

| Bridge Culvert Inspection | | | |
|---------------------------|--|---------------------|----------------|
| Bridge File Number | 06692 -1 Bridge Culvert | Form Type | CUL1 |
| Year Built | 1975 | Lot No. | 1 |
| Bridge or Town Name | SEVEN PERSON | Inspector Name | Tom Carey |
| Located Over | STORNHAM COULEE, 2.7.1.5, WATERCRS-ST | Inspector Class | BR CLS A |
| Located On | 3:16 C1 2.422 | Assistant Name | |
| Water Body Cl./Year | | Assistant Class | |
| Navigabil. Cl./Year | | Inspection Date | 11-Nov-2011 |
| Legal Land Location | SE SEC 1 TWP 11 RGE 8 W4M | Data Entry By | Alyssa Boynton |
| Longitude, Latitude | -110:57:51, 49:52:24 | Data Entry Date | 01-Dec-2011 |
| Road Authority | Alberta Transportation (AIT) | Reviewer Name | Garry Roberts |
| Contract Main. Area | CMA23 | Review Date | 21-Nov-2011 |
| Clear Roadway/Skew | 13 / | Dept. Reviewer Name | Tim Davies |
| AADT/Year | 3,430 / 2010 (A) | Dept. Review Date | 06-Dec-2011 |
| Road Classification | RAU-213-130 | 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 | 2316 | 2560 | SPE | 46.3 | 152X51 | 2.8,2.8,2.8 | ELLIPSE |
| Special Features | | | | | | | | |
| Special Features Comment | | | | | | | | |

Utilities (Located at)

| | | | | | | | |
|---------------------|--------------------------------|---------------|----|--|--|--|--|
| Utility Attachments | | | | | | | |
| Telephone | South ditch | Gas | | | | | |
| Power | 3 line @ N fence 20 m from c.l | Municipal | | | | | |
| Others | Fibre-optics in N R/W | Problem (Y/N) | No | | | | |
| Remarks | | | | | | | |

Approach Road / Embankment

| | Last | Now | Explanation of Condition |
|--|----------|----------|--|
| Horizontal Alignment | 9 | 9 | Gradual sag curve, no passing on both hills. Minor erosion at north-WELL GRASSED. |
| Vertical Alignment | 6 | 6 | |
| Roadway Width (m) | 13.000 | | |
| Embankment | 7 | 7 | |
| Sideslope (__:1) | 3.0 | | |
| (Height of Cover(m) : 4.6) | | | |
| Guardrail (Y/N) | No | | |
| Approach Road / Embankment General Rating | 6 | 6 | |

Upstream End

| Culvert Component | Last | Now | Explanation of Condition |
|---|-------|-----|--------------------------|
| Direction | N | | North end. |
| 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 | | 8 | 8 | |
| Heaving (mm) | 0 | | | |
| Invert Above/Below Stream Bed | BELOW | | | |
| Above/Below (mm) | 400 | | | |
| Scour Protection | | 8 | 8 | some 800mm diameter rock at West |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 400) | | | | |
| Scour/Erosion | | 8 | 8 | |
| Beavers (Y/N) | No | | | |
| Upstream End General Rating | | 8 | 8 | |
| Bridge Culvert Barrel | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2316, Rise (mm): 2560, Type: SPE) | | | | |
| Barrel Last Accessible Date | 13-Feb-2001 | | | Viewed from both ends- shape good |
| Special Features | | | | |
| Special Feature | | | | Average 0.9m of water and silt in pipe |
| (Type :) | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Roof | | N | N | |
| Measured Rise (mm) | 2500 | | | |
| Measured At Ring No. | 6 | | | |
| Sag (mm) | 60 | | | |
| Percent Sag | 2 | | | |
| Sidewall | | N | N | |
| Measured Span (mm) | 2385 | | | |
| Measured At Ring No. | 6 | | | |
| Deflection (mm) | 69 | | | |
| Percent Deflection | 3 | | | |
| Floor | | N | N | |
| Bulge (mm) | | | | |
| Measured At Ring No. | | | | |
| Abrasion (Y/N) | | | | |
| Circumferential Seams | | N | N | |
| Separation (mm) | 0 | | | |
| Longitudinal Seams | | N | N | [(Ring #3, 5, 7 & 9 cracked at east longit sidewall seam. 85 mm remaining steel at ring #3. No change from last inspection). 2001/02/13] |
| Total No. of Cracked Rings | 4 | | | |
| Total No. of Rings with Two Cracked Seams | 0 | | | |
| Min. Remaining Steel Between Cracks (mm) | 85 | | | |
| Proper Lap (Y/N) | No | | | |
| Longitudinal Stagger (Y/N) | Yes | | | |
| Coating | | N | N | (Alkali stains at bolt holes.) 2001/02/13 |
| Corrosion By Soil (Y/N) | Yes | | | |
| Corrosion By Water (Y/N) | | | | |
| Camber POS/ZERO/NEG | NEG | | | [Minor superficial corrosion at side-walls] |
| Ponding (Y/N) | No | | | |

| Bridge Culvert Barrel | | | | |
|--|-----------|----------|----------|--|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2316, Rise (mm): 2560, Type: SPE) | | | | |
| Fish Passage Adequacy | | 7 | 7 | |
| Baffle | | X | X | |
| (Type :) | | | | |
| Waterway Adequacy | | 7 | 7 | |
| Icing (Y/N) | No | | | |
| Silting (Y/N) | Yes | | | |
| Drift (Y/N) | No | | | |
| Barrel General Rating | | 3 | 3 | GR carried forward |
| Downstream End | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| Direction | | S | | South end. |
| End Treatment (Concrete, Steel, Others, None) | STEEL | | | |
| Headwall | | X | X | |
| Collar | | X | X | |
| Wingwalls | | X | X | |
| (Shape :) | | | | |
| Cutoff Wall | | X | X | |
| Bevel End | | 7 | 7 | |
| Heaving (mm) | 0 | | | |
| Invert Above/Below Stream Bed | BELOW | | | |
| Above/Below (mm) | 400 | | | |
| Scour Protection | | 7 | 7 | Mostly ingrown |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 300) | | | | |
| Scour/Erosion | | 7 | 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 | | 5 | 5 | Dugout 60 m north. 45 DEG. BEND @ D/S |
| Bank Stability | | 7 | 7 | |
| HWM (m below Top of Culvert) | 1.2 | | | |
| Drift (Y/N) | No | | | |
| Channel Bottom Degrading/Aggrading | AGGRADING | | | |
| Beavers (Y/N) | No | | | |
| (Fish Compensation Measure 1 : NONE) | | | | |
| (Fish Compensation Measure 2 : NONE) | | | | |
| Channel General Rating | | 5 | 5 | |

| 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 | 2012 | Consider dewater and insp. - hasn't been inspected in several cycles | | | | | |
| OTHER ACTION | | | | | | | |
| OTHER ACTION | | | | | | | |
| OTHER ACTION | | | | | | | |
| Structural Condition Rating (Last/Now) (%) | 33.3/33.3 | Sufficiency Rating (Last/Now) (%) | 52.5/52.5 | Est. Repl. Yr | 2020 | 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 | Tom Carey | | Previous Assistant's Name | | | | |
| Next Inspection Date | 11-Aug-2013 | | Previous Inspection Date | 25-Jun-2010 | | | |
| Inspection Cycle (Default) (months) | 21 | | | | | | |
| Comment | | | | | | | |