

| Bridge Inspection      |                                     |               |      |                     |              |                    |   |
|------------------------|-------------------------------------|---------------|------|---------------------|--------------|--------------------|---|
| Bridge File Number     | 06633 -1 Bridge                     |               |      | Form Type           | PCS          |                    |   |
| Year Built/Year Supstr | 1960/1960                           |               |      | Lot No.             | 2            |                    |   |
| Bridge or Town Name    | ANDREW                              |               |      | Inspector Name      | Jason Saly   |                    |   |
| Located Over           | WHITFORD CREEK, 6.48.4, WATERCRS-ST |               |      | Inspector Class     | BR CLS A     |                    |   |
| Located On             | 855:16 C1 26.561                    |               |      | Assistant Name      |              |                    |   |
| Water Body Cl./Year    |                                     |               |      | Assistant Class     |              |                    |   |
| Navigabil. Cl./Year    |                                     |               |      | Inspection Date     | 02-Jun-2010  |                    |   |
| Legal Land Location    | NW SEC 9 TWP 56 RGE 16 W4M          |               |      | Data Entry By       | Jill Potts   |                    |   |
| Longitude, Latitude    | -112:19:55, 53:49:40                |               |      | Data Entry Date     | 01-Jul-2010  |                    |   |
| Road Authority         | Alberta Transportation (AIT)        |               |      | Reviewer Name       | John O'Brien |                    |   |
| Contract Main. Area    | CMA14                               |               |      | Review Date         | 24-Jun-2010  |                    |   |
| Clear Roadway/Skew     | 8.2 /                               |               |      | Dept. Reviewer Name | Chris Black  |                    |   |
| AADT/Year              | 890 / 2009 (A)                      |               |      | Dept. Review Date   | 09-Jul-2010  |                    |   |
| Road Classification    | RCU-209-110                         |               |      | Follow-Up By        |              |                    |   |
| Detour Length (km)     | 3                                   |               |      |                     |              |                    |   |
| Allowable Load (t):    | Single                              | CS1 28 GIRDER | Semi | CS2 49 GIRDER       | Train        | CS3 66 GIRDER      | ----> On Critical Spans<br>---->Critical Member |
| Design Loading:        | HS20                                |               |      |                     |              | ----> Primary Span |   |

| Posting Information       |        |    |                   |    |                  |    |                    |
|---------------------------|--------|----|-------------------|----|------------------|----|--------------------|
| Required Load Posting (t) | Single |    |                   |    | Semi             |    | Truck Train        |
| Posted Loading (t)        | Single |    |                   |    | Semi             |    | Truck Train        |
| Posted:                   | Lane   | NB | At Junction (Y/N) | No | In Advance (Y/N) | No | At Bridge (Y/N) No |
| Posted:                   | Lane   | SB | At Junction (Y/N) | No | In Advance (Y/N) | No | At Bridge (Y/N) No |
| Remarks                   |        |    |                   |    |                  |    |                    |

|                               |  |  |  |  |  |  |  |
|-------------------------------|--|--|--|--|--|--|--|
| Hazard Marker At Bridge (Y/N) | Yes  |  |  |  |  |  |  |
| Remarks                       | Are not attached to bridge & 0.5m offline. |  |  |  |  |  |  |
| Other Sign Types              |  |  |  |  |  |  |  |

| Utilities (Located at) |   |  |                  |
|------------------------|---|--|------------------|
| Utility Attachments    | TELEPHONE UTILITIES-PHONE LINE            |  |                  |
| Telephone              | Conduit on East side.                     |  | Gas              |
| Power                  | 3 OH lines East side.                     |  | Municipal        |
| Others                 | 1 OH cable East side.                     |  | Problem (Y/N) No |
| Remarks                | Conduit attached to East exterior girder. |  |                  |

| Approach Road                       |           |          |          |   |
|-------------------------------------|-----------|----------|----------|---|
|                                     |           | Last     | Now      | Explanation of Condition  |
| Horizontal Alignment                |           | 8        | 7        | Field approach at SW corner.<br>Bottom of sag, limited sight distance to North. |
| Vertical Alignment                  |           | 6        | 5        |   |
| Roadway Width (m)                   | 8.200     |          |          | At SW, 80m @ NW, 65m @ NE, 76, @ SE.  |
| Approach Bump                       |           | 5        | 7        |   |
| Guardrail (Y/N)                     | Yes       |          |          |   |
| Guardrail                           |           | 5        | 5        |   |
| Length (m)                          | 8.000     |          |          |   |
| Current Standard (Y/N)              | No        |          |          |   |
| Termination Type                    | Turn Down |          |          |   |
| Drainage                            |           | 5        | 5        |   |
| <b>Approach Road General Rating</b> |           | <b>6</b> | <b>5</b> |   |

| Superstructure   |           |             |           |                          |  |
|--|-----------|-------------|-----------|--------------------------|--|
| Bridge Component   |           | Last        | Now       | Explanation of Condition |  |
| (Primary Span : PGO, 1 Spans, Lengths(m): 6.1, A-Ident Number: ) |           |             |           |                          |  |
| <b>Special Features</b>  |           |             |           |                          |  |
| Special Feature  |           |             | X         |                          |  |
| (Type : )  |           |             |           |                          |  |
| Special Feature  |           |             | X         |                          |  |
| (Type : )  |           |             |           |                          |  |
| Wearing Surface/Deck Top Detail Ratings                          |           |             |           |                          |  |
|  | N (%)     | 1 (%)       | 2 (%)     | 3 (%)                    |  |
| <b>Last</b>  | 0         | 0           | 0         | 0                        |  |
| <b>Now</b>   |           |             |           |                          |  |
| Wearing Surface  |           |             | 5         | 8                        | (Standard concrete overlay (tapers to 75mm at curbs) with chip coat. 2 lines with crack filler. 22/Mar/2007)   |
| (Material Type : <b>ACP</b> )                                    |           |             |           |                          |  |
| (Thickness(mm) : <b>50</b> )                                     |           |             |           |                          |  |
| Lateral Connection Problem (Y/N)                                 |           | No          |           |                          |  |
| Deck Top   |           |             | N         | N                        |  |
| Deck Rideability   |           |             | 6         | 7                        |  |
| Deck Joints  |           |             | X         | X                        |  |
| Bump (Y/N)   |           | No          |           |                          |  |
| Deck Drainage  |           |             | 6         | 6                        |  |
| Drains Clogged (Y/N)   |           | No          |           |                          |  |
| Curbs/Median   |           |             | N         | 4                        | Ligh scaling along the interior faces of the curbs. Lift pocket patches are deteriorated.  |
| (Curb Type : <b>Standard</b> )                                   |           |             |           |                          |  |
| Scaling (Percent Area)   |           | 10          |           |                          |  |
| Bridge Rail  |           |             | 7         | 7                        | Single layer, double over center portion. Nut missing from post @ NE corner. Insufficient post A/B thread, typical.  |
| (Type : <b>GALVANIZED STEEL FLEX BEAM</b> )                      |           |             |           |                          |  |
| Bridge Rail Posts  |           |             | 4         | 4                        |  |
| (Type : <b>GALVANIZED POST STEEL; GALVANIZED POST STEEL</b> )    |           |             |           |                          |  |
| Bridge Rail/Posts Coating  |           |             | 7         | 7                        |  |
| (Type : <b>GALVANIZED</b> )                                      |           |             |           |                          |  |
| Sidewalk   |           |             | X         | X                        |  |
| Girder Detail Ratings  |           |             |           |                          |  |
|  | N (count) | 1 (count)   | 2 (count) | 3 (count)                |  |
| <b>Last</b>  | 0         | 0           | 0         | 0                        |  |
| <b>Now</b>   |           |             |           |                          |  |
| Girders  |           |             | 4         | 4                        | Vertical hairline cracks on all units. 3/10 girders have medium longitudinal crack in AZ. The East leg of the West girder is spalled with exposed rebar. Curb lift pockets deteriorated. |
| Last Complete Inspection Date                                    |           | 02-Jun-2010 |           |                          |  |
| Cracking (Y/N)   |           | Yes         |           |                          |  |
| Spalling (Percent Area)  |           | 1           |           |                          |  |
| Lift or Connector Pocket Grouted (Y/N)                           |           | Yes         |           |                          |  |
| (Number Of Girders : <b>10</b> )                                 |           |             |           |                          |  |
| <b>Span Alignment Problems</b>                                   |           |             |           |                          |  |
| Vertical (Y/N)   |           | No          |           |                          |  |
| Horizontal (Y/N)   |           | No          |           |                          |  |
| <b>Superstructure General Rating</b>                             |           |             | <b>4</b>  | <b>4</b>                 |  |

| Substructure   |           |  |           |                          |   |  |
|--|-----------|--|-----------|--------------------------|---|--|
| Bridge Component   |           | Last   | Now       | Explanation of Condition |   |  |
| <b>Abutments</b>   |           |  |           |                          |   |  |
| (Extended Backwall Piles (Y/N) : Y)                                  |           | Piles anchored with struts.  |           |                          |   |  |
| (Extended Backwall Piles Spacing(mm) : 1600)                         |           |  |           |                          |   |  |
| (Total Number of Caps/Corbels : 1:1)                                 |           | (50mm rot in south abutment cap, cored '86 @ exposed end. Cap recored '94 & shows no sign of rot under bearing areas. SE corner lost 60mm bearing area of cap, no problems - photo. 22/Mar/2007) |           |                          |   |  |
| Bearing Seats/Caps/Corbels Detail Ratings                            |           |  |           |                          |   |  |
|  | N (count) | 1 (count)  | 2 (count) | 3 (count)                |   |  |
| <b>Last</b>  | 0         | 0  | 0         | 0                        |   |  |
| <b>Now</b>   |           |  |           |                          |   |  |
| Bearing Seats/Caps/Corbels   |           |  |           | 4                        | 4 |  |
| (Type : TREATED TIMBER)  |           |  |           |                          |   |  |
| (Depth(mm) : 300)  |           |  |           |                          |   |  |
| (Width(mm) : 300)  |           |  |           |                          |   |  |
| Backwalls/Breastwalls  |           |  | 6         | 6                        |   |  |
| Greatest Height (m)  |           | 2.40   |           |                          |   |  |
| Wingwalls  |           |  | 4         | 4                        |   |  |
| NW wing guy wires are broken. Top of planks of SW wingwall show rot. |           |  |           |                          |   |  |
| (Total Number of Bearing Piles : 7:7)                                |           |  |           |                          |   |  |
| Piles Detail Ratings   |           |  |           |                          |   |  |
|  | N (count) | 1 (count)  | 2 (count) | 3 (count)                |   |  |
| <b>Last</b>  | 0         | 0  | 0         | 0                        |   |  |
| <b>Now</b>   |           |  |           |                          |   |  |
| Piles  |           |  |           | 6                        | 6 |  |
| Paint/Coating  |           |  |           | X                        | X |  |
| Abutment Stability   |           |  |           | 7                        | 7 |  |
| Scour/Erosion  |           |  |           | 7                        | 6 |  |
| <b>Piers/Bents</b>   |           |  |           |                          |   |  |
| (Type : )  |           | (Maximum deck to S/B 2.55m. 00/10/24)  |           |                          |   |  |
| (Total Number of Caps/Corbels : )                                    |           |  |           |                          |   |  |
| Bearing Seats/Caps/Corbels Detail Ratings                            |           |  |           |                          |   |  |
|  | N (count) | 1 (count)  | 2 (count) | 3 (count)                |   |  |
| <b>Last</b>  |           |  |           |                          |   |  |
| <b>Now</b>   |           |  |           |                          |   |  |
| Bearing Seats/Caps/Corbels   |           |  |           | X                        | X |  |
| (Type : )  |           |  |           |                          |   |  |
| (Depth(mm) : )   |           |  |           |                          |   |  |
| (Width(mm) : )   |           |  |           |                          |   |  |
| (Total Number of Bearing Piles : )                                   |           |  |           |                          |   |  |
| Piles Detail Ratings   |           |  |           |                          |   |  |
|  | N (count) | 1 (count)  | 2 (count) | 3 (count)                |   |  |
| <b>Last</b>  |           |  |           |                          |   |  |
| <b>Now</b>   |           |  |           |                          |   |  |
| Pier Shaft/Piles   |           |  |           | X                        | X |  |
| Greatest Height (m)  |           |  |           |                          |   |  |
| Bracing/Struts/Sheathing   |           |  | 5         | 5                        |   |  |
| Struts missing cleat support, typical nailed in both abutments.      |           |  |           |                          |   |  |
| Nose Plate   |           |  |           | X                        | X |  |
| Paint/Coating  |           |  |           | X                        | X |  |
| (Colour Description : )  |           |  |           |                          |   |  |
| (Colour Code : )   |           |  |           |                          |   |  |

| Substructure                                 |     |          |          |   |
|--|-----|----------|----------|---|
| Bridge Component                             |     | Last     | Now      | Explanation of Condition  |
| Pier Stability                               |     | X        | X        |   |
| Scour  |     | N        | 5        | (1.4m deep scour hole under bridge extending 25m D/S. 00/10/24)<br>Rated what was seen.             |
| Debris (Y/N)                                 | Yes |          |          | Early stages of a beaver dam under bridge.  |
| <b>Substructure General Rating</b>           |     | <b>4</b> | <b>4</b> |   |
| Structure Usage                              |     |          |          |   |
|  |     | Last     | Now      | Explanation of Condition  |
| <b>Channel</b>                               |     |          |          |   |
| (U/S Direction : <b>E</b> )                  |     |          |          | Stream curves to bridge from west undermining North bank U/S from bridge.                           |
| (D/S Direction : <b>W</b> )                  |     |          |          |   |
| Alignment                                    |     | 6        | 6        |   |
| Bank Stability                               |     | N        | 6        |   |
| HWM (m below Top of Curb)                    |     |          |          | HWM not visible.<br>(High water to 0.3m below stringers as indicated by debris on struts. 00/10/24) |
| Drift (Y/N)                                  | Yes |          |          |   |
| Slope Protection                             |     | N        | N        | Water upto the abutments.   |
| (Type : )                                    |     |          |          |   |
| Guidebank/Spurs                              |     | X        | X        |   |
| Adequacy of Opening                          |     | 6        | 6        |   |
| (Fish Compensation Measure 1 : <b>NONE</b> ) |     |          |          |   |
| (Fish Compensation Measure 2 : <b>NONE</b> ) |     |          |          |   |
| <b>Channel General Rating</b>                |     | <b>6</b> | <b>6</b> |   |

| Maintenance Recommendations                       |                  |  |                           |               |           |                   |     |
|---|------------------|--|---------------------------|---------------|-----------|-------------------|-----|
| Inspector Recommendations                         | Year             | Inspector Comments                       | Department Comments       | Target Year   | Est. Cost | Cat #             |     |
| REPAIR/REPLACE BRIDGE RAIL                        |                  |  |                           |               |           |                   |     |
| SEAL CURBS  | 2010             | Seal cubs, re-grout lift pockets.        |                           |               |           |                   |     |
| PATCH DECK  |                  |  |                           |               |           |                   |     |
| OVERLAY DECK                                      |                  |  |                           |               |           |                   |     |
| STRAIGHTEN/REPLACE MEMBERS                        |                  |  |                           |               |           |                   |     |
| WASHING   |                  |  |                           |               |           |                   |     |
| SHOTCRETE REPAIRS                                 |                  |  |                           |               |           |                   |     |
| CORE TIMBER CAPS/CORBELS                          |                  |  |                           |               |           |                   |     |
| REPAIR/REPLACE TIMBER CAPS                        |                  |  |                           |               |           |                   |     |
| REPAIR ABUTMENT SCOUR/EROSION                     |                  |  |                           |               |           |                   |     |
| PLACE ADDITIONAL RIP RAP                          |                  |  |                           |               |           |                   |     |
| REMOVE DRIFT ACCUMULATION                         |                  |  |                           |               |           |                   |     |
| INSTALL STRUTS                                    |                  |  |                           |               |           |                   |     |
| OTHER ACTION                                      |                  |  |                           |               |           |                   |     |
| OTHER ACTION                                      |                  |  |                           |               |           |                   |     |
| OTHER ACTION                                      |                  |  |                           |               |           |                   |     |
| OTHER ACTION                                      |                  |  |                           |               |           |                   |     |
| <b>Structural Condition Rating (Last/Now) (%)</b> | <b>44.4/44.4</b> | <b>Sufficiency Rating (Last/Now) (%)</b> | <b>60.3/60.2</b>          | Est. Repl. Yr | 2020      | 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                         | Tim Davies       |  | Previous Assistant's Name |               |           |                   |     |
| Next Inspection Date                              | 02-Sep-2013      |  | Previous Inspection Date  | 22-Mar-2007   |           |                   |     |
| Inspection Cycle (Default) (months)               | 39               |  |                           |               |           |                   |     |
| Comment   |                  |  |                           |               |           |                   |     |