

| Bridge Culvert Inspection |  |                     |                     |
|---------------------------|--|---------------------|---------------------|
| Bridge File Number        | 09276 -1 Bridge Culvert                                  | Form Type           | CUL1                |
| Year Built                | 1985   | Lot No.             | 4                   |
| Bridge or Town Name       | TEEPEE CREEK   | Inspector Name      | Russel Vanderschaaf |
| Located Over              | TRIBUTARY TO KLESKUN CREEK,<br>8.10.58.13.3, WATERCRS-ST | Inspector Class     | BR CLS B            |
| Located On                | 674:02 C1 21.853   | Assistant Name      |                     |
| Water Body Cl./Year       |  | Assistant Class     |                     |
| Navigabil. Cl./Year       |  | Inspection Date     | 03-May-2010         |
| Legal Land Location       | SW SEC 5 TWP 74 RGE 3 W6M                                | Data Entry By       | Theresa Lacusta     |
| Longitude, Latitude       | -118:25:29, 55:22:27                                     | Data Entry Date     | 10-Jun-2010         |
| Road Authority            | Alberta Transportation (AIT)                             | Reviewer Name       | Arnold Assenheimer  |
| Contract Main. Area       | CMA05  | Review Date         | 07-Jun-2010         |
| Clear Roadway/Skew        | 9.2 / 13 deg. (RHF)                                      | Dept. Reviewer Name | Steve Pasquan       |
| AADT/Year                 | 900 / 2009 (A)   | Dept. Review Date   | 19-Aug-2010         |
| Road Classification       | RCU-209-110  | Follow-Up By        |                     |
| Detour Length (km)        | 6  |                     |                     |

**Bridge Culvert Information**

|                          |                   |      |                |      |        |               |                    |       |
|--------------------------|-------------------|------|----------------|------|--------|---------------|--------------------|-------|
| Number of Culverts       | 1                 |      |                |      |        |               |                    |       |
| Pipe #                   | Barrel            | Span | Rise (or Dia.) | Type | Length | Corr. Profile | Pl./Slab Thickness | Shape |
| 1                        | MAIN              | -    | 2700           | MP   | 35     | 125X26        | 3.5                | ROUND |
| Special Features         | VERT STEEL STRUTS |      |                |      |        |               |                    |       |
| Special Features Comment |                   |      |                |      |        |               |                    |       |

**Utilities (Located at)**

|                     |                           |               |    |
|---------------------|---------------------------|---------------|----|
| Utility Attachments |                           |               |    |
| Telephone           | SOUTH r/w                 | Gas           |    |
| Power               | 16 M NORTH OF C/L-3 wire. | Municipal     |    |
| Others              |                           | Problem (Y/N) | No |
| Remarks             |                           |               |    |

**Approach Road / Embankment**

|  | Last     | Now      | Explanation of Condition |
|--|----------|----------|--------------------------|
| Horizontal Alignment                             | 7        | 7        | Field access 80 m east.  |
| Vertical Alignment                               | 8        | 8        |                          |
| Roadway Width (m)                                | 9.200    |          |                          |
| Embankment                                       | 8        | 8        |                          |
| Sideslope ( __:1)                                | 3.5      |          |                          |
| (Height of Cover(m) : 2)                         |          |          |                          |
| Guardrail (Y/N)                                  | No       |          |                          |
| <b>Approach Road / Embankment General Rating</b> | <b>7</b> | <b>7</b> |                          |

**Upstream End**

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

| Upstream End  |             |          |          |   |
|---|-------------|----------|----------|---|
| Culvert Component   |             | Last     | Now      | Explanation of Condition  |
| Bevel End   |             | 7        | 7        |   |
| Heaving (mm)  | 0           |          |          |   |
| Invert Above/Below Stream Bed   | BELOW       |          |          |   |
| Above/Below (mm)  | 600         |          |          |   |
| Scour Protection  |             | N        | 7        |   |
| (Type : <b>RIP RAP</b> )  |             |          |          |   |
| (Avg. Rock Size(mm) : <b>200</b> )  |             |          |          |   |
| Scour/Erosion   |             | N        | 7        |   |
| Beavers (Y/N)   | No          |          |          |   |
| <b>Upstream End General Rating</b>  |             | <b>7</b> | <b>7</b> |   |
| Bridge Culvert Barrel   |             |          |          |   |
| Culvert Component   |             | Last     | Now      | Explanation of Condition  |
| (Pipe # : <b>1</b> , Primary Span, Location Code: <b>MAIN</b> , Span (mm): , Rise (mm): <b>2700</b> , Type: <b>MP</b> ) |             |          |          |   |
| Barrel Last Accessible Date   | 01-Feb-2007 |          |          | Could not access pipe due to water level - approx 1.2m high.      |
| <b>Special Features</b>   |             |          |          |   |
| Special Feature   |             |          | X        |   |
| (Type : <b>VERT STEEL STRUTS</b> )  |             |          |          |   |
| Special Feature   |             |          |          |   |
| (Type : )   |             |          |          |   |
| Roof  |             | 3        | N        | (Roof pushed in 100mm at upstream end. sag estimated-01-Feb-2007) |
| Measured Rise (mm)  |             |          |          |   |
| Measured At Ring No.  |             |          |          |   |
| Sag (mm)  | 300         |          |          |   |
| Percent Sag   |             |          |          |   |
| Sidewall  |             | 3        | N        |   |
| Measured Span (mm)  | 3034        |          |          |   |
| Measured At Ring No.  |             |          |          |   |
| Deflection (mm)   | 334         |          |          |   |
| Percent Deflection  | 12          |          |          |   |
| Floor   |             | N        | N        |   |
| Bulge (mm)  | 0           |          |          |   |
| Measured At Ring No.  |             |          |          |   |
| Abrasion (Y/N)  | No          |          |          |   |
| Circumferential Seams   |             | 5        | N        | Bevel section separation at d/s end.-01-Feb-2007                  |
| Separation (mm)   | 155         |          |          |   |
| Longitudinal Seams  |             | X        | X        |   |
| Total No. of Cracked Rings  | 0           |          |          |   |
| Total No. of Rings with Two Cracked Seams   |             |          |          |   |
| Min. Remaining Steel Between Cracks (mm)  |             |          |          |   |
| Proper Lap (Y/N)  |             |          |          |   |
| Longitudinal Stagger (Y/N)  |             |          |          |   |
| Coating   |             | 5        | 5        | Superficial rust on lower 1/3 of pipe.                            |
| Corrosion By Soil (Y/N)   | No          |          |          |   |
| Corrosion By Water (Y/N)  | Yes         |          |          |   |
| Camber POS/ZERO/NEG   | ZERO        |          |          |   |
| Ponding (Y/N)   | No          |          |          |   |

| Bridge Culvert Barrel   |       |          |          |                                   |
|---|-------|----------|----------|-----------------------------------|
| Culvert Component   |       | Last     | Now      | Explanation of Condition          |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2700, Type: MP) |       |          |          |                                   |
| Fish Passage Adequacy   |       | 7        | 7        |                                   |
| Baffle  |       | X        | X        |                                   |
| (Type : )   |       |          |          |                                   |
| Waterway Adequacy   |       | 7        | 7        |                                   |
| Icing (Y/N)   | No    |          |          |                                   |
| Silting (Y/N)   | No    |          |          |                                   |
| Drift (Y/N)   | No    |          |          |                                   |
| <b>Barrel General Rating</b>  |       | <b>3</b> | <b>3</b> | GR carried from 01-Feb-2007       |
| Downstream End  |       |          |          |                                   |
| Culvert Component   |       | Last     | Now      | Explanation of Condition          |
| Direction   |       | S        |          |                                   |
| End Treatment (Concrete, Steel, Others, None)   | STEEL |          |          |                                   |
| Headwall  |       | X        | X        |                                   |
| Collar  |       | X        | X        |                                   |
| Wingwalls   |       | X        | X        |                                   |
| (Shape : )  |       |          |          |                                   |
| Cutoff Wall   |       | X        | X        |                                   |
| Bevel End   |       | 7        | 7        |                                   |
| Heaving (mm)  | 200   |          |          |                                   |
| Invert Above/Below Stream Bed   |       |          |          |                                   |
| Above/Below (mm)  | 0     |          |          |                                   |
| Scour Protection  |       | N        | 7        |                                   |
| (Type : RIP RAP)  |       |          |          |                                   |
| (Avg. Rock Size(mm) : 200)  |       |          |          |                                   |
| Scour/Erosion   |       | N        | 7        |                                   |
| Beavers (Y/N)   | No    |          |          |                                   |
| <b>Downstream End General Rating</b>  |       | <b>6</b> | <b>7</b> |                                   |
| Structure Usage   |       |          |          |                                   |
|   |       | Last     | Now      | Explanation of Condition          |
| <b>Channel (U/S and D/S)</b>  |       |          |          |                                   |
| Alignment   |       | 6        | 6        | Curves within 50 m of either end. |
| Bank Stability  |       | 8        | 8        |                                   |
| HWM (m below Top of Culvert)  | 0.1   |          |          | Grass on brush on u/s end.        |
| Drift (Y/N)   | No    |          |          |                                   |
| Channel Bottom Degrading/Aggrading  |       |          |          |                                   |
| Beavers (Y/N)   | No    |          |          |                                   |
| (Fish Compensation Measure 1 : NONE)  |       |          |          |                                   |
| (Fish Compensation Measure 2 : NONE)  |       |          |          |                                   |
| <b>Channel General Rating</b>   |       | <b>6</b> | <b>6</b> |                                   |

| 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                                      |                  |  |                           |               |           |                   |    |
| <b>Structural Condition Rating (Last/Now) (%)</b> | <b>33.3/33.3</b> | <b>Sufficiency Rating (Last/Now) (%)</b> | <b>54.4/55.3</b>          | Est. Repl. Yr | 2015      | Maint. Req. (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                         | Colin Roy        |  | Previous Assistant's Name |               |           |                   |    |
| Next Inspection Date                              | 03-Aug-2013      |  | Previous Inspection Date  | 01-Feb-2007   |           |                   |    |
| Inspection Cycle (Default) (months)               | 39               |  |                           |               |           |                   |    |
| Comment   |                  |  |                           |               |           |                   |    |