

| Bridge Culvert Inspection | | | | |
|---------------------------|-----------------------------------------------------------|--|---------------------|----------------|
| Bridge File Number | 76087 -2 Bridge Culvert | | Form Type | CUL1 |
| Year Built | 2005 | | Lot No. | 4 |
| Bridge or Town Name | NORDEGG | | Inspector Name | Owen Salava |
| Located Over | TRIBUTARY TO NORTH SASKATCHEWAN RIVER, 6.191, WATERCRS-ST | | Inspector Class | BR CLS A |
| Located On | 11:02 C1 8.322 | | Assistant Name | |
| Water Body Cl./Year | | | Assistant Class | |
| Navigabil. Cl./Year | | | Inspection Date | 08-Feb-2012 |
| Legal Land Location | NE SEC 18 TWP 35 RGE 18 W5M | | Data Entry By | Marcia Chavez |
| Longitude, Latitude | -116:33:16, 52:00:24 | | Data Entry Date | 06-Mar-2012 |
| Road Authority | Alberta Transportation (AIT) | | Reviewer Name | John O'Brien |
| Contract Main. Area | CMA18 | | Review Date | 22-Feb-2012 |
| Clear Roadway/Skew | 12.2 / 0 deg. | | Dept. Reviewer Name | Andrew Smikles |
| AADT/Year | 360 / 2010 (A) | | Dept. Review Date | 09-Mar-2012 |
| Road Classification | RAU-213.4-110 | | Follow-Up By | |
| Detour Length (km) | 300 | | | |

Bridge Culvert Information

| | | | | | | | | |
|--------------------------|--------|------|----------------|------|--------|---------------|--------------------|-------|
| Number of Culverts | 1 | | | | | | | |
| Pipe # | Barrel | Span | Rise (or Dia.) | Type | Length | Corr. Profile | Pl./Slab Thickness | Shape |
| 1 | MAIN | 5150 | | RPB | 16.5 | 152X51 | 3.5 | ARCH |
| Special Features | | | | | | | | |
| Special Features Comment | | | | | | | | |

Utilities (Located at)

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

Approach Road / Embankment

| | | Last | Now | Explanation of Condition |
|--------------------------------------------------|--------|----------|----------|--------------------------------------|
| Horizontal Alignment | | 7 | 7 | Curves @ both ends. Hill to West. |
| Vertical Alignment | | 7 | 7 | |
| Roadway Width (m) | 12.200 | | | |
| Embankment | | 8 | 8 | |
| Sideslope (__:1) | 3.0 | | | |
| (Height of Cover(m) : 1.1) | | | | |
| Guardrail (Y/N) | Yes | | | |
| Approach Road / Embankment General Rating | | 7 | 7 | |

Upstream End

| Culvert Component | | Last | Now | Explanation of Condition |
|-----------------------------------------------|----------|------|-----|--------------------------------------|
| Direction | | N | | Pipe is grouted in under old bridge. |
| End Treatment (Concrete, Steel, Others, None) | CONCRETE | | | |
| Headwall | | 9 | 9 | |
| Collar | | X | X | |
| Wingwalls | | 9 | 9 | |
| (Shape :) | | | | |
| Cutoff Wall | | N | N | Buried. |

| Upstream End | | | | |
|------------------------------------------------------------------------------------------|-------------|----------|----------|--------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| Bevel End | | X | X | |
| Heaving (mm) | 0 | | | |
| Invert Above/Below Stream Bed | | | | |
| Above/Below (mm) | | | | |
| Scour Protection | | 9 | N | Snow covered. |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 450) | | | | |
| Scour/Erosion | | 9 | N | |
| Beavers (Y/N) | No | | | |
| Upstream End General Rating | | 9 | N | GR was 9 from 06May2010. |
| Bridge Culvert Barrel | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 5150, Rise (mm): , Type: RPB) | | | | |
| Barrel Last Accessible Date | 08-Feb-2012 | | | |
| Special Features | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Roof | | 9 | 9 | |
| Measured Rise (mm) | | | | |
| Measured At Ring No. | | | | |
| Sag (mm) | | | | |
| Percent Sag | | | | |
| Sidewall | | 9 | 9 | Shape looks good. |
| Measured Span (mm) | 5150 | | | |
| Measured At Ring No. | 4 | | | |
| Deflection (mm) | 0 | | | |
| Percent Deflection | 0 | | | |
| Floor | | X | X | Rock floor. |
| Bulge (mm) | | | | |
| Measured At Ring No. | | | | |
| Abrasion (Y/N) | | | | |
| Circumferential Seams | | 9 | 9 | |
| Separation (mm) | 0 | | | |
| Longitudinal Seams | | 9 | 9 | |
| Total No. of Cracked Rings | 0 | | | |
| Total No. of Rings with Two Cracked Seams | | | | |
| Min. Remaining Steel Between Cracks (mm) | | | | |
| Proper Lap (Y/N) | Yes | | | |
| Longitudinal Stagger (Y/N) | Yes | | | |
| Coating | | 9 | 9 | |
| Corrosion By Soil (Y/N) | No | | | |
| 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): 5150, Rise (mm): , Type: RPB) | | | | |
| Fish Passage Adequacy | | 3 | 3 | Very steep. |
| Baffle | | X | X | |
| (Type :) | | | | |
| Waterway Adequacy | | 7 | 7 | |
| Icing (Y/N) | No | | | |
| Silting (Y/N) | No | | | |
| Drift (Y/N) | No | | | |
| Barrel General Rating | | 9 | 9 | |
| Downstream End | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| Direction | | S | | |
| End Treatment (Concrete, Steel, Others, None) | CONCRETE | | | |
| Headwall | | 9 | 9 | |
| Collar | | X | X | |
| Wingwalls | | 9 | 9 | |
| (Shape :) | | | | |
| Cutoff Wall | | N | N | Buried. |
| Bevel End | | X | X | |
| Heaving (mm) | | | | |
| Invert Above/Below Stream Bed | | | | |
| Above/Below (mm) | | | | |
| Scour Protection | | 9 | N | Snow covered. |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 600) | | | | |
| Scour/Erosion | | 9 | N | |
| Beavers (Y/N) | No | | | |
| Downstream End General Rating | | 9 | N | GR was 9 from 06May2010. |
| Structure Usage | | | | |
| | | Last | Now | Explanation of Condition |
| Channel (U/S and D/S) | | | | |
| Alignment | | 7 | 7 | D/S channel on steep grade. |
| Bank Stability | | 6 | 6 | Cut bank D/S. |
| HWM (m below Top of Culvert) | | | | HWM not visible. |
| Drift (Y/N) | No | | | |
| Channel Bottom Degrading/Aggrading | | | | Aggrading @ U/S, degrading @ D/S. |
| Beavers (Y/N) | No | | | |
| (Fish Compensation Measure 1 : NONE) | | | | |
| (Fish Compensation Measure 2 : NONE) | | | | |
| Channel General Rating | | 7 | 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 | | | | | | | |
| OTHER ACTION | | | | | | | |
| OTHER ACTION | | | | | | | |
| OTHER ACTION | | | | | | | |
| Structural Condition Rating (Last/Now) (%) | 100.0/100.0 | Sufficiency Rating (Last/Now) (%) | 83.5/74.6 | Est. Repl. Yr | 2055 | 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 | Owen Salava | | Previous Assistant's Name | | | | |
| Next Inspection Date | 08-Nov-2013 | | Previous Inspection Date | 06-May-2010 | | | |
| Inspection Cycle (Default) (months) | 21 | | | | | | |
| Comment | | | | | | | |