

| Bridge Culvert Inspection | | | | |
|---------------------------|--|--|---------------------|---------------------|
| Bridge File Number | 73390 -1 Bridge Culvert | | Form Type | CUL1 |
| Year Built | 1987 | | Lot No. | 4 |
| Bridge or Town Name | WHITELAW | | Inspector Name | Russel Vanderschaaf |
| Located Over | TRIBUTARY TO LEITH RIVER, 8.10.73.4, WATERCRS-ST | | Inspector Class | BR CLS B |
| Located On | 735:02 C1 5.114 | | Assistant Name | |
| Water Body Cl./Year | | | Assistant Class | |
| Navigabil. Cl./Year | | | Inspection Date | 30-Aug-2012 |
| Legal Land Location | NW SEC 27 TWP 82 RGE 1 W6M | | Data Entry By | Theresa Lacusta |
| Longitude, Latitude | -118:04:43, 56:08:34 | | Data Entry Date | 02-Oct-2012 |
| Road Authority | Alberta Transportation (AIT) | | Reviewer Name | Eric Carcoux |
| Contract Main. Area | CMA04 | | Review Date | 23-Sep-2012 |
| Clear Roadway/Skew | 11.5 / | | Dept. Reviewer Name | Steve Pasquan |
| AADT/Year | 60 / 2011 (A) | | Dept. Review Date | 04-Jan-2013 |
| Road Classification | RLU-209G-90 | | Follow-Up By | |
| Detour Length (km) | 3 | | | |

Bridge Culvert Information

| | | | | | | | | |
|--------------------------|--------|------|----------------|------|--------|---------------|--------------------|-------|
| Number of Culverts | 1 | | | | | | | |
| Pipe # | Barrel | Span | Rise (or Dia.) | Type | Length | Corr. Profile | Pl./Slab Thickness | Shape |
| 1 | MAIN | - | 2000 | MP | 27 | 125X26 | 2.8 | ROUND |
| Special Features | | | | | | | | |
| Special Features Comment | | | | | | | | |

Utilities (Located at)

| | | | |
|---------------------|--|---------------|----|
| Utility Attachments | | | |
| Telephone | | Gas | |
| Power | | Municipal | |
| Others | | Problem (Y/N) | No |
| Remarks | | | |

Approach Road / Embankment

| | Last | Now | Explanation of Condition |
|--|----------|----------|--------------------------|
| Horizontal Alignment | 8 | 8 | |
| Vertical Alignment | 8 | 8 | |
| Roadway Width (m) | 11.500 | | |
| Embankment | 8 | 8 | |
| Sideslope (__:1) | 3.0 | | |
| (Height of Cover(m) : 1.3) | | | |
| Guardrail (Y/N) | No | | |
| Approach Road / Embankment General Rating | 8 | 8 | |

Upstream End

| Culvert Component | Last | Now | Explanation of Condition |
|---|-------|-----|--------------------------|
| Direction | E | | Water 0.7m from crown. |
| 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 | | N | 7 | |
| Heaving (mm) | 50 | | | |
| Invert Above/Below Stream Bed | | | | |
| Above/Below (mm) | 0 | | | |
| Scour Protection | | N | 7 | |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 150) | | | | |
| Scour/Erosion | | N | 7 | |
| Beavers (Y/N) | No | | | |
| Upstream End General Rating | | 7 | 7 | |
| Bridge Culvert Barrel | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 2000 , Type: MP) | | | | |
| Barrel Last Accessible Date | 20-Feb-2009 | | | Water to deep |
| Special Features | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Roof | | N | N | East due to ice.-20-Feb-2009 |
| Measured Rise (mm) | | | | near cl |
| Measured At Ring No. | | | | |
| Sag (mm) | 120 | | | |
| Percent Sag | 6 | | | |
| Sidewall | | N | N | 10.4m from inlet.-20-Feb-2009 |
| Measured Span (mm) | 2121 | | | |
| Measured At Ring No. | | | | |
| Deflection (mm) | 121 | | | |
| Percent Deflection | 6 | | | |
| Floor | | N | N | |
| Bulge (mm) | | | | |
| Measured At Ring No. | | | | |
| Abrasion (Y/N) | | | | |
| Circumferential Seams | | N | N | |
| Separation (mm) | 50 | | | |
| 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 | | N | N | Superficial rust on lower 1/3.-20-Feb-2009 |
| 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): 2000, Type: MP) | | | | |
| Fish Passage Adequacy | | 7 | 7 | |
| Baffle | | N | N | |
| (Type :) | | | | |
| Waterway Adequacy | | 7 | 7 | |
| Icing (Y/N) | No | | | |
| Silting (Y/N) | No | | | |
| Drift (Y/N) | No | | | |
| Barrel General Rating | | N | N | GR was '5' on 20-Feb-2009 |
| Downstream End | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| Direction | | W | | Water 0.6m from crown |
| End Treatment (Concrete, Steel, Others, None) | STEEL | | | |
| Headwall | | X | X | |
| Collar | | X | X | |
| Wingwalls | | X | X | |
| (Shape :) | | | | |
| Cutoff Wall | | X | X | |
| Bevel End | | N | 7 | |
| Heaving (mm) | 0 | | | |
| Invert Above/Below Stream Bed | | | | |
| Above/Below (mm) | 0 | | | |
| Scour Protection | | N | 7 | |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 150) | | | | |
| Scour/Erosion | | N | 7 | |
| Beavers (Y/N) | No | | | |
| Downstream End General Rating | | 7 | 7 | |
| Structure Usage | | | | |
| | | Last | Now | Explanation of Condition |
| Channel (U/S and D/S) | | | | |
| Alignment | | 6 | 6 | |
| Bank Stability | | 7 | 7 | |
| HWM (m below Top of Culvert) | 0.4 | | | 19-Jun-2012 |
| Drift (Y/N) | No | | | |
| Channel Bottom Degrading/Aggrading | | | | Stable. |
| Beavers (Y/N) | No | | | |
| (Fish Compensation Measure 1 : NONE) | | | | |
| (Fish Compensation Measure 2 : NONE) | | | | |
| Channel General Rating | | 6 | 6 | |

| 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) (%) | 55.6/55.6 | Sufficiency Rating (Last/Now) (%) | 67.6/67.6 | Est. Repl. Yr | 2022 | Maint. Req. (Y/N) | No |
| Special Comments for Next Inspection | Monitor barrel shape. | | 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 | Russel Vanderschaaf | | Previous Assistant's Name | | | | |
| Next Inspection Date | 30-Nov-2015 | | Previous Inspection Date | 19-Jun-2012 | | | |
| Inspection Cycle (Default) (months) | 39 | | | | | | |
| Comment | | | | | | | |