

**Title: Hwy 628:04, Intersection Improvement, Approach Sideslopes**

Memorandum (or Approval) Date: June 13, 2012

Design Exception Request Date: June 8, 2012

Region: North Central

Approval Status: Approved

| Project Location |                 |       |         |       |               |
|------------------|-----------------|-------|---------|-------|---------------|
| Highway          | Control Section | At km | From km | To km | Existing AADT |
| 628              | 04              |       | 1.16    | 1.80  | 14920         |

| Project Type (Mark all that apply with an X) |                            |                 |                   |
|--|----------------------------|-----------------|-------------------|
| Functional Planning:                         | New Construction: <b>X</b> | Reconstruction: | Paving/Surfacing: |
| Bridge:                                      | Operations:                | Geotechnical:   | Environmental:    |
| Other:                                       | Detailed Design <b>X</b>   |                 |                   |

| Summary   |
|---|
| <p>The following design exception request is for the following:<br/>Proposed intersection improvement at Highway 628:04/Range Rd. 233. The design exception request is for a V-ditch in the SW quadrant resulting in a 4:1 sideslope approach in the SW quadrant of the intersection.</p> <p>Based on the ATHGDG, Chapter G, 3R/\$R Guidelines, Table G.6.4, Suggested Approach Sideslopes for Highways Posted Speed <math>\geq 100</math> km/h, AADT <math>&gt; 3000</math> and fill height <math>&lt; 4</math>m, a approach slope of 5:1 is acceptable on existing approaches for projects with a major grading component. Desirable slope on new approaches are 7:1.</p> |

| Rationale for Approval/Rejection   |
|--|
| <ul style="list-style-type: none"> <li>• The design speed on Highway 628 is 80 km/h and the posted speed = 70 km/h.</li> <li>• Traffic signals will be installed along with advance warning flashers in both directions of Hwy 628.</li> <li>• Drainage flows away from the SW corner of the intersection.</li> <li>• The proposed intersection is an interim stage improvement until Highway 628 is twinned in the future.</li> </ul> |

| Additional Mitigation Required |
|--------------------------------|
| No mitigation is required.     |

| Key Words   |
|---|
| 3R/\$R Guidelines, intersections, approach sideslopes, desirable slopes on new approaches |

Photograph/Diagram





