

| Bridge Inspection      |                              |               |      |                     |                    |               |   |
|------------------------|------------------------------|---------------|------|---------------------|--------------------|---------------|---|
| Bridge File Number     | 01797 -1 Bridge              |               |      | Form Type           | SG                 |               |   |
| Year Built/Year Supstr | 1964/1964                    |               |      | Lot No.             | 2                  |               |   |
| Bridge or Town Name    | ALLIANCE                     |               |      | Inspector Name      | Owen Salava        |               |   |
| Located Over           | BATTLE RIVER, 5, WATERCRS-ST |               |      | Inspector Class     | BR CLS A           |               |   |
| Located On             | 36:14 C1 25.383              |               |      | Assistant Name      |                    |               |   |
| Water Body Cl./Year    |                              |               |      | Assistant Class     |                    |               |   |
| Navigabil. Cl./Year    |                              |               |      | Inspection Date     | 16-Jul-2012        |               |   |
| Legal Land Location    | SE SEC 4 TWP 40 RGE 13 W4M   |               |      | Data Entry By       | Marcia Chavez      |               |   |
| Longitude, Latitude    | -111:48:36, 52:24:33         |               |      | Data Entry Date     | 20-Aug-2012        |               |   |
| Road Authority         | Alberta Transportation (AIT) |               |      | Reviewer Name       | John O'Brien       |               |   |
| Contract Main. Area    | CMA21                        |               |      | Review Date         | 31-Jul-2012        |               |   |
| Clear Roadway/Skew     | 11 /                         |               |      | Dept. Reviewer Name | Andrew Smikles     |               |   |
| AADT/Year              | 950 / 2011 (A)               |               |      | Dept. Review Date   | 21-Aug-2012        |               |   |
| Road Classification    | RAU-211.8-110                |               |      | Follow-Up By        |                    |               |   |
| Detour Length (km)     | 15                           |               |      |                     |                    |               |   |
| Allowable Load (t):    | Single                       | CS1 68 GIRDER | Semi | CS2 76 GIRDER       | Train              | CS3 87 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                       |      |     |                   |    |                  |    |                 |    |
| Other Sign Types              |      |     |                   |    |                  |    |                 |    |

| Utilities (Located at) |                                  |  |               |   |
|------------------------|----------------------------------|--|---------------|---|
| Utility Attachments    |                                  |  |               |   |
| Telephone              | Plowed in ditch 15m East of c/l. |  | Gas           |   |
| Power                  | 1 wire OH 60m West of c/l.       |  | Municipal     |   |
| Others                 |                                  |  | Problem (Y/N) | No  |
| Remarks                |                                  |  |               | Telus suspended over river using poles, 20m East. |

| Approach Road                       |           |          |          |   |
|-------------------------------------|-----------|----------|----------|---|
|                                     |           | Last     | Now      | Explanation of Condition  |
| Horizontal Alignment                |           | 5        | 5        | Intersection with WB local road @ 6m South. 5% grades in both directions. No passing. |
| Vertical Alignment                  |           | 5        | 5        |   |
| Roadway Width (m)                   | 12.000    |          |          | Insufficient length.<br>Type VI on South end.   |
| Approach Bump                       |           | 7        | 7        |   |
| Guardrail (Y/N)                     | Yes       |          |          |   |
| Guardrail                           |           | 5        | 5        |   |
| Length (m)                          | 17.000    |          |          |   |
| Current Standard (Y/N)              | No        |          |          |   |
| Termination Type                    | Turn Down |          |          |   |
| Drainage                            |           | N        | 5        |   |
| <b>Approach Road General Rating</b> |           | <b>5</b> | <b>5</b> |   |

| Superstructure   |       |              |                |                          |  |  |
|--|-------|--------------|----------------|--------------------------|--|--|
| Bridge Component   |       | Last         | Now            | Explanation of Condition |  |  |
| (Primary Span : <b>RB, 3 Spans, Lengths(m): 20.4-25.6-20.4, A-Ident Number: A0467-01</b> ) |       |              |                |                          |  |  |
| <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>  | 15    | 0            | 0              | 0                        |  |  |
| <b>Now</b>   | 0.0   | 0.0          | 0.0            | 0.0                      |  |  |
| Wearing Surface  |       |              | 7              | 7                        | FRSF concrete o/l placed in 2000. Small patches, ok. 2008 deck testing report determined that there was no debonding.    |  |
| (Material Type : <b>CONCRETE - CONVENTIONAL CHIP SEAL COAT</b> )                           |       |              |                |                          |  |  |
| (Thickness(mm) : <b>50</b> )   |       |              |                |                          |  |  |
| Deck Top   |       |              | N              | N                        |  |  |
| Deck Rideability   |       |              | 7              | 7                        |  |  |
| Deck Joints  |       |              | 7              | 7                        |  |  |
| Temperature (deg. C)   |       | 20           |                |                          |  |  |
| (Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )                              |       |              |                |                          |  |  |
| (Fixed Type : )  |       |              |                |                          |  |  |
| Gap Size (mm)  |       | Gap Location |                |                          |  |  |
| 81   |       |              | A2 - Expansion |                          |  |  |
| 82   |       |              | A1 - Expansion |                          |  |  |
| Deck Drainage  |       |              | N              | 6                        |  |  |
| Drains Clogged (Y/N)   |       | No           |                |                          |  |  |
| Curbs/Median   |       |              | N              | 4                        | 3 patches have failed East curb, minor; 1 failed at W curb.  |  |
| (Curb Type : <b>Standard</b> )   |       |              |                |                          |  |  |
| Scaling (Percent Area)   |       | 5            |                |                          |  |  |
| Bridge Rail  |       |              | 6              | 6                        | Minor damage East side. Bent verticals @ panels 12 & 15.   |  |
| (Type : <b>GALVANIZED STEEL VERTICAL BAR</b> )   |       |              |                |                          |  |  |
| Bridge Rail Posts  |       |              | N              | 6                        | Grout pads deteriorated at several post locations, posts stable.   |  |
| (Type : <b>GALVANIZED POST STEEL; GALVANIZED POST STEEL</b> )                              |       |              |                |                          |  |  |
| Bridge Rail/Posts Coating  |       |              | 7              | 7                        |  |  |
| (Type : <b>GALVANIZED</b> )  |       |              |                |                          |  |  |
| Sidewalk   |       |              | X              | X                        |  |  |
| <b>Girder/Beam</b>   |       |              |                |                          |  |  |
| Cover Plate  |       |              | 7              | 7                        | Isolated corrosion at haunches.<br><br>(3 cracked cover plate welds. See 2009 cover plate inspection report. 27Aug2009). |  |
| Flange   |       |              | 7              | 7                        |  |  |
| Web  |       |              | 7              | 7                        |  |  |
| Stiffeners   |       |              | X              | X                        |  |  |
| Splice   |       |              | 7              | 7                        |  |  |
| Weld   |       |              | 4              | 4                        |  |  |
| Diaphragms/Cross Frame   |       |              | 7              | 7                        |  |  |

| Superstructure   |     |          |          |  |
|--|-----|----------|----------|--|
| Bridge Component   |     | Last     | Now      | Explanation of Condition   |
| (Primary Span : <b>RB, 3 Spans, Lengths(m): 20.4-25.6-20.4, A-Ident Number: A0467-01</b> ) |     |          |          |  |
| Paint Condition  |     | 5        | 5        | Isolated top of bottom flange corrosion. Minor web peeling. Red/orange. Corrosion top side of bottom flange on exterior girders. |
| (Colour Description : )  |     |          |          |  |
| (Colour Code : )   |     |          |          |  |
| Touchup Required (Y/N)   | No  |          |          |  |
| Bearings   |     | 6        | 6        |  |
| Temperature (deg. C)   | 20  |          |          |  |
| (Expansion Type : <b>ROCKER BEARING</b> )  |     |          |          |  |
| (Fixed Type : <b>PINNED BEARING</b> )  |     |          |          |  |
| Coating Adequate (Y/N)   | Yes |          |          |  |
| Functioning (Y/N)  | Yes |          |          |  |
| Deck Underside   |     | 6        | 5        | Several transverse cracks with efflorescent stain.   |
| Stains (Percent Area)  | 5   |          |          |  |
| <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>   |     |          |          |  |
| Bearing Seats/Caps   |     | 7        | 7        |  |
| (Type : <b>CONCRETE</b> )  |     |          |          |  |
| Backwalls/Breastwalls  |     | 7        | 7        |  |
| Wingwalls  |     | 7        | 7        |  |
| Piles  |     | N        | N        |  |
| Paint/Coating  |     | X        | X        |  |
| Abutment Stability   |     | 8        | 8        |  |
| Scour/Erosion  |     | 7        | 7        |  |
| <b>Piers/Bents</b>   |     |          |          |  |
| (Type : <b>PIER-SOLID</b> )  |     |          |          | Massive concrete.  |
| Bearing Seats/Caps   |     | 7        | 7        |  |
| (Type : <b>CONCRETE</b> )  |     |          |          | Two wide vertical cracks on South pier. One wide vertical crack on North pier.   |
| (Total Number of Bearing Piles : <b>0:0</b> )  |     |          |          |  |
| Pier Shaft/Piles   |     | 6        | 6        |  |
| Bracing/Struts/Sheathing   |     | X        | X        |  |
| Nose Plate   |     | 7        | 7        |  |
| Paint/Coating  |     | 4        | 4        | Nose plate paint 30% gone. Silver.   |
| (Colour Description : )  |     |          |          |  |
| (Colour Code : )   |     |          |          |  |
| Pier Stability   |     | 8        | 8        |  |
| Scour  |     | N        | 5        | Isolated scour @ SW corner, P1.  |
| Debris (Y/N)   | No  |          |          |  |
| <b>Substructure General Rating</b>   |     | <b>6</b> | <b>6</b> |  |

| Structure Usage                              |  |          |          |                          |
|--|--|----------|----------|--------------------------|
|  |  | Last     | Now      | Explanation of Condition |
| <b>Channel</b>                               |  |          |          |                          |
| (U/S Direction : <b>W</b> )                  |  |          |          | Curves both sides.       |
| (D/S Direction : <b>E</b> )                  |  |          |          |                          |
| Alignment                                    |  | 6        | 6        |                          |
| Bank Stability                               |  | N        | N        |                          |
| HWM (m below Top of Curb)                    |  |          |          | HWM not visible.         |
| Drift (Y/N)                                  |  | No       |          |                          |
| Slope Protection                             |  | N        | 6        |                          |
| (Type : <b>BAGGED CONC; BAGGED CONC</b> )    |  |          |          |                          |
| Guidebank/Spurs                              |  | X        | X        |                          |
| Adequacy of Opening                          |  | 8        | 8        |                          |
| (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                        | 2012  | Replace rail post grout.                 |                           |               |           |                   |     |
| GALVANIZE/PAINT BRIDGE RAIL                       |   |  |                           |               |           |                   |     |
| RETROFIT BRIDGE RAIL                              |   |  |                           |               |           |                   |     |
| SEAL CURBS  |   |  |                           |               |           |                   |     |
| PATCH DECK  |   |  |                           |               |           |                   |     |
| SEAL DECK   |   |  |                           |               |           |                   |     |
| OVERLAY DECK                                      |   |  |                           |               |           |                   |     |
| REPAIR/REPLACE DECK JOINTS                        |   |  |                           |               |           |                   |     |
| RESET/ PAINT BEARINGS                             |   |  |                           |               |           |                   |     |
| REPAINT SUPERSTRUCTURE                            |   |  |                           |               |           |                   |     |
| STRAIGHTEN/REPLACE MEMBERS                        |   |  |                           |               |           |                   |     |
| WASHING   |   |  |                           |               |           |                   |     |
| SHOTCRETE REPAIRS                                 |   |  |                           |               |           |                   |     |
| REPAIR ABUTMENT SCOUR/EROSION                     |   |  |                           |               |           |                   |     |
| PLACE ADDITIONAL RIP RAP                          |   |  |                           |               |           |                   |     |
| REMOVE DRIFT ACCUMULATION                         |   |  |                           |               |           |                   |     |
| OTHER ACTION                                      |   |  |                           |               |           |                   |     |
| OTHER ACTION                                      |   |  |                           |               |           |                   |     |
| OTHER ACTION                                      |   |  |                           |               |           |                   |     |
| OTHER ACTION                                      |   |  |                           |               |           |                   |     |
| <b>Structural Condition Rating (Last/Now) (%)</b> | <b>55.6/55.6</b>  | <b>Sufficiency Rating (Last/Now) (%)</b> | <b>65.3/65.2</b>          | Est. Repl. Yr | 2031      | Maint. Req. (Y/N) | Yes |
| Special Comments for Next Inspection              |   |  | Department Comments       |               |           |                   |     |
| Maintenance Reviewed By                           |   |  | Date                      |               |           | Estimated Total   | 0   |
| Proposed Long-Term Strategy                       | 2005.03.10 consider chip coat when operations in area. Deck should be good until at least 2020. Bridge should be good until 2045. |  |                           |               |           |                   |     |
| On 3-Year Program (Y/N)                           |   |  |                           |               |           |                   |     |
| Proposed Action                                   |   |  |                           |               |           |                   |     |
| Previous Inspector's Name                         | Jason Saly  |  | Previous Assistant's Name |               |           |                   |     |
| Next Inspection Date                              | 16-Apr-2014   |  | Previous Inspection Date  | 09-Mar-2011   |           |                   |     |
| Inspection Cycle (Default) (months)               | 21  |  |                           |               |           |                   |     |
| Comment   |   |  |                           |               |           |                   |     |