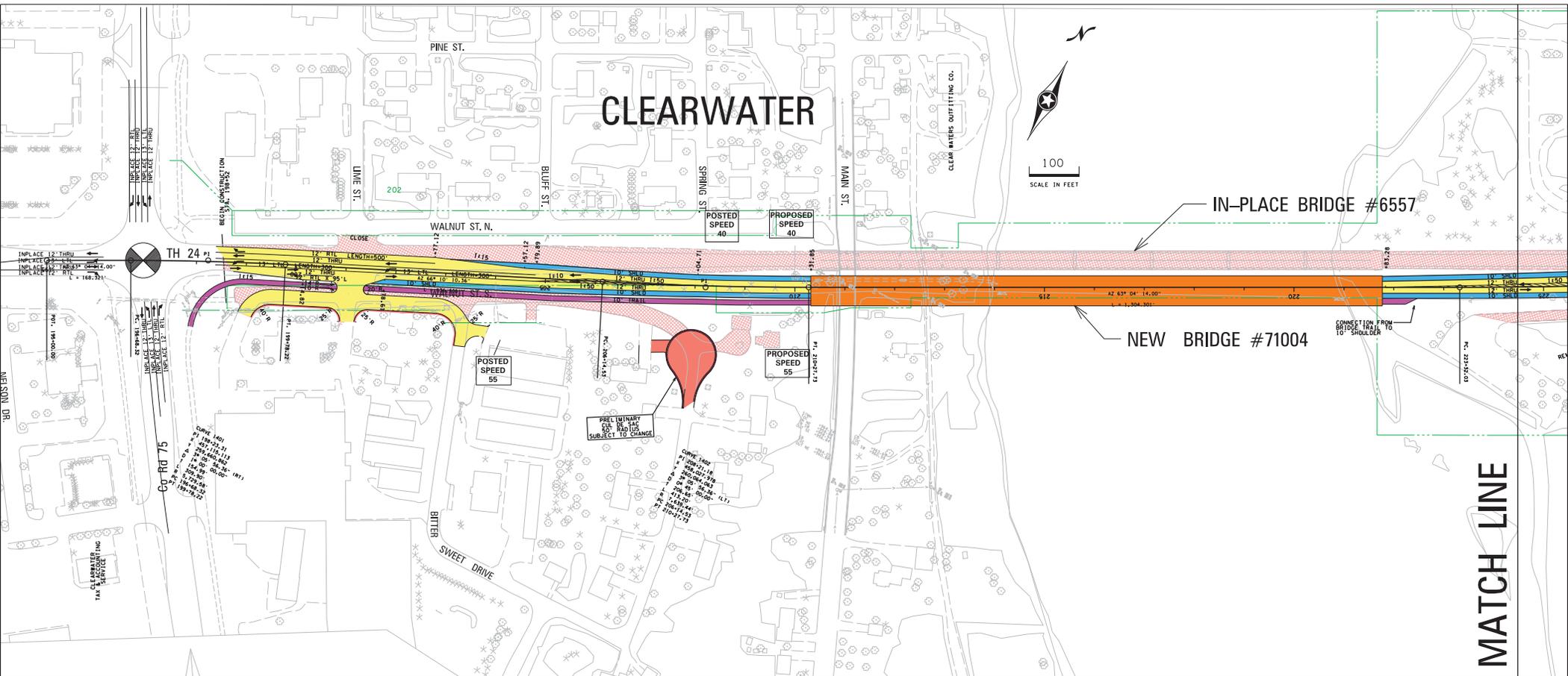


2014-02744-SEW, Figure 3 of 5:
Proposed Permanent Impact Locations



SP 7108-23
Layout

2014-02744-SEW,
Figure 4 of 5:
Project Layout



SP 7108-23
Layout

2014-02744-SEW,
Figure 5 of 5:
Project Location

