

| Bridge Culvert Inspection | | | | | | | | |
|--|-------------------------------------|-------|----------------|----------|--|---------------|--------------------|-------|
| Bridge File Number | 82017 -1 Bridge Culvert | | | | Form Type | CUL1 | | |
| Year Built | 1970 | | | | Lot No. | 2 | | |
| Bridge or Town Name | CALGARY - 64 AVE | | | | Inspector Name | Garry Roberts | | |
| Located Over | NOSE CREEK, 2.13.32, WATERCRS-ST | | | | Inspector Class | BR CLS A | | |
| Located On | 10251:02 L1 0.008;10251:02 R1 0.008 | | | | Assistant Name | | | |
| Water Body Cl./Year | | | | | Assistant Class | | | |
| Navigabil. Cl./Year | | | | | Inspection Date | 06-Jan-2013 | | |
| Legal Land Location | SE SEC 10 TWP 25 RGE 1 W5M | | | | Data Entry By | Lauren Korte | | |
| Longitude, Latitude | -114:02:56, 51:06:38 | | | | Data Entry Date | 28-Jan-2013 | | |
| Road Authority | Alberta Transportation (AIT) | | | | Reviewer Name | Tom Carey | | |
| Contract Main. Area | DEERFOOT/STONE Y | | | | Review Date | 17-Jan-2013 | | |
| Clear Roadway/Skew | 28 / | | | | Dept. Reviewer Name | Tim Davies | | |
| AADT/Year | | | | | Dept. Review Date | 29-Jan-2013 | | |
| Road Classification | RLU-208-100 | | | | Follow-Up By | | | |
| Detour Length (km) | 10 | | | | | | | |
| Bridge Culvert Information | | | | | | | | |
| Number of Culverts | 1 | | | | | | | |
| Pipe # | Barrel | Span | Rise (or Dia.) | Type | Length | Corr. Profile | Pl./Slab Thickness | Shape |
| 1 | MAIN | 11582 | 7200 | RP | 107.9 | 152X51 | 6.0 | ARCH |
| Special Features | | | | | | | | |
| Special Features Comment | | | | | | | | |
| Utilities (Located at) | | | | | | | | |
| Utility Attachments | | | | | | | | |
| Telephone | | | | | Gas | | | |
| Power | East side. | | | | Municipal | | | |
| Others | Street Lights. | | | | Problem (Y/N) | No | | |
| Remarks | | | | | | | | |
| Approach Road / Embankment | | | | | | | | |
| | | | Last | Now | Explanation of Condition | | | |
| Horizontal Alignment | | | 6 | 6 | Ramps and controlled intersection to East ramps. B3412 | | | |
| Vertical Alignment | | | 6 | 6 | | | | |
| Roadway Width (m) | 28.000 | | | | | | | |
| Embankment | | | 6 | 6 | | | | |
| Sideslope (_ :1) | 3.0 | | | | | | | |
| (Height of Cover(m) : 5.5) | | | | | | | | |
| Guardrail (Y/N) | Yes | | | | Parapets. | | | |
| Approach Road / Embankment General Rating | | | 6 | 6 | | | | |
| Upstream End | | | | | | | | |
| Culvert Component | | | Last | Now | Explanation of Condition | | | |
| Direction | | | N | | North. | | | |
| End Treatment (Concrete, Steel, Others, None) | CONCRETE | | | | | | | |
| Headwall | | | 4 | 4 | 50mm separation from roof plates exposed rebar and minor spalling. | | | |
| Collar | | | 5 | 5 | Some wide cracks. | | | |
| Wingwalls | | | X | X | | | | |
| (Shape :) | | | | | | | | |
| Cutoff Wall | | | N | N | Submerged. | | | |

| Upstream End | | | | |
|--|-------------|----------|----------|--|
| Culvert Component | | Last | Now | Explanation of Condition |
| Bevel End | | 7 | 7 | |
| Heaving (mm) | 0 | | | |
| Invert Above/Below Stream Bed | BELOW | | | Estimate. |
| Above/Below (mm) | 400 | | | |
| Scour Protection | | 6 | 6 | Concrete at sides. Some wide cracks. |
| (Type : CONCRETE) | | | | |
| (Avg. Rock Size(mm) :) | | | | |
| Scour/Erosion | | 6 | 6 | |
| Beavers (Y/N) | No | | | |
| Upstream End General Rating | | 4 | 4 | |
| Bridge Culvert Barrel | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 11582, Rise (mm): 7200, Type: RP) | | | | |
| Barrel Last Accessible Date | 06-Jan-2012 | | | |
| Special Features | | | | |
| Special Feature | | | | Safety Rail. |
| (Type :) | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Roof | | 6 | 6 | Majority of roof and upper sidewall longitudinal seams have 2 rows of bolts. |
| Measured Rise (mm) | | | | |
| Measured At Ring No. | | | | Est. |
| Sag (mm) | 50 | | | |
| Percent Sag | | | | |
| Sidewall | | 4 | 4 | Span measured 11,620 mm @ R 9 Cracks in West lower long sidewall seams at rings #1, 2, 4,8 & 27. |
| Measured Span (mm) | 1162 | | | |
| Measured At Ring No. | 9 | | | |
| Deflection (mm) | 38 | | | |
| Percent Deflection | 0 | | | |
| Floor | | N | N | Ice. |
| Bulge (mm) | | | | |
| Measured At Ring No. | | | | |
| Abrasion (Y/N) | | | | |
| Circumferential Seams | | 7 | 7 | |
| Separation (mm) | 0 | | | |
| Longitudinal Seams | | 4 | 4 | Worst seam is ring #2 with 65mm remaining steel. Cracks in lower West seam R1, 2,2 4, 8, 27. This seam is not visible below ice in other rings. |
| Total No. of Cracked Rings | 5 | | | |
| Total No. of Rings with Two Cracked Seams | 0 | | | Upper sidewall and roof seams are staggered. No stagger at mid sidewall seam. |
| Min. Remaining Steel Between Cracks (mm) | 65 | | | |
| Proper Lap (Y/N) | No | | | |
| Longitudinal Stagger (Y/N) | Yes | | | |
| Coating | | 5 | 5 | Alkali staining from upper bolt holes. |
| Corrosion By Soil (Y/N) | Yes | | | |
| Corrosion By Water (Y/N) | No | | | |
| 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): 11582, Rise (mm): 7200, Type: RP) | | | | |
| Fish Passage Adequacy | | 7 | 7 | |
| Baffle | | X | X | |
| (Type :) | | | | |
| Waterway Adequacy | | 7 | 7 | |
| Icing (Y/N) | No | | | Silt above ice in R3-R7. |
| Silting (Y/N) | Yes | | | |
| Drift (Y/N) | No | | | |
| Barrel General Rating | | 4 | 4 | |
| Downstream End | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| Direction | | S | | South. |
| End Treatment (Concrete, Steel, Others, None) | CONCRETE | | | |
| Headwall | | 5 | 5 | Some 20mm cracks and 25mm separation from roof plates. |
| Collar | | 5 | 6 | Medium to 3mm wide cracks. |
| Wingwalls | | X | X | |
| (Shape :) | | | | |
| Cutoff Wall | | N | N | Buried. |
| Bevel End | | 7 | 7 | |
| Heaving (mm) | 0 | | | |
| Invert Above/Below Stream Bed | BELOW | | | Est. |
| Above/Below (mm) | 500 | | | |
| Scour Protection | | 7 | 7 | Concrete at sides. Some cracking. |
| (Type : CONCRETE) | | | | |
| (Avg. Rock Size(mm) :) | | | | |
| Scour/Erosion | | 7 | 7 | |
| Beavers (Y/N) | No | | | |
| Downstream End General Rating | | 5 | 5 | |
| Structure Usage | | | | |
| | | Last | Now | Explanation of Condition |
| Channel (U/S and D/S) | | | | |
| Alignment | | 7 | 7 | |
| Bank Stability | | 7 | 7 | |
| HWM (m below Top of Culvert) | | | | No visible HWM. |
| Drift (Y/N) | No | | | |
| Channel Bottom Degrading/Aggrading | NONE | | | |
| Beavers (Y/N) | No | | | |
| (Fish Compensation Measure 1 : NONE) | | | | |
| (Fish Compensation Measure 2 : NONE) | | | | |
| Channel General Rating | | 8 | 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 | Patch U/S headwall. Approx. 0.5m ² | | | | | |
| OTHER ACTION | | | | | | | |
| OTHER ACTION | | | | | | | |
| OTHER ACTION | | | | | | | |
| Structural Condition Rating (Last/Now) (%) | 44.4/44.4 | Sufficiency Rating (Last/Now) (%) | 59.0/58.4 | Est. Repl. Yr | 2026 | 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 | Garry Roberts | | Previous Assistant's Name | | | | |
| Next Inspection Date | 06-Oct-2017 | | Previous Inspection Date | 20-Jan-2012 | | | |
| Inspection Cycle (Default) (months) | 57 | | | | | | |
| Comment | | | | | | | |