

| Bridge Inspection | | | | | | | |
|------------------------|------------------------------|---------------|------|---------------------|----------------|---------------|---|
| Bridge File Number | 13587 -1 Bridge | | | Form Type | PSR | | |
| Year Built/Year Supstr | 1965/1965 | | | Lot No. | 2 | | |
| Bridge or Town Name | WAINWRIGHT | | | Inspector Name | Jason Saly | | |
| Located Over | BATTLE RIVER, 5, WATERCRS-ST | | | Inspector Class | BR CLS A | | |
| Located On | 41:18 C1 17.724 | | | Assistant Name | | | |
| Water Body Cl./Year | | | | Assistant Class | | | |
| Navigabil. Cl./Year | | | | Inspection Date | 27-Nov-2012 | | |
| Legal Land Location | NW SEC 29 TWP 46 RGE 6 W4M | | | Data Entry By | Marcia Chavez | | |
| Longitude, Latitude | -110:50:58, 52:59:49 | | | Data Entry Date | 15-Jan-2013 | | |
| Road Authority | Alberta Transportation (AIT) | | | Reviewer Name | John O'Brien | | |
| Contract Main. Area | CMA15 | | | Review Date | 14-Dec-2012 | | |
| Clear Roadway/Skew | 9.1 / 20 deg. (RHF) | | | Dept. Reviewer Name | Andrew Smikles | | |
| AADT/Year | 1,220 / 2011 (A) | | | Dept. Review Date | 17-Jan-2013 | | |
| Road Classification | RAU-210-110 | | | Follow-Up By | | | |
| Detour Length (km) | 18 | | | | | | |
| Allowable Load (t): | Single | CS1 53 GIRDER | Semi | CS2 66 GIRDER | Train | CS3 84 GIRDER | ----> On Critical Spans ---->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 | Not required. | | | | | | | |
| Hazard Marker At Bridge (Y/N) | Yes | | | | | | | |
| Remarks | Too low. | | | | | | | |
| Other Sign Types | Information; "Battle River"; NB "Steep Grade 7%" | | | | | | | |

| Utilities (Located at) | | | | |
|------------------------|-----------|--|---------------|---------------------------|
| Utility Attachments | | | | |
| Telephone | West r/w. | | Gas | Major gas line 100m West. |
| Power | | | Municipal | |
| Others | | | Problem (Y/N) | No |
| Remarks | | | | |

| Approach Road | | | | |
|-------------------------------------|-------------|----------|----------|---|
| | | Last | Now | Explanation of Condition |
| Horizontal Alignment | | 6 | 6 | Long horiz. curve to S commences 400m from bridge. |
| Vertical Alignment | | 5 | 5 | Steep grade (+8%) to N of bridge, (+7%) to S; limited sight distance. |
| Roadway Width (m) | 10.200 | | | (Repaved approaches 2007. Birdbath @ SE approach. 16Aug2009). |
| Approach Bump | | 6 | 6 | Wide transverse crack at end of approach slab, typical both ends. |
| Guardrail (Y/N) | Yes | | | (Improper lap @ SW turn down. 16Aug2009). |
| Guardrail | | 6 | 6 | Connected to bridge wingwalls with type III section; steel posts cast into concrete catch basins. |
| Length (m) | 30.500 | | | Length extends up N grade 100+m. |
| Current Standard (Y/N) | No | | | Not long enough. Not thrie beam transition. |
| Termination Type | Turned Down | | | |
| Drainage | | N | N | Snow covered. |
| Approach Road General Rating | | 5 | 5 | |

| Superstructure | | | | | |
|--|-----------|--------------|----------------|--------------------------|---|
| Bridge Component | | Last | Now | Explanation of Condition | |
| (Primary Span : PO, 3 Spans, Lengths(m): 25.9-25.9-25.9, A-Ident Number:) | | | | | |
| Special Features | | | | | |
| Special Feature | | | X | | |
| (Type :) | | | | | |
| Special Feature | | | X | | |
| (Type :) | | | | | |
| Wearing Surface/Deck Top Detail Ratings | | | | | |
| | N (%) | 1 (%) | 2 (%) | 3 (%) | Snow covered. |
| Last | 10 | 0 | 0 | 0 | |
| Now | 20.0 | 0.0 | 0.0 | 0.0 | |
| Wearing Surface | | | 6 | 6 | FRSF conc. o/l 2007. 2009 Deck Testing report indicated no debonding & epoxy had been injected into the c/l cold jnt. |
| (Material Type : CONCRETE) | | | | | |
| (Thickness(mm) : 75) | | | | | |
| Lateral Connection Problem (Y/N) | No | | | | |
| Deck Top | | | N | N | |
| Deck Rideability | | | 7 | 7 | |
| Deck Joints | | | N | N | Cannot see glands due to snow & debris. |
| Temperature (deg. C) | | -10 | | | |
| (Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC)) | | | | | |
| (Fixed Type : GLAND (WABO-MAUER, TRANSFLEX, ETC)) | | | | | |
| Gap Size (mm) | | Gap Location | | | |
| 66 | | | North abutment | | |
| 75 | | | North pier | | |
| 72 | | | South pier | | |
| 63 | | | South abutment | | |
| Deck Drainage | | | N | N | On grade. Old weep tube leakage caused stains on exterior girders. |
| Drains Clogged (Y/N) | | No | | | |
| Curbs/Median | | | N | N | (Light scaling @ top. 16Aug2009). Snow covered. |
| (Curb Type : Standard) | | | | | |
| Scaling (Percent Area) | | 5 | | | |
| Bridge Rail | | | 6 | 6 | One slat is bent on West rail, minor. Panel 3 NE parapet cracking at rail connection. |
| (Type : GALVANIZED STEEL VERTICAL BAR) | | | | | |
| Bridge Rail Posts | | | 6 | 6 | (Minor grout deterioration @ post bases. 16Aug2009). |
| (Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL) | | | | | |
| Bridge Rail/Posts Coating | | | 7 | 7 | |
| (Type : GALVANIZED) | | | | | |
| Sidewalk | | | X | X | |
| Girder Detail Ratings | | | | | |
| | N (count) | 1 (count) | 2 (count) | 3 (count) | |
| Last | 0 | 0 | 0 | 0 | |
| Now | 0 | 0 | 0 | 0 | |
| Girders | | | 5 | 5 | |
| Cracking (Y/N) | | No | | | Minor spalling at shoe plates common to "0" girders. |
| Spalling (Percent Area) | | 1 | | | |
| (Number Of Girders : 18) | | | | | |

| Superstructure | | | | |
|--|-----|----------|----------|---|
| Bridge Component | | Last | Now | Explanation of Condition |
| (Primary Span : PO, 3 Spans, Lengths(m): 25.9-25.9-25.9, A-Ident Number:) | | | | |
| Diaphragms/Cross Frame | | 7 | 7 | |
| Bearings | | 4 | 4 | Abut bearings are painted; steel portion. Some girder shoes have cracks/spalls typical of movement in these units. Grout pad cracked P1E; A1 pads are distorted; A2G4,5 bearing pads are cantilevered due to movement and/or spalled grout pad. |
| Temperature (deg. C) | -10 | | | |
| (Expansion Type : REINFORCED PAD BEARING) | | | | |
| (Fixed Type : REINFORCED PAD BEARING) | | | | |
| Coating Adequate (Y/N) | Yes | | | |
| Functioning (Y/N) | Yes | | | |
| Deck Underside | | 6 | 5 | Minor spall at S2 btwn G2-3. |
| Stains (Percent Area) | 1 | | | |
| Span Alignment Problems | | | | |
| Vertical (Y/N) | No | | | |
| Horizontal (Y/N) | No | | | |
| Superstructure General Rating | | 4 | 4 | |
| Substructure | | | | |
| Bridge Component | | Last | Now | Explanation of Condition |
| Abutments | | | | |
| Bearing Seats/Caps | | 5 | 5 | Horiz. ck in the S abut below G2S1. |
| (Type : CONCRETE) | | | | |
| Backwalls/Breastwalls | | 7 | 7 | |
| Wingwalls | | 7 | 7 | |
| Piles | | N | N | Buried. |
| Paint/Coating | | 5 | 5 | |
| Abutment Stability | | 7 | 7 | |
| Scour/Erosion | | 5 | 6 | (Small erosion gullies @ NE. 07Mar2011). |
| Piers/Bents | | | | |
| (Type : PIER-SOLID) | | | | (Class V finish restored in 1990. 16Aug2009). 1% medium scaled. 800mm of old finish exposed above water. Minor spalls @ S pier. Wide vertical cracking, N pier. |
| Bearing Seats/Caps | | 5 | 5 | |
| (Type : CONCRETE) | | | | |
| (Total Number of Bearing Piles : 0:0) | | | | |
| Pier Shaft/Piles | | 6 | 6 | |
| Bracing/Struts/Sheathing | | X | X | |
| Nose Plate | | 6 | 6 | |
| Paint/Coating | | 4 | 4 | Capseal on pier. Silver paint on nose plate, 90% gone. No action required for painted nose plate. |
| (Colour Description :) | | | | |
| (Colour Code :) | | | | |
| Pier Stability | | 8 | 8 | |
| Scour | | N | N | (Sand/silt accumulation btwn N pier & toe of N hslp. 16Aug2009). |
| Debris (Y/N) | No | | | |
| Substructure General Rating | | 5 | 5 | |

| Structure Usage | | | | |
|--|-----|----------|----------|--|
| | | Last | Now | Explanation of Condition |
| Channel | | | | |
| (U/S Direction : W) | | | | |
| (D/S Direction : E) | | | | |
| Alignment | | 8 | 8 | |
| Bank Stability | | N | N | Snow covered. |
| HWM (m below Top of Curb) | 6.0 | | | |
| Drift (Y/N) | No | | | |
| Slope Protection | | 6 | 6 | S hslp has cast-in-place concrete slope protection while N hslp is all natural mixed with concrete debris. |
| (Type : CONCRETE; NATURAL; CONCRETE) | | | | |
| Guidebank/Spurs | | X | X | |
| Adequacy of Opening | | 8 | 8 | |
| (Fish Compensation Measure 1 : NONE) | | | | |
| (Fish Compensation Measure 2 : NONE) | | | | |
| Channel General Rating | | 6 | 6 | |

| Maintenance Recommendations | | | | | | | |
|---|---|---|---------------------------|---------------|-----------|-------------------|-----|
| Inspector Recommendations | Year | Inspector Comments | Department Comments | Target Year | Est. Cost | Cat # | |
| REPAIR/REPLACE BRIDGE RAIL | | | | | | | |
| GALVANIZE/PAINT BRIDGE RAIL | | | | | | | |
| SEAL CURBS | | | | | | | |
| PATCH DECK | | | | | | | |
| SEAL DECK | | | | | | | |
| OVERLAY DECK | | | | | | | |
| REPAIR/REPLACE DECK JOINTS | | | | | | | |
| RESET/ PAINT BEARINGS | 2013 | Rehab grout pads & reset bearings. | | | | | |
| WASHING | | | | | | | |
| SHOTCRETE REPAIRS | | | | | | | |
| REPAIR ABUTMENT SCOUR/EROSION | | | | | | | |
| PLACE ADDITIONAL RIP RAP | | | | | | | |
| REMOVE DRIFT ACCUMULATION | | | | | | | |
| OTHER ACTION | 2013 | Reset hazard markers to meet standard. | | | | | |
| OTHER ACTION | 2013 | Patch dip @ SE approach (bird bath) & seal crack @ end of approach slabs, if not yet done. | | | | | |
| OTHER ACTION | 2013 | Upgrade approach guradrail to meet standard, reinstall SW lap @ turn down, if not yet done. | | | | | |
| OTHER ACTION | | | | | | | |
| Structural Condition Rating (Last/Now) (%) | 50.0/50.0 | Sufficiency Rating (Last/Now) (%) | 59.9/59.9 | Est. Repl. Yr | 2040 | Maint. Req. (Y/N) | Yes |
| Special Comments for Next Inspection | Continue regular curb & deck sealing practices. | | 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 | Jason Saly | | Previous Assistant's Name | | | | |
| Next Inspection Date | 27-Aug-2014 | | Previous Inspection Date | 07-Mar-2011 | | | |
| Inspection Cycle (Default) (months) | 21 | | | | | | |
| Comment | | | | | | | |