Form 1717A-01/2002

Michigan Department of Transportation
Structure Inventory and Appraisal

8

MDOT Bridge ID	Control Section
3935384 0011800B01	3935384 0..

NBI Bridge ID	Struct Num	Region	TSC	County	City Resp	City Location	7- Facility Carried
394353800118B01	4672	05	5B	39	3538	3538	CROSSTOWN

6- Feature Intersected	9- Location	Latitude	Longitude	Owner	Maint Resp
PORTAGE CREEK	IN KALAMAZOO	42 16' 58."	85 34' 43.69"	4	4

Bridge History, Type, Materials

27 - Year Built	1965	
106 - Year Reconstructed		
202 - Year Painted		
203 - Year Overlay		
43 - Main Span Bridge Type	3	19
44 - Appr Span Bridge Type		
77 - Steel Type	0	
78 - Paint Type	0	
79 - Rail Type	4	
80 - Post Type	4	
107 - Deck Type	1	
108A - Wearing Surface	1	
108B - Membrane	0	
108C - Deck Protection	0	

Structure Dimensions

34 - Skew	45	
35 - Struct Flared	0	
45 - Num Main Spans	2	
46 - Num Apprs Spans	0	
48 - Max Span Length	9.8	
49 - Structure Length	29.9	
50A - Width Left Curb/SW	9.84	
50B - Width Right Curb/SW	9.84	
33 - Median	0	
51 - Width Curb to Curb	0.0	
52 - Width Out to Out		
112 - NBIS Length	Y	

Inspection Data

90 - Inspection Date	09/03/2010	
91 - Inspection Freq	24	
92A - Frac Crit Req/Freq	N	
93A - Frac Crit Insp Date		
92B - Und Water Req/Freq	N	
93B - Und Water Insp Date		
92C - Oth Spec Insp Req/F..	N	
93C - Oth Spec Insp Date		
176A - Und Water Insp Met..	1	
58 - Deck Rating	N	
58A - Deck Surface Rtg	N	
59 - Superstructure Rating	N	
59A - Paint Rating		
60 - Substructure Rating	N	
61 - Channel Rating	6	
62 - Culvert Rating	7	

Navigation Data

38 - Navigation Control	0	
39 - Vertical Clearance	0	
40 - Horizontal Clearance	0	
111 - Pier Protection		
116 - Lift Brdg Vert Clear		

Route Carried By Structure(ON Record)

5A - Record Type	1	
5B - Route Signing	5	
5C - Level of Service	0	
5D - Route Number	02005	
5E - Direction Suffix	0	
10L - Best 3m Unclr-Lt	0	0
10R- Best 3m Unclr- Rt	99	99
PR Number		
Control Section	0	
11- Mile Point	0.0	
12- Base Highway Network	0	
13- LRS Route-Subroute	000..	-
19- Detour Length	2	
20- Toll Facility	3	
26- Functional Class	16	
28A - Lanes On	4	
29 - ADT	5784	
30 - Year of ADT	1998	
32- Appr Roadway Width	44.0	
32A/B - Ap Pvt Type/Width	0	44.0
42A- Service Type On	5	
47L - Left Horizontal Clear	0.0	
47R- Right Horizontal Clear	44.0	
53- Min Vert Clr Ov Deck	99	99
100- STRAHNET	0	
102 - Traffic Direct	2	
109 - Truck %	10	
110 - Truck Network	0	
114 - Future ADT	7519	
115 - Year Future ADT	2018	
Freeway	0	

Structure Appraisal

36A- Bridge Railing	0
36B-Rail Transition	0
36C- Approach Rail	0
36D- Rail Termination	0
67- Structure Evaluation	
68- Deck Geometry	
69- Underclearance	
71- Waterway Adequacy	6
72- Approach Alignment	7
103- Temporary Structure	
113- Scour Criticality	4

Miscellaneous

37- Historical Significance	5
98A- Border Bridge State	
98B- Border Bridge %	
101- Parallel Structure	N
EPA ID	
Stay in Place Forms	

STATE OF MICHIGAN
DAVID L. STROCKIS
ENGINEER
No. 50013
LICENSED PROFESSIONAL ENGINEER

12/13/10

Route Under Structure(UNDER Record)

5A - Record Type		
5B - Route Signing		
5C - Level of Service		
5D - Route Number		
5E - Direction Suffix		
10L - Best 3m Unclr-Lt		
10R- Best 3m Unclr- Rt		
PR Number		
Control Section		
11- Mile Point		
12- Base Highway Network		
13- LRS Route-Subroute		
19- Detour Length		
20- Toll Facility		
26- Functional Class		
28A - Lanes Under		
29 - ADT		
30 - Year of ADT		
42B- Service Type Under	5	
47L - Left Horizontal Clear		
47R- Right Horizontal Clear		
54A - Left Feature	N	
54B- Left Underclearance	99	99
54C- RIght Feature	N	
54D- Right Underclearance	99	99
Under Clearance Year		
55A - Reference Feature	N	
55B- Right Horiz Clearance	327.8	
56- Left Horiz Clearance	0	
100- STRAHNET		
102 - Traffic Direct		
109 - Truck %		
110 - Truck Network		
114 - Future ADT		
115 - Year Future ADT		
Freeway		

Proposed Improvments

75 - Type of Work	
76- Length of Improvement	
94- Bridge Cost	
95- Roadway Cost	
96- Total Cost	
97- Year of Cost Estimate	

Load Rating and Posting

31- Design Load	6	
41- Open, Posted, Closed	A	
63- Oper Rtg Method	2	
64F- Fed Rtg Method	22.7	
64M- Mich Oper Rtg	9	77
65- Inv Rtg Method	2	
66- Inventory Load	18.2	
70- Posting	5	
141- Posted Loading		
195- Analysis ID		
193- Overload Class		

Culvert Safety Inspection Report

3935384 0011800B01

Facility	Federal Structure ID	Inspector Name	Agency/Consultant	Inspection Date
CROSSTOWN	394353800118B01	david strockis	hH Engineering, Ltd	09/03/2010

Feature	Latitude	Longitude	Struc Num	Insp Freq	Insp Key
PORTAGE CREEK	42 16' 58."	85 34' 43.69"	4672	24	CSXZ

Location	Length	Width	Year Built	Spans	Structure Type(43)	
IN KALAMAZOO	29.9		1965	2	3	19

Legend	
9	New
7-8	Good
5-6	Fair
3-4	Poor
2 or Less	Critical

NBI INSPECTION

		08	08	10	
1. Pavement	9	9	8		Newer HMA (Hot Mix Asphalt) surface (3 lanes). (10) (08) (08)
2. Sidewalks or curbs	9	9	8		Newer sidewalks over culvert. (10) (08) (08)
3. Headers / Rails	7	7	7		Metal panel railings with concrete posts. Some cracks in stone/grout headwalls. Tree growing out of headwall on east culvert/north side. (10) (08) Some cracks in stone/grout headwalls. Tree growing out of headwall on east culvert/north side. (08)
4. Approach Gd Rail	5	5	5		No connection of guardrail to railing at NE conmer. (10) (08) (08)
5. Shoulder		N	N		(10) (08) (08)
6. Deck		N	N		(10) (08) (08)
7. Deck Soffit		N	N		(10) (08) (08)
8. Joints		N	N		(10) (08) (08)
9. Leakage		N			(10) (08) (08)
10. Stringers					(10) (08) (08)
11. Pipe	7	7	7		(10) (08) Pipe is flowing half-way full, 09/26/08. (08)
12. Abutments	7	7			(10) (08) (08)
13. Piers	7	7			(10) (08) (08)
14. Slope		N			Some washout/scour/sinkholes behind SE wingwall. (10) (08) Some washout/scour/sinkholes behind SE wingwall. (08)
15. Scour		N			(10) (08) (08)

Facility	Federal Structure ID	Inspector Name	Agency/Consultant	Inspection Date
CROSSTOWN	394353800118B01	david strockis	hH Engineering, Ltd	09/03/2010

Feature	Latitude	Longitude	Struc Num	Insp Freq	Insp Key
PORTAGE CREEK	42 16' 58."	85 34' 43.69"	4672	24	CSXZ

Location	Length	Width	Year Built	Spans	Structure Type(43)	
IN KALAMAZOO	29.9		1965	2	3	19

Legend	
9	New
7-8	Good
5-6	Fair
3-4	Poor
2 or Less	Critical

	08	08	10

NBI INSPECTION

16. Channel SIA-61	6	6	6	Some debris in west pipe/south end. Minor debris in east culvert. No debris noted in upstream end at east culvert. Water depth east culvert south end 3.0ft. Water depth at SW corner of west culvert 2.8ft. Water depth east culvert north end 3.5ft+. Water depth at NW corner of west culvert 2.3ft. (10) (08) Tree branches inside of west culvert at center & upstream end of east culvert. Water 4 feet deep at center of west culvert, downstream end. Debris floating (no flow) in east culvert. Some debris in west pipe/north end. Tree/limbs/debris in east pipe/south end, 09/26/08. (08)
17. Culvert rtg SIA-62	7	7	7	(10) (08) (08)

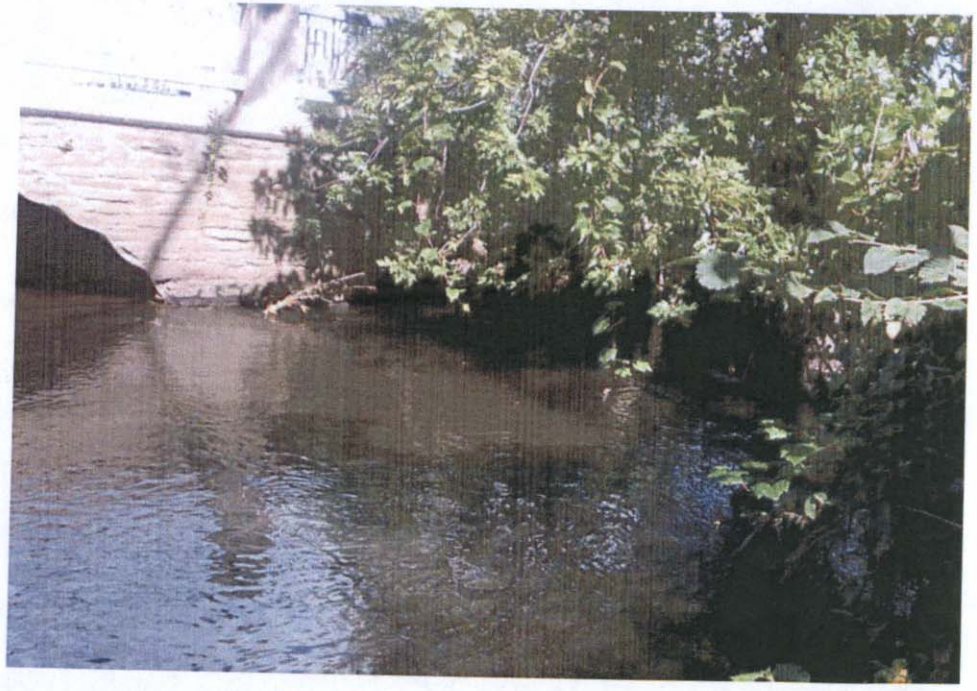
Guard Rail	
36A	0
36B	0
36C	0
36D	0

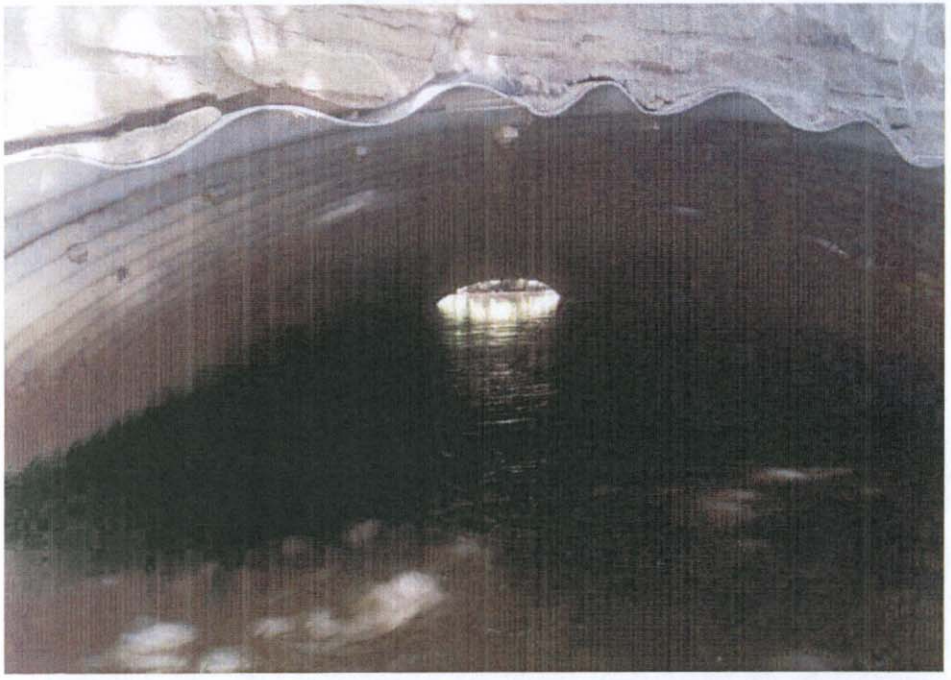
Watr Adeq	6
Appr Align	7
Special Insp Equip.	
UW Inspect Method	1

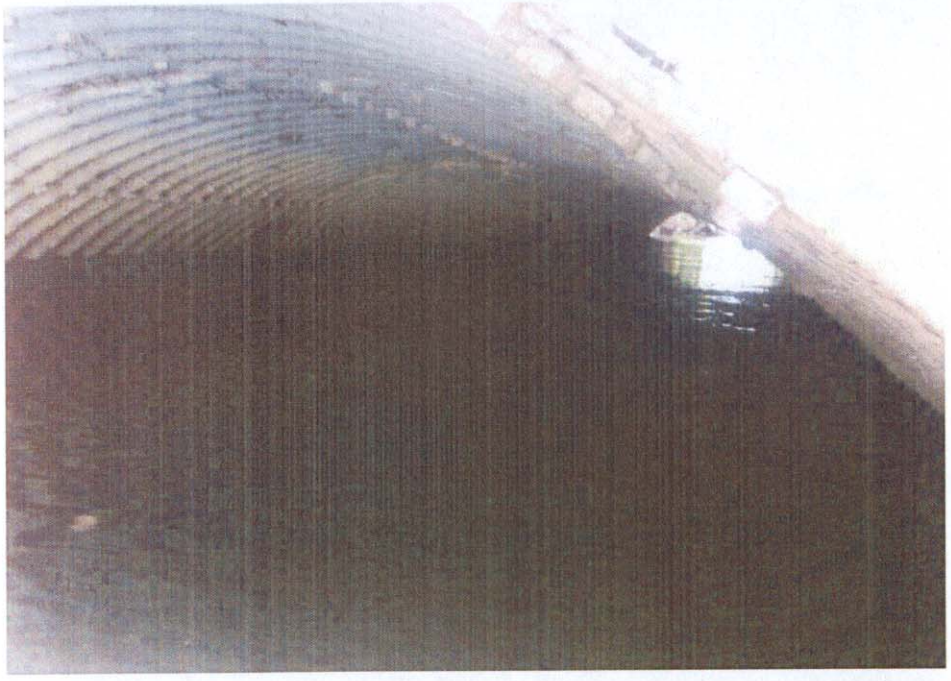
Repairs/Maintenance

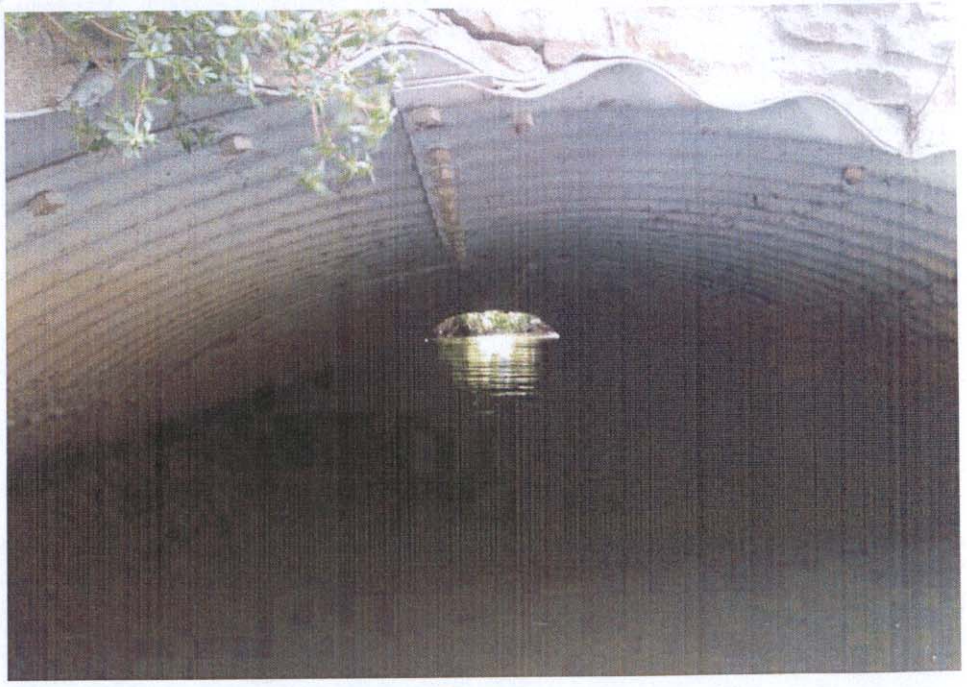
General Notes

Overgrown vegetation in NE quadrant.









Form 1717A-01/2002

Michigan Department of Transportation
Structure Inventory and Appraisal

10

MDOT Bridge ID	Control Section
3935385 0037200B01	3935385 0..

NBI Bridge ID	Struct Num	Region	TSC	County	City Resp	City Location	7- Facility Carried
395353800372B01	4686	05	5B	39	3538	3538	DUTTON STREET

8- Feature Intersected	9- Location	Latitude	Longitude	Owner	Maint Resp
PORTAGE CREEK	IN CITY OF KALAMAZOO	42 17' 5.78"	85 34' 41.50"	4	4

Bridge History, Type, Materials

27 - Year Built	1993	
106 - Year Reconstructed		
202 - Year Painted		
203 - Year Overlay		
43 - Main Span Bridge Type	5	05
44 - Appr Span Bridge Type		
77 - Steel Type	0	
78 - Paint Type	0	
79 - Rail Type	6	
80 - Post Type	0	
107 - Deck Type	1	
108A - Wearing Surface	1	
108B - Membrane	0	
108C - Deck Protection	1	

Structure Dimensions

34 - Skew	0	
35 - Struct Flared	0	
45 - Num Main Spans	1	
46 - Num Apprs Spans	0	
48 - Max Span Length	30.8	
49 - Structure Length	34.8	
50A - Width Left Curb/SW	6.23	
50B - Width Right Curb/SW	6.23	
33 - Median	0	
51 - Width Curb to Curb	42.0	
52 - Width Out to Out	54.46	
112 - NBIS Length	Y	

Inspection Data

90 - Inspection Date	09/03/2010	
91 - Inspection Freq	24	
92A - Frac Crit Req/Freq	N	
93A - Frac Crit Insp Date		
92B - Und Water Req/Freq	N	
93B - Und Water Insp Date		
92C - Oth Spec Insp Req/F..	N	
93C - Oth Spec Insp Date		
176A - Und Water Insp Met..	1	
58 - Deck Rating	8	
58A - Deck Surface Rtg	8	
59 - Superstructure Rating	8	
59A - Paint Rating	N	
60 - Substructure Rating	8	
61 - Channel Rating		
62 - Culvert Rating	N	

Navigation Data

38 - Navigation Control	0	
39 - Vertical Clearance	0	
40 - Horizontal Clearance	0	
111 - Pier Protection		
116 - Lift Brdg Vert Clear		

Route Carried By Structure(ON Record)

5A - Record Type	1	
5B - Route Signing	5	
5C - Level of Service	0	
5D - Route Number	00000	
5E - Direction Suffix	0	
10L - Best 3m Unclr-Lt	0	0
10R- Best 3m Unclr- Rt	99	99
PR Number		
Control Section	0	
11- Mile Point	0.0	
12- Base Highway Network	0	
13- LRS Route-Subroute	000..	-
19- Detour Length	2	
20- Toll Facility	3	
26- Functional Class	19	
28A - Lanes On	2	
29 - ADT	900	
30 - Year of ADT	1998	
32- Appr Roadway Width	43.0	
32A/B - Ap Pvt Type/Width	-	43.0
42A- Service Type On	5	
47L - Left Horizontal Clear	0.0	
47R- Right Horizontal Clear	54.8	
53- Min Vert Clr Ov Deck	99	99
100- STRAHNET	0	
102 - Traffic Direct	2	
109 - Truck %	8	
110 - Truck Network	0	
114 - Future ADT	1500	
115 - Year Future ADT	2012	
Freeway	0	

Structure Appraisal

36A- Bridge Railing	1
36B-Rail Transition	0
36C- Approach Rail	0
36D- Rail Termination	0
67- Structure Evaluation	
68- Deck Geometry	
69- Underclearance	
71- Waterway Adequacy	5
72- Approach Alignment	3
103- Temporary Structure	
113- Scour Criticality	8

Miscellaneous

37- Historical Significance	5
98A- Border Bridge State	
98B- Border Bridge %	
101- Parallel Structure	N
EPA ID	
Stay in Place Forms	

STATE OF MICHIGAN
DAVID L. STROCKIS
ENGINEER
No. 50013
LICENSED PROFESSIONAL ENGINEER

12/13/10

Route Under Structure(UNDER Record)

5A - Record Type		
5B - Route Signing		
5C - Level of Service		
5D - Route Number		
5E - Direction Suffix		
10L - Best 3m Unclr-Lt		
10R- Best 3m Unclr- Rt		
PR Number		
Control Section		
11- Mile Point		
12- Base Highway Network		
13- LRS Route-Subroute		
19- Detour Length		
20- Toll Facility		
26- Functional Class		
28A - Lanes Under		
29 - ADT		
30 - Year of ADT		
42B- Service Type Under	5	
47L - Left Horizontal Clear		
47R- Right Horizontal Clear		
54A - Left Feature	N	
54B- Left Underclearance	99	99
54C- RIght Feature	N	
54D- Right Underclearance	99	99
Under Clearance Year		
55A - Reference Feature	N	
55B- Right Horiz Clearance	327.8	
56- Left Horiz Clearance	0	
100- STRAHNET		
102 - Traffic Direct		
109 - Truck %		
110 - Truck Network		
114 - Future ADT		
115 - Year Future ADT		
Freeway		

Proposed Improvments

75 - Type of Work		
76- Length of Improvement	0	
94- Bridge Cost	0	
95- Roadway Cost	0	
96- Total Cost	0	
97- Year of Cost Estimate		

Load Rating and Posting

31- Design Load	5	
41- Open, Posted, Closed	A	
63- Oper Rtg Method	1	
64F- Fed Rtg Method	83.9	
64M- Mich Oper Rtg	9	154
65- Inv Rtg Method	1	
66- Inventory Load	50.3	
70- Posting	5	
141- Posted Loading		
195- Analysis ID		
193- Overload Class		

Bridge Safety Inspection Report

3935385 0037200B01

Facility	Federal Structure ID	Inspector Name	Agency/Consultant	Inspection Date
DUTTON STREET	395353800372B01	david strockis	hH Engineering, Ltd	09/03/2010

Feature	Latitude	Longitude	Struc Num	Insp Freq	Insp Key
PORTAGE CREEK	42 17' 5.78"	85 34' 41.50"	4686	24	WBMR

Location	Length	Width	Year Built	Year Recon	Mat Dsg	Scour Eval	No.Pins
IN CITY OF KALAMAZOO	34.8	54.46	1993		5	05 8	

Legend	
9	New
7-8	Good
5-6	Fair
3-4	Poor
2 or Less	Critical

NBI INSPECTION

	06	08	10	
1. Surface SIA-58A	8	8	8	Minor longitudinal cracks at beam joints. (10) Minor longitudinal cracks at beam joints. (08) Longitudinal cracks at beam joints. (06)
2. Expansion Jts				(10) (08) (06)
3. Other Joints	7	7	7	Bituminous wedge 2 feet wide at each abutment. (10) Bituminous wedge 2 feet wide at each abutment. (08) Bituminous wedge 2 feet wide at each abutment. (06)
4. Railings	7	7	7	Slight map cracking south railing. (10) Slight map cracking south railing. (08) (06)
5. Sidewalks or curbs	8	8	8	Minor chipping in south curb. (10) Minor chipping in south curb. (08) (06)
6. Deck Bottom Surface SIA-58B		8	N	Side by side box beams, deck bottom not visible. Grout forms left in place by contractor. (10) Grout forms left in place by contractor. (08) (06)
7. Deck SIA-58	8	8	8	(10) (08) (06)
8. Drainage				(10) (08) (06)
9. Stringer SIA-59	8	8	8	(10) (08) (06)
10. Paint SIA-59A	N		N	(10) (08) (06)
11. Section Loss				(10) (08) (06)
12. Bearings	8	8	8	(10) (08) (06)
13. Abutments SIA-60	8	8	8	(10) (08) (06)
14. Piers SIA-60	N	N	N	(10) (08) (06)
15. Slope Protection				Concrete riprap at abutments. (10) Concrete riprap at abutments. (08) (06)

Facility	Federal Structure ID	Inspector Name	Agency/Consultant	Inspection Date
DUTTON STREET	395353800372B01	david strockis	hH Engineering, Ltd	09/03/2010

Feature	Latitude	Longitude	Struc Num	Insp Freq	Insp Key
PORTAGE CREEK	42 17' 5.78"	85 34' 41.50"	4686	24	WBMR

Location	Length	Width	Year Built	Year Recon	Mat Dsg	Scour Eval	No.Pins
IN CITY OF KALAMAZOO	34.8	54.46	1993		5	5	8

Legend	
9	New
7-8	Good
5-6	Fair
3-4	Poor
2 or Less	Critical

NBI INSPECTION

	06	08	10	
16. Approach Pavt	7	7	7	HMA wedges at abutments. (10) HMA wedges at abutments. (08) (06)
17. Approach Shldrs Swalks	7	7	7	Sidewalks settled 2 to 3 inches at all quads. HMA wedge at each quadrant. (10) Sidewalks settled 2 to 3 inches at all quads. (08) Sidewalks settled 2 to 3 inches at all quads. (06)
18. Approach Slopes				(10) (08) (06)
19. Utilities				Lines on north & south fascias. 4 supports total, north side. Hanger rods installed on 2 center supports on north side since 2008 inspection. 2 supports total, south side. (10) Lines on north & south fascias. 4 supports total, north side. Hanger rods missing from 2 center supports on north side. 2 supports total, south side. (08) Lines on north and south fascias. (06)
20. Channel SIA-61	8	8	8	No debris in channel. Channel depth SW quad 2.30ft. bottom of sidewalk to water surface SW quad 3.59ft. (10) No debris in channel '08. (08) (06)
21. Drainage Culverts				(10) (08) (06)

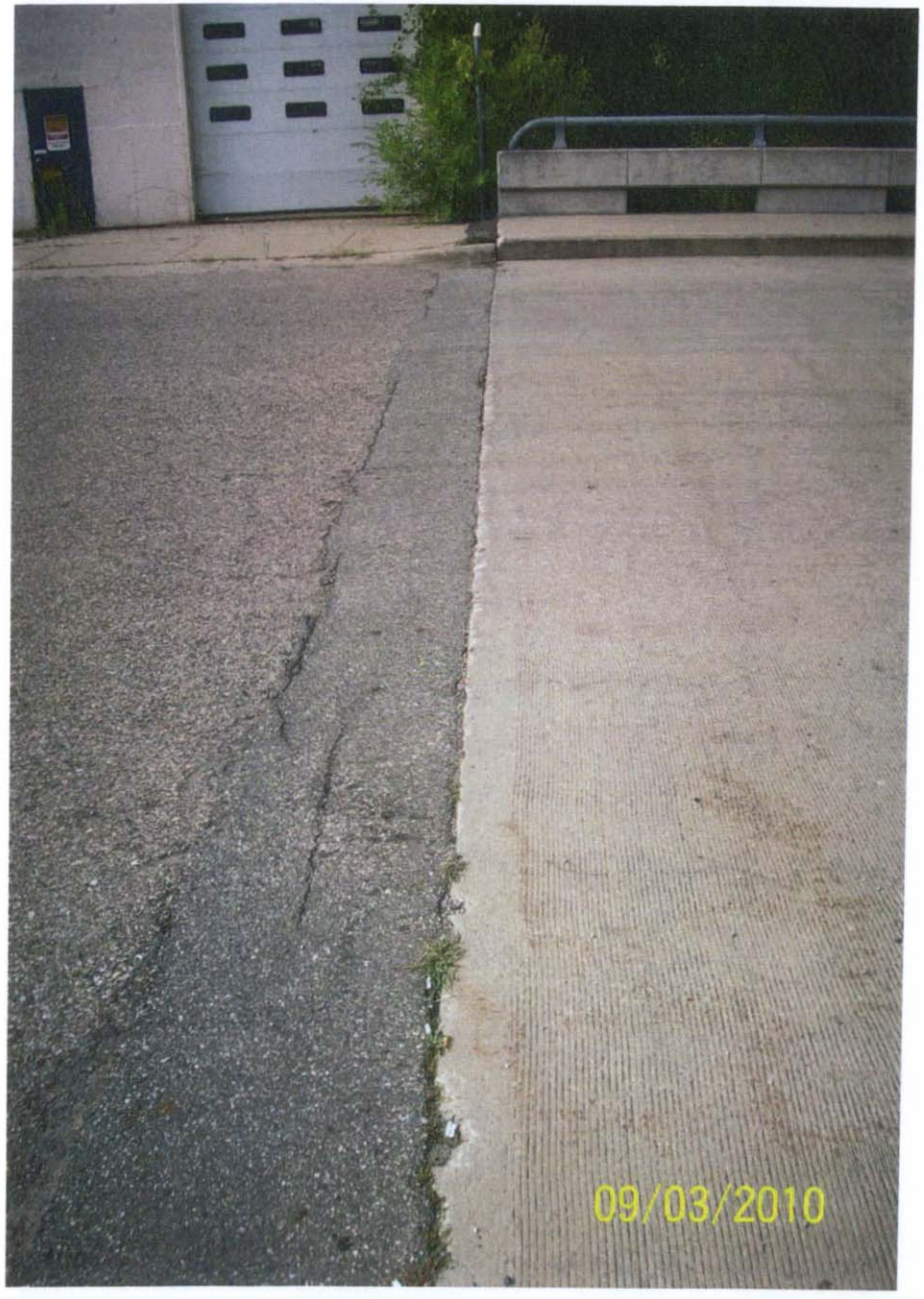
Guard Rail	
36A	1
36B	0
36C	0
36D	0

Crit Feat Insp(SIA-92)	Freq	Date
92A Frac Crit		
92B Und. Watr	-1	
92C Spl.Insp		
Fatg Sntv.Insp	0	-

71 Watr Adeq	5
72 Appr Align	3
Temp Supp	
Hi Ld Hit (M)	
Special Insp Equip.	

General Notes

Utility Support - South side, west hanger bolts missing.


09/03/2010

09/03/2010

Form 1717A-01/2002

Michigan Department of Transportation
Structure Inventory and Appraisal

7

MDOT Bridge ID	Control Section
3935385 0031800B01	3935385 0..

NBI Bridge ID	Struct Num	Region	TSC	County	City Resp	City Location	7- Facility Carried
395353800318B01	4685	05	5B	39	3538	3538	LAKE STREET

6- Feature Intersected	9- Location	Latitude	Longitude	Owner	Maint Resp
PORTAGE CREEK	IN KALAMAZOO	42 16' 47.97"	85 34' 39.19"	4	4

Bridge History, Type, Materials

27 - Year Built	1986	
106 - Year Reconstructed		
202 - Year Painted		
203 - Year Overlay		
43 - Main Span Bridge Type	5	05
44 - Appr Span Bridge Type		
77 - Steel Type	2	
78 - Paint Type	2	
79 - Rail Type	3	
80 - Post Type	2	
107 - Deck Type	1	
108A - Wearing Surface	6	
108B - Membrane	2	
108C - Deck Protection	1	

Structure Dimensions

34 - Skew	0
35 - Struct Flared	0
45 - Num Main Spans	1
46 - Num Apprs Spans	0
48 - Max Span Length	26.9
49 - Structure Length	29.9
50A - Width Left Curb/SW	5.91
50B - Width Right Curb/SW	5.91
33 - Median	0
51 - Width Curb to Curb	30.0
52 - Width Out to Out	44.62
112 - NBIS Length	Y

Inspection Data

90 - Inspection Date	09/03/2010	
91 - Inspection Freq	24	
92A - Frac Crit Req/Freq	N	
93A - Frac Crit Insp Date		
92B - Und Water Req/Freq	N	
93B - Und Water Insp Date		
92C - Oth Spec Insp Req/F..	N	
93C - Oth Spec Insp Date		
176A - Und Water Insp Met..	1	
58 - Deck Rating	7	
58A - Deck Surface Rtg	5	
59 - Superstructure Rating	8	
59A - Paint Rating		
60 - Substructure Rating	8	
61 - Channel Rating	8	
62 - Culvert Rating	N	

Navigation Data

38 - Navigation Control	0
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brdg Vert Clear	

Route Carried By Structure(ON Record)

5A - Record Type	1	
5B - Route Signing	5	
5C - Level of Service	0	
5D - Route Number	02005	
5E - Direction Suffix	0	
10L - Best 3m Unclr-Lt	0	0
10R- Best 3m Unclr- Rt	99	99
PR Number		
Control Section	0	
11- Mile Point	0.0	
12- Base Highway Network	0	
13- LRS Route-Subroute	000..	-
19- Detour Length	2	
20- Toll Facility	3	
26- Functional Class	17	
28A - Lanes On	2	
29 - ADT	2895	
30 - Year of ADT	1998	
32- Appr Roadway Width	24.0	
32A/B - Ap Pvt Type/Width	0	24.0
42A- Service Type On	1	
47L - Left Horizontal Clear	0.0	
47R- Right Horizontal Clear	29.9	
53- Min Vert Clr Ov Deck	99	99
100- STRAHNET	0	
102 - Traffic Direct	2	
109 - Truck %	5	
110 - Truck Network	0	
114 - Future ADT	3764	
115 - Year Future ADT	2018	
Freeway	0	

Structure Appraisal

36A- Bridge Railing	1
36B-Rail Transition	0
36C- Approach Rail	0
36D- Rail Termination	0
67- Structure Evaluation	
68- Deck Geometry	
69- Underclearance	
71- Waterway Adequacy	8
72- Approach Alignment	9
103- Temporary Structure	
113- Scour Criticality	8

Miscellaneous

37- Historical Significance	5
98A- Border Bridge State	
98B- Border Bridge %	
101- Parallel Structure	N
EPA ID	
Stay in Place Forms	

STATE OF MICHIGAN
DAVID L. STROCKIS
ENGINEER
No. 50013
LICENSED PROFESSIONAL ENGINEER

Route Under Structure(UNDER Record)

5A - Record Type		
5B - Route Signing		
5C - Level of Service		
5D - Route Number		
5E - Direction Suffix		
10L - Best 3m Unclr-Lt		
10R- Best 3m Unclr- Rt		
PR Number		
Control Section		
11- Mile Point		
12- Base Highway Network		
13- LRS Route-Subroute		
19- Detour Length		
20- Toll Facility		
26- Functional Class		
28A - Lanes Under		
29 - ADT		
30 - Year of ADT		
42B- Service Type Under	5	
47L - Left Horizontal Clear		
47R- Right Horizontal Clear		
54A - Left Feature	N	
54B- Left Underclearance	99	99
54C- RIght Feature	N	
54D- Right Underclearance	99	99
Under Clearance Year		
55A - Reference Feature	N	
55B- Right Horiz Clearance	327.8	
56- Left Horiz Clearance	0	
100- STRAHNET		
102 - Traffic Direct		
109 - Truck %		
110 - Truck Network		
114 - Future ADT		
115 - Year Future ADT		
Freeway		

Proposed Improvments

75 - Type of Work	
76- Length of Improvement	
94- Bridge Cost	
95- Roadway Cost	
96- Total Cost	
97- Year of Cost Estimate	

Load Rating and Posting

31- Design Load	6	
41- Open, Posted, Closed	A	
63- Oper Rtg Method	1	
64F- Fed Rtg Method	99	
64M- Mich Oper Rtg	9	223
65- Inv Rtg Method	1	
66- Inventory Load	70.4	
70- Posting	5	
141- Posted Loading		
195- Analysis ID		
193- Overload Class		

1/13/10

Bridge Safety Inspection Report

Facility	Federal Structure ID	Inspector Name	Agency/Consultant	Inspection Date
LAKE STREET	395353800318B01	david strockis	hH Engineering, Ltd	09/03/2010

Feature	Latitude	Longitude	Struc Num	Insp Freq	Insp Key
PORTAGE CREEK	42 16' 47.97"	85 34' 39.19"	4685	24	HZVR

Location	Length	Width	Year Built	Year Recon	Mat Dsg	Scour Eval	No.Pins
IN KALAMAZOO	29.9	44.62	1986		5	05 8	

Legend	
9	New
7-8	Good
5-6	Fair
3-4	Poor
2 or Less	Critical

NBI INSPECTION

	06	08	10	
1. Surface SIA-58A	5	5	5	Widespread cracking in bituminous surface. Longitudinal pothole entire length of bridge at road centerline. Pothole at NW corner at abutment joint. (10) Widespread cracking in bituminous surface. (08) Widespread cracking in bituminous surface. (06)
2. Expansion Jts	6	6	6	Some settlement at east abutment. (10) (08) Some settlement at east abutment. (06)
3. Other Joints				(10) Wider HMA cracks at east abutment (4" wide at NW quad). (08) (06)
4. Railings	8	8	8	Concrete parapet with 1 tube, good condition. (10) Concrete parapet with 1 tube, good condition. (08) (06)
5. Sidewalks or curbs	8	8	8	Minor scaling of surface. (10) Minor scaling of surface. (08) Minor scaling of surface. (06)
6. Deck Bottom Surface SIA-58B			N	Side by side box beams, deck bottom not visible. (10) (08) (06)
7. Deck SIA-58	7	7	7	HMA over side by side box beams. (10) HMA over side by side box beams. (08) (06)
8. Drainage				(10) (08) (06)
9. Stringer SIA-59	8	8	8	(10) (08) (06)
10. Paint SIA-59A				(10) (08) (06)
11. Section Loss				(10) (08) (06)
12. Bearings	8	8	8	(10) (08) (06)
13. Abutments SIA-60	8	8	8	Drainage outlets thru east and west abutment walls. No cracks or spalls visible. (10) No cracks or spalls visible. (08) No cracks or spalls visible. (06)
14. Piers SIA-60	N	N	N	(10) (08) (06)
15. Slope Protection				(10) (08) (06)

Facility	Federal Structure ID	Inspector Name	Agency/Consultant	Inspection Date
LAKE STREET	395353800318B01	david strockis	hH Engineering, Ltd	09/03/2010

Feature	Latitude	Longitude	Struc Num	Insp Freq	Insp Key
PORTAGE CREEK	42 16' 47.97"	85 34' 39.19"	4685	24	HZVR

Location	Length	Width	Year Built	Year Recon	Br Type	Scour Eval	No.Pins
IN KALAMAZOO	29.9	44.62	1986		5	5	8

Legend	
9	New
7-8	Good
5-6	Fair
3-4	Poor
2 or Less	Critical

NBI INSPECTION

	06	08	10	
16. Approach Pavt	7	7	7	Cracking in bit pavement east of bridge. (10) (08) Cracking in bit pavement east of bridge. New bituminous west of bridge. (06)
17. Approach Shldrs Swalks	7		7	(10) (08) (06)
18. Approach Slopes				(10) (08) (06)
19. Utilities				Water line on north fascia. (10) Water line on north fascia. Some debris trapped by utility supports (above normal water surface) due to high flow caused by heavy rain two weeks prior to '08 inspection. (08) Water line on north fascia. (06)
20. Channel	8	8	8	Debris piled at upstream side of structure (30' upstream). Bottom of beam to water surface NE Channel depth SW quad 2.4ft. (10) Debris piled at upstream side of structure (30' upstream). Bottom of beam to water surface - 2.4 feet. Water depth at west abutment - 3.5 feet. West half of channel has a majority of the flow due to debris upstream forcing flow that direction. (08) (06)
21. Drainage Culverts				(10) (08) (06)

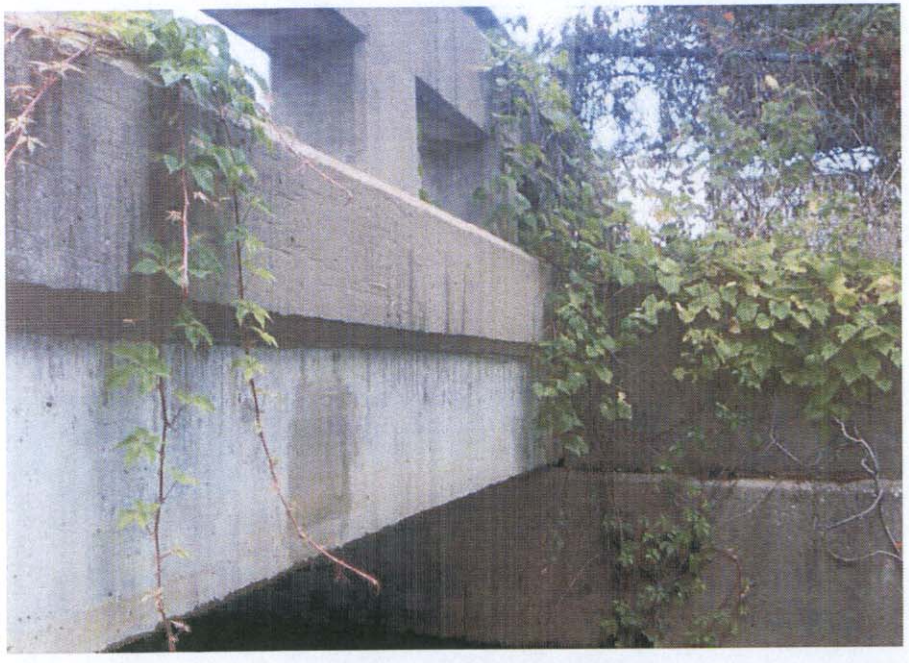
Guard Rail	
36A	1
36B	0
36C	0
36D	0

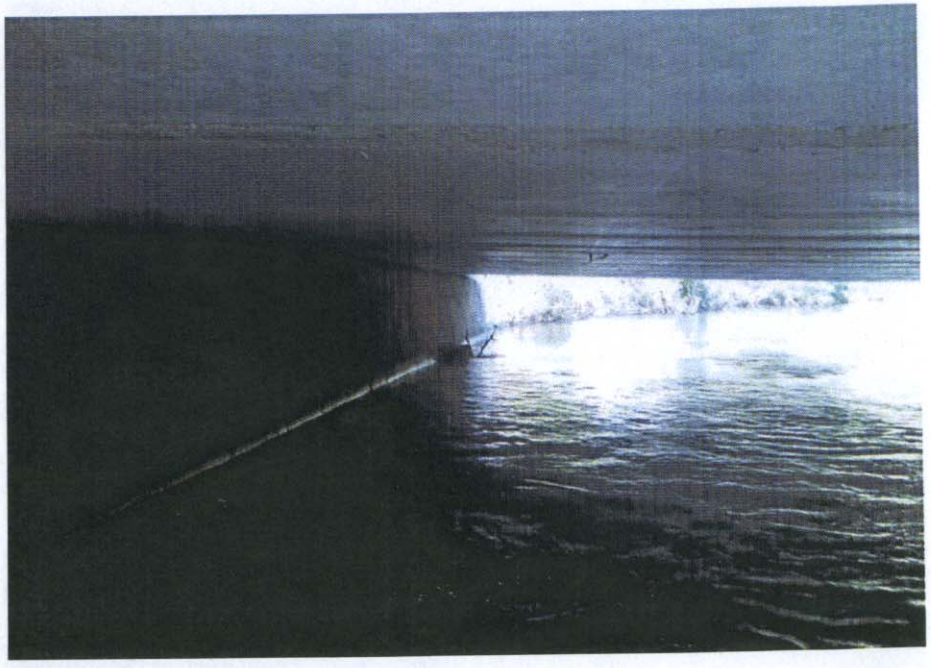
Crit Feat Insp(SIA-92)	Freq	Date
92A Frac Crit		
92B Und. Watr	-1	
92C Spl.Insp		
Fatg Sntv.Insp	-	-

71 Watr Adeq	8
72 Appr Align	9
Temp Supp	
Hi Ld Hit (M)	
Special Insp Equip.	

General Notes

Water line on north side - brackets need painting. Overgrown vegetation SE quad.





Michigan Department of Transportation
Structure Inventory and Appraisal

9

MDOT Bridge ID	Control Section
3935384 0010600B01	3935384 0..

NBI Bridge ID	Struct Num	Region	TSC	County	City Resp	City Location	7- Facility Carried
394353800106B01	4671	05	5B	39	3538	3538	E VINE

6- Feature Intersected	9- Location	Latitude	Longitude	Owner	Maint Resp
PORTAGE CREEK	IN KALAMAZOO	42 17' 2.31"	85 34' 44.19"	4	4

Bridge History, Type, Materials

27 - Year Built	1988	
106 - Year Reconstructed		
202 - Year Painted		
203 - Year Overlay		
43 - Main Span Bridge Type	5	05
44 - Appr Span Bridge Type		
77 - Steel Type	0	
78 - Paint Type	0	
79 - Rail Type	6	
80 - Post Type	0	
107 - Deck Type	1	
108A - Wearing Surface	6	
108B - Membrane	0	
108C - Deck Protection	1	

Structure Dimensions

34 - Skew	0
35 - Struct Flared	0
45 - Num Main Spans	1
46 - Num Apprs Spans	0
48 - Max Span Length	32.8
49 - Structure Length	32.8
50A - Width Left Curb/SW	9.51
50B - Width Right Curb/SW	10.83
33 - Median	0
51 - Width Curb to Curb	44.0
52 - Width Out to Out	65.94
112 - NBIS Length	Y

Inspection Data

90 - Inspection Date	09/03/2010	
91 - Inspection Freq	24	
92A - Frac Crit Req/Freq	N	
93A - Frac Crit Insp Date		
92B - Und Water Req/Freq	N	
93B - Und Water Insp Date		
92C - Oth Spec Insp Req/F..	N	
93C - Oth Spec Insp Date		
176A - Und Water Insp Met..	1	
58 - Deck Rating	7	
58A - Deck Surface Rtg	7	
59 - Superstructure Rating	8	
59A - Paint Rating	N	
60 - Substructure Rating	8	
61 - Channel Rating		
62 - Culvert Rating	N	

Navigation Data

38 - Navigation Control	0	
39 - Vertical Clearance	0	
40 - Horizontal Clearance	0	
111 - Pier Protection		
116 - Lift Brdg Vert Clear		

Route Carried By Structure(ON Record)

5A - Record Type	1	
5B - Route Signing	5	
5C - Level of Service	0	
5D - Route Number	02005	
5E - Direction Suffix	0	
10L - Best 3m Unclr-Lt	0	0
10R- Best 3m Unclr- Rt	99	99
PR Number		
Control Section	0	
11- Mile Point	0.0	
12- Base Highway Network	0	
13- LRS Route-Subroute	000..	-
19- Detour Length	4	
20- Toll Facility	3	
26- Functional Class	16	
28A - Lanes On	2	
29 - ADT	5600	
30 - Year of ADT	1998	
32- Appr Roadway Width	44.0	
32A/B - Ap Pvt Type/Width	-	44.0
42A- Service Type On	5	
47L - Left Horizontal Clear	0.0	
47R- Right Horizontal Clear	35.8	
53- Min Vert Clr Ov Deck	99	99
100- STRAHNET	0	
102 - Traffic Direct	2	
109 - Truck %	7	
110 - Truck Network	0	
114 - Future ADT	7300	
115 - Year Future ADT	2018	
Freeway	0	

Structure Appraisal

36A- Bridge Railing	1
36B-Rail Transition	0
36C- Approach Rail	0
36D- Rail Termination	0
67- Structure Evaluation	
68- Deck Geometry	
69- Underclearance	
71- Waterway Adequacy	6
72- Approach Alignment	8
103- Temporary Structure	
113- Scour Criticality	8

Miscellaneous

37- Historical Significance	5
98A- Border Bridge State	
98B- Border Bridge %	
101- Parallel Structure	N
FA ID	
Stay in Place Forms	

STATE OF MICHIGAN
DAVID L. STROCKIS
ENGINEER
No. 50013
LICENSED PROFESSIONAL ENGINEER

12/13/10

Route Under Structure(UNDER Record)

5A - Record Type		
5B - Route Signing		
5C - Level of Service		
5D - Route Number		
5E - Direction Suffix		
10L - Best 3m Unclr-Lt		
10R- Best 3m Unclr- Rt		
PR Number		
Control Section		
11- Mile Point		
12- Base Highway Network		
13- LRS Route-Subroute		
19- Detour Length		
20- Toll Facility		
26- Functional Class		
28A - Lanes Under		
29 - ADT		
30 - Year of ADT		
42B- Service Type Under	5	
47L - Left Horizontal Clear		
47R- Right Horizontal Clear		
54A - Left Feature	N	
54B- Left Underclearance	99	99
54C- Right Feature	N	
54D- Right Underclearance	99	99
Under Clearance Year		
55A - Reference Feature	N	
55B- Right Horiz Clearance	327.8	
56- Left Horiz Clearance	0	
100- STRAHNET		
102 - Traffic Direct		
109 - Truck %		
110 - Truck Network		
114 - Future ADT		
115 - Year Future ADT		
Freeway		

Proposed Improvments

75 - Type of Work	
76- Length of Improvement	
94- Bridge Cost	
95- Roadway Cost	
96- Total Cost	
97- Year of Cost Estimate	

Load Rating and Posting

31- Design Load	6	
41- Open, Posted, Closed	A	
63- Oper Rtg Method	1	
64F- Fed Rtg Method	99	
64M- Mich Oper Rtg	9	191
65- Inv Rtg Method	1	
66- Inventory Load	62.5	
70- Posting	5	
141- Posted Loading		
195- Analysis ID		
193- Overload Class		

Bridge Safety Inspection Report

3935384 0010600B01

Facility	Federal Structure ID	Inspector Name	Agency/Consultant	Inspection Date
E VINE	394353800106B01	david strockis	hH Engineering, Ltd	09/03/2010

ature	Latitude	Longitude	Struc Num	Insp Freq	Insp Key
PORTAGE CREEK	42 17' 2.31"	85 34' 44.19"	4671	24	SKSB

Location	Length	Width	Year Built	Year Recon	Mat Dsg	Scour Eval	No.Pins
IN KALAMAZOO	32.8	65.94	1988		5	05 8	

Legend	
9	New
7-8	Good
5-6	Fair
3-4	Poor
2 or Less	Critical

NBI INSPECTION

	06	08	10	
1. Surface SIA-58A	7	7	7	Transverse cracking SE & SW Quads. Longitudinal cracks, north side. (10) Transverse cracking SE & SW Quads. Longitudinal cracks, north side. (08) (06)
2. Expansion Jts				(10) (08) (06)
3. Other Joints	7	6	6	Ragged joints. Cracks over east abutment. (10) Ragged joints. Cracks over eaast abutment, spread diagonally to southeast. (08) Cracks along east abutment line. (06)
4. Railings	7	7	7	Concrete parapet with one tube. Map cracking continuing to develop. Center of parapet on north side has rebar and railing anchors visible (likely due to impact that popped concrete off oustide fasica of rail). (10) Concrete parapet with one tube. Map cracking continuing to develop. (08) (06)
5. Sidewalks or curbs	7	7	7	Map cracking on south walk. Spall at NE joint. 1/8" crack in approach sidewalk (SW Quad) (10) Map cracking on south walk. Spall at NE joint. (08) (06)
6. Deck Bottom Surface A-58B		7	N	Side by side box beams, deck bottom not visible. (10) Some salt leaching at 3rd joint (curb line) at both sides. (08) (06)
7. Deck SIA-58	7	7	7	(10) (08) (06)
8. Drainage				(10) (08) (06)
9. Stringer SIA-59	8	8	8	Some salt leaching at 3rd joint (curb line) at both sides. (10) (08) (06)
10. Paint SIA-59A	9	N	N	(10) (08) (06)
11. Section Loss				(10) (08) (06)
12. Bearings	8	8	8	(10) (08) (06)
13. Abutments SIA-60	8	8	8	Trees growing out of NE & NW corners at backwall. Small spall in backwall at fascia beam (SW quad). Drainage outlet thru abut at SE quad. (10) Trees growing out of NE & NW corners at backwall. Small spall in backwall at fascia beam (SW quad). (08) (06)
14. Piers SIA-60	N	N	N	(10) (08) (06)

Facility	Federal Structure ID	Inspector Name	Agency/Consultant	Inspection Date
E VINE	394353800106B01	david strockis	hH Engineering, Ltd	09/03/2010

Feature	Latitude	Longitude	Struc Num	Insp Freq	Insp Key
PORTAGE CREEK	42 17' 2.31"	85 34' 44.19"	4671	24	SKSB

Location	Length	Width	Year Built	Year Recon	Mat Dsg	Scour Eval	No.Pins
IN KALAMAZOO	32.8	65.94	1988		5	5	8

Legend	
9	New
7-8	Good
5-6	Fair
3-4	Poor
2 or Less	Critical

NBI INSPECTION

	06	08	10	
15. Slope Protection				(10) (08) (06)
16. Approach Pavt				(10) (08) (06)
17. Approach Shldrs Swalks	7	7	7	Newer approach sidewalk at NW corner. (10) (08) New approach sidewalk at NW corner. (06)
18. Approach Slopes				(10) (08) (06)
19. Utilities				Water main under north fascia. (10) Water main under north fascia. (08) (06)
20. Channel SIA-61	8	8	8	Channel depth SW quad 2.3ft. Bottom of deck to water surface SW quad 3.59ft. (10) (08) (06)
21. Drainage Culverts				(10) (08) (06)

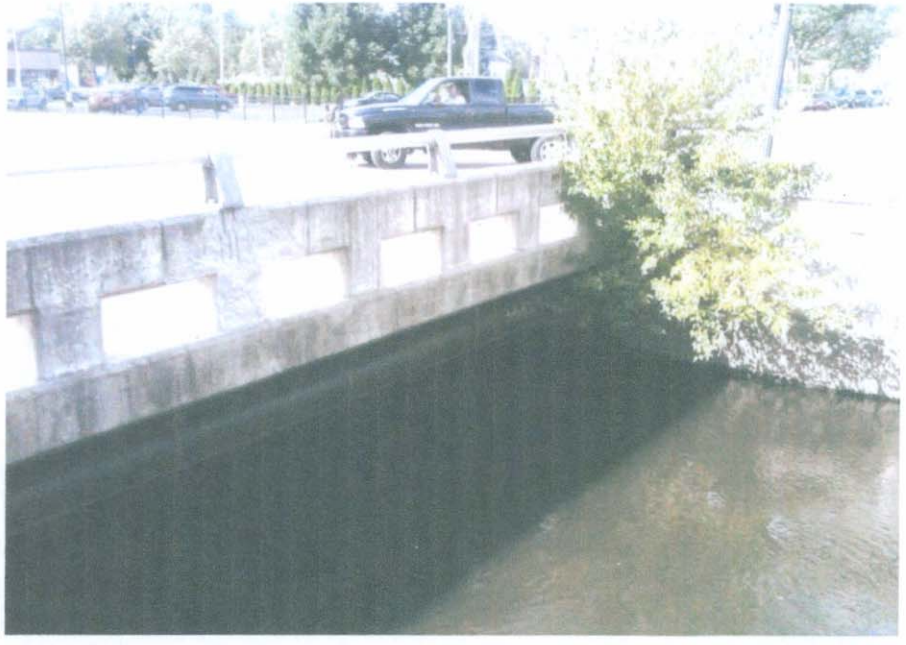
Guard Rail	
36A	1
36B	0
36C	0
36D	0

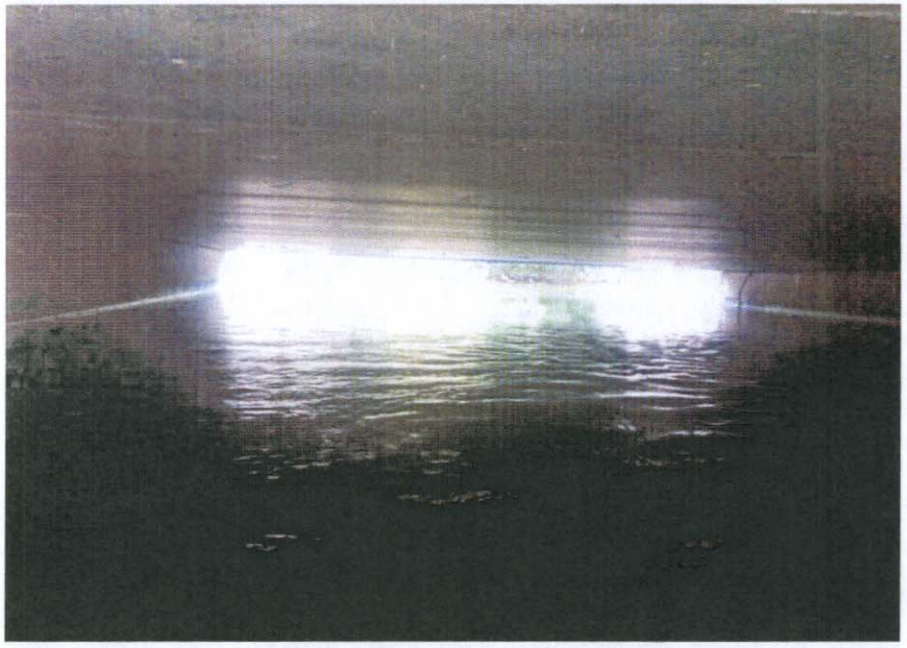
Crit Feat Insp(SIA-92)	Freq	Date
92A Frac Crit		
92B Und. Watr	-1	
92C Spl.Insp		
Fatg Sntv.Insp	0	-

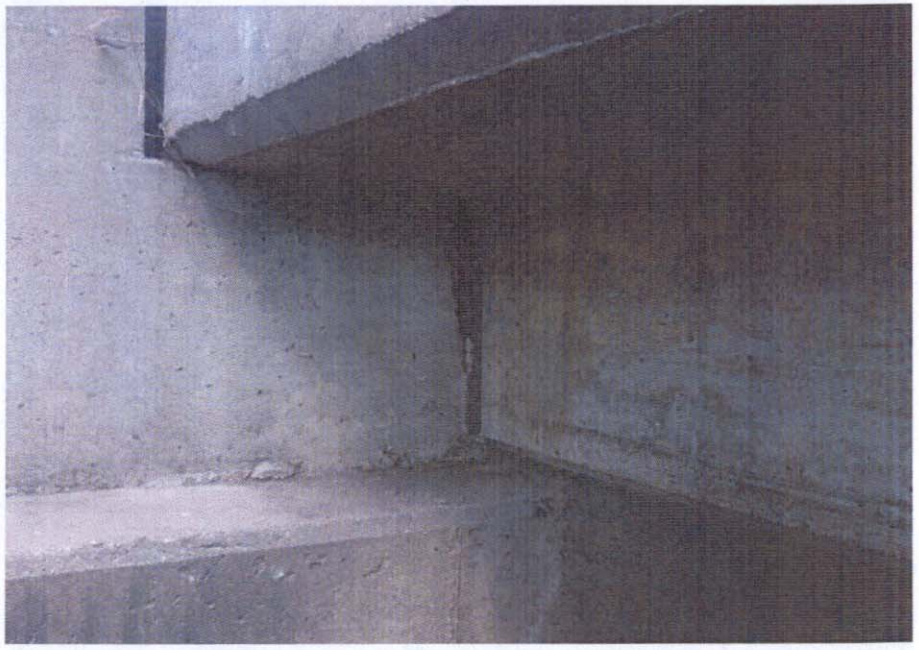
71 Watr Adeq	6
72 Appr Align	8
Temp Supp	
Hi Ld Hit (M)	
Special Insp Equip.	

General Notes

Patch spalled area of north railing to prevent deterioration of steel reinforcement.
Water Main on N. Fascia (Brackets Need Painting).
Chain link fence needed at SW/NE Quads.







DALEIDEN'S

Form 1717A-01/2002

11

Michigan Department of Transportation
Structure Inventory and Appraisal

MDOT Bridge ID: 3935385 0038900B01

Control Section: 3935385 0..

NBI Bridge ID	Struct Num	Region	TSC	County	City Resp	City Location	7- Facility Carried
395353800389B01	4687	05	5B	39	3538	3538	WALNUT STREET

6- Feature Intersected	9- Location	Latitude	Longitude	Owner	Maint Resp
PORTAGE CREEK	IN CITY OF KALAMAZOO	42 17' 10.12"	85 34' 37.50"	4	4

Bridge History, Type, Materials

27 - Year Built	1985	
106 - Year Reconstructed		
202 - Year Painted		
203 - Year Overlay		
43 - Main Span Bridge Type	6	06
44 - Appr Span Bridge Type		
77 - Steel Type	0	
78 - Paint Type	0	
79 - Rail Type	6	
80 - Post Type		
107 - Deck Type	1	
108A - Wearing Surface	6	
108B - Membrane	0	
108C - Deck Protection	1	

Structure Dimensions

34 - Skew	60	
35 - Struct Flared	0	
45 - Num Main Spans	1	
46 - Num Apprs Spans	0	
48 - Max Span Length	54.8	
49 - Structure Length	54.8	
50A - Width Left Curb/SW	5.91	
50B - Width Right Curb/SW	5.91	
33 - Median	0	
51 - Width Curb to Curb	48.0	
52 - Width Out to Out	62.34	
112 - NBIS Length	Y	

Inspection Data

90 - Inspection Date	09/03/2010	
91 - Inspection Freq	24	
92A - Frac Crit Req/Freq	N	
93A - Frac Crit Insp Date		
92B - Und Water Req/Freq	N	
93B - Und Water Insp Date		
92C - Oth Spec Insp Req/F..	N	
93C - Oth Spec Insp Date		
176A - Und Water Insp Met..	1	
58 - Deck Rating	7	
58A - Deck Surface Rtg	5	
59 - Superstructure Rating	7	
59A - Paint Rating	N	
60 - Substructure Rating	8	
61 - Channel Rating	7	
62 - Culvert Rating	N	

Navigation Data

38 - Navigation Control	0	
39 - Vertical Clearance	0	
40 - Horizontal Clearance	0	
111 - Pier Protection		
116 - Lift Brdg Vert Clear		

Route Carried By Structure(ON Record)

5A - Record Type	1	
5B - Route Signing	5	
5C - Level of Service	0	
5D - Route Number	00000	
5E - Direction Suffix	0	
10L - Best 3m Unclr-Lt	0	0
10R- Best 3m Unclr- Rt	99	99
PR Number		
Control Section	0	
11- Mile Point	0.0	
12- Base Highway Network	0	
13- LRS Route-Subroute	000..	-
19- Detour Length	2	
20- Toll Facility	3	
26- Functional Class	19	
28A - Lanes On	2	
29 - ADT	3100	
30 - Year of ADT	1998	
32- Appr Roadway Width	48.0	
32A/B - Ap Pvt Type/Width	0	48.0
42A- Service Type On	5	
47L - Left Horizontal Clear	0.0	
47R- Right Horizontal Clear	47.9	
53- Min Vert Clr Ov Deck	99	99
100- STRAHNET	0	
102 - Traffic Direct	2	
109 - Truck %	5	
110 - Truck Network	0	
114 - Future ADT	4500	
115 - Year Future ADT	2010	
Freeway	0	

Structure Appraisal

36A- Bridge Railing	1	
36B-Rail Transition	0	
36C- Approach Rail	0	
36D- Rail Termination	0	
67- Structure Evaluation		
68- Deck Geometry		
69- Underclearance		
71- Waterway Adequacy	4	
72- Approach Alignment	9	
103- Temporary Structure		
113- Scour Criticality	8	

Miscellaneous

37- Historical Significance	5	
98A- Border Bridge State		
98B- Border Bridge %		
101- Parallel Structure	N	
EPA ID		
Stay In Place Forms		

STATE OF MICHIGAN
DAVID L. STROCKIS
ENGINEER
No. 50013
LICENSED PROFESSIONAL ENGINEER

12/13/10

Route Under Structure(UNDER Record)

5A - Record Type		
5B - Route Signing		
5C - Level of Service		
5D - Route Number		
5E - Direction Suffix		
10L - Best 3m Unclr-Lt		
10R- Best 3m Unclr- Rt		
PR Number		
Control Section		
11- Mile Point		
12- Base Highway Network		
13- LRS Route-Subroute		
19- Detour Length		
20- Toll Facility		
26- Functional Class		
28A - Lanes Under		
29 - ADT		
30 - Year of ADT		
42B- Service Type Under	5	
47L - Left Horizontal Clear		
47R- Right Horizontal Clear		
54A - Left Feature	N	
54B- Left Underclearance	99	99
54C- RIght Feature	N	
54D- Right Underclearance	99	99
Under Clearance Year		
55A - Reference Feature	N	
55B- Right Horiz Clearance	327.8	
56- Left Horiz Clearance	0	
100- STRAHNET		
102 - Traffic Direct		
109 - Truck %		
110 - Truck Network		
114 - Future ADT		
115 - Year Future ADT		
Freeway		

Proposed Improvments

75 - Type of Work		
76- Length of Improvement		
94- Bridge Cost		
95- Roadway Cost		
96- Total Cost		
97- Year of Cost Estimate		

Load Rating and Posting

31- Design Load	6	
41- Open, Posted, Closed	A	
63- Oper Rtg Method	1	
64F- Fed Rtg Method	99	
64M- Mich Oper Rtg	9	183
65- Inv Rtg Method	1	
66- Inventory Load	71.9	
70- Posting	5	
141- Posted Loading		
195- Analysis ID		
193- Overload Class		

Bridge Safety Inspection Report

3935385 0038900B01

Facility	Federal Structure ID	Inspector Name	Agency/Consultant	Inspection Date
WALNUT STREET	395353800389B01	david strockis	hH Engineering, Ltd	09/03/2010

Feature	Latitude	Longitude	Struc Num	Insp Freq	Insp Key
PORTAGE CREEK	42 17' 10.12"	85 34' 37.50"	4687	24	ORCY

Location	Length	Width	Year Built	Year Recon	Br Type	Scour Eval	No.Pins
IN CITY OF KALAMAZOO	54.8	62.34	1985		6 06	8	

Legend	
9	New
7-8	Good
5-6	Fair
3-4	Poor
2 or Less	Critical

NBI INSPECTION

	06	08	10	
1. Surface SIA-58A	5	5	5	Cracks and potholes on surface. Most severe on north side. Some potholes have been patched with HMA. (10) Cracks and potholes on surface. Most severe on north side. (08) Cracks and potholes on surface. Most severe on north side. (06)
2. Expansion Jts				(10) (08) (06)
3. Other Joints	6	6	6	Crack along west abutment joint, flares to north. Ragged joints at both abutments. (10) Ragged joints at both abutments. (08) (06)
4. Railings	8	8	8	(10) (08) (06)
5. Sidewalks or curbs	7	6	6	Longitudinal & map cracking in sidewalks, more severe on NW. Spalling concrete NW quad. (10) Longitudinal & map cracking in sidewalks, more severe on NW. (08) Map cracking in sidewalks, SW and SW. More severe on NW. (06)
6. Deck Bottom Surface SIA-58B			N	Side by side box beams, deck bottom not visible. Leaching at 2nd joint line between beams, north and south fascias. (10) (08) (06)
7. Deck SIA-58	7	7	7	(10) (08) (06)
8. Drainage				(10) (08) (06)
9. Stringer SIA-59	7	7	7	Fascia beam showing map cracking. (10) Fascia beam showing map cracking. (08) (06)
10. Paint SIA-59A	N	N	N	(10) (08) (06)
11. Section Loss				(10) (08) (06)
12. Bearings	8	8	8	(10) (08) (06)
13. Abutments SIA-60	8	8	8	(10) (08) (06)
14. Piers SIA-60	N	N	N	(10) (08) (06)

Facility	Federal Structure ID	Inspector Name	Agency/Consultant	Inspection Date
WALNUT STREET	395353800389B01	david strockis	hH Engineering, Ltd	09/03/2010

Feature	Latitude	Longitude	Struc Num	Insp Freq	Insp Key
PORTAGE CREEK	42 17' 10.12"	85 34' 37.50"	4687	24	ORCY

Location	Length	Width	Year Built	Year Recon	Mat Dsg	Scour Eval	No.Pins
IN CITY OF KALAMAZOO	54.8	62.34	1985		6	6	8

Legend	
9	New
7-8	Good
5-6	Fair
3-4	Poor
2 or Less	Critical

NBI INSPECTION

	06	08	10	
15. Slope Protection				(10) (08) (06)
16. Approach Pavt	8	7	7	HMA approach (road resurfaced between 2000 & 2002 inspections). (10) (08) (06)
17. Approach Shldrs Swalks	8	7	7	Longitudinal crack in N&S sidewalk with map cracking developing. Settlement on NW & NE sidewalks approx 1". Diagonal crack in SE quad sidewalk. (10) Settlement on NW & NE sidewalks approx 1". Diagonal crack in SE quad sidewalk. (08) (06)
18. Approach Slopes				(10) (08) (06)
19. Utilities				Water pipe on painted suports below pipe, north fascia. Gas pipe on south fascia. (10) Water pipe on painted suports below pipe, north fascia. Gas pipe on south fascia. (08) Water pipe on north fascia. Gas pipe on south fascia. (06)
20. Channel SIA-61	7	7	7	Sand bar at center of downstream (north) channel and along west abutment (north side of bridge) not as prevalent as in past inspections. Channel depth NE corner 1.80ft. Bottom of deck to water surface NE corner 3.80ft. (10) Large sand bar built up in center of downstream (north) channel. Also along west abutment (north side of bridge). (08) (06)
21. Drainage Culverts				(10) (08) (06)

Guard Rail	
36A	1
36B	0
36C	0
36D	0

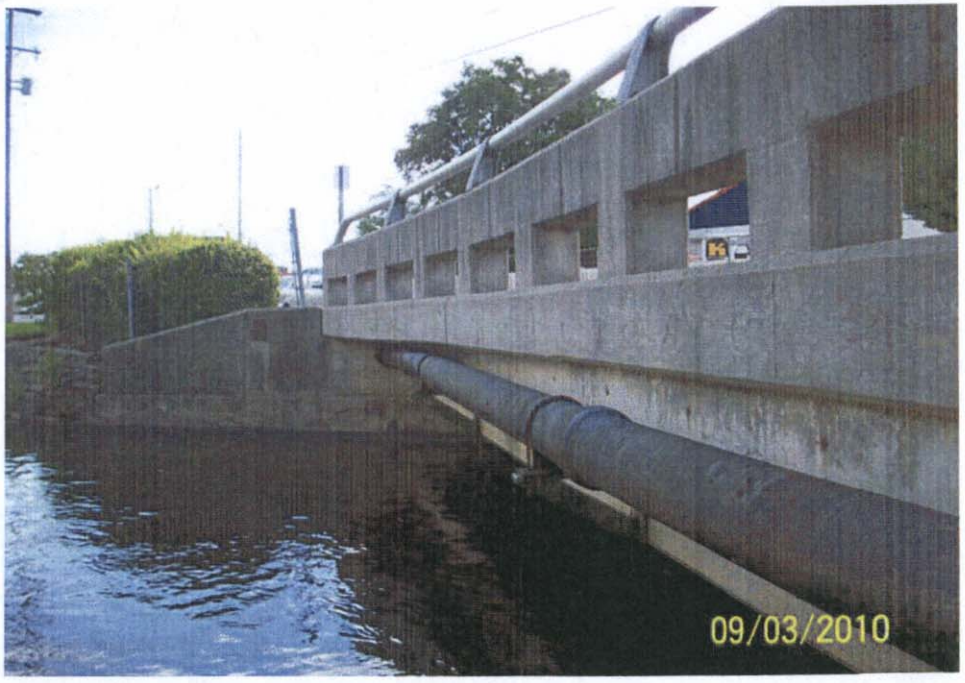
Crit Feat Insp(SIA-92)	Freq	Date
92A Frac Crit		
92B Und. Watr	-1	
92C Spl.Insp		
Fatg Sntv.Insp	0	-

71 Watr Adeq	4
72 Appr Align	9
Temp Supp	
Hi Ld Hit (M)	
Special Insp Equip.	

General Notes

Resurfacing needed.

09/03/2010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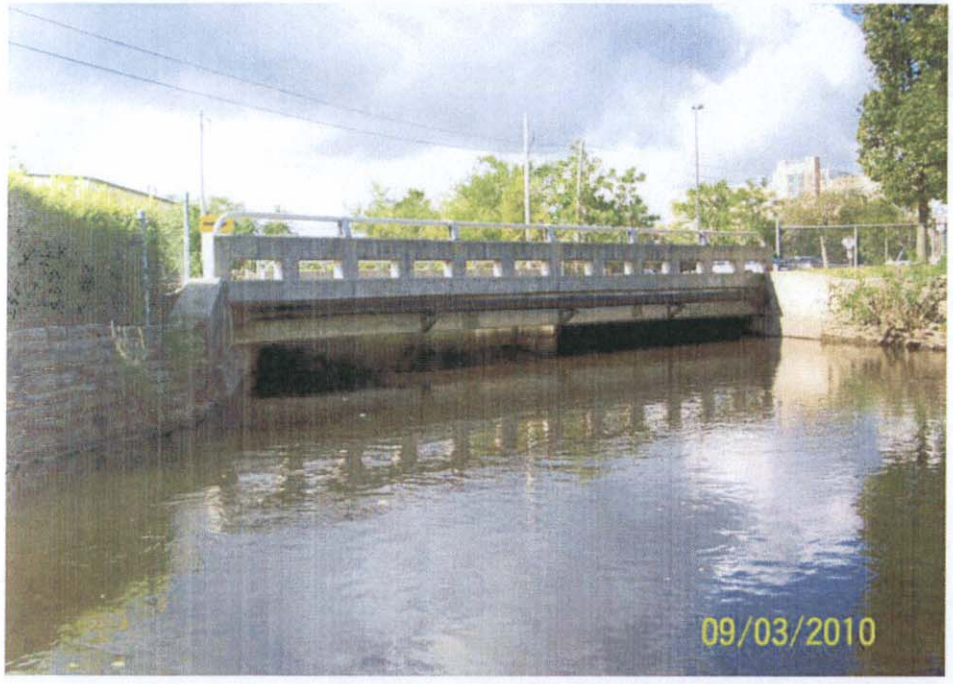
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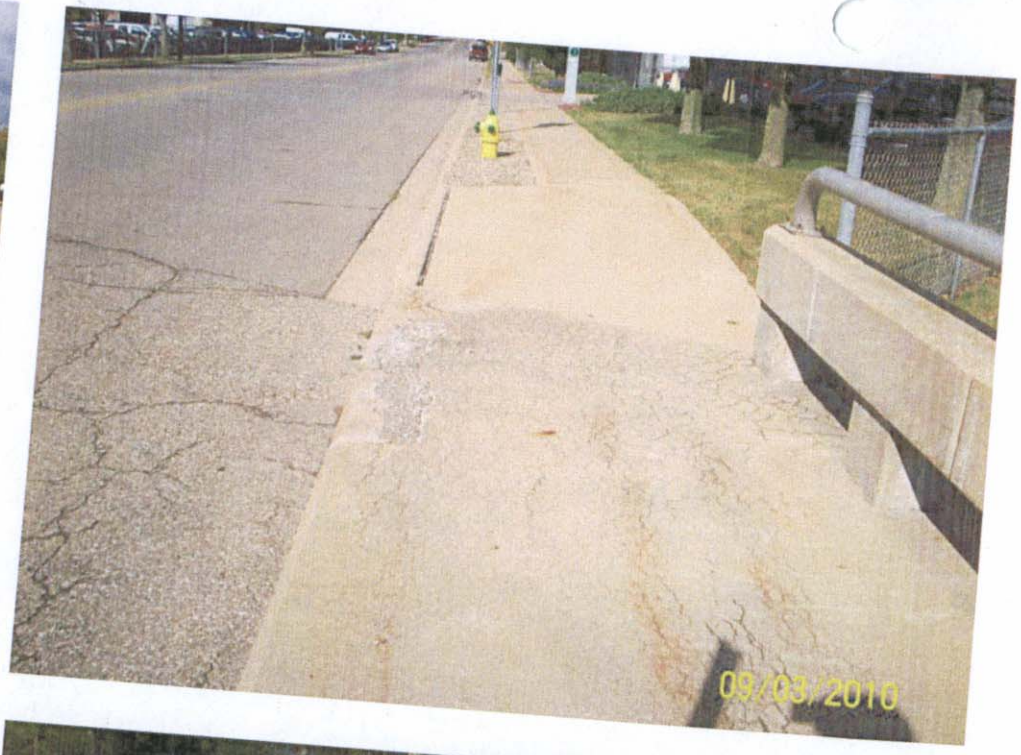
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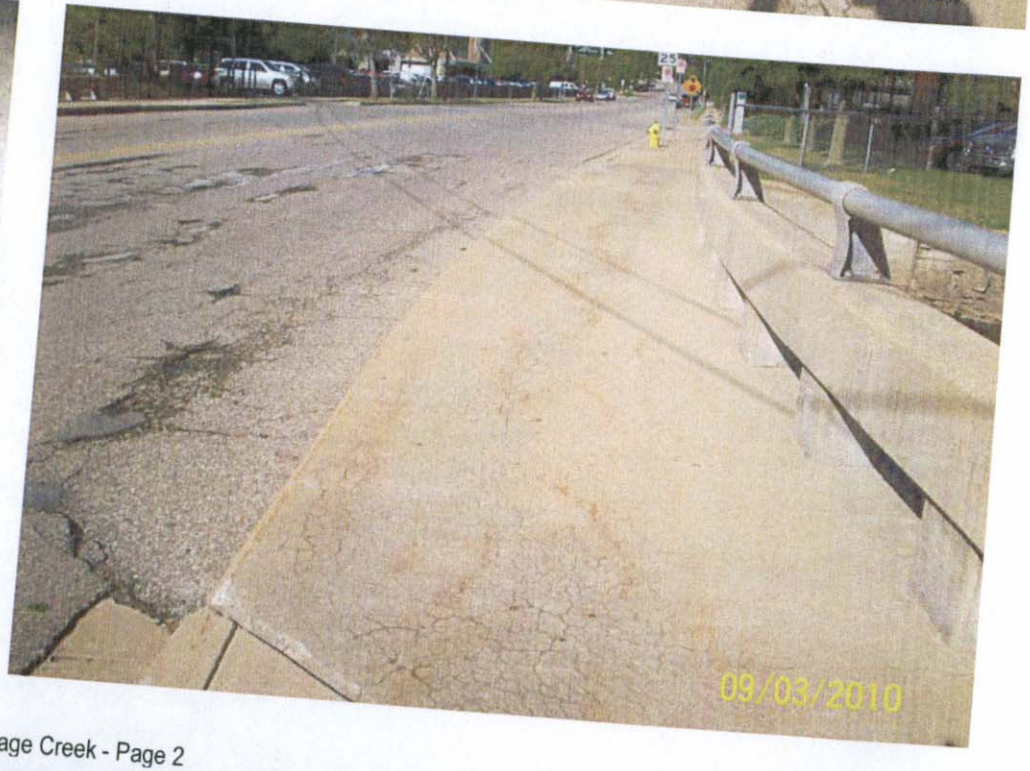
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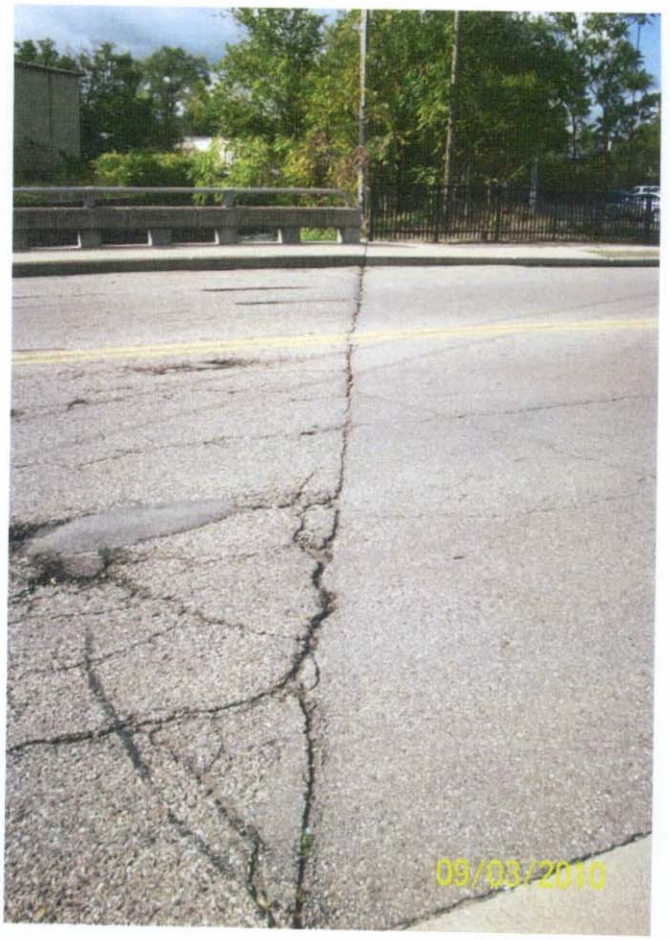
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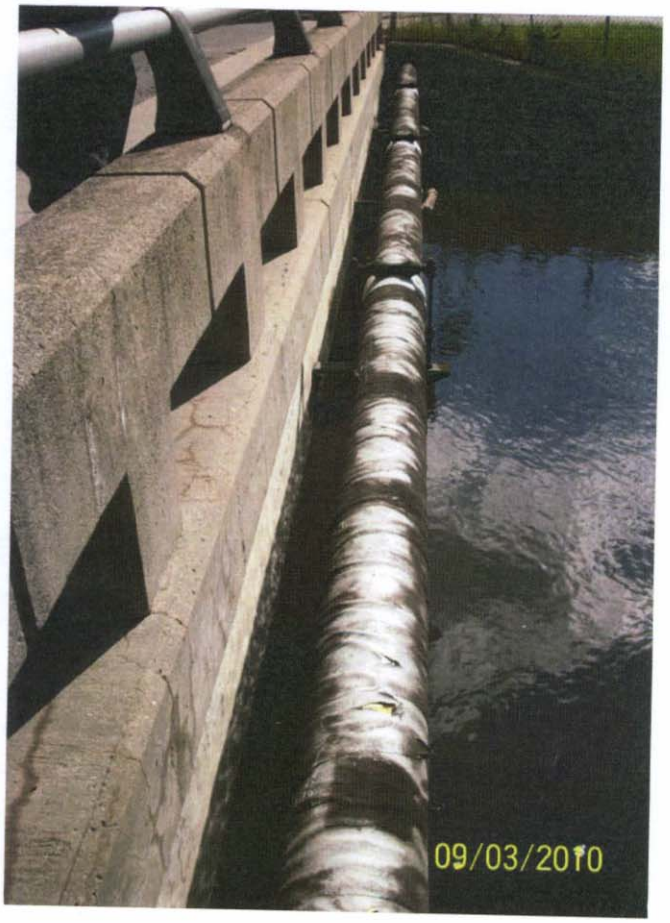
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