

Structure Number: MNOT10

200 System Designation	4 - Urban	<b>Classification</b>	
201 Status	Functionally Obsolete	12 Base Highway Network	Not on Base Network
202 Sufficiency Rating	62.60	20 Toll	3 On free road
<b>Identification</b>		21 Maint Responsibility	04 City/Muni Hwy Agenc
02 Highway District	Minot District	22 Owner	04 City/Muni Hwy Agenc
03 County	Ward	26 Functional	Urban, Minor Arterial
04 City	MINOT CITY	37 Historical Significance	5 Not eligible for NRHP
05 Inventory Route	Route On Structure	100 Defense Highway Designation	0 Not a STRAHNET hwy
5 City Street	6 Business 08950 0 N/A (NBI)	101 Parallel Structure Designation	No    bridge exists
06 Feats Intersect	4TH AVE BNRR SOURIS R.	102 Direction of Traffic	2 2-way traffic
09 Location	3RD ST NE-MINOT	103 Temporary Structure Designation	Not Applicable (P)
11 Milepoint	1.300	104 Highway System of Inventory Rte	0 Not on NHS
13 LRS Inv Route. Subroute	-1 -1	105 Federal Lands Highways	Not applicable
16 Latitude	48d 14' 22.00"	110 Designated National Network	0 Not part of natl netwo
17 Longitude	101d 17' 18.00"	112 NBIS Bridge Length	Yes
GPS Coordinates XY	330084.8 5345430.8	<b>Condition</b>	
98 Border Bridge	Unknown (P) 0.00 %	58 Deck	6 Satisfactory
99 Border Bridge Struct No.	-	59 Superstructure	5 Fair
<b>Structure Type and Material</b>		60 Substructure	5 Fair
43 Main Struct Type	Steel continuous	61 Chan. & Chan. Protection	7 Minor Damage
Stringer		62 Culvert and Retaining Walls	N N/A (NBI)
44 Approach Struct Type	Unknown (NBI)	<b>Load Rating and Posting</b>	
	Unknown (P)	31 Design Load	Unknown
45 No. Spans in Main Unit	11	41 Structure Open, Closed or Posted	A Open, no restriction
46 No. Approach Spans	0	63 Operating Rating Method	2 AS Allowable Stress
107 Deck Struct Type	1 Concrete-Cast-in-Place	64 Oper. Rating HS 41	74 Tons
108 Wearing Surface	1 Monolithic Concrete	65 Inventory Rating Method	2 AS Allowable Stress
Membrane	0 None	66 Inv. Rating HS 20	37 Tons
Dk Protect	None	70 Bridge Posting	5 At/Above Legal Loads
208 Dk Overburden	1 None	209 Posted in "Tons"	00 Tons
<b>Age and Service</b>		<b>Appraisal</b>	
27 Yr Built	1936 106 Yr Reconstructed 1985	67 Structural Condition	5 Above Min Tolerable
42 Type of Service	5 Highway-pedestrian - On	68 Deck Geometry	4 Tolerable
	8 Hwy-waterway-RR - Under	69 Underclear. Vert & Horiz	3 Intolerable - Correct
28 Lanes on Structure	2	71 Waterway Adequacy	8 Equal Desirable
29 ADT	9,000 30 Year of ADT 2017	72 App. Rdwy. Alignment	6 Equal Min Criteria
109 Average Daily Truck Traffic	1.00	36 Traffic Safety Features	1 0 0 0
19 Bypass, Detour Length	3 Miles	113 Scour Critical	8 Stable Above Footing
<b>Geometric Data</b>		<b>Inspections</b>	
10 Min Vert Clearance	99 Ft. 12 In.	90 Date of Last Inspection	November 17, 2017
32 Approach Roadway Width	29 Ft.	91 Designated Inspection Frequency	24 Months
33 Bridge Median	0 No median	92 Critical Feature Inspected / 93 Critical Feature Last Inpsection Dt	
34 Skew	0.00	Fracture Critical	N
35 Structure Flared	0 No flare	Underwater	N
47 Total Horizontal Clearance	28.9 Ft.	Other Special	N
48 Length of Max Span	117 Ft.	218 Channel Profile	Y 48 07/17/2013
49 Structure Length	912.07 Ft.	Chaining Date	None
50 Curb/Sidewalk Widths	0.0 Ft Rt-Side	207 Transporter Erector Routes and Sites	-1
	6.6 Ft Lt-Side	212 Structure Load Rated	01/01/1901
51 Bridge Rdwy Width - Curb to Curb	28.9 Ft.	213 Federal Aid Project Number	BRM-4-989(14)012
52 Deck Width	38.1 Ft.	214 Delayed Inspection	Not Applicable
53 Min Vert Clear. Over Bridge	99 Ft. 12 In.	216 Inspector	Lawson, Devries
54 Min Vert Underclearance	15 Ft. 0 In.	<b>Navigation Data</b>	
	H Hwy beneath struct	38 Navigation Control	Permit Not Required
55 Min Lateral UnderClear. - Rt	3.6 Ft.	39 Navigation Vertical Clearance	0 Ft.
	H Hwy beneath struct	40 Navigation Horizontal Clearance	0 Ft.
56 Min Lateral UnderClear. - Lt	3.6 Ft.	111 Pier or Abutment Protection	Unknown (NBI)
210 Culvert / 211 Description		116 Minimum Navigation Vertical Clearance	-1 Ft.

North Dakota Department of Transportation  
 Bridge Inventory - Structure Inventory And Appraisal Sheet

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Element / Env. / Description	Units	Total Qty	1 %	1-Qty St	2 %	2-Qty St	3 %	3-Qty St	4 %	4-Qty St
107/1:Steel Opn Girder/Beam	ft	4,551	34	1,547	66	3,004	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	50	50	25	25	25	25	0	0
3440/1:Eff (Stl Protect Coat)	each	100	50	50	25	25	25	25	0	0
1080/1:Delamination/Spall/Patched Area	each	327	99	324	0	0	0	0	1	3
12/1:Re Concrete Deck	sq.ft	26,447	63	16,652	0	0	37	9,795	0	0
1090/1:Exposed Rebar	each	10	0	0	0	0	100	10	0	0
1120/1:Efflorescence/Rust Staining	each	11	100	11	0	0	0	0	0	0
1130/1:Cracking (RC and Other)	each	9,784	0	0	0	0	100	9,784	0	0
510/1:Wearing Surfaces	sq.ft	26,447	63	16,662	37	9,785	0	0	0	0
205/1:Re Conc Column	each	20	70	14	30	6	0	0	0	0
1080/1:Delamination/Spall/Patched Area	each	5	0	0	100	5	0	0	0	0
1090/1:Exposed Rebar	each	1	0	0	100	1	0	0	0	0
215/1:Re Conc Abutment	ft	89	98	87	0	0	2	2	0	0
234/1:Re Conc Pier Cap	ft	331	98	324	1	4	0	0	1	3
1090/1:Exposed Rebar	each	4	0	0	100	4	0	0	0	0
300/1:Strip Seal Exp Joint	ft	190	0	0	37	70	47	90	16	30
2330/1:Seal Damage	each	190	0	0	37	70	47	90	16	30
311/1:Moveable Bearing	each	60	0	0	100	60	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
313/1:Fixed Bearing	each	40	0	0	100	40	0	0	0	0
515/1:Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
321/1:Re Conc Approach Slab	sq.ft	100	0	0	100	100	0	0	0	0
1130/1:Cracking (RC and Other)	each	100	0	0	100	100	0	0	0	0

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330/1: Metal Bridge Railing	ft	2,040	49	990	50	1,020	0	0	2	30
515/1: Steel Protective Coating	sq.ft	100	100	100	0	0	0	0	0	0
331/1: Re Conc Bridge Railing	ft	1,821	98	1,779	2	42	0	0	0	0
1080/1: Delamination/Spall/Patched Area	each	25	0	0	100	25	0	0	0	0
1090/1: Exposed Rebar	each	17	0	0	100	17	0	0	0	0
7357/1: Pack Rust	each	1	100	1	0	0	0	0	0	0
8398/1: Slope Protection	each	2	100	2	0	0	0	0	0	0
8401/1: Wings	each	2	100	2	0	0	0	0	0	0

**Remarks:** Abut 1: Bearing plate, under roller for 2nd girder from the W, destroyed by rust. Plate under E outside roller is moderately rusted and bent on either side of roller. NE corner has map cracking. Span 1: Diaphragms have spalls w/ rebar exposed and loss of section. Pier 2: spalls with rebar exposed. Pier 3: Masonry pad, under 2nd girder, has large crack and moderate deterioration. Span 3: 1 metal cross brace bent, Pack rust on end flanges of span 3 girder 5. Pier 4: Several spalls and delamination of cap and columns. Span 4: spalls with exposed rebar. Pier 5: Sides of cap are lightly scaled. Bottom of cap is cracked and delaminated. Pier 6: Bottom NE corner of cap is spalled. Span 6: 4 sections of exposed rebar along east soffit. Pier 7: Top east end of cap spalled and deteriorating. Pier 8: 1'x4" spall on NW corner of E column. Bottom of pier cap has moderate cracking and deterioration. East side has a few small to large spalls. Span 8: E soffit has 1'x0.5' spall w/ rebar exposed. Pier 9: Several locations of moderate deterioration. Gusset plate on outside of E girder, under expansion assembly is cracked in 2. Span 9: Small gouge in bottom flange of E outside girder. Flange also bent a couple inches to W. 2 diaphragms slightly bent. W edge of deck has spall w/ rebar exposed. Between beams 1 and 2 there is a 3'x1' spall w/ rebar exposed. Pier 10: Bearing plates for girders are moderately pack rusted. East side pier cap is crushing under girder 5. Cap is spalling and map cracking on the east side. Pier 11: Bearing plate under W outside girder is moderately pack rusted. Other: Map cracking in deck. 50' of pedestrian rail missing in SW corner. Moderate to severe deterioration of concrete in soffit of deck adjacent to first expansion assembly from S end. Rebar has 50% section loss. Numerous areas of pack rust under the joints in deck. East side

**Alert Code 1:** Partial failure of some of the new expansion assembly seals is allowing deicing salts to drip onto pier caps and metal diaphragms. Small holes rusted through lateral brace gusset plates at several locations. Repair, of deteriorated concrete at top east end of Pier 9, is failing. 30 Ft of pedestrian rail missing on west side toward north end of bridge.