

| Bridge Culvert Inspection | | | |
|---------------------------|---|---------------------|-----------------|
| Bridge File Number | 81805 -1 Bridge Culvert | Form Type | CUL1 |
| Year Built | 1992 | Lot No. | 2 |
| Bridge or Town Name | LOCAL ROAD OVER PROVINCIAL HIGHWAY 40 NEAR LUSCAR | Inspector Name | Todd Warshawski |
| Located Over | 40:28 C1 14.627 | Inspector Class | BR CLS B |
| Located On | MUNICIPAL | Assistant Name | |
| Water Body Cl./Year | | Assistant Class | |
| Navigabil. Cl./Year | | Inspection Date | 30-Oct-2012 |
| Legal Land Location | NE SEC 5 TWP 48 RGE 24 W5M | Data Entry By | Theresa Lacusta |
| Longitude, Latitude | -117:28:26, 53:07:06 | Data Entry Date | 21-Nov-2012 |
| Road Authority | Alberta Transportation (AIT) | Reviewer Name | Eric Carcoux |
| Contract Main. Area | CMA13 | Review Date | 13-Nov-2012 |
| Clear Roadway/Skew | 9 / | Dept. Reviewer Name | Brent Herrick |
| AADT/Year | | Dept. Review Date | 22-Nov-2012 |
| Road Classification | RAU-210-110 | Follow-Up By | |
| Detour Length (km) | 1 | | |

Bridge Culvert Information

| | | | | | | | | |
|--------------------------|--------|-------|----------------|------|--------|---------------|--------------------|-------|
| Number of Culverts | 1 | | | | | | | |
| Pipe # | Barrel | Span | Rise (or Dia.) | Type | Length | Corr. Profile | Pl./Slab Thickness | Shape |
| 1 | MAIN | 12300 | 9240 | SCA | 70.1 | 125X51 | 7.0 | ARCH |
| Special Features | | | | | | | | |
| Special Features Comment | | | | | | | | |

Posting Information

| | | | | | | | | | | | | |
|--------------------------------------|------|----|---------------|--|------------------|-----|------|----|---------------|-----|------------------|-----|
| Required Vert. Clearance Posting (m) | | | | | | | | | | | | |
| Posted Vertical Clearance (Y/N) | Yes | | | | | | | | | | | |
| Posted: | Lane | SB | On Bridge (m) | | In Advance (Y/N) | Yes | Lane | NB | On Bridge (m) | 5.3 | In Advance (Y/N) | Yes |
| Remarks | | | | | | | | | | | | |

Utilities (Located at)

| | | | | | | | | | | | | |
|---------------------|--------------------|--|--|--|---------------|----|--|--|--|--|--|--|
| Utility Attachments | | | | | | | | | | | | |
| Telephone | East r/w | | | | Gas | | | | | | | |
| Power | Over top and at NE | | | | Municipal | | | | | | | |
| Others | | | | | Problem (Y/N) | No | | | | | | |
| Remarks | | | | | | | | | | | | |

Approach Road / Embankment

| | Last | Now | Explanation of Condition |
|--|-------|----------|--------------------------|
| Horizontal Alignment | | 6 | Curve to North |
| Vertical Alignment | | 6 | Crest to South |
| Roadway Width (m) | 9.000 | | |
| Embankment | | N | Snow covered |
| Sideslope (__:1) | 2.0 | | |
| (Height of Cover(m) : 3.5) | | | |
| Guardrail (Y/N) | Yes | | 45.6m at each corner. |
| Approach Road / Embankment General Rating | | 6 | |

Upstream End

| Culvert Component | Last | Now | Explanation of Condition |
|---|----------|-----|--------------------------|
| Direction | N | | |
| End Treatment (Concrete, Steel, Others, None) | CONCRETE | | |
| Headwall | | 7 | Medium cracks |

| Upstream End | | | | |
|------------------------------------|----|------|----------|--------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| Collar | | | N | Snow covered |
| Wingwalls | | | X | |
| (Shape :) | | | | |
| Cutoff Wall | | | X | |
| Bevel End | | | 7 | |
| Heaving (mm) | | | | |
| Invert Above/Below Stream Bed | | | | |
| Above/Below (mm) | | | | |
| Scour Protection | | | X | Not required |
| (Type :) | | | | |
| (Avg. Rock Size(mm) :) | | | | |
| Scour/Erosion | | | X | |
| Beavers (Y/N) | No | | | |
| Upstream End General Rating | | | 7 | |

| Bridge Culvert Barrel | | | | |
|--|-------------|------|-----|--|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 12300, Rise (mm): 9240, Type: SCA) | | | | |
| Barrel Last Accessible Date | 30-Oct-2012 | | | |
| Special Features | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Roof | | | 8 | Road centerline to roof |
| Measured Rise (mm) | 7203 | | | |
| Measured At Ring No. | 10 | | | |
| Sag (mm) | | | | |
| Percent Sag | | | | |
| Sidewall | | | 8 | |
| Measured Span (mm) | 1253 | | | |
| Measured At Ring No. | 9 | | | |
| Deflection (mm) | 232 | | | |
| Percent Deflection | 2 | | | |
| Floor | | | X | |
| Bulge (mm) | | | | |
| Measured At Ring No. | | | | |
| Abrasion (Y/N) | | | | |
| Circumferential Seams | | | 8 | |
| Separation (mm) | | | | |
| Longitudinal Seams | | | 8 | 1N ON ROOF 3N ON SIDEWALLS NO STAGGER ON SIDEWALL/ROOF TRANSITION. |
| Total No. of Cracked Rings | | | | |
| Total No. of Rings with Two Cracked Seams | | | | |
| Min. Remaining Steel Between Cracks (mm) | | | | |
| Proper Lap (Y/N) | Yes | | | |
| Longitudinal Stagger (Y/N) | No | | | |

| Bridge Culvert Barrel | | | | |
|--|----------|------|----------|--|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 12300, Rise (mm): 9240, Type: SCA) | | | | |
| Coating | | | 7 | Stains at bolts/seams |
| Corrosion By Soil (Y/N) | Yes | | | |
| Corrosion By Water (Y/N) | No | | | |
| Camber POS/ZERO/NEG | ZERO | | | |
| Ponding (Y/N) | No | | | |
| Fish Passage Adequacy | | | X | |
| Baffle | | | X | |
| (Type :) | | | | |
| Waterway Adequacy | | | X | |
| Icing (Y/N) | | | | |
| Silting (Y/N) | | | | |
| Drift (Y/N) | | | | |
| Barrel General Rating | | | 8 | |
| Downstream End | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| Direction | | S | | |
| End Treatment (Concrete, Steel, Others, None) | CONCRETE | | | |
| Headwall | | | 7 | Medium cracks |
| Collar | | | N | Under snow |
| Wingwalls | | | X | |
| (Shape :) | | | | |
| Cutoff Wall | | | 7 | |
| Bevel End | | | 7 | |
| Heaving (mm) | | | | |
| Invert Above/Below Stream Bed | | | | |
| Above/Below (mm) | | | | |
| Scour Protection | | | X | |
| (Type :) | | | | |
| (Avg. Rock Size(mm) :) | | | | |
| Scour/Erosion | | | X | |
| Beavers (Y/N) | | | | |
| Downstream End General Rating | | | 7 | |
| Structure Usage | | | | |
| | | Last | Now | Explanation of Condition |
| Grade Separation | | | | |
| Road Alignment | | | 7 | |
| Roadway Surface | | | 8 | |
| (Type :) | | | | |
| Icing (Y/N) | No | | | ACP |
| Traffic Safety Features | | | 8 | Cast in place concrete barriers along sidewalls. |
| Type | | | | |

| Structure Usage | | | | |
|--|-----|------|----------|--------------------------|
| | | Last | Now | Explanation of Condition |
| Lighting | | | 5 | 3 of 18 not working |
| Barrel Leakage (Y/N) | No | | | |
| Drainage | | | 7 | |
| Structure In Use (Y/N) | Yes | | | |
| Grade Separation 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 | 2013 | Repair lights. | | | | | |
| OTHER ACTION | | | | | | | |
| OTHER ACTION | | | | | | | |
| OTHER ACTION | | | | | | | |
| OTHER ACTION | | | | | | | |
| Structural Condition Rating (Last/Now) (%) | /88.9 | Sufficiency Rating (Last/Now) (%) | /86.8 | Est. Repl. Yr | 2042 | Maint. Req. (Y/N) | Yes |
| 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 | 30-Jul-2014 | | Previous Inspection Date | | | | |
| Inspection Cycle (Default) (months) | 21 | | | | | | |
| Comment | | | | | | | |