

| Bridge Culvert Inspection | | | |
|---------------------------|--------------------------------------|---------------------|---------------|
| Bridge File Number | 79498 -1 Bridge Culvert | Form Type | CUL1 |
| Year Built | 1983 | Lot No. | 4 |
| Bridge or Town Name | CABIN LAKE | Inspector Name | Jason Saly |
| Located Over | BLOOD INDIAN CREEK, 3.9, WATERCRS-ST | Inspector Class | BR CLS A |
| Located On | 884:06 C1 9.806 | Assistant Name | |
| Water Body Cl./Year | | Assistant Class | |
| Navigabil. Cl./Year | | Inspection Date | 22-Nov-2010 |
| Legal Land Location | NE SEC 33 TWP 23 RGE 9 W4M | Data Entry By | Marcia Chavez |
| Longitude, Latitude | -111:11:53, 51:00:20 | Data Entry Date | 11-Jan-2011 |
| Road Authority | Alberta Transportation (AIT) | Reviewer Name | John O'Brien |
| Contract Main. Area | CMA22 | Review Date | 12-Dec-2010 |
| Clear Roadway/Skew | 9.1 / -5 deg. (LHF) | Dept. Reviewer Name | Chris Black |
| AADT/Year | 300 / 2009 (A) | Dept. Review Date | 11-Jan-2011 |
| Road Classification | RCU-210-110 | Follow-Up By | |
| Detour Length (km) | 50 | | |

Bridge Culvert Information

| | | | | | | | | |
|--------------------------|--------|------|----------------|------|--------|---------------|--------------------|---------|
| Number of Culverts | 1 | | | | | | | |
| Pipe # | Barrel | Span | Rise (or Dia.) | Type | Length | Corr. Profile | Pl./Slab Thickness | Shape |
| 1 | MAIN | 5260 | 5860 | SPE | 92.8 | 152X51 | 5.0,6.0 | ELLIPSE |
| Special Features | | | | | | | | |
| Special Features Comment | | | | | | | | |

Utilities (Located at)

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

Approach Road / Embankment

| | Last | Now | Explanation of Condition |
|--|----------|----------|-------------------------------------|
| Horizontal Alignment | 7 | 7 | Between two curves. |
| Vertical Alignment | 7 | 7 | Sag curve with good sight distance. |
| Roadway Width (m) | 9.100 | | |
| Embankment | 7 | N | Snow covered. |
| Sideslope (__:1) | 2.7 | | |
| (Height of Cover(m) : 9.3) | | | |
| Guardrail (Y/N) | No | | |
| Approach Road / Embankment General Rating | 7 | 7 | |

Upstream End

| Culvert Component | Last | Now | Explanation of Condition |
|---|----------|-----|--------------------------|
| Direction | W | | Concrete collar. |
| End Treatment (Concrete, Steel, Others, None) | CONCRETE | | |
| Headwall | 8 | 8 | |
| Collar | 8 | 8 | |
| Wingwalls | X | X | |
| (Shape :) | | | |
| Cutoff Wall | 7 | 7 | |

| 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) | 1000 | | | |
| Scour Protection | | 6 | N | Snow covered. |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 500) | | | | |
| Scour/Erosion | | 6 | N | Snow covered. |
| Beavers (Y/N) | No | | | |
| Upstream End General Rating | | 7 | 6 | Based on scour from 30Jan2009. |
| Bridge Culvert Barrel | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 5260, Rise (mm): 5860, Type: SPE) | | | | |
| Barrel Last Accessible Date | 30-Jan-2009 | | | Not accessible due to thin ice. Viewed from ends; shape appears good. |
| Special Features | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Roof | | 8 | N | |
| Measured Rise (mm) | 5887 | | | |
| Measured At Ring No. | 12 | | | |
| Sag (mm) | 27 | | | |
| Percent Sag | 1 | | | |
| Sidewall | | 8 | N | Spingline too high to measure. No indication of problems. |
| Measured Span (mm) | | | | |
| Measured At Ring No. | | | | |
| Deflection (mm) | 0 | | | Est 1% |
| Percent Deflection | | | | |
| Floor | | 7 | N | Ice covered. |
| Bulge (mm) | 0 | | | |
| Measured At Ring No. | | | | |
| Abrasion (Y/N) | No | | | |
| Circumferential Seams | | 8 | N | |
| Separation (mm) | 0 | | | |
| Longitudinal Seams | | 7 | N | |
| Total No. of Cracked Rings | 0 | | | |
| Total No. of Rings with Two Cracked Seams | 0 | | | |
| Min. Remaining Steel Between Cracks (mm) | | | | Staggered by 4N for last 6 rings. Lower haunch seams not staggered. |
| Proper Lap (Y/N) | No | | | |
| Longitudinal Stagger (Y/N) | No | | | |
| Coating | | 7 | N | Very light corrosion. |
| Corrosion By Soil (Y/N) | No | | | |
| Corrosion By Water (Y/N) | Yes | | | |
| Camber POS/ZERO/NEG | ZERO | | | |

| Bridge Culvert Barrel | | | | |
|--|-----------|----------|----------|-----------------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 5260, Rise (mm): 5860, Type: SPE) | | | | |
| Ponding (Y/N) | No | | | |
| Fish Passage Adequacy | | 7 | 7 | |
| Baffle | | X | X | |
| (Type :) | | | | |
| Waterway Adequacy | | 8 | 8 | |
| Icing (Y/N) | No | | | |
| Silting (Y/N) | No | | | |
| Drift (Y/N) | No | | | |
| Barrel General Rating | | 7 | N | Previous GR was 7 from 30Jan2009. |
| Downstream End | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| Direction | | E | | Concrete collar. |
| End Treatment (Concrete, Steel, Others, None) | CONCRETE | | | |
| Headwall | | 8 | 8 | |
| Collar | | 8 | 8 | |
| Wingwalls | | X | X | |
| (Shape :) | | | | |
| Cutoff Wall | | N | N | Buried |
| Bevel End | | 8 | 8 | |
| Heaving (mm) | 0 | | | |
| Invert Above/Below Stream Bed | BELOW | | | |
| Above/Below (mm) | 1100 | | | |
| Scour Protection | | 7 | N | Snow covered. |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 500) | | | | |
| Scour/Erosion | | 7 | N | Snow covered. |
| Beavers (Y/N) | No | | | |
| Downstream End General Rating | | 7 | 7 | Based on scour from 30Jan2009. |
| Structure Usage | | | | |
| | | Last | Now | Explanation of Condition |
| Channel (U/S and D/S) | | | | |
| Alignment | | 8 | 8 | |
| Bank Stability | | 8 | N | |
| HWM (m below Top of Culvert) | | | | No HWM visible. |
| Drift (Y/N) | No | | | |
| Channel Bottom Degrading/Aggrading | AGGRADING | | | Agg. near bevel ends. |
| 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) (%) | 77.8/55.6 | Sufficiency Rating (Last/Now) (%) | 79.5/67.8 | Est. Repl. Yr | 2031 | 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 | Garry Roberts | | Previous Assistant's Name | | | | |
| Next Inspection Date | 22-Feb-2014 | | Previous Inspection Date | 30-Jan-2009 | | | |
| Inspection Cycle (Default) (months) | 39 | | | | | | |
| Comment | | | | | | | |