

## Product Evaluation

**RE: Review of Sloped Grating for Culvert Ends**

### **PRODUCT**

The Sloped Grating is manufactured and distributed by Bet-Can Industrial Limited Surface Flow Control located in Sturgeon County, Alberta.

### **VENDOR CLAIMS AND INFORMATION**

#### **CLAIMS**

Sloped Grating is a culvert protection accessory designed to stop beavers and other animals from plugging or damaging culverts while promoting free flow of water with minimal environmental impact. Product web link: <http://www.surfaceflowcontrol.com/index.html>

#### **DESCRIPTION**

The spacing of the grate slats is 3" O.C. welded on vertical end for increased durability and strength; the grates are hot dip galvanized.

#### **POTENTIAL USAGE**

Sloped Grating is designed to fit over corrugated steel pipe beveled or straight culvert ends

#### **STANDARDS**

None provided

### **ALBERTA TRANSPORTATION COMMENTS**

#### **EXPERIENCE**

Alberta Transportation has no experience with this product. Alberta Transportation typically uses corrugated steel standard sloped end sections (bevelled ends at 3 to 4:1) for the majority of the non-bridge size culverts. The corrugated steel pipe industry has a standard steel section for culvert end treatment; this type of end treatment has not been used often due to economics. For plastic culverts the ends are bevelled (3 to 4:1) to form the end treatment. Concrete culverts use a flared end section for their end treatment.

Bridge size culverts typically have concrete headwall and wings for their end treatment and most likely require guardrail protection on the roadway shoulder due to safety requirements for the travelling public.

#### **APPLICABLE STANDARDS**

The Alberta Transportation Specification for culvert materials is as follows:

Standard Specification for Highway Construction 2.4 Culverts and Specification for Bridge Construction Section 18, Supply and Construction of CSP and SPCSP Structures

#### **RECOMMENDATIONS**

Sloped Grating be listed as a Trial Product on the Alberta Transportation Products List, Culverts – Beaver Control – Proprietary based on the information provided. Final acceptance as a proven product will be based on field performance. **Note: "require DFO approval prior to use"**

**TRIAL PROJECTS**

BF 86337 – Hwy 35:04 C1 KM33.140: Installed January 18, 2019 (from W.O. 064-2157), Pipe size 1524 mm Smooth walled steel pipe, Number of units – two (one on each end)

Hwy 986:02 C1 KM7.713: Installed – approximately November 16, 2018 (date on E.W.O. #7 for CON 0011375) , Pipe Size 800 mm (note: one is a smooth wall and the other is CSP Number of units – two (NOTE: 600 mm size)

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cc Innovation Evaluation Group – Roger Skirrow  
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