



Niagara Gorge Corridor Project

Draft Scoping Report

Appendix G - Visual Pavement Condition Assessment



U.S. Department of Transportation Federal Highway Administration



*New York State Department of Transportation
Andrew M. Cuomo, Governor Joan McDonald, Commissioner*



City of Niagara Falls, New York



USA Niagara Development Corporation



APPENDIX G - VISUAL PAVEMENT CONDITION ASSESSMENT

Robert Moses Parkway-North Segment

A visual pavement condition assessment was performed in April 2011 of the Robert Moses Parkway between Main Street in Niagara Falls, NY to Center Street in Lewiston, NY. The total distance covered was approximately 7-miles. There are no dedicated shoulders along this section of the Robert Moses Parkway. In lieu of shoulders, mountable curb is provided along both sides of the pavement. The Robert Moses Parkway (for assessment purposes) was divided into ten sections based on the geometry of the road and convenient land marks. Mileposts locations were measured starting at Main Street in the City of Niagara Falls and proceeded northerly to Center Street in the Village of Lewiston.

Whirlpool Street, Main Street and Lewiston Road

A supplemental visual pavement assessment was performed in October 2011 of the routes parallel to the Robert Moses Parkway. Those routes included:

- Whirlpool Street - Main Street to Findlay Drive
- Main Street - Whirlpool Street to Cleveland Avenue
- Lewiston Road – Cleveland Avenue to Ridge Road

Table G-1 includes a brief assessment of the pavement conditions for the roadway segments that were examined.

Table G-2 includes a list (photo log) of the photographs taken as part of the assessment.

Following **Table G-2** are copies of the photos taken that depict the existing pavement conditions.

Table G-1 - Existing Surface Conditions

Street	Limits	Visual Assessment
Robert Moses Parkway	Segment 1 MP 0 to 0.4	Pavement is in fair condition, transverse cracking/spalling at joints, minor potholes and longitudinal cracking along lane lines. A poor riding asphalt patch was installed at approximately MP 0.3.
	Segment 2 MP 0.4 to 1.1 miles	Pavement is in good condition, can begin to see transverse cracks at joints but cracks are tight, pavement rides well.
	Segment 3 MP 1.1 to 1.7 (Robert Moses viaduct BIN 1039539)	Pavement and bridge deck are in good condition except at the asphalt pressure relief joints. Concrete pavement is in good condition. There is some longitudinal cracking in one slab on the northbound end of the bridge at approximately MP 1.6.
	Segment 4 MP 1.7 to 2.2 (Robert Moses viaduct BIN 1039539 to Whirlpool State Park)	Pavement is in good condition, can feel the transverse joints but pavement is not exhibiting visual distress, joints sealed. No edge or lane cracking.
	Segment 5 MP 2.2 to 3.6 (near Devils Hole State Park)	Pavement is in good condition rides well. Minor isolated random cracking, random, edge and centerline cracking. Cracks are still tight with little raveling.
	Segment 6 MP 3.6 to 4.1	Pavement is in fair to poor condition. Transverse cracks at joints are 6" to 1" wide with alligator cracking adjacent to the transverse joints. Pavement rides rough with numerous asphalt patches. Also, has longitudinal cracking along the centerline and edges. This section of pavement is adjacent to a tall retaining wall for NY104 and sits above a retaining wall for the Robert Moses Parkway Southbound. The stepped geometry in this section may be causing drainage problems, which have led to the pavement problems in this section.
	Segment 7 MP 4.1 to 4.4 (NYPA Niagara Power Project Bridge BIN 1068262)	NYPA Bridge BIN 1068262 bridge deck pavement in good condition.
	Segment 8 MP 4.4 to 4.8 (NYPA Niagara Power Project to just south of the Lewiston-Queenston International Bridge)	Similar to segment 6. Pavement is in fair to poor condition. Transverse cracks at joints. Pavement rides rough. Also, has longitudinal cracking along the centerline and edges.
	Segment 9 MP 4.8 to 5.0	Pavement is fair to good. Spalling of transverse joints, some longitudinal spalling along centerline. Pavement rides OK so far.
	Segment 10 MP 5.0 to 7.0 (Lewiston-Queenston International Bridge to project limits)	This segment includes the transition for 1-lane undivided traffic to a 2-lane divided highway. The pavement is in fair condition. There is spalling at transverse joints, some longitudinal spalling, asphalt patches along the lane line and transverse joints in approximately 5-10% of the segment. Isolated random cracking of the slabs (approx 5%), isolated wide asphalt patches, and isolated potholes.
Whirlpool Street	Main Street to Walnut Street	Poor surface condition. Poor ride quality. Severe longitudinal cracks with potholes up to 12" long.
	Walnut Street to Third Street	This section of Whirlpool Street is closed due to roadwork. Traffic is detoured on to Third Street.
	Third Street to Whirlpool Rapids Bridge	Fair to poor surface condition. Alligator cracking occur at some locations with isolated potholes up to 18" long.
	Whirlpool Rapids Bridge to Chestnut Avenue	Fair surface condition. Low severity longitudinal cracks occur along this section if the roadway.
	Chestnut Avenue to Findlay Drive	Fair to poor surface condition. Alligator cracking occur at some locations with isolated potholes up to 24" long.



Niagara Gorge Corridor Project
PIN 5757.91.121
Visual Pavement Condition Report

Main Street	Whirlpool Street to Cleveland Avenue	Good to fair surface condition. Good ride quality. Low severity longitudinal cracks occur at isolated locations.
Lewiston Road	Cleveland Avenue to Hyde Park Boulevard	This section of Main Street/ Lewiston Road is under re-construction and is closed for northbound traffic.
	Hyde Park Boulevard to Upper Mountain Road	Good to fair surface condition. Good ride quality. Some minor longitudinal cracks at travel lane (sealed).
	Upper Mountain Road to Ridge Road	Fair surface condition. Longitudinal cracking from poor joint construction occurs along the southbound approach.
	Maple Avenue to Bellevue Avenue	This section of the roadway is under re-construction with one-lane (southbound) operational. Fair to poor surface condition.

NOTE: Photos taken of the Robert Moses Parkway are shown first, followed by the photos listed below.

Table G-2 - Photo Log

Sequence No.	Photo #	Roadway	Notes
1	713	Whirlpool Street	Towards north from Main Street. Multiple longitudinal and transverse cracks were observed.
2	714	Whirlpool Street	Towards north from Main Street.
3	715	Whirlpool Street	Towards south near Main Street.
4	716	Whirlpool Street	Road Closed Ahead Sign
5	717	Whirlpool Street / Main Street	Pavement Condition
6	718	Main Street	Towards north near Whirlpool Street
7	719	Main Street	Near Whirlpool Street
8	720	Main Street	Towards south, near Whirlpool Street
9	721	Main Street	North of Whirlpool Street
10	722	Whirlpool Street	Towards north between Main Street and Walnut Street
11	723	Whirlpool Street	Towards north between Main Street and Walnut Street
12	724	Whirlpool Street	Towards north between Main Street and Walnut Street
13	725	Whirlpool Street	Towards north between Main Street and Walnut Street
14	726	Whirlpool Street	Towards north between Main Street and Walnut Street
15	727	Whirlpool Street	Towards north between Main Street and Walnut Street
16	728	Whirlpool Street	Towards north between Main Street and Walnut Street
17	729	Whirlpool Street	Road Closed and Detour Sign
18	730	Whirlpool Street	Towards north, south of Findlay Drive
19	731	Whirlpool Street	Towards south, between Findlay Drive and Chestnut Avenue
20	732	Whirlpool Street	Towards south, between Findlay Drive and Chestnut Avenue
21	733	Whirlpool Street	Close up shot of the pothole
22	734	Whirlpool Street	Northbound approach, between Chestnut Avenue and Findlay Drive
23	735	Whirlpool Street	Close up shot of the pothole



Niagara Gorge Corridor Project
PIN 5757.91.121
Visual Pavement Condition Report

24	736	Whirlpool Street	Towards south, between Chestnut Avenue and Chasm Avenue
25	737	Whirlpool Street	Towards south, between Chasm Avenue and Whirlpool Maintenance
26	738	Whirlpool Street	No Standing Any Time Sign
27	739	Whirlpool Street	Road Work Ahead Sign
28	740	Whirlpool Street	Towards south, between Chasm Avenue and Whirlpool Maintenance
29	741	Whirlpool Street	At Whirlpool Maintenance
30	742	Whirlpool Street	Road Closed to Main Street
31	743	Whirlpool Street	Towards south, under Whirlpool Rapids Bridge
32	744	Whirlpool Street	Towards south near Ontario Street
33	745	Whirlpool Street	Northbound approach near Ontario Street
34	746	Whirlpool Street	Road Closed Sign at Ontario Street
35	747	Whirlpool Street	Northbound approach near Ontario Street
36	748	Whirlpool Street	Northbound approach south of Ontario Street
37	749	Whirlpool Street	Towards south, between Ontario Street and Cleveland Avenue
38	750	Whirlpool Street	Northbound approach between Ontario Street and Cleveland Avenue
39	751	Whirlpool Street	Close up shot of the pothole
40	752	Whirlpool Street	Close up shot of the pothole
41	753	Main Street	Towards north near Pine Avenue
42	754	Main Street	Towards north near Spruce
43	755	Main Street	Towards north near Portage Road
44	756	Main Street	Towards north, between Linwood Avenue and Michigan Avenue
45	757	Main Street	Road Closed and Detour Sign at Cleveland Avenue
46	758	Lewiston Road	Towards north near Niagara Power Project
47	759	Lewiston Road	Towards north near Niagara Power Project
48	760	Lewiston Road	Towards north of Niagara Power Project
49	761	Lewiston Road	Towards north near Upper Mountain Road
50	762	Lewiston Road	Towards north of I-190
51	763	Lewiston Road	Towards north of I-190
52	764	Lewiston Road	Towards north of I-190
53	765	Lewiston Road	Towards north of I-190
54	766	Lewiston Road	Towards north of I-190
55	767	Lewiston Road	Towards north of I-190
56	768	Lewiston Road	Towards north, near Route 104 Exit
57	769	Ext. Creek Road	Between Route 104 E and Lewiston Road
58	770	Lewiston Road	Towards south
59	771	Lewiston Road	Towards south
60	772	Lewiston Road	Towards south
61	773	Lewiston Road	Towards south

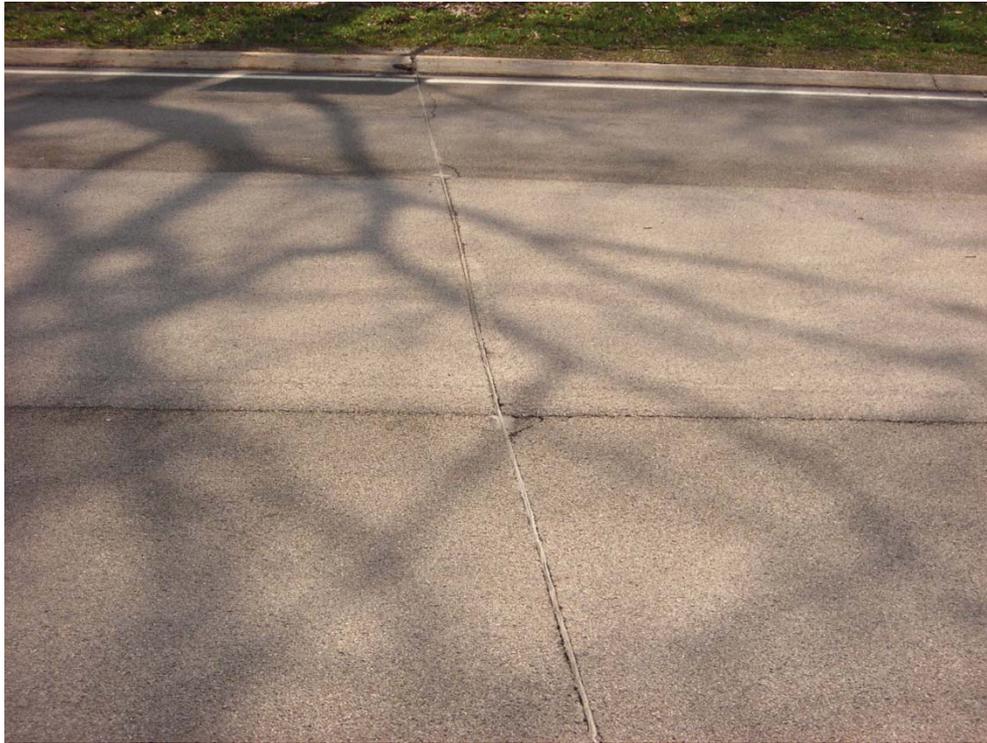


Niagara Gorge Corridor Project
PIN 5757.91.121
Visual Pavement Condition Report

62	774	Lewiston Road	Towards north near Garrett Avenue
63	775	Lewiston Road	Towards south near Garrett Avenue
64	776	Lewiston Road	Near Garrett Avenue
65	777	Lewiston Road	No Standing Any Time Sign
66	778	Lewiston Road	School Speed Limit Sign
67	779	Lewiston Road	Pavement condition near James Street
68	780	Lewiston Road	Towards south near James Street
69	781	Lewiston Road	Towards south near James Street
70	782	Lewiston Road	Utility cut patch near Morley Avenue
71	783	Lewiston Road	Towards south, between Morley Avenue and Maple Avenue
72	784	Lewiston Road	Pavement condition near Morley Avenue
73	785	Lewiston Road	Towards south, between Maple Avenue and College Avenue
74	786	Lewiston Road	Towards south, between College Avenue and Findlay Drive



Robert Moses Parkway
Segment 4 - MP 1.7 Top Photo, MP 1.8 Bottom Photo



Robert Moses Parkway

Milepost 2.2: Top photo close-up of a typical joint. Lower photo general view looking south from Whirlpool State Park



Robert Moses Parkway
Segment 5 - approx. MP 3.4 looking north



Robert Moses Parkway
Segment 5 - approx. MP 3.4 looking north from pedestrian overpass near Whirlpool Street Exit



Robert Moses Parkway

Segment 5 - approx. MP 3.4 looking south from pedestrian overpass (near Whirlpool Street Exit)



Robert Moses Parkway

**Segment 5 - approx. MP 3.4 looking at typical joint from pedestrian overpass
(near Whirlpool Street Exit)**



Robert Moses Parkway

Segment 6 Photo courtesy of NYPA (photo is a few years old, pavement is in worse condition now)



Robert Moses Parkway

Segment 8 Photo courtesy of NYPA (photo is a few years old, pavement is in worse condition now)



Robert Moses Parkway

Segment 10 - Divided highway section heading North out of Lewiston



Robert Moses Parkway

**Segment 10 - Divided highway section - typical conditions
(Note this section with shoulders I north of the project limits but pavement is similar)**



Robert Moses Parkway

Segment 10 - Divided highway section close-up of lane spalling (Note this sections with shoulders is just north of the project limits but pavement is similar)



Sequence No. 1



Sequence No. 2

Photo locations can be found in Table D-2.



Sequence No. 3



Sequence No. 4

Photo locations can be found in Table D-2.



Sequence No. 5



Sequence No. 6

Photo locations can be found in Table D-2.



Sequence No. 7



Sequence No. 8

Photo locations can be found in Table D-2.



Sequence No. 9



Sequence No. 10

Photo locations can be found in Table D-2.



Sequence No. 11



Sequence No. 12

Photo locations can be found in Table D-2.



Sequence No. 13



Sequence No. 14

Photo locations can be found in Table D-2.



Sequence No. 15



Sequence No. 16

Photo locations can be found in Table D-2.



Sequence No. 17



Sequence No. 18

Photo locations can be found in Table D-2.



Sequence No. 19



Sequence No. 20

Photo locations can be found in Table D-2.



Sequence No. 21



Sequence No. 22

Photo locations can be found in Table D-2.



Sequence No. 23



Sequence No. 24

Photo locations can be found in Table D-2.



Sequence No. 25



Sequence No. 26

Photo locations can be found in Table D-2.



Sequence No. 27



Sequence No. 28

Photo locations can be found in Table D-2.



Sequence No. 29



Sequence No. 30

Photo locations can be found in Table D-2.



Sequence No. 31

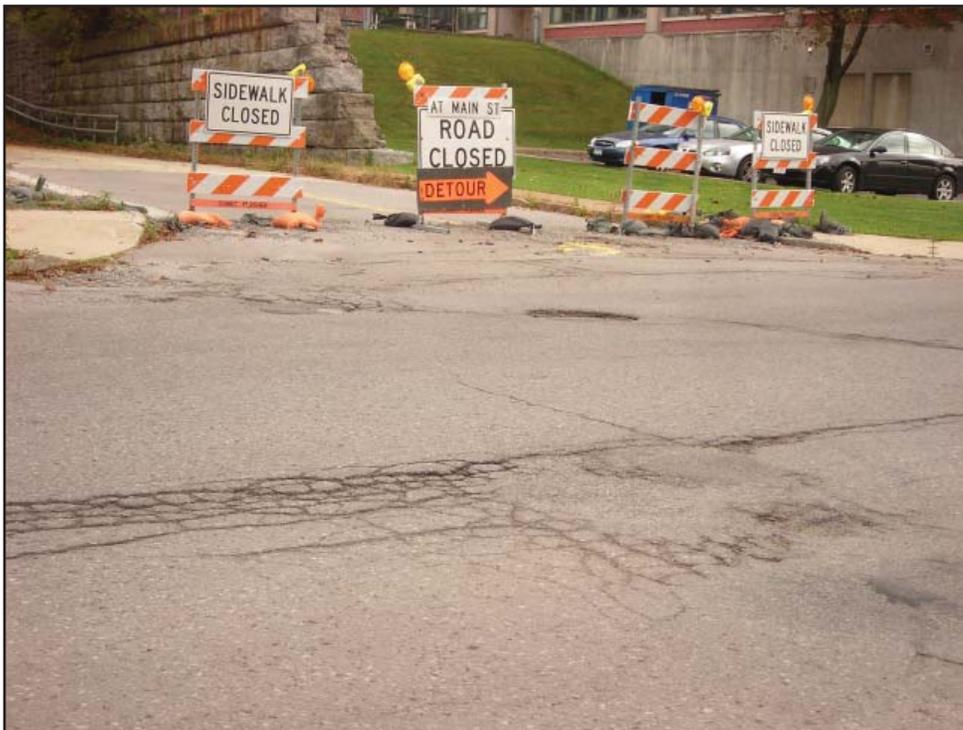


Sequence No. 32

Photo locations can be found in Table D-2.



Sequence No. 33



Sequence No. 34

Photo locations can be found in Table D-2.



Sequence No. 35



Sequence No. 36

Photo locations can be found in Table D-2.



Sequence No. 37



Sequence No. 38

Photo locations can be found in Table D-2.



Sequence No. 39



Sequence No. 40

Photo locations can be found in Table D-2.



Sequence No. 41



Sequence No. 42

Photo locations can be found in Table D-2.



Sequence No. 43



Sequence No. 44

Photo locations can be found in Table D-2.



Sequence No. 45



Sequence No. 46

Photo locations can be found in Table D-2.



Sequence No. 47



Sequence No. 48

Photo locations can be found in Table D-2.



Sequence No. 49



Sequence No. 50

Photo locations can be found in Table D-2.



Sequence No. 51



Sequence No. 52

Photo locations can be found in Table D-2.



Sequence No. 53



Sequence No. 54

Photo locations can be found in Table D-2.



Sequence No. 55



Sequence No. 56

Photo locations can be found in Table D-2.



Sequence No. 57



Sequence No. 58

Photo locations can be found in Table D-2.



Sequence No. 59



Sequence No. 60

Photo locations can be found in Table D-2.



Sequence No. 61



Sequence No. 62

Photo locations can be found in Table D-2.



Sequence No. 63



Sequence No. 64

Photo locations can be found in Table D-2.



Sequence No. 65



Sequence No. 66

Photo locations can be found in Table D-2.



Sequence No. 67



Sequence No. 68

Photo locations can be found in Table D-2.



Sequence No. 69



Sequence No. 70

Photo locations can be found in Table D-2.



Sequence No. 71



Sequence No. 72

Photo locations can be found in Table D-2.



Sequence No. 73



Sequence No. 74

Photo locations can be found in Table D-2.