Appendix C

Wetland Impact Assessment and Two-Part Finding
Wetland Impact Assessment & Two Part Finding Form

S.P. Number: 1017-108
Project Name: TH 212/CSAH 44 Interchange Project
County: Carver
Watershed: 33 / Lower Minnesota River

WETLAND ASSESSMENT

The proposed project would improve Carver County State Aid Highway 44 (CSAH 44) and construct a partial access interchange at Trunk Highway 212 (TH 212) with interchange ramps to and from the north.

The purpose of the proposed project is to improve access to TH 212 to accommodate planned growth and development in southwest Chaska. The existing access to US 212 is inadequate to serve forecast travel demand, contributing to congestion and poor operations at the CSAH 10 (Engler Boulevard) interchange. The planned land uses in southwest Chaska do not have efficient access to the existing transportation network.

The project is needed because there is inadequate access in southwest Chaska to accommodate planned growth and serve forecast travel demand, contributing to poor traffic operations under the No Build Alternative.

A Level 1 (office) wetland delineation was completed in October 2017. Twenty-two aquatic resources were identified: nine wetlands, nine wet ditches, and four stormwater ponds constructed in uplands. The mapped aquatic resources are illustrated in the attached aquatic resource impact figures.

A Level 2 (field) wetland delineation will be completed in 2018 for the entire project. The Level 2 wetland delineation will be reviewed and approved by the U.S. Army Corps of Engineers (USACE) and the Minnesota Wetland Conservation Act (WCA) Local Government Units (LGUs), which are the City of Chaska and the Minnesota Department of Transportation (MnDOT). The WCA/USACE permit application will be based on the approved wetland boundaries and types.

See Table 1, Aquatic Resource Assessment.

See attached State Location Map, Aquatic Resource Impact Index Map, and Aquatic Resource Impacts figures.

PART 1: AVOIDANCE ALTERNATIVES

No-Build Alternative - This alternative would avoid all wetland impacts (except those due to routine maintenance), but would fail to meet the project purpose and need. It was therefore rejected from further consideration.

Alternatives Considered – Several build alternatives were considered in addition to the Preferred Alternative:

- **Full diamond interchange**
  - Constructing a full diamond interchange would impact Wetland 6; therefore, the southbound TH 212 exit ramp was folded into a loop in the southwest quadrant of the interchange to avoid impacts to a natural wetland basin.

- **Traffic signals at ramp intersections**
  - Traffic signals would require turn lanes on the CSAH 44 bridge over TH 212, which means the bridge would need to be widened. Roundabouts minimize the number of lanes needed on the bridge; therefore, signals were rejected in favor of roundabouts.
- **Widen existing bridge**
  - The existing CSAH 44 bridge over TH 212 can accommodate three lanes of traffic if the multi-use trail on the existing bridge is removed; however, the bridge would then have to be widened to allow space for the multi-use trail facility. Because an adjacent multi-use trail bridge would completely separate non-motorized traffic from motorized traffic without increasing wetland impacts, the Preferred Alternative includes construction of a multi-use trail bridge along the north side of the existing CSAH 44 bridge.

Because all of the build alternatives would result in the same or additional wetland impacts compared to the Preferred Alternative, there is no practicable alternative to avoid wetland impacts.

**Wetland Impacts of Preferred Alternative** - The proposed project would include construction of a partial access interchange at TH 212 and CSAH 44 with interchange ramps to and from the north; construction of roundabout intersection control at the ramp terminal intersections; reconstruction of CSAH 44 from the proposed TH 212/CSAH 44 interchange to east of Founders Way/Cascade Drive; and construction of drainage improvements, stormwater ponds, multi-use trails, and sidewalks.

Anticipated impacts are based on the preliminary construction limits. **Table 1** identifies the anticipated wetland impacts for the preferred alternative concept.

### Table 1. Aquatic Resource Assessment

<table>
<thead>
<tr>
<th>Wetland ID</th>
<th>Classification (Type of wetland)</th>
<th>Approximate Basin Size (Acres or Square Feet within Review Area)</th>
<th>Impact Duration</th>
<th>Type of Impact (fill, excavate, drain, remove vegetation, no impact)</th>
<th>Size of Impact ¹ (Acres or Square Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WD-1</td>
<td>Wet Ditch Type 1</td>
<td>338 sf</td>
<td>N/A</td>
<td>No Impact</td>
<td>N/A</td>
</tr>
<tr>
<td>WD-2</td>
<td>Wet Ditch Type 1</td>
<td>0.26 ac.</td>
<td>P</td>
<td>Fill</td>
<td>0.06 ac.</td>
</tr>
<tr>
<td>WD-3</td>
<td>Wet Ditch Type 1</td>
<td>0.24 ac.</td>
<td>N/A</td>
<td>No Impact</td>
<td>N/A</td>
</tr>
<tr>
<td>WD-4</td>
<td>Wet Ditch Type 1</td>
<td>0.36 ac.</td>
<td>T</td>
<td>Remove Vegetation</td>
<td>0.04 ac.</td>
</tr>
<tr>
<td>SW-5</td>
<td>Stormwater Pond Type 4/5</td>
<td>2.38 ac.</td>
<td>T</td>
<td>Excavate / Remove Vegetation</td>
<td>0.63 ac.</td>
</tr>
<tr>
<td>SW-5</td>
<td>Stormwater Pond Type 4/5</td>
<td>2.38 ac.</td>
<td>P</td>
<td>Fill</td>
<td>0.40 ac.</td>
</tr>
<tr>
<td>W-6</td>
<td>Wetland Type 4/5</td>
<td>0.35 ac.</td>
<td>N/A</td>
<td>No Impact</td>
<td>N/A</td>
</tr>
<tr>
<td>WD-7</td>
<td>Wet Ditch Type 1</td>
<td>0.20 ac.</td>
<td>T</td>
<td>Remove Vegetation</td>
<td>0.18 ac.</td>
</tr>
<tr>
<td>WD-7</td>
<td>Wet Ditch Type 1</td>
<td>0.20 ac.</td>
<td>P</td>
<td>Fill</td>
<td>0.02 ac.</td>
</tr>
<tr>
<td>WD-8</td>
<td>Wet Ditch Type 1</td>
<td>0.06 ac.</td>
<td>T</td>
<td>Remove Vegetation</td>
<td>0.03 ac.</td>
</tr>
<tr>
<td>WD-9</td>
<td>Wet Ditch Type 1</td>
<td>0.54 ac.</td>
<td>P</td>
<td>Fill</td>
<td>0.32 ac.</td>
</tr>
<tr>
<td>WD-10</td>
<td>Wet Ditch Type 1</td>
<td>0.49 ac.</td>
<td>T</td>
<td>Remove Vegetation</td>
<td>0.03 ac.</td>
</tr>
<tr>
<td>Wetland ID</td>
<td>Classification (Type of wetland)</td>
<td>Approximate Basin Size (Acres or Square Feet within Review Area)</td>
<td>Impact Duration</td>
<td>Type of Impact (fill, excavate, drain, remove vegetation, no impact)</td>
<td>Size of Impact ¹ (Acres or Square Feet)</td>
</tr>
<tr>
<td>------------</td>
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<td>---------------------------------------------------------------</td>
<td>----------------</td>
<td>-----------------------------------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>WD-10</td>
<td>Wet Ditch Type 1</td>
<td>0.49 ac.</td>
<td>P</td>
<td>Fill</td>
<td>0.23 ac.</td>
</tr>
<tr>
<td>WD-11</td>
<td>Wet Ditch Type 1</td>
<td>0.44 ac.</td>
<td>T</td>
<td>Remove Vegetation</td>
<td>0.04 ac.</td>
</tr>
<tr>
<td>W-12</td>
<td>Wetland Type 1</td>
<td>0.13 ac.</td>
<td>N/A</td>
<td>No Impact</td>
<td>N/A</td>
</tr>
<tr>
<td>W-13</td>
<td>Wetland Type 1</td>
<td>0.16 ac.</td>
<td>T</td>
<td>Remove Vegetation</td>
<td>71 sf</td>
</tr>
<tr>
<td>W-14A</td>
<td>Wetland Type 1</td>
<td>0.02 ac.</td>
<td>P</td>
<td>Fill</td>
<td>112 sf</td>
</tr>
<tr>
<td>W-14B</td>
<td>Wetland Type 1</td>
<td>0.03 ac.</td>
<td>N/A</td>
<td>No Impact</td>
<td>N/A</td>
</tr>
<tr>
<td>SW-15</td>
<td>Stormwater Pond Type 4/5</td>
<td>0.05 ac.</td>
<td>N/A</td>
<td>No Impact</td>
<td>N/A</td>
</tr>
<tr>
<td>SW-16</td>
<td>Stormwater Pond Type 4/5</td>
<td>0.17 ac.</td>
<td>T</td>
<td>Excavate / Remove Vegetation</td>
<td>0.04 ac.</td>
</tr>
<tr>
<td>W-17A</td>
<td>Wetland / Tributary Type 3</td>
<td>0.15 ac. (437 ft)</td>
<td>T</td>
<td>Remove Vegetation</td>
<td>0.13 ac. (402 ft)</td>
</tr>
<tr>
<td>W-17A</td>
<td>Wetland / Tributary Type 3</td>
<td>0.15 ac. (437 ft)</td>
<td>P</td>
<td>Fill</td>
<td>0.02 ac. (35 ft)</td>
</tr>
<tr>
<td>W-17B</td>
<td>Wetland / Tributary Type 3</td>
<td>0.05 ac. (126 ft)</td>
<td>T</td>
<td>Remove Vegetation</td>
<td>0.05 ac. (120 ft)</td>
</tr>
<tr>
<td>W-18</td>
<td>Wetland Type 3</td>
<td>1.12 ac.</td>
<td>T</td>
<td>Excavate / Remove Vegetation</td>
<td>0.90 ac.</td>
</tr>
<tr>
<td>W-18</td>
<td>Wetland Type 3</td>
<td>1.12 ac.</td>
<td>P</td>
<td>Fill</td>
<td>0.17 ac.</td>
</tr>
<tr>
<td>SW-19</td>
<td>Stormwater Pond Type 3/4</td>
<td>0.25 ac.</td>
<td>T</td>
<td>Excavate / Remove Vegetation</td>
<td>0.04 ac.</td>
</tr>
</tbody>
</table>

| Total Permanent Impacts: | 1.22 ac. (35 ft) |
| Total Temporary Impacts: | 2.11 ac. (522 ft) |

¹ Denote if a wet-ditch
² Temporary impacts typically last between 90 and 180 days.
³ Impacts less than 0.01 acre should be reported in square feet. Impacts greater than 0.01 acre should be reported as acres and rounded to the nearest 0.01 acre.

* Wetland boundaries and types are based on a Level 1 Wetland Delineation completed in October 2017. A Level 2 Wetland Delineation will be completed in spring/summer 2018.

**PART 2: WETLAND MINIMIZATION MEASURES**

It was not feasible to completely avoid all wetland impacts/encroachments resulting from this roadway improvement. Wetland impacts/encroachments that are unavoidable have been minimized to the extent practicable without compromising safety. The following design measures were used to minimize these impacts:

- Steeper inslopes (1:4 or steeper) at Wetland 17
- Lower vertical profile at Wetland 17
Compensation (Replacement/Enhancements)

Application for wetland permits will be made to the appropriate agencies with wetland jurisdiction. Wetland mitigation is an on-going development during early stages of project design, and therefore subject to change. The preferred method of wetland replacement is to use established, federally and state approved wetland bank credits. Efforts will be made to replace wetland losses within the bank service area of the wetland impact. It is anticipated that wetlands will be replaced at a 2:1 ratio, within bank service area (BSA) 9. The specific wetland bank credits will be determined through consultation with the U.S. Army Corps of Engineers, the City of Chaska, and MnDOT’s Office of Environmental Stewardship (OES).

CONCLUSION

In accordance with Executive Order 11990, based upon the above factors and considerations, it is determined that there is no practicable alternative to the proposed construction in the identified wetlands, and that the proposed action includes all practicable measures to minimize harm to the wetlands.

Based on the findings of approximately 1.22 acre of permanent aquatic resource impacts, including 0.19 acre of permanent wetland impacts, 0.63 acre of permanent wet ditch impacts, 0.40 acre of permanent stormwater pond impacts and 35 linear feet of permanent tributary impacts, it is anticipated that the project would qualify for the following U.S. Army Corps of Engineers permit category: Transportation Regional General Permit (RGP). However, this finding is subject to change as continued coordination occurs with the U.S. Army Corps of Engineers as the permitting processes proceeds.

ATTACHMENTS

State Location Map
Aquatic Resource Impact Index Map
Aquatic Resource Impacts
Aquatic Resource Impacts

TH 212 / CSAH 44 Interchange Project
SP 1017-108
Carver County

Figure 3B
Aquatic Resource Impacts

WETLAND W-12
TYPE 1
NO IMPACT

WETLAND WD-9
TYPE 1
PERMANENT
0.25 AC.

WETLAND WD-10
TYPE 1
PERMANENT
0.23 AC.

WETLAND WD-11
TYPE 1
PERMANENT
0.25 AC.

WETLAND W-13
TYPE 1
TEMPORARY
71 SF
Aquatic Resource Impacts

TH 212 / CSAH 44 Interchange Project
SP 1017-101
Carver County

Figure 3E