## Bridge Culvert Inspection

| | | | |
|---|---|---|---|
| Bridge File Number | 86246 -2 Bridge Culvert | Form Type | CUL1 |
| Year Built | 2010 | Lot No. | 4 |
| Bridge or Town Name | WATERCOURSE CULVERT ON HWY 58 NEAR HIGH LEVEL | Inspector Name | Brian Pientsch |
| | | Inspector Class | BR CLS A |
| Located Over | WATERCOURSE, WATERCRS-NI | Assistant Name | Clem Guenette |
| Located On | 58:06 C1 69.220 | Assistant Class | |
| Water Body Cl./Year | | Inspection Date | 12-Jan-2012 |
| Navigabil. Cl./Year | | Data Entry By | Theresa Lacusta |
| Legal Land Location | NW SEC 31 TWP 109 RGE 19 W5M | Data Entry Date | 04-Mar-2012 |
| Longitude, Latitude | -117:10:17, 58:30:46 | Reviewer Name | Eric Carcoux |
| Road Authority | Alberta Transportation (AIT) | Review Date | 26-Feb-2012 |
| Contract Main. Area | CMA01 | Dept. Reviewer Name | David Morrison |
| Clear Roadway/Skew | 8.3 / | Dept. Review Date | 30-Mar-2012 |
| AADT/Year | 730 / 2011 (A) | Follow-Up By | |
| Road Classification | | | |
| Detour Length (km) | 999 | | |

### Bridge Culvert Information

| | |
|---|---|
| Number of Culverts | 1 |

| Pipe # | Barrel | Span | Rise (or Dia.) | Type | Length | Corr. Profile | Pl./Slab Thickness | Shape |
|---|---|---|---|---|---|---|---|---|
| 1 | MAIN | - | 1828 | SSP | 32 | | 12.7 | ROUND |

| | |
|---|---|
| Special Features | |
| Special Features Comment | |

## Utilities (Located at)

| | | | |
|---|---|---|---|
| Utility Attachments | | | |
| Telephone | In South r/w. | Gas | |
| Power | 4 wire o/h 50m South, 1 wire o/h-15m North side. | Municipal | |
| Others | | Problem (Y/N) | Yes |
| Remarks | Remporary phone cable laying above ground on d/s side. | | |

## Approach Road / Embankment

| | | Last | Now | Explanation of Condition |
|---|---|---|---|---|
| Horizontal Alignment | | | 9 | |
| Vertical Alignment | | | 9 | |
| Roadway Width (m) | 11.000 | | | |
| Embankment | | | 8 | |
| Sideslope (__:1) | 6.0 | | | |
| (Height of Cover(m) : **0.8**) | | | | |
| Guardrail (Y/N) | No | | | |
| **Approach Road / Embankment General Rating** | | | **9** | |

## Upstream End

| Culvert Component | | Last | Now | Explanation of Condition |
|---|---|---|---|---|
| Direction | | N | | |
| End Treatment (Concrete, Steel, Others, None) | STEEL | | | |
| Headwall | | | X | |
| Collar | | | X | |
| Wingwalls | | | X | |
| (Shape : ) | | | | |
| Cutoff Wall | | | X | |

| Upstream End | | | | |
|---|---|---|---|---|
| **Culvert Component** | | **Last** | **Now** | **Explanation of Condition** |
| Bevel End | | | N | Snow/ice covered. |
| Heaving (mm) | | | | |
| Invert Above/Below Stream Bed | BELOW | | | |
| Above/Below (mm) | 800 | | | |
| Scour Protection | | | N | Snow covered. |
| (Type : ) | | | | |
| (Avg. Rock Size(mm) : ) | | | | |
| Scour/Erosion | | | N | |
| Beavers (Y/N) | No | | | |
| **Upstream End General Rating** | | | **N** | |

| Bridge Culvert Barrel | | | | |
|---|---|---|---|---|
| **Culvert Component** | | **Last** | **Now** | **Explanation of Condition** |
| (Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1828, Type: SSP**) | | | | |
| Barrel Last Accessible Date | | | | No access due to 500mm ice to crown.<br>Viewed from ends looks good. |
| **Special Features** | | | | |
| Special Feature | | | | |
| (Type : ) | | | | |
| Special Feature | | | | |
| (Type : ) | | | | |
| Roof | | | 9 | |
| Measured Rise (mm) | | | | |
| Measured At Ring No. | | | | |
| Sag (mm) | | | | |
| Percent Sag | | | | |
| Sidewall | | | N | |
| Measured Span (mm) | | | | |
| Measured At Ring No. | | | | |
| Deflection (mm) | | | | |
| Percent Deflection | | | | |
| Floor | | | N | |
| Bulge (mm) | | | | |
| Measured At Ring No. | | | | |
| Abrasion (Y/N) | | | | |
| Circumferential Seams | | | N | |
| Separation (mm) | | | | |
| Longitudinal Seams | | | X | |
| Total No. of Cracked Rings | | | | |
| Total No. of Rings with Two Cracked Seams | | | | |
| Min. Remaining Steel Between Cracks (mm) | | | | |
| Proper Lap (Y/N) | | | | |
| Longitudinal Stagger (Y/N) | | | | |
| Coating | | | N | |
| Corrosion By Soil (Y/N) | | | | |
| Corrosion By Water (Y/N) | | | | |
| Camber POS/ZERO/NEG | ZERO | | | |
| Ponding (Y/N) | Yes | | | |

| Bridge Culvert Barrel | | | | |
|---|---|---|---|---|
| **Culvert Component** | | **Last** | **Now** | **Explanation of Condition** |
| (Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1828, Type: SSP**) | | | | |
| Fish Passage Adequacy | | | 7 | |
| Baffle | | | N | |
| (Type : ) | | | | |
| Waterway Adequacy | | | 7 | |
| Icing (Y/N) | No | | | |
| Silting (Y/N) | No | | | |
| Drift (Y/N) | No | | | |
| **Barrel General Rating** | | | **N** | |

| Downstream End | | | | |
|---|---|---|---|---|
| **Culvert Component** | | **Last** | **Now** | **Explanation of Condition** |
| Direction | | S | | |
| End Treatment (Concrete, Steel, Others, None) | STEEL | | | |
| Headwall | | | X | |
| Collar | | | X | |
| Wingwalls | | | X | |
| (Shape : ) | | | | |
| Cutoff Wall | | | X | |
| Bevel End | | | N | Snow and ice covered. |
| Heaving (mm) | | | | |
| Invert Above/Below Stream Bed | BELOW | | | |
| Above/Below (mm) | 800 | | | |
| Scour Protection | | | N | Snow covered |
| (Type : ) | | | | |
| (Avg. Rock Size(mm) : ) | | | | |
| Scour/Erosion | | | N | SNow covered |
| Beavers (Y/N) | No | | | |
| **Downstream End General Rating** | | | **N** | |

| Structure Usage | | | | |
|---|---|---|---|---|
| | | **Last** | **Now** | **Explanation of Condition** |
| **Channel (U/S and D/S)** | | | | |
| Alignment | | | 7 | |
| Bank Stability | | | 9 | |
| HWM (m below Top of Culvert) | | | | No HWN visible |
| Drift (Y/N) | No | | | |
| Channel Bottom Degrading/Aggrading | NONE | | | |
| Beavers (Y/N) | No | | | |
| (Fish Compensation Measure 1 : **NONE**) | | | | |
| (Fish Compensation Measure 2 : **NONE**) | | | | |
| **Channel General Rating** | | | **7** | |

**Maintenance Recommendations**

| Inspector Recommendations | Year | Inspector Comments | Department Comments | Target Year | Est. Cost | Cat # |
|---|---|---|---|---|---|---|
| SHOTCRETE REPAIRS | | | | | | |
| PLACE ADDITIONAL RIP RAP | | | | | | |
| REMOVE DRIFT ACCUMULATION | | | | | | |
| INSTALL CONCRETE/STEEL LINING | | | | | | |
| INSTALL STRUTS | | | | | | |
| INSTALL CONCRETE COLLAR/CUTOFF | | | | | | |
| REPAIR SEAMS | | | | | | |
| OTHER ACTION | | | | | | |
| OTHER ACTION | | | | | | |
| OTHER ACTION | | | | | | |
| OTHER ACTION | | | | | | |

| **Structural Condition Rating (Last/Now) (%)** | **/55.6** | **Sufficiency Rating (Last/Now) (%)** | **/59.8** | Est. Repl. Yr | 2060 | Maint. Reqd. (Y/N) | No |
|---|---|---|---|---|---|---|---|

| Special Comments for Next Inspection | | Department Comments | |
|---|---|---|---|

| Maintenance Reviewed By | | Date | | Estimated Total | 0 |
|---|---|---|---|---|---|
| Proposed Long-Term Strategy | | | | | |
| On 3-Year Program (Y/N) | | | | | |
| Proposed Action | | | | | |
| Previous Inspector's Name | | Previous Assistant's Name | | | |
| Next Inspection Date | 12-Oct-2013 | Previous Inspection Date | | | |
| Inspection Cycle (Default) (months) | 21 | | | | |
| Comment | | | | | |