

| Bridge Culvert Inspection | | | |
|---------------------------|---|---------------------|---------------------|
| Bridge File Number | 78146 -2 Bridge Culvert | Form Type | CUL1 |
| Year Built | 2007 | Lot No. | 4 |
| Bridge or Town Name | GRANDE PRAIRIE | Inspector Name | Russel Vanderschaaf |
| Located Over | 2ND ORDER TRIBUTARY TO BEAR RIVER, 8.10.58.18.2.4.1, WATERCRS-ST | Inspector Class | BR CLS B |
| Located On | 668:02 C1 1.458 | Assistant Name | |
| Water Body Cl./Year | | Assistant Class | |
| Navigabil. Cl./Year | | Inspection Date | 03-May-2010 |
| Legal Land Location | SE SEC 2 TWP 71 RGE 6 W6M | Data Entry By | Theresa Lacusta |
| Longitude, Latitude | -118:47:52, 55:06:45 | Data Entry Date | 07-Jun-2010 |
| Road Authority | Alberta Transportation (AIT) | Reviewer Name | Arnold Assenheimer |
| Contract Main. Area | CMA05 | Review Date | 07-Jun-2010 |
| Clear Roadway/Skew | 8.6 / -5 deg. (LHF) | Dept. Reviewer Name | Steve Pasquan |
| AADT/Year | 3,630 / 2009 (A) | Dept. Review Date | 18-Aug-2010 |
| Road Classification | RAU-209-110 | Follow-Up By | |
| Detour Length (km) | 5 | | |

Bridge Culvert Information

| | | | | | | | | |
|--------------------------|--------|------|----------------|------|--------|---------------|--------------------|-------|
| Number of Culverts | 1 | | | | | | | |
| Pipe # | Barrel | Span | Rise (or Dia.) | Type | Length | Corr. Profile | Pl./Slab Thickness | Shape |
| 1 | MAIN | - | 2200 | MP | 34 | 125X26 | 2.8 | ROUND |
| Special Features | | | | | | | | |
| Special Features Comment | | | | | | | | |

Utilities (Located at)

| | | | | | | | |
|---------------------|---------------------------|---------------|-------------------|--|--|--|--|
| Utility Attachments | | | | | | | |
| Telephone | 1 line s R/W | Gas | 4 gas lines N R/W | | | | |
| Power | S R/W - 7 wire | Municipal | | | | | |
| Others | | Problem (Y/N) | No | | | | |
| Remarks | Z Fibre Optic lines S R/W | | | | | | |

Approach Road / Embankment

| | | Last | Now | Explanation of Condition |
|--|-------|----------|----------|--------------------------|
| Horizontal Alignment | | 8 | 8 | Entrance west 50m. |
| Vertical Alignment | | 8 | 8 | |
| Roadway Width (m) | 9.500 | | | |
| Embankment | | 8 | 8 | |
| Sideslope (__:1) | 5.0 | | | |
| (Height of Cover(m) : 1.3) | | | | |
| Guardrail (Y/N) | No | | | |
| Approach Road / Embankment General Rating | | 8 | 8 | Aligment |

Upstream 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 :) | | | | |

| Upstream End | | | | |
|---|-------------|----------|----------|--|
| Culvert Component | | Last | Now | Explanation of Condition |
| Cutoff Wall | | X | X | |
| Bevel End | | 9 | 9 | |
| Heaving (mm) | | | | |
| Invert Above/Below Stream Bed | BELOW | | | |
| Above/Below (mm) | 360 | | | |
| Scour Protection | | 8 | 8 | |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 200) | | | | |
| Scour/Erosion | | 8 | 8 | |
| Beavers (Y/N) | | | | |
| Upstream End General Rating | | 9 | 8 | |
| Bridge Culvert Barrel | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 2200 , Type: MP) | | | | |
| Barrel Last Accessible Date | 05-Oct-2007 | | | Water 700-800mm high, could not access pipe. Shape looks good as viewed from ends. |
| Special Features | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Roof | | 8 | N | |
| Measured Rise (mm) | 2243 | | | |
| Measured At Ring No. | 1 | | | |
| Sag (mm) | 43 | | | |
| Percent Sag | 0 | | | |
| Sidewall | | 8 | N | |
| Measured Span (mm) | 2143 | | | |
| Measured At Ring No. | 4 | | | |
| Deflection (mm) | 0 | | | |
| Percent Deflection | 3 | | | |
| Floor | | 8 | N | |
| Bulge (mm) | 0 | | | |
| Measured At Ring No. | 2 | | | |
| Abrasion (Y/N) | No | | | |
| Circumferential Seams | | 8 | N | |
| Separation (mm) | 20 | | | |
| Longitudinal Seams | | X | 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 | | 9 | N | |
| Corrosion By Soil (Y/N) | No | | | |
| Corrosion By Water (Y/N) | No | | | |
| Camber POS/ZERO/NEG | ZERO | | | |

| Bridge Culvert Barrel | | | | |
|---|-----------|----------|----------|--------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP) | | | | |
| Ponding (Y/N) | No | | | |
| Fish Passage Adequacy | | 8 | 8 | |
| Baffle | | X | X | |
| (Type :) | | | | |
| Waterway Adequacy | | 8 | 8 | |
| Icing (Y/N) | No | | | |
| Silting (Y/N) | No | | | |
| Drift (Y/N) | No | | | |
| Barrel General Rating | | 8 | N | GR 8- 05-Oct-2007 |
| Downstream 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 | |
| Bevel End | | 8 | 8 | |
| Heaving (mm) | | | | |
| Invert Above/Below Stream Bed | BELOW | | | |
| Above/Below (mm) | 450 | | | |
| Scour Protection | | 8 | 8 | |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 250) | | | | |
| Scour/Erosion | | 8 | 8 | |
| Beavers (Y/N) | No | | | |
| Downstream End General Rating | | 8 | 8 | |
| Structure Usage | | | | |
| | | Last | Now | Explanation of Condition |
| Channel (U/S and D/S) | | | | |
| Alignment | | 8 | 8 | |
| Bank Stability | | 8 | 8 | |
| HWM (m below Top of Culvert) | | | | HWM not visible. |
| Drift (Y/N) | No | | | |
| Channel Bottom Degrading/Aggrading | DEGRADING | | | |
| Beavers (Y/N) | No | | | |
| (Fish Compensation Measure 1 : NONE) | | | | |
| (Fish Compensation Measure 2 : NONE) | | | | |
| Channel General Rating | | 8 | 8 | |

| 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) (%) | 88.9/55.6 | Sufficiency Rating (Last/Now) (%) | 88.4/69.3 | Est. Repl. Yr | 2052 | 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 | Michael Bird | | Previous Assistant's Name | | | | |
| Next Inspection Date | 03-Aug-2013 | | Previous Inspection Date | 05-Oct-2007 | | | |
| Inspection Cycle (Default) (months) | 39 | | | | | | |
| Comment | | | | | | | |