## Appendix A

## M

	BRIDGE CAPITAL PROGRAM
East River Bridge Rehabilitation Plans	A-1
Bridges Under Construction	A-2
Component Rehabilitation	A-3
Bridges Under Design	A-4

## **MANHATTAN BRIDGE**

## REHABILITATION ITEMS TOTAL ESTIMATED COST

	TOTAL ESTIMATED COST	
•	Repair floor beams. (1982)	Est. Cost (\$ in millions) 0.70*
•	Replace inspection platforms, subway stringers on approach spans. (1985)	6.30*
•	Install truss supports on suspended spans. (1985)	0.50*
•	Partial rehabilitation of walkway. (1989)	3.00*
•	Rehabilitate truss hangers on east side of bridge. (1989)	0.70*
•	Install anti-torsional fix (side spans) and rehabilitate upper roadway decks or approach spans on east side; replace drainage system on approach spans install new lighting on entire upper roadways east side, including purchase of fabricated material for west side of bridge. (1989)	,
•	Eyebar rehabilitation - Manhattan anchorage Chamber "C." (1988)	12.20*
•	Replacement of maintenance platform in the suspended span. (1982)	4.27*
•	Reconstruct maintenance inspection platforms, including new rail and hanger systems and new electrical and mechanical systems; over 2,000 interim repairs to structural steel support system of lower roadway for future functioning of roadway as a detour during later construction contracts. (1992)	) }
•	Install anti-torsional fix on west side (main and side spans); west upper roadway decks, replace drainage systems on west suspended and approach spans; walkway rehabilitation (install fencing, new lighting on west upper roadways and walkways); rehabilitate cables in both Brooklyn and Manhattar anchorage chambers; dehumidify Brooklyn and Manhattan anchorages (1997)	) ( )
•	Installation of test panels. (1982)	1.55****
•	Removal of existing suspender ropes and sockets in the suspended spans replacement with new suspender ropes and sockets in the suspended spans and re-tensioning of suspender ropes bearing plates; re-tensioning of cable band bolts; removal of existing main cable wrapping; cleaning of main cables application of new protective paste on main cables; replacement of new main cable wrapping; reinforcement of truss verticals and gusset plates.  Replacement of necklace lighting and multirotational bearings at truss "C" and "D," installation of access platforms at towers, rehabilitation of south upper Roadway Lighting. (2010)	5 ; ; 1 159.12*
•	Interim Steel Rehabilitation and Painting - cable and saddle repairs lower roadway floorbeams @PP 37/38 on approaches and at anchorages; west side truss rockers and grillages on approaches; cable and suspender repairs Removal of parking desk. Painting entire west side, all four cables. (2001)	t

## **MANHATTAN BRIDGE**

## REHABILITATION ITEMS TOTAL ESTIMATED COST

Est. Cost (\$ in millions)

Stiffening of Main Span; Reconstruction of North Subway framing; reconstruction of North upper roadway deck at suspended spans; rehabilitation of north approach span trusses; replace overlay on north upper roadway approach spans; rehabilitation of north elevated structures and subway tunnels; removal of railing on truss "D" in the north spans; painting of north side of bridge; new inspection platforms and debris protection in approach spans; construction of new north bikeway, replacement of approach span bearings and grillages; installation of Intelligent Vehicle Highway System for North and South Upper Roadways as well as for Lower Roadway. (In Progress)

184.78\*

 Rehabilitation of Lower Roadway; rehabilitation of anchorage roofs under lower roadway; rehabilitation of substructures and retaining walls in Brooklyn and Manhattan approaches; installation of new signage on bridge and at plaza areas; installation of new lighting on lower roadway and plaza areas; clean and paint lower roadway; installation of grating platform under towers at lower roadway; canopy lighting at towers. (Present)

143.80\*

Seismic Retrofit. (2020)

40.00

to

60.00\*\*\* 75.00

to

95.00\*\*\*

TOTAL: \$ 962.52

to

\$ 1,002.52

- Construction Complete
- \*\* In Construction
- \*\*\* In Design
- \*\*\*\* Research and Development (completed)

Structural and Component Rehabilitation (2018)

Revised 2014

## **ED KOCH QUEENSBORO BRIDGE**

## REHABILITATION ITEMS

	TOTAL ESTIMATED COST	
		Est. Cost (\$ in millions)
•	Repair lower outer roadways / reconstruct two ramps in lower Queens. (1984) Reconstruct south upper roadway, replace inspection platforms, lighting. (1986)	18.80* 31.50*
•	Interim rehabilitation, contracts A, B, & C (repairs to lower deck and main bridge approaches). (1985)	2.80*
•	Interim rehabilitation, contract D (repairs to lower deck, main bridge, and new median barrier). (1988)	3.00*
•	Reconstruct north upper roadway and Queens approaches A & B, rehabilitate bearings at Queens approach. (1989)	50.00*
•	Reconstruct ramps C & D (Queensboro only, not Thompson Avenue). (1988)	10.40*
•	Rehabilitate bridge bearings, pier tops, and truss lower chords. (1989)	18.00*
•	Rehabilitate Queens approach trusses, lower inner roadways on the main span and approaches. (1996)	172.00*
•	Rehabilitate lower outer roadways main span and approaches, (bikeway) cleaning and painting. (2001)	227.05*
•	Cleaning and painting main bridge upper trusses. (2009)	168.24*
•	Miscellaneous Items – Component Rehabilitation. (In Progress)	43.88*
•	Eye bar investigation. (In Progress)	0.62****
•	Seismic Retrofit. (2020)	40.00
•	Installation of aviation lighting (2010)	to 60.00*** 1.76*
•	Replacement of Upper Roadways (2017)	115.00 to 140.00
	TOTAL: \$	898.05

to

948.05

Revised 2014

<sup>\*</sup> Construction Complete\*\* In Construction

<sup>\*\*\*</sup> In Design

Research and Development

## **WILLIAMSBURG BRIDGE**

## REHABILITATION ITEMS TOTAL ESTIMATED COST

	TOTAL ESTIMATED COST	
		Est. Cost (\$ in millions)
•	Replace main span outer roadway. (1983)	11.20*
•	Replace one third of suspenders. (1984)	3.20*
•	Repair pier 20E foundation, and replace bulkhead. (1986)	2.30*
•	Paint side spans and towers. (1985)	1.10*
•	Paint main and approach spans. (1989)	4.24*
•	Emergency interim repairs. (1989)	10.00*
•	Install temporary hand-rope system on main cables. (1990)	0.63*
•	Main cable preservation (field test - oiling). (1991)	0.44*
•	Main cable strand splicing at Manhattan anchorage. (1991)	0.29*
•	Interim pedestrian walkway. (1994)	1.05*
•	Component repairs of flag conditions on the north outer roadway and no inner roadway. (1994)	rth 4.12*
•	Rehabilitate main cables and new redundant suspender system. (1996)	88.30*
•	Demolish existing building under approaches. (1993)	1.50*
•	Testing Program for bored-in piles. (1993)	0.74*
•	Demolish DOS and DOH buildings, replace entire south outer roadway approach structures, rehabilitate south outer roadway deck and south inroadway deck of the main bridge, and replace south inner roadway substructure of the approaches. (1998)	ner

## WILLIAMSBURG BRIDGE

## REHABILITATION ITEMS TOTAL ESTIMATED COST

Est. Cost (\$ in millions)

 Portion of Contract #6 BMT track structure work transferred to Contract #5 south approach roadway reconstruction work. (1998)

65.00\*

• Paint main and intermediate towers. (2001)

14.90 \*(1)

 Reconstruct BMT Subway structure; install new signals, tracks and communication system. (2000)

166.65\*

• Miscellaneous rehabilitation work: rehabilitation of towers, replace bearings, travelers, architectural work, painting of north and south trusses, suspender adjustment, tower jacking, construction of colonnades, purchase of barrier transfer machine BTM) and contra-flow barriers, lane control signal field system. Seismic retrofit – reinforce concrete with granite cladding, bearing replacement at PP10 & 15, rehabilitation of wind tongue casting assembly at main towers, contra-flow of south inner roadway – installation of contra-flow barriers, lightning protection grounding system. Kent Avenue Yard soil erosion and deck pins at PP29 E/W rehabilitation, modular joint repairs and structural flag repairs. (In Progress)

280.00\*

 Replace north approach structures (Manhattan / Brooklyn), and rehabilitate north half of bridge. (2002)

233.00\*

TOTAL: \$1,086.66

- \* Construction Complete
- \*\* In Construction
- \*\*\* In Design

(1) Painting suspended in 1996 pending publication of Environmental Impact Statement (EIS) in 1998. Painting resumed under a new schedule in 1999 and was completed in 2001.

Revised 11/12/10, No change

## **BROOKLYN BRIDGE**

## REHABILITATION ITEMS TOTAL ESTIMATED COST

		Est. Cost (\$ in millions)
•	Brooklyn Tower protection and new sign gantries. (1981)	2.72*
•	Rehabilitate promenade between towers. (1983)	0.94*
•	Rehabilitate cables in anchorage and replace short rod suspenders; rehabilitate balance of promenade and construct bikeway and new pedestrian ramp. (1988)	22.68*
•	Rehabilitate and paint York, Main, William and Prospect Street structures and main bridge roadway deck overlay. (1988)	6.21*
•	Replace suspenders, cable posts, stay cables, hand-rope necklace lights, main cable wrapping; paint suspended spans. (1991)	53.57*
•	Rehabilitate ramp E. concrete piers of ramp C and abutment at ramps C & I, and rehabilitate Sands and Washington Street structures in Brooklyn. (1991)	4.73*
•	Rehabilitate ramp D and H in Manhattan; permanent improvement of promenade at Manhattan approach. (1993)	17.92*
•	Rehabilitate floor systems, stiffening trusses, roadways of suspended spans and Franklin Square trusses. (1994)	66.30*
•	Rehabilitate Manhattan traveler (electrical work). (1997)	1.83*
•	Rehabilitate ramp D and widening along the FDR Drive. (1996)	11.50*
•	Arch supports for Franklin Square truss structure.	9.50*
•	Replacement of Suspended Span Deck. (2000)	36.2*
•	Resurfacing of the main spans. (1998)	6.67*

## **BROOKLYN BRIDGE**

## REHABILITATION ITEMS TOTAL ESTIMATED COST

Est. Cost (\$ in millions)

Improvement of Manhattan end of promenade. (2001)

4.50\*

Rehabilitate Brooklyn approach & ramps (B, S, F), Rehabilitate
 Manhattan approaches and remaining ramps (A, B, C, F, G, I, J), and Paint entire bridge. (2010)

508.61\*\*\*

Seismic Retrofit and Arch Block Rehabilitation. (2019)

300.00

to

325.00\*\*

Replacement of Travelers.

22.34\*

TOTAL: \$1,076.22

to

\$ 1,101.22

\* Construction Complete

\*\* In Design

\*\*\* In Construction

Revised 2014

## **BRIDGES UNDER CONSTRUCTION**

CALENDAR YEAR 2014

## **CONTRACT # BRIDGE**

CONTINACT #	BRIDGE
HBX1152	Bryant Avenue over Amtrak
HBX1164	City Island Road Bridge over Eastchester Bay
HBCMVBE	Metropolitan Avenue Bridge over English Kills (Emergency Contract)
SANDHB002	Macombs Dam Bridge over Harlem River (Emergency Contract)
SANDHB002	145 <sup>th</sup> Street Bridge over Harlem River (Emergency Contract)
SANDHB002	Third Avenue Bridge over Harlem River (Emergency Contract)
SANDHB002	Madison Avenue Bridge over Harlem River (Emergency Contract)
SANDHB002	Hunters Point Avenue Bridge over Dutch Kills (Emergency Contract)
SANDHB002	Carroll Street Bridge over Gowanus Canal (Emergency Contract)
SANDHB002	Ninth Street Bridge over Gowanus Canal (Emergency Contract)
SANDHB002 Third Street Bridge over Gowanus Canal (Emergency Contract)	
SANDHB002 V	Vest 207 <sup>th</sup> Street/West Fordham Road Bridge over Harlem River (Emergency
	Contract)
SANDHB002	Borden Avenue Bridge over Dutch Kills (Emergency Contract)
SANDHB002	Union Street Bridge over Gowanus Canal (Emergency Contract)
SANDHB002	Grand Street Bridge over Newtown Creek (Emergency Contract)
HBM1027	Harlem River Drive Viaduct, 127 <sup>th</sup> Street (NB)
HBM1027	Harlem River Drive Viaduct, 127 <sup>th</sup> Street (SB)
HBM1124	Willis Avenue Bridge over Harlem River
HBK643	Belt Parkway Bridge over Gerritsen Inlet
HBK1089	Belt Parkway Bridge over Bay Ridge Avenue
HBK1072WM	Tidal Wetland Mitigation (4 Belt Parkway bridges)
BRC270C (#6)	, 0 \ 1 1 0/
HBCBORERS-	• · · · · · · · · · · · · · · · · · · ·
	platforms midtown, FDR Drive relieving platform uptown + Carroll Street Bridge
	over Gowanus Canal + Ocean Avenue Pedestrian Bridge over Sheepshead Bay

## **BRIDGE CONSTRUCTION**

PROJECTS COMPLETED IN CALENDAR YEAR 2014

## CONTRACT # BRIDGE

NONE

## Component Rehabilitation

The following table illustrates the program's performance over the last eight years:

	<sup>#</sup> FY 07	FY 08	##FY 09	FY 10	*FY 11	###FY 12	*FY 13	**FY 14
Number of Bridges	0	10	0	13	0	10	0	11
Construction Cost	\$0	\$14.93	\$0	\$12.74	\$0	\$6.35	0	\$15.55

In 2014, work was completed at the following bridges, in the indicated boroughs, at the final cost shown, in millions:

West 148 <sup>th</sup> Street Pedestrian Bridge over Amtrak 30 <sup>th</sup> Street Branch (M)	1.07
Inwood Hill Park Footbridge over Amtrak 30 <sup>th</sup> Street Branch (M)	0.69
Union Street over Brooklyn-Queens Expressway (K)	0.63
4 <sup>th</sup> Avenue over Belt Parkway (K)	0.62
Belt Parkway over Bedford Avenue (K)	1.28
Crown Street over Franklin Shuttle (K)	0.18
(Hill Drive) Cleft Ridge Span over Pedestrian Path South of Boathouse (K)	0.38

**TOTAL** \$4.85 M

During calendar year 2014, work commenced at the following bridges:

None. The contract was not registered until October 2014.

<sup>\*</sup>No contracts were bid during the 2011, and 2013 calendar years.

\_\_\_\_One contract was bid during the 2007 calendar year, but was not registered until April 2008.

<sup>\*\*\*</sup>Two contracts were bid during the 2009 calendar year, but were not registered until March and May 2010. \*\*\*\*\* One contract was bid during the 2012 calendar year and was registered in June 2012.

<sup>\*\*</sup> Two contracts were bid during the 2014 calendar year, and one was registered in October 2014.

## **Component Rehabilitation**

There are two projects "still under construction" since the 2013 Annual Report was issued.

149<sup>th</sup> Street over LIRR (Q) Ocean Avenue over LIRR Bay Ridge (K)

22 component rehabilitation projects are slated to continue, commence or be completed in the 2015 calendar year. They are:

149<sup>th</sup> Street over LIRR (Q) Ocean Avenue over LIRR Bay Ridge (K)

Moshulu Parkway over Conrail (Abandoned) (B)

Leggett Avenue over Amtrak (B)

East 162<sup>nd</sup> Street over Metro North RR HAR (B) East 165<sup>th</sup> Street over Metro North RR HAR (B)

East 187<sup>th</sup> Street over Metro North RR HAR (B)

Southern Boulevard over East Fordham Road (B)

Grand Concourse over East 167<sup>th</sup> Street (B)

East 180<sup>th</sup> Street over Bronx River (B)

Riverside Drive over West 138<sup>th</sup> Street (M) Riverside Drive over West 145<sup>th</sup> Street (M)

McGuiness Boulevard/Newtown Creek (Pulaski Bridge Bike Path) (KQ)

Ramp To Queensboro Bridge From East 58<sup>th</sup> Street over East 59<sup>th</sup> Street (M)

Ramp To 21<sup>st</sup> Street From NY over 22<sup>nd</sup> Street (Q)

71<sup>st</sup> Avenue over Cooper Avenue (Q)

Douglaston Parkway NB over Cross Island Parkway (Q)

Douglaston Parkway SB over Cross Island Parkway (Q)

Roosevelt Avenue over Flushing Meadow Park Road (Q)

80<sup>th</sup> Road over LIRR Main Line (Q)

Hannah Street over SIRT South Shore (R)

Forest Avenue over Clove Lakes Park Stream (R)

BRIDGES UNDER DESIGN BY NEW YORK CITY							
BIN NO.	CAPIS NO.	FEATURE CARRIED	FEATURE CROSSED	FY CNST	PHASE	BORO	
2230290	HBCR02A	MOSHOLU PARKWAY	EQUESTRIAN PATH	2016	FD	В	
2242350	HBCR02A	EAST FORDHAM ROAD	GRAND CONCOURSE	2016	FD	В	
2269030	HBCR02A	MATTHEWSON ROAD	MAC CRACKEN AVENUE	2016	FD	В	
2241080	HBCR02B	SOUTHERN BLVD	CSX PORT MORRIS	2016	FD	В	
2241129	HBCR02B	EAST 149 <sup>TH</sup> STREET	AMTRAK & CSX	2016	FD	В	
2241330	HBCR02B	UNIONPORT ROAD	AMTRAK & CSX	2016	FD	В	
2242071	HBCR02B	BRONX BLVD S.B.	BRONX RIVER	2016	FD	В	
2242072	HBCR02B	BRONX BLVD N.B.	BRONX RIVER	2016	FD	В	
2242319	HBCR03A	GRAND CONCOURSE	EAST 174 <sup>1H</sup> ST	2016	PD	В	
2241790	HBX180	EAST 180 <sup>TH</sup> STREET	METRO NORTH RR	2020	PD	В	
2075837	HBX1086	WESTCHESTER AVENUE	HRP	2016	FD	В	
2066510	HBX1131	BRUCKNER EXPRESSWAY	WESTCHESTER CREEK	2016	PD	В	
2241409	HBX1190	GRAND CONCOURSE	METRO NORTH RR HUD	2018	FD	В	
2242220	HBX1214	SNUFF MILL ROAD	BRONX RIVER	2025	PD	В	
227220	TIDATET	(SOUTHERN BLVD)	DIOWN RIVER	2020	10	D	
2241740	HBX1215	ÈAST 175 <sup>™</sup> ST	METRO NORTH RR	2019	PD	В	
2230250	HBX1216	MOSHOLU PARKWAY	BRONX RIVER	2025	PD	В	
2241670	HBX1670	EAST 169 <sup>™</sup> STREET	METRO NORTH RR	2020	PD	В	
2240137	HBM1147	BROADWAY	HARLEM RIVER	2018	FD	BM	
2240079	HBX644S	MADISON AVE	HARLEM RIVER	2017	PD	BM	
1240090	BRX287S	MACOMBS DAM BRIDGE	HARLEM RIVER	2015	FD	BM	
2240027	BRC156F	MANHATTAN BRIDGE (LL)	EAST RIVER	2018	PD	KM	
2240028	BRC156F	MANHATTAN BRIDGE (UL)	EAST RIVER	2018	PD	KM	
2240027	BRC156S2	MANHATTAN BRIDGE (LL)	EAST RIVER	2020	PD	KM	
2240028	BRC156S2	MANHATTAN BRIDGE (UL)	EAST RIVER	2020	PD	KM	
2240019	BRC270S	BROOKLYN BRIDGE	2781 (B.Q.E.)	2020	FD	KM	
2244030	HBCR02A	EAST DRIVE	BRIDLE PATH	2016	FD	K	
2230370	HBCR02B	SACKETT STREET	B.Q.E.	2016	PD	K	
2231449	HBCR03A	KNAPP STREET	BELT PARKWAY	2016	PD	K	
2244440	HBCR03A	SOUTH OF TILLARY STREET	NAVY STREET	2016	PD	K	
2243710	HBKC062	19TH AVE	BMT SEA BEACH	2023	FD	K	
2243820	HBK548	21 <sup>ST</sup> AVE	BMT SEA BEACH	2020	FD	K	
2231479	HBK1023	BSHP	MILL BASIN	2015	FD	K	
2231439	HBK1090	BSHP	NOSTRAND AVE	2021	FD	K	
2243569	HBK1201	ATLANTIC AVE	LIRR ATLANTIC AVE	2016	FD	K	
2240270	HBK1213	UNION STREET BRIDGE	GOWANUS CANAL	2019	PD	K	
2231319	HBK1202	BELT PARKWAY	BAY PARKWAY	2024	PD	K	
2240048	BRC231F	ED KOCH QUEENSBORO EAST RIVER BRIDGE (UL)		2017	PD	MQ	
2240047	BRC231S	ED KOCH QUEENSBORO BRIDGE (LL)	EAST RIVER	2020	PD	MQ	
2240048	BRC231S	ED KOCH QUEENSBORO BRIDGE (UL)	EAST RIVER	2020	PD	MQ	
2245220	HBCR02A	WEST 57 <sup>TH</sup> STREET	AMTRAK 30 <sup>TH</sup> ST BRANCH	2016	FD	M	
2245319	HBCR02A	EAST 97 <sup>™</sup> STREET	METRO NORTH	2016	FD	M	
2229311	HBCR03A	HHP SB	RAMP TO 96 <sup>TH</sup> STREET	2016	PD	M	
2229312	HBCR03A	HHP NB	RAMP TO 96 <sup>TH</sup> STREET	2016	PD	M	
2246540	HBM551	EAST 34 <sup>1H</sup> STREET	PARK AVENUE TUNNEL	2016	FD	М	

PD=Preliminary Design; FD=Final Design; DB=Design Build

BRIDGES UNDER DESIGN BY NEW YORK CITY						
BIN NO.	CAPIS NO. FEATURE CARRIED		FEATURE CROSSED	FY CNST	PHASE	BORO
2245010	HBM1120	11 <sup>TH</sup> AVE VIADUCT [NORTH]	LIRR WEST SIDE YARD	2020	FD	М
2232040	HBM1056	HOUSTON STREET	FDR DRIVE	2016	DB	М
223204A	HBM1056	FDR DRIVE NB RAMP TO HOUSTON STREET	RELIEF	2016	DB	М
223204B	HBM1056	HOUSTON STREET RAMP TO FDR DRIVE NB	RELIEF	2016	DB	М
2246720	HBM1165	RIVERSIDE RIVE	WEST 158 <sup>TH</sup> STREET/AMTRAK	2018	PD	M
226672A	HBM1171	W 31 <sup>ST</sup> ST	AMTRAK LAYUP TRACKS	2020	FD	M
224501E	HBM1186	W 35 <sup>™</sup> ST	AMTRAK 30 <sup>TH</sup> ST BRANCH	2023	FD	M
2229290	HBM1189	W 79 <sup>™</sup> ST	AMTRAK	2017	PD	M
2232070	HBM1221	E 25 <sup>TH</sup> STREET PEDESTRIAN BRIDGE	FDR DRIVE	2022	PD	M
2231880	HBCR02A	CROCHERON PARK PEDESTRIAN	CROSS ISLAND PARKWAY	2016	FD	Q
2230890	HBCR02B	49 <sup>™</sup> STREET	GRAND CENTRAL PARKWAY	2016	FD	Q
2231950	HBCR03A	150 <sup>™</sup> STREET	CROSS ISLAND PARKWAY	2016	PD	Q
2231980	HBCR03A	147 <sup>™</sup> STREET	CROSS ISLAND PARKWAY	2016	PD	Q
2055801	HBCR03A	NORTHERN BOULEVARD WB	FLUSHING RIVER	2016	PD	Q
2055802	HBCR03A	NORTHERN BOULEVARD EB	FLUSHING RIVER	2016	PD	Q
1247560	HBQ1112	METRO AVE (FRESH POND)	LIRR MONTAUK DIV	2016	FD	Q
2231780	HBQ1114	HEMPSTEAD AVE	BCIP	2021	PD	Q
2266149	HBQ1114	HEMPSTEAD AVE	RAMP TO BCIP NB	2021	PD	Q
2231850	HBQ1115	UNION TPKE	BCIP	2021	PD	Q
2248160	HBQ1137	ELIOT AVE	QUEENS BLVD	2022	FD	Q
2240507	HBQ1203	ROOSEVELT AVE	VAN WYCK EXPRY	2016	FD	Q
2248280	HBQ1206	HIGHLAND PK PED BRDG	PEDESTRIAN PATH	2016	FD	Q
2266160	HBQC064	WHITESTONE EXPRY/VAN WYCK EXPRY SB TO BCIP EB	ACCESS ROAD FROM WHITESTONE EXPRY/VAN WYCK EXPRY	2019	PD	Q
2249240	HBCR02B	ARTHUR KILL ROAD	SIRT SOUTH SHORE	2016	PD	R
2249450	HBCR03A	FREMONT AVENUE PEDESTRIAN	SIRT SOUTH SHORE	2016	PD	R
R00010	HBRC036	GALLOWAY AVE	MARIANNE ST	2016	FD	R
R00011	HBRC037	FOREST AVE	CRYSTAL AVE	2016	FD	R
R00013	HBRC038	NAUGHTON AVE	PATTERSON AVE	2016	FD	R
R00023	HBRC039	MIDLAND AVE	HYLAN BLVD	2016	FD	R
R00034	HBRC040	ROCKLAND AVE	BRIELLE AVE	2016	FD	R
R00068	HBRC041	FOREST AVE	RANDALL AVE	2016	FD	R
R00069	HBRC042	GREGG PLACE	RANDALL AVE	2016	FD	R
R00084	HBRC043	ARTHUR KILL RD	MULDOON AVE	2016	FD	R
R00097	HBRC044	RICHMOND HILL RD	RICHMOND RD	2016	FD	R
R00122	HBRC045	ARTHUR KILL RD	RIDGEWOOD AVE	2016	FD	R

Revised 12/2/14

## Appendix B

	FLAG CONDITIONS
Definitions and Procedures	B-1
2010 - 2014 Red, Yellow and Safety Flags	B-2
Flag Reporting and Tracking Process	B-3

## **FLAG DEFINITIONS AND PROCEDURES**

(Source: NYSDOT Engineering Instruction 94-002)

New York State Department of Transportation (NYSDOT) bridge inspection procedures require that "**Flags**" be issued to report the existence of conditions that pose a clear and present danger, or conditions which, if left unattended for an extended period, would likely become a clear and present danger.

A "Flag" is classified as either a Red Flag, Yellow Flag or Safety Flag.

Red Flag is used to report the failure or potentially imminent failure of a critical primary structural component. Potentially imminent means that a failure is likely before the next scheduled inspection. The maximum time between bridge inspections is two years. Red Flags must be addressed within six weeks.



September 2008: Advanced Corrosion of Steel Stringer and Girder. February 2011: Red Flag Stringer Repair at Riverside
Drive Viaduct over West 158<sup>th</sup> Street.



August 2013 Red Flags on the Ed Koch Queensboro Bridge. A truck caught fire on the bridge and damaged three stringers that support the eastbound upper roadway. Replacement of the two damaged stringers and the repair of a third were completed in October 2013. All work was performed by in-house forces. August 2013: Firefighters Examining the Damage. Repairing the Bridge Included Custom Designing the Steel Beams, as Well as Fabrication and Installation. Division Ironworkers Fabricated Two 26-Foot-Long, 1.5-Ton Beams in Their Brooklyn Shop.

#### FLAG DEFINITIONS AND PROCEDURES

(Source: NYSDOT Engineering Instruction 94-002)



August 2013 Red Flags on the Ed Koch Queensboro Bridge. October 2013: Removing the Warped Beams.

The New Beams.

Yellow Flag is used to report a potentially hazardous condition which, if left unattended beyond the next scheduled inspection, would likely become a clear and present danger. A Yellow Flag is also used to report the actual or imminent failure of a non-critical primary structural component, where its failure may diminish the reserve capacity or redundancy of the bridge but would not result in structural collapse or a clear and present danger.



February 2008: Yellow Structural Flag Due to the Deteriorated Cap Beam. October 2008: Corrosion of Steel Secondary Member. November 2008: Crack in Steel Girder.

Safety Flag is used to report a condition that presents a clear and present vehicular or pedestrian traffic hazard, but there is no danger of structural failure or collapse.



August, October, and November 2008: Examples of Tripping Hazards. July 2013 Safety Flag: Ironworker and Mason Crews Repairing Missing Joint Seal Materials on the Brooklyn-Bound Williamsburg Bridge. The Joint Sealer Spaces Were Widened on Each Part of the Joint Utilizing the Shop-Made Jack Expansion Blocks, and Then Completely Cleaned With a Needle Gun to Prepare the Surface to be Rough Contacted With Epoxy Glue. After the Glue was Spread on the Sealer Space Surfaces, the Seal Strip was Installed and Tightened. (Credit: Hany Soliman)

## **FLAG DEFINITIONS AND PROCEDURES**

(Source: NYSDOT Engineering Instruction 94-002)

Certain Red or Safety Flags may be further classified as *Prompt Interim Action (PIA) flags*. PIA flags must be addressed within 24 hours of discovery.



Example of PIA Safety Flag: Broken Grating. Executive Director of Bridge Preventive Maintenance and Repair Tom Whitehouse (White Hardhat) Ensuring the Proper Setup of Containment Procedures at the St. George Ferry Terminal Landing Slips Before the Masons Address A PIA Flag (Falling Concrete). Inspecting the Flagged Condition.



July 2013 PIA Safety Flag on the City Island Bridge. The repairs, conducted after a record-breaking heat wave, involved opening the joint plates and installing plug welds, which helped correct the plates' position and recreated the proper gap to allow the bridge to expand and contract safely. Finger Joint Before the Repair. Open Finger Joint. Division Crews Repairing the Joints. View Beneath the Finger Joint. The Joint Plates are Placed to Check for the Proper Gap. Leveling the Plate Before Welding. Close-Up of a Plug Weld. After 17 Plug Welds, the Finger Joints Sit Flush on the Roadway.



August 2014 PIA Safety Flag: Broken Joint Concrete Header And Steel Armor on the Long Island Expressway over Dutch Kills Creek. The Condition Was Made Safe By Installing Two Steel Plates. PIA Flag (Truck Wedged Under the FDR Drive at Span 41): Removing the Debris. (Credit: Victor Sandoval) PIA Flag Repair (Through Hole) on Harlem River Drive Ramp. (Credit: Bojidar Yanev)

**APPENDIX B-2** 

						APPENDIX B
	FLAG	G COND	ITIONS BY	CALENDA	AR YEAR	
	2010	2011	2012	2013	2014	% increase (2010 – 2014)
Citywide						
FLAGS ROUTED RED YELLOW SAFETY	1,591 53 387 1,151	1,342 56 252 1,034	1,187 34 208 945	1,117 62 123 932	1,465 128 245 1,092	-8% 142% -37% -5%
TOTAL FLAGS ELIMINATED	1,297	966	1,164	1,176	1,167	-10%
RED YELLOW SAFETY	47 214 1,036	53 126 787	43 243 878	44 212 920	116 173 878	147% -19% -15%
TOTAL FLAGS OUTSTANDING	3,612	3,989	4,012	3,953	4,251	18%
RED	50	53	44	62	74	48%
YELLOW	760	887	852	763	835	10%
SAFETY	2,802	3,049	3,116	3,128	3,342	19%
Division of Bridges Workload						
FLAGS ROUTED*	1,390	1,160	1,001	938	1,200	-14%
RED	52	47	32	61	124	138%
YELLOW	383	250	204	117	242	-37%
SAFETY	955	863	765	760	834	-13%
FLAGS ELIMINATED**	1,198	877	1,057	1,091	1,081	-10%
RED	40	46	41	43	111	178%
YELLOW	207	126	241	208	171	-17%
SAFETY	951	705	775	840	799	-16%
FLAGS OUTSTANDING***	2,076	2,355	2,309	2,166	2,300	11%
RED	50	51	42	60	73	46%
YELLOW	731	845	808	717	798	9%
SAFETY	1,295	1,459	1,459	1,389	1,429	10%

<sup>\*</sup>Does not include re-routed flags. \*\*\*Includes re-routed flags.

Revised 2/13/15

<sup>\*\*95%</sup> of PIA flags were remediated within 24 hours in 2014.

## FLAG REPORTING AND TRACKING PROCESS

There are four primary sources from which flags originate:

- NYSDOT inspectors
- NYCDOT inspectors
- NYCDOT Communications Center, 311, or other Public Channels
- NYCDOT Bridge Repair Section

### State DOT Inspectors

- 1. State inspectors identify flag conditions.
- 2. Written notification of flag conditions are sent to the Bridge's Flags unit. (Immediate verbal notification is given for Red Flags and PIA flags.)
- 3. Flag condition reports are entered into the Division's "City Flag" and "State Flag" database.
- 4. Flag conditions are reviewed by City engineers who have four routing options:
  - assign flags to outside agencies for repair, or
  - have City inspectors monitor flags until further action is desired, or
  - assign flags to in-house or contractor forces for repair, or
  - assign flags to the Construction Section for Capital contractor repair.
- 5. Each flag condition is assigned a City Flag number, and routed to the appropriate group.
- 6. When flag conditions are eliminated, the respective databases are updated.

## City DOT Division of Bridges Inspectors

- 1. City inspectors identify flag conditions and prepare a scope of work. (Immediate verbal notification is given for Red Flags and PIA flags.)
- 2. Flag condition reports are received and reviewed by the Flags unit.
- 3. Flag condition reports are entered into the "City Flag" database.
- 4. Flag conditions are reviewed by City engineers who have four routing options:
  - assign flags to outside agencies for repair, or
  - have City inspectors monitor flags until further action is desired, or
  - assign flags to in-house or contractor forces for repair, or
  - assign flags to the Construction Section for Capital contractor repair.
- 5. When flag conditions are eliminated, the database is updated.

### City DOT Communications Center, 311, or other Public Channels

- 1. DOT is alerted to a possible flag condition.
- 2. City engineers visit the site to review the reported condition.
- 3. If the deficiency warrants, a verbal flag is communicated and a condition report is filed.
- 4. Flag condition reports are entered into the "City Flag" database.
- 5. Flag conditions are reviewed by City engineers who have four routing options:
  - assign flags to outside agencies for repair, or
  - have City inspectors monitor flags until further action is indicated, or
  - assign flags to in-house or contractor forces for repair, or
  - assign flags to the Construction Section for Capital contractor repair.
- 6. When flag conditions are eliminated, the database is updated.

## City DOT Bridge Repair Section

- 1. Bridge Repair personnel complete a Post Flag Request Form for a condition which they have identified and already corrected.
- 2. Report is entered into the "City Flag" database as an eliminated flag.

Revised 12/1/14

## Appendix C

	2014 INVENTORY
Inventory Summary	C-1
Posted, Partially Closed & Closed Bridges	C-2
Bridge Identification Numbers	C-3
New York State Inspection System	C-4
Standard Abbreviations	C-5
Information on Inventory Lists	C-6
Adjustments to the Inventory	C-7
Listing of Bridge Inventory and Conditions	C-8

## **Inventory Summary**

In Calendar Year 2014, the total number of bridge and tunnel structures under the jurisdiction of the New York City Department of Transportation (NYCDOT) remained at 789. NYCDOT owns, operates, and/or maintains 759 non-movable bridges, 24 movable bridges, and five tunnels. In 1999, a Memorandum of Understanding between NYCDOT and the New York City Department of Environmental Protection (NYCDEP) added 67 culverts (since reduced to 53) in Staten Island to the Division's Inventory. While the Division is responsible for the capital rehabilitation of these structures, maintenance and inspection responsibilities remain with NYCDEP.

The condition of New York City's 789 elevated bridge structures (including five tunnels), as measured by the City's general condition rating, are as follows: No structures were rated *Poor*, 456 structures were rated *Fair*, 221 structures were rated *Good*, 111 structures were classified *Very Good*, and one structure is not rated (closed).

The bridges in the Division's inventory connect a vast and diverse highway and street network throughout the City. The impressive East River crossings – the Brooklyn, Manhattan, Williamsburg, and Ed Koch Queensboro Bridges – are the most visible and famous structures, but are by no means representative of all the bridges in the City's inventory. Three hundred twenty-four (41.06%) of the Division's structures consist of one span (the portion of a bridge between two supports). One hundred three (13%) bridges carry only pedestrian traffic. Of the 789 structures in the City's inventory, 103 (13.05%) cross waterways; of these, 20 connect the boroughs of the Bronx, Brooklyn, Manhattan and Queens. Three hundred twenty-seven (41.4%) structures cross the City's labyrinthine system of railroad and subway tracks. Two hundred fifty (31.69%) structures cross or connect arterial highways, such as the Henry Hudson Parkway, the Brooklyn-Queens Expressway, and the Belt Parkway, which facilitate traffic flow through and around the five boroughs of the City of New York.

## **Rating System**

The Division of Bridges bases its general condition ratings directly on the numerical ratings assigned during bridge inspections. Federal law mandates that bridge structures be inspected at least once every two years. The New York State Department of Transportation hires engineering consultants to perform biennial inspections for all bridge structures except pedestrian bridge structures, and bridge structures less than 20 feet in length. Bridge structures not inspected by the State are inspected by the NYC Department of Transportation's Division of Bridges, with the exception of the East 63<sup>rd</sup> Street Pedestrian Bridge over the FDR Drive, which was inspected by Rockefeller University.

The State inspected 676 (85.68%) bridge structures. The balance of 112 (14.20%) were inspected by the City, with the exception of the High Bridge over the Harlem River, which was inspected in 2002 by the Department of Parks and Recreation. Each structure in a biennial inspection is given an overall numerical condition rating from 1 (structural failure) to 7 (new condition), reflecting a weighting of key features of the structure (see Appendix C-4). In certain cases, where a bridge structure is closed to traffic, only a city condition rating is given.

City condition ratings coincide with the following ranges of State ratings:

State Numerical Rating	<u>Cit</u>	y Condition Rating
1.000 – 3.000	=	POOR
3.001 – 4.999	=	FAIR
5.000 - 6.000	=	GOOD
6.001 - 7.000	=	VERY GOOD

This method is used as a guide in assessing what operational action is needed. The overall bridge rating, in and of itself, is not always indicative of whether a bridge needs major rehabilitation. Further inspection and analysis must be done to determine specific rehabilitation or corrective repair needs.

## **Summary of 2014 Structure Conditions**

Rating	Number of Structures	Percent	Number of Spans	Percent	Deck Area Sq Ft	Percent
Poor	0	0.00%	0	0.00%	0	0.00%
Fair	456	57.87%	3,312	76.33%	10,405,676	71.32%
Good	221	28.05%	706	16.27%	2,621,093	17.96%
Very Good	111	14.09%	321	7.40%	1,563,458	10.72%
Not Rated	1					
Total	789	100%	4,339	100%	14,590,227	100.00%

As of December 31, 2014, the condition of the City's bridges and tunnels indicated that 0% were rated as *Poor*, 57.87% were classified as *Fair*, 28.05% were awarded ratings of *Good*; and 14.09% as *Very Good*. Those structures given ratings of Fair encompassed 76.33% of bridge spans.

Rating	201	1	201	2	201	3	20	14
Poor	3	0.38%	1	0.13%	1	0.13%	0	0.00%
Fair	459	58.40%	460	58.45%	456	57.87%	456	57.87%
Good	215	27.35%	212	26.94%	217	27.54%	221	28.05%
Very Good	109	13.87%	114	14.49%	114	14.47%	111	14.09%
Not Rated	1		1		1		1	
Total	787	100%	788	100%	789	100%	789	100

During 2014, Manhattan had the highest percentage of bridge structures rated fair - 74.43% - as well as the lowest percentage of bridge structures rated good - 21.02%. Staten Island had the highest percentage of bridge structures classified as good - 43.28%, and the second highest percentage of bridge structures rated  $very\ good - 17.91\%$ , for a total of 61.19%. In 2014, Brooklyn had the highest percentage of bridge structures rated as  $very\ good - 22.86\%$ . The Bronx had the second highest percentage of bridge structures classified as fair - 62.50%. Queens had the third highest percentage of bridge structures classified as  $very\ good - 17.68\%$ , and the second highest percentage of bridge structures rated as good - 29.80%.

Borough*	Poor	% of Boro	Fair	% of Boro	Good	% of Boro	Very	% of Boro	Total
							Good		
Bronx	0	0.00%	95	62.50%	43	28.29%	14	9.21%	152
Brooklyn	0	0.00%	86	49.14%	49	28.00%	40	22.86%	175
Manhattan	0	0.00%	131	74.43%	37	21.02%	8	4.55%	176
Queens	0	0.00%	104	52.53%	59	29.80%	35	17.68%	198
Staten Island	0	0.00%	26	38.81%	29	43.28%	12	17.91%	67
Total	0	0.00%	442	57.55%	217	28.26%	109	14.19%	768

<sup>\*</sup> Does not include borough-crossing bridges (see next table).

## **Summary of 2014 Structure Conditions**

Seventy percent of the 20 bridge structures that service the five boroughs were rated in *fair* condition in 2014, and 30% were rated *good* or *very good*.

Boro- Crossing	Poor	% of Boro Crossing	Fair	% of Boro Crossing	Good	% of Boro Crossing	Very Good	% of Boro Crossing	Total
Bronx- Manhattan	0	0.00%	6	60.00%	2	20.00%	2	20.00%	10
Brooklyn- Manhattan	0	0.00%	4	100.00%	0	0.00%	0	0.00%	4
Queens- Manhattan	0	0.00%	2	66.67%	1	33.33%	0	0.00%	3
Brooklyn- Queens	0	0.00%	2	66.67%	1	33.33%	0	0.00%	3
Total	0	0.00%	14	70.00%	4	20.00%	2	10.00%	20

These figures evidence that the Division is continuing to make progress in improving the conditions of the City's bridges. The number of bridges rated *Poor* and *Fair* has decreased over the past few years while the number of bridges rated *Good* and *Very Good* has increased. However, it continues to remain essential that the overall bridge program include an expansion of the Preventive Maintenance and Corrective Repair programs which have traditionally slowed the deterioration of *good* and *very good* bridges.

During 2014, the total number of closed or partially closed bridge structures was four, with one closed and three partially-closed structures (see Appendix C-2).

# Bridges with Posted Weight Restrictions NEW YORK CITY DEPARTMENT OF TRANSPORTATION

BIN	BOROUGH	LOCATION FEATURE-1	LOCATION FEATURE-2	LOCATION FEATURE-3	FISCAL YEAR*	POSTED TONS	REMARKS
2231450	BROOKLYN	BELT SHORE PARKWAY	GERRITSEN INLET		2012	5	CONDITION OF MILL BASIN BRIDGE
2231479	BROOKLYN	BELT SHORE PARKWAY	MILL BASIN CREEK		2016	5	
	MANHATTAN	FDR DRIVE (NB & SB)	23 <sup>RD</sup> TO 63 <sup>RD</sup> STREET			4	PASSENGER CARS ONLY
2240019	BROOKLYN & MANHATTAN	BROOKLYN BRIDGE	EAST RIVER	INCLUDING RAMPS	2009	3	NO COMMERCIAL TRAFFIC NO TRUCKS, NO BUSSES: 11'0' CLEARANCE
2240039	BROOKLYN & MANHATTAN	WILLIAMSBURG BRIDGE	EAST RIVER				INNER ROADWAYS, <u>NO</u> <u>TRUCKS</u> ; OUTER ROADWAYS DESIGN FOR HS20 [36 TONS] AND TRUCKS ARE PERMITTED ON OUTER ROADWAY
2240047	MANHATTAN & QUEENS	ED KOCH QUEENSBORO BRIDGE	EAST RIVER			7.5	LOWER OUTER ROADWAYS POSTED AS H-7.5 [7.5 TONS] (PASSENGER CARS ONLY FOR SOUTHBOUND; PEDESTRIANS AND BICYCLES ONLY FOR NORTHBOUND); LOWER INNER ROADWAYS ARE DESIGNED FOR HS20 TRUCK LOAD [36 TONS]; UPPER ROADWAYS DESIGNED FOR H-15 [15 TONS], NO TRUCKS, ONLY BUSES
2240260	BROOKLYN	CARROLL STREET BRIDGE	GOWANUS CANAL	CARROLL STREET		10	
2240640	MANHATTAN & QUEENS	ROOSEVELT ISLAND	EAST CHANNEL OF THE EAST RIVER			36	
2240660	QUEENS	RIKERS ISLAND BRIDGE	RIKERS ISLAND CHANNEL			36	
2246550	MANHATTAN	PARK AVENUE VIADUCT	42 <sup>ND</sup> STREET			15	NO COMMERCIAL TRAFFIC
2247590	QUEENS	FOREST PARK DRIVE	LIRR			8	
2247660	QUEENS	FOREST PARK DRIVE	ABANDONED LIRR			8	
2245460	MANHATTAN	PARK AVENUE SB	EAST 45 <sup>TH</sup> STREET			15	NO COMMERCIAL TRAFFIC
2245470	MANHATTAN	PARK AVENUE NB	EAST 45 <sup>TH</sup> STREET			15	NO COMMERCIAL TRAFFIC
2244120	BROOKLYN	HILL DRIVE	PROSPECT PARK LAKE				NO VEHICLES
226771A**	MANHATTAN	79 <sup>Th</sup> STREET RAMP to HHP	79 <sup>TH</sup> STREET BOAT BASIN GARAGE			15	
226771B**	MANHATTAN	79 <sup>TH</sup> STREET RAMP TO GARAGE	79 <sup>TH</sup> STREET BOAT BASIN GARAGE			15	
226771C**	MANHATTAN	GARAGE RAMP TO 79 <sup>TH</sup> STREET	79 <sup>TH</sup> STREET BOAT BASIN GARAGE			15	
226771D**	MANHATTAN	SB HHP RAMP TO 79 <sup>TH</sup> STREET	79 <sup>TH</sup> STREET BOAT BASIN GARAGE			15	
2240507**	QUEENS	ROOSEVELT AVENUE BRIDGE	VAN WYCK EXPRESSWAY		2015	25	
2247120**	QUEENS	WOODSIDE AVENUE BRIDGE	LIRR MAIN LINE			8	
		1	1	1			1

21 COUNT

\* - CONSTRUCTION CONTRACT LETTING

2/28/15

# Partially Closed Bridges NEW YORK CITY DEPARTMENT OF TRANSPORTATION

BIN	BOROUGH	LOCATION FEATURE-1	LOCATION FEATURE-2	LOCATION FEATURE-3	FISCAL YEAR*	REMARKS
2076640	BRONX	DEPOT PLACE	CONRAIL HUDSON DIVISION			ONE LANE CLOSED TO TRAFFIC (BUT OPEN TO PEDESTRIANS AND BICYCLES), AND ONE LANE OPEN
2244120	BROOKLYN	HILL DRIVE	PROSPECT PARK LAKE		CONSTR UCTION MOVED DUE TO LACK OF FUNDING	CLOSED TO VEHICULAR TRAFFIC, OPEN TO PEDESTRIAN TRAFFIC, ALONG THE CENTER OF THE ROADWAY.
2247080	QUEENS	149 <sup>TH</sup> STREET	LIRR		FY'16	CLOSED TO VEHICULAR TRAFFIC, BUT OPEN TO PEDESTRIANS AND BICYCLES.

3 COUNT

## \* - CONSTRUCTION CONTRACT LETTING



Carroll Street, Gerritsen Inlet, Mill Basin, and Roosevelt Avenue Bridge Posted Weight Restriction Signs. (Carroll Street, Gerritsen Inlet, and Roosevelt Avenue Credit: NYSDOT) Madison Avenue Bridge Posted Weight Restriction in Effect in 1959.

# Closed Bridges NEW YORK CITY DEPARTMENT OF TRANSPORTATION

There is one closed bridge.

BIN	BOROUGH	LOCATION	LOCATION	LOCATION	REMARKS
		FEATURE-1	FEATURE-2	FEATURE-3	
2248130	QUEENS	FLUSHING MEADOW PARK PEDESTRIAN	WILLOW LAKE	76 <sup>th</sup> ROAD	BRIDGE IS IN FLUSHING CORONA PARK, WHICH IS IN A REMOTE LOCATION AND WAS DAMAGED BY FIRE.

10/20/09, no change 2014

## **Bridge Identification Numbers**

In 1972, the State of New York developed a computerized system to store inventory and inspection data on bridges that are greater than 20 feet in length. In New York City, structures that are 20 feet in length or less, "mini-bridges," are tracked independently by the City. Each structure is distinguished by a separate Bridge Identification Number (B.I.N.).

A six-digit B.I.N. identifies a single structure or group of connected or associated structures, while the seven-digit B.I.N. identifies each of those connected or associated bridge structures individually. Each level of a bi-level bridge, each separate bridge structure in a parallel configuration, and each ramp attached to a main bridge is considered an individual structure and assigned its own unique B.I.N. for example, the Brooklyn Bridge has one six-digit B.I.N., 2-24002, which incorporates the entire bridge. All ramps and secondary structures, as well as the main structure, are identified by their own seven-digit numbers, such as 2-24001-A, 2-24001-B, etc.

## If the prefix (first number) of the B.I.N. is:

- 1, the bridge is considered part of the **State** bridge system. This number might include City bridges if maintenance is shared between City and State.
- **2**, the bridge is considered part of the **City** bridge system. This number might include State bridges if maintenance is shared between City and State.
- **M**, **Q**, or **R**, the bridge is a "mini-bridge," and is considered part of the **City** bridge system. They are located in Manhattan, Queens, or Staten Island, respectively.

### If the suffix (last character) of the B.I.N. is:

- **1 through 6**, the bridge is in parallel configuration. The left-most bridge in the Direction of Orientation has a last character of 1. The next left-most bridge has a last character of 2, and so on.
- **7 or 8**, the bridge is in a bi-level configuration. Seven indicates the lower level and eight indicates the upper level.
- **0 or 9**, the bridge is not in parallel or bi-level configuration.

A letter of the alphabet, the structure is a ramp physically attached to the main bridge. If more than one ramp is attached to the same span of the main bridge, the characters are assigned alphabetically starting with the left-most ramp in the Direction of Orientation. Other ramps attached to the bridge are assigned alphabetical characters in a clockwise direction.

## **New York State Biennial Bridge Inspection and Condition Rating System**

During the regularly scheduled State biennial bridge inspections, each bridge element is investigated and its structural condition is numerically rated according to the system indicated below:

Numerical Rating	<u>Description</u>
4	Detectable Herondone
1	Potentially Hazardous
2	Used to shade between a rating of 1 and 3
3	Serious deterioration, or not functioning as originally designed
4	Used to shade between a rating of 3 and 5
5	Minor deterioration, and is functioning as originally designed
6	Used to shade between a rating of 5 and 7
7	New condition
8	Not Applicable
9	Unknown (due to inaccessibility, e.g. footings or piles)

Based on these individual ratings for each element, a weighted average rating is computed for the entire structure.

These ratings (both individual and weighted average) are recorded on New York State Department of Transportation Inspection report Forms. Together with photographs and explanatory descriptions, the ratings provide the Division with information on the existing condition of each bridge.

A description of the condition ratings 1 through 7, with programmed responses to certain critical ratings, demonstrates the importance of these inspections:

A rating of 1 describes an extremely serious condition which is deemed potentially hazardous. This rating, which is phoned in by the inspection leader, necessitates that the Division respond immediately by 1) closing the structure either completely or partially until emergency repairs are made, or 2) limiting the vehicle weight permitted on the structure and then performing repairs on a timely basis.

A rating of 3 describes a bridge element that is not functioning as designed. Although not considered hazardous, such members require extensive rehabilitation. A determination is then made to repair such rated members either by the Division's in-house repair personnel, the critical maintenance contractor (When and Where contracts), or a major capital contract. Until such repairs are made, this condition is periodically monitored.

A<u>rating of 5</u> indicates the member is functioning as designed but exhibits minor deterioration. These members are prioritized and scheduled for repair by the Bridge Maintenance, Inspection and Operations Bureau.

A rating of 7 indicates a new condition requiring no remediation.

The <u>ratings of 2, 4, and 6</u> are utilized to shade between each of the above ratings.

## **Standard Abbreviations**

### **General Abbreviations:**

APP: NB: Northbound Approach AVE: Avenue PED BR: Pedestrian Bridge BLVD: Boulevard PKWY: Parkway Bridge Place PL: BR: Central Park Road CPK: RD: DR: Drive SB: Southbound ST: Street EB: Eastbound EXPWY: Expressway TPKE: Turnpike Interstate Westbound l: WB:

LN: Lane

X: No State accepted mileage markers exist on this route



Assistant Civil Engineer Andrew Hoang Inspecting the Brooklyn Bridge. (Credit: Clara Medina)

## Routes:

<u>No.</u>	Borough	<u>Name</u>
25	Queens	Union Turnpike
25A	Queens	Northern Boulevard
27	Brooklyn	Southern Parkway
I-87	Manhattan, Bronx	Major Deegan Expressway
I-95	Manhattan, Bronx	Cross Bronx Expressway
I-278	Brooklyn, Queens	Brooklyn-Queens Expressway
I-278	Bronx	Bruckner Expressway
I-278	Staten Island	Staten Island Expressway
I-295	Queens	Clearview Expressway
I-295	Bronx	Throgs Neck Expressway
I-440	Staten Island	Richmond Parkway
I-478	Brooklyn	Brooklyn Battery Tunnel
I-495	Queens	Long Island Expressway
I-678	Queens	Whitestone Expressway, Van Wyck
I-878	Queens	Nassau Expressway
I-895	Bronx	Sheridan Expressway

## **Standard Abbreviations**

Highways:

BCIP: Belt System - Cross Island
BE: Bruckner Expressway

BLP: Belt System - Laurelton Parkway

BPP: Bronx Pelham Parkway

BQE: Brooklyn-Queens Expressway
BRPC: Bronx River Parkway (in NYC)
BSHP: Belt System - Shore Parkway
BSOP: Belt System - Southern Parkway
CBE: Cross Bronx Expressway

FDRD: Franklin D. Roosevelt Drive
GCP: Grand Central Parkway
GW: George Washington Bridge
HHP: Henry Hudson Parkway
HRD: Harlem River Drive

HRPC: Hutchinson River Parkway (in NYC)
IP: Jackie Robinson (Interborough) Parkway

LIE: Long Island Expressway

MAP: Marine Parkway

MDE: Major Deegan Expressway

MP: Mosholu Parkway
OCP: Ocean Parkway
PR: Prospect Expressway
RP: Richmond Parkway
VWE: Van Wyck Expressway
WLMBRG: Williamsburg Bridge
WSE: West Shore Expressway

## **Information Available On Division Of Bridges Inventory Of Structures**

- **Bridge Identification Number (B.I.N.)**
- Borough:

B - The Bronx Q - Queens R - Staten Island

K - Brooklyn M - Manhattan

- **Feature Carried**: Name of passageway carrying vehicle or pedestrian traffic.
- Feature Crossed: Description of area crossed.
  - Railroad Crossed (if applicable):

A - Amtrak N - New York & Atlantic C - CSX O - B & O Railroad

L - Long Island Railroad M - Metro-North (MTA) S - Staten Island Rapid Transit Operating Authority

T - NYC Transit Authority

Other Owner:

Department of Education ED

Ferries (Department of Transportation) F Ρ Department of Parks and Recreation

Bridge Type:

Α	Arterial	PED	Pedestrian
Е	East River	R	Ramp
M	Movable	T	Tunnel
0	Off-System	W	Waterway

**Rating Source:** 

(C) City Inspection (P) Parks Inspection

State Inspection Rockefeller University Inspection (S) (U)

Rating: Numerical and/or verbal rating

**POOR** 1.000 - 3.000: 3.001 - 4.999: (F) FAIR GOOD 5.000 - 6.000: (G)

**VERY GOOD** 6.001 - 7.000: (V)

- **Deck Area:** Square feet
- CD:

**Community Board District** 

## 2014 Bridge Inventory Adjustments

There were no bridges removed from or added to the City's inventory since the 2013 Annual Report was issued.

REV. DATE 3/2015

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Conditio Rating		DECK AREA	REPLACEMENT COST	CD CD	2CD3
1065210	Q	WHITESTONE EXPRESSWAY NORTHBOUND	BCIP		Α		1	s	6/17/2014	4.656	F	2,500	\$11,062,500	407	
1066510	В	BRUCKNER EXPRESSWAY SERVICE ROAD	WESTCHESTER CREEK		WMA		17	s	9/17/2014	3.226	F	39,400	\$174,345,000	209	
1067150	В	NEREID AVE (EAST 240TH STREET)	BRONX RIVER PARKWAY	М	0		10	s	10/19/2013	4.632	F	57,750	\$255,543,750	212	
1240090	вм	MACOMBS DAM BRIDGE	HARLEM RIVER	м	wmo		52	s	12/13/2013	3.986	F	220,000	\$973,500,000	110 20	4
1247010	Q	91ST PLACE (2247010)	LIRR PT WASH BR	L	o		1	s	9/3/2013	6.500	VG	2,760	\$12,213,000	404	
1247200	Q	67TH AVENUE PEDESTRIAN BRIDGE (2247200)	LIRR MAIN LINE	L	O-PED		3	С	9/24/2014	4.219	F	1,300	\$5,752,500	406	
1247280	Q	51ST AVENUE PEDESTRIAN BRIDGE (2247280)	LIRR MAIN LINE	L	O-PED		5	С	10/8/2013	3.018	F	700	\$3,097,500	402	
1247560	Q	METROPOLITAN AVENUE	LIRR - NY&ATL	LN	О		2	s	9/23/2014	3.603	F	20,900	\$92,482,500	405	
2055801	Q	NORTHERN BOULEVARD WESTBOUND	FLUSHING RIVER		wo		40	s	11/21/2012	4.338	F	71,900	\$318,157,500	407	
2055802	Q	NORTHERN BOULEVARD EASTBOUND	FLUSHING RIVER		wo		40	s	10/28/2014	4.268	F	78,894	\$349,105,950	407	
205580A	Q	NORTHERN BOULEVARD WESTBOUND TO 678I SOUTHBOUND	VACANT LAND		AR		16	s	6/5/2014	5.619	G	8,600	\$38,055,000	407	
2065629	В	BRONX RIVER PARKWAY	BOSTON ROAD - BX ZOO		A		1	s	8/14/2013	5.138	G	6,300	\$27,877,500	227	
2065930	Q	HAMILTON PLACE	495I (L.I.E.)		Α		2	s	2/20/2014	5.528	G	11,111	\$49,166,175	405	
2065940	О	GRAND AVENUE	4951 (L.I.E.)		Α		2	s	11/11/2014	4.861	F	12,850	\$56,861,250	405	
2065950	Q	69TH STREET	4951 (L.I.E.)		А		2	s	7/8/2013	5.250	G	10,336	\$45,736,800	405	
2066002	О	4951 (2066000)	WOODHAVEN BOULEVARD		Α		2	s	5/23/2013	5.620	G	25,200	\$111,510,000	406 40	.4
2066100	к	5TH AVENUE	27 X PROSPECT EXPRESSWAY		А		1	s	4/22/2014	5.063	G	8,800	\$38,940,000	307	
2066671	В	BRUCKNER EXPRESSWAY SOUTHBOUND	BRONX RIVER		WA		3	s	10/15/2013	5.222	G	12,400	\$54,870,000	202 20	.9
2066672	В	BRUCKNER EXRESSWAY NORTHBOUND	BRONX RIVER		WA		8	s	10/15/2013	4.418	F	22,300	\$98,677,500	202 20	.9
2066720	В	EAST 174TH STREET	SHERIDAN EXPRESSWAY/AMTRAK	А	А		13	s	7/29/2014	3.986	F	35,573	\$157,410,525	209 20	.3
206672A	В	174TH STREET-NORTH PEDESTRIAN BRIDGE	895I - SHERIDAN EXPRESSWAY		A-PED		4	С	4/1/2014	4.667	F	1,800	\$7,965,000	209	
206672B	В	174TH STREET-SOUTH PEDESTRIAN BRIDGE	8951 - SHERIDAN EXPRESSWAY		A-PED		4	С	4/17/2014	4.750	F	1,900	\$8,407,500	209	
2066919	вм	WASHINGTON BRIDGE	HARLEM RIVER	м	wo		9	s	11/29/2012	4.642	F	128,339	\$567,900,075	112 20	5 204
2075351	В	BRUCKNER EXPRESSWAY SOUTHBOUND	AMTRAK - CSX	AC	А		1	s	10/29/2014	5.698	G	11,600	\$51,330,000	202	
2075352	В	BRUCKNER EXPRESSWAY NORTHBOUND	AMTRAK - CSX	AC	Α		1	s	10/30/2014	6.190	VG	10,900	\$48,232,500	202	
2075820	В	EAST TREMONT AVENUE	HUTCHINSON RIVER PARKWAY		А		2	s	11/21/2013	4.444	F	10,200	\$45,135,000	210	
2075837	В	WESTCHESTER AVENUE	HUTCHINSON RIVER PARKWAY		Α		2	s	2/27/2014	4.097	F	15,858	\$70,171,650	210 21	1
2075849	В	BRONX PELHAM PARKWAY	HUTCHINSON RIVER PARKWAY		А		2	s	5/8/2014	3.974	F	17,600	\$77,880,000	210 21	1
2075859	В	HUTCHINSON RIVER PARKWAY	HUTCHINSON RIVER		WMA		7	s	11/7/2014	4.828	F	60,500	\$267,712,500	210 22	.8
2076109	В	BE NORTHBOUND SERVICE ROAD	HUTCHINSON RIVER PARKWAY		Α		2	s	8/15/2013	5.105	G	7,800	\$34,515,000	210	
2076129	В	BE SOUTHBOUND SERVICE ROAD	HUTCHINSON RIVER PARKWAY		А		2	s	1/16/2014	5.079	G	7,100	\$31,417,500	210	
2076640	В	DEPOT PLACE	METRO NORTH RR HUD	СМ	0		11	s	5/16/2014	4.653	F	26,566	\$117,554,550	204	
2076929	В	BRUCKNER EXPRESSWAY	CSX - HUNTS POINT	С	А		1	s	8/28/2013	4.567	F	3,800	\$16,815,000	202	$\Box$
2229289	м	HHP VIADUCT	AMTRAK - WEST 72ND STREET - WEST 79TH STREET	А	А		145	s	9/17/2014	3.597	F	213,173	\$943,290,525	107	
222928C	м	PEDESTRIAN BRIDGE AT WEST 73RD STREET	HHP - AMTRAK	А	A-PED	Р	5	С	8/12/2013	3.812	F	3,700	\$16,372,500	107	$\top$
222928D	м	WEST 72ND STREET RAMP TO HHP NORTHBOUND	RELIEF		AR		1	s	7/18/2014	6.648	VG	1,750	\$7,743,750	107	
2229290	м	WEST 79TH STREET	AMTRAK	Α	А		1	s	6/11/2014	4.424	F	4,500	\$19,912,500	107	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	n VR BL RT	DECK AREA	REPLACEMENT COST	CD CD2	CD3
2229309	М	ннр	RIVERSIDE PARK	А		1	s	1/13/2014	5.267	G	2,172	\$9,611,100	107	
2229311	М	HHP SOUTHBOUND	RAMP TO WEST 96TH STREET	А		1	s	1/28/2014	4.455	F	2,000	\$8,850,000	107	
2229312	М	HHP NORTHBOUND	RAMP TO WEST 96TH STREET	А		1	s	1/27/2014	4.182	F	2,000	\$8,850,000	107	
2229321	М	HHP SOUTHBOUND	RAMP FROM WEST 96TH STREET	А		1	s	1/31/2014	5.133	G	2,000	\$8,850,000	107	
2229322	М	HHP NORTHBOUND	RAMP FROM WEST 96TH STREET	А		1	s	1/31/2014	5.300	G	2,000	\$8,850,000	107	
2229349	М	ннр	WEST 158TH STREET A	А		44	s	10/10/2014	4.155	F	140,000	\$619,500,000	109 112	
222934A	М	RAMP TO NORTHBOUND HHP	AMTRAK WEST SIDE A	AR		26	s	6/30/2014	3.764	F	10,800	\$47,790,000	112	
2229400	М	WEST 181ST STREET PEDESTRIAN BRIDGE	HHP NORTHBOUND	A-PED	Р	7	С	2/25/2014	4.493	F	1,500	\$6,637,500	112	
2229440	В	ннр	KAPPOCK ST	А		1	s	7/18/2013	4.931	F	3,900	\$17,257,500	208	
2229450	В	WEST 232ND STREET	ННР	А		2	s	7/22/2013	5.026	G	4,900	\$21,682,500	208	
2229460	В	WEST 236TH STREET PEDESTRIAN BRIDGE	ннр	A-PED		3	С	7/7/2014	4.443	F	2,500	\$11,062,500	208	
2229470	В	WEST 239TH STREET	ннр	А		2	s	6/3/2013	5.053	G	6,100	\$26,992,500	208	
2229480	В	MANHATTAN COLLEGE PARKWAY	ННР	А		3	s	6/3/2013	5.053	G	6,200	\$27,435,000	208	
2229490	В	WEST 246TH STREET	ННР	А		2	s	6/3/2013	4.868	F	5,600	\$24,780,000	208	
2229500	В	WEST 252ND STREET	ннр	А		2	s	1/27/2014	5.372	G	4,500	\$19,912,500	208	
2229510	В	RIVERDALE AVENUE	ннр	А		2	s	7/22/2013	5.079	G	5,200	\$23,010,000	208	
2229520	В	FIELDSTON ROAD	ннр	А		1	s	7/29/2013	4.900	F	6,600	\$29,205,000	208	
2229530	В	ннр	BROADWAY	А		1	s	7/29/2013	4.574	F	7,500	\$33,187,500	208	
2229540	В	VAN CORTLANDT PARK	ННР	A-PED	Р	2	С	7/14/2014	4.759	F	3,900	\$17,257,500	226	
2229550	В	VAN CORTLANDT EQUESTRIAN	ннр	A-PED	Р	2	С	7/16/2014	4.440	F	2,100	\$9,292,500	226	
2229560	В	BRONX PELHAM PARKWAY	AMTRAK - CSX AC	А		3	s	11/12/2014	4.486	F	24,591	\$108,815,175	211	
2229579	В	BOSTON ROAD	HUTCHINSON RIVER	wo		14	s	5/9/2014	4.042	F	95,700	\$423,472,500	212	
2230000	к	HIGHLAND BOULEVARD EASTBOUND	JACKIE ROBINSON PARKWAY	А		1	s	3/17/2014	4.724	F	4,900	\$21,682,500	305	
2230010	к	HIGHLAND BOULEVARD WESTBOUND	JACKIE ROBINSON PARKWAY	А		1	s	2/25/2014	4.767	F	3,500	\$15,487,500	305	
2230020	к	HIGHLAND BOULEVARD WESTBOUND	JACKIE ROBINSON PARKWAY EASTBOUND ENTRANCE RAMP	А		2	s	3/11/2014	4.974	F	4,700	\$20,797,500	305	
2230040	Q	CYPRESS HILLS STREET	JACKIE ROBINSON PARKWAY	А		1	s	3/28/2014	4.722	F	5,000	\$22,125,000	405	
2230099	Q	JACKIE ROBINSON PARKWAY	CYPRESS HILLS CEMETERY	А		1	s	1/6/2014	5.444	G	4,200	\$18,585,000	405	
2230120	Q	MYRTLE AVENUE	JACKIE ROBINSON PARKWAY	А		1	s	4/17/2014	5.250	G	6,400	\$28,320,000	405 482	
2230179	Q	JACKIE ROBINSON PARKWAY	METROPOLITAN AVENUE	А		2	s	4/22/2014	5.286	G	8,673	\$38,378,025	482	
2230180	Q	UNION TURNPIKE	JACKIE ROBINSON PARKWAY	А		1	s	1/27/2014	5.672	G	5,359	\$23,713,575	482	
2230190	Q	MARKWOOD ROAD	JACKIE ROBINSON PARKWAY	А		1	s	1/27/2014	5.167	G	4,400	\$19,470,000	482 406	
2230209	Q	QUEENS BOULEVARD	JACKIE ROBINSON PARKWAY T	А		5	s	6/9/2014	4.841	F	37,700	\$166,822,500	409	
2230220	к	HIGHLAND BOULEVARD NORTHBOUND	VERMONT AVENUE	А		1	s	6/5/2013	5.857	G	3,995	\$17,677,875	305	
2230250	В	MOSHOLU PARKWAY	BRONX RIVER	WA		5	s	1/8/2014	4.263	F	16,300	\$72,127,500	227	
2230260	В	MOSHOLU PARKWAY	METRO NORTH M	А		1	s	4/30/2014	5.391	G	8,880	\$39,294,000	227 207	
2230270	В	MOSHOLU PARKWAY	WEBSTER AVENUE	А		1	s	5/21/2013	5.203	G	8,480	\$37,524,000	207	
2230287	В	JEROME AVENUE	MOSHOLU PARKWAY T	А		3	s	5/22/2013	4.816	F	11,800	\$52,215,000	207	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED RA	TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD CD2	D3
2230290	В	MOSHOLU PARKWAY	EQUESTRIAN PATH	А		1	s	1/13/2014	4.310	F	4,300	\$19,027,500	226	
2230300	В	MOSHOLU PARKWAY	CONRAIL (ABANDONED)	А		1	s	7/31/2014	4.271	F	4,600	\$20,355,000	226	_
2230310	В	MOSHOLU PARKWAY	SOUTHBOUND RAMP TO HHP	А		2	s	9/16/2013	4.919	F	7,400	\$32,745,000	226	
2230350	к	SUMMIT STREET PEDESTRIAN BRIDGE	278I (B.Q.E.)	A-PED		2	s	4/4/2014	4.557	F	1,400	\$6,195,000	306	
2230360	к	UNION STREET	278I (B.Q.E.)	А		2	s	3/19/2014	4.236	F	5,000	\$22,125,000	306	
2230370	к	SACKETT STREET	278I (B.Q.E.)	А		2	s	3/19/2014	4.500	F	5,000	\$22,125,000	306	
2230380	к	KANE STREET	278I (B.Q.E.)	А		2	s	3/27/2014	4.153	F	5,000	\$22,125,000	306	
2230390	к	CONGRESS STREET	278I (B.Q.E.)	А		2	s	3/27/2014	6.029	VG	5,000	\$22,125,000	306	
2230410	к	278I EASTBOUND (B.Q.E.)	WASHINGTON STREET	А		1	s	7/16/2014	4.500	F	2,500	\$11,062,500	302	
2230420	к	278I WESTBOUND (B.Q.E.)	WASHINGTON STREET	А		1	s	7/16/2014	5.047	G	2,500	\$11,062,500	302	
2230430	к	278I (B.Q.E.) RAMP TO BROOKLYN BRIDGE	PROSPECT STREET	А		1	s	1/6/2014	5.000	G	1,100	\$4,867,500	302	
2230440	к	278I WESTBOUND (B.Q.E.)	ADAMS STREET	А		1	s	1/15/2014	5.200	G	2,700	\$11,947,500	302	
2230450	к	278I EASTBOUND (B.Q.E.)	ADAMS STREET	А		1	s	1/15/2014	4.933	F	2,500	\$11,062,500	302	
2230460	ĸ	278I (B.Q.E.)	PEARL STREET	А		1	s	1/15/2014	5.467	G	4,500	\$19,912,500	302	
2230470	к	278I (B.Q.E.)	JAY STREET	А		1	s	1/15/2014	4.833	F	5,100	\$22,567,500	302	
2230480	ĸ	278I (B.Q.E.)	PROSPECT STREET	А		1	s	2/21/2014	4.852	F	8,400	\$37,170,000	302	
2230490	к	278I (B.Q.E.)	SANDS STREET	А		1	s	2/27/2014	5.019	G	12,600	\$55,755,000	302	
2230500	к	278I (B.Q.E.)	RAMP TO BQE EASTBOUND	А		1	s	2/10/2014	4.967	F	1,300	\$5,752,500	302	
2230510	ĸ	278I (B.Q.E.)	NASSAU STREET	А		6	s	7/3/2014	5.169	G	51,200	\$226,560,000	302	
2230520	Q	65TH PLACE	278I (B.Q.E.)	А		2	s	2/6/2014	5.889	G	11,668	\$51,630,900	402	
2230530	Q	QUEENS BOULEVARD	2781 (B.Q.E.)	А		2	s	10/22/2014	6.306	VG	25,543	\$113,027,775	402	
2230540	Q	WOODSIDE AVENUE	278I (B.Q.E.)	А		1	s	1/31/2014	5.672	G	7,529	\$33,315,825	402	
2230550	Q	69TH STREET	278I (B.Q.E.)	А		2	s	1/31/2014	5.263	G	12,600	\$55,755,000	402	
2230560	Q	70TH STREET	278I (B.Q.E.)	А		2	s	10/22/2014	6.556	VG	8,580	\$37,966,500	402	
2230570	Q	41ST AVENUE	278I (B.Q.E.)	А		2	s	10/22/2014	6.735	VG	8,580	\$37,966,500	402	
2230587	Q	ROOSEVELT AVENUE	278I (B.Q.E.)	А		2	s	9/24/2013	5.889	G	11,022	\$48,772,350	402	
2230590	Q	BROADWAY	278I (B.Q.E.)	А		2	s	12/6/2012	5.789	G	16,000	\$70,800,000	402	
2230600	Q	STEINWAY STREET	278I WESTBOUND (BQE)	А		1	s	8/7/2014	6.349	VG	5,229	\$23,138,325	401	
2230610	Q	STEINWAY STREET	278I EASTBOUND (BQE)	А		1	s	8/8/2014	6.349	VG	5,146	\$22,771,050	401	
2230620	Q	37TH STREET	278I (B.Q.E.)	А		2	s	3/12/2014	4.681	F	5,300	\$23,452,500	401	
2230630	Q	35TH STREET	278I (B.Q.E.)	А		4	s	3/14/2014	4.667	F	9,000	\$39,825,000	401	
2230640	Q	32ND STREET	278I (B.Q.E.)	А		2	s	6/6/2013	4.875	F	8,100	\$35,842,500	401	
2230657	Q	31ST STREET	278I (B.Q.E.)	А		2	s	12/5/2012	4.569	F	9,500	\$42,037,500	401	
2230669	Q	278I (B.Q.E.)	35TH AVENUE	А		1	s	8/2/2013	6.390	VG	13,135	\$58,122,375	402	
2230679	Q	278I (B.Q.E.)	34TH AVENUE	А		1	s	5/17/2013	6.068	VG	7,793	\$34,484,025	402	
2230680	Q	278I (B.Q.E.)	NORTHERN BOULEVARD	А		1	s	11/5/2014	6.016	VG	27,011	\$119,523,675	402 401	
2230690	Q	278I NORTHBOUND (BQE WEST LEG)	32ND AVENUE	А		1	s	6/2/2014	6.407	VG	4,080	\$18,054,000	401	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED RA L RC	TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD CD2C	:D3
2230700	Q	278I NORTHBOUND (BQE EAST LEG)	32ND AVENUE (TO BQE WEST LEG)	А		8	s	11/5/2014	6.352	VG	31,600	\$139,830,000	401 403	
2230710	Q	278I SOUTHBOUND (BQE WEST LEG)	32ND AVENUE	A		1	s	6/28/2013	6.424	VG	5,240	\$23,187,000	401	
2230720	Q	278I SOUTHBOUND (BQE EAST LEG)	278I NORTHBOUND (BQE WEST LEG)	А		3	s	6/25/2013	6.182	VG	20,896	\$92,464,800	401	
2230730	Q	31ST AVENUE	278I NORTHBOUND (BQE WEST LEG)	А		1	s	6/25/2013	6.217	VG	5,875	\$25,996,875	401	
2230740	Q	278I SOUTHBOUND (BQE WEST LEG)	31ST AVENUE	А		1	s	6/27/2013	6.217	VG	5,246	\$23,213,550	401	
2230750	О	278I SOUTHBOUND (BQE EAST LEG)	31ST AVENUE	А		1	s	6/27/2013	6.508	VG	4,221	\$18,677,925	401 403	
2230760	D	278I NORTHBOUND (BQE EAST LEG)	31ST AVENUE	А		1	s	7/23/2014	6.356	VG	4,161	\$18,412,425	401	
2230770	О	278I (BQE WEST LEG)	30TH AVENUE	А		1	s	5/24/2013	6.322	VG	6,199	\$27,430,575	401	
2230780	О	278I (BQE EAST LEG)	30TH AVENUE	А		1	s	5/24/2013	6.206	VG	7,071	\$31,289,175	403 401	
2230790	Q	BULOVA AVENUE	278I (BQE WEST LEG)	А		2	s	4/4/2014	5.278	G	3,300	\$14,602,500	401	
2230800	О	49TH STREET	278I (BQE WEST LEG)	А		2	s	4/7/2014	5.278	G	4,900	\$21,682,500	401	
2230810	Q	ASTORIA BOULEVARD EASTBOUND	278I (BQE WEST LEG)	А		4	s	3/14/2014	4.279	F	8,200	\$36,285,000	401	_
2230820	Q	47TH STREET	GCP	А		2	s	4/28/2014	4.889	F	5,700	\$25,222,500	401	
2230830	Q	278I NORTHBOUNDB (BQE WEST LEG)	GCP	А		2	s	4/28/2014	4.583	F	7,600	\$33,630,000	401	
2230840	Q	44TH STREET	GCP	А		2	s	5/13/2014	4.764	F	5,000	\$22,125,000	401	
2230857	к	278I WESTBOUND (B.Q.E.)	JORALEMON STREET	А		1	s	3/11/2014	5.000	G	2,100	\$9,292,500	302	
2230858	к	278I EASTBOUND (B.Q.E.)	JORALEMON STREET / BQE WESTBOUND	А		1	s	11/5/2013	4.619	F	5,900	\$26,107,500	302	
2230869	Q	QUEENS BOULEVARD	ACCESS RD BQE SOUTHBOUND	А		1	s	9/30/2014	5.659	G	7,900	\$34,957,500	402	
2230870	к	COLUMBIA HEIGHTS	278I (B.Q.E.)	А		1	s	8/7/2014	4.450	F	16,500	\$73,012,500	302	
2230887	к	278I WESTBOUND (B.Q.E.)	CADMAN PLAZA	А		2	s	7/25/2014	4.403	F	4,500	\$19,912,500	302	
2230888	к	278I EASTBOUND (B.Q.E.)	CADMAN PLAZA / 278I WESTBOUND	А		2	s	7/28/2014	5.263	G	4,500	\$19,912,500	302	
2230890	Q	49TH STREET	GCP	А		2	s	5/15/2014	4.444	F	6,350	\$28,098,750	401	
2231249	к	BSHP	BAY RIDGE AVENUE	А		1	s	3/26/2014	3.625	F	4,900	\$21,682,500	310	
2231250	к	81ST STREET PEDESTRIAN BRIDGE	ВЅНР	A-PED	Р	5	С	3/25/2014	4.761	F	3,100	\$13,717,500	310	
2231260	к	92ND STREET PEDESTRIAN BRIDGE	вѕнр	A-PED	Р	6	С	8/6/2014	3.541	F	3,000	\$13,275,000	310	
2231270	к	4TH AVENUE	ВЅНР	А		2	s	3/21/2014	4.763	F	6,100	\$26,992,500	310	
2231290	к	BAY 8TH STREET	вѕнр	А		1	s	6/11/2013	5.921	G	4,950	\$21,903,750	311	_
2231300	к	17TH AVENUE PEDESTRIAN BRIDGE	ВЅНР	A-PED	Р	1	С	8/14/2014	3.667	F	2,100	\$9,292,500	311	
2231319	к	BSHP	BAY PARKWAY	А		1	s	6/19/2014	4.533	F	7,200	\$31,860,000	311	
2231329	к	BSHP	26TH AVENUE	А		1	s	4/1/2014	4.600	F	6,700	\$29,647,500	313	
2231330	к	27TH AVENUE PEDESTRIAN BRIDGE	вѕнр	A-PED	Р	1	С	1/27/2014	4.021	F	2,100	\$9,292,500	313	
2231340	к	CROPSEY AVENUE	вѕнр	А		2	s	7/10/2014	4.639	F	13,100	\$57,967,500	313	
2231360	к	BSHP	OCEAN PARKWAY	А		3	s	7/16/2014	6.448	VG	29,637	\$131,143,725	313	
2231370	к	GUIDER AVENUE RAMP TO BSHP	вѕнр	А		4	s	9/23/2014	6.778	VG	10,548	\$46,674,900	313	
2231380	к	CONEY ISLAND AVENUE	вѕнр	А		4	s	10/15/2013	5.708	G	19,866	\$87,907,050	313	
2231390	к	EAST 12TH STREET	вѕнр	А		4	s	7/7/2014	4.542	F	17,200	\$76,110,000	315	
2231409	к	BSHP	SHEEPSHEAD BAY ROAD	А		1	s	4/1/2014	4.738	F	6,500	\$28,762,500	315	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED RAI		OTHER	SPA		Inspection	Condition		DECK AREA	REPLACEMENT COST	CD CD2C
			L RO	TYPE	OWNER	NS	NG SR	Date	Rating	BL RT			
2231419	к	вѕнр	OCEAN AVENUE	А		3	s	3/25/2014	4.306	F	14,000	\$61,950,000	315
2231429	к	взнр	BEDFORD AVENUE	А		3	s	4/23/2014	4.278	F	12,000	\$53,100,000	315
2231439	к	взнр	NOSTRAND AVENUE	А		3	s	3/25/2014	4.264	F	13,000	\$57,525,000	315
2231449	к	KNAPP STREET	вѕнр	А		1	s	4/9/2014	4.313	F	9,500	\$42,037,500	315
2231450	к	BSHP	GERRITSEN INLET	WA		11	s	8/12/2014	3.418	F	52,000	\$230,100,000	356
2231460	ĸ	FLATBUSH AVENUE	BSHP	А		2	s	10/18/2013	6.206	VG	14,058	\$62,206,650	356
2231479	к	BSHP	MILL BASIN	WMA		14	s	11/4/2014	3.269	F	73,500	\$325,237,500	318
2231481	ĸ	BSHP WESTBOUND	PAERDEGAT BASIN	WA		3	s	11/5/2013	6.939	VG	50,052	\$221,480,100	318
2231482	ĸ	BSHP EASTBOUND	PAERDEGAT BASIN	WA		5	s	11/4/2014	7.000	VG	82,074	\$363,177,450	318
2231499	к	BSHP	ROCKAWAY PARKWAY	А		1	s	11/5/2014	7.000	VG	10,370	\$45,887,250	356
2231509	ĸ	BSHP	FRESH CREEK	WA		3	s	11/25/2013	6.831	VG	40,095	\$177,420,375	356
2231519	к	PENNSYLVANIA AVENUE	ВЅНР	А		2	s	6/18/2013	5.694	G	6,640	\$29,382,000	356
2231559	Q	CROSS BAY BOULEVARD	BSHP	А		4	s	5/30/2014	5.083	G	23,205	\$102,682,125	410
2231560	Q	SOUTH CONDUIT BOULEVARD	BSOP	А		2	s	6/16/2014	5.268	G	15,776	\$69,808,800	410
2231570	Q	COHANCY STREET	BSOP	А		2	s	4/17/2014	4.395	F	6,400	\$28,320,000	410
2231590	Q	130TH STREET	BSOP	А		2	s	1/30/2014	4.659	F	6,800	\$30,090,000	410
2231610	Q	GUY R. BREWER BOULEVARD	BSOP	А		4	s	5/20/2013	6.222	VG	12,342	\$54,613,350	413
2231620	Q	FARMERS BOULEVARD	BSOP	А		2	s	4/25/2014	4.477	F	6,400	\$28,320,000	413
2231630	Q	SPRINGFIELD BOULEVARD	BSOP	А		2	s	4/25/2014	4.591	F	8,500	\$37,612,500	413
2231640	Q	225TH STREET	BSOP	А		2	s	5/15/2014	4.614	F	7,000	\$30,975,000	413
2231650	Q	SUNRISE HWY WESTBOUND	BLP EASTBOUND	А		1	s	3/21/2014	4.262	F	4,100	\$18,142,500	413
2231660	Q	SUNRISE HWY WESTBOUND	BLP WESTBOUND	А		2	s	2/25/2014	4.565	F	5,350	\$23,673,750	413
2231670	Q	NORTH CONDUIT AVENUE WESTBOUND	BLP EASTBOUND	А		1	s	1/13/2014	4.917	F	4,000	\$17,700,000	413
2231680	Q	NORTH CONDUIT AVENUE WESTBOUND	BLP WESTBOUND	А		2	s	1/20/2014	4.932	F	6,500	\$28,762,500	413
2231690	Q	FRANCIS LEWIS BOULEVARD	BLP EASTBOUND	А		1	s	3/17/2014	5.033	G	6,000	\$26,550,000	413
2231700	Q	FRANCIS LEWIS BOULEVARD	BLP WESTBOUND	А		1	s	3/18/2014	4.700	F	6,000	\$26,550,000	413
2231710	Q	MERRICK BOULEVARD	BLP NORTHBOUND	А		1	s	2/11/2014	4.467	F	6,000	\$26,550,000	413
2231720	Q	MERRICK BOULEVARD	BLP SOUTHBOUND	А		1	s	2/12/2014	4.200	F	6,000	\$26,550,000	413
2231730	Q	130TH AVENUE	BLP NORTHBOUND	А		1	s	1/10/2014	5.133	G	4,400	\$19,470,000	413
2231740	Q	130TH AVENUE	BLP SOUTHBOUND	А		1	s	1/13/2014	4.700	F	4,400	\$19,470,000	413
2231750	Q	LINDEN BOULEVARD	BCIP	А		2	s	2/25/2014	4.432	F	6,700	\$29,647,500	413
2231760	Q	ВСІР	DUTCH BROADWAY-115TH AVENUE	А		1	s	2/28/2014	4.233	F	7,300	\$32,302,500	413
2231770	Q	BELMONT PARK SOUTH RAMP	BCIP	А	P	1	s	2/26/2014	4.781	F	3,200	\$14,160,000	413
2231780	Q	HEMPSTEAD AVENUE	ВСІР	А		2	s	2/6/2014	4.000	F	14,200	\$62,835,000	413
2231790	Q	BELMONT PARK NORTH RAMP	BCIP	А	Р	1	s	1/12/2014	4.563	F	3,400	\$15,045,000	413
2231800	Q	SUPERIOR ROAD	BCIP	А		2	s	4/1/2014	4.682	F	7,000	\$30,975,000	413
2231819	Q	JAMAICA AVENUE	BCIP	А		2	s	3/19/2014	4.773	F	11,500	\$50,887,500	413

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	•	/R I BL RT	DECK AREA	REPLACEMENT COST	CD CD2CD
2231829	Q	BRADDOCK AVENUE	BCIP	Α		2	s	3/19/2014	4.886	F	10,600	\$46,905,000	413
2231840	Q	HILLSIDE AVENUE	BCIP	Α		2	s	3/18/2014	4.211	F	9,672	\$42,798,600	413
2231850	Q	UNION TURNPIKE	BCIP	А		2	s	3/19/2014	4.409	F	13,600	\$60,180,000	413
2231860	Q	WEST ALLEY ROAD	BCIP	А		2	s	7/17/2013	5.368	G	7,200	\$31,860,000	411
2231870	Q	NORTHERN BOULEVARD	BCIP	Α		2	s	7/14/2014	5.764	G	9,400	\$41,595,000	411
2231880	Q	CROCHERON PARK PEDESTRIAN	BCIP	A-PED	Р	9	С	5/13/2014	3.954	F	2,300	\$10,177,500	411
2231890	Q	28TH AVENUE PEDESTRIAN BRIDGE	BCIP	A-PED	Р	24	С	6/4/2014	4.615	F	7,600	\$33,630,000	411
2231900	Q	ВСІР	TOTTEN AVENUE	А		1	s	5/12/2014	4.609	F	4,900	\$21,682,500	407
2231910	Q	UTOPIA PARKWAY	BCIP	А		2	s	3/7/2014	5.341	G	7,200	\$31,860,000	407
2231920	Q	160TH STREET	BCIP	А		2	s	6/17/2013	5.694	G	5,550	\$24,558,750	407
2231930	Q	FRANCIS LEWIS BOULEVARD	BCIP	А		3	s	2/21/2014	4.682	F	9,100	\$40,267,500	407
2231940	Q	CLINTONVILLE STREET	BCIP	А		2	s	2/21/2014	4.705	F	7,400	\$32,745,000	407
2231950	Q	150TH STREET	BCIP	Α		2	s	2/21/2014	4.591	F	5,900	\$26,107,500	407
2231960	Q	149TH STREET	BCIP	А		2	s	1/29/2014	4.795	F	6,210	\$27,479,250	407
2231970	Q	14TH AVENUE	BCIP	А		2	s	1/29/2014	4.523	F	8,100	\$35,842,500	407
2231980	Q	147TH STREET	BCIP	Α		2	s	1/29/2014	4.705	F	6,300	\$27,877,500	407
2232000	М	BATTERY PLACE	FDR DRIVE	AT		2	s	10/16/2013	5.182	G	142,000	\$628,350,000	101
223201A	м	FDR DRIVE NORTHBOUND OFF RMP	FDR DRIVE & SOUTH STREET	AR		17	s	7/23/2014	4.493	F	23,373	\$103,425,525	101
223201B	м	SOUTH STREET RAMP TO FDR DRIVE SOUTHBOUND	SOUTH STREET	AR		10	s	2/24/2014	3.791	F	13,388	\$59,241,900	101
223201C	м	FDR DR SOUTHBOUND OFF RAMP	SOUTH STREET	AR		8	s	2/6/2014	5.209	G	36,700	\$162,397,500	103
223201D	м	RAMP TO NORTHBOUND FOR DRIVE	FDR DRIVE & SOUTH STREET	AR		22	s	2/25/2014	4.967	F	15,825	\$70,025,625	101 103
2232029	М	CORLEARS PARK ROAD	FDR DRIVE	А	Р	4	s	3/20/2014	3.813	F	4,100	\$18,142,500	103
2232030	м	DELANCEY STREET PEDESTRIAN BRIDGE	FDR DRIVE	A-PED	P	12	С	3/9/2014	4.443	F	3,390	\$15,000,750	103
2232040	м	HOUSTON STREET	FDR DRIVE	А		2	s	5/6/2014	3.750	F	11,010	\$48,719,250	103
223204A	м	FDR NORTHBOUND RAMP TO HOUSTON STREET	RELIEF	AR		4	s	1/17/2014	4.706	F	6,150	\$27,213,750	103
223204B	м	HOUSTON STREET RAMP TO FDR DRIVE NORTHBOUND	RELIEF	AR		4	s	1/17/2014	4.792	F	7,125	\$31,528,125	103
2232050	М	EAST 6TH STREET PEDESTRIN BRIDGE	FDR DRIVE	A-PED	P	19	С	3/13/2014	4.167	F	2,200	\$9,735,000	103
2232070	М	EAST 25TH STREET PEDESTRIAN BRIDGE	FDR DRIVE	A-PED		3	С	3/23/2014	4.600	F	1,700	\$7,522,500	106
2232100	М	EAST 51ST STREET PEDESTRIAN BRIDGE	FDR DRIVE	A-PED	P	6	С	4/22/2014	4.283	F	2,800	\$12,390,000	106
2232110	М	EAST 63RD STREET PEDESTRIAN BRIDGE	FDR DRIVE	A-PED	Р	11	U	11/23/2011	4.912	F	2,100	\$9,292,500	108
2232120	М	EAST 71ST STREET PEDESTRIAN BRIDGE	FDR DRIVE	A-PED	P	19	С	8/17/2014	4.761	F	3,700	\$16,372,500	108
2232140	М	EAST 78TH STREET PEDESTRIAN BRIDGE	FDR DRIVE	A-PED	Р	13	С	5/8/2014	6.708	vG	5,226	\$23,125,050	108
2232167	м	PROMENADE OVER FDR DRIVE	FDR DRIVE- EAST 81ST STREET - EAST 90TH STREET	A-PED	Р	53	s	7/2/2013	3.143	F	93,000	\$411,525,000	108
2232180	М	EAST 103RD STREET PEDESTRIAN BRIDGE	FDR DRIVE	A-PED		18	С	8/17/2014	4.390	F	6,807	\$30,120,975	111
2232190	м	EAST 111TH STREET PEDESTRIAN BRIDGE	FDR DRIVE	A-PED	Р	9	С	8/25/2014	4.319	F	4,254	\$18,823,950	111
2232200	М	EAST 120TH STREET PEDESTRIAN BRIDGE	FDR DRIVE	A-PED	Р	18	С	8/24/2014	4.114	F	3,978	\$17,602,650	111
2233020	М	EAST 10TH STREET PEDESTRIAN BRIDGE	FDR DRIVE	A-PED	Р	21	С	4/14/2014	4.673	F	2,754	\$12,186,450	103

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED RA	TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD	:D2CD
2233038	М	FDR DRIVE SOUTHBOUND	FDR DRIVE NORTHBOUND / EAST 62ND STREET	AT		34	s	11/25/2014	6.563	VG	58,700	\$259,747,500	106	108
2233040	М	EAST 60TH STREET	FDR DRIVE	А	P	17	s	7/2/2014	5.000	G	24,480	\$108,324,000	108	
2233059	М	HARLEM RIVER DRIVE	EAST 127TH STREET RAMP TO/FROM HRD NORTHBOUND	А		11	s	6/24/2014	3.552	F	51,000	\$225,675,000	111	
2233080	к	EAST 14TH STREET PEDESTRIAN BRIDGE	ВЅНР	A-PED		14	С	8/5/2014	4.164	F	4,700	\$20,797,500	315	
2240019	км	BROOKLYN BRIDGE	EAST RIVER	WEO		75	s	12/5/2014	3.139	F	503,788	\$2,229,261,900	103	302 101
224001A	м	PARK ROW TO BROOKLYN	WILLIAM STREET NORTHBOUND	OE		4	s	4/23/2014	4.229	F	10,167	\$44,988,975	101	
224001B	М	TO BROOKLYN FROM FDR DRIVE	FRANKFORT & PEARL STREETS	OE		31	s	8/1/2014	4.926	F	51,400	\$227,445,000	101	103
224001C	м	PEARL STREET TO BROOKLYN	LAND ADJACENT TO BRIDGE	OE		9	s	3/28/2014	3.678	F	6,365	\$28,165,125	101	
224001D	М	TO FDR DIVE NORTHBOUND	PEARL STREET	OE		30	s	9/18/2014	4.679	F	49,600	\$219,480,000	101	103
224001E	М	TO PEARL STREET	LAND ADJACENT TO BRIDGE	OE		3	s	6/2/2014	5.197	G	5,300	\$23,452,500	101	
224001F	м	PEARL STREET TO FDR DRIVE	LAND ADJACENT TO BRIDGE	OE		3	s	7/9/2014	5.141	G	5,200	\$23,010,000	103	
224001G	м	TO PARK ROW	ROSE STREET	OE		11	s	4/9/2014	4.549	F	16,551	\$73,238,175	101	
2240027	км	MANHATTAN BRIDGE (LOWER LEVEL)	EAST RIVER T	WEO		23	s	10/22/2014	3.889	F	616,390	\$2,727,525,750	103	302
2240028	км	MANHATTAN BRIDGE (UPPER LEVEL)	NYCTA TRACKS-BMT	WEO		43	s	10/21/2014	3.757	F	587,424	\$2,599,351,200	103	302
2240039	км	WILLIAMSBURG BRIDGE	EAST RIVER T	WEO		53	s	10/20/2014	4.542	F	824,000	\$3,646,200,000	103	301
2240047	MQ	QUEENSBORO BRIDGE (LOWER LEVEL)	EAST RIVER A	. WEO		53	s	11/12/2014	4.167	F	626,900	\$2,774,032,500	108	402 401
2240048	MQ	QUEENSBORO BRIDGE (UPPER LEVEL)	EAST RIVER - LL	WEO		37	s	10/13/2014	4.340	F	322,300	\$1,426,177,500	108	402 40 <sup>-</sup>
224004A	м	TO EAST 60TH STREET FROM QUEENS	FIRST AVENUE	OE		13	s	4/21/2014	5.338	G	14,800	\$65,490,000	108	
224004B	м	TO QUEENS FROM EAST 59TH STREET	FIRST AVENUE	OE		13	s	4/22/2014	5.542	G	14,800	\$65,490,000	108	
224004C	м	TO EAST 62ND STREET FROM QUEENS	EAST 60TH - EAST 61ST STREET	OE		10	s	7/17/2014	4.985	F	16,720	\$73,986,000	108	
224004D	м	TO QUEENS FROM EAST 58TH STREET	EAST 59TH STREET	OE		12	s	6/13/2014	4.396	F	10,858	\$48,046,650	106	108
224004E	Q	TO NY FROM THOMSON AVENUE	JACKSON AVENUE L	OE		94	s	11/26/2014	4.679	F	104,600	\$462,855,000	402	
224004F	Q	TO NY FROM 21ST STREET	21ST STREET	OE		63	s	11/7/2014	4.712	F	63,310	\$280,146,750	402	401
224004G	Q	TO NY FROM 11TH STREET	TERRAIN (CHAMBER)	OE		36	s	7/25/2014	5.268	G	8,360	\$36,993,000	401	402
224004H	Q	TO 21ST STREET FROM NY	22ND STREET	OE		43	s	10/13/2014	4.366	F	48,100	\$212,842,500	402	
2240041	Q	TO THOMSON AVENUE FROM NY	JACKSON AVENUE	OE		39	s	11/21/2014	5.148	G	59,100	\$261,517,500	402	
224004J	М	25X TO/FROM 2ND AVENUE	NYC GARAGE	OE		14	s	4/21/2014	4.829	F	22,058	\$97,606,650	108	
2240059	вм	WILLIS AVENUE	HARLEM RIVER	WMO		15	s	11/12/2014	6.778	VG	171,105	\$757,139,625	111	201
224005A	М	RAMP FROM FDR DRIVE	HARLEM RIVER DR NORTHBOUND	OR		11	s	11/7/2014	6.887	VG	28,233	\$124,931,025	111	
224005B	В	TO BRUCKNER BOULEVARD	RELIEF	OR		4	s	10/3/2013	6.831	VG	19,990	\$88,455,750	201	
2240069	вм	THIRD AVENUE BRIDGE	HARLEM RIVER	WMO		14	s	9/4/2014	5.789	G	100,232	\$443,526,600	111	201
224006A	В	FROM BRUCKNER BOULEVARD	RELIEF	OR		5	s	9/14/2013	6.535	VG	14,037	\$62,113,725	201	
2240079	вм	MADISON AVENUE BRIDGE	HARLEM RIVER	wmo		21	s	9/17/2014	4.861	F	80,000	\$354,000,000	111	201
224007A	м	RAMP TO MADISON AVENUE	EAST 138TH STREET	OR		7	s	2/6/2014	5.028	G	19,880	\$87,969,000	111	
2240089	вм	145TH STREET BRIDGE	HARLEM RIVER	wmo		8	s	8/15/2013	6.278	VG	56,700	\$250,897,500	110	204 20
2240120	вм	WEST 207TH STREET/WEST FORDHAM ROAD	HARLEM RIVER	wmo		5	s	7/31/2014	5.000	G	31,784	\$140,644,200	112	207
2240137	вм	BROADWAY BRIDGE	HARLEM RIVER TI	n wmo		3	s	12/17/2014	3.806	F	46,848	\$207,302,400	112	207 20

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED RA L RC	TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD CD	2CD3
2240138	вм	NYCTA IRT	HARLEM RIVER/BROADWAY TN	ı wмо		3	s	10/9/2013	4.720	F	19,520	\$86,376,000	112 20	7 208
2240180	В	WESTCHESTER AVENUE	BRONX RIVER	wo		1	s	8/22/2013	4.667	F	5,476	\$24,231,300	202 20	19
2240200	В	SHORE ROAD	HUTCHINSON RIVER	wмо		7	s	5/30/2014	4.537	F	43,576	\$192,823,800	228	
2240210	В	CITY ISLAND ROAD	EASTCHESTER BAY	wo		7	s	10/16/2014	3.389	F	19,915	\$88,123,875	228	
2240231	к	HAMILTON AVENUE BRIDGE	GOWANUS CANAL	wмо		3	s	9/9/2014	5.472	G	7,300	\$32,302,500	307 30	16
2240232	к	HAMILTON AVENUE BRIDGE	GOWANUS CANAL	wмо		3	s	8/13/2013	5.361	G	8,611	\$38,103,675	306	
2240240	к	NINTH STREET BRIDGE	GOWANUS CANAL	wмо		3	s	6/25/2013	6.065	VG	5,772	\$25,541,100	306	
2240250	к	THIRD STREET	GOWANUS CANAL	wмo		5	s	5/31/2013	4.722	F	4,900	\$21,682,500	306	
2240260	к	CARROLL STREET	GOWANUS CANAL	wмo		2	s	10/13/2014	5.208	G	3,000	\$13,275,000	306	
2240270	к	UNION STREET	GOWANUS CANAL	wмo		5	s	8/15/2014	4.111	F	4,900	\$21,682,500	306	
2240290	к	METROPOLITAN AVENUE	ENGLISH KILLS	wмo		5	s	7/9/2013	5.444	G	10,550	\$46,683,750	301	
2240301	к	CROPSEY AVENUE SOUTHBOUND	CONEY ISLAND CREEK	wo		3	s	7/2/2013	5.000	G	9,400	\$41,595,000	313	
2240302	к	CROPSEY AVENUE NORTHBOUND	CONEY ISLAND CREEK	wo		3	s	10/27/2014	4.718	F	9,400	\$41,595,000	313	
2240310	к	THIRD AVENUE	GOWANUS CANAL	wo		1	s	6/6/2013	6.633	VG	3,200	\$14,160,000	306	
2240320	к	OCEAN AVENUE PEDESTRIAN BRIDGE	SHEEPSHEAD BAY	WO-PED		30	С	5/8/2014	4.532	F	4,450	\$19,691,250	315	
2240350	R	RICHMOND AVENUE	RICHMOND CREEK	wo		3	s	7/1/2013	5.472	G	32,589	\$144,206,325	502	
2240370	KQ	GREENPOINT AVENUE BRIDGE	NEWTOWN CREEK	wмo		12	s	8/5/2013	5.083	G	76,106	\$336,769,050	301 40	12
2240390	KQ	GRAND STREET BRIDGE	NEWTOWN CREEK	wмo		2	s	10/28/2014	4.069	F	5,100	\$22,567,500	301 40	5
2240410	Q	BORDEN AVENUE	DUTCH KILLS	wмo		2	s	7/5/2013	4.792	F	8,400	\$37,170,000	402	
2240440	Q	NORTHERN BOULEVARD	ALLEY CREEK	wo		2	s	6/17/2014	4.681	F	8,300	\$36,727,500	411	
2240450	Q	HUNTERS POINT AVENUE	DUTCH KILLS	wmo		4	s	5/30/2014	5.056	G	12,168	\$53,843,400	402	
2240507	Q	ROOSEVELT AVENUE	678I - FLUSHING RIVER	WA		27	s	11/7/2014	3.521	F	84,424	\$373,576,200	407 48	<b>.</b> 1
2240540	к	STILLWELL AVENUE	CONEY ISLAND CREEK	wo		2	s	6/12/2013	6.292	VG	17,000	\$75,225,000	313	
2240620	М	WARDS ISLAND PEDESTRIN BRIDGE	HARLEM RIVER	WMO-PED		10	С	4/2/2014	4.667	F	19,500	\$86,287,500	111	
2240639	KQ	PULASKI BRIDGE	NEWTOWN CREEK	wмo		44	s	6/5/2014	4.437	F	205,770	\$910,532,250	301 40	12
2240640	MQ	ROOSEVELT ISLAND BRIDGE	EAST RIVER EAST CHANNEL	wмo		8	s	10/29/2014	5.569	G	36,500	\$161,512,500	108 40	/1
2240650	Q	163RD AVENUE PEDESTRIAN BRIDGE	HAWTREE BASIN	WO-PED		13	С	5/12/2014	4.037	F	5,000	\$22,125,000	410	
2240660	Q	RIKERS ISLAND BRIDGE	RIKERS ISLAND CHANNEL	wo		56	s	9/26/2013	4.211	F	183,100	\$810,217,500	401 48	:0
2241000	В	WESTCHESTER AVENUE	CSX PT MORRIS - (ABANDONED) C	0		1	s	8/29/2014	4.660	F	1,740	\$7,699,500	201	
2241010	В	EAST 156TH STREET	CSX PT MORRIS - (ABANDONED) C	0		1	s	5/9/2014	4.612	F	2,400	\$10,620,000	201	
2241020	В	EAST 161ST STREET	CSX PT MORRIS - (ABANDONED) C	0		1	s	3/20/2014	5.800	G	12,800	\$56,640,000	203	
2241030	В	EAST 163RD STREET	CSX PT MORRIS - (ABANDONED) C	0		1	s	2/27/2014	4.611	F	3,200	\$14,160,000	203	
2241040	В	THIRD AVENUE	CSX PT MORRIS - (ABANDONED) C	o		1	s	7/3/2014	4.563	F	2,700	\$11,947,500	201 20	13
2241050	В	EAST 149TH STREET / JACKSON AVENUE	CSX PT MORRIS - (ABANDONED) C	0		1	s	5/12/2014	4.817	F	65,000	\$287,625,000	201	
2241060	В	ST. MARYS & CONCORD	CSX PT MORRIS - (ABANDONED) C	0		1	s	7/2/2014	5.370	G	4,500	\$19,912,500	201	1
2241070	В	WALES AVENUE	CSX PT MORRIS - (ABANDONED) C	0		1	s	7/2/2014	6.467	VG	2,535	\$11,217,375	201	
2241080	В	SOUTHERN BOULEVARD	CSX PT MORRIS - (ABANDONED) C	o		1	s	7/1/2014	4.093	F	3,900	\$17,257,500	201	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Conditio Rating		DECK AREA	REPLACEMENT COST	CD CD2C
2241099	В	BRUCKNER BOULEVARD	CSX TRANS - PT MORRIS	С	0		1	s	7/16/2014	6.067	VG	6,700	\$29,647,500	201
2241110	В	MELROSE AVENUE	CSX PT MORRIS - (ABANDONED)	С	o		8	s	8/20/2013	5.667	G	37,854	\$167,503,950	203
2241129	В	EAST 149TH STREET	AMTRAK - CSX	AC	0		2	s	11/17/2014	4.592	F	18,258	\$80,791,650	201 202
2241139	В	LEGGETT AVENUE	AMTRAK - CSX	AC	o		3	s	11/17/2014	4.620	F	41,551	\$183,863,175	202
2241159	В	LONGWOOD AVENUE	AMTRAK - CSX	AC	О		2	s	11/18/2014	5.236	G	10,625	\$47,015,625	202
2241169	В	LAFAYETTE AVENUE	AMTRAK - CSX	AC	o		1	s	11/18/2014	5.365	G	12,000	\$53,100,000	202
2241170	В	TIFFANY STREET	AMTRAK - CSX	AC	О		1	s	11/18/2013	5.745	G	7,267	\$32,156,475	202
2241180	В	BARRETTO STREET	AMTRAK - CSX	AC	o		1	s	11/18/2014	5.813	G	5,313	\$23,510,025	202
2241190	В	HUNTS POINT AVENUE	AMTRAK - CSX	AC	o		1	s	11/20/2014	4.813	F	10,049	\$44,466,825	202
2241200	В	FAILE STREET	AMTRAK - CSX	AC	o		1	s	11/19/2014	5.578	G	6,208	\$27,470,400	202
2241210	В	BRYANT AVENUE	AMTRAK - CSX	AC	o		1	s	11/19/2014	3.186	F	5,300	\$23,452,500	202
2241230	В	WESTCHESTER AVENUE	AMTRAK - CSX	AC	0		3	s	11/1/2014	5.778	G	15,600	\$69,030,000	202 209
2241259	В	204TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	O-PED	P	1	С	10/20/2014	3.845	F	4,700	\$20,797,500	227 207
2241269	В	EAST 177TH STREET	AMTRAK - CSX	AC	0		3	s	7/29/2014	5.278	G	16,606	\$73,481,550	206
2241270	В	EAST TREMONT AVENUE	AMTRAK - CSX	AC	0		2	s	10/31/2014	5.153	G	22,300	\$98,677,500	209 211
2241329	В	WHITE PLAINS ROAD	AMTRAK - CSX	AC	0		1	s	10/28/2014	4.781	F	6,900	\$30,532,500	211
2241330	В	UNIONPORT ROAD	AMTRAK - CSX	AC	0		1	s	10/28/2014	4.688	F	7,631	\$33,767,175	211
2241369	В	WILLIAMSBRIDGE ROAD	AMTRAK - CSX	AC	0		2	s	10/29/2014	4.985	F	6,510	\$28,806,750	211
2241380	В	PELHAM BAY PARK EQUESTRIAN	AMTRAK - CSX	AC	O-PED	P	1	С	7/24/2013	3.339	F	7,300	\$32,302,500	228
2241390	В	SHORE ROAD CIRCLE	AMTRAK - CSX	AC	0		1	s	7/21/2014	7.000	VG	8,067	\$35,696,475	228
2241409	В	GRAND CONCOURSE	METRO NORTH RR HUD	мт	0		1	s	6/27/2014	3.766	F	14,300	\$63,277,500	204
2241410	В	WALTON AVENUE	METRO NORTH RR HUD	м	0		1	s	5/5/2014	4.406	F	3,600	\$15,930,000	204
2241420	В	GERARD AVENUE	METRO NORTH RR HUD	м	0		1	s	5/5/2014	5.422	G	5,063	\$22,403,775	204
2241430	В	RIVER AVENUE	METRO NORTH RR HUD	м	0		1	s	8/30/2013	6.156	VG	5,040	\$22,302,000	204
2241460	В	WEST TREMONT AVENUE	METRO NORTH RR HUD	м	0		8	s	6/12/2014	3.776	F	12,900	\$57,082,500	205
2241470	В	WEST FORDHAM ROAD	METRO NORTH RR HUD	м	0		4	s	9/9/2013	5.694	G	16,052	\$71,030,100	207
2241489	В	WEST 225TH STREET	CSX TRASP - PUTNAM	С	0		2	s	8/28/2014	5.269	G	10,900	\$48,232,500	207 208
2241490	В	WEST 230TH STREET	CSX PUTNAM (ABANDONED)		0		1	s	5/8/2013	5.625	G	5,600	\$24,780,000	208
2241509	В	WEST 231ST STREET	CSX PUTNAM (ABANDONED)		0		1	s	7/3/2014	4.745	F	4,723	\$20,899,275	208
2241510	В	WEST 233RD STREET	CSX PUTNAM (ABANDONED)		0		1	s	5/8/2013	5.275	G	3,760	\$16,638,000	208
2241520	В	WEST 234TH STREET	CSX PUTNAM (ABANDONED)		0		1	s	5/8/2013	5.176	G	3,770	\$16,682,250	208
2241550	В	EAST 144TH STREET	METRO NORTH RR HAR	м	О		2	s	8/30/2013	6.181	VG	8,290	\$36,683,250	201
2241560	В	EAST 149TH STREET	METRO NORTH RR HAR	м	0		8	s	5/5/2014	4.625	F	27,900	\$123,457,500	201 204
2241590	В	CONCOURSE VILLAGE AVENUE	METRO NORTH RR HAR	м	О		1	s	4/19/2014	3.969	F	12,077	\$53,440,725	204
2241600	В	EAST 158TH STREET	METRO NORTH RR HAR	м	О		1	s	8/31/2013	5.200	G	3,400	\$15,045,000	204
2241610	В	EAST 161ST STREET	METRO NORTH RR HAR	м	0		1	s	9/24/2013	5.050	G	6,600	\$29,205,000	204 203
2241620	В	EAST 162ND STREET	METRO NORTH RR HAR	м	0		1	s	4/26/2014	4.781	F	4,700	\$20,797,500	203

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD C	D2CD3
2241630	В	EAST 165TH STREET	METRO NORTH RR HAR	М	0		1	s	4/26/2014	4.300	F	16,400	\$72,570,000 2	203	
2241650	В	EAST 167TH STREET	METRO NORTH RR HAR	М	0		1	s	4/21/2014	5.510	G	3,363	\$14,881,275 2	203	
2241660	В	EAST 168TH STREET	METRO NORTH RR HAR	М	О		1	s	4/22/2014	4.641	F	4,800	\$21,240,000 2	203	
2241670	В	EAST 169TH STREET	METRO NORTH RR HAR	М	o		1	s	4/22/2014	4.188	F	3,300	\$14,602,500 2	203	
2241680	В	EAST 170TH STREET	METRO NORTH RR HAR	М	0		1	s	4/22/2014	6.333	VG	3,150	\$13,938,750 2	203	
2241700	В	ST PAULS PLACE PEDESTRIAN BRIDGE	METRO NORTH RR HAR	М	O-PED		2	С	10/24/2014	4.887	F	888	\$3,929,400 2	203	
2241710	В	CLAREMONT PARKWAY	METRO NORTH RR HAR	М	o		1	s	4/17/2014	6.458	VG	5,950	\$26,328,750 2	203	
2241720	В	EAST 173RD STREET	METRO NORTH RR HAR	М	o		1	s	4/17/2014	4.875	F	3,000	\$13,275,000 2	203	
2241740	В	EAST 175TH STREET	METRO NORTH RR HAR	М	o		1	s	4/14/2014	3.875	F	3,600	\$15,930,000 2	206	
2241760	В	EAST TREMONT AVENUE	METRO NORTH RR HAR	М	o		1	s	8/29/2013	6.450	VG	8,424	\$37,276,200 2	206	
2241770	В	EAST 178TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	М	O-PED		1	С	10/23/2014	4.921	F	731	\$3,234,675 2	206	
2241780	В	EAST 179TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	М	O-PED		6	С	10/22/2014	5.311	G	1,011	\$4,473,675 2	206	
2241790	В	EAST 180TH STREET	METRO NORTH RR HAR	М	o		1	s	4/24/2014	3.844	F	5,000	\$22,125,000 2	206	
2241800	В	EAST 183TH STREET	METRO NORTH RR HAR	М	o		1	s	4/24/2014	3.953	F	4,080	\$18,054,000 2	206	
2241810	В	EAST 188TH STREET	METRO NORTH RR HAR	М	0		1	s	4/16/2014	4.094	F	5,300	\$23,452,500 2	206	
2241820	В	EAST 187TH STREET	METRO NORTH RR HAR	М	o		1	s	4/23/2014	4.344	F	3,800	\$16,815,000 2	206	
2241839	В	EAST 189TH STREET	METRO NORTH RR HAR	М	o		1	s	8/28/2013	6.133	VG	43,157	\$190,969,725 2	206 2	207
2241840	В	BEDFORD PARK BOULEVARD	METRO NORTH RR HAR	М	o		1	s	4/28/2014	4.656	F	6,400	\$28,320,000 2	227 2	207
2241860	В	GUN HILL ROD	METRO NORTH RR HAR	М	o		1	s	4/29/2014	6.531	VG	9,128	\$40,391,400 2	212	
2241870	В	EAST 233RD STREET	METRO NORTH RR HAR	М	0		1	s	4/28/2014	4.902	F	7,664	\$33,913,200 2	212 2	207
2241890	В	EAST 241ST STREET	BRP, METRO NORTH HAR	М	wo		28	s	11/30/2013	4.417	F	49,500	\$219,037,500 2	212	
2241900	В	EASTCHESTER ROAD	NYCTA-DYRE AVENUE LINE	т	0		3	s	10/28/2014	4.472	F	13,500	\$59,737,500 2	212	
2241910	В	GUN HILL ROAD	NYCTA-DYRE AVENUE LINE	т	o		1	s	10/28/2014	5.516	G	7,500	\$33,187,500 2	211 2	112
2241930	В	BEDFORD PARK BOULEVARD	NYCTA IND YARDS	т	o		4	s	10/31/2014	5.347	G	46,300	\$204,877,500 2	207	
2241940	В	WEST 205TH STREET	NYCTA IND YARDS	т	o		4	s	10/31/2014	5.514	G	32,508	\$143,847,900 2	207	
2241959	В	HUTCHINSON RIVER PARKWAY	AMTRAK - CSX	AC	o		1	s	10/9/2014	5.542	G	15,444	\$68,339,700 2	210 2	211
2242010	В	EAST FORDHAM ROAD	BRONX RIVER		wo		1	s	3/26/2014	5.467	G	9,200	\$40,710,000 2	227	
2242029	В	SOUTHERN BOULEVARD	EAST FORDHAM ROAD		o		2	s	1/29/2014	4.605	F	12,900	\$57,082,500 2	227	
2242030	В	CROTONA AVENUE	BRONX PELHAM PARKWAY		o		2	s	1/29/2014	5.447	G	7,600	\$33,630,000 2	206	
2242071	В	BRONX BOULEVARD SOUTHBOUND	BRONX RIVER		wo		1	s	3/27/2014	4.367	F	1,800	\$7,965,000 2	212	
2242072	В	BRONX BOULEVARD NORTHBOUND	BRONX RIVER		wo		1	s	3/27/2014	4.867	F	1,800	\$7,965,000 2	212	
2242081	В	BRONX BOULEVARD SOUTHBOUND	BRONX RIVER		wo		1	s	3/26/2014	4.300	F	2,800	\$12,390,000 2	212	
2242082	В	BRONX BOULEVARD NORTHBOUND	BRONX RIVER		wo		1	s	3/26/2014	4.467	F	2,800	\$12,390,000 2	212	
2242099	В	PARK ROAD (204TH STREET)	BRONX RIVER		wo		1	s	5/6/2014	4.655	F	4,700	\$20,797,500 2	212	
2242100	В	BOTANICAL GARDEN ROAD	TWIN LAKES		wo	Р	1	s	2/26/2014	4.833	F	2,200	\$9,735,000 2	227	
2242110	В	BOSTON ROAD	BRONX RIVER		wo		1	s	2/26/2014	4.227	F	6,200	\$27,435,000 2	227	
2242120	В	FOOTBRIDGE NORTH OF ROUTE 1	BRONX RIVER		WO-PED	Р	1	С	8/7/2013	3.583	F	1,900	\$8,407,500 2	227	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED R.	TYPE	OTHER OWNER	SPA NS	NG	Inspection Date	Condition Rating	BL	DECK AREA	REPLACEMENT COST	CD CD	2CD3
2242149	В	EAST TREMONT AVENUE	R BRONX RIVER	wo		2	SR s	5/7/2014	4.361	RT	12,900	\$57,082,500	206	
2242210	В	MAGNOLIA WAY	BRONX RIVER	wo	P	3	s	5/6/2014	4.763	F	6,200	\$27,435,000		+-
2242220	В	SNUFF MILL ROAD	BRONX RIVER	wo	P	2	s	1/9/2014	4.395	F	4,800	\$21,240,000		+
2242259	В	GRAND CONCOURSE	EAST 161ST STREET	0	•	1	s	6/30/2014	6.333	VG	27.017	\$119,550,225		+-
2242260	В	EAGLE AVENUE	EAST 161ST STREET	0		1	s	2/14/2014	5.117	G	2.800	\$12,390,000		13
2242280	В	GRAND CONCOURSE	EAST 167TH STREET	0		2	s	7/2/2014	4.754	F	42,900	\$189,832,500		1
2242299	В	GRAND CONCOURSE	EAST 138TH STREET	0		1	s	6/11/2013	4.867	F	9,500	\$42,037,500		+
2242300	В	GRAND CONCOURSE	EAST 170TH STREET	0		2	s	3/19/2014	4.754	F	39,300	\$173,902,500		+
2242319	В	GRAND CONCOURSE	EAST 174TH STREET			1	s	3/18/2014	4.067	F	14,900	\$65,932,500		+
2242329	В	GRAND CONCOURSE	EAST 175TH STREET			1	s	6/11/2014	4.833	F	11,900	\$52,657,500	+ +	+
2242330	В	GRAND CONCOURSE	EAST TREMONT AVENUE	0		1	s	9/12/2013	5.883	G	11,700	\$51,772,500		+
2242340	В	GRAND CONCOURSE	EAST KINGSBRIDGE	0		2	s	6/12/2014	4.714	F	18,285	\$80,911,125		+-
2242350	В	EAST FORDHAM ROAD	GRAND CONCOURSE	0		1	s	3/7/2014	4.833	F	10,300	\$45,577,500		17
2242360	В	GRAND CONCOURSE	BURNSIDE AVENUE	0		2	s	6/30/2014	4.265	F	8,400	\$37,170,000		-
2242370	В	GRAND CONCOURSE	BEDFORD PARK BOULEVARD	0		1	s	2/21/2014	4.373	F	8,418	\$37,249,650		+
2242380	В	GRAND CONCOURSE	EAST 204TH STREET	0		1	s	9/11/2013	5.484	G	9,272	\$41,028,600		+
2242400	В	EAST 180TH STREET	BRONX RIVER	wo		1	s	9/26/2014	4.810	F	4,500	\$19,912,500		,,,
2242430	В	GUN HILL ROAD	BRONX BOULEVARD	0		4	s	2/20/2014	4.947	F	9,400	\$41,595,000		+
2242440	В	GUN HILL ROAD	BRONX RIVER	wo		1	s	1/14/2014	5.300	G	8,700	\$38,497,500		+
2242459	В	EAST 233RD STREET	BRONX RIVER	wo		1	s	2/26/2014	4.233	F	7,000	\$30,975,000		+
2242460	В	EAST 233RD STREET	ENTRANCE ROAD BRONX RIVER PARKWAY	0		1	s	1/7/2014	4.900	F	5,300	\$23,452,500		+
2243010	К	LINCOLN ROAD	BMT SUBWAY, BRIGHTON	. 0		1	s	5/19/2014	6.685	VG	6,243	\$27,625,275	+ +	+
2243020	к	PARKSIDE AVENUE - OCEAN AVENUE	BMT SUBWAY, BRIGHTON	. 0		6	s	6/18/2014	4.043	F	48,700	\$215,497,500		+
2243040	к	CROOKE AVENUE	BMT SUBWAY, BRIGHTON	. 0		4	s	6/11/2014	4.421	F	6,000	\$26,550,000		+
2243050	к	CATON AVENUE	BMT SUBWAY, BRIGHTON	. 0		4	s	8/23/2013	4.842	F	20,800	\$92,040,000		+
2243080	к	EAST 18TH STREET - CHURCH AVE	BMT SUBWAY, BRIGHTON	. 0		4	s	8/20/2013	4.545	F	18,200	\$80,535,000	314	1
2243100	к	BEVERLY ROAD	BMT SUBWAY, BRIGHTON	. 0		3	s	6/3/2014	4.263	F	4,200	\$18,585,000	314	+
2243110	к	CORTELYOU ROAD	BMT SUBWAY, BRIGHTON	. 0		3	s	8/20/2013	6.139	VG	4,810	\$21,284,250	314	1
2243120	к	DORCHESTER ROAD	BMT SUBWAY, BRIGHTON	. 0		1	s	6/16/2014	5.863	G	4,825	\$21,350,625	314	
2243130	к	DITMAS AVENUE	BMT SUBWAY, BRIGHTON	. 0		1	s	8/22/2013	5.723	G	5,150	\$22,788,750	314	
2243140	к	NEWKIRK AVENUE	BMT SUBWAY, BRIGHTON	. 0		3	s	6/17/2014	4.574	F	4,100	\$18,142,500	314	
2243150	к	FOSTER AVENUE	BMT SUBWAY, BRIGHTON	. 0		1	s	6/9/2014	4.417	F	3,000	\$13,275,000	314	
2243170	к	STERLING PLACE	FRANKLIN SHUTTLE	. 0		1	s	8/23/2013	6.438	VG	2,300	\$10,177,500		1
2243180	к	ST JOHNS PLACE	FRANKLIN SHUTTLE	. 0		1	s	8/23/2013	6.656	VG	2,300	\$10,177,500		1
2243190	к	LINCOLN PLACE	FRANKLIN SHUTTLE	. 0		1	s	6/26/2014	6.672	VG	2,460	\$10,885,500	308	$\top$
2243200	к	UNION STREET	FRANKLIN SHUTTLE	. о		2	s	6/25/2014	4.913	F	4,100	\$18,142,500	309	1
2243210	к	PRESIDENT STREET	FRANKLIN SHUTTLE	. о		2	s	6/25/2014	5.078	G	2,500	\$11,062,500	309	1

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Conditio Rating		DECK AREA	REPLACEMENT COST	CD CD2CI
2243220	к	CARROLL STREET PEDESTRIAN BRIDGE	FRANKLIN SHUTTLE	т	O-PED		3	С	4/29/2014	5.789	G	600	\$2,655,000	309
2243230	к	CROWN STREET	FRANKLIN SHUTTLE	т	o		3	s	8/8/2013	5.014	G	4,060	\$17,965,500	309
2243240	к	MONTGOMERY STREET	FRANKLIN SHUTTLE	т	0		1	s	8/8/2013	5.843	G	2,240	\$9,912,000	309
2243250	к	WASHINGTON AVENUE	FRANKLIN SHUTTLE	т	0		1	s	6/24/2014	6.000	G	3,657	\$16,182,225	309 355
2243260	к	FLATBUSH AVENUE	FRANKLIN SHUTTLE	т	0		2	s	6/23/2014	4.961	F	11,300	\$50,002,500	309
2243279	к	EASTERN PARKWAY	FRANKLIN SHUTTLE	т	О		1	s	6/27/2014	4.833	F	7,700	\$34,072,500	309 308
2243280	к	6TH AVENUIE	LIRR ATLANTIC AVENUE	L	o		9	s	9/5/2014	5.431	G	12,276	\$54,321,300	302
2243290	к	CARLTON AVENUE	LIRR ATLANTIC AVENUE	L	О		4	s	7/29/2013	6.806	VG	15,400	\$68,145,000	302
2243310	к	2ND AVENUE	LIRR BAY RIDGE	N	o		2	s	10/7/2014	6.208	VG	17,751	\$78,548,175	310
2243320	к	3RD AVENUE	LIRR BAY RIDGE	N	o		4	s	9/17/2013	4.917	F	17,230	\$76,242,750	310
2243330	к	4TH AVENUE	LIRR BAY RIDGE	NT	o		4	s	8/30/2013	5.597	G	13,668	\$60,480,900	310
2243340	к	15TH AVENUE	LIRR BAY RIDGE	N	o		1	s	10/3/2014	4.872	F	3,614	\$15,991,950	311
2243350	к	60TH STREET	LIRR BAY RIDGE	N	o		1	s	9/4/2013	6.133	VG	3,900	\$17,257,500	311
2243360	к	16TH AVENUE	LIRR BAY RIDGE	N	О		1	s	10/3/2014	5.350	G	4,345	\$19,226,625	311
2243370	к	17TH AVENUE	LIRR BAY RIDGE	N	o		1	s	10/2/2014	4.745	F	3,406	\$15,071,550	312
2243380	к	18TH AVENUE	LIRR BAY RIDGE	N	o		1	s	10/2/2014	4.625	F	6,006	\$26,576,550	312
2243390	к	52ND STREET	LIRR BAY RIDGE	N	o		1	s	10/1/2014	6.017	VG	3,293	\$14,571,525	312
2243400	к	50TH STREET	LIRR BAY RIDGE	N	О		2	s	9/5/2013	4.731	F	7,100	\$31,417,500	312
2243410	к	MCDONALD AVENUE	LIRR BAY RIDGE	N	О		1	s	10/1/2014	5.141	G	2,760	\$12,213,000	312
2243420	к	EAST 3RD STREET	LIRR BAY RIDGE	N	o		1	s	8/8/2013	6.517	VG	1,840	\$8,142,000	312
2243439	к	OCEAN PARKWAY	LIRR BAY RIDGE	N	О		1	s	9/19/2014	4.927	F	7,000	\$30,975,000	312
2243440	к	CONEY ISLAND AVENUE	LIRR BAY RIDGE	N	o		1	s	9/18/2014	5.043	G	3,231	\$14,297,175	312
2243450	к	EAST 14TH STREET	LIRR BAY RIDGE	N	О		1	s	9/17/2014	4.809	F	1,775	\$7,854,375	314
2243460	к	EAST 15TH STREET PEDESTRIAN BRIDGE	LIRR BAY RIDGE	N	O-PED		3	С	8/12/2014	5.592	G	900	\$3,982,500	314
2243480	к	OCEAN AVENUE	LIRR BAY RIDGE	N	О		2	s	9/16/2014	4.965	F	5,000	\$22,125,000	314
2243490	к	BEDFORD AVENUE	LIRR BAY RIDGE	N	О		6	s	9/15/2014	5.097	G	12,000	\$53,100,000	314
2243500	к	NOSTRAND AVENUE	LIRR BAY RIDGE	N	О		2	s	9/29/2014	4.898	F	4,320	\$19,116,000	314
2243510	к	FLATBUSH AVENUE	LIRR BAY RIDGE	N	О		2	s	9/30/2014	4.651	F	5,900	\$26,107,500	318
2243520	к	BROOKLYN AVENUE	LIRR BAY RIDGE	N	О		3	s	8/8/2013	5.873	G	4,500	\$19,912,500	318
2243530	к	AVENUE H	LIRR BAY RIDGE	N	0		2	s	9/9/2013	5.956	G	35,100	\$155,317,500	318
2243569	к	ATLANTIC AVENUE	LIRR ATLANTIC AVENUE	L	О		75	s	6/18/2014	3.620	F	135,100	\$597,817,500	316 305
2243570	к	86TH STREET	BMT SEA BEACH	т	О		1	s	6/4/2014	5.797	G	12,167	\$53,838,975	313
2243580	к	5TH AVENUE	LIRR & SEA BEACH	NT	0		4	s	10/27/2014	3.882	F	12,395	\$54,847,875	310
2243590	к	6TH AVENUE	LIRR & SEA BEACH	NT	О		2	s	7/16/2013	6.056	VG	14,382	\$63,640,350	310
2243600	к	7TH AVENUE	LIRR & SEA BEACH	NT	0		7	s	10/22/2014	4.806	F	18,628	\$82,428,900	310
2243610	к	8TH AVENUE	LIRR & SEA BEACH	NT	o		2	s	7/15/2013	6.181	VG	10,834	\$47,940,450	310
2243620	к	FORT HAMILTON PARKWAY	LIRR & SEA BEACH	NT	0		3	s	6/19/2014	4.729	F	14,800	\$65,490,000	310

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	NR BL RT	DECK AREA	REPLACEMENT COST	CD CD2C
2243630	к	11TH AVENUE	LIRR & SEA BEACH	NT	О		5	s	7/1/2014	5.985	G	9,700	\$42,922,500	310
2243640	к	13TH AVENUE	LIRR & SEA BEACH	NT	О		5	s	7/15/2013	4.972	F	16,000	\$70,800,000	310
2243650	к	14TH AVENUE	LIRR BAY RIDGE	N	О		1	s	10/3/2014	6.167	VG	4,720	\$20,886,000	311
2243660	к	NEW UTRECHT AVENUE	LIRR BAY RIDGE	N	О		1	s	10/3/2014	5.883	G	2,350	\$10,398,750	311
2243670	к	15TH AVENUE	BMT SEA BEACH	т	О		4	s	6/24/2013	6.136	VG	16,020	\$70,888,500	311
2243680	к	16TH AVENUE	BMT SEA BEACH	т	О		3	s	6/6/2014	5.481	G	6,816	\$30,160,800	311
2243690	к	17TH AVENUE	BMT SEA BEACH	т	О		4	s	5/30/2014	6.173	VG	8,946	\$39,586,050	311
2243700	к	18TH AVENUE	BMT SEA BEACH	т	О		1	s	7/25/2013	6.632	VG	5,200	\$23,010,000	311
2243710	к	19TH AVENUE	BMT SEA BEACH	т	О		4	s	5/29/2014	4.237	F	4,800	\$21,240,000	311
2243720	к	20TH AVENUE	BMT SEA BEACH	т	О		1	s	6/2/2014	6.421	VG	7,000	\$30,975,000	311
2243730	к	65TH STREET	BMT SEA BEACH	т	О		4	s	5/23/2014	5.132	G	12,000	\$53,100,000	311
2243740	к	BAY PARKWAY	BMT SEA BEACH	т	О		4	s	5/22/2014	4.658	F	16,800	\$74,340,000	311
2243750	к	AVENUE O	BMT SEA BEACH	т	О		1	s	8/12/2013	5.706	G	4,658	\$20,611,650	311
2243760	к	AVENUE P	BMT SEA BEACH	т	О		1	s	8/13/2013	6.140	VG	5,544	\$24,532,200	311
2243770	к	KINGS HIGHWAY	BMT SEA BEACH	т	o		1	s	6/28/2013	6.628	VG	5,032	\$22,266,600	311
2243780	к	HIGHLAWN AVENUE	BMT SEA BEACH	т	o		1	s	8/16/2013	6.440	VG	6,960	\$30,798,000	311
2243790	к	AVENUE S	BMT SEA BEACH	т	o		1	s	7/2/2013	5.967	G	5,360	\$23,718,000	315
2243800	к	AVENUE T	BMT SEA BEACH	т	o		1	s	7/3/2013	6.200	VG	5,360	\$23,718,000	311
2243810	к	AVENUE U	BMT SEA BEACH	т	o		1	s	6/20/2014	5.294	G	5,880	\$26,019,000	315
2243820	к	21ST AVENUE	BMT SEA BEACH	т	o		4	s	7/9/2014	4.289	F	21,400	\$94,695,000	311
2243839	к	4TH AVENUE	NYCTA BMT TRACKS	т	o		1	s	8/20/2013	6.250	VG	4,440	\$19,647,000	307
2243840	к	9TH AVENUE	NYCTA BMT YARD	т	o		5	s	8/19/2013	5.736	G	12,440	\$55,047,000	312
2243850	к	LIBERTY AVENUE	LIRR BAY RIDGE	N	О		3	s	9/23/2014	6.103	VG	6,659	\$29,466,075	316
2243860	к	GLENMORE AVENUE	LIRR BAY RIDGE	N	o		2	s	9/22/2014	6.456	VG	5,616	\$24,850,800	316
2243870	к	PITKIN AVENUE	LIRR BAY RIDGE	N	0		2	s	9/24/2014	6.279	VG	5,328	\$23,576,400	316
2243890	к	SUTTER AVENUE	LIRR BAY RIDGE	N	О		3	s	9/26/2014	6.292	VG	5,497	\$24,324,225	316
2243900	к	BLAKE AVENUE	LIRR BAY RIDGE	N	o		3	s	9/26/2014	4.927	F	4,912	\$21,735,600	316
2243910	к	LIVONIA AVENUE PEDESTRIAN BRIDGE	LIRR BAY RIDGE	N	O-PED		6	С	8/7/2014	4.833	F	2,500	\$11,062,500	316
2243920	к	7TH AVENUE	NYCTA BMT YARD	т	o		2	s	6/30/2014	6.042	VG	4,700	\$20,797,500	307
2243940	к	9TH AVENUE	NYCTA IND SUBWAY	т	0		5	s	8/19/2013	4.737	F	6,300	\$27,877,500	312
2244010	к	EAST DRIVE (ENDALE ARCH)	PEDESTRIAN PATH NEAR GRAND ARMY PLAZA		o	Р	1	С	5/28/2014	4.367	F	1,533	\$6,783,525	355
2244020	к	WEST DRIVE (MEADOWPORT ARCH)	PEDESTRIAN PATH NEAR GRAND ARMY PLAZA		o	P	1	s	5/16/2013	5.321	G	2,500	\$11,062,500	355
2244030	к	EAST DRIVE	BRIDLE PATH NEAR ZOO		o	P	1	s	5/17/2013	4.878	F	2,000	\$8,850,000	355
2244040	к	EAST DRIVE (EAST WOOD ARCH)	PEDESTRIAN PATH NEAR CENTER DRIVE		o	Р	1	С	6/16/2014	4.667	F	1,066	\$4,717,050	355
2244050	к	CENTER DRIVE (NETHERMEAD ARCHES)	PEDESTRIAN PATH & STREAM		wo	Р	3	s	5/22/2013	5.000	G	7,020	\$31,063,500	355
2244060	к	HILL DRIVE (CLEFT RIDGE SPAN)	PEDESTRIAN PATH SOUTH OF BOATHOUSE		o	P	1	С	5/1/2014	4.433	F	750	\$3,318,750	355
2244100	к	WEST FOOTBRIDGE	PROSPCT PARK STREAM		WO-PED	Р	1	С	1/24/2014	4.889	F	308	\$1,362,900	355

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED R		RIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD CD2	:D3
2244120	к	HILL DRIVE (TERRACE BRIDGE)	PROSPECT PARK LAKE		wo	P	3	s	9/16/2014	3.436	F	7,800	\$34,515,000	355	
2244130	к	PEDESTRIAN NEAR BOATHOUSE (LULLWATER BRIDGE)	PROSPECT PARK LAKE	v	VO-PED	P	1	С	5/22/2014	4.898	F	1,000	\$4,425,000	355	
2244150	к	RIDGE BOULEVARD	SHORE ROAD DRIVE		0		1	s	6/10/2013	6.333	VG	4,350	\$19,248,750	310	
2244160	к	3RD AVENUE	SHORE ROAD DRIVE		0		1	s	6/14/2013	6.727	VG	4,360	\$19,293,000	310	
2244170	к	ATLANTIC AVENUE SERVICE ROAD EASTBOUND	EAST NEW YORK AVENUE		0		2	s	8/5/2013	5.474	G	3,192	\$14,124,600	305	
2244180	к	ATLANTIC AVENUE SERVICE ROAD WESTBOUND	EAST NEW YORK AVENUE		0		2	s	8/5/2013	5.105	G	5,600	\$24,780,000	305	
2244440	к	FLEET WALK PEDESTRIAN BRIDGE	NAVY STREET		O-PED		1	С	8/21/2014	3.958	F	620	\$2,743,500	302	
2244460	к	CONDUIT BOULEVARD NORTHBOUND	ATLANTIC AVENUE EASTBOUND		0		1	s	10/10/2014	4.833	F	3,800	\$16,815,000	305	
2244470	к	SEELEY STREET	PROSPECT AVENUE		0		1	s	7/25/2014	4.033	F	8,482	\$37,532,850	307	
2244480	к	5TH AVENUE	GREENWOOD CEMETERY		0		1	s	9/25/2013	5.333	G	3,600	\$15,930,000	307	
2245010	м	11TH AVENUE VIADUCT	LIRR WEST SIDE YARD	\L	0		39	s	12/12/2014	4.056	F	149,100	\$659,767,500	104	
224501B	М	WEST 33RD STREET	AMTRAK 30 STREET BRANCH	A	OR		8	s	3/7/2014	4.500	F	16,500	\$73,012,500	104	
224501C	м	WEST 33RD STREET	LAND ADJACENT TO AMTRAK	A	OR		2	s	5/14/2013	4.472	F	2,360	\$10,443,000	104	
224501D	М	WEST 34TH STREET	AMTRAK 30 STREET BRANCH	A	OR		4	s	5/13/2013	4.542	F	11,800	\$52,215,000	104	
224501E	М	WEST 35TH STREET	AMTRAK 30 STREET BRANCH	A	OR		3	s	7/29/2014	4.181	F	6,500	\$28,762,500	104	
224501F	М	WEST 36TH STREET	AMTRAK 30 STREET BRANCH	A	OR		3	s	11/12/2013	4.612	F	5,520	\$24,426,000	104	
2245040	М	MARGARET CORBIN DRIVE	PEDESTRIAN PATH NEAR CAFÉ		0	Р	1	С	6/9/2014	4.933	F	598	\$2,646,150	112	
2245050	м	MARGARET CORBIN DRIVE	PEDESTRIAN PATH NEAR NORTH ENTRANCE		0	P	1	С	4/8/2014	4.600	F	889	\$3,933,825	112	
2245060	М	WEST 37TH STREET	AMTRAK 30 STREET BRANCH	A	0		3	s	11/12/2013	6.190	VG	7,505	\$33,209,625	104	
2245070	М	WEST 38TH STREET	AMTRAK 30 STREET BRANCH	A	0		2	s	7/8/2014	4.135	F	6,200	\$27,435,000	104	
2245080	М	WEST 39TH STREET	AMTRAK 30 STREET BRANCH	A	0		3	s	7/8/2014	4.173	F	6,300	\$27,877,500	104	
2245090	М	WEST 43RD STREET	AMTRAK 30 STREET BRANCH	A	0		2	s	4/18/2014	4.662	F	4,140	\$18,319,500	104	
2245100	м	WEST 44TH STREET	AMTRAK 30 STREET BRANCH	A	0		2	s	4/18/2014	4.559	F	4,300	\$19,027,500	104	
2245110	М	WEST 45TH STREET	AMTRAK 30 STREET BRANCH	A	0		2	s	4/29/2014	5.338	G	4,100	\$18,142,500	104	
2245120	м	WEST 46TH STREET	AMTRAK 30 STREET BRANCH	A	0		2	s	4/29/2014	4.500	F	4,100	\$18,142,500	104	
2245130	М	WEST 47TH STREET	AMTRAK 30 STREET BRANCH	A	0		2	s	5/6/2014	4.721	F	4,100	\$18,142,500	104	
2245140	М	WEST 48TH STREET	AMTRAK 30 STREET BRANCH	A	0		2	s	5/6/2014	4.618	F	4,100	\$18,142,500	104	
2245150	М	WEST 49TH STREET	AMTRAK 30 STREET BRANCH	A	0		3	s	5/6/2014	4.426	F	4,100	\$18,142,500	104	
2245160	М	WEST 51ST STREET	AMTRAK 30 STREET BRANCH	A	0		2	s	5/13/2014	4.853	F	4,300	\$19,027,500	104	
2245170	м	WEST 52ND STREET	AMTRAK 30 STREET BRANCH	A	0		2	s	5/13/2014	5.191	G	4,300	\$19,027,500	104	
2245180	м	WEST 53RD STREET	AMTRAK 30 STREET BRANCH	A	0		2	s	5/20/2014	5.221	G	5,100	\$22,567,500	104	
2245190	м	WEST 58TH STREET	AMTRAK 30 STREET BRANCH	A	0		2	s	5/20/2014	4.706	F	4,100	\$18,142,500	104	
2245209	м	11TH AVENUE	AMTRAK 30 STREET BRANCH	A	0		2	s	6/4/2014	4.426	F	15,400	\$68,145,000	104	
2245210	м	WEST 42ND STREET	AMTRAK 30 STREET BRANCH	A	0		4	s	11/5/2014	4.587	F	10,300	\$45,577,500	104	
2245220	м	WEST 57TH STREET	AMTRAK 30 STREET BRANCH	A	o		3	s	5/20/2014	4.853	F	9,100	\$40,267,500	104	
2245230	м	WEST 148TH STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	Α .	O-PED	Р	5	С	8/9/2013	4.200	F	1,100	\$4,867,500	109	
2245250	М	WEST 158TH STREET	AMTRAK 30 STREET BRANCH	A	0		7	s	10/18/2013	5.903	G	29,170	\$129,077,250	112	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	NR BL RT	DECK AREA	REPLACEMENT COST	CD CE	)2CD3
2245260	М	WEST 173RD SREEET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	Α	O-PED	Р	2	С	8/6/2013	4.600	F	1,500	\$6,637,500	112	
2245290	М	WEST 155TH STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	А	O-PED		3	С	7/30/2013	3.862	F	800	\$3,540,000	109 11	12
2245300	М	INWOOD HILL PARKK FOOTBRIDGE	AMTRAK 30 STREET BRANCH	А	O-PED	Р	6	С	8/6/2013	4.100	F	700	\$3,097,500	112	
2245319	М	EAST 97TH STREET	METRO NORTH MAIN LN	м	o		1	s	12/17/2014	4.647	F	3,200	\$14,160,000	111	
2245330	М	WEST 41ST STREET	AMTRAK 30 STREET BRANCH	А	0		3	s	7/24/2014	4.444	F	6,200	\$27,435,000	104	
2245340	М	WEST 50TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	s	5/13/2014	4.500	F	4,100	\$18,142,500	104	
2245350	М	WEST 54TH STREET	AMTRAK 30 STREET BRANCH	А	0		2	s	5/20/2014	5.492	G	4,700	\$20,797,500	104	
2245360	М	WEST 55TH STREET	AMTRAK 30 STREET BRANCH	А	0		2	s	5/20/2014	5.529	G	4,300	\$19,027,500	104	
2245370	М	WEST 56TH STREET	AMTRAK 30 STREET BRANCH	А	0		2	s	5/20/2014	5.397	G	4,400	\$19,470,000	104	
2245380	М	TRANSVERSE ROAD #1 WESTBOUND	PEDESTRIAN PATH OPPOSITE EAST 66TH STREET		0	Р	1	s	1/15/2014	5.000	G	1,500	\$6,637,500	164	
2245420	М	WEST 65TH STREET ENTRANCE EASTBOUND	BRIDLE PATH WEST END		0	Р	1	s	1/14/2014	5.100	G	1,300	\$5,752,500	164	
2245440	М	WEST 40TH STREET	AMTRAK 30 STREET BRANCH	А	0		4	s	7/23/2014	4.103	F	9,400	\$41,595,000	104	
2245460	М	PARK AVE SOUTHBOUND	EAST 45TH STREET		О		1	s	5/22/2014	4.514	F	2,400	\$10,620,000	105	
2245470	М	PARK AVE NORTHBOUND	EAST 45TH STREET		О		1	s	5/21/2014	4.865	F	2,400	\$10,620,000	105	
2245480	м	TO GEORGE WASHINGTON BRIDGE OPPOSITE WEST 171ST STREET	RIVERSIDE DRIVE		О		1	s	2/24/2014	4.524	F	10,773	\$47,670,525	112	
2246000	м	WEST DRIVE (GREYSHOT ARCH)	PEDESTRIAN PATH BETWEEN 61ST & 62ND STREETS		О	Р	1	s	1/8/2014	5.400	G	2,500	\$11,062,500	164	
2246010	М	WEST 62ND STREET PEDESTRIAN BRIDGE (PINEBANK ARCH)	BRIDLE PATH		O-PED	Р	1	С	7/22/2014	4.654	F	1,000	\$4,425,000	164	
2246030	м	EAST 62ND STREET PEDESTRIAN BRIDGE (GAPSTOW BRIDGE)	THE POND		O-PED	Р	1	С	4/21/2014	3.897	F	1,400	\$6,195,000	164	
2246040	м	EAST DRIVE (INSCOPE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 62ND STREET		o	Р	1	С	4/30/2014	4.400	F	1,515	\$6,703,875	164	
2246050	М	CENTER DRIVE (DRIPROCK ARCH)	PEDESTRIAN OPPOSITE 63RD STREET		0	Р	1	s	1/14/2014	4.867	F	1,725	\$7,633,125	164	
2246069	м	EAST DRIVE (GREEN GAP ARCH)	PEDESTRIAN PATH BETWEEN 63RD & 64TH STREETS		О	Р	1	s	1/16/2014	4.433	F	2,075	\$9,181,875	164	
2246070	М	CENTER DRIVE (PLAYMATES ARCH)	PEDESTRIAN PATH OPPOSITE 65TH STREET		0	Р	1	С	6/11/2014	4.500	F	1,129	\$4,995,825	164	
2246080	м	WEST DRIVE (DALEHEAD ARCH)	BRIDLE OPPOSITE WEST 64TH STREET		О	Р	1	s	1/14/2014	4.667	F	2,000	\$8,850,000	164	
2246090	м	PEDESTRIAN BRIDGE OPPOSITE 65TH STREET	TRANSVERSE ROAD #1		O-PED	Р	1	С	9/19/2014	4.655	F	2,300	\$10,177,500	164	
2246100	М	CENTER DRIVE	TRANSVERSE ROAD #1		0	Р	1	s	2/7/2014	4.467	F	6,000	\$26,550,000	164	
2246110	м	EAST DRIVE	TRANSVERSE ROAD #1		О	Р	1	s	3/19/2014	4.667	F	6,000	\$26,550,000	164	
2246120	М	WEST DRIVE	TRANSVERSE ROAD #1		0	Р	1	s	3/25/2014	4.700	F	7,900	\$34,957,500	164	
2246130	М	EAST DRIVE (WILLOWDELL ARCH)	PEDESTRIAN PATH OPPOSITE EAST 67TH STREET		0	Р	1	С	4/29/2014	3.500	F	666	\$2,947,050	164	
2246140	М	WEST 72ND STREET ENTRANCE (RIFTSTONE ARCH)	BRIDLE PATH		0	Р	1	s	1/8/2014	4.467	F	3,600	\$15,930,000	164	
2246150	М	72ND STREET CROSS DRIVE (TERRACE BRIDGE)	PEDESTRIAN PATH TO FOUNTAIN		0	Р	3	s	2/24/2014	5.786	G	7,300	\$32,302,500	164	
2246160	м	73RD STREET PEDESTRIAN BRIDGE (BOW BRIDGE)	THE LAKE		WO-PED	Р	1	С	4/8/2014	3.946	F	1,700	\$7,522,500	164	
2246170	М	EAST DRIVE (TREFOIL ARCH)	PEDESTRIAN PATH OPPOSITE EAST 73RD STREET		0	Р	1	s	1/24/2014	5.130	G	1,900	\$8,407,500	164	
2246230	м	EAST DRIVE	TRANSVERSE ROAD #2		0	Р	1	s	3/11/2014	4.600	F	5,080	\$22,479,000	164	
2246240	М	WEST DRIVE	TRANSVERSE ROAD #2		0	Р	1	s	3/12/2014	4.167	F	7,200	\$31,860,000	164	
2246250	М	EAST DRIVE	TRANSVERSE ROAD #3		0	Р	1	s	1/17/2014	4.300	F	4,500	\$19,912,500	164	
2246260	М	WEST DRIVE	TRANSVERSE ROAD #3		0	Р	1	s	3/18/2014	4.800	F	5,100	\$22,567,500	164	
2246270	М	EAST DRIVE	TRANSVERSE ROAD #4		0	Р	1	s	3/20/2014	4.100	F	7,000	\$30,975,000	164	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED RA L RC	TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD CD2	CD3
2246280	м	WEST DRIVE	TRANSVERSE ROAD #4	0	P	1	s	3/21/2014	4.167	F	4,700	\$20,797,500	164	
2246320	м	WEST 77TH STREET PEDESTRIAN (OAK BRIDGE)	THE LAKE	WO-PED	P	3	С	4/8/2014	5.474	G	1,100	\$4,867,500	164	
2246330	М	WEST DRIVE (BALCONY BRIDGE)	STREAM TO THE LAKE	wo	Р	1	s	1/15/2014	5.000	G	1,817	\$8,040,225	164	
2246340	М	WEST 77TH STREET PEDESTRIAN (LADIES POND BRIDGE)	STREAM TO THE LAKE	WO-PED	Р	3	С	10/17/2014	4.355	F	500	\$2,212,500	164	
2246350	м	EAST DRIVE (GREYWACKE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 80TH STREET	0	P	1	С	5/23/2014	3.733	F	1,266	\$5,602,050	164	
2246360	М	WEST DRIVE (WINTERDALE ARCH)	PEDESTRIAN PATH OPPOSITE WEST 82ND STREET	0	P	1	s	1/16/2014	5.182	G	2,502	\$11,071,350	164	
2246380	М	WEST 86TH STREET PEDESTRIAN (SOUTHWEST RESERVOIR BRIDGE)	BRIDLE PATH	O-PED	Р	1	С	10/17/2014	4.852	F	700	\$3,097,500	164	
2246390	М	EAST 86TH STREET PEDESTRIAN (SOUTHEAST RESERVOIR BRIDGE)	BRIDLE PATH	O-PED	P	3	С	10/17/2014	4.509	F	1,100	\$4,867,500	164	
2246400	М	PEDESTRIAN PATH OPPOSITE EAST 79TH STREET	TRANSVERSE ROAD #2	O-PED	P	1	С	7/14/2013	4.233	F	3,700	\$16,372,500	164	
2246410	М	TRANSVERSE ROAD 1 EASTBOUND (DENESMOUTH ARCH)	PEDESTRIAN PATH OPPOSITE EAST 65TH STREET	0	Р	1	s	2/24/2014	4.636	F	1,739	\$7,695,075	164	
2246430	М	WEST 110TH STREET ENTRANCE (MOUNTCLIFF ARCH)	PEDESTRIAN PATH OPPOSITE WEST 109TH STREET	0	P	1	s	2/24/2014	4.317	F	1,200	\$5,310,000	164	
2246440	М	79TH STREET PEDESTRIAN BRIDGE	TRANSVERSE ROAD #2	O-PED	Р	1	С	7/13/2014	3.926	F	5,900	\$26,107,500	164	
2246450	М	EAST 77TH STREET PEDESTRIAN (GLADE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 77TH STREET	O-PED	P	1	С	4/1/2014	4.138	F	5,000	\$22,125,000	164	
2246460	М	WEST 77TH STREET ENTRANCE (EAGLEVALE ARCH)	PEDESTRIAN PATH OPPOSITE WEST 77TH STREET	0	P	2	s	1/9/2014	4.263	F	3,066	\$13,567,050	164	
2246470	М	EAST DRIVE (HUDDLESTONE ARCH)	THE LOCH	wo	Р	1	s	1/28/2014	4.500	F	1,100	\$4,867,500	164	
2246489	М	WEST 181ST STREET	RAMP TO WASHINGTON BRIDGE	0		1	s	1/30/2014	5.200	G	8,200	\$36,285,000	112	
2246490	М	A.C. POWELL BOULEVARD NORTHBOUND	A.C. POWELL BOULEVARD	0		1	s	1/31/2014	4.347	F	3,000	\$13,275,000	110	
2246500	М	FORT TRYON PLACE	ENTRANCE FROM RIVERSIDE DRIVE	0	P	1	s	3/25/2014	4.200	F	3,280	\$14,514,000	112	
2246510	М	CORBIN PLACE OVERPASS	CORBIN PLACE	0	P	1	s	1/8/2014	5.000	G	2,223	\$9,836,775	112	
2246540	М	EAST 34TH STREET	PARK AVENUE TUNNEL	ОТ		1	s	8/20/2014	4.117	F	36,200	\$160,185,000	105 106	,
2246550	М	PARK AVENUE VIADUCT	EAST 42ND STREET	0		10	s	12/10/2014	4.478	F	22,150	\$98,013,750	105	
2246560	М	TUDOR CITY PLACE	EAST 42ND STREET	o		1	s	1/24/2014	5.133	G	6,600	\$29,205,000	106	
2246570	М	EAST 42ND STREET - EAST 47TH STREET	FIRST AVE TUNNEL	ОТ		2	s	5/20/2014	4.922	F	95,000	\$420,375,000	106	
2246580	вм	HIGH BRIDGE PEDESTRIAN OVERPASS	I87 - HARLEM RIVER	WA-PED	P	11	Р	8/12/2002	3.759	F	34,100	\$150,892,500	112 204	,
2246600	М	WEST 176TH STREET PEDESTRIAN BRIDGE	APPROACH TO GEORGE WASHINGTON BRIDGE	O-PED	P	1	С	3/7/2014	4.200	F	1,200	\$5,310,000	112	
2246620	М	EAST 128TH STREET PEDESTRIAN BRIDGE	3RD AVE BRIDGE APPROACH	O-PED		18	С	12/15/2014	3.939	F	2,300	\$10,177,500	111	
2246660	М	RIVERSIDE DRIVE	WEST 125TH STREET - WEST 134TH STREET	o		27	s	7/12/2013	4.472	F	148,300	\$656,227,500	109	
2246670	М	WEST 134TH STREET	TERRAIN	o		4	s	6/13/2013	4.870	F	7,500	\$33,187,500	109	
2246690	М	ISHAM PARK VEHICULAR	HARLEM RIVER INLET	o	P	1	s	4/28/2014	6.065	VG	911	\$4,031,175	112	
2246700	М	ISHAM PARK PEDESTRIAN BRIDGE	HARLEM RIVER INLET	WO-PED	P	1	С	1/29/2014	3.552	F	300	\$1,327,500	112	
2246710	М	WEST 153RD STREET	A.C. POWELL BLVD	o		1	s	1/31/2014	4.611	F	3,082	\$13,637,850	110	
2246720	М	RIVERSIDE DRIVE	WEST 158TH STREET - AMTRAK	o		77	s	10/24/2014	3.528	F	185,658	\$821,536,650	109 112	:
2246970	М	RIVERSIDE DRIVE	W EST 96TH STREET	o		3	s	5/6/2013	5.471	G	10,600	\$46,905,000	107	
2246980	М	RIVERSIDE DRIVE	WEST 138TH STREET	o		1	s	1/16/2014	4.900	F	6,700	\$29,647,500	109	
2246990	М	EAST 129TH STREET PEDESTRIAN BRIDGE	3RD AVENUE BRIDGE RAMP	O-PED	Р	5	С	12/2/2013	4.095	F	1,046	\$4,628,550	111	
2247020	Q	94TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASH BR	O-PED		5	С	9/12/2014	4.231	F	905	\$4,004,625	404	
2247040	Q	UNION STREET	LIRR PORT WASH BR	0		1	s	8/22/2013	6.172	VG	3,313	\$14,660,025	407	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG	Inspection Date	Condition Rating	VR BL	DECK AREA	REPLACEMENT COST	CD CD	2CD3
				RO	TYPE	OWNER	NS	SR	Date	Rating	RT				
2247050	Q	BOWNE AVENUE	LIRR PORT WASH BR	L	o		1	s	9/24/2014	5.451	G	4,974	\$22,009,950	407	
2247060	Q	PARSONS BOULEVARD	LIRR PORT WASH BR	L	О		1	s	9/24/2014	4.824	F	4,200	\$18,585,000	407	
2247070	Q	147TH STREET	LIRR PORT WASH BR	L	О		1	s	8/22/2013	5.392	G	2,800	\$12,390,000	407	
2247080	Q	149TH STREET	LIRR PORT WASH BR	L	o		1	s	10/31/2014	4.776	F	4,100	\$18,142,500	407	
2247090	Q	149TH PLACE	LIRR PORT WASH BR	L	0		2	s	8/21/2013	5.000	G	4,300	\$19,027,500	407	
2247100	О	150TH STREET	LIRR PORT WASH BR	L	0		2	s	8/21/2013	6.029	VG	7,830	\$34,647,750	407	
2247110	Q	MURRAY STREET	LIRR PORT WASH BR	L	0		1	s	8/21/2013	5.222	G	4,000	\$17,700,000	407	
2247120	р	WOODSIDE AVENUE	LIRR MAIN LINE	L	0		3	s	9/19/2014	4.413	F	14,900	\$65,932,500	402	
2247130	О	CORPORAL KENNEDY STREET	LIRR PORT WASH BR	L	0		1	s	9/5/2013	6.157	VG	3,379	\$14,952,075	411	
2247140	Q	BELL BOULEVARD	LIRR PORT WASH BR	L	0		1	s	9/5/2013	5.780	G	4,320	\$19,116,000	411	
2247150	О	65TH STREET	LIRR MAIN LINE	L	0		3	s	9/5/2013	6.375	VG	6,344	\$28,072,200	402	
2247160	Q	65TH PLACE	LIRR MAIN LINE	L	0		3	s	9/5/2013	6.441	VG	8,381	\$37,085,925	402	
2247170	О	DOUGLASTON PARKWAY	LIRR PORT WASH BR	L	0		3	s	10/1/2014	4.542	F	6,300	\$27,877,500	411	
2247180	Q	GRAND AVENUE	LIRR MAIN LINE	L	o		3	s	10/1/2014	4.396	F	7,415	\$32,811,375	404	
2247190	Q	55TH AVENUE PEDESTRIAN BRIDGE	LIRR MAIN LINE	L	O-PED		3	С	9/17/2014	4.120	F	1,296	\$5,734,800	404	
2247220	р	80TH ROAD	LIRR MAIN LINE	L	0		3	s	8/30/2013	4.794	F	4,100	\$18,142,500	409	
2247230	Q	82ND AVENUE	LIRR MAIN LINE	L	0		3	s	8/30/2013	5.311	G	4,100	\$18,142,500	409	
2247240	р	LEFFERTS BOULEVARD	LIRR MAIN LINE	L	0		3	s	8/30/2013	5.806	G	5,460	\$24,160,500	409	
2247260	р	JACKSON AVENUE	LIRR MONTAUK DIV	L	0		1	s	10/8/2014	5.550	G	4,517	\$19,987,725	402	
2247270	O	21ST STREET	LIRR N SHORE YARD	L	0		6	s	9/11/2013	5.153	G	17,590	\$77,835,750	402	
2247290	Q	49TH AVENUE	LIRR,AMTRAK	L	o		5	s	11/26/2014	3.819	F	20,400	\$90,270,000	402	
2247300	O	THOMPSON AVENUE	AMTRAK & LIRR YARD	AL	0		14	s	12/6/2012	5.042	G	61,280	\$271,164,000	402	
2247310	Q	QUEENS BOULEVARD	AMTRAK & LIRR YARD	AL	О		19	s	12/6/2012	6.268	VG	92,400	\$408,870,000	402 40	1
2247320	Q	HONEYWELL STREET	AMTRAK & LIRR YARD	AL	o		22	s	9/26/2013	5.903	G	99,036	\$438,234,300	402 40	1
2247330	O	39TH STREET (NORTH)	SUNNYSIDE YARD	А	o		14	s	9/30/2013	6.556	VG	48,200	\$213,285,000	402 40	1
2247370	Q	37TH AVENUE	CSX - HELLGATE	С	o		1	s	8/1/2013	6.234	VG	6,868	\$30,390,900	402	
2247380	Q	ROOSEVELT AVENUE	CSX - HELLGATE	С	О		2	s	8/1/2013	6.333	VG	7,380	\$32,656,500	402 40:	3 404
2247390	Q	41ST AVENUE	CSX - HELLGATE	С	О		2	s	8/1/2013	4.942	F	4,400	\$19,470,000	402 404	4
2247400	Q	WOODSIDE AVENUE	CSX TRANSPORT	С	o		1	s	8/9/2013	5.033	G	8,200	\$36,285,000	402 404	4
2247410	Q	43RD AVENUE	CSX TRANSPORT	С	О		1	s	8/9/2013	5.000	G	4,800	\$21,240,000	402 404	4
2247420	Q	44TH AVENUE	CSX TRANSPORT	С	o		1	s	8/9/2013	5.000	G	5,100	\$22,567,500	402 404	4
2247430	Q	45TH AVENUE	CSX TRANSPORT	С	0		1	s	8/9/2013	5.306	G	2,400	\$10,620,000	402 40	4
2247440	O	GRAND AVENUE	CSX TRANSPORT	С	o		1	s	8/13/2013	6.183	VG	3,280	\$14,514,000	405	
2247450	Q	57TH AVENUE	CSX TRANSPORT	С	0		1	s	8/13/2013	5.976	G	2,248	\$9,947,400	405	
2247460	Q	CALDWELL AVENUE	CSX TRANSPORT	С	0		1	s	11/10/2014	5.889	G	2,243	\$9,925,275	405	
2247470	Q	ELIOT AVENUE	CSX TRANSPORT	С	0		1	s	8/15/2013	4.972	F	2,960	\$13,098,000	405	
2247480	Q	JUNIPER BOULEVARD SOUTH	CSX TRANSPORT	С	o		1	s	8/16/2013	5.000	G	9,000	\$39,825,000	405	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Conditio Rating		DECK AREA	REPLACEMENT COST	CD CD2C
2247490	Q	69TH STREET	CSX TRANSPORT	С	o		1	s	11/10/2014	4.979	F	6,175	\$27,324,375	405
2247500	Q	METROPOLITAN AVENUE	CSX TRANSPORT	С	o		1	s	8/16/2013	4.233	F	18,650	\$82,526,250	405
2247530	Q	ANDREWS AVENUE	LIRR MONTAUK DIV	L	o		1	s	9/3/2013	7.000	VG	1,765	\$7,810,125	405
2247540	Q	60TH STREET	LIRR MONTAUK DIV	L	o		2	s	9/3/2013	5.208	G	5,340	\$23,629,500	405
2247550	Q	ELIOT AVENUE	LIRR MONTAUK DIV	L	0		2	s	8/27/2013	5.712	G	9,550	\$42,258,750	405
2247570	Q	80TH STREET	77TH AVENUE - LIRR MT	L	o		5	s	10/21/2014	4.932	F	11,725	\$51,883,125	405
2247590	Q	FOREST PARK DRIVE	LIRR MONTAUK DIV	L	О	P	5	s	9/22/2014	5.158	G	6,000	\$26,550,000	409
2247600	Q	PARK LANE SOUTH	LIRR MONTAUK DIV	L	О		1	s	9/22/2014	6.983	VG	3,024	\$13,381,200	409 482
2247620	Q	MYRTLE AVENUE	ABANDONED LIRR		o		3	s	1/2/2014	5.028	G	6,725	\$29,758,125	482 406
2247630	Q	PEDESTRIAN BRIDGE NEAR UNION TURNPIKE	ABANDONED LIRR		O-PED		8	С	6/12/2014	4.582	F	1,500	\$6,637,500	406
2247640	Q	39TH STREET (SOUTH)	AMTRAK & LIRR YARD	AL	О		9	s	10/7/2013	5.903	G	34,100	\$150,892,500	402
2247650	Q	60TH ROAD PEDESTRIAN BRIDGE	LIRR MAIN LINE	L	O-PED		3	С	9/16/2014	5.000	G	1,200	\$5,310,000	405 406
2247660	Q	FOREST PARK DRIVE	ABANDONED LIRR		o	Р	6	s	2/21/2014	4.524	F	10,000	\$44,250,000	409
2247680	Q	221ST STREET	LIRR PORT WASH BR	L	О		3	s	8/22/2013	5.926	G	6,050	\$26,771,250	411
2248019	Q	WOODHAVEN BOULEVARD	ATLANTIC AVENUE		О		3	s	3/26/2014	4.208	F	19,400	\$85,845,000	409
2248020	Q	WHITELAW PEDESTRIAN BRIDGE	CONDUIT AVENUE		O-PED		7	С	10/17/2014	4.225	F	5,500	\$24,337,500	410
2248039	Q	CROSS BAY BOULEVARD	NASSAU EXPRESSWAY - ROUTE 27		О		2	s	5/31/2013	6.208	VG	16,544	\$73,207,200	410
2248040	Q	RAMP TO LINDEN BOULEVARD	SOUTH CONDUIT AVENUE		О		1	s	5/15/2014	5.200	G	3,352	\$14,832,600	410
2248059	Q	MOTOR PARKWAY (PEDESTRIAN)	FRANCIS LEWIS BOULEVARD		O-PED	P	2	С	6/13/2014	4.528	F	2,800	\$12,390,000	408
2248060	Q	MOTOR PARKWAY (PEDESTRIAN)	BELL BOULEVARD		O-PED	P	2	С	6/29/2014	4.403	F	2,650	\$11,726,250	411
2248070	Q	MOTOR PARKWAY (PEDESTRIAN)	SPRINGFIELD BOULEVARD		O-PED	Р	3	С	6/17/2014	3.639	F	2,900	\$12,832,500	411
2248080	Q	MOTOR PARKWAY (PEDESTRIAN)	HOLLIS COURT BOULEVARD		O-PED	Р	3	С	11/18/2014	4.672	F	2,700	\$11,947,500	408
2248090	Q	FLUSHING MEADOW PARK PEDESTRIAN	COLLEGE POINT BOULEVARD		O-PED	P	3	С	3/24/2014	4.639	F	8,400	\$37,170,000	407
2248100	Q	MOTOR PARKWAY (PEDESTRIAN)	73RD AVENUE		O-PED	P	3	С	2/11/2014	4.672	F	2,600	\$11,505,000	408
2248110	Q	MOTOR PARKWAY (PEDESTRIAN)	ALLEY PARK PEDESTRIAN WALK		O-PED	P	1	С	6/17/2014	4.056	F	1,000	\$4,425,000	413
2248129	Q	UNION TURNPIKE	CREEDMOORE HOSPITAL ROAD		О		1	s	6/7/2013	4.867	F	3,500	\$15,487,500	413
2248130	Q	FLUSHING MEADOW PARK PEDESTRIAN	WILLOW LAKE & 76TH ROAD		WO-PED	Р	4	С	4/20/2002	1.000	С	1,891	\$8,367,675	481
2248140	Q	FLUSHING MEADW PARK ROAD	STREAM NORTH OF LIE		wo	P	5	s	7/31/2013	4.481	F	4,100	\$18,142,500	481
2248159	Q	WOODHAVEN BOULEVARD	QUEENS BOULEVARD		О		2	s	7/17/2014	4.078	F	11,500	\$50,887,500	404
2248160	Q	ELIOT AVENUE	QUEENS BOULEVARD		o		2	s	7/17/2014	4.804	F	13,785	\$60,998,625	406
2248200	Q	RUST STREET	FLUSHING AVENUE		О		1	s	6/21/2013	4.922	F	2,940	\$13,009,500	405
2248220	Q	SERVICE ROAD TURNAROUND	FLUSHING AVENUE		0		1	s	6/21/2013	5.078	G	2,940	\$13,009,500	405
2248230	Q	BEACH CHANNEL DRIVE WESTBOUND	BEACH CHANNEL DRIVE EASTBOUND		О		1	s	6/18/2013	4.400	F	3,600	\$15,930,000	484
2248240	Q	FLUSHING AVENUE SERVICE ROAD	FLUSHING AVENUE		o		1	s	6/21/2013	5.250	G	2,940	\$13,009,500	405
2248250	Q	102ND STREET	HAWTREE BASIN		wo		3	s	7/18/2013	6.015	VG	4,900	\$21,682,500	410
2248260	Q	MEADOW LAKE BRIDGE	MEADOW LAKE		wo	Р	5	s	4/29/2014	4.458	F	4,200	\$18,585,000	481
2248280	Q	HIGHLAND PARK PEDESTRIAN	PEDESTRIAN PATH		O-PED	P	1	С	12/31/2014	3.667	F	1,900	\$8,407,500	405

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED RA	-	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating		DECK AREA	REPLACEMENT COST	CD CD2CI
2248299	Q	JACKIE ROBINSON PARKWAY-UNION TURNPIKE	AUSTIN STREET		0		1	s	5/23/2014	4.806	F	5,900	\$26,107,500	409 406
2248300	Q	71ST AVENUE	COOPER AVENUE		o		1	s	7/1/2013	4.373	F	2,800	\$12,390,000	405
2248340	Q	FOREST PARK DRIVE	MYRTLE AVENUE		o	P	3	s	5/24/2013	4.984	F	5,100	\$22,567,500	409
2248369	Q	ROCKAWAY BOULEVARD	THURSTON BASIN		wo		2	s	7/16/2013	5.474	G	6,000	\$26,550,000	483 413
2248379	Q	BOATHOUSE BRIDGE	AQUACADE LAKE		wo	P	5	s	8/1/2013	4.296	F	6,300	\$27,877,500	481
2249040	R	TOMPKINS AVENUE	B&O RR (ABANDONED)		o		1	s	4/4/2014	5.953	G	5,096	\$22,549,800	501
2249070	R	JOHN STREET PEDESTRIAN BRIDGE	B&O RR (ABANDONED)	)	O-PED		2	С	8/15/2014	5.423	G	1,050	\$4,646,250	501
2249090	R	MORNINGSTAR ROAD	B&O RR (ABANDONED)	)	o		4	s	5/21/2013	4.898	F	7,900	\$34,957,500	501
2249100	R	GRANITE AVENUE	B&O RR (ABANDONED)	)	o		4	s	2/4/2014	5.966	G	7,300	\$32,302,500	501
2249110	R	LAKE AVENUE	B&O RR (ABANDONED)	)	o		3	s	4/18/2014	5.148	G	5,900	\$26,107,500	501
2249120	R	SIMONSON AVENUE	B&O RR (ABANDONED)	)	o		3	s	5/15/2013	5.852	G	5,819	\$25,749,075	501
2249130	R	VAN NAME AVENUE	B&O RR (ABANDONED)	)	o		3	s	4/16/2014	5.186	G	5,474	\$24,222,450	501
2249140	R	VAN PELT AVENUE	B&O RR (ABANDONED)	<b>o</b>	o		3	s	5/16/2013	5.576	G	5,000	\$22,125,000	501
2249160	R	DE HART AVENUE	B&O RR (ABANDONED)	)	o		4	s	5/15/2013	6.389	VG	6,700	\$29,647,500	501
2249170	R	UNION AVENUE	B&O RR (ABANDONED)	,	o		4	s	5/14/2013	5.315	G	6,500	\$28,762,500	501
2249180	R	HARBOR ROAD	CONRAIL - EX B&O RR	3	o		4	s	9/16/2013	6.000	G	5,778	\$25,567,650	501
2249200	R	SOUTH AVENUE	ARLINGTON YARD C	3	o		3	s	9/17/2013	6.527	VG	8,500	\$37,612,500	501
2249210	R	MAIN STREET PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	5	O-PED		9	С	3/5/2014	4.123	F	400	\$1,770,000	503
2249230	R	TRACY AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE S	5	O-PED		9	С	3/5/2014	3.894	F	635	\$2,809,875	503
2249240	R	ARTHUR KILL ROAD	SIRT SOUTH SHORE S	5	o		1	s	10/14/2014	4.796	F	3,650	\$16,151,250	503
2249250	R	BETHEL AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	5	O-PED		12	С	3/6/2014	3.525	F	111	\$491,175	503
2249269	R	PAGE AVENUE	SIRT SOUTH SHORE S	5	o		4	s	9/23/2013	5.806	G	30,710	\$135,891,750	503
2249270	R	RICHMOND VALLY ROAD	SIRT SOUTH SHORE	5	o		4	s	9/13/2013	5.164	G	9,440	\$41,772,000	503
2249280	R	CHAMP COURT PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	5	O-PED		7	С	3/7/2014	4.393	F	595	\$2,632,875	503
2249290	R	SEGUINE AVENUE	SIRT SOUTH SHORE	5	o		1	s	8/30/2013	6.016	VG	3,250	\$14,381,250	503
2249300	R	HUGUENOT AVENUE	SIRT SOUTH SHORE S	5	o		2	s	9/24/2013	4.788	F	4,900	\$21,682,500	503
2249320	R	ALBEE AVENUE	SIRT SOUTH SHORE	5	o		3	s	9/25/2013	4.689	F	6,500	\$28,762,500	503
2249330	R	ANNADALE ROAD	SIRT SOUTH SHORE S	5	О		1	s	8/23/2013	6.233	VG	3,540	\$15,664,500	503
2249350	R	NELSON AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	6	O-PED		3	С	3/10/2014	4.115	F	300	\$1,327,500	503
2249360	R	GIFFORDS LANE	SIRT SOUTH SHORE S	5	o		1	s	10/15/2014	5.625	G	3,042	\$13,460,850	503
2249370	R	GREAVES AVENUE	SIRT SOUTH SHORE	6	О		1	s	8/22/2013	6.533	VG	2,650	\$11,726,250	503
2249380	R	GUYON AVENUE	SIRT SOUTH SHORE	5	o		3	s	10/7/2013	4.770	F	6,900	\$30,532,500	503
2249390	R	CEDARVIEW AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE S	6	O-PED		5	С	3/11/2014	3.615	F	625	\$2,765,625	503
2249400	R	BEACH AVENUE	SIRT SOUTH SHORE S	5	o		2	s	8/19/2013	5.364	G	3,700	\$16,372,500	502
2249410	R	ROSS AVENUE	SIRT SOUTH SHORE S	s	О		2	s	8/20/2013	5.379	G	3,800	\$16,815,000	502
2249420	R	ROSE AVENUE	SIRT SOUTH SHORE	5	О		2	s	8/21/2013	5.258	G	3,800	\$16,815,000	502
2249430	R	NEW DORP LANE	SIRT SOUTH SHORE	5	o		2	s	9/9/2013	4.958	F	7,600	\$33,630,000	502

BIN	BORO	FEATURE CARRIED		L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating		DECK AREA	REPLACEMENT COST	CD CD2CI
2249440	R	BANCROFT AVENUE	SIRT SOUTH SHORE	s	o		3	s	10/9/2013	5.393	G	5,900	\$26,107,500	502
2249450	R	FREMONT AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		3	С	3/12/2014	4.073	F	800	\$3,540,000	502
2249460	R	LINCOLN AVENUE	SIRT SOUTH SHORE	s	o		1	s	9/10/2013	5.190	G	4,500	\$19,912,500	502
2249470	R	MIDLAND AVENUE	SIRT SOUTH SHORE	s	0		1	s	10/29/2013	5.466	G	3,000	\$13,275,000	502
2249480	R	FINGERBOARD ROAD	SIRT SOUTH SHORE	s	o		2	s	9/26/2013	6.431	VG	5,100	\$22,567,500	502
2249490	R	CLOVE ROAD	SIRT SOUTH SHORE	s	o		3	s	10/16/2014	5.778	G	5,104	\$22,585,200	502
2249510	R	TOMPKINS AVENUE	WILLOW AVENUE, SIRT	s	0		2	s	10/17/2014	5.269	G	5,378	\$23,797,650	501
2249520	R	HANNAH STREET	SIRT SOUTH SHORE	s	o		10	s	10/18/2013	4.966	F	10,020	\$44,338,500	501
2249530	R	MINTHORNE STREET PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		26	С	3/13/2014	4.736	F	6,000	\$26,550,000	501
2249580	R	BELFIELD AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		5	С	3/14/2014	3.980	F	400	\$1,770,000	503
2249710	R	WEST FOOTBRIDGE	CLOVE LAKE		WO-PED	P	2	С	4/28/2014	3.857	F	900	\$3,982,500	501
2249720	R	EAST FOOTBRIDGE	CLOVE LAKE		WO-PED	Р	2	С	4/28/2014	4.371	F	900	\$3,982,500	501
2249730	R	BRIDGE OVER DAM	NORTH END CLOVE LAKE		WO-PED	Р	1	С	5/6/2014	3.351	F	1,000	\$4,425,000	501
2249760	R	MARTLINGS AVENUE	RICHMOND LAKE DAM		wo		2	s	6/24/2013	4.467	F	7,000	\$30,975,000	501
2249770	R	SOUTH OF BROOKS LAKE	STREAM IN PARK		WO-PED	Р	3	С	11/26/2013	4.946	F	700	\$3,097,500	501
2249780	R	FOOTBRIDGE	BROOKS LAKE DAM		WO-PED	Р	1	С	5/19/2014	3.433	F	800	\$3,540,000	501
2249790	R	FOOTBRIDGE SOUTH OF FOREST AVENUE	STREAM IN PARK		WO-PED	Р	3	С	10/21/2014	4.651	F	700	\$3,097,500	501
2249800	R	FOREST AVENUE	CLOVE LAKES PARK STREAM		wo	Р	1	s	11/6/2013	4.567	F	1,600	\$7,080,000	501
2249810	R	HYLAN BOULEVARD	LEMON CREEK		wo		1	s	3/10/2014	6.172	VG	11,400	\$50,445,000	503
2249820	R	ARTHUR KILL ROAD	ARTHUR KILL STREAM		wo		1	s	5/20/2013	4.184	F	1,500	\$6,637,500	503
2249840	R	TOMPKINS AVENUE	GREENFIELD AVENUE		o		1	s	3/10/2014	4.638	F	2,690	\$11,903,250	501
2249860	R	SLATER BOULEVARD	NEW CREEK		wo		1	s	5/17/2013	5.510	G	2,037	\$9,013,725	502
2249870	R	TRAVIS AVENUE	MAIN CREEK		wo		1	s	10/16/2013	5.483	G	1,700	\$7,522,500	502
2249880	R	CHELSEA ROAD	SAWMILL CREEK		wo		1	s	5/21/2013	6.633	VG	2,205	\$9,757,125	502
2257569	м	MILLER HIGHWAY	TERRAIN		А		64	s	12/5/2014	4.352	F	272,475	\$1,205,701,875	104 107
2266129	Q	DOUGLASTON PARKWAY	BCIP SOUTHBOUND		А		1	s	3/10/2014	4.592	F	4,400	\$19,470,000	411
2266139	Q	DOUGLASTON PARKWAY	BCIP NORTHBOUND		А		1	s	3/12/2014	4.653	F	6,400	\$28,320,000	411
2266149	Q	HEMPSTEAD AVENUE	BCIP RAMP NORTHBOUND		А		2	s	3/12/2014	4.190	F	9,500	\$42,037,500	413
2266160	Q	678I SOUTHBOUND TO BCIP EASTBOUND	ACCESS ROAD FROM 6781 - BCIP		А		1	s	6/17/2014	3.781	F	2,300	\$10,177,500	407
2266229	м	ннр	PEDESTRIAN UNDERPASS AT WEST 148TH STREET		А		1	s	1/30/2014	5.000	G	1,840	\$8,142,000	109
2266230	М	HHP NORTHBOUND	PEDESTRIAN UNDERPASS INWOOD PARK		А		1	s	1/23/2014	5.000	G	800	\$3,540,000	112
2266240	м	HHP SOUTHBOUND	PEDESTRIAN UNDERPASS INWOOD PARK		А		1	s	1/23/2014	5.526	G	1,100	\$4,867,500	112
2266540	В	2781	BRUCKNER BOULVARD		А		2	s	7/10/2013	4.435	F	32,900	\$145,582,500	201
226672A	м	WEST 31ST STREET	AMTRAK LAYUP TRACKS	А	0		9	s	11/15/2014	3.619	F	8,800	\$38,940,000	104
2266770	Q	BCIP	LAURELTON PARKWAY		А		1	s	3/7/2014	4.972	F	9,508	\$42,072,900	413
2267130	м	RIVERSIDE DRIVE	WEST 145TH STREET		0		1	s	4/29/2013	5.133	G	5,800	\$25,665,000	109
2267160	Q	ROOSEVELT AVENUE	SHEA ROAD		0		4	s	7/29/2013	4.873	F	7,280	\$32,214,000	408

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Conditio Rating		DECK AREA	REPLACEMENT COST	CD CD2CI
2267199	Q	FRANCIS LEWIS BOULEVARD	CUNNINGHAM PARK ROAD		0		1	s	5/13/2013	5.033	G	7,085	\$31,351,125	408
2267240	М	HRD RAMP TO GEORGE WASHINGTON BRIDGE	HARLEM RIVER DRIVE SOUTHBOUND		Α		55	s	10/14/2014	3.042	F	122,900	\$543,832,500	112
2267250	М	ннр	AMTRAK - WEST 96TH STREET	Α	Α		55	s	11/1/2014	3.548	F	40,000	\$177,000,000	107
2267380	М	WEST STREET	RECTOR STREET - BROOKLYN BATTERY MANHATTAN PLAZA		AT		1	s	11/19/2013	5.033	G	25,760	\$113,988,000	101
2267717	М	79TH STREET PEDESTRIAN PLAZA	79TH STREET BOAT BASIN GARAGE		Α	P	10	s	5/10/2013	4.444	F	27,400	\$121,245,000	107
2267718	М	79TH STREET TRAFFIC CIRCLE	79TH STREET PEDESTRIAN PLAZA		А	Р	34	s	5/15/2013	3.738	F	24,130	\$106,775,250	107
226771A	М	79TH STREET RAMP TO HHP	79TH STREET BOAT BASIN GARAGE		AR	Р	4	s	5/8/2014	4.221	F	3,131	\$13,854,675	107
226771B	м	79TH STREET RAMP TO GARAGE	79TH STREET BOAT BASIN GARAGE		AR	P	21	s	5/14/2014	4.452	F	8,989	\$39,776,325	107
226771C	м	GARAGE RAMP TO 79TH STREET	79TH STREET BOAT BASIN GARAGE		AR	P	21	s	5/12/2014	4.435	F	9,095	\$40,245,375	107
226771D	м	SOUTHBOUND HHP RAMP TO 79TH STREET	79TH STREET BOAT BASIN GARAGE		AR	Р	4	s	5/8/2014	4.403	F	2,601	\$11,509,425	107
2267860	ĸ	BROOKLYN BRIDGE APPROACH	STORAGE (SANDS STREET)		o		1	s	5/23/2014	4.344	F	6,490	\$28,718,250	302
2268350	к	BROOKLYN PROMENADE	278I EASTBOUND (BQE)		A-PED	Р	35	С	8/10/2014	3.552	F	46,184	\$204,364,200	302
2268480	м	CHAMBERS STREET PEDESTRIAN BRIDGE	ROUTE 9A - WEST STREET		O-PED		10	С	5/30/2014	5.391	G	7,481	\$33,103,425	101
2268497	к	278I WESTBOUND (B.Q.E.)	FURMAN STREET - 278I EASTBOUND		А		45	s	8/30/2013	4.357	F	86,406	\$382,346,550	302
2268498	к	278I EASTBOUND (B.Q.E.)	278I WESTBOUND (BQE) - PROMENADE		А		69	s	11/26/2014	3.754	F	133,708	\$591,657,900	302
2268507	ĸ	278I WESTBOUND (B.Q.E.)	YORK STREET		Α		6	s	7/2/2013	4.071	F	10,388	\$45,966,900	302
2268508	к	278I EASTBOUND (B.Q.E.)	278I WESTBOUND (BQE) - BROOKLYN BRIDGE		А		11	s	7/5/2013	4.103	F	20,529	\$90,840,825	302
2268517	к	278I WESTBOUND (B.Q.E.)	FURMAN STREET		Α		7	s	7/1/2013	4.000	F	10,988	\$48,621,900	302
2268518	к	278I EASTBOUND (B.Q.E.)	278I WESTBOUND (B.Q.E.)		А		5	s	7/5/2013	4.310	F	9,275	\$41,041,875	302
2268650	м	FDR NORTHBOUND EAST 42ND STREET TO EAST 49TH STREET	EAST RIVER		А		119	s	10/17/2013	3.660	F	30,767	\$136,143,975	106
2268760	М	PS-5 PEDESTRIAN BRIDGE	TENTH AVENUE		O-PED		5	С	12/9/2013	4.184	F	1,285	\$5,686,125	112
2268770	Q	SPRINGFIELD BOULEVARD	EQUESTRIAN PATH (ABANDONED)		0		1	s	5/9/2013	5.000	G	1,470	\$6,504,750	413
2268920	R	AMBOY ROAD	LEMON CREEK		wo		1	s	3/10/2014	6.333	VG	1,310	\$5,796,750	503
2268930	м	MORRIS STREET PEDESTRIAN BRIDGE	BROOKLYN-BATTERY TUNNEL PLAZA		A-PED		3	С	7/15/2013	3.875	F	1,842	\$8,150,850	101
2269030	В	MATTHEWSON ROAD	MAC CRACKEN AVENUE		0		15	s	10/8/2014	4.175	F	14,880	\$65,844,000	205
2269190	М	WEST 70TH STREET	AMTRAK	А	0		3	s	11/19/2013	5.542	G	17,258	\$76,366,650	107
2269200	М	RIVERSIDE DRIVE SOUTH	AMTRAK	А	0		11	s	11/4/2013	6.069	VG	69,040	\$305,502,000	107
2269210	м	WEST 68TH STREET	AMTRAK	А	0		3	s	11/5/2013	6.593	VG	5,382	\$23,815,350	107
2269240	м	RIVERSIDE DRIVE	WEST 155TH STREET		0		1	s	4/25/2013	4.640	F	2,780	\$12,301,500	109 112
2269600	к	ERSKINE STREET	вѕнр		Α		1	s	8/20/2014	5.938	G	8,258	\$36,541,650	305
2269730	R	PARKING EXIT RAMP	SIRT	s	0	F	10	s	11/7/2014	6.097	VG	20,727	\$91,716,975	501
2269740	R	BUS STATION NORTH	SIRT	s	0	F	12	s	11/2/2014	5.600	G	64,605	\$285,877,125	501
2269750	R	BUS STATION SOUTH	SIRT	s	0	F	12	s	11/2/2014	5.280	G	154,688	\$684,494,400	501
2269760	R	NORTH RAMP	SIRT	s	О	F	2	s	10/22/2014	6.431	VG	6,000	\$26,550,000	501
2269770	R	BUS STATION ENTRANCE RAMP	SIRT	s	0	F	19	s	10/11/2013	5.611	G	39,333	\$174,048,525	501
2269780	R	PARKING ENTRANCE RAMP	SIRT	s	О	F	3	s	11/7/2014	5.889	G	8,589	\$38,006,325	501
2269790	R	BUS STATION EXIT RAMP	SIRT	s	0	F	7	s	11/4/2014	5.167	G	28,721	\$127,090,425	501

BIN	BORG	FEATURE CARRIED	FEATURE CROSSED	RAI	BRIDGE	OTHER	SPA	RT	Inspection	Condition	VR	DECK AREA	REPLACEMENT COST C	CD CD	2CD3
				L	TYPE	OWNER	NS		Date	Rating	BL				
				RO				SR			RT				4
2269820	М	EAST 81ST STREET PEDESTRIAN BRIDGE	FDR DRIVE NORTHBOUND		A-PED	P	3	С	6/8/2014	3.439	F	600	\$2,655,000	08	
2270030	В	EAST 156TH STREET	ACCESS TO HOUSING		o	ED	16	s	11/13/2014	3.493	F	49,696	\$219,904,800	204	
2270170	R	STATEN ISLAND FERRY PEDESTRIAN BRIDGE	PARKING LOT EXIT ROADWAY		O-PED	F	5	С	7/28/2014	5.583	G	2,917	\$12,907,725 56	i01	
2270180	R	BOROUGH PLACE - RAMP A	STATEN ISLAND RAILWAY	s	o	F	1	s	5/9/2014	6.594	VG	1,870	\$8,274,750 56	i01	
2270250	В	BROOKE AVENUE	CSX TRANS - PT MORRIS		o		1	s	7/11/2014	3.727	F	21,035	\$93,079,875	201	
2300130	Q	ROCKAWAY BOULEVARD	HOOK CREEK		wo		3	s	7/15/2013	6.271	VG	18,302	\$80,986,350 4	↓13	
7703720	Q	216TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASH BR	L	O-PED		6	С	9/22/2014	3.111	F	960	\$4,248,000 4	J11	
7705510	Q	167TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASH BR	L	O-PED		3	С	9/11/2014	4.000	F	840	\$3,717,000 46	107	
M00001	м	WEST 191ST STREET PEDESTRIAN TUNNEL	BROADWAY - IRT #1 SUBWAY		O-PED		1	С	12/9/2014	4.364	F	2,000	\$8,850,000	12	
M00003	М	HHP ON/OFF RMP-79TH STREET SOUTH SIDE	PEDESTRIAN PATH SOUTH OF 79TH STREET		А		1	С	6/6/2014	4.467	F	846	\$3,743,550	07	
M00004	М	HHP ON/OFF RAMP-79TH STREET NORTH SIDE	PEDESTRIAN PATH NORTH OF 79TH STREET		А		1	С	6/6/2014	4.667	F	846	\$3,743,550	.07	
Q00002	Q	BCIP	PATH OPPOSITE 88TH ROAD		А		1	С	6/11/2014	4.667	F	1,272	\$5,628,600 4	113	
788 OPEN BI	RIDGES			OPEN	SPANS 4,339					OPEN SF		14,590,227	64,480,843,350 A	.LL	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	n VR BL RT	DECK AREA	REPLACEMENT COST	CD CD	2CD3
224005B	В	TO BRUCKNER BOULEVARD	RELIEF		OR		4	s	10/3/2013	6.831	VG	19,990	\$88,455,750	201	
224006A	В	FROM BRUCKNER BOULEVARD	RELIEF		OR		5	s	9/14/2013	6.535	VG	14,037	\$62,113,725	201	
2241000	В	WESTCHESTER AVENUE	CSX PT MORRIS - (ABANDONED)	С	О		1	s	8/29/2014	4.660	F	1,740	\$7,699,500	201	
2241010	В	EAST 156TH STREET	CSX PT MORRIS - (ABANDONED)	С	o		1	s	5/9/2014	4.612	F	2,400	\$10,620,000	201	
2241040	В	THIRD AVENUE	CSX PT MORRIS - (ABANDONED)	С	0		1	s	7/3/2014	4.563	F	2,700	\$11,947,500	201 20	3
2241050	В	EAST 149TH STREET / JACKSON AVENUE	CSX PT MORRIS - (ABANDONED)	С	o		1	s	5/12/2014	4.817	F	65,000	\$287,625,000	201	
2241060	В	ST. MARYS & CONCORD	CSX PT MORRIS - (ABANDONED)	С	o		1	s	7/2/2014	5.370	G	4,500	\$19,912,500	201	
2241070	В	WALES AVENUE	CSX PT MORRIS - (ABANDONED)	С	О		1	s	7/2/2014	6.467	VG	2,535	\$11,217,375	201	
2241080	В	SOUTHERN BOULEVARD	CSX PT MORRIS - (ABANDONED)	С	О		1	s	7/1/2014	4.093	F	3,900	\$17,257,500	201	
2241099	В	BRUCKNER BOULEVARD	CSX TRANS - PT MORRIS	С	o		1	s	7/16/2014	6.067	VG	6,700	\$29,647,500	201	
2241129	В	EAST 149TH STREET	AMTRAK - CSX	AC	o		2	s	11/17/2014	4.592	F	18,258	\$80,791,650	201 20	2
2241550	В	EAST 144TH STREET	METRO NORTH RR HAR	м	О		2	s	8/30/2013	6.181	VG	8,290	\$36,683,250	201	
2241560	В	EAST 149TH STREET	METRO NORTH RR HAR	м	0		8	s	5/5/2014	4.625	F	27,900	\$123,457,500	201 20	4
2242260	В	EAGLE AVENUE	EAST 161ST STREET		О		1	s	2/14/2014	5.117	G	2,800	\$12,390,000	201 20	3
2242299	В	GRAND CONCOURSE	EAST 138TH STREET		0		1	s	6/11/2013	4.867	F	9,500	\$42,037,500	201	
2266540	В	2781	BRUCKNER BOULVARD		Α		2	s	7/10/2013	4.435	F	32,900	\$145,582,500	201	
2270250	В	BROOKE AVENUE	CSX TRANS - PT MORRIS		0		1	s	7/11/2014	3.727	F	21,035	\$93,079,875	201	
2066671	В	BRUCKNER EXPRESSWAY SOUTHBOUND	BRONX RIVER		WA		3	s	10/15/2013	5.222	G	12,400	\$54,870,000	202 20	9
2066672	В	BRUCKNER EXRESSWAY NORTHBOUND	BRONX RIVER		WA		8	s	10/15/2013	4.418	F	22,300	\$98,677,500	202 20	9
2075351	В	BRUCKNER EXPRESSWAY SOUTHBOUND	AMTRAK - CSX	AC	Α		1	s	10/29/2014	5.698	G	11,600	\$51,330,000	202	
2075352	В	BRUCKNER EXPRESSWAY NORTHBOUND	AMTRAK - CSX	AC	Α		1	s	10/30/2014	6.190	VG	10,900	\$48,232,500	202	
2076929	В	BRUCKNER EXPRESSWAY	CSX - HUNTS POINT	С	А		1	s	8/28/2013	4.567	F	3,800	\$16,815,000	202	1
2240180	В	WESTCHESTER AVENUE	BRONX RIVER		wo		1	s	8/22/2013	4.667	F	5,476	\$24,231,300	202 20	9
2241139	В	LEGGETT AVENUE	AMTRAK - CSX	AC	О		3	s	11/17/2014	4.620	F	41,551	\$183,863,175	202	
2241159	В	LONGWOOD AVENUE	AMTRAK - CSX	AC	0		2	s	11/18/2014	5.236	G	10,625	\$47,015,625	202	
2241169	В	LAFAYETTE AVENUE	AMTRAK - CSX	AC	О		1	s	11/18/2014	5.365	G	12,000	\$53,100,000	202	
2241170	В	TIFFANY STREET	AMTRAK - CSX	AC	0		1	s	11/18/2013	5.745	G	7,267	\$32,156,475	202	
2241180	В	BARRETTO STREET	AMTRAK - CSX	AC	o		1	s	11/18/2014	5.813	G	5,313	\$23,510,025	202	
2241190	В	HUNTS POINT AVENUE	AMTRAK - CSX	AC	o		1	s	11/20/2014	4.813	F	10,049	\$44,466,825	202	
2241200	В	FAILE STREET	AMTRAK - CSX	AC	О		1	s	11/19/2014	5.578	G	6,208	\$27,470,400	202	
2241210	В	BRYANT AVENUE	AMTRAK - CSX	AC	О		1	s	11/19/2014	3.186	F	5,300	\$23,452,500	202	
2241230	В	WESTCHESTER AVENUE	AMTRAK - CSX	AC	О		3	s	11/1/2014	5.778	G	15,600	\$69,030,000	202 20	9
2241020	В	EAST 161ST STREET	CSX PT MORRIS - (ABANDONED)	С	o		1	s	3/20/2014	5.800	G	12,800	\$56,640,000	203	
2241030	В	EAST 163RD STREET	CSX PT MORRIS - (ABANDONED)	С	o		1	s	2/27/2014	4.611	F	3,200	\$14,160,000	203	
2241110	В	MELROSE AVENUE	CSX PT MORRIS - (ABANDONED)	С	o		8	s	8/20/2013	5.667	G	37,854	\$167,503,950	203	
2241620	В	EAST 162ND STREET	METRO NORTH RR HAR	м	О		1	s	4/26/2014	4.781	F	4,700	\$20,797,500	203	
2241630	В	EAST 165TH STREET	METRO NORTH RR HAR	м	o		1	s	4/26/2014	4.300	F	16,400	\$72,570,000	203	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating		DECK AREA	REPLACEMENT COST	CD CE	)2CD3
2241650	В	EAST 167TH STREET	METRO NORTH RR HAR	М	o		1	s	4/21/2014	5.510	G	3,363	\$14,881,275	203	
2241660	В	EAST 168TH STREET	METRO NORTH RR HAR	М	0		1	s	4/22/2014	4.641	F	4,800	\$21,240,000	203	
2241670	В	EAST 169TH STREET	METRO NORTH RR HAR	М	0		1	s	4/22/2014	4.188	F	3,300	\$14,602,500	203	
2241680	В	EAST 170TH STREET	METRO NORTH RR HAR	м	0		1	s	4/22/2014	6.333	VG	3,150	\$13,938,750	203	
2241700	В	ST PAULS PLACE PEDESTRIAN BRIDGE	METRO NORTH RR HAR	М	O-PED		2	С	10/24/2014	4.887	F	888	\$3,929,400	203	
2241710	В	CLAREMONT PARKWAY	METRO NORTH RR HAR	м	О		1	s	4/17/2014	6.458	VG	5,950	\$26,328,750	203	
2241720	В	EAST 173RD STREET	METRO NORTH RR HAR	М	o		1	s	4/17/2014	4.875	F	3,000	\$13,275,000	203	
2076640	В	DEPOT PLACE	METRO NORTH RR HUD	СМ	О		11	s	5/16/2014	4.653	F	26,566	\$117,554,550	204	
2241409	В	GRAND CONCOURSE	METRO NORTH RR HUD	мт	o		1	s	6/27/2014	3.766	F	14,300	\$63,277,500	204	
2241410	В	WALTON AVENUE	METRO NORTH RR HUD	М	o		1	s	5/5/2014	4.406	F	3,600	\$15,930,000	204	
2241420	В	GERARD AVENUE	METRO NORTH RR HUD	м	o		1	s	5/5/2014	5.422	G	5,063	\$22,403,775	204	
2241430	В	RIVER AVENUE	METRO NORTH RR HUD	М	o		1	s	8/30/2013	6.156	VG	5,040	\$22,302,000	204	
2241590	В	CONCOURSE VILLAGE AVENUE	METRO NORTH RR HAR	м	o		1	s	4/19/2014	3.969	F	12,077	\$53,440,725	204	
2241600	В	EAST 158TH STREET	METRO NORTH RR HAR	М	О		1	s	8/31/2013	5.200	G	3,400	\$15,045,000	204	
2241610	В	EAST 161ST STREET	METRO NORTH RR HAR	М	o		1	s	9/24/2013	5.050	G	6,600	\$29,205,000	204 20	)3
2242259	В	GRAND CONCOURSE	EAST 161ST STREET		o		1	s	6/30/2014	6.333	VG	27,017	\$119,550,225	204	
2242280	В	GRAND CONCOURSE	EAST 167TH STREET		o		2	s	7/2/2014	4.754	F	42,900	\$189,832,500	204	
2242300	В	GRAND CONCOURSE	EAST 170TH STREET		О		2	s	3/19/2014	4.754	F	39,300	\$173,902,500	204	
2242319	В	GRAND CONCOURSE	EAST 174TH STREET	т	О		1	s	3/18/2014	4.067	F	14,900	\$65,932,500	204	
2270030	В	EAST 156TH STREET	ACCESS TO HOUSING		o	ED	16	s	11/13/2014	3.493	F	49,696	\$219,904,800	204	
2241460	В	WEST TREMONT AVENUE	METRO NORTH RR HUD	М	o		8	s	6/12/2014	3.776	F	12,900	\$57,082,500	205	
2242329	В	GRAND CONCOURSE	EAST 175TH STREET	т	o		1	s	6/11/2014	4.833	F	11,900	\$52,657,500	205	
2242330	В	GRAND CONCOURSE	EAST TREMONT AVENUE		o		1	s	9/12/2013	5.883	G	11,700	\$51,772,500	205	
2242350	В	EAST FORDHAM ROAD	GRAND CONCOURSE		О		1	s	3/7/2014	4.833	F	10,300	\$45,577,500	205 20	37
2242360	В	GRAND CONCOURSE	BURNSIDE AVENUE		О		2	s	6/30/2014	4.265	F	8,400	\$37,170,000	205	
2269030	В	MATTHEWSON ROAD	MAC CRACKEN AVENUE		О		15	s	10/8/2014	4.175	F	14,880	\$65,844,000	205	
2241269	В	EAST 177TH STREET	AMTRAK - CSX	AC	О		3	s	7/29/2014	5.278	G	16,606	\$73,481,550	206	
2241740	В	EAST 175TH STREET	METRO NORTH RR HAR	м	О		1	s	4/14/2014	3.875	F	3,600	\$15,930,000	206	
2241760	В	EAST TREMONT AVENUE	METRO NORTH RR HAR	м	О		1	s	8/29/2013	6.450	VG	8,424	\$37,276,200	206	
2241770	В	EAST 178TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	O-PED		1	С	10/23/2014	4.921	F	731	\$3,234,675	206	
2241780	В	EAST 179TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	М	O-PED		6	С	10/22/2014	5.311	G	1,011	\$4,473,675	206	
2241790	В	EAST 180TH STREET	METRO NORTH RR HAR	м	o		1	s	4/24/2014	3.844	F	5,000	\$22,125,000	206	
2241800	В	EAST 183TH STREET	METRO NORTH RR HAR	м	o		1	s	4/24/2014	3.953	F	4,080	\$18,054,000	206	
2241810	В	EAST 188TH STREET	METRO NORTH RR HAR	м	o		1	s	4/16/2014	4.094	F	5,300	\$23,452,500	206	
2241820	В	EAST 187TH STREET	METRO NORTH RR HAR	м	o		1	s	4/23/2014	4.344	F	3,800	\$16,815,000	206	
2241839	В	EAST 189TH STREET	METRO NORTH RR HAR	м	o		1	s	8/28/2013	6.133	VG	43,157	\$190,969,725	206 20	77ر
2242030	В	CROTONA AVENUE	BRONX PELHAM PARKWAY		o		2	s	1/29/2014	5.447	G	7,600	\$33,630,000	206	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED RA	I BRID		SPA NS	RT NG	Inspection Date	Condition Rating	VR BL	DECK AREA	REPLACEMENT COST	CD CD	2CD3
			RO				SR			RT				
2242149	В	EAST TREMONT AVENUE	BRONX RIVER	wo		2	s	5/7/2014	4.361	F	12,900	\$57,082,500	206	
2242400	В	EAST 180TH STREET	BRONX RIVER	wo		1	s	9/26/2014	4.810	F	4,500	\$19,912,500	206 22	:7
2230270	В	MOSHOLU PARKWAY	WEBSTER AVENUE	А		1	s	5/21/2013	5.203	G	8,480	\$37,524,000	207	
2230287	В	JEROME AVENUE	MOSHOLU PARKWAY T	А		3	s	5/22/2013	4.816	F	11,800	\$52,215,000	207	
2241470	В	WEST FORDHAM ROAD	METRO NORTH RR HUD	0		4	s	9/9/2013	5.694	G	16,052	\$71,030,100	207	
2241489	В	WEST 225TH STREET	CSX TRASP - PUTNAM	o		2	s	8/28/2014	5.269	G	10,900	\$48,232,500	207 20	8
2241930	В	BEDFORD PARK BOULEVARD	NYCTA IND YARDS T	o		4	s	10/31/2014	5.347	G	46,300	\$204,877,500	207	
2241940	В	WEST 205TH STREET	NYCTA IND YARDS T	o		4	s	10/31/2014	5.514	G	32,508	\$143,847,900	207	
2242340	В	GRAND CONCOURSE	EAST KINGSBRIDGE	o		2	s	6/12/2014	4.714	F	18,285	\$80,911,125	207	
2242370	В	GRAND CONCOURSE	BEDFORD PARK BOULEVARD	0		1	s	2/21/2014	4.373	F	8,418	\$37,249,650	207	
2242380	В	GRAND CONCOURSE	EAST 204TH STREET	0		1	s	9/11/2013	5.484	G	9,272	\$41,028,600	207	
2229440	В	ннр	KAPPOCK ST	А		1	s	7/18/2013	4.931	F	3,900	\$17,257,500	208	
2229450	В	WEST 232ND STREET	ННР	А		2	s	7/22/2013	5.026	G	4,900	\$21,682,500	208	
2229460	В	WEST 236TH STREET PEDESTRIAN BRIDGE	ННР	A-PE	D	3	С	7/7/2014	4.443	F	2,500	\$11,062,500	208	
2229470	В	WEST 239TH STREET	ННР	А		2	s	6/3/2013	5.053	G	6,100	\$26,992,500	208	
2229480	В	MANHATTAN COLLEGE PARKWAY	ННР	А		3	s	6/3/2013	5.053	G	6,200	\$27,435,000	208	
2229490	В	WEST 246TH STREET	ННР	А		2	s	6/3/2013	4.868	F	5,600	\$24,780,000	208	
2229500	В	WEST 252ND STREET	ннр	А		2	s	1/27/2014	5.372	G	4,500	\$19,912,500	208	
2229510	В	RIVERDALE AVENUE	ННР	А		2	s	7/22/2013	5.079	G	5,200	\$23,010,000	208	
2229520	В	FIELDSTON ROAD	ннр	А		1	s	7/29/2013	4.900	F	6,600	\$29,205,000	208	
2229530	В	ннр	BROADWAY	А		1	s	7/29/2013	4.574	F	7,500	\$33,187,500	208	
2241490	В	WEST 230TH STREET	CSX PUTNAM (ABANDONED)	0		1	s	5/8/2013	5.625	G	5,600	\$24,780,000	208	
2241509	В	WEST 231ST STREET	CSX PUTNAM (ABANDONED)	0		1	s	7/3/2014	4.745	F	4,723	\$20,899,275	208	
2241510	В	WEST 233RD STREET	CSX PUTNAM (ABANDONED)	0		1	s	5/8/2013	5.275	G	3,760	\$16,638,000	208	
2241520	В	WEST 234TH STREET	CSX PUTNAM (ABANDONED)	0		1	s	5/8/2013	5.176	G	3,770	\$16,682,250	208	
1066510	В	BRUCKNER EXPRESSWAY SERVICE ROAD	WESTCHESTER CREEK	WM.	4	17	s	9/17/2014	3.226	F	39,400	\$174,345,000	209	
2066720	В	EAST 174TH STREET	SHERIDAN EXPRESSWAY/AMTRAK A	А		13	s	7/29/2014	3.986	F	35,573	\$157,410,525	209 20	13
206672A	В	174TH STREET-NORTH PEDESTRIAN BRIDGE	895I - SHERIDAN EXPRESSWAY	A-PE	D	4	С	4/1/2014	4.667	F	1,800	\$7,965,000	209	
206672B	В	174TH STREET-SOUTH PEDESTRIAN BRIDGE	895I - SHERIDAN EXPRESSWAY	A-PE	D	4	С	4/17/2014	4.750	F	1,900	\$8,407,500	209	
2241270	В	EAST TREMONT AVENUE	AMTRAK - CSX AG	: О		2	s	10/31/2014	5.153	G	22,300	\$98,677,500	209 21	1
2075820	В	EAST TREMONT AVENUE	HUTCHINSON RIVER PARKWAY	А		2	s	11/21/2013	4.444	F	10,200	\$45,135,000	210	
2075837	В	WESTCHESTER AVENUE	HUTCHINSON RIVER PARKWAY	А		2	s	2/27/2014	4.097	F	15,858	\$70,171,650	210 21	1
2075849	В	BRONX PELHAM PARKWAY	HUTCHINSON RIVER PARKWAY	А		2	s	5/8/2014	3.974	F	17,600	\$77,880,000	210 21	1
2075859	В	HUTCHINSON RIVER PARKWAY	HUTCHINSON RIVER	WM.	Α .	7	s	11/7/2014	4.828	F	60,500	\$267,712,500	210 22	:8
2076109	В	BE NORTHBOUND SERVICE ROAD	HUTCHINSON RIVER PARKWAY	А		2	s	8/15/2013	5.105	G	7,800	\$34,515,000	210	
2076129	В	BE SOUTHBOUND SERVICE ROAD	HUTCHINSON RIVER PARKWAY	А		2	s	1/16/2014	5.079	G	7,100	\$31,417,500	210	
2241959	В	HUTCHINSON RIVER PARKWAY	AMTRAK - CSX AG	: 0		1	s	10/9/2014	5.542	G	15,444	\$68,339,700	210 21	1

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI	BRIDGE	OTHER	SPA	RT	Inspection	Condition	VR	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
				L	TYPE	OWNER	NS	NG	Date	Rating	BL					
				RO				SR			RT					
2229560	В	BRONX PELHAM PARKWAY	AMTRAK - CSX	AC	Α		3	s	11/12/2014	4.486	F	24,591	\$108,815,175		$\dashv$	$\dashv$
2241329	В	WHITE PLAINS ROAD	AMTRAK - CSX	AC	0		1	s	10/28/2014	4.781	F	6,900	\$30,532,500	211	$\vdash$	_
2241330	В	UNIONPORT ROAD	AMTRAK - CSX	AC	O		1	S	10/28/2014	4.688	F	7,631	\$33,767,175	211	$\vdash$	_
2241369	В	WILLIAMSBRIDGE ROAD	AMTRAK - CSX	AC	0		2	s	10/29/2014	4.985	F	6,510	\$28,806,750	211		
2241910	В	GUN HILL ROAD	NYCTA-DYRE AVENUE LINE	т	0		1	s	10/28/2014	5.516	G	7,500	\$33,187,500	211	212	
1067150	В	NEREID AVE (EAST 240TH STREET)	BRONX RIVER PARKWAY	М	o		10	s	10/19/2013	4.632	F	57,750	\$255,543,750	212		
2229579	В	BOSTON ROAD	HUTCHINSON RIVER		wo		14	s	5/9/2014	4.042	F	95,700	\$423,472,500	212		
2241860	В	GUN HILL ROD	METRO NORTH RR HAR	М	0		1	s	4/29/2014	6.531	VG	9,128	\$40,391,400	212		
2241870	В	EAST 233RD STREET	METRO NORTH RR HAR	М	o		1	s	4/28/2014	4.902	F	7,664	\$33,913,200	212	207	
2241890	В	EAST 241ST STREET	BRP, METRO NORTH HAR	М	wo		28	s	11/30/2013	4.417	F	49,500	\$219,037,500	212		
2241900	В	EASTCHESTER ROAD	NYCTA-DYRE AVENUE LINE	т	О		3	s	10/28/2014	4.472	F	13,500	\$59,737,500	212	.	
2242071	В	BRONX BOULEVARD SOUTHBOUND	BRONX RIVER		wo		1	s	3/27/2014	4.367	F	1,800	\$7,965,000	212		
2242072	В	BRONX BOULEVARD NORTHBOUND	BRONX RIVER		wo		1	s	3/27/2014	4.867	F	1,800	\$7,965,000	212		
2242081	В	BRONX BOULEVARD SOUTHBOUND	BRONX RIVER		wo		1	s	3/26/2014	4.300	F	2,800	\$12,390,000	212		
2242082	В	BRONX BOULEVARD NORTHBOUND	BRONX RIVER		wo		1	s	3/26/2014	4.467	F	2,800	\$12,390,000	212		
2242099	В	PARK ROAD (204TH STREET)	BRONX RIVER		wo		1	s	5/6/2014	4.655	F	4,700	\$20,797,500	212		
2242430	В	GUN HILL ROAD	BRONX BOULEVARD		O		4	s	2/20/2014	4.947	F	9,400	\$41,595,000	212		
2242440	В	GUN HILL ROAD	BRONX RIVER		wo		1	s	1/14/2014	5.300	G	8,700	\$38,497,500	212		
2242459	В	EAST 233RD STREET	BRONX RIVER		wo		1	s	2/26/2014	4.233	F	7,000	\$30,975,000	212		
2242460	В	EAST 233RD STREET	ENTRANCE ROAD BRONX RIVER PARKWAY		0		1	s	1/7/2014	4.900	F	5,300	\$23,452,500	212		
2229540	В	VAN CORTLANDT PARK	ННР		A-PED	P	2	С	7/14/2014	4.759	F	3,900	\$17,257,500	226		
2229550	В	VAN CORTLANDT EQUESTRIAN	ннр		A-PED	P	2	С	7/16/2014	4.440	F	2,100	\$9,292,500	226		
2230290	В	MOSHOLU PARKWAY	EQUESTRIAN PATH		Α		1	s	1/13/2014	4.310	F	4,300	\$19,027,500	226		
2230300	В	MOSHOLU PARKWAY	CONRAIL (ABANDONED)	С	А		1	s	7/31/2014	4.271	F	4,600	\$20,355,000	226		
2230310	В	MOSHOLU PARKWAY	SOUTHBOUND RAMP TO HHP		Α		2	s	9/16/2013	4.919	F	7,400	\$32,745,000	226		
2065629	В	BRONX RIVER PARKWAY	BOSTON ROAD - BX ZOO		А		1	s	8/14/2013	5.138	G	6,300	\$27,877,500	227		
2230250	В	MOSHOLU PARKWAY	BRONX RIVER		WA		5	s	1/8/2014	4.263	F	16,300	\$72,127,500	227		
2230260	В	MOSHOLU PARKWAY	METRO NORTH	м	A		1	s	4/30/2014	5.391	G	8,880	\$39,294,000	227	207	
2241259	В	204TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	O-PED	P	1	С	10/20/2014	3.845	F	4,700	\$20,797,500	227	207	
2241840	В	BEDFORD PARK BOULEVARD	METRO NORTH RR HAR	м	О		1	s	4/28/2014	4.656	F	6,400	\$28,320,000	227	207	
2242010	В	EAST FORDHAM ROAD	BRONX RIVER		wo		1	s	3/26/2014	5.467	G	9,200	\$40,710,000	227		
2242029	В	SOUTHERN BOULEVARD	EAST FORDHAM ROAD		o		2	s	1/29/2014	4.605	F	12,900	\$57,082,500	227		
2242100	В	BOTANICAL GARDEN ROAD	TWIN LAKES		wo	Р	1	s	2/26/2014	4.833	F	2,200	\$9,735,000	227		
2242110	В	BOSTON ROAD	BRONX RIVER		wo		1	s	2/26/2014	4.227	F	6,200	\$27,435,000	227		
2242120	В	FOOTBRIDGE NORTH OF ROUTE 1	BRONX RIVER		WO-PED	Р	1	С	8/7/2013	3.583	F	1,900	\$8,407,500	227		
2242210	В	MAGNOLIA WAY	BRONX RIVER		wo	Р	3	s	5/6/2014	4.763	F	6,200	\$27,435,000	227		-
2242220	В	SNUFF MILL ROAD	BRONX RIVER		wo	Р	2	s	1/9/2014	4.395	F	4,800	\$21,240,000	227	$\Box$	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	NG	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240200	В	SHORE ROAD	HUTCHINSON RIVER	RU	WMO		7	SR	5/30/2014	4.537	R I	43,576	\$192,823,800	228		
2240210		CITY ISLAND ROAD	EASTCHESTER BAY		wo		7	s	10/16/2014	3.389	F	19,915	\$88,123,875		$\vdash$	
2241380	В	PELHAM BAY PARK EQUESTRIAN	AMTRAK - CSX	AC	O-PED	P	1	С	7/24/2013	3.339	F	7,300	\$32,302,500			Н
2241390	В	SHORE ROAD CIRCLE	AMTRAK - CSX	AC	0	-	1	s	7/21/2014	7.000	VG	8,067	\$35,696,475			
1240090		MACOMBS DAM BRIDGE	HARLEM RIVER	м	WMO		52	s	12/13/2013	3.986	F	220,000	\$973,500,000		204	
2240089	вм	145TH STREET BRIDGE	HARLEM RIVER		WMO		8	s	8/15/2013	6.278	VG	56,700	\$250,897,500	110	204	201
2240059	вм	WILLIS AVENUE	HARLEM RIVER		WMO		15	s	11/12/2014	6.778	VG	171,105	\$757,139,625	111	201	
2240069	вм	THIRD AVENUE BRIDGE	HARLEM RIVER		WMO		14	s	9/4/2014	5.789	G	100,232	\$443,526,600	111	201	
2240079	вм	MADISON AVENUE BRIDGE	HARLEM RIVER		WMO		21	s	9/17/2014	4.861	F	80,000	\$354,000,000	111	201	
2066919	вм	WASHINGTON BRIDGE	HARLEM RIVER	м	wo		9	s	11/29/2012	4.642	F	128,339	\$567,900,075	112	205	204
2240120	вм	WEST 207TH STREET/WEST FORDHAM ROAD	HARLEM RIVER		WMO		5	s	7/31/2014	5.000	G	31,784	\$140,644,200	112	207	
2240137	вм	BROADWAY BRIDGE	HARLEM RIVER	тм	WMO		3	s	12/17/2014	3.806	F	46,848	\$207,302,400	112	207	208
2240138	вм	NYCTA IRT	HARLEM RIVER/BROADWAY	тм	WMO		3	s	10/9/2013	4.720	F	19,520	\$86,376,000	112	207	208
2246580	вм	HIGH BRIDGE PEDESTRIAN OVERPASS	187 - HARLEM RIVER	М	WA-PED	P	11	Р	8/12/2002	3.759	F	34,100	\$150,892,500	112	204	
2240290	к	METROPOLITAN AVENUE	ENGLISH KILLS		WMO		5	s	7/9/2013	5.444	G	10,550	\$46,683,750	301		
2230410	к	278I EASTBOUND (B.Q.E.)	WASHINGTON STREET		Α		1	s	7/16/2014	4.500	F	2,500	\$11,062,500	302		
2230420	к	278I WESTBOUND (B.Q.E.)	WASHINGTON STREET		A		1	s	7/16/2014	5.047	G	2,500	\$11,062,500	302		
2230430	к	278I (B.Q.E.) RAMP TO BROOKLYN BRIDGE	PROSPECT STREET		А		1	s	1/6/2014	5.000	G	1,100	\$4,867,500	302		
2230440	к	278I WESTBOUND (B.Q.E.)	ADAMS STREET		Α		1	s	1/15/2014	5.200	G	2,700	\$11,947,500	302		
2230450	к	278I EASTBOUND (B.Q.E.)	ADAMS STREET		А		1	s	1/15/2014	4.933	F	2,500	\$11,062,500	302		
2230460	к	278I (B.Q.E.)	PEARL STREET		А		1	s	1/15/2014	5.467	G	4,500	\$19,912,500	302		
2230470	к	278I (B.Q.E.)	JAY STREET		Α		1	s	1/15/2014	4.833	F	5,100	\$22,567,500	302		
2230480	к	278I (B.Q.E.)	PROSPECT STREET		Α		1	s	2/21/2014	4.852	F	8,400	\$37,170,000	302		
2230490	к	278I (B.Q.E.)	SANDS STREET		A		1	s	2/27/2014	5.019	G	12,600	\$55,755,000	302		
2230500	к	278I (B.Q.E.)	RAMP TO BQE EASTBOUND		Α		1	s	2/10/2014	4.967	F	1,300	\$5,752,500	302		
2230510	ĸ	278I (B.Q.E.)	NASSAU STREET		Α		6	s	7/3/2014	5.169	G	51,200	\$226,560,000	302		
2230857	к	278I WESTBOUND (B.Q.E.)	JORALEMON STREET		Α		1	s	3/11/2014	5.000	G	2,100	\$9,292,500	302		
2230858	к	278I EASTBOUND (B.Q.E.)	JORALEMON STREET / BQE WESTBOUND		A		1	s	11/5/2013	4.619	F	5,900	\$26,107,500	302		
2230870	к	COLUMBIA HEIGHTS	278I (B.Q.E.)		Α		1	s	8/7/2014	4.450	F	16,500	\$73,012,500	302		
2230887	к	278I WESTBOUND (B.Q.E.)	CADMAN PLAZA		А		2	s	7/25/2014	4.403	F	4,500	\$19,912,500	302		
2230888	к	278I EASTBOUND (B.Q.E.)	CADMAN PLAZA / 278I WESTBOUND		A		2	s	7/28/2014	5.263	G	4,500	\$19,912,500	302		
2243280	к	6TH AVENUIE	LIRR ATLANTIC AVENUE	L	0		9	s	9/5/2014	5.431	G	12,276	\$54,321,300	302		
2243290	к	CARLTON AVENUE	LIRR ATLANTIC AVENUE	L	0		4	s	7/29/2013	6.806	VG	15,400	\$68,145,000	302		
2244440	к	FLEET WALK PEDESTRIAN BRIDGE	NAVY STREET		O-PED		1	С	8/21/2014	3.958	F	620	\$2,743,500	302		Ш
2267860	к	BROOKLYN BRIDGE APPROACH	STORAGE (SANDS STREET)		o		1	s	5/23/2014	4.344	F	6,490	\$28,718,250	302		
2268350	к	BROOKLYN PROMENADE	278I EASTBOUND (BQE)		A-PED	Р	35	С	8/10/2014	3.552	F	46,184	\$204,364,200	302		
2268497	к	278I WESTBOUND (B.Q.E.)	FURMAN STREET - 278I EASTBOUND		А		45	s	8/30/2013	4.357	F	86,406	\$382,346,550	302		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD	D2CD3
2268498	к	278I EASTBOUND (B.Q.E.)	278I WESTBOUND (BQE) - PROMENADE		А		69	s	11/26/2014	3.754	F	133,708	\$591,657,900	302	
2268507	к	278I WESTBOUND (B.Q.E.)	YORK STREET		А		6	s	7/2/2013	4.071	F	10,388	\$45,966,900	302	
2268508	к	278I EASTBOUND (B.Q.E.)	278I WESTBOUND (BQE) - BROOKLYN BRIDGE		Α		11	s	7/5/2013	4.103	F	20,529	\$90,840,825	302	
2268517	к	278I WESTBOUND (B.Q.E.)	FURMAN STREET		А		7	s	7/1/2013	4.000	F	10,988	\$48,621,900	302	
2268518	к	278I EASTBOUND (B.Q.E.)	278I WESTBOUND (B.Q.E.)		А		5	s	7/5/2013	4.310	F	9,275	\$41,041,875	302	
2230000	к	HIGHLAND BOULEVARD EASTBOUND	JACKIE ROBINSON PARKWAY		Α		1	s	3/17/2014	4.724	F	4,900	\$21,682,500	305	
2230010	к	HIGHLAND BOULEVARD WESTBOUND .	JACKIE ROBINSON PARKWAY		А		1	s	2/25/2014	4.767	F	3,500	\$15,487,500	305	
2230020	к	HIGHLAND BOULEVARD WESTBOUND	JACKIE ROBINSON PARKWAY EASTBOUND ENTRANCE RAMP		Α		2	s	3/11/2014	4.974	F	4,700	\$20,797,500	305	
2230220	к	HIGHLAND BOULEVARD NORTHBOUND	VERMONT AVENUE		Α		1	s	6/5/2013	5.857	G	3,995	\$17,677,875	305	
2244170	к	ATLANTIC AVENUE SERVICE ROAD EASTBOUND	EAST NEW YORK AVENUE		0		2	s	8/5/2013	5.474	G	3,192	\$14,124,600	305	
2244180	к	ATLANTIC AVENUE SERVICE ROAD WESTBOUND	EAST NEW YORK AVENUE		o		2	s	8/5/2013	5.105	G	5,600	\$24,780,000	305	
2244460	к	CONDUIT BOULEVARD NORTHBOUND	ATLANTIC AVENUE EASTBOUND		0		1	s	10/10/2014	4.833	F	3,800	\$16,815,000	305	
2269600	к	ERSKINE STREET	BSHP		А		1	s	8/20/2014	5.938	G	8,258	\$36,541,650	305	
2230350	к	SUMMIT STREET PEDESTRIAN BRIDGE	278I (B.Q.E.)		A-PED		2	s	4/4/2014	4.557	F	1,400	\$6,195,000	306	
2230360	к	UNION STREET 2	278I (B.Q.E.)		А		2	s	3/19/2014	4.236	F	5,000	\$22,125,000	306	
2230370	к	SACKETT STREET	278I (B.Q.E.)		Α		2	s	3/19/2014	4.500	F	5,000	\$22,125,000	306	
2230380	к	KANE STREET	278I (B.Q.E.)		Α		2	s	3/27/2014	4.153	F	5,000	\$22,125,000	306	
2230390	к	CONGRESS STREET	278I (B.Q.E.)		А		2	s	3/27/2014	6.029	VG	5,000	\$22,125,000	306	
2240232	к	HAMILTON AVENUE BRIDGE	GOWANUS CANAL		WMO		3	s	8/13/2013	5.361	G	8,611	\$38,103,675	306	
2240240	к	NINTH STREET BRIDGE	GOWANUS CANAL		WMO		3	s	6/25/2013	6.065	VG	5,772	\$25,541,100	306	
2240250	к	THIRD STREET	GOWANUS CANAL		WMO		5	s	5/31/2013	4.722	F	4,900	\$21,682,500	306	
2240260	к	CARROLL STREET	GOWANUS CANAL		WMO		2	s	10/13/2014	5.208	G	3,000	\$13,275,000	306	
2240270	к	UNION STREET	GOWANUS CANAL		WMO		5	s	8/15/2014	4.111	F	4,900	\$21,682,500	306	
2240310	к	THIRD AVENUE	GOWANUS CANAL		wo		1	s	6/6/2013	6.633	VG	3,200	\$14,160,000	306	
2066100	к	5TH AVENUE	27 X PROSPECT EXPRESSWAY		А		1	s	4/22/2014	5.063	G	8,800	\$38,940,000	307	
2240231	к	HAMILTON AVENUE BRIDGE	GOWANUS CANAL		WMO		3	s	9/9/2014	5.472	G	7,300	\$32,302,500	307	306
2243839	к	4TH AVENUE	NYCTA BMT TRACKS	Т	О		1	s	8/20/2013	6.250	VG	4,440	\$19,647,000	307	
2243920	к	7TH AVENUE	NYCTA BMT YARD	Т	О		2	s	6/30/2014	6.042	VG	4,700	\$20,797,500	307	
2244470	к	SEELEY STREET	PROSPECT AVENUE		0		1	s	7/25/2014	4.033	F	8,482	\$37,532,850	307	
2244480	к	5TH AVENUE	GREENWOOD CEMETERY		0		1	s	9/25/2013	5.333	G	3,600	\$15,930,000	307	
2243170	к	STERLING PLACE	FRANKLIN SHUTTLE	т	0		1	s	8/23/2013	6.438	VG	2,300	\$10,177,500	308	
2243180	к	ST JOHNS PLACE	FRANKLIN SHUTTLE	т	0		1	s	8/23/2013	6.656	VG	2,300	\$10,177,500	308	
2243190	к	LINCOLN PLACE	FRANKLIN SHUTTLE	т	0		1	s	6/26/2014	6.672	VG	2,460	\$10,885,500	308	
2243200	к	UNION STREET	FRANKLIN SHUTTLE	т	0		2	s	6/25/2014	4.913	F	4,100	\$18,142,500	309	
2243210	к	PRESIDENT STREET	FRANKLIN SHUTTLE	т	0		2	s	6/25/2014	5.078	G	2,500	\$11,062,500	309	
2243220	K	CARROLL STREET PEDESTRIAN BRIDGE	FRANKLIN SHUTTLE	т	O-PED		3	С	4/29/2014	5.789	G	600	\$2,655,000	309	
2243230	к	CROWN STREET	FRANKLIN SHUTTLE	т	0		3	s	8/8/2013	5.014	G	4,060	\$17,965,500	309	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI	BRIDGE	OTHER	SPA		Inspection	Condition		DECK AREA	REPLACEMENT COST	CD	CD2	CD3
				RO	TYPE	OWNER	NS	NG SR	Date	Rating	BL RT					
2243240	к	MONTGOMERY STREET	FRANKLIN SHUTTLE	т	О		1	s	8/8/2013	5.843	G	2,240	\$9,912,000	309		П
2243250	к	WASHINGTON AVENUE	FRANKLIN SHUTTLE	т	0		1	s	6/24/2014	6.000	G	3,657	\$16,182,225	309	355	П
2243260	к	FLATBUSH AVENUE	FRANKLIN SHUTTLE	т	0		2	s	6/23/2014	4.961	F	11,300	\$50,002,500	309		П
2243279	к	EASTERN PARKWAY	FRANKLIN SHUTTLE	т	0		1	s	6/27/2014	4.833	F	7,700	\$34,072,500	309	308	П
2231249	к	вѕнр	BAY RIDGE AVENUE		А		1	s	3/26/2014	3.625	F	4,900	\$21,682,500	310		П
2231250	к	81ST STREET PEDESTRIAN BRIDGE	вѕнр		A-PED	Р	5	С	3/25/2014	4.761	F	3,100	\$13,717,500	310		
2231260	к	92ND STREET PEDESTRIAN BRIDGE	ВЅНР		A-PED	Р	6	С	8/6/2014	3.541	F	3,000	\$13,275,000	310		П
2231270	к	4TH AVENUE	ВЅНР		А		2	s	3/21/2014	4.763	F	6,100	\$26,992,500	310		
2243310	к	2ND AVENUE	LIRR BAY RIDGE	N	0		2	s	10/7/2014	6.208	VG	17,751	\$78,548,175	310		
2243320	к	3RD AVENUE	LIRR BAY RIDGE	N	0		4	s	9/17/2013	4.917	F	17,230	\$76,242,750	310		П
2243330	к	4TH AVENUE	LIRR BAY RIDGE	NT	0		4	s	8/30/2013	5.597	G	13,668	\$60,480,900	310		
2243580	к	5TH AVENUE	LIRR & SEA BEACH	NT	0		4	s	10/27/2014	3.882	F	12,395	\$54,847,875	310		П
2243590	к	6TH AVENUE	LIRR & SEA BEACH	NT	0		2	s	7/16/2013	6.056	VG	14,382	\$63,640,350	310		
2243600	к	7TH AVENUE	LIRR & SEA BEACH	NT	0		7	s	10/22/2014	4.806	F	18,628	\$82,428,900	310		
2243610	к	8TH AVENUE	LIRR & SEA BEACH	NT	o		2	s	7/15/2013	6.181	VG	10,834	\$47,940,450	310		
2243620	к	FORT HAMILTON PARKWAY	LIRR & SEA BEACH	NT	0		3	s	6/19/2014	4.729	F	14,800	\$65,490,000	310		
2243630	к	11TH AVENUE	LIRR & SEA BEACH	NT	0		5	s	7/1/2014	5.985	G	9,700	\$42,922,500	310		
2243640	к	13TH AVENUE	LIRR & SEA BEACH	NT	o		5	s	7/15/2013	4.972	F	16,000	\$70,800,000	310		
2244150	к	RIDGE BOULEVARD	SHORE ROAD DRIVE		0		1	s	6/10/2013	6.333	VG	4,350	\$19,248,750	310		
2244160	к	3RD AVENUE	SHORE ROAD DRIVE		0		1	s	6/14/2013	6.727	VG	4,360	\$19,293,000	310		
2231290	к	BAY 8TH STREET	ВЅНР		А		1	s	6/11/2013	5.921	G	4,950	\$21,903,750	311		Ш
2231300	к	17TH AVENUE PEDESTRIAN BRIDGE	BSHP		A-PED	Р	1	С	8/14/2014	3.667	F	2,100	\$9,292,500	311		Ш
2231319	к	BSHP	BAY PARKWAY		А		1	s	6/19/2014	4.533	F	7,200	\$31,860,000	311		
2243340	к	15TH AVENUE	LIRR BAY RIDGE	N	o		1	s	10/3/2014	4.872	F	3,614	\$15,991,950	311		
2243350	к	60TH STREET	LIRR BAY RIDGE	N	o		1	s	9/4/2013	6.133	VG	3,900	\$17,257,500	311		
2243360	к	16TH AVENUE	LIRR BAY RIDGE	N	o		1	s	10/3/2014	5.350	G	4,345	\$19,226,625	311		Ш
2243650	к	14TH AVENUE	LIRR BAY RIDGE	N	o		1	s	10/3/2014	6.167	VG	4,720	\$20,886,000	311		
2243660	к	NEW UTRECHT AVENUE	LIRR BAY RIDGE	N	o		1	s	10/3/2014	5.883	G	2,350	\$10,398,750	311		
2243670	к	15TH AVENUE	BMT SEA BEACH	т	o		4	s	6/24/2013	6.136	VG	16,020	\$70,888,500	311		
2243680	к	16TH AVENUE	BMT SEA BEACH	т	0		3	s	6/6/2014	5.481	G	6,816	\$30,160,800	311		
2243690	к	17TH AVENUE	BMT SEA BEACH	т	o		4	s	5/30/2014	6.173	VG	8,946	\$39,586,050	311		
2243700	к	18TH AVENUE	BMT SEA BEACH	т	o		1	s	7/25/2013	6.632	VG	5,200	\$23,010,000	311		
2243710	к	19TH AVENUE	BMT SEA BEACH	т	o		4	s	5/29/2014	4.237	F	4,800	\$21,240,000	311		Ш
2243720	к	20TH AVENUE	BMT SEA BEACH	т	o		1	s	6/2/2014	6.421	VG	7,000	\$30,975,000	311		
2243730	к	65TH STREET	BMT SEA BEACH	т	0		4	s	5/23/2014	5.132	G	12,000	\$53,100,000	311		
2243740	к	BAY PARKWAY	BMT SEA BEACH	т	o		4	s	5/22/2014	4.658	F	16,800	\$74,340,000	311		Ш
2243750	к	AVENUE O	BMT SEA BEACH	Т	0		1	s	8/12/2013	5.706	G	4,658	\$20,611,650	311		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI	BRIDGE	OTHER	SPA		Inspection	Condition	VR	DECK AREA	REPLACEMENT COST	CD C	D2CD3
				L RO	TYPE	OWNER	NS	NG SR	Date	Rating	BL RT				
2243760	К	AVENUE P	BMT SEA BEACH	т	0		1	s	8/13/2013	6.140	VG	5,544	\$24,532,200	311	
2243770	к	KINGS HIGHWAY	BMT SEA BEACH	т	0		1	s	6/28/2013	6.628	VG	5,032	\$22,266,600	311	
2243780	к	HIGHLAWN AVENUE	BMT SEA BEACH	т	0		1	s	8/16/2013	6.440	VG	6,960	\$30,798,000	311	
2243800	к	AVENUE T	BMT SEA BEACH	т	0		1	s	7/3/2013	6.200	VG	5,360	\$23,718,000	311	
2243820	к	21ST AVENUE	BMT SEA BEACH	т	0		4	s	7/9/2014	4.289	F	21,400	\$94,695,000	311	$\top$
2243370	к	17TH AVENUE	LIRR BAY RIDGE	N	0		1	s	10/2/2014	4.745	F	3,406	\$15,071,550	312	
2243380	к	18TH AVENUE	LIRR BAY RIDGE	N	0		1	s	10/2/2014	4.625	F	6,006	\$26,576,550	312	
2243390	к	52ND STREET	LIRR BAY RIDGE	N	О		1	s	10/1/2014	6.017	VG	3,293	\$14,571,525	312	
2243400	к	50TH STREET	LIRR BAY RIDGE	N	О		2	s	9/5/2013	4.731	F	7,100	\$31,417,500	312	
2243410	к	MCDONALD AVENUE	LIRR BAY RIDGE	N	О		1	s	10/1/2014	5.141	G	2,760	\$12,213,000	312	
2243420	к	EAST 3RD STREET	LIRR BAY RIDGE	N	0		1	s	8/8/2013	6.517	VG	1,840	\$8,142,000	312	
2243439	к	OCEAN PARKWAY	LIRR BAY RIDGE	N	0		1	s	9/19/2014	4.927	F	7,000	\$30,975,000	312	
2243440	к	CONEY ISLAND AVENUE	LIRR BAY RIDGE	N	0		1	s	9/18/2014	5.043	G	3,231	\$14,297,175	312	
2243840	к	9TH AVENUE	NYCTA BMT YARD	т	0		5	s	8/19/2013	5.736	G	12,440	\$55,047,000	312	
2243940	к	9TH AVENUE	NYCTA IND SUBWAY	т	0		5	s	8/19/2013	4.737	F	6,300	\$27,877,500	312	
2231329	к	вѕнр	26TH AVENUE		Α		1	s	4/1/2014	4.600	F	6,700	\$29,647,500	313	
2231330	к	27TH AVENUE PEDESTRIAN BRIDGE	ВЅНР		A-PED	P	1	С	1/27/2014	4.021	F	2,100	\$9,292,500	313	
2231340	к	CROPSEY AVENUE	BSHP		А		2	s	7/10/2014	4.639	F	13,100	\$57,967,500	313	
2231360	к	вѕнр	OCEAN PARKWAY		А		3	s	7/16/2014	6.448	VG	29,637	\$131,143,725	313	
2231370	к	GUIDER AVENUE RAMP TO BSHP	ВЅНР		А		4	s	9/23/2014	6.778	VG	10,548	\$46,674,900	313	
2231380	к	CONEY ISLAND AVENUE	ВЅНР		Α		4	s	10/15/2013	5.708	G	19,866	\$87,907,050	313	
2240301	к	CROPSEY AVENUE SOUTHBOUND	CONEY ISLAND CREEK		wo		3	s	7/2/2013	5.000	G	9,400	\$41,595,000	313	
2240302	к	CROPSEY AVENUE NORTHBOUND	CONEY ISLAND CREEK		wo		3	s	10/27/2014	4.718	F	9,400	\$41,595,000	313	
2240540	к	STILLWELL AVENUE	CONEY ISLAND CREEK		wo		2	s	6/12/2013	6.292	VG	17,000	\$75,225,000	313	
2243570	к	86TH STREET	BMT SEA BEACH	т	0		1	s	6/4/2014	5.797	G	12,167	\$53,838,975	313	
2243020	к	PARKSIDE AVENUE - OCEAN AVENUE	BMT SUBWAY, BRIGHTON	т	0		6	s	6/18/2014	4.043	F	48,700	\$215,497,500	314	
2243040	к	CROOKE AVENUE	BMT SUBWAY, BRIGHTON	т	0		4	s	6/11/2014	4.421	F	6,000	\$26,550,000	314	
2243050	к	CATON AVENUE	BMT SUBWAY, BRIGHTON	т	0		4	s	8/23/2013	4.842	F	20,800	\$92,040,000	314	
2243080	к	EAST 18TH STREET - CHURCH AVE	BMT SUBWAY, BRIGHTON	т	0		4	s	8/20/2013	4.545	F	18,200	\$80,535,000	314	
2243100	к	BEVERLY ROAD	BMT SUBWAY, BRIGHTON	т	0		3	s	6/3/2014	4.263	F	4,200	\$18,585,000	314	
2243110	к	CORTELYOU ROAD	BMT SUBWAY, BRIGHTON	Т	0		3	s	8/20/2013	6.139	VG	4,810	\$21,284,250	314	
2243120	к	DORCHESTER ROAD	BMT SUBWAY, BRIGHTON	т	o		1	s	6/16/2014	5.863	G	4,825	\$21,350,625	314	
2243130	к	DITMAS AVENUE	BMT SUBWAY, BRIGHTON	т	0		1	s	8/22/2013	5.723	G	5,150	\$22,788,750	314	
2243140	к	NEWKIRK AVENUE	BMT SUBWAY, BRIGHTON	т	0		3	s	6/17/2014	4.574	F	4,100	\$18,142,500	314	
2243150	к	FOSTER AVENUE	BMT SUBWAY, BRIGHTON	т	0		1	s	6/9/2014	4.417	F	3,000	\$13,275,000	314	
2243450	к	EAST 14TH STREET	LIRR BAY RIDGE	N	0		1	s	9/17/2014	4.809	F	1,775	\$7,854,375	314	
2243460	к	EAST 15TH STREET PEDESTRIAN BRIDGE	LIRR BAY RIDGE	N	O-PED		3	С	8/12/2014	5.592	G	900	\$3,982,500	314	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD	D2CD3
2243480	к	OCEAN AVENUE	LIRR BAY RIDGE	N	o		2	s	9/16/2014	4.965	F	5,000	\$22,125,000	314	
2243490	к	BEDFORD AVENUE	LIRR BAY RIDGE	N	О		6	s	9/15/2014	5.097	G	12,000	\$53,100,000	314	
2243500	к	NOSTRAND AVENUE	LIRR BAY RIDGE	N	О		2	s	9/29/2014	4.898	F	4,320	\$19,116,000	314	
2231390	к	EAST 12TH STREET	ВЅНР		А		4	s	7/7/2014	4.542	F	17,200	\$76,110,000	315	
2231409	к	BSHP	SHEEPSHEAD BAY ROAD		Α		1	s	4/1/2014	4.738	F	6,500	\$28,762,500	315	
2231419	к	ВЅНР	OCEAN AVENUE		Α		3	s	3/25/2014	4.306	F	14,000	\$61,950,000	315	
2231429	к	BSHP	BEDFORD AVENUE		Α		3	s	4/23/2014	4.278	F	12,000	\$53,100,000	315	
2231439	к	BSHP	NOSTRAND AVENUE		Α		3	s	3/25/2014	4.264	F	13,000	\$57,525,000	315	
2231449	к	KNAPP STREET	вѕнр		Α		1	s	4/9/2014	4.313	F	9,500	\$42,037,500	315	
2233080	к	EAST 14TH STREET PEDESTRIAN BRIDGE	BSHP		A-PED		14	С	8/5/2014	4.164	F	4,700	\$20,797,500	315	
2240320	к	OCEAN AVENUE PEDESTRIAN BRIDGE	SHEEPSHEAD BAY		WO-PED		30	С	5/8/2014	4.532	F	4,450	\$19,691,250	315	
2243790	к	AVENUE S	BMT SEA BEACH	т	o		1	s	7/2/2013	5.967	G	5,360	\$23,718,000	315	
2243810	к	AVENUE U	BMT SEA BEACH	т	o		1	s	6/20/2014	5.294	G	5,880	\$26,019,000	315	
2243569	к	ATLANTIC AVENUE	LIRR ATLANTIC AVENUE	L	0		75	s	6/18/2014	3.620	F	135,100	\$597,817,500	316	:05
2243850	к	LIBERTY AVENUE	LIRR BAY RIDGE	N	0		3	s	9/23/2014	6.103	VG	6,659	\$29,466,075	316	
2243860	к	GLENMORE AVENUE	LIRR BAY RIDGE	N	0		2	s	9/22/2014	6.456	VG	5,616	\$24,850,800	316	
2243870	к	PITKIN AVENUE	LIRR BAY RIDGE	N	0		2	s	9/24/2014	6.279	VG	5,328	\$23,576,400	316	
2243890	к	SUTTER AVENUE	LIRR BAY RIDGE	N	0		3	s	9/26/2014	6.292	VG	5,497	\$24,324,225	316	
2243900	к	BLAKE AVENUE	LIRR BAY RIDGE	N	o		3	s	9/26/2014	4.927	F	4,912	\$21,735,600	316	
2243910	к	LIVONIA AVENUE PEDESTRIAN BRIDGE	LIRR BAY RIDGE	N	O-PED		6	С	8/7/2014	4.833	F	2,500	\$11,062,500	316	
2231479	к	вѕнр	MILL BASIN		WMA		14	s	11/4/2014	3.269	F	73,500	\$325,237,500	318	
2231481	к	BSHP WESTBOUND	PAERDEGAT BASIN		WA		3	s	11/5/2013	6.939	VG	50,052	\$221,480,100	318	
2231482	к	BSHP EASTBOUND	PAERDEGAT BASIN		WA		5	s	11/4/2014	7.000	VG	82,074	\$363,177,450	318	
2243510	к	FLATBUSH AVENUE	LIRR BAY RIDGE	N	o		2	s	9/30/2014	4.651	F	5,900	\$26,107,500	318	
2243520	к	BROOKLYN AVENUE	LIRR BAY RIDGE	N	О		3	s	8/8/2013	5.873	G	4,500	\$19,912,500	318	
2243530	к	AVENUE H	LIRR BAY RIDGE	N	О		2	s	9/9/2013	5.956	G	35,100	\$155,317,500	318	
2243010	к	LINCOLN ROAD	BMT SUBWAY, BRIGHTON	т	o		1	s	5/19/2014	6.685	VG	6,243	\$27,625,275	355	
2244010	к	EAST DRIVE (ENDALE ARCH)	PEDESTRIAN PATH NEAR GRAND ARMY PLAZA		О	Р	1	С	5/28/2014	4.367	F	1,533	\$6,783,525	355	
2244020	к	WEST DRIVE (MEADOWPORT ARCH)	PEDESTRIAN PATH NEAR GRAND ARMY PLAZA		О	Р	1	s	5/16/2013	5.321	G	2,500	\$11,062,500	355	
2244030	к	EAST DRIVE	BRIDLE PATH NEAR ZOO		o	P	1	s	5/17/2013	4.878	F	2,000	\$8,850,000	355	
2244040	к	EAST DRIVE (EAST WOOD ARCH)	PEDESTRIAN PATH NEAR CENTER DRIVE		o	Р	1	С	6/16/2014	4.667	F	1,066	\$4,717,050	355	
2244050	к	CENTER DRIVE (NETHERMEAD ARCHES)	PEDESTRIAN PATH & STREAM		wo	P	3	s	5/22/2013	5.000	G	7,020	\$31,063,500	355	
2244060	к	HILL DRIVE (CLEFT RIDGE SPAN)	PEDESTRIAN PATH SOUTH OF BOATHOUSE		o	Р	1	С	5/1/2014	4.433	F	750	\$3,318,750	355	
2244100	к	WEST FOOTBRIDGE	PROSPCT PARK STREAM		WO-PED	Р	1	С	1/24/2014	4.889	F	308	\$1,362,900	355	
2244120	к	HILL DRIVE (TERRACE BRIDGE)	PROSPECT PARK LAKE		wo	Р	3	s	9/16/2014	3.436	F	7,800	\$34,515,000	355	$\Box$
2244130	к	PEDESTRIAN NEAR BOATHOUSE (LULLWATER BRIDGE)	PROSPECT PARK LAKE		WO-PED	Р	1	С	5/22/2014	4.898	F	1,000	\$4,425,000	355	
2231450	к	вѕнр	GERRITSEN INLET		WA		11	s	8/12/2014	3.418	F	52,000	\$230,100,000	356	$\Box$

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2231460	к	FLATBUSH AVENUE E	BSHP	RO	A		2	S	10/18/2013	6.206	VG	14,058	\$62,206,650	356		
2231499	к	BSHP F	ROCKAWAY PARKWAY		A		1	s	11/5/2014	7.000	VG	10,370	\$45,887,250	356	$\vdash$	
2231509	к	BSHP F	FRESH CREEK		WA		3	s	11/25/2013	6.831	VG	40,095	\$177,420,375	356	-	
2231519	к	PENNSYLVANIA AVENUE E	BSHP		А		2	s	6/18/2013	5.694	G	6,640	\$29,382,000	356	$\vdash$	
2240019	км	BROOKLYN BRIDGE E	EAST RIVER		WEO		75	s	12/5/2014	3.139	F	503,788	\$2,229,261,900	103	302	101
2240027	км	MANHATTAN BRIDGE (LOWER LEVEL)	EAST RIVER	т	WEO		23	s	10/22/2014	3.889	F	616,390	\$2,727,525,750	103	302	
2240028	км	MANHATTAN BRIDGE (UPPER LEVEL)	NYCTA TRACKS-BMT	т	WEO		43	s	10/21/2014	3.757	F	587,424	\$2,599,351,200	103	302	
2240039	км	WILLIAMSBURG BRIDGE	EAST RIVER	т	WEO		53	s	10/20/2014	4.542	F	824,000	\$3,646,200,000	103	301	
2240370	KQ	GREENPOINT AVENUE BRIDGE	NEWTOWN CREEK	L	WMO		12	s	8/5/2013	5.083	G	76,106	\$336,769,050	301	402	
2240390	KQ	GRAND STREET BRIDGE	NEWTOWN CREEK		WMO		2	s	10/28/2014	4.069	F	5,100	\$22,567,500	301	405	
2240639	KQ	PULASKI BRIDGE	NEWTOWN CREEK		WMO		44	s	6/5/2014	4.437	F	205,770	\$910,532,250	301	402	ı
2232000	М	BATTERY PLACE F	FDR DRIVE		AT		2	s	10/16/2013	5.182	G	142,000	\$628,350,000	101	$_{\scriptscriptstyle  }$	
223201A	м	FDR DRIVE NORTHBOUND OFF RMP	FDR DRIVE & SOUTH STREET		AR		17	s	7/23/2014	4.493	F	23,373	\$103,425,525	101	$\Box$	
223201B	м	SOUTH STREET RAMP TO FDR DRIVE SOUTHBOUND	SOUTH STREET		AR		10	s	2/24/2014	3.791	F	13,388	\$59,241,900	101	$\Box$	
223201D	м	RAMP TO NORTHBOUND FDR DRIVE	FDR DRIVE & SOUTH STREET		AR		22	s	2/25/2014	4.967	F	15,825	\$70,025,625	101	103	
224001A	М	PARK ROW TO BROOKLYN	WILLIAM STREET NORTHBOUND		OE		4	s	4/23/2014	4.229	F	10,167	\$44,988,975	101		
224001B	М	TO BROOKLYN FROM FDR DRIVE	FRANKFORT & PEARL STREETS		OE		31	s	8/1/2014	4.926	F	51,400	\$227,445,000	101	103	
224001C	М	PEARL STREET TO BROOKLYN	LAND ADJACENT TO BRIDGE		OE		9	s	3/28/2014	3.678	F	6,365	\$28,165,125	101		
224001D	м	TO FDR DIVE NORTHBOUND	PEARL STREET		OE		30	s	9/18/2014	4.679	F	49,600	\$219,480,000	101	103	
224001E	М	TO PEARL STREET	LAND ADJACENT TO BRIDGE		OE		3	s	6/2/2014	5.197	G	5,300	\$23,452,500	101		
224001G	М	TO PARK ROW	ROSE STREET		OE		11	s	4/9/2014	4.549	F	16,551	\$73,238,175	101		
2267380	М	WEST STREET	RECTOR STREET - BROOKLYN BATTERY MANHATTAN PLAZA		AT		1	s	11/19/2013	5.033	G	25,760	\$113,988,000	101		
2268480	М	CHAMBERS STREET PEDESTRIAN BRIDGE	ROUTE 9A - WEST STREET		O-PED		10	С	5/30/2014	5.391	G	7,481	\$33,103,425	101		
2268930	М	MORRIS STREET PEDESTRIAN BRIDGE	BROOKLYN-BATTERY TUNNEL PLAZA		A-PED		3	С	7/15/2013	3.875	F	1,842	\$8,150,850	101		
223201C	М	FDR DR SOUTHBOUND OFF RAMP	SOUTH STREET		AR		8	s	2/6/2014	5.209	G	36,700	\$162,397,500	103		
2232029	М	CORLEARS PARK ROAD F	FDR DRIVE		Α	P	4	s	3/20/2014	3.813	F	4,100	\$18,142,500	103	┙	
2232030	М	DELANCEY STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	Р	12	С	3/9/2014	4.443	F	3,390	\$15,000,750	103	╜	
2232040	М	HOUSTON STREET F	FDR DRIVE		Α		2	s	5/6/2014	3.750	F	11,010	\$48,719,250	103		
223204A	М	FDR NORTHBOUND RAMP TO HOUSTON STREET	RELIEF		AR		4	s	1/17/2014	4.706	F	6,150	\$27,213,750	103	┙	
223204B	М	HOUSTON STREET RAMP TO FOR DRIVE NORTHBOUND	RELIEF		AR		4	s	1/17/2014	4.792	F	7,125	\$31,528,125	103		
2232050	М	EAST 6TH STREET PEDESTRIN BRIDGE	FDR DRIVE		A-PED	P	19	С	3/13/2014	4.167	F	2,200	\$9,735,000	103	$\square$	
2233020	М	EAST 10TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	P	21	С	4/14/2014	4.673	F	2,754	\$12,186,450	103	┙	
224001F	М	PEARL STREET TO FDR DRIVE	LAND ADJACENT TO BRIDGE		OE		3	s	7/9/2014	5.141	G	5,200	\$23,010,000	103		
2245010	М	11TH AVENUE VIADUCT	LIRR WEST SIDE YARD	AL	0		39	s	12/12/2014	4.056	F	149,100	\$659,767,500	104	┙	
224501B	М	WEST 33RD STREET	AMTRAK 30 STREET BRANCH	А	OR		8	s	3/7/2014	4.500	F	16,500	\$73,012,500	104		Ш
224501C	М	WEST 33RD STREET	LAND ADJACENT TO AMTRAK	А	OR		2	s	5/14/2013	4.472	F	2,360	\$10,443,000	104		
224501D	М	WEST 34TH STREET	AMTRAK 30 STREET BRANCH	Α	OR		4	s	5/13/2013	4.542	F	11,800	\$52,215,000	104		

BIN	BORO	FEATURE CARRIED		RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating		DECK AREA	REPLACEMENT COST	CD CD2	CD3
224501E	М	WEST 35TH STREET	AMTRAK 30 STREET BRANCH	А	OR		3	s	7/29/2014	4.181	F	6,500	\$28,762,500	104	
224501F	М	WEST 36TH STREET	AMTRAK 30 STREET BRANCH	Α	OR		3	s	11/12/2013	4.612	F	5,520	\$24,426,000	104	
2245060	М	WEST 37TH STREET	AMTRAK 30 STREET BRANCH	А	o		3	s	11/12/2013	6.190	VG	7,505	\$33,209,625	104	
2245070	М	WEST 38TH STREET	AMTRAK 30 STREET BRANCH	Α	0		2	s	7/8/2014	4.135	F	6,200	\$27,435,000	104	
2245080	М	WEST 39TH STREET	AMTRAK 30 STREET BRANCH	Α	o		3	s	7/8/2014	4.173	F	6,300	\$27,877,500	104	
2245090	М	WEST 43RD STREET	AMTRAK 30 STREET BRANCH	А	o		2	s	4/18/2014	4.662	F	4,140	\$18,319,500	104	
2245100	М	WEST 44TH STREET	AMTRAK 30 STREET BRANCH	Α	0		2	s	4/18/2014	4.559	F	4,300	\$19,027,500	104	
2245110	М	WEST 45TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	s	4/29/2014	5.338	G	4,100	\$18,142,500	104	
2245120	м	WEST 46TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	s	4/29/2014	4.500	F	4,100	\$18,142,500	104	
2245130	М	WEST 47TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	s	5/6/2014	4.721	F	4,100	\$18,142,500	104	
2245140	м	WEST 48TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	s	5/6/2014	4.618	F	4,100	\$18,142,500	104	
2245150	М	WEST 49TH STREET	AMTRAK 30 STREET BRANCH	А	o		3	s	5/6/2014	4.426	F	4,100	\$18,142,500	104	
2245160	м	WEST 51ST STREET	AMTRAK 30 STREET BRANCH	A	О		2	s	5/13/2014	4.853	F	4,300	\$19,027,500	104	
2245170	М	WEST 52ND STREET	AMTRAK 30 STREET BRANCH	А	o		2	s	5/13/2014	5.191	G	4,300	\$19,027,500	104	
2245180	М	WEST 53RD STREET	AMTRAK 30 STREET BRANCH	А	О		2	s	5/20/2014	5.221	G	5,100	\$22,567,500	104	
2245190	М	WEST 58TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	s	5/20/2014	4.706	F	4,100	\$18,142,500	104	
2245209	М	11TH AVENUE	AMTRAK 30 STREET BRANCH	А	О		2	s	6/4/2014	4.426	F	15,400	\$68,145,000	104	
2245210	М	WEST 42ND STREET	AMTRAK 30 STREET BRANCH	А	o		4	s	11/5/2014	4.587	F	10,300	\$45,577,500	104	
2245220	М	WEST 57TH STREET	AMTRAK 30 STREET BRANCH	А	О		3	s	5/20/2014	4.853	F	9,100	\$40,267,500	104	
2245330	М	WEST 41ST STREET	AMTRAK 30 STREET BRANCH	А	О		3	s	7/24/2014	4.444	F	6,200	\$27,435,000	104	
2245340	М	WEST 50TH STREET	AMTRAK 30 STREET BRANCH	А	О		2	s	5/13/2014	4.500	F	4,100	\$18,142,500	104	
2245350	М	WEST 54TH STREET	AMTRAK 30 STREET BRANCH	А	О		2	s	5/20/2014	5.492	G	4,700	\$20,797,500	104	
2245360	М	WEST 55TH STREET	AMTRAK 30 STREET BRANCH	А	О		2	s	5/20/2014	5.529	G	4,300	\$19,027,500	104	
2245370	М	WEST 56TH STREET	AMTRAK 30 STREET BRANCH	А	О		2	s	5/20/2014	5.397	G	4,400	\$19,470,000	104	
2245440	м	WEST 40TH STREET	AMTRAK 30 STREET BRANCH	А	О		4	s	7/23/2014	4.103	F	9,400	\$41,595,000	104	
2257569	м	MILLER HIGHWAY	TERRAIN		А		64	s	12/5/2014	4.352	F	272,475	\$1,205,701,875	104 107	
226672A	м	WEST 31ST STREET	AMTRAK LAYUP TRACKS	А	О		9	s	11/15/2014	3.619	F	8,800	\$38,940,000	104	
2245460	м	PARK AVE SOUTHBOUND	EAST 45TH STREET		0		1	s	5/22/2014	4.514	F	2,400	\$10,620,000	105	
2245470	м	PARK AVE NORTHBOUND	EAST 45TH STREET		О		1	s	5/21/2014	4.865	F	2,400	\$10,620,000	105	
2246540	М	EAST 34TH STREET	PARK AVENUE TUNNEL		ОТ		1	s	8/20/2014	4.117	F	36,200	\$160,185,000	105 106	
2246550	М	PARK AVENUE VIADUCT	EAST 42ND STREET		0		10	s	12/10/2014	4.478	F	22,150	\$98,013,750	105	
2232070	М	EAST 25TH STREET PEDESTRIAN BRIDGE	FDR DRIVE	$\neg$	A-PED		3	С	3/23/2014	4.600	F	1,700	\$7,522,500	106	
2232100	М	EAST 51ST STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	P	6	С	4/22/2014	4.283	F	2,800	\$12,390,000	106	
2233038	М	FDR DRIVE SOUTHBOUND	FDR DRIVE NORTHBOUND / EAST 62ND STREET	$\neg$	AT		34	s	11/25/2014	6.563	VG	58,700	\$259,747,500	106 108	
224004D	М	TO QUEENS FROM EAST 58TH STREET	EAST 59TH STREET		OE		12	s	6/13/2014	4.396	F	10,858	\$48,046,650	106 108	
2246560	М	TUDOR CITY PLACE	EAST 42ND STREET		o		1	s	1/24/2014	5.133	G	6,600	\$29,205,000	106	
2246570	М	EAST 42ND STREET - EAST 47TH STREET	FIRST AVE TUNNEL		от		2	s	5/20/2014	4.922	F	95,000	\$420,375,000	106	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD	CD2CD3
2268650	м	FDR NORTHBOUND EAST 42ND STREET TO EAST 49TH STREET	EAST RIVER	KO	A		119	S	10/17/2013	3.660	F	30,767	\$136,143,975	106	
2229289	м	HHP VIADUCT	AMTRAK - WEST 72ND STREET - WEST 79TH STREET	А	A		145	s	9/17/2014	3.597	F	213,173	\$943,290,525		
222928C	м	PEDESTRIAN BRIDGE AT WEST 73RD STREET	HHP - AMTRAK	А	A-PED	Р	5	С	8/12/2013	3.812	F	3,700	\$16,372,500		
222928D	м	WEST 72ND STREET RAMP TO HHP NORTHBOUND	RELIEF		AR		1	s	7/18/2014	6.648	VG	1,750	\$7,743,750		
2229290	м	WEST 79TH STREET	AMTRAK	А	A		1	s	6/11/2014	4.424	F	4,500	\$19,912,500	_	
2229309	м	ннр	RIVERSIDE PARK		А		1	s	1/13/2014	5.267	G	2,172	\$9,611,100		
2229311	м	HHP SOUTHBOUND	RAMP TO WEST 96TH STREET		A		1	s	1/28/2014	4.455	F	2,000	\$8,850,000	107	
2229312	м	HHP NORTHBOUND	RAMP TO WEST 96TH STREET		A		1	s	1/27/2014	4.182	F	2,000	\$8,850,000	107	
2229321	м	HHP SOUTHBOUND	RAMP FROM WEST 96TH STREET		A		1	s	1/31/2014	5.133	G	2,000	\$8,850,000	107	
2229322	м	HHP NORTHBOUND	RAMP FROM WEST 96TH STREET		А		1	s	1/31/2014	5.300	G	2,000	\$8,850,000	107	
2246970	М	RIVERSIDE DRIVE	W EST 96TH STREET		0		3	s	5/6/2013	5.471	G	10,600	\$46,905,000	107	
2267250	м	ННР	AMTRAK - WEST 96TH STREET	А	А		55	s	11/1/2014	3.548	F	40,000	\$177,000,000	107	
2267717	м	79TH STREET PEDESTRIAN PLAZA	79TH STREET BOAT BASIN GARAGE		А	Р	10	s	5/10/2013	4.444	F	27,400	\$121,245,000	107	
2267718	м	79TH STREET TRAFFIC CIRCLE	79TH STREET PEDESTRIAN PLAZA		А	Р	34	s	5/15/2013	3.738	F	24,130	\$106,775,250	107	
226771A	м	79TH STREET RAMP TO HHP	79TH STREET BOAT BASIN GARAGE		AR	Р	4	s	5/8/2014	4.221	F	3,131	\$13,854,675	107	
226771B	м	79TH STREET RAMP TO GARAGE	79TH STREET BOAT BASIN GARAGE		AR	Р	21	s	5/14/2014	4.452	F	8,989	\$39,776,325	107	
226771C	м	GARAGE RAMP TO 79TH STREET	79TH STREET BOAT BASIN GARAGE		AR	Р	21	s	5/12/2014	4.435	F	9,095	\$40,245,375	107	
226771D	М	SOUTHBOUND HHP RAMP TO 79TH STREET	79TH STREET BOAT BASIN GARAGE		AR	Р	4	s	5/8/2014	4.403	F	2,601	\$11,509,425	107	
2269190	м	WEST 70TH STREET	AMTRAK	А	0		3	s	11/19/2013	5.542	G	17,258	\$76,366,650	107	
2269200	м	RIVERSIDE DRIVE SOUTH	AMTRAK	А	0		11	s	11/4/2013	6.069	VG	69,040	\$305,502,000	107	
2269210	м	WEST 68TH STREET	AMTRAK	А	О		3	s	11/5/2013	6.593	VG	5,382	\$23,815,350	107	
M00003	М	HHP ON/OFF RMP-79TH STREET SOUTH SIDE	PEDESTRIAN PATH SOUTH OF 79TH STREET		А		1	С	6/6/2014	4.467	F	846	\$3,743,550	107	
M00004	М	HHP ON/OFF RAMP-79TH STREET NORTH SIDE	PEDESTRIAN PATH NORTH OF 79TH STREET		А		1	С	6/6/2014	4.667	F	846	\$3,743,550	107	
2232110	м	EAST 63RD STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	Р	11	U	11/23/2011	4.912	F	2,100	\$9,292,500	108	
2232120	М	EAST 71ST STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	Р	19	С	8/17/2014	4.761	F	3,700	\$16,372,500	108	
2232140	М	EAST 78TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	Р	13	С	5/8/2014	6.708	VG	5,226	\$23,125,050	108	
2232167	М	PROMENADE OVER FOR DRIVE	FDR DRIVE- EAST 81ST STREET - EAST 90TH STREET		A-PED	Р	53	s	7/2/2013	3.143	F	93,000	\$411,525,000	108	
2233040	М	EAST 60TH STREET	FDR DRIVE		А	Р	17	s	7/2/2014	5.000	G	24,480	\$108,324,000	108	
224004A	м	TO EAST 60TH STREET FROM QUEENS	FIRST AVENUE		OE		13	s	4/21/2014	5.338	G	14,800	\$65,490,000	108	
224004B	М	TO QUEENS FROM EAST 59TH STREET	FIRST AVENUE		OE		13	s	4/22/2014	5.542	G	14,800	\$65,490,000	108	
224004C	М	TO EAST 62ND STREET FROM QUEENS	EAST 60TH - EAST 61ST STREET		OE		10	s	7/17/2014	4.985	F	16,720	\$73,986,000	108	
224004J	М	25X TO/FROM 2ND AVENUE	NYC GARAGE		OE		14	s	4/21/2014	4.829	F	22,058	\$97,606,650	108	
2269820	М	EAST 81ST STREET PEDESTRIAN BRIDGE	FDR DRIVE NORTHBOUND		A-PED	Р	3	С	6/8/2014	3.439	F	600	\$2,655,000	108	
2229349	м	ннр	WEST 158TH STREET	А	Α		44	s	10/10/2014	4.155	F	140,000	\$619,500,000	109	112
2245230	М	WEST 148TH STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	А	O-PED	Р	5	С	8/9/2013	4.200	F	1,100	\$4,867,500	109	
2245290	М	WEST 155TH STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	А	O-PED		3	С	7/30/2013	3.862	F	800	\$3,540,000	109	112
2246660	М	RIVERSIDE DRIVE	WEST 125TH STREET - WEST 134TH STREET		0		27	s	7/12/2013	4.472	F	148,300	\$656,227,500	109	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD C	:D2CD	3
2246670	М	WEST 134TH STREET	TERRAIN		0		4	s	6/13/2013	4.870	F	7,500	\$33,187,500 1	109	$\perp$	
2246720	М	RIVERSIDE DRIVE	WEST 158TH STREET - AMTRAK	Α	0		77	s	10/24/2014	3.528	F	185,658	\$821,536,650 1	109 1	112	_
2246980	М	RIVERSIDE DRIVE	WEST 138TH STREET		0		1	s	1/16/2014	4.900	F	6,700	\$29,647,500 1	109	$\perp$	4
2266229	М	ннр	PEDESTRIAN UNDERPASS AT WEST 148TH STREET		Α		1	s	1/30/2014	5.000	G	1,840	\$8,142,000 1	109		
2267130	М	RIVERSIDE DRIVE	WEST 145TH STREET		0		1	s	4/29/2013	5.133	G	5,800	\$25,665,000 1	109		
2269240	М	RIVERSIDE DRIVE	WEST 155TH STREET		0		1	s	4/25/2013	4.640	F	2,780	\$12,301,500 1	109 1	112	
2246490	М	A.C. POWELL BOULEVARD NORTHBOUND	A.C. POWELL BOULEVARD		0		1	s	1/31/2014	4.347	F	3,000	\$13,275,000 1	110		
2246710	М	WEST 153RD STREET	A.C. POWELL BLVD		0		1	s	1/31/2014	4.611	F	3,082	\$13,637,850 1	110		
2232180	М	EAST 103RD STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED		18	С	8/17/2014	4.390	F	6,807	\$30,120,975 1	111		
2232190	М	EAST 111TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	Р	9	С	8/25/2014	4.319	F	4,254	\$18,823,950 1	111		1
2232200	М	EAST 120TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	P	18	С	8/24/2014	4.114	F	3,978	\$17,602,650 1	111		1
2233059	М	HARLEM RIVER DRIVE	EAST 127TH STREET RAMP TO/FROM HRD NORTHBOUND		Α		11	s	6/24/2014	3.552	F	51,000	\$225,675,000 1	111		1
224005A	М	RAMP FROM FDR DRIVE	HARLEM RIVER DR NORTHBOUND		OR		11	s	11/7/2014	6.887	VG	28,233	\$124,931,025 1	111		1
224007A	М	RAMP TO MADISON AVENUE	EAST 138TH STREET		OR		7	s	2/6/2014	5.028	G	19,880	\$87,969,000 1	111		1
2240620	М	WARDS ISLAND PEDESTRIN BRIDGE	HARLEM RIVER		WMO-PED		10	С	4/2/2014	4.667	F	19,500	\$86,287,500 1	111		1
2245319	м	EAST 97TH STREET	METRO NORTH MAIN LN	м	0		1	s	12/17/2014	4.647	F	3,200	\$14,160,000 1	111		1
2246620	М	EAST 128TH STREET PEDESTRIAN BRIDGE	3RD AVE BRIDGE APPROACH		O-PED		18	С	12/15/2014	3.939	F	2,300	\$10,177,500 1	111		1
2246990	М	EAST 129TH STREET PEDESTRIAN BRIDGE	3RD AVENUE BRIDGE RAMP		O-PED	Р	5	С	12/2/2013	4.095	F	1,046	\$4,628,550 1	111		1
222934A	м	RAMP TO NORTHBOUND HHP	AMTRAK WEST SIDE	А	AR		26	s	6/30/2014	3.764	F	10,800	\$47,790,000 1	112		1
2229400	м	WEST 181ST STREET PEDESTRIAN BRIDGE	HHP NORTHBOUND		A-PED	Р	7	С	2/25/2014	4.493	F	1,500	\$6,637,500 1	112		٦
2245040	м	MARGARET CORBIN DRIVE	PEDESTRIAN PATH NEAR CAFÉ		0	Р	1	С	6/9/2014	4.933	F	598	\$2,646,150 1	112		1
2245050	м	MARGARET CORBIN DRIVE	PEDESTRIAN PATH NEAR NORTH ENTRANCE		0	Р	1	С	4/8/2014	4.600	F	889	\$3,933,825 1	112		٦
2245250	м	WEST 158TH STREET	AMTRAK 30 STREET BRANCH	А	0		7	s	10/18/2013	5.903	G	29,170	\$129,077,250 1	112		1
2245260	м	WEST 173RD SREEET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	А	O-PED	Р	2	С	8/6/2013	4.600	F	1,500	\$6,637,500 1	112		1
2245300	м	INWOOD HILL PARKK FOOTBRIDGE	AMTRAK 30 STREET BRANCH	А	O-PED	Р	6	С	8/6/2013	4.100	F	700	\$3,097,500 1	112		1
2245480	м	TO GEORGE WASHINGTON BRIDGE OPPOSITE WEST 171ST STREET	RIVERSIDE DRIVE		0		1	s	2/24/2014	4.524	F	10,773	\$47,670,525 1	112		1
2246489	м	WEST 181ST STREET	RAMP TO WASHINGTON BRIDGE		0		1	s	1/30/2014	5.200	G	8,200	\$36,285,000 1	112		1
2246500	М	FORT TRYON PLACE	ENTRANCE FROM RIVERSIDE DRIVE		0	Р	1	s	3/25/2014	4.200	F	3,280	\$14,514,000 1	112		1
2246510	М	CORBIN PLACE OVERPASS	CORBIN PLACE		0	P	1	s	1/8/2014	5.000	G	2,223	\$9,836,775 1	112		1
2246600	М	WEST 176TH STREET PEDESTRIAN BRIDGE	APPROACH TO GEORGE WASHINGTON BRIDGE		O-PED	Р	1	С	3/7/2014	4.200	F	1,200	\$5,310,000 1	112		1
2246690	М	ISHAM PARK VEHICULAR	HARLEM RIVER INLET		0	P	1	s	4/28/2014	6.065	VG	911	\$4,031,175 1	112		1
2246700	М	ISHAM PARK PEDESTRIAN BRIDGE	HARLEM RIVER INLET		WO-PED	Р	1	С	1/29/2014	3.552	F	300	\$1,327,500 1	112		1
2266230	М	HHP NORTHBOUND	PEDESTRIAN UNDERPASS INWOOD PARK		А		1	s	1/23/2014	5.000	G	800	\$3,540,000 1	112		1
2266240	М	HHP SOUTHBOUND	PEDESTRIAN UNDERPASS INWOOD PARK		A		1	s	1/23/2014	5.526	G	1,100	\$4,867,500 1	112		1
2267240	м	HRD RAMP TO GEORGE WASHINGTON BRIDGE	HARLEM RIVER DRIVE SOUTHBOUND		A		55	s	10/14/2014	3.042	F	122,900	\$543,832,500 1	112	$\top$	1
2268760	М	PS-5 PEDESTRIAN BRIDGE	TENTH AVENUE		O-PED		5	С	12/9/2013	4.184	F	1,285	\$5,686,125 1	112	+	1
M00001	М	WEST 191ST STREET PEDESTRIAN TUNNEL	BROADWAY - IRT #1 SUBWAY		O-PED		1	С	12/9/2014	4.364	F	2,000	\$8,850,000 1	112	$\top$	1

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED R		OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD CD2	CD3
2245380	М	TRANSVERSE ROAD #1 WESTBOUND	PEDESTRIAN PATH OPPOSITE EAST 66TH STREET	О	P	1	s	1/15/2014	5.000	G	1,500	\$6,637,500	164	
2245420	М	WEST 65TH STREET ENTRANCE EASTBOUND	BRIDLE PATH WEST END	О	P	1	s	1/14/2014	5.100	G	1,300	\$5,752,500	164	
2246000	М	WEST DRIVE (GREYSHOT ARCH)	PEDESTRIAN PATH BETWEEN 61ST & 62ND STREETS	o	P	1	s	1/8/2014	5.400	G	2,500	\$11,062,500	164	
2246010	М	WEST 62ND STREET PEDESTRIAN BRIDGE (PINEBANK ARCH)	BRIDLE PATH	O-PED	P	1	С	7/22/2014	4.654	F	1,000	\$4,425,000	164	
2246030	М	EAST 62ND STREET PEDESTRIAN BRIDGE (GAPSTOW BRIDGE)	THE POND	O-PED	P	1	С	4/21/2014	3.897	F	1,400	\$6,195,000	164	
2246040	М	EAST DRIVE (INSCOPE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 62ND STREET	О	P	1	С	4/30/2014	4.400	F	1,515	\$6,703,875	164	
2246050	М	CENTER DRIVE (DRIPROCK ARCH)	PEDESTRIAN OPPOSITE 63RD STREET	o	P	1	s	1/14/2014	4.867	F	1,725	\$7,633,125	164	
2246069	м	EAST DRIVE (GREEN GAP ARCH)	PEDESTRIAN PATH BETWEEN 63RD & 64TH STREETS	0	P	1	s	1/16/2014	4.433	F	2,075	\$9,181,875	164	
2246070	м	CENTER DRIVE (PLAYMATES ARCH)	PEDESTRIAN PATH OPPOSITE 65TH STREET	0	Р	1	С	6/11/2014	4.500	F	1,129	\$4,995,825	164	
2246080	М	WEST DRIVE (DALEHEAD ARCH)	BRIDLE OPPOSITE WEST 64TH STREET	0	Р	1	s	1/14/2014	4.667	F	2,000	\$8,850,000	164	
2246090	м	PEDESTRIAN BRIDGE OPPOSITE 65TH STREET	TRANSVERSE ROAD #1	O-PED	P	1	С	9/19/2014	4.655	F	2,300	\$10,177,500	164	
2246100	М	CENTER DRIVE	TRANSVERSE ROAD #1	0	Р	1	s	2/7/2014	4.467	F	6,000	\$26,550,000	164	
2246110	М	EAST DRIVE	TRANSVERSE ROAD #1	0	Р	1	s	3/19/2014	4.667	F	6,000	\$26,550,000	164	
2246120	М	WEST DRIVE	TRANSVERSE ROAD #1	0	Р	1	s	3/25/2014	4.700	F	7,900	\$34,957,500	164	
2246130	м	EAST DRIVE (WILLOWDELL ARCH)	PEDESTRIAN PATH OPPOSITE EAST 67TH STREET	0	P	1	С	4/29/2014	3.500	F	666	\$2,947,050	164	
2246140	м	WEST 72ND STREET ENTRANCE (RIFTSTONE ARCH)	BRIDLE PATH	0	Р	1	s	1/8/2014	4.467	F	3,600	\$15,930,000	164	
2246150	М	72ND STREET CROSS DRIVE (TERRACE BRIDGE)	PEDESTRIAN PATH TO FOUNTAIN	0	Р	3	s	2/24/2014	5.786	G	7,300	\$32,302,500	164	
2246160	м	73RD STREET PEDESTRIAN BRIDGE (BOW BRIDGE)	THE LAKE	WO-PED	P	1	С	4/8/2014	3.946	F	1,700	\$7,522,500	164	
2246170	м	EAST DRIVE (TREFOIL ARCH)	PEDESTRIAN PATH OPPOSITE EAST 73RD STREET	0	P	1	s	1/24/2014	5.130	G	1,900	\$8,407,500	164	
2246230	М	EAST DRIVE	TRANSVERSE ROAD #2	0	P	1	s	3/11/2014	4.600	F	5,080	\$22,479,000	164	
2246240	м	WEST DRIVE	TRANSVERSE ROAD #2	0	Р	1	s	3/12/2014	4.167	F	7,200	\$31,860,000	164	
2246250	М	EAST DRIVE	TRANSVERSE ROAD #3	0	Р	1	s	1/17/2014	4.300	F	4,500	\$19,912,500	164	
2246260	м	WEST DRIVE	TRANSVERSE ROAD #3	0	P	1	s	3/18/2014	4.800	F	5,100	\$22,567,500	164	
2246270	м	EAST DRIVE	TRANSVERSE ROAD #4	0	P	1	s	3/20/2014	4.100	F	7,000	\$30,975,000	164	
2246280	М	WEST DRIVE	TRANSVERSE ROAD #4	0	Р	1	s	3/21/2014	4.167	F	4,700	\$20,797,500	164	
2246320	М	WEST 77TH STREET PEDESTRIAN (OAK BRIDGE)	THE LAKE	WO-PED	P	3	С	4/8/2014	5.474	G	1,100	\$4,867,500	164	
2246330	М	WEST DRIVE (BALCONY BRIDGE)	STREAM TO THE LAKE	wo	P	1	s	1/15/2014	5.000	G	1,817	\$8,040,225	164	
2246340	М	WEST 77TH STREET PEDESTRIAN (LADIES POND BRIDGE)	STREAM TO THE LAKE	WO-PED	P	3	С	10/17/2014	4.355	F	500	\$2,212,500	164	
2246350	м	EAST DRIVE (GREYWACKE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 80TH STREET	0	P	1	С	5/23/2014	3.733	F	1,266	\$5,602,050	164	
2246360	М	WEST DRIVE (WINTERDALE ARCH)	PEDESTRIAN PATH OPPOSITE WEST 82ND STREET	0	P	1	s	1/16/2014	5.182	G	2,502	\$11,071,350	164	
2246380	м	WEST 86TH STREET PEDESTRIAN (SOUTHWEST RESERVOIR BRIDGE)	BRIDLE PATH	O-PED	Р	1	С	10/17/2014	4.852	F	700	\$3,097,500	164	
2246390	м	EAST 86TH STREET PEDESTRIAN (SOUTHEAST RESERVOIR BRIDGE)	BRIDLE PATH	O-PED	P	3	С	10/17/2014	4.509	F	1,100	\$4,867,500	164	
2246400	м	PEDESTRIAN PATH OPPOSITE EAST 79TH STREET	TRANSVERSE ROAD #2	O-PED	Р	1	С	7/14/2013	4.233	F	3,700	\$16,372,500	164	
2246410	м	TRANSVERSE ROAD 1 EASTBOUND (DENESMOUTH ARCH)	PEDESTRIAN PATH OPPOSITE EAST 65TH STREET	0	Р	1	s	2/24/2014	4.636	F	1,739	\$7,695,075	164	
2246430	м	WEST 110TH STREET ENTRANCE (MOUNTCLIFF ARCH)	PEDESTRIAN PATH OPPOSITE WEST 109TH STREET	0	P	1	s	2/24/2014	4.317	F	1,200	\$5,310,000	164	
2246440	м	79TH STREET PEDESTRIAN BRIDGE	TRANSVERSE ROAD #2	O-PED	Р	1	С	7/13/2014	3.926	F	5,900	\$26,107,500	164	
2246450	м	EAST 77TH STREET PEDESTRIAN (GLADE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 77TH STREET	O-PED	Р	1	С	4/1/2014	4.138	F	5,000	\$22,125,000	164	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED RAI	BRIDGE	OTHER	SPA		Inspection	Condition		DECK AREA	REPLACEMENT COST	CD C	D2CD:
			L RO	TYPE	OWNER	NS	NG SR	Date	Rating	BL RT				
2246460	м	WEST 77TH STREET ENTRANCE (EAGLEVALE ARCH)	PEDESTRIAN PATH OPPOSITE WEST 77TH STREET	0	P	2	s	1/9/2014	4.263	F	3,066	\$13,567,050	164	
2246470	м	EAST DRIVE (HUDDLESTONE ARCH)	THE LOCH	wo	Р	1	s	1/28/2014	4.500	F	1,100	\$4,867,500	0 164	
2240047	MQ	QUEENSBORO BRIDGE (LOWER LEVEL)	EAST RIVER AL	WEO		53	s	11/12/2014	4.167	F	626,900	\$2,774,032,500	108 4	102 401
2240048	MQ	QUEENSBORO BRIDGE (UPPER LEVEL)	EAST RIVER - LL	WEO		37	s	10/13/2014	4.340	F	322,300	\$1,426,177,500	108 4	102 401
2240640	МО	ROOSEVELT ISLAND BRIDGE	EAST RIVER EAST CHANNEL	WMO		8	s	10/29/2014	5.569	G	36,500	\$161,512,500	108 4	101
2230600	Q	STEINWAY STREET	278I WESTBOUND (BQE)	А		1	s	8/7/2014	6.349	VG	5,229	\$23,138,325	5 401	
2230610	Q	STEINWAY STREET	278I EASTBOUND (BQE)	А		1	s	8/8/2014	6.349	VG	5,146	\$22,771,050	401	
2230620	Q	37TH STREET	278I (B.Q.E.)	А		2	s	3/12/2014	4.681	F	5,300	\$23,452,500	401	
2230630	Q	35TH STREET	278I (B.Q.E.)	А		4	s	3/14/2014	4.667	F	9,000	\$39,825,000	401	
2230640	Q	32ND STREET	278I (B.Q.E.)	А		2	s	6/6/2013	4.875	F	8,100	\$35,842,500	401	
2230657	Q	31ST STREET	278I (B.Q.E.)	А		2	s	12/5/2012	4.569	F	9,500	\$42,037,500	401	
2230690	Q	278I NORTHBOUND (BQE WEST LEG)	32ND AVENUE	А		1	s	6/2/2014	6.407	VG	4,080	\$18,054,000	401	
2230700	Q	278I NORTHBOUND (BQE EAST LEG)	32ND AVENUE (TO BQE WEST LEG)	А		8	s	11/5/2014	6.352	VG	31,600	\$139,830,000	401 4	103
2230710	Q	278I SOUTHBOUND (BQE WEST LEG)	32ND AVENUE	А		1	s	6/28/2013	6.424	VG	5,240	\$23,187,000	401	
2230720	Q	278I SOUTHBOUND (BQE EAST LEG)	278I NORTHBOUND (BQE WEST LEG)	А		3	s	6/25/2013	6.182	VG	20,896	\$92,464,800	401	
2230730	Q	31ST AVENUE	278I NORTHBOUND (BQE WEST LEG)	А		1	s	6/25/2013	6.217	VG	5,875	\$25,996,875	5 401	
2230740	Q	278I SOUTHBOUND (BQE WEST LEG)	31ST AVENUE	А		1	s	6/27/2013	6.217	VG	5,246	\$23,213,550	401	
2230750	Q	278I SOUTHBOUND (BQE EAST LEG)	31ST AVENUE	А		1	s	6/27/2013	6.508	VG	4,221	\$18,677,925	5 401 4	103
2230760	Q	278I NORTHBOUND (BQE EAST LEG)	31ST AVENUE	А		1	s	7/23/2014	6.356	VG	4,161	\$18,412,425	401 ة	
2230770	Q	278I (BQE WEST LEG)	30TH AVENUE	А		1	s	5/24/2013	6.322	VG	6,199	\$27,430,575	5 401	
2230790	Q	BULOVA AVENUE	278I (BQE WEST LEG)	А		2	s	4/4/2014	5.278	G	3,300	\$14,602,500	401	
2230800	Q	49TH STREET	278I (BQE WEST LEG)	А		2	s	4/7/2014	5.278	G	4,900	\$21,682,500	401	
2230810	Q	ASTORIA BOULEVARD EASTBOUND	278I (BQE WEST LEG)	А		4	s	3/14/2014	4.279	F	8,200	\$36,285,000	401	
2230820	Q	47TH STREET	GCP	А		2	s	4/28/2014	4.889	F	5,700	\$25,222,500	401	
2230830	Q	278I NORTHBOUNDB (BQE WEST LEG)	GCP	А		2	s	4/28/2014	4.583	F	7,600	\$33,630,000	401	
2230840	Q	44TH STREET	GCP	А		2	s	5/13/2014	4.764	F	5,000	\$22,125,000	401	
2230890	Q	49TH STREET	GCP	А		2	s	5/15/2014	4.444	F	6,350	\$28,098,750	401	
224004G	Q	TO NY FROM 11TH STREET	TERRAIN (CHAMBER)	OE		36	s	7/25/2014	5.268	G	8,360	\$36,993,000	401 4	102
2240660	Q	RIKERS ISLAND BRIDGE	RIKERS ISLAND CHANNEL	wo		56	s	9/26/2013	4.211	F	183,100	\$810,217,500	401 4	180
1247280	Q	51ST AVENUE PEDESTRIAN BRIDGE (2247280)	LIRR MAIN LINE L	O-PED		5	С	10/8/2013	3.018	F	700	\$3,097,500	402	
2230520	Q	65TH PLACE	278I (B.Q.E.)	А		2	s	2/6/2014	5.889	G	11,668	\$51,630,900	402	
2230530	Q	QUEENS BOULEVARD	278I (B.Q.E.)	А		2	s	10/22/2014	6.306	VG	25,543	\$113,027,775	5 402	
2230540	Q	WOODSIDE AVENUE	278I (B.Q.E.)	А		1	s	1/31/2014	5.672	G	7,529	\$33,315,825	5 402	
2230550	Q	69TH STREET	278I (B.Q.E.)	А		2	s	1/31/2014	5.263	G	12,600	\$55,755,000	402	
2230560	Q	70TH STREET	278I (B.Q.E.)	А		2	s	10/22/2014	6.556	VG	8,580	\$37,966,500	402	
2230570	Q	41ST AVENUE	278I (B.Q.E.)	А		2	s	10/22/2014	6.735	VG	8,580	\$37,966,500	402	
2230587	Q	ROOSEVELT AVENUE	278I (B.Q.E.)	А		2	s	9/24/2013	5.889	G	11,022	\$48,772,350	0 402	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG	Inspection Date	Condition Rating	VR BL	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
				RO				SR			RT					
2230590	Q	BROADWAY	278I (B.Q.E.)		A		2	s	12/6/2012	5.789	G	16,000	\$70,800,000	402	<u> </u>	Ш
2230669	Q	278I (B.Q.E.)	35TH AVENUE		A		1	s	8/2/2013	6.390	VG	13,135	\$58,122,375	402	ـــــ	Ш
2230679	Q	278I (B.Q.E.)	34TH AVENUE		A		1	s	5/17/2013	6.068	VG	7,793	\$34,484,025	402		Ш
2230680	Q	278I (B.Q.E.)	NORTHERN BOULEVARD		Α		1	s	11/5/2014	6.016	VG	27,011	\$119,523,675	402	401	Ш
2230869	Q	QUEENS BOULEVARD	ACCESS RD BQE SOUTHBOUND		Α		1	s	9/30/2014	5.659	G	7,900	\$34,957,500	402	<u> </u>	Ш
224004E	Q	TO NY FROM THOMSON AVENUE	JACKSON AVENUE	L	OE		94	s	11/26/2014	4.679	F	104,600	\$462,855,000	402	L	
224004F	Q	TO NY FROM 21ST STREET	21ST STREET		OE		63	s	11/7/2014	4.712	F	63,310	\$280,146,750	402	401	
224004H	Q	TO 21ST STREET FROM NY	22ND STREET		OE		43	s	10/13/2014	4.366	F	48,100	\$212,842,500	402		
224004I	Q	TO THOMSON AVENUE FROM NY	JACKSON AVENUE	L	OE		39	s	11/21/2014	5.148	G	59,100	\$261,517,500	402		
2240410	Q	BORDEN AVENUE	DUTCH KILLS		WMO		2	s	7/5/2013	4.792	F	8,400	\$37,170,000	402		
2240450	Q	HUNTERS POINT AVENUE	DUTCH KILLS		WMO		4	s	5/30/2014	5.056	G	12,168	\$53,843,400	402		
2247120	Q	WOODSIDE AVENUE	LIRR MAIN LINE	L	o		3	s	9/19/2014	4.413	F	14,900	\$65,932,500	402		
2247150	Q	65TH STREET	LIRR MAIN LINE	L	o		3	s	9/5/2013	6.375	VG	6,344	\$28,072,200	402		
2247160	Q	65TH PLACE	LIRR MAIN LINE	L	o		3	s	9/5/2013	6.441	VG	8,381	\$37,085,925	402		
2247260	Q	JACKSON AVENUE	LIRR MONTAUK DIV	L	0		1	s	10/8/2014	5.550	G	4,517	\$19,987,725	402		
2247270	Q	21ST STREET	LIRR N SHORE YARD	L	o		6	s	9/11/2013	5.153	G	17,590	\$77,835,750	402		
2247290	Q	49TH AVENUE	LIRR,AMTRAK	L	О		5	s	11/26/2014	3.819	F	20,400	\$90,270,000	402		
2247300	Q	THOMPSON AVENUE	AMTRAK & LIRR YARD	AL	О		14	s	12/6/2012	5.042	G	61,280	\$271,164,000	402		
2247310	Q	QUEENS BOULEVARD	AMTRAK & LIRR YARD	AL	О		19	s	12/6/2012	6.268	VG	92,400	\$408,870,000	402	401	
2247320	Q	HONEYWELL STREET	AMTRAK & LIRR YARD	AL	О		22	s	9/26/2013	5.903	G	99,036	\$438,234,300	402	401	
2247330	Q	39TH STREET (NORTH)	SUNNYSIDE YARD	А	o		14	s	9/30/2013	6.556	VG	48,200	\$213,285,000	402	401	
2247370	Q	37TH AVENUE	CSX - HELLGATE	С	О		1	s	8/1/2013	6.234	VG	6,868	\$30,390,900	402		
2247380	Q	ROOSEVELT AVENUE	CSX - HELLGATE	С	О		2	s	8/1/2013	6.333	VG	7,380	\$32,656,500	402	403	404
2247390	Q	41ST AVENUE	CSX - HELLGATE	С	О		2	s	8/1/2013	4.942	F	4,400	\$19,470,000	402	404	
2247400	Q	WOODSIDE AVENUE	CSX TRANSPORT	С	О		1	s	8/9/2013	5.033	G	8,200	\$36,285,000	402	404	
2247410	Q	43RD AVENUE	CSX TRANSPORT	С	О		1	s	8/9/2013	5.000	G	4,800	\$21,240,000	402	404	
2247420	Q	44TH AVENUE	CSX TRANSPORT	С	О		1	s	8/9/2013	5.000	G	5,100	\$22,567,500	402	404	
2247430	Q	45TH AVENUE	CSX TRANSPORT	С	О		1	s	8/9/2013	5.306	G	2,400	\$10,620,000	402	404	
2247640	Q	39TH STREET (SOUTH)	AMTRAK & LIRR YARD	AL	0		9	s	10/7/2013	5.903	G	34,100	\$150,892,500	402	:	
2230780	Q	278I (BQE EAST LEG)	30TH AVENUE		А		1	s	5/24/2013	6.206	VG	7,071	\$31,289,175	403	401	
1247010	Q	91ST PLACE (2247010)	LIRR PT WASH BR	L	0		1	s	9/3/2013	6.500	VG	2,760	\$12,213,000	404		
2247020	Q	94TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASH BR	L	O-PED		5	С	9/12/2014	4.231	F	905	\$4,004,625	404		T
2247180	Q	GRAND AVENUE	LIRR MAIN LINE	L	0		3	s	10/1/2014	4.396	F	7,415	\$32,811,375	404		
2247190	Q	55TH AVENUE PEDESTRIAN BRIDGE	LIRR MAIN LINE	L	O-PED		3	С	9/17/2014	4.120	F	1,296	\$5,734,800	404		
2248159	Q	WOODHAVEN BOULEVARD	QUEENS BOULEVARD		0		2	s	7/17/2014	4.078	F	11,500	\$50,887,500	404	1	
1247560	Q	METROPOLITAN AVENUE	LIRR - NY&ATL	LN	0		2	s	9/23/2014	3.603	F	20,900	\$92,482,500	405		
2065930	Q	HAMILTON PLACE	4951 (L.I.E.)		A		2	s	2/20/2014	5.528	G	11,111	\$49,166,175	405		П

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD	CD2 CD
2065940	Q	GRAND AVENUE	4951 (L.I.E.)	RU	A		2	S	11/11/2014	4.861	F	12,850	\$56,861,250	405	
2065950		69TH STREET	495I (L.I.E.)		A		2	s	7/8/2013	5.250	G	10,336	\$45,736,800		
2230040	Q	CYPRESS HILLS STREET	JACKIE ROBINSON PARKWAY		А		1	s	3/28/2014	4.722	F	5,000	\$22,125,000	405	
2230099	Q	JACKIE ROBINSON PARKWAY	CYPRESS HILLS CEMETERY		A		1	s	1/6/2014	5.444	G	4,200	\$18,585,000		
2230120	Q	MYRTLE AVENUE	JACKIE ROBINSON PARKWAY		A		1	s	4/17/2014	5.250	G	6,400	\$28,320,000	405	482
2247440	Q	GRAND AVENUE	CSX TRANSPORT	С	0		1	s	8/13/2013	6.183	VG	3,280	\$14,514,000	405	
2247450	Q	57TH AVENUE	CSX TRANSPORT	С	0		1	s	8/13/2013	5.976	G	2,248	\$9,947,400	405	
2247460	Q	CALDWELL AVENUE	CSX TRANSPORT	С	0		1	s	11/10/2014	5.889	G	2,243	\$9,925,275	405	
2247470	Q	ELIOT AVENUE	CSX TRANSPORT	С	0		1	s	8/15/2013	4.972	F	2,960	\$13,098,000	405	
2247480	Q	JUNIPER BOULEVARD SOUTH	CSX TRANSPORT	С	0		1	s	8/16/2013	5.000	G	9,000	\$39,825,000	405	
2247490	Q	69TH STREET	CSX TRANSPORT	С	0		1	s	11/10/2014	4.979	F	6,175	\$27,324,375	405	
2247500	Q	METROPOLITAN AVENUE	CSX TRANSPORT	С	О		1	s	8/16/2013	4.233	F	18,650	\$82,526,250	405	
2247530	Q	ANDREWS AVENUE	LIRR MONTAUK DIV	L	О		1	s	9/3/2013	7.000	VG	1,765	\$7,810,125	405	
2247540	Q	60TH STREET	LIRR MONTAUK DIV	L	0		2	s	9/3/2013	5.208	G	5,340	\$23,629,500	405	
2247550	Q	ELIOT AVENUE	LIRR MONTAUK DIV	L	o		2	s	8/27/2013	5.712	G	9,550	\$42,258,750	405	
2247570	Q	BOTH STREET	77TH AVENUE - LIRR MT	L	0		5	s	10/21/2014	4.932	F	11,725	\$51,883,125	405	
2247650	Q	60TH ROAD PEDESTRIAN BRIDGE	LIRR MAIN LINE	L	O-PED		3	С	9/16/2014	5.000	G	1,200	\$5,310,000	405	406
2248200	Q	RUST STREET	FLUSHING AVENUE		0		1	s	6/21/2013	4.922	F	2,940	\$13,009,500	405	
2248220	Q	SERVICE ROAD TURNAROUND	FLUSHING AVENUE		О		1	s	6/21/2013	5.078	G	2,940	\$13,009,500	405	
2248240	Q	FLUSHING AVENUE SERVICE ROAD	FLUSHING AVENUE		О		1	s	6/21/2013	5.250	G	2,940	\$13,009,500	405	
2248280	Q	HIGHLAND PARK PEDESTRIAN	PEDESTRIAN PATH		O-PED	Р	1	С	12/31/2014	3.667	F	1,900	\$8,407,500	405	
2248300	Q	71ST AVENUE	COOPER AVENUE		0		1	s	7/1/2013	4.373	F	2,800	\$12,390,000	405	
1247200	Q	67TH AVENUE PEDESTRIAN BRIDGE (2247200)	LIRR MAIN LINE	L	O-PED		3	С	9/24/2014	4.219	F	1,300	\$5,752,500	406	
2066002	Q	4951 (2066000)	WOODHAVEN BOULEVARD		А		2	s	5/23/2013	5.620	G	25,200	\$111,510,000	406	404
2247630	Q	PEDESTRIAN BRIDGE NEAR UNION TURNPIKE	ABANDONED LIRR		O-PED		8	С	6/12/2014	4.582	F	1,500	\$6,637,500	406	
2248160	Q	ELIOT AVENUE	QUEENS BOULEVARD		0		2	s	7/17/2014	4.804	F	13,785	\$60,998,625	406	
1065210	Q	WHITESTONE EXPRESSWAY NORTHBOUND	ВСІР		А		1	s	6/17/2014	4.656	F	2,500	\$11,062,500	407	
2055801	Q	NORTHERN BOULEVARD WESTBOUND	FLUSHING RIVER		wo		40	s	11/21/2012	4.338	F	71,900	\$318,157,500	407	
2055802	Q	NORTHERN BOULEVARD EASTBOUND	FLUSHING RIVER		wo		40	s	10/28/2014	4.268	F	78,894	\$349,105,950	407	
205580A	Q	NORTHERN BOULEVARD WESTBOUND TO 678I SOUTHBOUND	VACANT LAND		AR		16	s	6/5/2014	5.619	G	8,600	\$38,055,000	407	
2231900	Q	BCIP	TOTTEN AVENUE		Α		1	s	5/12/2014	4.609	F	4,900	\$21,682,500	407	
2231910	Q	UTOPIA PARKWAY	ВСІР		А		2	s	3/7/2014	5.341	G	7,200	\$31,860,000	407	
2231920	Q	160TH STREET	ВСІР		А		2	s	6/17/2013	5.694	G	5,550	\$24,558,750	407	
2231930	Q	FRANCIS LEWIS BOULEVARD	BCIP		А		3	s	2/21/2014	4.682	F	9,100	\$40,267,500	407	
2231940	Q	CLINTONVILLE STREET	ВСІР		А		2	s	2/21/2014	4.705	F	7,400	\$32,745,000	407	
2231950	Q	150TH STREET	ВСІР		А		2	s	2/21/2014	4.591	F	5,900	\$26,107,500	407	
2231960	Q	149TH STREET	ВСІР		А		2	s	1/29/2014	4.795	F	6,210	\$27,479,250	407	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI	BRIDGE	OTHER	SPA		Inspection	Condition		DECK AREA	REPLACEMENT COST	CD	CD2	CD3
				RO	TYPE	OWNER	NS	NG SR	Date	Rating	BL RT					
2231970	Q	14TH AVENUE	ВСІР		А		2	s	1/29/2014	4.523	F	8,100	\$35,842,500	407		
2231980	Q	147TH STREET	BCIP		А		2	s	1/29/2014	4.705	F	6,300	\$27,877,500	407		
2240507	Q	ROOSEVELT AVENUE	678I - FLUSHING RIVER		WA		27	s	11/7/2014	3.521	F	84,424	\$373,576,200	407	481	
2247040	Q	UNION STREET	LIRR PORT WASH BR	L	0		1	s	8/22/2013	6.172	VG	3,313	\$14,660,025	407		
2247050	Q	BOWNE AVENUE	LIRR PORT WASH BR	L	0		1	s	9/24/2014	5.451	G	4,974	\$22,009,950	407		
2247060	Q	PARSONS BOULEVARD	LIRR PORT WASH BR	L	0		1	s	9/24/2014	4.824	F	4,200	\$18,585,000	407		
2247070	Q	147TH STREET	LIRR PORT WASH BR	L	0		1	s	8/22/2013	5.392	G	2,800	\$12,390,000	407		
2247080	Q	149TH STREET	LIRR PORT WASH BR	L	0		1	s	10/31/2014	4.776	F	4,100	\$18,142,500	407		
2247090	Q	149TH PLACE	LIRR PORT WASH BR	L	o		2	s	8/21/2013	5.000	G	4,300	\$19,027,500	407		
2247100	Q	150TH STREET	LIRR PORT WASH BR	L	0		2	s	8/21/2013	6.029	VG	7,830	\$34,647,750	407		
2247110	Q	MURRAY STREET	LIRR PORT WASH BR	L	0		1	s	8/21/2013	5.222	G	4,000	\$17,700,000	407		
2248090	Q	FLUSHING MEADOW PARK PEDESTRIAN	COLLEGE POINT BOULEVARD		O-PED	P	3	С	3/24/2014	4.639	F	8,400	\$37,170,000	407		
2266160	Q	678I SOUTHBOUND TO BCIP EASTBOUND	ACCESS ROAD FROM 678I - BCIP		А		1	s	6/17/2014	3.781	F	2,300	\$10,177,500	407		
7705510	Q	167TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASH BR	L	O-PED		3	С	9/11/2014	4.000	F	840	\$3,717,000	407		
2248059	Q	MOTOR PARKWAY (PEDESTRIAN)	FRANCIS LEWIS BOULEVARD		O-PED	Р	2	С	6/13/2014	4.528	F	2,800	\$12,390,000	408		
2248080	Q	MOTOR PARKWAY (PEDESTRIAN)	HOLLIS COURT BOULEVARD		O-PED	Р	3	С	11/18/2014	4.672	F	2,700	\$11,947,500	408		
2248100	Q	MOTOR PARKWAY (PEDESTRIAN)	73RD AVENUE		O-PED	Р	3	С	2/11/2014	4.672	F	2,600	\$11,505,000	408		
2267160	Q	ROOSEVELT AVENUE	SHEA ROAD		o		4	s	7/29/2013	4.873	F	7,280	\$32,214,000	408		
2267199	Q	FRANCIS LEWIS BOULEVARD	CUNNINGHAM PARK ROAD		o		1	s	5/13/2013	5.033	G	7,085	\$31,351,125	408		
2230209	Q	QUEENS BOULEVARD	JACKIE ROBINSON PARKWAY	т	А		5	s	6/9/2014	4.841	F	37,700	\$166,822,500	409		
2247220	Q	80TH ROAD	LIRR MAIN LINE	L	o		3	s	8/30/2013	4.794	F	4,100	\$18,142,500	409		
2247230	Q	82ND AVENUE	LIRR MAIN LINE	L	o		3	s	8/30/2013	5.311	G	4,100	\$18,142,500	409		l
2247240	Q	LEFFERTS BOULEVARD	LIRR MAIN LINE	L	О		3	s	8/30/2013	5.806	G	5,460	\$24,160,500	409		
2247590	Q	FOREST PARK DRIVE	LIRR MONTAUK DIV	L	o	Р	5	s	9/22/2014	5.158	G	6,000	\$26,550,000	409		ı
2247600	Q	PARK LANE SOUTH	LIRR MONTAUK DIV	L	o		1	s	9/22/2014	6.983	VG	3,024	\$13,381,200	409	482	
2247660	Q	FOREST PARK DRIVE	ABANDONED LIRR		o	Р	6	s	2/21/2014	4.524	F	10,000	\$44,250,000	409		ı
2248019	Q	WOODHAVEN BOULEVARD	ATLANTIC AVENUE		o		3	s	3/26/2014	4.208	F	19,400	\$85,845,000	409		l
2248299	Q	JACKIE ROBINSON PARKWAY-UNION TURNPIKE	AUSTIN STREET		o		1	s	5/23/2014	4.806	F	5,900	\$26,107,500	409	406	l
2248340	Q	FOREST PARK DRIVE	MYRTLE AVENUE		o	Р	3	s	5/24/2013	4.984	F	5,100	\$22,567,500	409		ı
2231559	Q	CROSS BAY BOULEVARD	ВЅНР		Α		4	s	5/30/2014	5.083	G	23,205	\$102,682,125	410		l
2231560	Q	SOUTH CONDUIT BOULEVARD	BSOP		Α		2	s	6/16/2014	5.268	G	15,776	\$69,808,800	410		
2231570	Q	COHANCY STREET	BSOP		А		2	s	4/17/2014	4.395	F	6,400	\$28,320,000	410	Ш	
2231590	Q	130TH STREET	BSOP		Α		2	s	1/30/2014	4.659	F	6,800	\$30,090,000	410	Ш	
2240650	Q	163RD AVENUE PEDESTRIAN BRIDGE	HAWTREE BASIN		WO-PED		13	С	5/12/2014	4.037	F	5,000	\$22,125,000	410	Ш	
2248020	Q	WHITELAW PEDESTRIAN BRIDGE	CONDUIT AVENUE		O-PED		7	С	10/17/2014	4.225	F	5,500	\$24,337,500	410	Ш	
2248039	Q	CROSS BAY BOULEVARD	NASSAU EXPRESSWAY - ROUTE 27		0		2	s	5/31/2013	6.208	VG	16,544	\$73,207,200	410	Ш	
2248040	Q	RAMP TO LINDEN BOULEVARD	SOUTH CONDUIT AVENUE		0		1	s	5/15/2014	5.200	G	3,352	\$14,832,600	410		ı

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L	BRIDGE TYPE	OTHER OWNER	SPA NS	NG	Inspection Date	Condition Rating	BL	DECK AREA	REPLACEMENT COST	CD CE	D2 CD3
0040050		102ND STREET		RO	o			SR	7/18/2013		RT VG	4.000	404 (00 500		
2248250	Q	WEST ALLEY ROAD	HAWTREE BASIN BCIP		WO A		2	s	7/17/2013	6.015 5.368	G	4,900 7,200	\$21,682,500 4 \$31,860,000 4		+
									7/14/2014						+
2231870		NORTHERN BOULEVARD	BCIP		Α	_	2	S	5/13/2014	5.764	G	9,400 2,300	\$41,595,000		_
2231880		CROCHERON PARK PEDESTRIAN	BCIP		A-PED	P	9	F	6/4/2014	3.954	F	7,600	\$10,177,500		+
2231890		28TH AVENUE PEDESTRIAN BRIDGE	BCIP		A-PED	Р	24	С		4.615			\$33,630,000		-
2240440		NORTHERN BOULEVARD	ALLEY CREEK		wo		2	S	6/17/2014	4.681	F	8,300	\$36,727,500		_
2247130		CORPORAL KENNEDY STREET	LIRR PORT WASH BR	L	0		1	S	9/5/2013	6.157	VG	3,379	\$14,952,075		
2247140		BELL BOULEVARD	LIRR PORT WASH BR	L	0		1	S	9/5/2013	5.780	G	4,320	\$19,116,000		+
2247170		DOUGLASTON PARKWAY	LIRR PORT WASH BR	L	0		3	S	10/1/2014	4.542	F	6,300	\$27,877,500		$\perp$
2247680	Q	221ST STREET	LIRR PORT WASH BR	L	0		3	s	8/22/2013	5.926	G	6,050	\$26,771,250	411	_
2248060	Q	MOTOR PARKWAY (PEDESTRIAN)	BELL BOULEVARD		O-PED	Р	2	С	6/29/2014	4.403	F	2,650	\$11,726,250	411	$\perp$
2248070	Q	MOTOR PARKWAY (PEDESTRIAN)	SPRINGFIELD BOULEVARD		O-PED	P	3	С	6/17/2014	3.639	F	2,900	\$12,832,500	411	
2266129	Q	DOUGLASTON PARKWAY	BCIP SOUTHBOUND		Α		1	s	3/10/2014	4.592	F	4,400	\$19,470,000	411	
2266139	Q	DOUGLASTON PARKWAY	BCIP NORTHBOUND		Α		1	s	3/12/2014	4.653	F	6,400	\$28,320,000	411	
7703720	Q	216TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASH BR	L	O-PED		6	С	9/22/2014	3.111	F	960	\$4,248,000	411	
2231610	Q	GUY R. BREWER BOULEVARD	BSOP		Α		4	s	5/20/2013	6.222	VG	12,342	\$54,613,350	413	
2231620	Q	FARMERS BOULEVARD	BSOP		Α		2	s	4/25/2014	4.477	F	6,400	\$28,320,000	413	
2231630	Q	SPRINGFIELD BOULEVARD	BSOP		Α		2	s	4/25/2014	4.591	F	8,500	\$37,612,500	413	
2231640	Q	225TH STREET	BSOP		Α		2	s	5/15/2014	4.614	F	7,000	\$30,975,000	413	
2231650	Q	SUNRISE HWY WESTBOUND	BLP EASTBOUND		Α		1	s	3/21/2014	4.262	F	4,100	\$18,142,500	413	
2231660	Q	SUNRISE HWY WESTBOUND	BLP WESTBOUND		Α		2	s	2/25/2014	4.565	F	5,350	\$23,673,750	413	
2231670	Q	NORTH CONDUIT AVENUE WESTBOUND	BLP EASTBOUND		Α		1	s	1/13/2014	4.917	F	4,000	\$17,700,000	413	
2231680	Q	NORTH CONDUIT AVENUE WESTBOUND	BLP WESTBOUND		Α		2	s	1/20/2014	4.932	F	6,500	\$28,762,500	413	
2231690	Q	FRANCIS LEWIS BOULEVARD	BLP EASTBOUND		Α		1	s	3/17/2014	5.033	G	6,000	\$26,550,000	413	
2231700	Q	FRANCIS LEWIS BOULEVARD	BLP WESTBOUND		А		1	s	3/18/2014	4.700	F	6,000	\$26,550,000	413	
2231710	Q	MERRICK BOULEVARD	BLP NORTHBOUND		Α		1	s	2/11/2014	4.467	F	6,000	\$26,550,000	413	
2231720	Q	MERRICK BOULEVARD	BLP SOUTHBOUND		А		1	s	2/12/2014	4.200	F	6,000	\$26,550,000	413	
2231730	Q	130TH AVENUE	BLP NORTHBOUND		Α		1	s	1/10/2014	5.133	G	4,400	\$19,470,000	413	
2231740	Q	130TH AVENUE	BLP SOUTHBOUND		А		1	s	1/13/2014	4.700	F	4,400	\$19,470,000	413	
2231750	Q	LINDEN BOULEVARD	ВСІР		Α		2	s	2/25/2014	4.432	F	6,700	\$29,647,500	413	
2231760	Q	BCIP	DUTCH BROADWAY-115TH AVENUE		А		1	s	2/28/2014	4.233	F	7,300	\$32,302,500	413	
2231770	Q	BELMONT PARK SOUTH RAMP	BCIP		А	Р	1	s	2/26/2014	4.781	F	3,200	\$14,160,000	413	
2231780	Q	HEMPSTEAD AVENUE	BCIP		А		2	s	2/6/2014	4.000	F	14,200	\$62,835,000	413	
2231790	Q	BELMONT PARK NORTH RAMP	BCIP		А	Р	1	s	1/12/2014	4.563	F	3,400	\$15,045,000	413	$\top$
2231800	Q	SUPERIOR ROAD	BCIP		А		2	s	4/1/2014	4.682	F	7,000	\$30,975,000	413	$\top$
2231819	Q	JAMAICA AVENUE	BCIP		A		2	s	3/19/2014	4.773	F	11,500	\$50,887,500	413	
2231829	Q	BRADDOCK AVENUE	BCIP		A		2	s	3/19/2014	4.886	F	10,600	\$46,905,000	413	+

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD	D2CD3
2231840	Q	HILLSIDE AVENUE	BCIP	RU	A		2	S	3/18/2014	4.211	F	9,672	\$42,798,600	413	
2231850	Q	UNION TURNPIKE	BCIP		Α		2	s	3/19/2014	4.409	F	13,600	\$60,180,000	-	_
2248110	Q	MOTOR PARKWAY (PEDESTRIAN)	ALLEY PARK PEDESTRIAN WALK		O-PED	Р	1	С	6/17/2014	4.056	F	1,000	\$4,425,000	413	
2248129	Q	UNION TURNPIKE	CREEDMOORE HOSPITAL ROAD		0		1	s	6/7/2013	4.867	F	3,500	\$15,487,500	-	
2266149		HEMPSTEAD AVENUE	BCIP RAMP NORTHBOUND		Α		2	s	3/12/2014	4.190	F	9,500	\$42,037,500	$\rightarrow$	_
2266770	Q	BCIP	LAURELTON PARKWAY		Α		1	s	3/7/2014	4.972	F	9,508	\$42,072,900	-	
2268770	Q	SPRINGFIELD BOULEVARD	EQUESTRIAN PATH (ABANDONED)		0		1	s	5/9/2013	5.000	G	1,470	\$6,504,750	413	_
2300130	Q	ROCKAWAY BOULEVARD	HOOK CREEK		wo		3	s	7/15/2013	6.271	VG	18,302	\$80,986,350		
Q00002	Q	BCIP	PATH OPPOSITE 88TH ROAD		А		1	С	6/11/2014	4.667	F	1,272	\$5,628,600	413	
2248130	Q	FLUSHING MEADOW PARK PEDESTRIAN	WILLOW LAKE & 76TH ROAD		WO-PED	Р	4	С	4/20/2002	1.000	С	1,891	\$8,367,675	481	
2248140	Q	FLUSHING MEADW PARK ROAD	STREAM NORTH OF LIE		wo	Р	5	s	7/31/2013	4.481	F	4,100	\$18,142,500	481	
2248260	Q	MEADOW LAKE BRIDGE	MEADOW LAKE		wo	Р	5	s	4/29/2014	4.458	F	4,200	\$18,585,000	481	
2248379	Q	BOATHOUSE BRIDGE	AQUACADE LAKE		wo	Р	5	s	8/1/2013	4.296	F	6,300	\$27,877,500	481	
2230179	Q	JACKIE ROBINSON PARKWAY	METROPOLITAN AVENUE		А		2	s	4/22/2014	5.286	G	8,673	\$38,378,025	482	
2230180	Q	UNION TURNPIKE	JACKIE ROBINSON PARKWAY		А		1	s	1/27/2014	5.672	G	5,359	\$23,713,575	482	
2230190	Q	MARKWOOD ROAD	JACKIE ROBINSON PARKWAY		А		1	s	1/27/2014	5.167	G	4,400	\$19,470,000	482	406
2247620	Q	MYRTLE AVENUE	ABANDONED LIRR		0		3	s	1/2/2014	5.028	G	6,725	\$29,758,125	482	406
2248369	Q	ROCKAWAY BOULEVARD	THURSTON BASIN		wo		2	s	7/16/2013	5.474	G	6,000	\$26,550,000	483	413
2248230	Q	BEACH CHANNEL DRIVE WESTBOUND	BEACH CHANNEL DRIVE EASTBOUND		О		1	s	6/18/2013	4.400	F	3,600	\$15,930,000	484	
2249040	R	TOMPKINS AVENUE	B&O RR (ABANDONED)		0		1	s	4/4/2014	5.953	G	5,096	\$22,549,800	501	
2249070	R	JOHN STREET PEDESTRIAN BRIDGE	B&O RR (ABANDONED)	О	O-PED		2	С	8/15/2014	5.423	G	1,050	\$4,646,250	501	
2249090	R	MORNINGSTAR ROAD	B&O RR (ABANDONED)	О	0		4	s	5/21/2013	4.898	F	7,900	\$34,957,500	501	
2249100	R	GRANITE AVENUE	B&O RR (ABANDONED)	О	0		4	s	2/4/2014	5.966	G	7,300	\$32,302,500	501	
2249110	R	LAKE AVENUE	B&O RR (ABANDONED)	О	0		3	s	4/18/2014	5.148	G	5,900	\$26,107,500	501	
2249120	R	SIMONSON AVENUE	B&O RR (ABANDONED)	0	0		3	s	5/15/2013	5.852	G	5,819	\$25,749,075	501	
2249130	R	VAN NAME AVENUE	B&O RR (ABANDONED)	0	0		3	s	4/16/2014	5.186	G	5,474	\$24,222,450	501	
2249140	R	VAN PELT AVENUE	B&O RR (ABANDONED)	0	0		3	s	5/16/2013	5.576	G	5,000	\$22,125,000	501	
2249160	R	DE HART AVENUE	B&O RR (ABANDONED)	О	o		4	s	5/15/2013	6.389	VG	6,700	\$29,647,500	501	
2249170	R	UNION AVENUE	B&O RR (ABANDONED)	0	o		4	s	5/14/2013	5.315	G	6,500	\$28,762,500	501	
2249180	R	HARBOR ROAD	CONRAIL - EX B&O RR	С	o		4	s	9/16/2013	6.000	G	5,778	\$25,567,650	501	
2249200	R	SOUTH AVENUE	ARLINGTON YARD	С	o		3	s	9/17/2013	6.527	VG	8,500	\$37,612,500	501	
2249510	R	TOMPKINS AVENUE	WILLOW AVENUE, SIRT	s	o		2	s	10/17/2014	5.269	G	5,378	\$23,797,650	501	
2249520	R	HANNAH STREET	SIRT SOUTH SHORE	s	o		10	s	10/18/2013	4.966	F	10,020	\$44,338,500	501	
2249530	R	MINTHORNE STREET PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		26	С	3/13/2014	4.736	F	6,000	\$26,550,000	501	
2249710	R	WEST FOOTBRIDGE	CLOVE LAKE		WO-PED	Р	2	С	4/28/2014	3.857	F	900	\$3,982,500	501	
2249720	R	EAST FOOTBRIDGE	CLOVE LAKE		WO-PED	P	2	С	4/28/2014	4.371	F	900	\$3,982,500	501	
2249730	R	BRIDGE OVER DAM	NORTH END CLOVE LAKE		WO-PED	Р	1	С	5/6/2014	3.351	F	1,000	\$4,425,000	501	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR		Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST CI	D CD2CI
2249760	R	MARTLINGS AVENUE	RICHMOND LAKE DAM		wo		2	s	6/24/2013	4.467	F	7,000	\$30,975,000 50	)1
2249770	R	SOUTH OF BROOKS LAKE	STREAM IN PARK		WO-PED	Р	3	С	11/26/2013	4.946	F	700	\$3,097,500 50	)1
2249780	R	FOOTBRIDGE	BROOKS LAKE DAM		WO-PED	Р	1	С	5/19/2014	3.433	F	800	\$3,540,000 50	)1
2249790	R	FOOTBRIDGE SOUTH OF FOREST AVENUE	STREAM IN PARK		WO-PED	P	3	С	10/21/2014	4.651	F	700	\$3,097,500 50	)1
2249800	R	FOREST AVENUE	CLOVE LAKES PARK STREAM		wo	Р	1	s	11/6/2013	4.567	F	1,600	\$7,080,000 50	)1
2249840	R	TOMPKINS AVENUE	GREENFIELD AVENUE		0		1	s	3/10/2014	4.638	F	2,690	\$11,903,250 50	)1
2269730	R	PARKING EXIT RAMP	SIRT	s	0	F	10	s	11/7/2014	6.097	VG	20,727	\$91,716,975 50	)1
2269740	R	BUS STATION NORTH	SIRT	s	0	F	12	s	11/2/2014	5.600	G	64,605	\$285,877,125 50	)1
2269750	R	BUS STATION SOUTH	SIRT	s	0	F	12	s	11/2/2014	5.280	G	154,688	\$684,494,400 50	)1
2269760	R	NORTH RAMP	SIRT	s	0	F	2	s	10/22/2014	6.431	VG	6,000	\$26,550,000 50	)1
2269770	R	BUS STATION ENTRANCE RAMP	SIRT	s	0	F	19	s	10/11/2013	5.611	G	39,333	\$174,048,525 50	)1
2269780	R	PARKING ENTRANCE RAMP	SIRT	s	0	F	3	s	11/7/2014	5.889	G	8,589	\$38,006,325 50	)1
2269790	R	BUS STATION EXIT RAMP	SIRT	s	0	F	7	s	11/4/2014	5.167	G	28,721	\$127,090,425 50	)1
2270170	R	STATEN ISLAND FERRY PEDESTRIAN BRIDGE	PARKING LOT EXIT ROADWAY		O-PED	F	5	С	7/28/2014	5.583	G	2,917	\$12,907,725 50	)1
2270180	R	BOROUGH PLACE - RAMP A	STATEN ISLAND RAILWAY	s	0	F	1	s	5/9/2014	6.594	VG	1,870	\$8,274,750 50	)1
2240350	R	RICHMOND AVENUE	RICHMOND CREEK		wo		3	s	7/1/2013	5.472	G	32,589	\$144,206,325 50	12
2249400	R	BEACH AVENUE	SIRT SOUTH SHORE	s	0		2	s	8/19/2013	5.364	G	3,700	\$16,372,500 50	12
2249410	R	ROSS AVENUE	SIRT SOUTH SHORE	s	0		2	s	8/20/2013	5.379	G	3,800	\$16,815,000 50	12
2249420	R	ROSE AVENUE	SIRT SOUTH SHORE	s	0		2	s	8/21/2013	5.258	G	3,800	\$16,815,000 50	12
2249430	R	NEW DORP LANE	SIRT SOUTH SHORE	s	0		2	s	9/9/2013	4.958	F	7,600	\$33,630,000 50	12
2249440	R	BANCROFT AVENUE	SIRT SOUTH SHORE	s	0		3	s	10/9/2013	5.393	G	5,900	\$26,107,500 50	12
2249450	R	FREMONT AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		3	С	3/12/2014	4.073	F	800	\$3,540,000 50	12
2249460	R	LINCOLN AVENUE	SIRT SOUTH SHORE	s	0		1	s	9/10/2013	5.190	G	4,500	\$19,912,500 50	12
2249470	R	MIDLAND AVENUE	SIRT SOUTH SHORE	s	0		1	s	10/29/2013	5.466	G	3,000	\$13,275,000 50	12
2249480	R	FINGERBOARD ROAD	SIRT SOUTH SHORE	s	0		2	s	9/26/2013	6.431	VG	5,100	\$22,567,500 50	12
2249490	R	CLOVE ROAD	SIRT SOUTH SHORE	s	0		3	s	10/16/2014	5.778	G	5,104	\$22,585,200 50	12
2249860	R	SLATER BOULEVARD	NEW CREEK		wo		1	s	5/17/2013	5.510	G	2,037	\$9,013,725 50	12
2249870	R	TRAVIS AVENUE	MAIN CREEK		wo		1	s	10/16/2013	5.483	G	1,700	\$7,522,500 50	12
2249880	R	CHELSEA ROAD	SAWMILL CREEK		wo		1	s	5/21/2013	6.633	VG	2,205	\$9,757,125 50	12
2249210	R	MAIN STREET PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		9	С	3/5/2014	4.123	F	400	\$1,770,000 50	13
2249230	R	TRACY AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		9	С	3/5/2014	3.894	F	635	\$2,809,875 50	13
2249240	R	ARTHUR KILL ROAD	SIRT SOUTH SHORE	s	0		1	s	10/14/2014	4.796	F	3,650	\$16,151,250 50	13
2249250	R	BETHEL AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		12	С	3/6/2014	3.525	F	111	\$491,175 50	13
2249269	R	PAGE AVENUE	SIRT SOUTH SHORE	s	0		4	s	9/23/2013	5.806	G	30,710	\$135,891,750 50	13
2249270	R	RICHMOND VALLY ROAD	SIRT SOUTH SHORE	s	0		4	s	9/13/2013	5.164	G	9,440	\$41,772,000 50	13
2249280	R	CHAMP COURT PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		7	С	3/7/2014	4.393	F	595	\$2,632,875 50	13
2249290	R	SEGUINE AVENUE	SIRT SOUTH SHORE	s	0		1	s	8/30/2013	6.016	VG	3,250	\$14,381,250 50	)3

BIN	BORO	FEATURE CARRIED		RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS		•	Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD CD2C	:D3
2249300	R	HUGUENOT AVENUE	SIRT SOUTH SHORE	s	О		2	s	9/24/2013	4.788	F	4,900	\$21,682,500	503	
2249320	R	ALBEE AVENUE	SIRT SOUTH SHORE	s	О		3	s	9/25/2013	4.689	F	6,500	\$28,762,500	503	
2249330	R	ANNADALE ROAD	SIRT SOUTH SHORE	s	О		1	s	8/23/2013	6.233	VG	3,540	\$15,664,500	503	
2249350	R	NELSON AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		3	С	3/10/2014	4.115	F	300	\$1,327,500	503	
2249360	R	GIFFORDS LANE	SIRT SOUTH SHORE	s	О		1	s	10/15/2014	5.625	G	3,042	\$13,460,850	503	
2249370	R	GREAVES AVENUE	SIRT SOUTH SHORE	s	О		1	s	8/22/2013	6.533	VG	2,650	\$11,726,250	503	
2249380	R	GUYON AVENUE	SIRT SOUTH SHORE	s	О		3	s	10/7/2013	4.770	F	6,900	\$30,532,500	503	
2249390	R	CEDARVIEW AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		5	С	3/11/2014	3.615	F	625	\$2,765,625	503	
2249580	R	BELFIELD AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		5	С	3/14/2014	3.980	F	400	\$1,770,000	503	
2249810	R	HYLAN BOULEVARD	LEMON CREEK		wo		1	s	3/10/2014	6.172	VG	11,400	\$50,445,000	503	
2249820	R	ARTHUR KILL ROAD	ARTHUR KILL STREAM		wo		1	s	5/20/2013	4.184	F	1,500	\$6,637,500	503	
2268920	R	AMBOY ROAD	LEMON CREEK		wo		1	s	3/10/2014	6.333	VG	1,310	\$5,796,750	503	
788 OPEN B	RIDGES			OPEN	SPANS 4,339					OPEN SF		14,590,227	64,480,843,350	ALL	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	n VR BL RT	DECK AREA	REPLACEMENT COST	CD CD2CE
2243310	к	2ND AVENUE	LIRR BAY RIDGE	N	0		2	s	10/7/2014	6.208	VG	17,751	\$78,548,175	310
2240310	к	THIRD AVENUE	GOWANUS CANAL		wo		1	s	6/6/2013	6.633	VG	3,200	\$14,160,000	306
2243320	к	3RD AVENUE	LIRR BAY RIDGE	N	0		4	s	9/17/2013	4.917	F	17,230	\$76,242,750	310
2241040	В	THIRD AVENUE	CSX PT MORRIS - (ABANDONED)	С	О		1	s	7/3/2014	4.563	F	2,700	\$11,947,500	201 203
2244160	к	3RD AVENUE	SHORE ROAD DRIVE		0		1	s	6/14/2013	6.727	VG	4,360	\$19,293,000	310
2240069	вм	THIRD AVENUE BRIDGE	HARLEM RIVER		wmo		14	s	9/4/2014	5.789	G	100,232	\$443,526,600	111 201
2240250	к	THIRD STREET	GOWANUS CANAL		WMO		5	s	5/31/2013	4.722	F	4,900	\$21,682,500	306
2231270	к	4TH AVENUE	BSHP		A		2	s	3/21/2014	4.763	F	6,100	\$26,992,500	310
2243330	к	4TH AVENUE	LIRR BAY RIDGE	NT	o		4	s	8/30/2013	5.597	G	13,668	\$60,480,900	310
2243839	к	4TH AVENUE	NYCTA BMT TRACKS	т	0		1	s	8/20/2013	6.250	VG	4,440	\$19,647,000	307
2066100	к	5TH AVENUE	27 X PROSPECT EXPRESSWAY		Α		1	s	4/22/2014	5.063	G	8,800	\$38,940,000	307
2243580	к	5TH AVENUE	LIRR & SEA BEACH	NT	0		4	s	10/27/2014	3.882	F	12,395	\$54,847,875	310
2244480	к	5TH AVENUE	GREENWOOD CEMETERY		0		1	s	9/25/2013	5.333	G	3,600	\$15,930,000	307
2243590	к	6TH AVENUE	LIRR & SEA BEACH	NT	o		2	s	7/16/2013	6.056	VG	14,382	\$63,640,350	310
2243280	к	6TH AVENUIE	LIRR ATLANTIC AVENUE	L	О		9	s	9/5/2014	5.431	G	12,276	\$54,321,300	302
2243600	к	7TH AVENUE	LIRR & SEA BEACH	NT	o		7	s	10/22/2014	4.806	F	18,628	\$82,428,900	310
2243920	к	7TH AVENUE	NYCTA BMT YARD	т	О		2	s	6/30/2014	6.042	VG	4,700	\$20,797,500	307
2243840	к	9TH AVENUE	NYCTA BMT YARD	т	0		5	s	8/19/2013	5.736	G	12,440	\$55,047,000	312
2243940	к	9TH AVENUE	NYCTA IND SUBWAY	т	О		5	s	8/19/2013	4.737	F	6,300	\$27,877,500	312
2243630	к	11TH AVENUE	LIRR & SEA BEACH	NT	О		5	s	7/1/2014	5.985	G	9,700	\$42,922,500	310
2245209	М	11TH AVENUE	AMTRAK 30 STREET BRANCH	А	О		2	s	6/4/2014	4.426	F	15,400	\$68,145,000	104
2245010	м	11TH AVENUE VIADUCT	LIRR WEST SIDE YARD	AL	0		39	s	12/12/2014	4.056	F	149,100	\$659,767,500	104
2243640	к	13TH AVENUE	LIRR & SEA BEACH	NT	О		5	s	7/15/2013	4.972	F	16,000	\$70,800,000	310
2231970	Q	14TH AVENUE	ВСІР		А		2	s	1/29/2014	4.523	F	8,100	\$35,842,500	407
2243650	к	14TH AVENUE	LIRR BAY RIDGE	N	О		1	s	10/3/2014	6.167	VG	4,720	\$20,886,000	311
2243340	к	15TH AVENUE	LIRR BAY RIDGE	N	o		1	s	10/3/2014	4.872	F	3,614	\$15,991,950	311
2243670	к	15TH AVENUE	BMT SEA BEACH	т	О		4	s	6/24/2013	6.136	VG	16,020	\$70,888,500	311
2243360	к	16TH AVENUE	LIRR BAY RIDGE	N	0		1	s	10/3/2014	5.350	G	4,345	\$19,226,625	311
2243680	к	16TH AVENUE	BMT SEA BEACH	т	0		3	s	6/6/2014	5.481	G	6,816	\$30,160,800	311
2243370	к	17TH AVENUE	LIRR BAY RIDGE	N	o		1	s	10/2/2014	4.745	F	3,406	\$15,071,550	312
2243690	к	17TH AVENUE	BMT SEA BEACH	т	0		4	s	5/30/2014	6.173	VG	8,946	\$39,586,050	311
2231300	к	17TH AVENUE PEDESTRIAN BRIDGE	вѕнр		A-PED	Р	1	С	8/14/2014	3.667	F	2,100	\$9,292,500	311
2243380	к	18TH AVENUE	LIRR BAY RIDGE	N	o		1	s	10/2/2014	4.625	F	6,006	\$26,576,550	312
2243700	к	18TH AVENUE	BMT SEA BEACH	т	o		1	s	7/25/2013	6.632	VG	5,200	\$23,010,000	311
2243710	к	19TH AVENUE	BMT SEA BEACH	т	О		4	s	5/29/2014	4.237	F	4,800	\$21,240,000	311
2243720	к	20TH AVENUE	BMT SEA BEACH	т	0		1	s	6/2/2014	6.421	VG	7,000	\$30,975,000	311
2243820	к	21ST AVENUE	BMT SEA BEACH	т	0		4	s	7/9/2014	4.289	F	21,400	\$94,695,000	311

BIN	BORO	FEATURE CARRIED		RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating		DECK AREA	REPLACEMENT COST	CD CD2C
2247270	Q	21ST STREET	LIRR N SHORE YARD	L	o		6	s	9/11/2013	5.153	G	17,590	\$77,835,750	402
224004J	М	25X TO/FROM 2ND AVENUE	NYC GARAGE		OE		14	s	4/21/2014	4.829	F	22,058	\$97,606,650	108
2231330	к	27TH AVENUE PEDESTRIAN BRIDGE	BSHP		A-PED	P	1	С	1/27/2014	4.021	F	2,100	\$9,292,500	313
2231890	Q	28TH AVENUE PEDESTRIAN BRIDGE	BCIP		A-PED	P	24	С	6/4/2014	4.615	F	7,600	\$33,630,000	411
2230730	Q	31ST AVENUE	278I NORTHBOUND (BQE WEST LEG)		Α		1	s	6/25/2013	6.217	VG	5,875	\$25,996,875	401
2230657	Q	31ST STREET	278I (B.Q.E.)		Α		2	s	12/5/2012	4.569	F	9,500	\$42,037,500	401
2230640	Q	32ND STREET	278I (B.Q.E.)		Α		2	s	6/6/2013	4.875	F	8,100	\$35,842,500	401
2230630	Q	35TH STREET	278I (B.Q.E.)		Α		4	s	3/14/2014	4.667	F	9,000	\$39,825,000	401
2247370	Q	37TH AVENUE	CSX - HELLGATE	С	o		1	s	8/1/2013	6.234	VG	6,868	\$30,390,900	402
2230620	Q	37TH STREET	278I (B.Q.E.)		А		2	s	3/12/2014	4.681	F	5,300	\$23,452,500	401
2247330	Q	39TH STREET (NORTH)	SUNNYSIDE YARD	Α	o		14	s	9/30/2013	6.556	VG	48,200	\$213,285,000	402 401
2247640	Q	39TH STREET (SOUTH)	AMTRAK & LIRR YARD	AL	o		9	s	10/7/2013	5.903	G	34,100	\$150,892,500	402
2230570	Q	41ST AVENUE	278I (B.Q.E.)		Α		2	s	10/22/2014	6.735	VG	8,580	\$37,966,500	402
2247390	Q	41ST AVENUE	CSX - HELLGATE	С	О		2	s	8/1/2013	4.942	F	4,400	\$19,470,000	402 404
2247410	Q	43RD AVENUE	CSX TRANSPORT	С	0		1	s	8/9/2013	5.000	G	4,800	\$21,240,000	402 404
2247420	Q	44TH AVENUE	CSX TRANSPORT	С	0		1	s	8/9/2013	5.000	G	5,100	\$22,567,500	402 404
2230840	Q	44TH STREET	GCP		А		2	s	5/13/2014	4.764	F	5,000	\$22,125,000	401
2247430	Q	45TH AVENUE	CSX TRANSPORT	С	О		1	s	8/9/2013	5.306	G	2,400	\$10,620,000	402 404
2230820	Q	47TH STREET	GCP		Α		2	s	4/28/2014	4.889	F	5,700	\$25,222,500	401
2247290	Q	49TH AVENUE	LIRR,AMTRAK	L	0		5	s	11/26/2014	3.819	F	20,400	\$90,270,000	402
2230800	Q	49TH STREET	278I (BQE WEST LEG)		Α		2	s	4/7/2014	5.278	G	4,900	\$21,682,500	401
2230890	Q	49TH STREET	GCP		Α		2	s	5/15/2014	4.444	F	6,350	\$28,098,750	401
2066002	Q	4951 (2066000)	WOODHAVEN BOULEVARD		Α		2	s	5/23/2013	5.620	G	25,200	\$111,510,000	406 404
2243400	к	50TH STREET	LIRR BAY RIDGE	N	o		2	s	9/5/2013	4.731	F	7,100	\$31,417,500	312
1247280	Q	51ST AVENUE PEDESTRIAN BRIDGE (2247280)	LIRR MAIN LINE	L	O-PED		5	С	10/8/2013	3.018	F	700	\$3,097,500	402
2243390	к	52ND STREET	LIRR BAY RIDGE	N	О		1	s	10/1/2014	6.017	VG	3,293	\$14,571,525	312
2247190	Q	55TH AVENUE PEDESTRIAN BRIDGE	LIRR MAIN LINE	L	O-PED		3	С	9/17/2014	4.120	F	1,296	\$5,734,800	404
2247450	Q	57TH AVENUE	CSX TRANSPORT	С	О		1	s	8/13/2013	5.976	G	2,248	\$9,947,400	405
2247650	Q	60TH ROAD PEDESTRIAN BRIDGE	LIRR MAIN LINE	L	O-PED		3	С	9/16/2014	5.000	G	1,200	\$5,310,000	405 406
2243350	к	60TH STREET	LIRR BAY RIDGE	N	О		1	s	9/4/2013	6.133	VG	3,900	\$17,257,500	311
2247540	Q	60TH STREET	LIRR MONTAUK DIV	L	О		2	s	9/3/2013	5.208	G	5,340	\$23,629,500	405
2230520	Q	65TH PLACE	278I (B.Q.E.)		А		2	s	2/6/2014	5.889	G	11,668	\$51,630,900	402
2247160	Q	65TH PLACE	LIRR MAIN LINE	L	О		3	s	9/5/2013	6.441	VG	8,381	\$37,085,925	402
2243730	к	65TH STREET	BMT SEA BEACH	т	О		4	s	5/23/2014	5.132	G	12,000	\$53,100,000	311
2247150	Q	65TH STREET	LIRR MAIN LINE	L	О		3	s	9/5/2013	6.375	VG	6,344	\$28,072,200	402
1247200	Q	67TH AVENUE PEDESTRIAN BRIDGE (2247200)	LIRR MAIN LINE	L	O-PED		3	С	9/24/2014	4.219	F	1,300	\$5,752,500	406
2065950	Q	69TH STREET	495I (L.I.E.)		А		2	s	7/8/2013	5.250	G	10,336	\$45,736,800	405

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG	Inspection Date	Condition Rating	VR BL	DECK AREA	REPLACEMENT COST C	D CD2 CD3
				RO				SR	4/04/0044		RT			
2230550	Q	69TH STREET	278I (B.Q.E.)		A		2	S	1/31/2014	5.263	G	12,600	\$55,755,000 46	
2247490		69TH STREET	CSX TRANSPORT	С	0		1	S	11/10/2014	4.979	F	6,175	\$27,324,375 40	
2266160	Q	678I SOUTHBOUND TO BCIP EASTBOUND	ACCESS ROAD FROM 678I - BCIP		A		1	S	6/17/2014	3.781	F	2,300	\$10,177,500 46	
2230560	Q	70TH STREET	278I (B.Q.E.)		Α		2	s	10/22/2014	6.556	VG	8,580	\$37,966,500 46	
2248300	Q	71ST AVENUE	COOPER AVENUE		0		1	s	7/1/2013	4.373	F	2,800	\$12,390,000 40	05
2246150	М	72ND STREET CROSS DRIVE (TERRACE BRIDGE)	PEDESTRIAN PATH TO FOUNTAIN		0	Р	3	s	2/24/2014	5.786	G	7,300	\$32,302,500 10	54
2246160	М	73RD STREET PEDESTRIAN BRIDGE (BOW BRIDGE)	THE LAKE		WO-PED	P	1	С	4/8/2014	3.946	F	1,700	\$7,522,500 10	54
2246440	М	79TH STREET PEDESTRIAN BRIDGE	TRANSVERSE ROAD #2		O-PED	P	1	С	7/13/2014	3.926	F	5,900	\$26,107,500 10	54
2267717	М	79TH STREET PEDESTRIAN PLAZA	79TH STREET BOAT BASIN GARAGE		Α	P	10	s	5/10/2013	4.444	F	27,400	\$121,245,000 10	07
226771B	М	79TH STREET RAMP TO GARAGE	79TH STREET BOAT BASIN GARAGE		AR	Р	21	s	5/14/2014	4.452	F	8,989	\$39,776,325	07
226771A	М	79TH STREET RAMP TO HHP	79TH STREET BOAT BASIN GARAGE		AR	P	4	s	5/8/2014	4.221	F	3,131	\$13,854,675	07
2267718	м	79TH STREET TRAFFIC CIRCLE	79TH STREET PEDESTRIAN PLAZA		Α	Р	34	s	5/15/2013	3.738	F	24,130	\$106,775,250	07
2247220	Q	80TH ROAD	LIRR MAIN LINE	L	О		3	s	8/30/2013	4.794	F	4,100	\$18,142,500 40	09
2247570	Q	BOTH STREET	77TH AVENUE - LIRR MT	L	o		5	s	10/21/2014	4.932	F	11,725	\$51,883,125 46	05
2231250	к	81ST STREET PEDESTRIAN BRIDGE	ВЅНР		A-PED	P	5	С	3/25/2014	4.761	F	3,100	\$13,717,500 3	10
2247230	Q	82ND AVENUE	LIRR MAIN LINE	L	О		3	s	8/30/2013	5.311	G	4,100	\$18,142,500 40	09
2243570	к	86TH STREET	BMT SEA BEACH	т	0		1	s	6/4/2014	5.797	G	12,167	\$53,838,975	13
2243610	к	8TH AVENUE	LIRR & SEA BEACH	NT	0		2	s	7/15/2013	6.181	VG	10,834	\$47,940,450	10
1247010	Q	91ST PLACE (2247010)	LIRR PT WASH BR	L	О		1	s	9/3/2013	6.500	VG	2,760	\$12,213,000 46	04
2231260	к	92ND STREET PEDESTRIAN BRIDGE	ВЅНР		A-PED	P	6	С	8/6/2014	3.541	F	3,000	\$13,275,000	10
2247020	Q	94TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASH BR	L	O-PED		5	С	9/12/2014	4.231	F	905	\$4,004,625	04
2248250	Q	102ND STREET	HAWTREE BASIN		wo		3	s	7/18/2013	6.015	VG	4,900	\$21,682,500 4	10
2231730	Q	130TH AVENUE	BLP NORTHBOUND		Α		1	s	1/10/2014	5.133	G	4,400	\$19,470,000 4	13
2231740	Q	130TH AVENUE	BLP SOUTHBOUND		Α		1	s	1/13/2014	4.700	F	4,400	\$19,470,000 4	13
2231590	Q	130TH STREET	BSOP		Α		2	s	1/30/2014	4.659	F	6,800	\$30,090,000 4	10
2240089	вм	145TH STREET BRIDGE	HARLEM RIVER		WMO		8	s	8/15/2013	6.278	VG	56,700	\$250,897,500 1	10 204 201
2231980	Q	147TH STREET	BCIP		Α		2	s	1/29/2014	4.705	F	6,300	\$27,877,500 46	07
2247070	Q	147TH STREET	LIRR PORT WASH BR	L	О		1	s	8/22/2013	5.392	G	2,800	\$12,390,000 40	07
2247090	Q	149TH PLACE	LIRR PORT WASH BR	L	0		2	s	8/21/2013	5.000	G	4,300	\$19,027,500 40	07
2231960	Q	149TH STREET	всір		Α		2	s	1/29/2014	4.795	F	6,210	\$27,479,250 40	07
2247080	Q	149TH STREET	LIRR PORT WASH BR	L	0		1	s	10/31/2014	4.776	F	4,100	\$18,142,500 40	07
2231950	Q	150TH STREET	всір		Α		2	s	2/21/2014	4.591	F	5,900	\$26,107,500 46	07
2247100	Q	150TH STREET	LIRR PORT WASH BR	L	0		2	s	8/21/2013	6.029	VG	7,830	\$34,647,750 40	07
2231920	Q	160TH STREET	всір		Α		2	s	6/17/2013	5.694	G	5,550	\$24,558,750 40	07
2240650	Q	163RD AVENUE PEDESTRIAN BRIDGE	HAWTREE BASIN		WO-PED		13	С	5/12/2014	4.037	F	5,000	\$22,125,000 4	10
7705510	Q	167TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASH BR	L	O-PED		3	С	9/11/2014	4.000	F	840	\$3,717,000 46	07
206672A	В	174TH STREET-NORTH PEDESTRIAN BRIDGE	8951 - SHERIDAN EXPRESSWAY		A-PED		4	С	4/1/2014	4.667	F	1,800	\$7,965,000	)9

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD	;D2C	CD3
206672B	В	174TH STREET-SOUTH PEDESTRIAN BRIDGE	895I - SHERIDAN EXPRESSWAY		A-PED		4	С	4/17/2014	4.750	F	1,900	\$8,407,500	209		
2241259	В	204TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	М	O-PED	P	1	С	10/20/2014	3.845	F	4,700	\$20,797,500	227	207	
7703720	Q	216TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASH BR	L	O-PED		6	С	9/22/2014	3.111	F	960	\$4,248,000	411		
2247680	Q	221ST STREET	LIRR PORT WASH BR	L	o		3	s	8/22/2013	5.926	G	6,050	\$26,771,250	411		
2231640	Q	225TH STREET	BSOP		Α		2	s	5/15/2014	4.614	F	7,000	\$30,975,000	413		
2266540	В	2781	BRUCKNER BOULVARD		А		2	s	7/10/2013	4.435	F	32,900	\$145,582,500	201		
2230460	к	278I (B.Q.E.)	PEARL STREET		Α		1	s	1/15/2014	5.467	G	4,500	\$19,912,500	302		
2230470	к	278I (B.Q.E.)	JAY STREET		Α		1	s	1/15/2014	4.833	F	5,100	\$22,567,500	302		
2230480	к	278I (B.Q.E.)	PROSPECT STREET		Α		1	s	2/21/2014	4.852	F	8,400	\$37,170,000	302		
2230490	к	278I (B.Q.E.)	SANDS STREET		А		1	s	2/27/2014	5.019	G	12,600	\$55,755,000	302		
2230500	к	278I (B.Q.E.)	RAMP TO BOE EASTBOUND		Α		1	s	2/10/2014	4.967	F	1,300	\$5,752,500	302		
2230510	к	278I (B.Q.E.)	NASSAU STREET		Α		6	s	7/3/2014	5.169	G	51,200	\$226,560,000	302		
2230669	Q	278I (B.Q.E.)	35TH AVENUE		A		1	s	8/2/2013	6.390	VG	13,135	\$58,122,375	402		
2230679	Q	278I (B.Q.E.)	34TH AVENUE		Α		1	s	5/17/2013	6.068	VG	7,793	\$34,484,025	402		
2230680	Q	278I (B.Q.E.)	NORTHERN BOULEVARD		Α		1	s	11/5/2014	6.016	VG	27,011	\$119,523,675	402	401	
2230430	к	278I (B.Q.E.) RAMP TO BROOKLYN BRIDGE	PROSPECT STREET		Α		1	s	1/6/2014	5.000	G	1,100	\$4,867,500	302		
2230780	Q	278I (BQE EAST LEG)	30TH AVENUE		А		1	s	5/24/2013	6.206	VG	7,071	\$31,289,175	403	401	
2230770	Q	278I (BQE WEST LEG)	30TH AVENUE		Α		1	s	5/24/2013	6.322	VG	6,199	\$27,430,575	401		
2230888	к	278I EASTBOUND (B.Q.E.)	CADMAN PLAZA / 278I WESTBOUND		А		2	s	7/28/2014	5.263	G	4,500	\$19,912,500	302		
2268498	к	278I EASTBOUND (B.Q.E.)	278I WESTBOUND (BQE) - PROMENADE		А		69	s	11/26/2014	3.754	F	133,708	\$591,657,900	302		
2268508	к	278I EASTBOUND (B.Q.E.)	278I WESTBOUND (BQE) - BROOKLYN BRIDGE		А		11	s	7/5/2013	4.103	F	20,529	\$90,840,825	302		
2268518	к	278I EASTBOUND (B.Q.E.)	278I WESTBOUND (B.Q.E.)		А		5	s	7/5/2013	4.310	F	9,275	\$41,041,875	302		
2230410	к	278I EASTBOUND (B.Q.E.)	WASHINGTON STREET		Α		1	s	7/16/2014	4.500	F	2,500	\$11,062,500	302		
2230450	к	278I EASTBOUND (B.Q.E.)	ADAMS STREET		Α		1	s	1/15/2014	4.933	F	2,500	\$11,062,500	302		
2230858	к	278I EASTBOUND (B.Q.E.)	JORALEMON STREET / BQE WESTBOUND		А		1	s	11/5/2013	4.619	F	5,900	\$26,107,500	302		
2230700	Q	278I NORTHBOUND (BQE EAST LEG)	32ND AVENUE (TO BQE WEST LEG)		Α		8	s	11/5/2014	6.352	VG	31,600	\$139,830,000	401	403	
2230760	Q	278I NORTHBOUND (BQE EAST LEG)	31ST AVENUE		А		1	s	7/23/2014	6.356	VG	4,161	\$18,412,425	401		
2230690	Q	278I NORTHBOUND (BQE WEST LEG)	32ND AVENUE		Α		1	s	6/2/2014	6.407	VG	4,080	\$18,054,000	401		
2230830	Q	278I NORTHBOUNDB (BQE WEST LEG)	GCP		Α		2	s	4/28/2014	4.583	F	7,600	\$33,630,000	401		
2230720	Q	278I SOUTHBOUND (BQE EAST LEG)	278I NORTHBOUND (BQE WEST LEG)		Α		3	s	6/25/2013	6.182	VG	20,896	\$92,464,800	401		
2230710	Q	278I SOUTHBOUND (BQE WEST LEG)	32ND AVENUE		Α		1	s	6/28/2013	6.424	VG	5,240	\$23,187,000	401		
2230750	Q	278I SOUTHBOUND (BQE EAST LEG)	31ST AVENUE		Α		1	s	6/27/2013	6.508	VG	4,221	\$18,677,925	401	403	
2230740	Q	278I SOUTHBOUND (BQE WEST LEG)	31ST AVENUE		Α		1	s	6/27/2013	6.217	VG	5,246	\$23,213,550	401		
2230887	к	278I WESTBOUND (B.Q.E.)	CADMAN PLAZA		А		2	s	7/25/2014	4.403	F	4,500	\$19,912,500	302	$\top$	
2268497	к	278I WESTBOUND (B.Q.E.)	FURMAN STREET - 278I EASTBOUND		А		45	s	8/30/2013	4.357	F	86,406	\$382,346,550	302	丁	
2268507	к	278I WESTBOUND (B.Q.E.)	YORK STREET		А		6	s	7/2/2013	4.071	F	10,388	\$45,966,900	302	$\top$	
2268517	к	278I WESTBOUND (B.Q.E.)	FURMAN STREET		А		7	s	7/1/2013	4.000	F	10,988	\$48,621,900	302	$\top$	$\exists$

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED R.	L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating		DECK AREA	REPLACEMENT COST	CD C	D2CD3
2230420	к	278I WESTBOUND (B.Q.E.)	WASHINGTON STREET		Α		1	s	7/16/2014	5.047	G	2,500	\$11,062,500	302	
2230440	к	278I WESTBOUND (B.Q.E.)	ADAMS STREET		Α		1	s	1/15/2014	5.200	G	2,700	\$11,947,500	302	
2230857	к	278I WESTBOUND (B.Q.E.)	JORALEMON STREET		Α		1	s	3/11/2014	5.000	G	2,100	\$9,292,500	302	
2246490	м	A.C. POWELL BOULEVARD NORTHBOUND	A.C. POWELL BOULEVARD		o		1	s	1/31/2014	4.347	F	3,000	\$13,275,000	110	
2249320	R	ALBEE AVENUE	SIRT SOUTH SHORE	s	0		3	s	9/25/2013	4.689	F	6,500	\$28,762,500	503	
2268920	R	AMBOY ROAD	LEMON CREEK		wo		1	s	3/10/2014	6.333	VG	1,310	\$5,796,750	503	
2247530	Q	ANDREWS AVENUE	LIRR MONTAUK DIV	L	o		1	s	9/3/2013	7.000	VG	1,765	\$7,810,125	405	
2249330	R	ANNADALE ROAD	SIRT SOUTH SHORE	s	o		1	s	8/23/2013	6.233	VG	3,540	\$15,664,500	503	
2249240	R	ARTHUR KILL ROAD	SIRT SOUTH SHORE	s	o		1	s	10/14/2014	4.796	F	3,650	\$16,151,250	503	
2249820	R	ARTHUR KILL ROAD	ARTHUR KILL STREAM		wo		1	s	5/20/2013	4.184	F	1,500	\$6,637,500	503	
2230810	Q	ASTORIA BOULEVARD EASTBOUND	278I (BQE WEST LEG)		Α		4	s	3/14/2014	4.279	F	8,200	\$36,285,000	401	
2243569	к	ATLANTIC AVENUE	LIRR ATLANTIC AVENUE	L	o		75	s	6/18/2014	3.620	F	135,100	\$597,817,500	316 3	.05
2244170	к	ATLANTIC AVENUE SERVICE ROAD EASTBOUND	EAST NEW YORK AVENUE		0		2	s	8/5/2013	5.474	O	3,192	\$14,124,600	305	
2244180	к	ATLANTIC AVENUE SERVICE ROAD WESTBOUND	EAST NEW YORK AVENUE		О		2	s	8/5/2013	5.105	G	5,600	\$24,780,000	305	
2243530	к	AVENUE H	LIRR BAY RIDGE	N	o		2	s	9/9/2013	5.956	G	35,100	\$155,317,500	318	
2243750	к	AVENUE O	BMT SEA BEACH	т	o		1	s	8/12/2013	5.706	O	4,658	\$20,611,650	311	
2243760	к	AVENUE P	BMT SEA BEACH	т	o		1	s	8/13/2013	6.140	VG	5,544	\$24,532,200	311	
2243790	к	AVENUE S	BMT SEA BEACH	т	o		1	s	7/2/2013	5.967	O	5,360	\$23,718,000	315	
2243800	к	AVENUE T	BMT SEA BEACH	т	О		1	s	7/3/2013	6.200	VG	5,360	\$23,718,000	311	
2243810	к	AVENUE U	BMT SEA BEACH	т	o		1	s	6/20/2014	5.294	G	5,880	\$26,019,000	315	
2249440	R	BANCROFT AVENUE	SIRT SOUTH SHORE	s	o		3	s	10/9/2013	5.393	G	5,900	\$26,107,500	502	
2241180	В	BARRETTO STREET	AMTRAK - CSX	AC	o		1	s	11/18/2014	5.813	G	5,313	\$23,510,025	202	
2232000	М	BATTERY PLACE	FDR DRIVE		AT		2	s	10/16/2013	5.182	О	142,000	\$628,350,000	101	
2231290	к	BAY 8TH STREET	ВЅНР		Α		1	s	6/11/2013	5.921	G	4,950	\$21,903,750	311	
2243740	к	BAY PARKWAY	BMT SEA BEACH	т	o		4	s	5/22/2014	4.658	F	16,800	\$74,340,000	311	
2231760	ρ	BCIP	DUTCH BROADWAY-115TH AVENUE		Α		1	s	2/28/2014	4.233	F	7,300	\$32,302,500	413	
2231900	Q	ВСІР	TOTTEN AVENUE		А		1	s	5/12/2014	4.609	F	4,900	\$21,682,500	407	
2266770	ο	BCIP	LAURELTON PARKWAY		Α		1	s	3/7/2014	4.972	F	9,508	\$42,072,900	413	
Q00002	ρ	BCIP	PATH OPPOSITE 88TH ROAD		Α		1	С	6/11/2014	4.667	F	1,272	\$5,628,600	413	
2076109	В	BE NORTHBOUND SERVICE ROAD	HUTCHINSON RIVER PARKWAY		Α		2	s	8/15/2013	5.105	G	7,800	\$34,515,000	210	
2076129	В	BE SOUTHBOUND SERVICE ROAD	HUTCHINSON RIVER PARKWAY		Α		2	s	1/16/2014	5.079	G	7,100	\$31,417,500	210	
2249400	R	BEACH AVENUE	SIRT SOUTH SHORE	s	o		2	s	8/19/2013	5.364	G	3,700	\$16,372,500	502	
2248230	Q	BEACH CHANNEL DRIVE WESTBOUND	BEACH CHANNEL DRIVE EASTBOUND		o		1	s	6/18/2013	4.400	F	3,600	\$15,930,000	484	
2243490	к	BEDFORD AVENUE	LIRR BAY RIDGE	N	o		6	s	9/15/2014	5.097	G	12,000	\$53,100,000	314	
2241840	В	BEDFORD PARK BOULEVARD	METRO NORTH RR HAR	м	o		1	s	4/28/2014	4.656	F	6,400	\$28,320,000	227 2	:07
2241930	В	BEDFORD PARK BOULEVARD	NYCTA IND YARDS	т	o		4	s	10/31/2014	5.347	G	46,300	\$204,877,500	207	
2249580	R	BELFIELD AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		5	С	3/14/2014	3.980	F	400	\$1,770,000	503	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Conditio Rating		DECK AREA	REPLACEMENT COST	CD CI	)2CD3
2247140	Q	BELL BOULEVARD	LIRR PORT WASH BR	L	o		1	s	9/5/2013	5.780	G	4,320	\$19,116,000	411	
2231790	Q	BELMONT PARK NORTH RAMP	BCIP		Α	Р	1	s	1/12/2014	4.563	F	3,400	\$15,045,000	413	
2231770	Q	BELMONT PARK SOUTH RAMP	BCIP		Α	Р	1	s	2/26/2014	4.781	F	3,200	\$14,160,000	413	
2249250	R	BETHEL AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		12	С	3/6/2014	3.525	F	111	\$491,175	503	
2243100	к	BEVERLY ROAD	BMT SUBWAY, BRIGHTON	Т	0		3	s	6/3/2014	4.263	F	4,200	\$18,585,000	314	
2243900	к	BLAKE AVENUE	LIRR BAY RIDGE	N	o		3	s	9/26/2014	4.927	F	4,912	\$21,735,600	316	
2248379	Q	BOATHOUSE BRIDGE	AQUACADE LAKE		wo	Р	5	s	8/1/2013	4.296	F	6,300	\$27,877,500	481	
2240410	Q	BORDEN AVENUE	DUTCH KILLS		wмо		2	s	7/5/2013	4.792	F	8,400	\$37,170,000	402	
2270180	R	BOROUGH PLACE - RAMP A	STATEN ISLAND RAILWAY	s	o	F	1	s	5/9/2014	6.594	VG	1,870	\$8,274,750	501	
2229579	В	BOSTON ROAD	HUTCHINSON RIVER		wo		14	s	5/9/2014	4.042	F	95,700	\$423,472,500	212	
2242110	В	BOSTON ROAD	BRONX RIVER		wo		1	s	2/26/2014	4.227	F	6,200	\$27,435,000	227	
2242100	В	BOTANICAL GARDEN ROAD	TWIN LAKES		wo	Р	1	s	2/26/2014	4.833	F	2,200	\$9,735,000	227	
2247050	Q	BOWNE AVENUE	LIRR PORT WASH BR	L	o		1	s	9/24/2014	5.451	G	4,974	\$22,009,950	407	
2231829	Q	BRADDOCK AVENUE	ВСІР		А		2	s	3/19/2014	4.886	F	10,600	\$46,905,000	413	
2249730	R	BRIDGE OVER DAM	NORTH END CLOVE LAKE		WO-PED	Р	1	С	5/6/2014	3.351	F	1,000	\$4,425,000	501	
2230590	Q	BROADWAY	278I (B.Q.E.)		А		2	s	12/6/2012	5.789	G	16,000	\$70,800,000	402	
2240137	вм	BROADWAY BRIDGE	HARLEM RIVER	тм	wмo		3	s	12/17/2014	3.806	F	46,848	\$207,302,400	112 20	)7 208
2242072	В	BRONX BOULEVARD NORTHBOUND	BRONX RIVER		wo		1	s	3/27/2014	4.867	F	1,800	\$7,965,000	212	
2242082	В	BRONX BOULEVARD NORTHBOUND	BRONX RIVER		wo		1	s	3/26/2014	4.467	F	2,800	\$12,390,000	212	
2242071	В	BRONX BOULEVARD SOUTHBOUND	BRONX RIVER		wo		1	s	3/27/2014	4.367	F	1,800	\$7,965,000	212	
2242081	В	BRONX BOULEVARD SOUTHBOUND	BRONX RIVER		wo		1	s	3/26/2014	4.300	F	2,800	\$12,390,000	212	
2075849	В	BRONX PELHAM PARKWAY	HUTCHINSON RIVER PARKWAY		А		2	s	5/8/2014	3.974	F	17,600	\$77,880,000	210 21	11
2229560	В	BRONX PELHAM PARKWAY	AMTRAK - CSX	AC	А		3	s	11/12/2014	4.486	F	24,591	\$108,815,175	211	
2065629	В	BRONX RIVER PARKWAY	BOSTON ROAD - BX ZOO		А		1	s	8/14/2013	5.138	G	6,300	\$27,877,500	227	
2270250	В	BROOKE AVENUE	CSX TRANS - PT MORRIS		О		1	s	7/11/2014	3.727	F	21,035	\$93,079,875	201	
2243520	к	BROOKLYN AVENUE	LIRR BAY RIDGE	N	0		3	s	8/8/2013	5.873	G	4,500	\$19,912,500	318	
2240019	км	BROOKLYN BRIDGE	EAST RIVER		WEO		75	s	12/5/2014	3.139	F	503,788	\$2,229,261,900	103 30	)2 101
2267860	к	BROOKLYN BRIDGE APPROACH	STORAGE (SANDS STREET)		О		1	s	5/23/2014	4.344	F	6,490	\$28,718,250	302	
2268350	к	BROOKLYN PROMENADE	278I EASTBOUND (BQE)		A-PED	Р	35	С	8/10/2014	3.552	F	46,184	\$204,364,200	302	
2241099	В	BRUCKNER BOULEVARD	CSX TRANS - PT MORRIS	С	О		1	s	7/16/2014	6.067	VG	6,700	\$29,647,500	201	
2076929	В	BRUCKNER EXPRESSWAY	CSX - HUNTS POINT	С	А		1	s	8/28/2013	4.567	F	3,800	\$16,815,000	202	
2075352	В	BRUCKNER EXPRESSWAY NORTHBOUND	AMTRAK - CSX	AC	А		1	s	10/30/2014	6.190	VG	10,900	\$48,232,500	202	$\top$
1066510	В	BRUCKNER EXPRESSWAY SERVICE ROAD	WESTCHESTER CREEK		WMA		17	s	9/17/2014	3.226	F	39,400	\$174,345,000	209	
2066671	В	BRUCKNER EXPRESSWAY SOUTHBOUND	BRONX RIVER		WA		3	s	10/15/2013	5.222	G	12,400	\$54,870,000	202 20	)9
2075351	В	BRUCKNER EXPRESSWAY SOUTHBOUND	AMTRAK - CSX	AC	А		1	s	10/29/2014	5.698	G	11,600	\$51,330,000	202	
2066672	В	BRUCKNER EXRESSWAY NORTHBOUND	BRONX RIVER		WA		8	s	10/15/2013	4.418	F	22,300	\$98,677,500	202 20	)9
2241210	В	BRYANT AVENUE	AMTRAK - CSX	AC	О		1	s	11/19/2014	3.186	F	5,300	\$23,452,500	202	$\top$

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED RAI L RO	TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD CD2CE
2231249	к	BSHP	BAY RIDGE AVENUE	А		1	s	3/26/2014	3.625	F	4,900	\$21,682,500	310
2231319	к	BSHP	BAY PARKWAY	А		1	s	6/19/2014	4.533	F	7,200	\$31,860,000	311
2231329	к	BSHP	26TH AVENUE	А		1	s	4/1/2014	4.600	F	6,700	\$29,647,500	313
2231360	к	BSHP	OCEAN PARKWAY	А		3	s	7/16/2014	6.448	VG	29,637	\$131,143,725	313
2231409	к	BSHP	SHEEPSHEAD BAY ROAD	А		1	s	4/1/2014	4.738	F	6,500	\$28,762,500	315
2231419	к	BSHP	OCEAN AVENUE	А		3	s	3/25/2014	4.306	F	14,000	\$61,950,000	315
2231429	к	BSHP	BEDFORD AVENUE	А		3	s	4/23/2014	4.278	F	12,000	\$53,100,000	315
2231439	к	BSHP	NOSTRAND AVENUE	А		3	s	3/25/2014	4.264	F	13,000	\$57,525,000	315
2231450	к	BSHP	GERRITSEN INLET	WA		11	s	8/12/2014	3.418	F	52,000	\$230,100,000	356
2231479	к	BSHP	MILL BASIN	WMA		14	s	11/4/2014	3.269	F	73,500	\$325,237,500	318
2231499	к	BSHP	ROCKAWAY PARKWAY	А		1	s	11/5/2014	7.000	VG	10,370	\$45,887,250	356
2231509	к	BSHP	FRESH CREEK	WA		3	s	11/25/2013	6.831	VG	40,095	\$177,420,375	356
2231482	к	BSHP EASTBOUND	PAERDEGAT BASIN	WA		5	s	11/4/2014	7.000	VG	82,074	\$363,177,450	318
2231481	к	BSHP WESTBOUND	PAERDEGAT BASIN	WA		3	s	11/5/2013	6.939	VG	50,052	\$221,480,100	318
2230790	Q	BULOVA AVENUE	278I (BQE WEST LEG)	А		2	s	4/4/2014	5.278	G	3,300	\$14,602,500	401
2269770	R	BUS STATION ENTRANCE RAMP	SIRT S	o	F	19	s	10/11/2013	5.611	G	39,333	\$174,048,525	501
2269790	R	BUS STATION EXIT RAMP	SIRT S	o	F	7	s	11/4/2014	5.167	G	28,721	\$127,090,425	501
2269740	R	BUS STATION NORTH	SIRT S	o	F	12	s	11/2/2014	5.600	G	64,605	\$285,877,125	501
2269750	R	BUS STATION SOUTH	SIRT S	0	F	12	s	11/2/2014	5.280	G	154,688	\$684,494,400	501
2247460	Q	CALDWELL AVENUE	CSX TRANSPORT C	0		1	s	11/10/2014	5.889	G	2,243	\$9,925,275	405
2243290	к	CARLTON AVENUE	LIRR ATLANTIC AVENUE L	0		4	s	7/29/2013	6.806	VG	15,400	\$68,145,000	302
2240260	к	CARROLL STREET	GOWANUS CANAL	wmo		2	s	10/13/2014	5.208	G	3,000	\$13,275,000	306
2243220	к	CARROLL STREET PEDESTRIAN BRIDGE	FRANKLIN SHUTTLE T	O-PED		3	С	4/29/2014	5.789	G	600	\$2,655,000	309
2243050	к	CATON AVENUE	BMT SUBWAY, BRIGHTON T	0		4	s	8/23/2013	4.842	F	20,800	\$92,040,000	314
2249390	R	CEDARVIEW AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE S	O-PED		5	С	3/11/2014	3.615	F	625	\$2,765,625	503
2246100	М	CENTER DRIVE	TRANSVERSE ROAD #1	0	Р	1	s	2/7/2014	4.467	F	6,000	\$26,550,000	164
2246050	М	CENTER DRIVE (DRIPROCK ARCH)	PEDESTRIAN OPPOSITE 63RD STREET	0	Р	1	s	1/14/2014	4.867	F	1,725	\$7,633,125	164
2244050	к	CENTER DRIVE (NETHERMEAD ARCHES)	PEDESTRIAN PATH & STREAM	wo	Р	3	s	5/22/2013	5.000	G	7,020	\$31,063,500	355
2246070	м	CENTER DRIVE (PLAYMATES ARCH)	PEDESTRIAN PATH OPPOSITE 65TH STREET	0	P	1	С	6/11/2014	4.500	F	1,129	\$4,995,825	164
2268480	М	CHAMBERS STREET PEDESTRIAN BRIDGE	ROUTE 9A - WEST STREET	O-PED		10	С	5/30/2014	5.391	G	7,481	\$33,103,425	101
2249280	R	CHAMP COURT PEDESTRIAN BRIDGE	SIRT SOUTH SHORE S	O-PED		7	С	3/7/2014	4.393	F	595	\$2,632,875	503
2249880	R	CHELSEA ROAD	SAWMILL CREEK	wo		1	s	5/21/2013	6.633	VG	2,205	\$9,757,125	502
2240210	В	CITY ISLAND ROAD	EASTCHESTER BAY	wo		7	s	10/16/2014	3.389	F	19,915	\$88,123,875	228
2241710	В	CLAREMONT PARKWAY	METRO NORTH RR HAR M	0		1	s	4/17/2014	6.458	VG	5,950	\$26,328,750	203
2231940	Q	CLINTONVILLE STREET	BCIP	А		2	s	2/21/2014	4.705	F	7,400	\$32,745,000	407
2249490	R	CLOVE ROAD	SIRT SOUTH SHORE S	О		3	s	10/16/2014	5.778	G	5,104	\$22,585,200	502
2231570	Q	COHANCY STREET	BSOP	А		2	s	4/17/2014	4.395	F	6,400	\$28,320,000	410

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating		DECK AREA	REPLACEMENT COST	CD CD2CE
2230870	к	COLUMBIA HEIGHTS	278I (B.Q.E.)		Α		1	s	8/7/2014	4.450	F	16,500	\$73,012,500	302
2241590	В	CONCOURSE VILLAGE AVENUE	METRO NORTH RR HAR	М	0		1	s	4/19/2014	3.969	F	12,077	\$53,440,725	204
2244460	к	CONDUIT BOULEVARD NORTHBOUND	ATLANTIC AVENUE EASTBOUND		0		1	s	10/10/2014	4.833	F	3,800	\$16,815,000	305
2231380	к	CONEY ISLAND AVENUE	ВЅНР		Α		4	s	10/15/2013	5.708	G	19,866	\$87,907,050	313
2243440	к	CONEY ISLAND AVENUE	LIRR BAY RIDGE	N	0		1	s	9/18/2014	5.043	G	3,231	\$14,297,175	312
2230390	к	CONGRESS STREET	278I (B.Q.E.)		Α		2	s	3/27/2014	6.029	VG	5,000	\$22,125,000	306
2246510	М	CORBIN PLACE OVERPASS	CORBIN PLACE		0	P	1	s	1/8/2014	5.000	G	2,223	\$9,836,775	112
2232029	М	CORLEARS PARK ROAD	FDR DRIVE		Α	P	4	s	3/20/2014	3.813	F	4,100	\$18,142,500	103
2247130	Q	CORPORAL KENNEDY STREET	LIRR PORT WASH BR	L	o		1	s	9/5/2013	6.157	VG	3,379	\$14,952,075	411
2243110	к	CORTELYOU ROAD	BMT SUBWAY, BRIGHTON	т	o		3	s	8/20/2013	6.139	VG	4,810	\$21,284,250	314
2231880	Q	CROCHERON PARK PEDESTRIAN	ВСІР		A-PED	P	9	С	5/13/2014	3.954	F	2,300	\$10,177,500	411
2243040	к	CROOKE AVENUE	BMT SUBWAY, BRIGHTON	т	o		4	s	6/11/2014	4.421	F	6,000	\$26,550,000	314
2231340	к	CROPSEY AVENUE	вѕнр		Α		2	s	7/10/2014	4.639	F	13,100	\$57,967,500	313
2240302	к	CROPSEY AVENUE NORTHBOUND	CONEY ISLAND CREEK		wo		3	s	10/27/2014	4.718	F	9,400	\$41,595,000	313
2240301	к	CROPSEY AVENUE SOUTHBOUND	CONEY ISLAND CREEK		wo		3	s	7/2/2013	5.000	G	9,400	\$41,595,000	313
2231559	О	CROSS BAY BOULEVARD	ВЅНР		Α		4	s	5/30/2014	5.083	О	23,205	\$102,682,125	410
2248039	D	CROSS BAY BOULEVARD	NASSAU EXPRESSWAY - ROUTE 27		o		2	s	5/31/2013	6.208	VG	16,544	\$73,207,200	410
2242030	В	CROTONA AVENUE	BRONX PELHAM PARKWAY		o		2	s	1/29/2014	5.447	О	7,600	\$33,630,000	206
2243230	к	CROWN STREET	FRANKLIN SHUTTLE	т	o		3	s	8/8/2013	5.014	G	4,060	\$17,965,500	309
2230040	Q	CYPRESS HILLS STREET	JACKIE ROBINSON PARKWAY		А		1	s	3/28/2014	4.722	F	5,000	\$22,125,000	405
2249160	R	DE HART AVENUE	B&O RR (ABANDONED)	0	О		4	s	5/15/2013	6.389	VG	6,700	\$29,647,500	501
2232030	М	DELANCEY STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	Р	12	С	3/9/2014	4.443	F	3,390	\$15,000,750	103
2076640	В	DEPOT PLACE	METRO NORTH RR HUD	СМ	o		11	s	5/16/2014	4.653	F	26,566	\$117,554,550	204
2243130	к	DITMAS AVENUE	BMT SUBWAY, BRIGHTON	т	О		1	s	8/22/2013	5.723	G	5,150	\$22,788,750	314
2243120	к	DORCHESTER ROAD	BMT SUBWAY, BRIGHTON	т	О		1	s	6/16/2014	5.863	G	4,825	\$21,350,625	314
2247170	О	DOUGLASTON PARKWAY	LIRR PORT WASH BR	L	o		3	s	10/1/2014	4.542	F	6,300	\$27,877,500	411
2266129	Q	DOUGLASTON PARKWAY	BCIP SOUTHBOUND		А		1	s	3/10/2014	4.592	F	4,400	\$19,470,000	411
2266139	О	DOUGLASTON PARKWAY	BCIP NORTHBOUND		А		1	s	3/12/2014	4.653	F	6,400	\$28,320,000	411
2242260	В	EAGLE AVENUE	EAST 161ST STREET		o		1	s	2/14/2014	5.117	G	2,800	\$12,390,000	201 203
2243420	к	EAST 3RD STREET	LIRR BAY RIDGE	N	o		1	s	8/8/2013	6.517	VG	1,840	\$8,142,000	312
2232050	М	EAST 6TH STREET PEDESTRIN BRIDGE	FDR DRIVE		A-PED	Р	19	С	3/13/2014	4.167	F	2,200	\$9,735,000	103
2233020	М	EAST 10TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	P	21	С	4/14/2014	4.673	F	2,754	\$12,186,450	103
2231390	к	EAST 12TH STREET	вѕнр		Α		4	s	7/7/2014	4.542	F	17,200	\$76,110,000	315
2243450	к	EAST 14TH STREET	LIRR BAY RIDGE	N	0		1	s	9/17/2014	4.809	F	1,775	\$7,854,375	314
2233080	к	EAST 14TH STREET PEDESTRIAN BRIDGE	вѕнр		A-PED		14	С	8/5/2014	4.164	F	4,700	\$20,797,500	315
2243460	к	EAST 15TH STREET PEDESTRIAN BRIDGE	LIRR BAY RIDGE	N	O-PED		3	С	8/12/2014	5.592	G	900	\$3,982,500	314
2243080	к	EAST 18TH STREET - CHURCH AVE	BMT SUBWAY, BRIGHTON	т	0		4	s	8/20/2013	4.545	F	18,200	\$80,535,000	314

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CDC	D2CD3
2232070	М	EAST 25TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED		3	С	3/23/2014	4.600	F	1,700	\$7,522,500 1	106	
2246540	М	EAST 34TH STREET	PARK AVENUE TUNNEL		от		1	s	8/20/2014	4.117	F	36,200	\$160,185,000 1	105 1	06
2246570	М	EAST 42ND STREET - EAST 47TH STREET	FIRST AVE TUNNEL		от		2	s	5/20/2014	4.922	F	95,000	\$420,375,000 1	106	
2232100	М	EAST 51ST STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	P	6	С	4/22/2014	4.283	F	2,800	\$12,390,000 1	106	
2233040	М	EAST 60TH STREET	FDR DRIVE		A	Р	17	s	7/2/2014	5.000	G	24,480	\$108,324,000 1	108	
2246030	М	EAST 62ND STREET PEDESTRIAN BRIDGE (GAPSTOW BRIDGE)	THE POND		O-PED	Р	1	С	4/21/2014	3.897	F	1,400	\$6,195,000 1	164	
2232110	М	EAST 63RD STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	Р	11	U	11/23/2011	4.912	F	2,100	\$9,292,500 1	108	
2232120	М	EAST 71ST STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	P	19	С	8/17/2014	4.761	F	3,700	\$16,372,500 1	108	
2246450	М	EAST 77TH STREET PEDESTRIAN (GLADE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 77TH STREET		O-PED	Р	1	С	4/1/2014	4.138	F	5,000	\$22,125,000 1	164	
2232140	М	EAST 78TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	Р	13	С	5/8/2014	6.708	VG	5,226	\$23,125,050 1	108	
2269820	М	EAST 81ST STREET PEDESTRIAN BRIDGE	FDR DRIVE NORTHBOUND		A-PED	P	3	С	6/8/2014	3.439	F	600	\$2,655,000 1	108	
2246390	М	EAST 86TH STREET PEDESTRIAN (SOUTHEAST RESERVOIR BRIDGE)	BRIDLE PATH		O-PED	P	3	С	10/17/2014	4.509	F	1,100	\$4,867,500 1	164	
2245319	М	EAST 97TH STREET	METRO NORTH MAIN LN	м	0		1	s	12/17/2014	4.647	F	3,200	\$14,160,000 1	111	
2232180	М	EAST 103RD STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED		18	С	8/17/2014	4.390	F	6,807	\$30,120,975 1	111	
2232190	М	EAST 111TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	P	9	С	8/25/2014	4.319	F	4,254	\$18,823,950 1	111	
2232200	М	EAST 120TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		A-PED	P	18	С	8/24/2014	4.114	F	3,978	\$17,602,650 1	111	
2246620	М	EAST 128TH STREET PEDESTRIAN BRIDGE	3RD AVE BRIDGE APPROACH		O-PED		18	С	12/15/2014	3.939	F	2,300	\$10,177,500 1	111	
2246990	М	EAST 129TH STREET PEDESTRIAN BRIDGE	3RD AVENUE BRIDGE RAMP		O-PED	Р	5	С	12/2/2013	4.095	F	1,046	\$4,628,550 1	111	
2241550	В	EAST 144TH STREET	METRO NORTH RR HAR	м	О		2	s	8/30/2013	6.181	VG	8,290	\$36,683,250 2	201	
2241129	В	EAST 149TH STREET	AMTRAK - CSX	AC	О		2	s	11/17/2014	4.592	F	18,258	\$80,791,650 2	201 2	:02
2241560	В	EAST 149TH STREET	METRO NORTH RR HAR	м	О		8	s	5/5/2014	4.625	F	27,900	\$123,457,500 2	201 2	:04
2241050	В	EAST 149TH STREET / JACKSON AVENUE	CSX PT MORRIS - (ABANDONED)	С	О		1	s	5/12/2014	4.817	F	65,000	\$287,625,000 2	201	
2241010	В	EAST 156TH STREET	CSX PT MORRIS - (ABANDONED)	С	О		1	s	5/9/2014	4.612	F	2,400	\$10,620,000 2	201	
2270030	В	EAST 156TH STREET	ACCESS TO HOUSING		О	ED	16	s	11/13/2014	3.493	F	49,696	\$219,904,800 2	204	
2241600	В	EAST 158TH STREET	METRO NORTH RR HAR	м	О		1	s	8/31/2013	5.200	G	3,400	\$15,045,000 2	204	
2241020	В	EAST 161ST STREET	CSX PT MORRIS - (ABANDONED)	С	О		1	s	3/20/2014	5.800	G	12,800	\$56,640,000 2	203	
2241610	В	EAST 161ST STREET	METRO NORTH RR HAR	м	О		1	s	9/24/2013	5.050	G	6,600	\$29,205,000 2	204 2	:03
2241620	В	EAST 162ND STREET	METRO NORTH RR HAR	м	О		1	s	4/26/2014	4.781	F	4,700	\$20,797,500 2	203	
2241030	В	EAST 163RD STREET	CSX PT MORRIS - (ABANDONED)	С	О		1	s	2/27/2014	4.611	F	3,200	\$14,160,000 2	203	
2241630	В	EAST 165TH STREET	METRO NORTH RR HAR	м	О		1	s	4/26/2014	4.300	F	16,400	\$72,570,000 2	203	
2241650	В	EAST 167TH STREET	METRO NORTH RR HAR	м	О		1	s	4/21/2014	5.510	G	3,363	\$14,881,275 2	203	
2241660	В	EAST 168TH STREET	METRO NORTH RR HAR	м	О		1	s	4/22/2014	4.641	F	4,800	\$21,240,000 2	203	
2241670	В	EAST 169TH STREET	METRO NORTH RR HAR	м	О		1	s	4/22/2014	4.188	F	3,300	\$14,602,500 2	203	
2241680	В	EAST 170TH STREET	METRO NORTH RR HAR	м	О		1	s	4/22/2014	6.333	VG	3,150	\$13,938,750 2	203	
2241720	В	EAST 173RD STREET	METRO NORTH RR HAR	м	О		1	s	4/17/2014	4.875	F	3,000	\$13,275,000 2	203	
2066720	В	EAST 174TH STREET	SHERIDAN EXPRESSWAY/AMTRAK	А	А		13	s	7/29/2014	3.986	F	35,573	\$157,410,525 2	209 2	:03
2241740	В	EAST 175TH STREET	METRO NORTH RR HAR	м	О		1	s	4/14/2014	3.875	F	3,600	\$15,930,000 2	206	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Conditio Rating		DECK AREA	REPLACEMENT COST	CD CD	)2CD3
2241269	В	EAST 177TH STREET	AMTRAK - CSX	AC	o		3	s	7/29/2014	5.278	G	16,606	\$73,481,550	206	
2241770	В	EAST 178TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	М	O-PED		1	С	10/23/2014	4.921	F	731	\$3,234,675	206	'
2241780	В	EAST 179TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	М	O-PED		6	С	10/22/2014	5.311	G	1,011	\$4,473,675	206	
2241790	В	EAST 180TH STREET	METRO NORTH RR HAR	М	0		1	s	4/24/2014	3.844	F	5,000	\$22,125,000	206	
2242400	В	EAST 180TH STREET	BRONX RIVER		wo		1	s	9/26/2014	4.810	F	4,500	\$19,912,500	206 22	<b>!7</b>
2241800	В	EAST 183TH STREET	METRO NORTH RR HAR	М	o		1	s	4/24/2014	3.953	F	4,080	\$18,054,000	206	
2241820	В	EAST 187TH STREET	METRO NORTH RR HAR	М	О		1	s	4/23/2014	4.344	F	3,800	\$16,815,000	206	
2241810	В	EAST 188TH STREET	METRO NORTH RR HAR	М	О		1	s	4/16/2014	4.094	F	5,300	\$23,452,500	206	
2241839	В	EAST 189TH STREET	METRO NORTH RR HAR	м	o		1	s	8/28/2013	6.133	VG	43,157	\$190,969,725	206 20	J7
2241870	В	EAST 233RD STREET	METRO NORTH RR HAR	М	o		1	s	4/28/2014	4.902	F	7,664	\$33,913,200	212 20	17
2242459	В	EAST 233RD STREET	BRONX RIVER		wo		1	s	2/26/2014	4.233	F	7,000	\$30,975,000	212	
2242460	В	EAST 233RD STREET	ENTRANCE ROAD BRONX RIVER PARKWAY		o		1	s	1/7/2014	4.900	F	5,300	\$23,452,500	212	
2241890	В	EAST 241ST STREET	BRP, METRO NORTH HAR	м	wo		28	s	11/30/2013	4.417	F	49,500	\$219,037,500	212	
2244030	к	EAST DRIVE	BRIDLE PATH NEAR ZOO		О	Р	1	s	5/17/2013	4.878	F	2,000	\$8,850,000	355	
2246110	м	EAST DRIVE	TRANSVERSE ROAD #1		О	P	1	s	3/19/2014	4.667	F	6,000	\$26,550,000	164	
2246230	М	EAST DRIVE	TRANSVERSE ROAD #2		О	Р	1	s	3/11/2014	4.600	F	5,080	\$22,479,000	164	
2246250	М	EAST DRIVE	TRANSVERSE ROAD #3		0	Р	1	s	1/17/2014	4.300	F	4,500	\$19,912,500	164	
2246270	М	EAST DRIVE	TRANSVERSE ROAD #4		О	Р	1	s	3/20/2014	4.100	F	7,000	\$30,975,000	164	
2246170	М	EAST DRIVE (TREFOIL ARCH)	PEDESTRIAN PATH OPPOSITE EAST 73RD STREET		О	Р	1	s	1/24/2014	5.130	G	1,900	\$8,407,500	164	
2244040	к	EAST DRIVE (EAST WOOD ARCH)	PEDESTRIAN PATH NEAR CENTER DRIVE		0	Р	1	С	6/16/2014	4.667	F	1,066	\$4,717,050	355	
2244010	к	EAST DRIVE (ENDALE ARCH)	PEDESTRIAN PATH NEAR GRAND ARMY PLAZA		o	P	1	С	5/28/2014	4.367	F	1,533	\$6,783,525	355	
2246069	М	EAST DRIVE (GREEN GAP ARCH)	PEDESTRIAN PATH BETWEEN 63RD & 64TH STREETS		o	Р	1	s	1/16/2014	4.433	F	2,075	\$9,181,875	164	
2246350	м	EAST DRIVE (GREYWACKE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 80TH STREET		О	P	1	С	5/23/2014	3.733	F	1,266	\$5,602,050	164	
2246470	М	EAST DRIVE (HUDDLESTONE ARCH)	THE LOCH		wo	Р	1	s	1/28/2014	4.500	F	1,100	\$4,867,500	164	
2246040	м	EAST DRIVE (INSCOPE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 62ND STREET		О	P	1	С	4/30/2014	4.400	F	1,515	\$6,703,875	164	
2246130	М	EAST DRIVE (WILLOWDELL ARCH)	PEDESTRIAN PATH OPPOSITE EAST 67TH STREET		0	Р	1	С	4/29/2014	3.500	F	666	\$2,947,050	164	
2249720	R	EAST FOOTBRIDGE	CLOVE LAKE		WO-PED	P	2	С	4/28/2014	4.371	F	900	\$3,982,500	501	
2242010	В	EAST FORDHAM ROAD	BRONX RIVER		wo		1	s	3/26/2014	5.467	G	9,200	\$40,710,000	227	
2242350	В	EAST FORDHAM ROAD	GRAND CONCOURSE		О		1	s	3/7/2014	4.833	F	10,300	\$45,577,500	205 20	17
2075820	В	EAST TREMONT AVENUE	HUTCHINSON RIVER PARKWAY		А		2	s	11/21/2013	4.444	F	10,200	\$45,135,000	210	
2241270	В	EAST TREMONT AVENUE	AMTRAK - CSX	AC	О		2	s	10/31/2014	5.153	G	22,300	\$98,677,500	209 21	(1
2241760	В	EAST TREMONT AVENUE	METRO NORTH RR HAR	м	o		1	s	8/29/2013	6.450	VG	8,424	\$37,276,200	206	
2242149	В	EAST TREMONT AVENUE	BRONX RIVER		wo		2	s	5/7/2014	4.361	F	12,900	\$57,082,500	206	
2241900	В	EASTCHESTER ROAD	NYCTA-DYRE AVENUE LINE	т	О		3	s	10/28/2014	4.472	F	13,500	\$59,737,500	212	
2243279	к	EASTERN PARKWAY	FRANKLIN SHUTTLE	т	О		1	s	6/27/2014	4.833	F	7,700	\$34,072,500	309 30	18
2247470	Q	ELIOT AVENUE	CSX TRANSPORT	С	o		1	s	8/15/2013	4.972	F	2,960	\$13,098,000	405	
2247550	Q	ELIOT AVENUE	LIRR MONTAUK DIV	L	О		2	s	8/27/2013	5.712	G	9,550	\$42,258,750	405	

BIN	BORO	FEATURE CARRIED		RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	n VR BL RT	DECK AREA	REPLACEMENT COST	CD CE	)2CD3
2248160	Q	ELIOT AVENUE	QUEENS BOULEVARD		o		2	s	7/17/2014	4.804	F	13,785	\$60,998,625	406	
2269600	к	ERSKINE STREET	вѕнр		А		1	s	8/20/2014	5.938	G	8,258	\$36,541,650	305	
2241200	В	FAILE STREET	AMTRAK - CSX	AC	o		1	s	11/19/2014	5.578	G	6,208	\$27,470,400	202	
2231620	Q	FARMERS BOULEVARD	BSOP		А		2	s	4/25/2014	4.477	F	6,400	\$28,320,000	413	
223201C	м	FDR DR SOUTHBOUND OFF RAMP	SOUTH STREET		AR		8	s	2/6/2014	5.209	G	36,700	\$162,397,500	103	
223201A	м	FDR DRIVE NORTHBOUND OFF RMP	FDR DRIVE & SOUTH STREET		AR		17	s	7/23/2014	4.493	F	23,373	\$103,425,525	101	
2233038	М	FDR DRIVE SOUTHBOUND	FDR DRIVE NORTHBOUND / EAST 62ND STREET		AT		34	s	11/25/2014	6.563	VG	58,700	\$259,747,500	106 10	38
2268650	М	FDR NORTHBOUND EAST 42ND STREET TO EAST 49TH STREET	EAST RIVER		A		119	s	10/17/2013	3.660	F	30,767	\$136,143,975	106	
223204A	М	FDR NORTHBOUND RAMP TO HOUSTON STREET	RELIEF		AR		4	s	1/17/2014	4.706	F	6,150	\$27,213,750	103	
2229520	В	FIELDSTON ROAD	ннр		Α		1	s	7/29/2013	4.900	F	6,600	\$29,205,000	208	
2249480	R	FINGERBOARD ROAD	SIRT SOUTH SHORE	s	0		2	s	9/26/2013	6.431	VG	5,100	\$22,567,500	502	
2231460	к	FLATBUSH AVENUE	ВЅНР		Α		2	s	10/18/2013	6.206	VG	14,058	\$62,206,650	356	
2243260	к	FLATBUSH AVENUE	FRANKLIN SHUTTLE	т	0		2	s	6/23/2014	4.961	F	11,300	\$50,002,500	309	
2243510	к	FLATBUSH AVENUE	LIRR BAY RIDGE	N	o		2	s	9/30/2014	4.651	F	5,900	\$26,107,500	318	
2244440	к	FLEET WALK PEDESTRIAN BRIDGE	NAVY STREET		O-PED		1	С	8/21/2014	3.958	F	620	\$2,743,500	302	
2248240	Q	FLUSHING AVENUE SERVICE ROAD	FLUSHING AVENUE		o		1	s	6/21/2013	5.250	G	2,940	\$13,009,500	405	
2248090	Q	FLUSHING MEADOW PARK PEDESTRIAN	COLLEGE POINT BOULEVARD		O-PED	Р	3	С	3/24/2014	4.639	F	8,400	\$37,170,000	407	
2248130	Q	FLUSHING MEADOW PARK PEDESTRIAN	WILLOW LAKE & 76TH ROAD		WO-PED	Р	4	С	4/20/2002	1.000	С	1,891	\$8,367,675	481	
2248140	Q	FLUSHING MEADW PARK ROAD	STREAM NORTH OF LIE		wo	Р	5	s	7/31/2013	4.481	F	4,100	\$18,142,500	481	
2249780	R	FOOTBRIDGE	BROOKS LAKE DAM		WO-PED	Р	1	С	5/19/2014	3.433	F	800	\$3,540,000	501	
2242120	В	FOOTBRIDGE NORTH OF ROUTE 1	BRONX RIVER		WO-PED	Р	1	С	8/7/2013	3.583	F	1,900	\$8,407,500	227	
2249790	R	FOOTBRIDGE SOUTH OF FOREST AVENUE	STREAM IN PARK		WO-PED	Р	3	С	10/21/2014	4.651	F	700	\$3,097,500	501	
2249800	R	FOREST AVENUE	CLOVE LAKES PARK STREAM		wo	Р	1	s	11/6/2013	4.567	F	1,600	\$7,080,000	501	
2247590	Q	FOREST PARK DRIVE	LIRR MONTAUK DIV	L	0	Р	5	s	9/22/2014	5.158	G	6,000	\$26,550,000	409	
2247660	Q	FOREST PARK DRIVE	ABANDONED LIRR		0	Р	6	s	2/21/2014	4.524	F	10,000	\$44,250,000	409	
2248340	Q	FOREST PARK DRIVE	MYRTLE AVENUE		0	Р	3	s	5/24/2013	4.984	F	5,100	\$22,567,500	409	
2243620	к	FORT HAMILTON PARKWAY	LIRR & SEA BEACH	NT	o		3	s	6/19/2014	4.729	F	14,800	\$65,490,000	310	
2246500	м	FORT TRYON PLACE	ENTRANCE FROM RIVERSIDE DRIVE		0	Р	1	s	3/25/2014	4.200	F	3,280	\$14,514,000	112	
2243150	к	FOSTER AVENUE	BMT SUBWAY, BRIGHTON	т	o		1	s	6/9/2014	4.417	F	3,000	\$13,275,000	314	
2231690	Q	FRANCIS LEWIS BOULEVARD	BLP EASTBOUND		Α		1	s	3/17/2014	5.033	G	6,000	\$26,550,000	413	
2231700	Q	FRANCIS LEWIS BOULEVARD	BLP WESTBOUND		Α		1	s	3/18/2014	4.700	F	6,000	\$26,550,000	413	
2231930	Q	FRANCIS LEWIS BOULEVARD	ВСІР		Α		3	s	2/21/2014	4.682	F	9,100	\$40,267,500	407	
2267199	Q	FRANCIS LEWIS BOULEVARD	CUNNINGHAM PARK ROAD		o		1	s	5/13/2013	5.033	G	7,085	\$31,351,125	408	
2249450	R	FREMONT AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		3	С	3/12/2014	4.073	F	800	\$3,540,000	502	
224006A	В	FROM BRUCKNER BOULEVARD	RELIEF		OR		5	s	9/14/2013	6.535	VG	14,037	\$62,113,725	201	
226771C	м	GARAGE RAMP TO 79TH STREET	79TH STREET BOAT BASIN GARAGE		AR	P	21	s	5/12/2014	4.435	F	9,095	\$40,245,375	107	
2241420	В	GERARD AVENUE	METRO NORTH RR HUD	м	0		1	s	5/5/2014	5.422	G	5,063	\$22,403,775	204	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG	Inspection Date	Condition Rating	n VR BL	DECK AREA	REPLACEMENT COST	CD CD2C
				RO	1111	OWNER	143	SR	Date	Kating	RT			
2249360	R	GIFFORDS LANE	SIRT SOUTH SHORE	s	o		1	s	10/15/2014	5.625	G	3,042	\$13,460,850	503
2243860	к	GLENMORE AVENUE	LIRR BAY RIDGE	N	0		2	s	9/22/2014	6.456	VG	5,616	\$24,850,800	316
2065940	Q	GRAND AVENUE	4951 (L.I.E.)		А		2	s	11/11/2014	4.861	F	12,850	\$56,861,250	405
2247180	Q	GRAND AVENUE	LIRR MAIN LINE	L	0		3	s	10/1/2014	4.396	F	7,415	\$32,811,375	404
2247440	Q	GRAND AVENUE	CSX TRANSPORT	С	o		1	s	8/13/2013	6.183	VG	3,280	\$14,514,000	405
2241409	В	GRAND CONCOURSE	METRO NORTH RR HUD	мт	o		1	s	6/27/2014	3.766	F	14,300	\$63,277,500	204
2242259	В	GRAND CONCOURSE	EAST 161ST STREET		o		1	s	6/30/2014	6.333	VG	27,017	\$119,550,225	204
2242280	В	GRAND CONCOURSE	EAST 167TH STREET		o		2	s	7/2/2014	4.754	F	42,900	\$189,832,500	204
2242299	В	GRAND CONCOURSE	EAST 138TH STREET		0		1	s	6/11/2013	4.867	F	9,500	\$42,037,500	201
2242300	В	GRAND CONCOURSE	EAST 170TH STREET		0		2	s	3/19/2014	4.754	F	39,300	\$173,902,500	204
2242319	В	GRAND CONCOURSE	EAST 174TH STREET	т	0		1	s	3/18/2014	4.067	F	14,900	\$65,932,500	204
2242329	В	GRAND CONCOURSE	EAST 175TH STREET	Т	0		1	s	6/11/2014	4.833	F	11,900	\$52,657,500	205
2242330	В	GRAND CONCOURSE	EAST TREMONT AVENUE		0		1	s	9/12/2013	5.883	G	11,700	\$51,772,500	205
2242340	В	GRAND CONCOURSE	EAST KINGSBRIDGE		0		2	s	6/12/2014	4.714	F	18,285	\$80,911,125	207
2242360	В	GRAND CONCOURSE	BURNSIDE AVENUE		0		2	s	6/30/2014	4.265	F	8,400	\$37,170,000	205
2242370	В	GRAND CONCOURSE	BEDFORD PARK BOULEVARD		0		1	s	2/21/2014	4.373	F	8,418	\$37,249,650	207
2242380	В	GRAND CONCOURSE	EAST 204TH STREET		0		1	s	9/11/2013	5.484	G	9,272	\$41,028,600	207
2240390	KQ	GRAND STREET BRIDGE	NEWTOWN CREEK		wмо		2	s	10/28/2014	4.069	F	5,100	\$22,567,500	301 405
2249100	R	GRANITE AVENUE	B&O RR (ABANDONED)	0	0		4	s	2/4/2014	5.966	G	7,300	\$32,302,500	501
2249370	R	GREAVES AVENUE	SIRT SOUTH SHORE	s	0		1	s	8/22/2013	6.533	VG	2,650	\$11,726,250	503
2240370	KQ	GREENPOINT AVENUE BRIDGE	NEWTOWN CREEK	٦	wwo		12	s	8/5/2013	5.083	G	76,106	\$336,769,050	301 402
2231370	к	GUIDER AVENUE RAMP TO BSHP	BSHP		А		4	s	9/23/2014	6.778	VG	10,548	\$46,674,900	313
2241910	В	GUN HILL ROAD	NYCTA-DYRE AVENUE LINE	т	0		1	s	10/28/2014	5.516	G	7,500	\$33,187,500	211 212
2242430	В	GUN HILL ROAD	BRONX BOULEVARD		o		4	s	2/20/2014	4.947	F	9,400	\$41,595,000	212
2242440	В	GUN HILL ROAD	BRONX RIVER		wo		1	s	1/14/2014	5.300	G	8,700	\$38,497,500	212
2241860	В	GUN HILL ROD	METRO NORTH RR HAR	м	o		1	s	4/29/2014	6.531	VG	9,128	\$40,391,400	212
2231610	Q	GUY R. BREWER BOULEVARD	BSOP		A		4	s	5/20/2013	6.222	VG	12,342	\$54,613,350	413
2249380	R	GUYON AVENUE	SIRT SOUTH SHORE	s	О		3	s	10/7/2013	4.770	F	6,900	\$30,532,500	503
2240231	к	HAMILTON AVENUE BRIDGE	GOWANUS CANAL		wмо		3	s	9/9/2014	5.472	G	7,300	\$32,302,500	307 306
2240232	к	HAMILTON AVENUE BRIDGE	GOWANUS CANAL		wмо		3	s	8/13/2013	5.361	G	8,611	\$38,103,675	306
2065930	Q	HAMILTON PLACE	495I (L.I.E.)		Α		2	s	2/20/2014	5.528	G	11,111	\$49,166,175	405
2249520	R	HANNAH STREET	SIRT SOUTH SHORE	s	0		10	s	10/18/2013	4.966	F	10,020	\$44,338,500	501
2249180	R	HARBOR ROAD	CONRAIL - EX B&O RR	С	o		4	s	9/16/2013	6.000	G	5,778	\$25,567,650	501
2233059	м	HARLEM RIVER DRIVE	EAST 127TH STREET RAMP TO/FROM HRD NORTHBOUND		А		11	s	6/24/2014	3.552	F	51,000	\$225,675,000	111
2231780	Q	HEMPSTEAD AVENUE	BCIP		А		2	s	2/6/2014	4.000	F	14,200	\$62,835,000	413
2266149	Q	HEMPSTEAD AVENUE	BCIP RAMP NORTHBOUND		А		2	s	3/12/2014	4.190	F	9,500	\$42,037,500	413
2229309	М	ннр	RIVERSIDE PARK		А		1	s	1/13/2014	5.267	G	2,172	\$9,611,100	107

BIN	BORO	FEATURE CARRIED		AI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating		DECK AREA	REPLACEMENT COST	CD CD	2CD3
2229349	М	ннр	WEST 158TH STREET	А	Α		44	s	10/10/2014	4.155	F	140,000	\$619,500,000	109 112	!
2229440	В	ннр	KAPPOCK ST		A		1	s	7/18/2013	4.931	F	3,900	\$17,257,500	208	
2229530	В	ннр	BROADWAY		A		1	s	7/29/2013	4.574	F	7,500	\$33,187,500	208	
2266229	М	ннр	PEDESTRIAN UNDERPASS AT WEST 148TH STREET		А		1	s	1/30/2014	5.000	G	1,840	\$8,142,000	109	
2267250	М	ннр	AMTRAK - WEST 96TH STREET	A	Α		55	s	11/1/2014	3.548	F	40,000	\$177,000,000	107	
2229312	М	HHP NORTHBOUND	RAMP TO WEST 96TH STREET		Α		1	s	1/27/2014	4.182	F	2,000	\$8,850,000	107	
2229322	М	HHP NORTHBOUND	RAMP FROM WEST 96TH STREET		Α		1	s	1/31/2014	5.300	G	2,000	\$8,850,000	107	
2266230	М	HHP NORTHBOUND	PEDESTRIAN UNDERPASS INWOOD PARK		Α		1	s	1/23/2014	5.000	G	800	\$3,540,000	112	
M00004	М	HHP ON/OFF RAMP-79TH STREET NORTH SIDE	PEDESTRIAN PATH NORTH OF 79TH STREET		Α		1	С	6/6/2014	4.667	F	846	\$3,743,550	107	
M00003	М	HHP ON/OFF RMP-79TH STREET SOUTH SIDE	PEDESTRIAN PATH SOUTH OF 79TH STREET		Α		1	С	6/6/2014	4.467	F	846	\$3,743,550	107	
2229311	М	HHP SOUTHBOUND	RAMP TO WEST 96TH STREET		Α		1	s	1/28/2014	4.455	F	2,000	\$8,850,000	107	
2229321	М	HHP SOUTHBOUND	RAMP FROM WEST 96TH STREET		А		1	s	1/31/2014	5.133	G	2,000	\$8,850,000	107	
2266240	М	HHP SOUTHBOUND	PEDESTRIAN UNDERPASS INWOOD PARK		A		1	s	1/23/2014	5.526	G	1,100	\$4,867,500	112	
2229289	м	HHP VIADUCT	AMTRAK - WEST 72ND STREET - WEST 79TH STREET	А	А		145	s	9/17/2014	3.597	F	213,173	\$943,290,525	107	
2246580	вм	HIGH BRIDGE PEDESTRIAN OVERPASS	187 - HARLEM RIVER	м	WA-PED	Р	11	Р	8/12/2002	3.759	F	34,100	\$150,892,500	112 204	ı
2230000	к	HIGHLAND BOULEVARD EASTBOUND	JACKIE ROBINSON PARKWAY		А		1	s	3/17/2014	4.724	F	4,900	\$21,682,500	305	
2230220	к	HIGHLAND BOULEVARD NORTHBOUND	VERMONT AVENUE		А		1	s	6/5/2013	5.857	G	3,995	\$17,677,875	305	
2230010	к	HIGHLAND BOULEVARD WESTBOUND	JACKIE ROBINSON PARKWAY		А		1	s	2/25/2014	4.767	F	3,500	\$15,487,500	305	
2230020	к	HIGHLAND BOULEVARD WESTBOUND	JACKIE ROBINSON PARKWAY EASTBOUND ENTRANCE RAMP		А		2	s	3/11/2014	4.974	F	4,700	\$20,797,500	305	
2248280	Q	HIGHLAND PARK PEDESTRIAN	PEDESTRIAN PATH		O-PED	P	1	С	12/31/2014	3.667	F	1,900	\$8,407,500	405	
2243780	к	HIGHLAWN AVENUE	BMT SEA BEACH	т	0		1	s	8/16/2013	6.440	VG	6,960	\$30,798,000	311	
2244060	к	HILL DRIVE (CLEFT RIDGE SPAN)	PEDESTRIAN PATH SOUTH OF BOATHOUSE		o	Р	1	С	5/1/2014	4.433	F	750	\$3,318,750	355	
2244120	к	HILL DRIVE (TERRACE BRIDGE)	PROSPECT PARK LAKE		wo	P	3	s	9/16/2014	3.436	F	7,800	\$34,515,000	355	
2231840	Q	HILLSIDE AVENUE	BCIP		Α		2	s	3/18/2014	4.211	F	9,672	\$42,798,600	413	
2247320	Q	HONEYWELL STREET	AMTRAK & LIRR YARD	AL	o		22	s	9/26/2013	5.903	G	99,036	\$438,234,300	402 401	
2232040	м	HOUSTON STREET	FDR DRIVE		А		2	s	5/6/2014	3.750	F	11,010	\$48,719,250	103	
223204B	м	HOUSTON STREET RAMP TO FDR DRIVE NORTHBOUND	RELIEF		AR		4	s	1/17/2014	4.792	F	7,125	\$31,528,125	103	
2267240	м	HRD RAMP TO GEORGE WASHINGTON BRIDGE	HARLEM RIVER DRIVE SOUTHBOUND		А		55	s	10/14/2014	3.042	F	122,900	\$543,832,500	112	
2249300	R	HUGUENOT AVENUE	SIRT SOUTH SHORE	s	О		2	s	9/24/2013	4.788	F	4,900	\$21,682,500	503	
2240450	Q	HUNTERS POINT AVENUE	DUTCH KILLS		wmo		4	s	5/30/2014	5.056	G	12,168	\$53,843,400	402	
2241190	В	HUNTS POINT AVENUE	AMTRAK - CSX	AC	o		1	s	11/20/2014	4.813	F	10,049	\$44,466,825	202	
2075859	В	HUTCHINSON RIVER PARKWAY	HUTCHINSON RIVER		WMA		7	s	11/7/2014	4.828	F	60,500	\$267,712,500	210 228	3
2241959	В	HUTCHINSON RIVER PARKWAY	AMTRAK - CSX	AC	О		1	s	10/9/2014	5.542	G	15,444	\$68,339,700	210 211	1
2249810	R	HYLAN BOULEVARD	LEMON CREEK		wo		1	s	3/10/2014	6.172	VG	11,400	\$50,445,000	503	
2245300	м	INWOOD HILL PARKK FOOTBRIDGE	AMTRAK 30 STREET BRANCH	А	O-PED	Р	6	С	8/6/2013	4.100	F	700	\$3,097,500	112	
2246700	м	ISHAM PARK PEDESTRIAN BRIDGE	HARLEM RIVER INLET		WO-PED	Р	1	С	1/29/2014	3.552	F	300	\$1,327,500	112	
2246690	м	ISHAM PARK VEHICULAR	HARLEM RIVER INLET		o	Р	1	s	4/28/2014	6.065	VG	911	\$4,031,175	112	

BIN	BORO	FEATURE CARRIED		RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	NR BL RT	DECK AREA	REPLACEMENT COST	CD CD2C	:D3
2230099	Q	JACKIE ROBINSON PARKWAY	CYPRESS HILLS CEMETERY		Α		1	s	1/6/2014	5.444	G	4,200	\$18,585,000	405	
2230179	Q	JACKIE ROBINSON PARKWAY	METROPOLITAN AVENUE		Α		2	s	4/22/2014	5.286	G	8,673	\$38,378,025	482	
2248299	Q	JACKIE ROBINSON PARKWAY-UNION TURNPIKE	AUSTIN STREET		o		1	s	5/23/2014	4.806	F	5,900	\$26,107,500	409 406	
2247260	Q	JACKSON AVENUE	LIRR MONTAUK DIV	L	o		1	s	10/8/2014	5.550	G	4,517	\$19,987,725	402	
2231819	O	JAMAICA AVENUE	ВСІР		А		2	s	3/19/2014	4.773	F	11,500	\$50,887,500	413	
2230287	В	JEROME AVENUE	MOSHOLU PARKWAY	т	Α		3	s	5/22/2013	4.816	F	11,800	\$52,215,000	207	
2249070	R	JOHN STREET PEDESTRIAN BRIDGE	B&O RR (ABANDONED)	0	O-PED		2	С	8/15/2014	5.423	G	1,050	\$4,646,250	501	
2247480	О	JUNIPER BOULEVARD SOUTH	CSX TRANSPORT	С	o		1	s	8/16/2013	5.000	G	9,000	\$39,825,000	405	
2230380	к	KANE STREET	278I (B.Q.E.)		А		2	s	3/27/2014	4.153	F	5,000	\$22,125,000	306	
2243770	к	KINGS HIGHWAY	BMT SEA BEACH	т	o		1	s	6/28/2013	6.628	VG	5,032	\$22,266,600	311	
2231449	к	KNAPP STREET	вѕнр		А		1	s	4/9/2014	4.313	F	9,500	\$42,037,500	315	
2241169	В	LAFAYETTE AVENUE	AMTRAK - CSX	AC	О		1	s	11/18/2014	5.365	G	12,000	\$53,100,000	202	
2249110	R	LAKE AVENUE	B&O RR (ABANDONED)	О	О		3	s	4/18/2014	5.148	G	5,900	\$26,107,500	501	
2247240	Q	LEFFERTS BOULEVARD	LIRR MAIN LINE	L	0		3	s	8/30/2013	5.806	G	5,460	\$24,160,500	409	
2241139	В	LEGGETT AVENUE	AMTRAK - CSX	AC	О		3	s	11/17/2014	4.620	F	41,551	\$183,863,175	202	
2243850	к	LIBERTY AVENUE	LIRR BAY RIDGE	N	О		3	s	9/23/2014	6.103	VG	6,659	\$29,466,075	316	
2249460	R	LINCOLN AVENUE	SIRT SOUTH SHORE	s	o		1	s	9/10/2013	5.190	G	4,500	\$19,912,500	502	
2243190	к	LINCOLN PLACE	FRANKLIN SHUTTLE	т	О		1	s	6/26/2014	6.672	VG	2,460	\$10,885,500	308	
2243010	к	LINCOLN ROAD	BMT SUBWAY, BRIGHTON	т	О		1	s	5/19/2014	6.685	VG	6,243	\$27,625,275	355	
2231750	Q	LINDEN BOULEVARD	ВСІР		Α		2	s	2/25/2014	4.432	F	6,700	\$29,647,500	413	
2243910	к	LIVONIA AVENUE PEDESTRIAN BRIDGE	LIRR BAY RIDGE	N	O-PED		6	С	8/7/2014	4.833	F	2,500	\$11,062,500	316	
2241159	В	LONGWOOD AVENUE	AMTRAK - CSX	AC	О		2	s	11/18/2014	5.236	G	10,625	\$47,015,625	202	
1240090	вм	MACOMBS DAM BRIDGE	HARLEM RIVER	м	wмо		52	s	12/13/2013	3.986	F	220,000	\$973,500,000	110 204	
2240079	вм	MADISON AVENUE BRIDGE	HARLEM RIVER		wмо		21	s	9/17/2014	4.861	F	80,000	\$354,000,000	111 201	
2242210	В	MAGNOLIA WAY	BRONX RIVER		wo	Р	3	s	5/6/2014	4.763	F	6,200	\$27,435,000	227	
2249210	R	MAIN STREET PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		9	С	3/5/2014	4.123	F	400	\$1,770,000	503	
2240027	км	MANHATTAN BRIDGE (LOWER LEVEL)	EAST RIVER	т	WEO		23	s	10/22/2014	3.889	F	616,390	\$2,727,525,750	103 302	
2240028	км	MANHATTAN BRIDGE (UPPER LEVEL)	NYCTA TRACKS-BMT	т	WEO		43	s	10/21/2014	3.757	F	587,424	\$2,599,351,200	103 302	
2229480	В	MANHATTAN COLLEGE PARKWAY	ННР		А		3	s	6/3/2013	5.053	G	6,200	\$27,435,000	208	
2245040	М	MARGARET CORBIN DRIVE	PEDESTRIAN PATH NEAR CAFÉ		О	Р	1	С	6/9/2014	4.933	F	598	\$2,646,150	112	
2245050	м	MARGARET CORBIN DRIVE	PEDESTRIAN PATH NEAR NORTH ENTRANCE		О	Р	1	С	4/8/2014	4.600	F	889	\$3,933,825	112	
2230190	Q	MARKWOOD ROAD	JACKIE ROBINSON PARKWAY		А		1	s	1/27/2014	5.167	G	4,400	\$19,470,000	482 406	
2249760	R	MARTLINGS AVENUE	RICHMOND LAKE DAM		wo		2	s	6/24/2013	4.467	F	7,000	\$30,975,000	501	
2269030	В	MATTHEWSON ROAD	MAC CRACKEN AVENUE		0		15	s	10/8/2014	4.175	F	14,880	\$65,844,000	205	
2243410	к	MCDONALD AVENUE	LIRR BAY RIDGE	N	0		1	s	10/1/2014	5.141	G	2,760	\$12,213,000	312	
2248260	Q	MEADOW LAKE BRIDGE	MEADOW LAKE		wo	Р	5	s	4/29/2014	4.458	F	4,200	\$18,585,000	481	
2241110	В	MELROSE AVENUE	CSX PT MORRIS - (ABANDONED)	С	О		8	s	8/20/2013	5.667	G	37,854	\$167,503,950	203	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD CD2	CD3
2231710	Q	MERRICK BOULEVARD	BLP NORTHBOUND		А		1	s	2/11/2014	4.467	F	6,000	\$26,550,000	413	
2231720	Q	MERRICK BOULEVARD	BLP SOUTHBOUND		А		1	s	2/12/2014	4.200	F	6,000	\$26,550,000	413	
1247560	Q	METROPOLITAN AVENUE	LIRR - NY&ATL	LN	О		2	s	9/23/2014	3.603	F	20,900	\$92,482,500	405	
2240290	к	METROPOLITAN AVENUE	ENGLISH KILLS		wmo		5	s	7/9/2013	5.444	G	10,550	\$46,683,750	301	
2247500	Q	METROPOLITAN AVENUE	CSX TRANSPORT	С	o		1	s	8/16/2013	4.233	F	18,650	\$82,526,250	405	
2249470	R	MIDLAND AVENUE	SIRT SOUTH SHORE	s	o		1	s	10/29/2013	5.466	G	3,000	\$13,275,000	502	
2257569	м	MILLER HIGHWAY	TERRAIN		А		64	s	12/5/2014	4.352	F	272,475	\$1,205,701,875	104 107	
2249530	R	MINTHORNE STREET PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		26	С	3/13/2014	4.736	F	6,000	\$26,550,000	501	
2243240	к	MONTGOMERY STREET	FRANKLIN SHUTTLE	т	o		1	s	8/8/2013	5.843	G	2,240	\$9,912,000	309	
2249090	R	MORNINGSTAR ROAD	B&O RR (ABANDONED)	0	o		4	s	5/21/2013	4.898	F	7,900	\$34,957,500	501	
2268930	М	MORRIS STREET PEDESTRIAN BRIDGE	BROOKLYN-BATTERY TUNNEL PLAZA		A-PED		3	С	7/15/2013	3.875	F	1,842	\$8,150,850	101	
2230250	В	MOSHOLU PARKWAY	BRONX RIVER		WA		5	s	1/8/2014	4.263	F	16,300	\$72,127,500	227	
2230260	В	MOSHOLU PARKWAY	METRO NORTH	м	Α		1	s	4/30/2014	5.391	G	8,880	\$39,294,000	227 207	
2230270	В	MOSHOLU PARKWAY	WEBSTER AVENUE		А		1	s	5/21/2013	5.203	G	8,480	\$37,524,000	207	
2230290	В	MOSHOLU PARKWAY	EQUESTRIAN PATH		А		1	s	1/13/2014	4.310	F	4,300	\$19,027,500	226	
2230300	В	MOSHOLU PARKWAY	CONRAIL (ABANDONED)	С	А		1	s	7/31/2014	4.271	F	4,600	\$20,355,000	226	
2230310	В	MOSHOLU PARKWAY	SOUTHBOUND RAMP TO HHP		А		2	s	9/16/2013	4.919	F	7,400	\$32,745,000	226	
2248059	Q	MOTOR PARKWAY (PEDESTRIAN)	FRANCIS LEWIS BOULEVARD		O-PED	Р	2	С	6/13/2014	4.528	F	2,800	\$12,390,000	408	
2248060	Q	MOTOR PARKWAY (PEDESTRIAN)	BELL BOULEVARD		O-PED	Р	2	С	6/29/2014	4.403	F	2,650	\$11,726,250	411	
2248070	Q	MOTOR PARKWAY (PEDESTRIAN)	SPRINGFIELD BOULEVARD		O-PED	Р	3	С	6/17/2014	3.639	F	2,900	\$12,832,500	411	
2248080	Q	MOTOR PARKWAY (PEDESTRIAN)	HOLLIS COURT BOULEVARD		O-PED	Р	3	С	11/18/2014	4.672	F	2,700	\$11,947,500	408	
2248100	Q	MOTOR PARKWAY (PEDESTRIAN)	73RD AVENUE		O-PED	Р	3	С	2/11/2014	4.672	F	2,600	\$11,505,000	408	
2248110	Q	MOTOR PARKWAY (PEDESTRIAN)	ALLEY PARK PEDESTRIAN WALK		O-PED	Р	1	С	6/17/2014	4.056	F	1,000	\$4,425,000	413	
2247110	Q	MURRAY STREET	LIRR PORT WASH BR	L	o		1	s	8/21/2013	5.222	G	4,000	\$17,700,000	407	
2230120	Q	MYRTLE AVENUE	JACKIE ROBINSON PARKWAY		А		1	s	4/17/2014	5.250	G	6,400	\$28,320,000	405 482	
2247620	Q	MYRTLE AVENUE	ABANDONED LIRR		o		3	s	1/2/2014	5.028	G	6,725	\$29,758,125	482 406	
2249350	R	NELSON AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		3	С	3/10/2014	4.115	F	300	\$1,327,500	503	
1067150	В	NEREID AVE (EAST 240TH STREET)	BRONX RIVER PARKWAY	м	o		10	s	10/19/2013	4.632	F	57,750	\$255,543,750	212	
2249430	R	NEW DORP LANE	SIRT SOUTH SHORE	s	o		2	s	9/9/2013	4.958	F	7,600	\$33,630,000	502	
2243660	к	NEW UTRECHT AVENUE	LIRR BAY RIDGE	N	o		1	s	10/3/2014	5.883	G	2,350	\$10,398,750	311	
2243140	к	NEWKIRK AVENUE	BMT SUBWAY, BRIGHTON	т	o		3	s	6/17/2014	4.574	F	4,100	\$18,142,500	314	
2240240	к	NINTH STREET BRIDGE	GOWANUS CANAL		WMO		3	s	6/25/2013	6.065	VG	5,772	\$25,541,100	306	
2231670	Q	NORTH CONDUIT AVENUE WESTBOUND	BLP EASTBOUND		Α		1	s	1/13/2014	4.917	F	4,000	\$17,700,000	413	
2231680	Q	NORTH CONDUIT AVENUE WESTBOUND	BLP WESTBOUND		А		2	s	1/20/2014	4.932	F	6,500	\$28,762,500	413	
2269760	R	NORTH RAMP	SIRT	s	o	F	2	s	10/22/2014	6.431	VG	6,000	\$26,550,000	501	
2231870	Q	NORTHERN BOULEVARD	ВСІР		А		2	s	7/14/2014	5.764	G	9,400	\$41,595,000	411	
2240440	Q	NORTHERN BOULEVARD	ALLEY CREEK		wo		2	s	6/17/2014	4.681	F	8,300	\$36,727,500	411	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	NR BL RT	DECK AREA	REPLACEMENT COST	CD CE	)2CD3
2055802	Q	NORTHERN BOULEVARD EASTBOUND	FLUSHING RIVER		wo		40	s	10/28/2014	4.268	F	78,894	\$349,105,950	407	
2055801	Q	NORTHERN BOULEVARD WESTBOUND	FLUSHING RIVER		wo		40	s	11/21/2012	4.338	F	71,900	\$318,157,500	407	
205580A	Q	NORTHERN BOULEVARD WESTBOUND TO 678I SOUTHBOUND	VACANT LAND		AR		16	s	6/5/2014	5.619	G	8,600	\$38,055,000	407	
2243500	к	NOSTRAND AVENUE	LIRR BAY RIDGE	N	o		2	s	9/29/2014	4.898	F	4,320	\$19,116,000	314	
2240138	вм	NYCTA IRT	HARLEM RIVER/BROADWAY	тм	WMO		3	s	10/9/2013	4.720	F	19,520	\$86,376,000	112 20	208
2243480	к	OCEAN AVENUE	LIRR BAY RIDGE	N	0		2	s	9/16/2014	4.965	F	5,000	\$22,125,000	314	
2240320	к	OCEAN AVENUE PEDESTRIAN BRIDGE	SHEEPSHEAD BAY		WO-PED		30	С	5/8/2014	4.532	F	4,450	\$19,691,250	315	
2243439	к	OCEAN PARKWAY	LIRR BAY RIDGE	N	0		1	s	9/19/2014	4.927	F	7,000	\$30,975,000	312	
2249269	R	PAGE AVENUE	SIRT SOUTH SHORE	s	0		4	s	9/23/2013	5.806	G	30,710	\$135,891,750	503	
2245470	м	PARK AVE NORTHBOUND	EAST 45TH STREET		o		1	s	5/21/2014	4.865	F	2,400	\$10,620,000	105	
2245460	М	PARK AVE SOUTHBOUND	EAST 45TH STREET		0		1	s	5/22/2014	4.514	F	2,400	\$10,620,000	105	
2246550	М	PARK AVENUE VIADUCT	EAST 42ND STREET		О		10	s	12/10/2014	4.478	F	22,150	\$98,013,750	105	
2247600	Q	PARK LANE SOUTH	LIRR MONTAUK DIV	L	0		1	s	9/22/2014	6.983	VG	3,024	\$13,381,200	409 48	32
2242099	В	PARK ROAD (204TH STREET)	BRONX RIVER		wo		1	s	5/6/2014	4.655	F	4,700	\$20,797,500	212	
224001A	м	PARK ROW TO BROOKLYN	WILLIAM STREET NORTHBOUND		OE		4	s	4/23/2014	4.229	F	10,167	\$44,988,975	101	
2269780	R	PARKING ENTRANCE RAMP	SIRT	s	0	F	3	s	11/7/2014	5.889	G	8,589	\$38,006,325	501	
2269730	R	PARKING EXIT RAMP	SIRT	s	О	F	10	s	11/7/2014	6.097	VG	20,727	\$91,716,975	501	
2243020	к	PARKSIDE AVENUE - OCEAN AVENUE	BMT SUBWAY, BRIGHTON	т	О		6	s	6/18/2014	4.043	F	48,700	\$215,497,500	314	
2247060	Q	PARSONS BOULEVARD	LIRR PORT WASH BR	L	О		1	s	9/24/2014	4.824	F	4,200	\$18,585,000	407	
224001C	м	PEARL STREET TO BROOKLYN	LAND ADJACENT TO BRIDGE		OE		9	s	3/28/2014	3.678	F	6,365	\$28,165,125	101	
224001F	М	PEARL STREET TO FDR DRIVE	LAND ADJACENT TO BRIDGE		OE		3	s	7/9/2014	5.141	G	5,200	\$23,010,000	103	
222928C	М	PEDESTRIAN BRIDGE AT WEST 73RD STREET	HHP - AMTRAK	А	A-PED	Р	5	С	8/12/2013	3.812	F	3,700	\$16,372,500	107	
2247630	Q	PEDESTRIAN BRIDGE NEAR UNION TURNPIKE	ABANDONED LIRR		O-PED		8	С	6/12/2014	4.582	F	1,500	\$6,637,500	406	
2246090	М	PEDESTRIAN BRIDGE OPPOSITE 65TH STREET	TRANSVERSE ROAD #1		O-PED	P	1	С	9/19/2014	4.655	F	2,300	\$10,177,500	164	
2244130	к	PEDESTRIAN NEAR BOATHOUSE (LULLWATER BRIDGE)	PROSPECT PARK LAKE		WO-PED	P	1	С	5/22/2014	4.898	F	1,000	\$4,425,000	355	
2246400	М	PEDESTRIAN PATH OPPOSITE EAST 79TH STREET	TRANSVERSE ROAD #2		O-PED	P	1	С	7/14/2013	4.233	F	3,700	\$16,372,500	164	
2241380	В	PELHAM BAY PARK EQUESTRIAN	AMTRAK - CSX	AC	O-PED	Р	1	С	7/24/2013	3.339	F	7,300	\$32,302,500	228	
2231519	к	PENNSYLVANIA AVENUE	вѕнр		А		2	s	6/18/2013	5.694	G	6,640	\$29,382,000	356	
2243870	к	PITKIN AVENUE	LIRR BAY RIDGE	N	o		2	s	9/24/2014	6.279	VG	5,328	\$23,576,400	316	
2243210	к	PRESIDENT STREET	FRANKLIN SHUTTLE	т	o		2	s	6/25/2014	5.078	G	2,500	\$11,062,500	309	
2232167	М	PROMENADE OVER FOR DRIVE	FDR DRIVE- EAST 81ST STREET - EAST 90TH STREET		A-PED	P	53	s	7/2/2013	3.143	F	93,000	\$411,525,000	108	
2268760	м	PS-5 PEDESTRIAN BRIDGE	TENTH AVENUE		O-PED		5	С	12/9/2013	4.184	F	1,285	\$5,686,125	112	
2240639	KQ	PULASKI BRIDGE	NEWTOWN CREEK		wmo		44	s	6/5/2014	4.437	F	205,770	\$910,532,250	301 40	)2
2230209	Q	QUEENS BOULEVARD	JACKIE ROBINSON PARKWAY	т	А		5	s	6/9/2014	4.841	F	37,700	\$166,822,500	409	
2230530	Q	QUEENS BOULEVARD	278I (B.Q.E.)		А		2	s	10/22/2014	6.306	VG	25,543	\$113,027,775	402	
2230869	Q	QUEENS BOULEVARD	ACCESS RD BQE SOUTHBOUND		А		1	s	9/30/2014	5.659	G	7,900	\$34,957,500	402	
2247310	Q	QUEENS BOULEVARD	AMTRAK & LIRR YARD	AL	0		19	s	12/6/2012	6.268	VG	92,400	\$408,870,000	402 40	)1

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L	BRIDGE TYPE	OTHER OWNER	SPA NS	NG	Inspection Date	Condition Rating	BL	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240047	MQ	QUEENSBORO BRIDGE (LOWER LEVEL)	EAST RIVER	RO AL	WEO		53	SR s	11/12/2014	4.167	RT F	626,900	\$2,774,032,500	108	402	401
2240048		QUEENSBORO BRIDGE (LOWER LEVEL)	EAST RIVER - LL	AL	WEO		37	s	10/13/2014	4.340	F	322,300	\$1,426,177,500			
224005A		RAMP FROM FDR DRIVE	HARLEM RIVER DR NORTHBOUND		OR		11	s	11/7/2014	6.887	vG	28,233	\$124,931,025			
2248040		RAMP TO LINDEN BOULEVARD	SOUTH CONDUIT AVENUE		0		1	s	5/15/2014	5.200	G	3.352	\$14,832,600		$\dashv$	
224007A		RAMP TO MADISON AVENUE	EAST 138TH STREET		OR		7	s	2/6/2014	5.028	G	19.880	\$87,969,000		$\dashv$	-1
223201D		RAMP TO NORTHBOUND FOR DRIVE	FDR DRIVE & SOUTH STREET		AR		22	s	2/25/2014	4.967	F	15,825	\$70,025,625		103	
222934A		RAMP TO NORTHBOUND HHP	AMTRAK WEST SIDE	А	AR		26	s	6/30/2014	3.764	F	10,800	\$47,790,000		103	-1
2240350		RICHMOND AVENUE	RICHMOND CREEK		wo		3	s	7/1/2013	5.472	G	32,589	\$144,206,325		$\dashv$	
2249270		RICHMOND VALLY ROAD	SIRT SOUTH SHORE	s	0		4	s	9/13/2013	5.164	G	9,440	\$41,772,000	-	$\dashv$	
2244150		RIDGE BOULEVARD	SHORE ROAD DRIVE	3	0		1	s	6/10/2013	6.333	VG	4,350	\$19,248,750	-	$\dashv$	
2240660		RIKERS ISLAND BRIDGE	RIKERS ISLAND CHANNEL		wo		56	s	9/26/2013	4.211	F	183,100	\$810,217,500		480	-1
2241430		RIVER AVENUE	METRO NORTH RR HUD	м	0		1	s	8/30/2013	6.156	VG	5,040	\$22,302,000	-	480	
2229510		RIVER AVENUE	HHP	IVI	Α		2	s	7/22/2013	5.079	G	5,200	\$22,302,000		$\dashv$	
							27	Ė	7/12/2013		F	-,			$\dashv$	-
2246660		RIVERSIDE DRIVE	WEST 125TH STREET - WEST 134TH STREET		0			s	10/24/2014	4.472	F	148,300	\$656,227,500		_	-
2246720			WEST 158TH STREET - AMTRAK	A			77	s	5/6/2013	3.528		185,658	\$821,536,650		112	H
2246970	M	RIVERSIDE DRIVE	W EST 96TH STREET		0		3	s	1/16/2014	5.471	G	10,600	\$46,905,000	-	$\dashv$	
2246980		RIVERSIDE DRIVE	WEST 138TH STREET		0		1	S		4.900	F	6,700	\$29,647,500			
2267130		RIVERSIDE DRIVE	WEST 145TH STREET		0		1	s	4/29/2013	5.133	G	5,800	\$25,665,000		$\dashv$	
2269240		RIVERSIDE DRIVE	WEST 155TH STREET		0		1	S	4/25/2013	4.640	F	2,780	\$12,301,500		112	$\vdash$
2269200		RIVERSIDE DRIVE SOUTH	AMTRAK	Α	0		11	S	11/4/2013	6.069	VG	69,040	\$305,502,000	-		
2248369		ROCKAWAY BOULEVARD	THURSTON BASIN		wo		2	S	7/16/2013	5.474	G	6,000	\$26,550,000		413	-
2300130		ROCKAWAY BOULEVARD	HOOK CREEK		wo		3	S	7/15/2013	6.271	VG	18,302	\$80,986,350	413		-
2230587	Q	ROOSEVELT AVENUE	278I (B.Q.E.)		Α		2	s	9/24/2013	5.889	G	11,022	\$48,772,350	402		
2240507	Q	ROOSEVELT AVENUE	678I - FLUSHING RIVER		WA		27	s	11/7/2014	3.521	F	84,424	\$373,576,200	-	-	
2247380	Q	ROOSEVELT AVENUE	CSX - HELLGATE	С	0		2	S	8/1/2013	6.333	VG	7,380	\$32,656,500	402	403	404
2267160	Q	ROOSEVELT AVENUE	SHEA ROAD		0		4	s	7/29/2013	4.873	F	7,280	\$32,214,000	408	!	$\vdash$
2240640	MQ	ROOSEVELT ISLAND BRIDGE	EAST RIVER EAST CHANNEL		WMO		8	s	10/29/2014	5.569	G	36,500	\$161,512,500	108	401	$\vdash$
2249420	R	ROSE AVENUE	SIRT SOUTH SHORE	s	0		2	s	8/21/2013	5.258	G	3,800	\$16,815,000	502		
2249410	R	ROSS AVENUE	SIRT SOUTH SHORE	s	0		2	s	8/20/2013	5.379	G	3,800	\$16,815,000	502		
2248200	Q	RUST STREET	FLUSHING AVENUE		0		1	s	6/21/2013	4.922	F	2,940	\$13,009,500	405		Ш
2230370	к	SACKETT STREET	278I (B.Q.E.)		Α		2	s	3/19/2014	4.500	F	5,000	\$22,125,000	306		
2244470	к	SEELEY STREET	PROSPECT AVENUE		0		1	s	7/25/2014	4.033	F	8,482	\$37,532,850	307		
2249290	R	SEGUINE AVENUE	SIRT SOUTH SHORE	s	0		1	s	8/30/2013	6.016	VG	3,250	\$14,381,250	503		
2248220	Q	SERVICE ROAD TURNAROUND	FLUSHING AVENUE		o		1	s	6/21/2013	5.078	G	2,940	\$13,009,500	405		
2240200	В	SHORE ROAD	HUTCHINSON RIVER		wmo		7	s	5/30/2014	4.537	F	43,576	\$192,823,800	228		
2241390	В	SHORE ROAD CIRCLE	AMTRAK - CSX	AC	o		1	s	7/21/2014	7.000	VG	8,067	\$35,696,475	228		
2249120	R	SIMONSON AVENUE	B&O RR (ABANDONED)	0	o		3	s	5/15/2013	5.852	G	5,819	\$25,749,075	501		

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG	Inspection Date	Condition Rating	VR BI	DECK AREA	REPLACEMENT COST	CD	CD2CD3
				RO		OWILER	143	SR	Date	Ruting	RT				
2249860	R	SLATER BOULEVARD	NEW CREEK		wo		1	s	5/17/2013	5.510	G	2,037	\$9,013,725	502	
2242220	В	SNUFF MILL ROAD	BRONX RIVER		wo	Р	2	s	1/9/2014	4.395	F	4,800	\$21,240,000	227	
2249200	R	SOUTH AVENUE	ARLINGTON YARD	С	0		3	s	9/17/2013	6.527	VG	8,500	\$37,612,500	501	
2231560	Q	SOUTH CONDUIT BOULEVARD	вѕор		А		2	s	6/16/2014	5.268	G	15,776	\$69,808,800	410	
2249770	R	SOUTH OF BROOKS LAKE	STREAM IN PARK		WO-PED	Р	3	С	11/26/2013	4.946	F	700	\$3,097,500	501	
223201B	м	SOUTH STREET RAMP TO FDR DRIVE SOUTHBOUND	SOUTH STREET		AR		10	s	2/24/2014	3.791	F	13,388	\$59,241,900	101	
226771D	м	SOUTHBOUND HHP RAMP TO 79TH STREET	79TH STREET BOAT BASIN GARAGE		AR	Р	4	s	5/8/2014	4.403	F	2,601	\$11,509,425	107	
2241080	В	SOUTHERN BOULEVARD	CSX PT MORRIS - (ABANDONED)	С	0		1	s	7/1/2014	4.093	F	3,900	\$17,257,500	201	
2242029	В	SOUTHERN BOULEVARD	EAST FORDHAM ROAD		0		2	s	1/29/2014	4.605	F	12,900	\$57,082,500	227	
2231630	Q	SPRINGFIELD BOULEVARD	BSOP		А		2	s	4/25/2014	4.591	F	8,500	\$37,612,500	413	
2268770	Q	SPRINGFIELD BOULEVARD	EQUESTRIAN PATH (ABANDONED)		0		1	s	5/9/2013	5.000	G	1,470	\$6,504,750	413	
2243180	к	ST JOHNS PLACE	FRANKLIN SHUTTLE	т	0		1	s	8/23/2013	6.656	VG	2,300	\$10,177,500	308	
2241700	В	ST PAULS PLACE PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	O-PED		2	С	10/24/2014	4.887	F	888	\$3,929,400	203	
2241060	В	ST. MARYS & CONCORD	CSX PT MORRIS - (ABANDONED)	С	0		1	s	7/2/2014	5.370	G	4,500	\$19,912,500	201	
2270170	R	STATEN ISLAND FERRY PEDESTRIAN BRIDGE	PARKING LOT EXIT ROADWAY		O-PED	F	5	С	7/28/2014	5.583	G	2,917	\$12,907,725	501	
2230600	Q	STEINWAY STREET	278I WESTBOUND (BQE)		Α		1	s	8/7/2014	6.349	VG	5,229	\$23,138,325	401	
2230610	Q	STEINWAY STREET	278I EASTBOUND (BQE)		А		1	s	8/8/2014	6.349	VG	5,146	\$22,771,050	401	
2243170	к	STERLING PLACE	FRANKLIN SHUTTLE	т	О		1	s	8/23/2013	6.438	VG	2,300	\$10,177,500	308	
2240540	к	STILLWELL AVENUE	CONEY ISLAND CREEK		wo		2	s	6/12/2013	6.292	VG	17,000	\$75,225,000	313	
2230350	к	SUMMIT STREET PEDESTRIAN BRIDGE	278I (B.Q.E.)		A-PED		2	s	4/4/2014	4.557	F	1,400	\$6,195,000	306	
2231650	Q	SUNRISE HWY WESTBOUND	BLP EASTBOUND		Α		1	s	3/21/2014	4.262	F	4,100	\$18,142,500	413	
2231660	Q	SUNRISE HWY WESTBOUND	BLP WESTBOUND		Α		2	s	2/25/2014	4.565	F	5,350	\$23,673,750	413	
2231800	Q	SUPERIOR ROAD	ВСІР		Α		2	s	4/1/2014	4.682	F	7,000	\$30,975,000	413	
2243890	к	SUTTER AVENUE	LIRR BAY RIDGE	N	o		3	s	9/26/2014	6.292	VG	5,497	\$24,324,225	316	
2247300	Q	THOMPSON AVENUE	AMTRAK & LIRR YARD	AL	o		14	s	12/6/2012	5.042	G	61,280	\$271,164,000	402	
2241170	В	TIFFANY STREET	AMTRAK - CSX	AC	О		1	s	11/18/2013	5.745	G	7,267	\$32,156,475	202	
224004H	Q	TO 21ST STREET FROM NY	22ND STREET		OE		43	s	10/13/2014	4.366	F	48,100	\$212,842,500	402	
224001B	м	TO BROOKLYN FROM FDR DRIVE	FRANKFORT & PEARL STREETS		OE		31	s	8/1/2014	4.926	F	51,400	\$227,445,000	101	103
224005B	В	TO BRUCKNER BOULEVARD	RELIEF		OR		4	s	10/3/2013	6.831	VG	19,990	\$88,455,750	201	
224004A	м	TO EAST 60TH STREET FROM QUEENS	FIRST AVENUE		OE		13	s	4/21/2014	5.338	G	14,800	\$65,490,000	108	
224004C	М	TO EAST 62ND STREET FROM QUEENS	EAST 60TH - EAST 61ST STREET		OE		10	s	7/17/2014	4.985	F	16,720	\$73,986,000	108	
224001D	м	TO FDR DIVE NORTHBOUND	PEARL STREET		OE		30	s	9/18/2014	4.679	F	49,600	\$219,480,000	101	103
2245480	м	TO GEORGE WASHINGTON BRIDGE OPPOSITE WEST 171ST STREET	RIVERSIDE DRIVE		o		1	s	2/24/2014	4.524	F	10,773	\$47,670,525	112	
224004G	Q	TO NY FROM 11TH STREET	TERRAIN (CHAMBER)		OE		36	s	7/25/2014	5.268	G	8,360	\$36,993,000	401	402
224004F	Q	TO NY FROM 21ST STREET	21ST STREET		OE		63	s	11/7/2014	4.712	F	63,310	\$280,146,750	402	401
224004E	Q	TO NY FROM THOMSON AVENUE	JACKSON AVENUE	L	OE		94	s	11/26/2014	4.679	F	104,600	\$462,855,000	402	
224001G	М	TO PARK ROW	ROSE STREET		OE		11	s	4/9/2014	4.549	F	16,551	\$73,238,175	101	

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating	VR BL RT	DECK AREA	REPLACEMENT COST	CD C	D2CI	)3
224001E	М	TO PEARL STREET	LAND ADJACENT TO BRIDGE		OE		3	s	6/2/2014	5.197	G	5,300	\$23,452,500 1	101		
224004D	М	TO QUEENS FROM EAST 58TH STREET	EAST 59TH STREET		OE		12	s	6/13/2014	4.396	F	10,858	\$48,046,650 1	106 1	08	
224004B	М	TO QUEENS FROM EAST 59TH STREET	FIRST AVENUE		OE		13	s	4/22/2014	5.542	G	14,800	\$65,490,000 1	108		
2240041	Q	TO THOMSON AVENUE FROM NY	JACKSON AVENUE	L	OE		39	s	11/21/2014	5.148	G	59,100	\$261,517,500 4	102		
2249040	R	TOMPKINS AVENUE	B&O RR (ABANDONED)		0		1	s	4/4/2014	5.953	G	5,096	\$22,549,800 5	501		
2249510	R	TOMPKINS AVENUE	WILLOW AVENUE, SIRT	s	0		2	s	10/17/2014	5.269	G	5,378	\$23,797,650	301		
2249840	R	TOMPKINS AVENUE	GREENFIELD AVENUE		0		1	s	3/10/2014	4.638	F	2,690	\$11,903,250 5	501		
2249230	R	TRACY AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	O-PED		9	С	3/5/2014	3.894	F	635	\$2,809,875 5	503		
2245380	м	TRANSVERSE ROAD #1 WESTBOUND	PEDESTRIAN PATH OPPOSITE EAST 66TH STREET		0	Р	1	s	1/15/2014	5.000	G	1,500	\$6,637,500 1	164		
2246410	М	TRANSVERSE ROAD 1 EASTBOUND (DENESMOUTH ARCH)	PEDESTRIAN PATH OPPOSITE EAST 65TH STREET		0	Р	1	s	2/24/2014	4.636	F	1,739	\$7,695,075 1	164		
2249870	R	TRAVIS AVENUE	MAIN CREEK		wo		1	s	10/16/2013	5.483	G	1,700	\$7,522,500 5	502		
2246560	М	TUDOR CITY PLACE	EAST 42ND STREET		0		1	s	1/24/2014	5.133	G	6,600	\$29,205,000 1	106		
2249170	R	UNION AVENUE	B&O RR (ABANDONED)	О	0		4	s	5/14/2013	5.315	G	6,500	\$28,762,500 5	501		
2230360	к	UNION STREET	278I (B.Q.E.)		А		2	s	3/19/2014	4.236	F	5,000	\$22,125,000 3	306		
2240270	к	UNION STREET	GOWANUS CANAL		WMO		5	s	8/15/2014	4.111	F	4,900	\$21,682,500 3	306		
2243200	к	UNION STREET	FRANKLIN SHUTTLE	т	0		2	s	6/25/2014	4.913	F	4,100	\$18,142,500 3	309		
2247040	Q	UNION STREET	LIRR PORT WASH BR	L	0		1	s	8/22/2013	6.172	VG	3,313	\$14,660,025 4	107		
2230180	Q	UNION TURNPIKE	JACKIE ROBINSON PARKWAY		А		1	s	1/27/2014	5.672	G	5,359	\$23,713,575 4	182		
2231850	Q	UNION TURNPIKE	ВСІР		А		2	s	3/19/2014	4.409	F	13,600	\$60,180,000 4	¥13		
2248129	Q	UNION TURNPIKE	CREEDMOORE HOSPITAL ROAD		0		1	s	6/7/2013	4.867	F	3,500	\$15,487,500 4	Į13		1
2241330	В	UNIONPORT ROAD	AMTRAK - CSX	AC	0		1	s	10/28/2014	4.688	F	7,631	\$33,767,175 2	211		
2231910	Q	UTOPIA PARKWAY	ВСІР		А		2	s	3/7/2014	5.341	G	7,200	\$31,860,000 4	107		
2229550	В	VAN CORTLANDT EQUESTRIAN	ННР		A-PED	Р	2	С	7/16/2014	4.440	F	2,100	\$9,292,500 2	226		
2229540	В	VAN CORTLANDT PARK	ннр		A-PED	Р	2	С	7/14/2014	4.759	F	3,900	\$17,257,500 2	226		
2249130	R	VAN NAME AVENUE	B&O RR (ABANDONED)	o	0		3	s	4/16/2014	5.186	G	5,474	\$24,222,450 5	501		1
2249140	R	VAN PELT AVENUE	B&O RR (ABANDONED)	О	0		3	s	5/16/2013	5.576	G	5,000	\$22,125,000 5	501		
2241070	В	WALES AVENUE	CSX PT MORRIS - (ABANDONED)	С	0		1	s	7/2/2014	6.467	VG	2,535	\$11,217,375 2	201		1
2241410	В	WALTON AVENUE	METRO NORTH RR HUD	м	0		1	s	5/5/2014	4.406	F	3,600	\$15,930,000 2	204		1
2240620	м	WARDS ISLAND PEDESTRIN BRIDGE	HARLEM RIVER		WMO-PED		10	С	4/2/2014	4.667	F	19,500	\$86,287,500 1	111		
2243250	к	WASHINGTON AVENUE	FRANKLIN SHUTTLE	т	0		1	s	6/24/2014	6.000	G	3,657	\$16,182,225 3	309 2	355	1
2066919	вм	WASHINGTON BRIDGE	HARLEM RIVER	м	wo		9	s	11/29/2012	4.642	F	128,339	\$567,900,075 1	112 2	205 2	04
226672A	М	WEST 31ST STREET	AMTRAK LAYUP TRACKS	А	0		9	s	11/15/2014	3.619	F	8,800	\$38,940,000 1	104		
224501B	М	WEST 33RD STREET	AMTRAK 30 STREET BRANCH	А	OR		8	s	3/7/2014	4.500	F	16,500	\$73,012,500 1	104		
224501C	м	WEST 33RD STREET	LAND ADJACENT TO AMTRAK	А	OR		2	s	5/14/2013	4.472	F	2,360	\$10,443,000 1	104		1
224501D	м	WEST 34TH STREET	AMTRAK 30 STREET BRANCH	А	OR		4	s	5/13/2013	4.542	F	11,800	\$52,215,000 1	104		1
224501E	м	WEST 35TH STREET	AMTRAK 30 STREET BRANCH	А	OR		3	s	7/29/2014	4.181	F	6,500	\$28,762,500 1	104		
224501F	м	WEST 36TH STREET	AMTRAK 30 STREET BRANCH	А	OR		3	s	11/12/2013	4.612	F	5,520	\$24,426,000 1	104		1

BIN	BORO	FEATURE CARRIED		RAI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating		DECK AREA	REPLACEMENT COST	CD CD2C
2245060	М	WEST 37TH STREET	AMTRAK 30 STREET BRANCH	Α	o		3	s	11/12/2013	6.190	VG	7,505	\$33,209,625	104
2245070	М	WEST 38TH STREET	AMTRAK 30 STREET BRANCH	Α	0		2	s	7/8/2014	4.135	F	6,200	\$27,435,000	104
2245080	М	WEST 39TH STREET	AMTRAK 30 STREET BRANCH	А	o		3	s	7/8/2014	4.173	F	6,300	\$27,877,500	104
2245440	М	WEST 40TH STREET	AMTRAK 30 STREET BRANCH	Α	О		4	s	7/23/2014	4.103	F	9,400	\$41,595,000	104
2245330	М	WEST 41ST STREET	AMTRAK 30 STREET BRANCH	Α	o		3	s	7/24/2014	4.444	F	6,200	\$27,435,000	104
2245210	М	WEST 42ND STREET	AMTRAK 30 STREET BRANCH	Α	o		4	s	11/5/2014	4.587	F	10,300	\$45,577,500	104
2245090	М	WEST 43RD STREET	AMTRAK 30 STREET BRANCH	Α	0		2	s	4/18/2014	4.662	F	4,140	\$18,319,500	104
2245100	М	WEST 44TH STREET	AMTRAK 30 STREET BRANCH	Α	0		2	s	4/18/2014	4.559	F	4,300	\$19,027,500	104
2245110	М	WEST 45TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	s	4/29/2014	5.338	G	4,100	\$18,142,500	104
2245120	М	WEST 46TH STREET	AMTRAK 30 STREET BRANCH	Α	0		2	s	4/29/2014	4.500	F	4,100	\$18,142,500	104
2245130	М	WEST 47TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	s	5/6/2014	4.721	F	4,100	\$18,142,500	104
2245140	М	WEST 48TH STREET	AMTRAK 30 STREET BRANCH	А	0		2	s	5/6/2014	4.618	F	4,100	\$18,142,500	104
2245150	М	WEST 49TH STREET	AMTRAK 30 STREET BRANCH	А	o		3	s	5/6/2014	4.426	F	4,100	\$18,142,500	104
2245340	м	WEST 50TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	s	5/13/2014	4.500	F	4,100	\$18,142,500	104
2245160	М	WEST 51ST STREET	AMTRAK 30 STREET BRANCH	А	О		2	s	5/13/2014	4.853	F	4,300	\$19,027,500	104
2245170	м	WEST 52ND STREET	AMTRAK 30 STREET BRANCH	А	o		2	s	5/13/2014	5.191	G	4,300	\$19,027,500	104
2245180	М	WEST 53RD STREET	AMTRAK 30 STREET BRANCH	А	o		2	s	5/20/2014	5.221	G	5,100	\$22,567,500	104
2245350	М	WEST 54TH STREET	AMTRAK 30 STREET BRANCH	А	О		2	s	5/20/2014	5.492	G	4,700	\$20,797,500	104
2245360	м	WEST 55TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	s	5/20/2014	5.529	G	4,300	\$19,027,500	104
2245370	М	WEST 56TH STREET	AMTRAK 30 STREET BRANCH	А	О		2	s	5/20/2014	5.397	G	4,400	\$19,470,000	104
2245220	м	WEST 57TH STREET	AMTRAK 30 STREET BRANCH	А	o		3	s	5/20/2014	4.853	F	9,100	\$40,267,500	104
2245190	М	WEST 58TH STREET	AMTRAK 30 STREET BRANCH	А	О		2	s	5/20/2014	4.706	F	4,100	\$18,142,500	104
2246010	М	WEST 62ND STREET PEDESTRIAN BRIDGE (PINEBANK ARCH)	BRIDLE PATH		O-PED	P	1	С	7/22/2014	4.654	F	1,000	\$4,425,000	164
2245420	м	WEST 65TH STREET ENTRANCE EASTBOUND	BRIDLE PATH WEST END		o	P	1	s	1/14/2014	5.100	G	1,300	\$5,752,500	164
2269210	М	WEST 68TH STREET	AMTRAK	А	О		3	s	11/5/2013	6.593	VG	5,382	\$23,815,350	107
2269190	м	WEST 70TH STREET	AMTRAK	А	o		3	s	11/19/2013	5.542	G	17,258	\$76,366,650	107
2246140	М	WEST 72ND STREET ENTRANCE (RIFTSTONE ARCH)	BRIDLE PATH		О	P	1	s	1/8/2014	4.467	F	3,600	\$15,930,000	164
222928D	М	WEST 72ND STREET RAMP TO HHP NORTHBOUND	RELIEF		AR		1	s	7/18/2014	6.648	VG	1,750	\$7,743,750	107
2246460	м	WEST 77TH STREET ENTRANCE (EAGLEVALE ARCH)	PEDESTRIAN PATH OPPOSITE WEST 77TH STREET		o	P	2	s	1/9/2014	4.263	F	3,066	\$13,567,050	164
2246340	М	WEST 77TH STREET PEDESTRIAN (LADIES POND BRIDGE)	STREAM TO THE LAKE		WO-PED	P	3	С	10/17/2014	4.355	F	500	\$2,212,500	164
2246320	м	WEST 77TH STREET PEDESTRIAN (OAK BRIDGE)	THE LAKE		WO-PED	P	3	С	4/8/2014	5.474	G	1,100	\$4,867,500	164
2229290	М	WEST 79TH STREET	AMTRAK	А	А		1	s	6/11/2014	4.424	F	4,500	\$19,912,500	107
2246380	м	WEST 86TH STREET PEDESTRIAN (SOUTHWEST RESERVOIR BRIDGE)	BRIDLE PATH		O-PED	P	1	С	10/17/2014	4.852	F	700	\$3,097,500	164
2246430	М	WEST 110TH STREET ENTRANCE (MOUNTCLIFF ARCH)	PEDESTRIAN PATH OPPOSITE WEST 109TH STREET		o	P	1	s	2/24/2014	4.317	F	1,200	\$5,310,000	164
2246670	М	WEST 134TH STREET	TERRAIN		o		4	s	6/13/2013	4.870	F	7,500	\$33,187,500	109
2245230	М	WEST 148TH STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	А	O-PED	Р	5	С	8/9/2013	4.200	F	1,100	\$4,867,500	109
2246710	М	WEST 153RD STREET	A.C. POWELL BLVD		o		1	s	1/31/2014	4.611	F	3,082	\$13,637,850	110

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED R	AI L RO	BRIDGE TYPE	OTHER OWNER	SPA NS	RT NG SR	Inspection Date	Condition Rating			REPLACEMENT COST	CD C	D2CD3
2245290	М	WEST 155TH STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	A	O-PED		3	С	7/30/2013	3.862	F	800	\$3,540,000	) 109 1	112
2245250	М	WEST 158TH STREET	AMTRAK 30 STREET BRANCH	A	0		7	s	10/18/2013	5.903	G	29,170	\$129,077,250	) 112	
2245260	М	WEST 173RD SREEET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	A	O-PED	P	2	С	8/6/2013	4.600	F	1,500	\$6,637,500	) 112	
2246600	М	WEST 176TH STREET PEDESTRIAN BRIDGE	APPROACH TO GEORGE WASHINGTON BRIDGE		O-PED	P	1	С	3/7/2014	4.200	F	1,200	\$5,310,000	0 112	
2246489	М	WEST 181ST STREET	RAMP TO WASHINGTON BRIDGE		o		1	s	1/30/2014	5.200	G	8,200	\$36,285,000	) 112	
2229400	М	WEST 181ST STREET PEDESTRIAN BRIDGE	HHP NORTHBOUND		A-PED	P	7	С	2/25/2014	4.493	F	1,500	\$6,637,500	112	
M00001	М	WEST 191ST STREET PEDESTRIAN TUNNEL	BROADWAY - IRT #1 SUBWAY		O-PED		1	С	12/9/2014	4.364	F	2,000	\$8,850,000	) 112	
2241940	В	WEST 205TH STREET	NYCTA IND YARDS	т	o		4	s	10/31/2014	5.514	G	32,508	\$143,847,900	207	
2240120	вм	WEST 207TH STREET/WEST FORDHAM ROAD	HARLEM RIVER		wмо		5	s	7/31/2014	5.000	G	31,784	\$140,644,200	) 112 2	207
2241489	В	WEST 225TH STREET	CSX TRASP - PUTNAM	С	o		2	s	8/28/2014	5.269	G	10,900	\$48,232,500	207 2	208
2241490	В	WEST 230TH STREET	CSX PUTNAM (ABANDONED)		o		1	s	5/8/2013	5.625	G	5,600	\$24,780,000	208	
2241509	В	WEST 231ST STREET	CSX PUTNAM (ABANDONED)		o		1	s	7/3/2014	4.745	F	4,723	\$20,899,275	5 208	
2229450	В	WEST 232ND STREET	ННР		Α		2	s	7/22/2013	5.026	G	4,900	\$21,682,500	208	
2241510	В	WEST 233RD STREET	CSX PUTNAM (ABANDONED)		0		1	s	5/8/2013	5.275	G	3,760	\$16,638,000	208	
2241520	В	WEST 234TH STREET	CSX PUTNAM (ABANDONED)		0		1	s	5/8/2013	5.176	G	3,770	\$16,682,250	208	
2229460	В	WEST 236TH STREET PEDESTRIAN BRIDGE	ННР		A-PED		3	С	7/7/2014	4.443	F	2,500	\$11,062,500	208	
2229470	В	WEST 239TH STREET	ННР		Α		2	s	6/3/2013	5.053	G	6,100	\$26,992,500	208	
2229490	В	WEST 246TH STREET	ННР		А		2	s	6/3/2013	4.868	F	5,600	\$24,780,000	208	
2229500	В	WEST 252ND STREET	ННР		А		2	s	1/27/2014	5.372	G	4,500	\$19,912,500	208	
2231860	Q	WEST ALLEY ROAD	BCIP		А		2	s	7/17/2013	5.368	G	7,200	\$31,860,000	) 411	
2246120	м	WEST DRIVE	TRANSVERSE ROAD #1		o	P	1	s	3/25/2014	4.700	F	7,900	\$34,957,500	164	
2246240	м	WEST DRIVE	TRANSVERSE ROAD #2		o	Р	1	s	3/12/2014	4.167	F	7,200	\$31,860,000	164	
2246260	м	WEST DRIVE	TRANSVERSE ROAD #3		o	P	1	s	3/18/2014	4.800	F	5,100	\$22,567,500	164	
2246280	м	WEST DRIVE	TRANSVERSE ROAD #4		0	Р	1	s	3/21/2014	4.167	F	4,700	\$20,797,500	164	
2246330	м	WEST DRIVE (BALCONY BRIDGE)	STREAM TO THE LAKE		wo	Р	1	s	1/15/2014	5.000	G	1,817	\$8,040,225	5 164	
2246080	м	WEST DRIVE (DALEHEAD ARCH)	BRIDLE OPPOSITE WEST 64TH STREET		o	P	1	s	1/14/2014	4.667	F	2,000	\$8,850,000	164	
2246000	м	WEST DRIVE (GREYSHOT ARCH)	PEDESTRIAN PATH BETWEEN 61ST & 62ND STREETS		o	P	1	s	1/8/2014	5.400	G	2,500	\$11,062,500	164	
2244020	к	WEST DRIVE (MEADOWPORT ARCH)	PEDESTRIAN PATH NEAR GRAND ARMY PLAZA		0	Р	1	s	5/16/2013	5.321	G	2,500	\$11,062,500	355	
2246360	м	WEST DRIVE (WINTERDALE ARCH)	PEDESTRIAN PATH OPPOSITE WEST 82ND STREET		o	P	1	s	1/16/2014	5.182	G	2,502	\$11,071,350	0 164	
2244100	к	WEST FOOTBRIDGE	PROSPCT PARK STREAM		WO-PED	Р	1	С	1/24/2014	4.889	F	308	\$1,362,900	355	
2249710	R	WEST FOOTBRIDGE	CLOVE LAKE		WO-PED	Р	2	С	4/28/2014	3.857	F	900	\$3,982,500	501	
2241470	В	WEST FORDHAM ROAD	METRO NORTH RR HUD	м	О		4	s	9/9/2013	5.694	G	16,052	\$71,030,100	207	
2267380	м	WEST STREET	RECTOR STREET - BROOKLYN BATTERY MANHATTAN PLAZA		AT		1	s	11/19/2013	5.033	G	25,760	\$113,988,000	101	
2241460	В	WEST TREMONT AVENUE	METRO NORTH RR HUD	м	o		8	s	6/12/2014	3.776	F	12,900	\$57,082,500	205	
2075837	В	WESTCHESTER AVENUE	HUTCHINSON RIVER PARKWAY		А		2	s	2/27/2014	4.097	F	15,858	\$70,171,650	210 2	211
2240180	В	WESTCHESTER AVENUE	BRONX RIVER		wo		1	s	8/22/2013	4.667	F	5,476	\$24,231,300	202 2	209
2241000	В	WESTCHESTER AVENUE	CSX PT MORRIS - (ABANDONED)	С	О		1	s	8/29/2014	4.660	F	1,740	\$7,699,500	201	

BIN	BORO	FEATURE CARRIED		RAI L	BRIDGE TYPE	OTHER OWNER	SPA NS		•		BL	DECK AREA	REPLACEMENT COST	CD CD	2CD3
				RO				SR			RT				
2241230	В	WESTCHESTER AVENUE	AMTRAK - CSX	AC	o		3	s	11/1/2014	5.778	G	15,600	\$69,030,000	202 20	.9
2241329	В	WHITE PLAINS ROAD	AMTRAK - CSX	AC	o		1	s	10/28/2014	4.781	F	6,900	\$30,532,500	211	
2248020	О	WHITELAW PEDESTRIAN BRIDGE	CONDUIT AVENUE		O-PED		7	С	10/17/2014	4.225	F	5,500	\$24,337,500	410	
1065210	Q	WHITESTONE EXPRESSWAY NORTHBOUND	ВСІР		А		1	s	6/17/2014	4.656	F	2,500	\$11,062,500	407	
2241369	В	WILLIAMSBRIDGE ROAD	AMTRAK - CSX	AC	О		2	s	10/29/2014	4.985	F	6,510	\$28,806,750	211	$\Box$
2240039	км	WILLIAMSBURG BRIDGE	EAST RIVER	т	WEO		53	s	10/20/2014	4.542	F	824,000	\$3,646,200,000	103 30	1
2240059	вм	WILLIS AVENUE	HARLEM RIVER		wмо		15	s	11/12/2014	6.778	VG	171,105	\$757,139,625	111 20	1
2248019	Q	WOODHAVEN BOULEVARD	ATLANTIC AVENUE		О		3	s	3/26/2014	4.208	F	19,400	\$85,845,000	409	
2248159	Q	WOODHAVEN BOULEVARD	QUEENS BOULEVARD		О		2	s	7/17/2014	4.078	F	11,500	\$50,887,500	404	
2230540	Q	WOODSIDE AVENUE	278I (B.Q.E.)		А		1	s	1/31/2014	5.672	G	7,529	\$33,315,825	402	
2247120	Q	WOODSIDE AVENUE	LIRR MAIN LINE	L	o		3	s	9/19/2014	4.413	F	14,900	\$65,932,500	402	
2247400	Q	WOODSIDE AVENUE	CSX TRANSPORT	С	o		1	s	8/9/2013	5.033	G	8,200	\$36,285,000	402 40	.4
788 OPEN BRIDGES				OPEN SPANS 4,339 OPEN SF 14,590,227 66					63,294,492,000	63,294,492,000 ALL					

STATEN ISLAND CULVERTS									
BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	BRIDGE TYPE	SPANS	SOURCE			
R00004	R	DICKIE AVE	NEAR COLUMBUS PLACE	0	1	CITY			
R00005	R	BIDWELL AVE	COLUMBUS PLACE	0	1	CITY			
R00010	R	GALLOWAY AVE	MARIANNE ST	0	1	CITY			
R00011	R	FOREST AVE	CRYSTAL AVE	0	1	CITY			
R00013	R	NAUGHTON AVE	PATTERSON AVE	0	3	CITY			
R00015	R	OLYMPIA BLVD	SLATER AVE	0	1	CITY			
R00016	R	GRAHAM BLVD	JAY ST	0	2	CITY			
R00021	R	HUNTER AVE	IDLEASE PLACE	0	1	CITY			
R00022	R	IDLEASE PLACE	HUNTER AVE	0	1	CITY			
R00023	R	MIDLAND AVE	HYLAN BLVD	0	1	CITY			
R00024	R	LINCOLN AVE	SANILAC ST	0	1	CITY			
R00025	R	GREELEY AVE	SANILAC ST	0	1	CITY			
R00027	R	ELEANOR ST	ROCKLAND AVE	0	1	CITY			
R00031	R	TARLTON ST	GREAT KILLS LANE	0	1	CITY			
R00032	R	SEGUINE AVE	PURDY PLACE	0	1	CITY			
R00034	R	ROCKLAND AVE	BRIELLE AVE	0	1	CITY			
R00035	R	BRADLEY AVE	WILLOWBROOK ROAD	0	1	CITY			
R00036	R	AMBOY ROAD	ARBUTUS AVE	0	1	CITY			
R00038	R	MAGUIRE AVE	DEPEW PLACE	0	1	CITY			
R00040	R	113 MAGUIRE AVE	DEPEW PLACE	0	1	CITY			
R00041	R	93 FOSTER ROAD	AMBOY ROAD	0	1	CITY			
R00042	R	LEDYARD PLACE	LACONIA AVE	0	1	CITY			
R00046	R	RICHMOND TERRACE	SNUG HARBOUR	0	2	CITY			
R00051	R	HARBOR ROAD	DUBLIN PLACE	0	1	CITY			
R00055	R	TRAVIS AVE	VICTORY BLVD	0	1	CITY			
R00059	R	WESTERN AVE	RR BRIDGE	WO		CITY			
R00060 R00062	R R	SIGNS ROAD KISSEL AVE	VICTORY BLVD SNUG HARBOR ROAD	0	1	CITY			
R00062	R	HENDERSON AVE	WESTBURY AVE	0	1	CITY			
R00068	R	FOREST AVE	RANDALL AVE	0	1	CITY			
R00069	R	GREGG PLACE	RANDALL AVE	0	1	CITY			
R00076	R	ROOSEVELT AVE	HAROLD ST	0	1	CITY			
R00070	R	BUCHANAN AVE	HAROLD ST	0	1	CITY			
R00077	R	ARTHUR KILL ROAD	MULDOON AVE	0	1	CITY			
R00085	R	ARTHUR KILL ROAD	150' N.W. ELLIS ROAD	0	1	CITY			
R00086	R	ARTHUR KILL ROAD	ENGLEWOOD ST	0	1	CITY			
R00095	R	MEISNER AVE	ROCKLAND AVE	0	1	CITY			
R00096	R	ROCKLAND AVE	MANOR ROAD	0	1	CITY			
R00097	R	RICHMOND HILL ROAD	RICHMOND ROAD	Ö	1	CITY			
R00101	R	ST ANDREWS ROAD	LIGHTHOUSE AVE	Ö	1	CITY			
R00103	R	AULTMAN AVE	ST GEORGE ROAD	0	2	CITY			
R00105	R	ARTHUR KILL ROAD	CLARKE AVENUE	0	1	CITY			
R00106	R	ARTHUR KILL ROAD	RICHMONDTOWN ROAD	0	1	CITY			
R00114	R	SWEET BROOK ROAD	RIDGEWOOD ROAD	0	1	CITY			
R00115	R	VICTORY BLVD	CLOVES LAKE PARK	0	3	CITY			
R00122	R	ARTHUR KILL ROAD	RIDGEWOOD AVE	0	1	CITY			
R00133	R	ARDEN AVE	HALPIN AVE	0	1	CITY			
R00135	R	HYLAN BLVD	CORNELIA AVE	0	1	CITY			
R00136	R	SNUG HARBOR ROAD	KISSEL AVE	0	1	CITY			
R00137	R	RICHMOND TERRACE	WESTERN AVE	0	2	CITY			
R00138	R	HOLLAND AVE	BENJAMIN PLACE	0	1	CITY			
R00139	R	DE PEW PL	MAGUIRE AVE	0	1	CITY			
R00141	R	ALTER AVE	STORM&GRND FED STREAM	0	1	CITY			



R00013 Naughton Avenue over Patterson Avenue. R00032 Seguine Avenue over Purdy Place. R00115 Victory Boulevard over Cloves Lake Park. R00114 Sweet Brook Road over Ridgewood Road. R00103 Aultman Avenue over St. George Road. R00139 De Pew Place over Maguire Avenue.

A glossary of the terms most commonly used in bridge design, construction and maintenance is presented below. Cross-references are indicated through the use of BLOCK LETTERING.

AASHTO (AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS) - A nonprofit, nonpartisan association representing highway and transportation departments in the fifty states, the District of Columbia, and Puerto Rico, representing all five transportation modes air — highways, public transportation, rail, and water.

**ABUTMENT** - Walls of reinforced concrete or masonry. Abutments support a bridge's SUPERSTRUCTURE and APPROACHES, as well as retain the embankments that are positioned at the extreme ends of a multi-span bridge.



Riverside Drive Viaduct Abutment End. Battery Place Underpass Abutments. City Island Bridge Beginning and Ending Abutment. (Credit: NYSDOT)

ADA (AMERICANS WITH DISABILITIES ACT) - The Americans with Disabilities Act gives civil rights protections to individuals with disabilities, similar to those rights provided to individuals on the basis of race, color, sex, national origin, age, and religion. It guarantees equal opportunity for individuals with disabilities in public accommodations, employment, transportation, state and local government services, and telecommunications.

**ADMIXTURE** - Material, other than water, AGGREGATE, and hydraulic cement, used as an ingredient of concrete, mortar, grout, or plaster and added to the batch immediately before or during mixing.

**AERIAL LIFT** - Any vehicle-mounted device used to elevate personnel, including: extendable boom platforms, aerial ladders, articulating (jointed) boom platforms, vertical towers, or any combination of these. Aerial lifts have replaced ladders and scaffolding on many job sites due to their mobility and flexibility. They may be made of metal, fiberglass-reinforced plastic, or other materials. They may be powered or manually operated, and are considered to be aerial lifts whether or not they can rotate around a primarily vertical axis.



Inspecting the Belt Parkway Bridge over 26th Avenue in December 2012. (Credit: Artemio Angeles) Inspecting the Nereid Avenue Bridge over Bronx River Parkway in June 2012, Using a 60 Foot Boom With Outriggers. (Credit: Bojidar Yanev) Inspecting the Brooklyn-Queens Expressway (Eastbound) over Cadman Plaza/Brooklyn-Queens Expressway (Westbound).

AGGREGATE - Inert material such as sand or stone that is mixed with cement, lime and water to produce grout or mortar.

ALIGNMENT - The relative horizontal and vertical positioning between the bridge and APPROACHES.

ALLISION - The violent impact of a movable object (vessel) striking a stationary object (bridge or/and bridge protective system).

**ANCHORAGE** - A solid mass, usually comprised of concrete, that encases a grillage of heavy steel bars into which the ends of a SUSPENSION BRIDGE'S main CABLES are anchored. Anchorages are designed to resist the pull of the cables.



Inspecting the Exterior of the Manhattan Bridge Anchorage. (Credit: NYSDOT)

APPROACH - Roadway at each end of a bridge, beyond the ABUTMENT, providing access to the bridge.



End Approach to Bridge Over Dam at Clove Lake. Metropolitan Avenue Bridge Approach. (Metropolitan Credit: NYSDOT) Belt Parkway Bridge over 26th Avenue Approach. (Credit: Artemio Angeles)

ARTERIAL BRIDGE - Any bridge upon which an arterial highway runs as it crosses streets, water, railroads, etc.

**AS-BUILT DRAWINGS** - Drawings that are prepared from measurements taken on-site to accurately depict the actual sizes and location of elements of the construction project. The as-built drawings indicate variations from the construction documents that occurred during construction.

ASPHALT - Black bituminous surface material made from AGGREGATE and processed petroleum.



Hamilton Avenue Asphalt Plant Silo. (Credit: Sheena Diaz)

BACKFILL - Material used to refill an excavated area.

**BASCULE BRIDGES** - Bascule bridges are movable bridges, typically referred to as "draw bridges" which rotate the superstructure vertically. The movable leaf of the structure - known as a *bascule* - is counterbalanced by weights of such size that minimal power is required for operation - just enough to overcome inertia, frictional resistance, wind and snow loads. Such bridges are relatively speedy to operate and provide unlimited vertical clearance. Examples of bascule bridges currently under the jurisdiction of the New York City Department of Transportation include the *Unionport*, **Shore Road (Pelham), Hamilton Avenue**, Third Street, **Union Street**, Metropolitan Avenue, Hunters Point Avenue, and **Greenpoint Avenue** Bridges.



Unionport and Hamilton Avenue Bridge. (Credit: NYSDOT) Union Street Bridge. Greenpoint Avenue Bridge. (Greenpoint Credit: Michele N. Vulcan) Shore Road Bridge in July 2011. (Credit: Sergey Parayev)

BASE COURSE - The layer of compacted ASPHALT directly under the WEARING SURFACE.

**BEAM** - A linear structural member designed to span from one support to another.

**BEARINGS** - Designed to transmit the load from the SUPERSTRUCTURE to the SUBSTRUCTURE. Divided into two types, expansion and fixed, bearings are needed to ensure that certain elements are not forced to take more load than that for which they were designed and that the bridge can move slightly under load and temperature changes as needed. Bearings that do not allow for horizontal movement of the superstructure are referred to as fixed bearings. Bearings that allow for horizontal movement of the superstructure are known as expansion bearings. Both fixed and expansion bearings permit rotation.



Truss Bearing on Manhattan Bridge. (Credit: NYSDOT)

BICYCLE LANE - A portion of the roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicycles. (New York State Vehicle and Traffic Law, Title 1, Article 1, §102–a)

**BICYCLE PATH** - A path physically separated from motorized vehicle traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way and which is intended for the use of bicycles. (New York State Vehicle and Traffic Law, Title 1, Article 1, § 102-b)



Fresh Creek Bicycle/Pedestrian Path in 2013. Brooklyn Bridge and Williamsburg Bridge Bicycle/Pedestrian Paths in 2010. (Williamsburg Credit: Russell Holcomb) Manhattan Bridge Bicycle Path in 2013.

BID - A contractor's formal proposal, including prices, to perform the work set out in the project SPECIFICATIONS.

**BMP (BEST MANAGEMENT PRACTICES)** - Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage, or leaks, sludge or waste disposal, or drainage from raw material storage.

BORING - A soil exploration technique of drilling into the ground at various locations in an attempt to construct an accurate subsurface profile.



Conducting Soil Borings in 2008 as Part of the Seismic Retrofit Design of the Manhattan Bridge.

Drilling to a Depth of Approximately 210 Feet to Obtain an 8-foot Long Hard Rock Sample. A 2 1/2 –

Foot Long Hard Rock Sample Taken From a Depth of Between 202 and 204 ½ Feet.

BOX BEAM - A hollow structural beam with a square, rectangular, or trapezoidal cross-section.

**BRIDGE** - A structure connecting two points, greater than 20 feet in distance, which carries vehicular and/or pedestrian traffic over water, a descending slope, or another road.

**BULKHEAD** - A RETAINING WALL-like structure commonly composed of driven piles supporting a wall or a barrier of wooden timbers or reinforced concrete members.

CABLE - A steel rope, composed of parallel or twisted wires, used to support the road deck of SUSPENSION BRIDGES or CABLE STAYED BRIDGES.



Inspector on Manhattan Bridge Cable. Cable B. (Credit: NYSDOT)

CABLE STAYED BRIDGES - Bridges in which the superstructure is directly supported by cables, or stays, passing over or attached to towers located at the main piers.



East 64th Street Pedestrian Bridge over FDR Drive.

CAISSON - A rectangular or cylindrical chamber for keeping water or soft ground from flowing into an excavation.

**CAMELBACK TRUSS** - A TRUSS having a curved top chord and straight bottom chord meeting at each end. There is a camelback truss on the Macombs Dam Bridge.



Macombs Dam Camelback Truss.

CANTILEVER BRIDGES - A cantilever is a BEAM that is supported only on one end. In a cantilever bridge, the tree branch-like beams project toward each other, forming a span of the bridge when connected in the center. Bridges of this type are economical to build because they require less material in construction and less condemnation of property is necessary for the narrow piers which are sufficient for support. Typically, no FALSEWORK is required during construction and the bridge does not exceed 1,800 feet in length. NYCDOT's Ed Koch Queensboro Bridge is a notable example of this type of structure.



Ed Koch Queensboro Bridge (Credit: Russell Holcomb)

CAST-IN-PLACE - Concrete that is poured and cured in its final position at the project site.

**CATCH BASIN** - A receptacle, commonly box shaped and fitted with a grilled inlet and a pipe outlet drain, designed to collect the rain water and floating debris from the roadway surface and retain the solid material so that it may be periodically removed.

CATWALK - A narrow walkway for access to some part of a structure, typically running parallel to the girders under the superstructure.



Ed Koch Queensboro Bridge Lower Level Flooring System Catwalk under Lower Level Queens Approach. Manhattan Bridge Brooklyn Tower Catwalk. (Credit: NYSDOT) Fresh Creek Catwalk Under Deck.

CHANGE ORDER - An approved modification of the SPECIFICATIONS or the costs in a construction contract.

CHIPPING HAMMER - A welder's compressed-air tool for cleaning steel after welding. It is also used by bridge inspectors.

CLADDING - Non-load-bearing stone or brick veneer used as the facing material in exterior bridge wall construction.



Abutment Wingwall Cladding on the West 173rd Street Bridge. Hutchinson River Parkway Bridge. Brooklyn-Queens Expressway Over Ramp to Brooklyn-Queens Expressway (Eastbound). Right Side Fascia on the Bronx Pelham Parkway Bridge.

CLEARANCE - The unobstructed vertical and horizontal space provided between two objects



United Nations – 1st Avenue Tunnel Vertical Clearance Posting. Grand Street Vertical Clearance Posting. (Credit: NYSDOT) Retro-reflective Material Improves Visibility of These Low Vertical Clearance Bridges: East 60th Street Bridge Over FDR Drive and Westchester Avenue Bridge over Hutchinson River Parkway.

COFFERDAM - A temporary dam-like structure constructed around an excavation to exclude water.



April 2010: Cofferdam With Filter Fabric and Gravel Placed Prior to Pile Driving During the Emergency Repair Project on the Borden Avenue Bridge over Dutch Kills. February 2011: Fresh Creek Cofferdam Pad.

COLONNADE - A series of regularly spaced columns.



Manhattan Bridge Colonnade. (Credit: Peter Basich) Arch and Part of the Colonnades in March 2011. (Credit: Bojidar Yanev)

COMPRESSION - The stress resulting from a pushing force on a structure.

CONDITION RATING - A judgment of a structure's condition in comparison to its original as-built condition.

COPING - The material forming the top layer of a masonry unit which protects the MASONRY below from penetrating water.

CORE - A cylindrical sample of concrete removed from a bridge component for the purpose of destructive testing.



Removing a Core From 252nd Street Bridge over Henry Hudson Parkway in January 2009. (Credit: Masroor Mahmood)

CORROSION - The general disintegration of surface metal through oxidation.

COUPON - A sample of steel taken from an element in order to test material properties.

**COUNTERWEIGHT** - A weight which is used to balance the weight of a movable member; in bridge applications counterweights are used to balance a movable span so that it rotates or lifts with minimum resistance.

CRITICAL PATH - The set of activities that must be completed on time for the contract completion date to be met. Activities on the critical path have no slack time.

**CUL VERT** - Any structure under the roadway with a clear opening of twenty feet or less, measured along the center of the roadway. A culvert is primarily a hydraulic structure, and its main purpose is to allow free flow of water under roadways.



Idlease Place Culvert. Sweet Brook Road Culvert. Richmond Terrace over Snug Harbor Culvert.

**CURING** - Process of maintaining freshly placed concrete mortar, grout, or plaster moist and at a favorable temperature for a suitable period of time during its early stages so that the desired properties of the material can develop. Curing assures satisfactory hydration and hardening of the cementitious materials.

DAMAGE INSPECTION - An unscheduled inspection to assess structural damage resulting from environmental factors or human actions.

**DEAD LOAD** - The weight of the bridge itself without any traffic or external loads.

**DECK** - The supporting slab and wearing surface of a bridge. Since the deck is directly affected by traffic loads, it's most susceptible to traffic-related problems such as: traffic abrasion, corrosion effects of deicing chemicals, live load deflections and cracking, and impact loads that materially increase as the deck surface deteriorates.



Hamilton Avenue Bridge, East 81st to East 90th Street Promenade over FDR Drive, and Chambers Street Pedestrian Bridge Decks.

(Hamilton Avenue Bridge, East 81st to East 90th Street Promenade over FDR Drive, and Chambers Street Pedestrian Bridge Decks.

(Hamilton Avenue Bridge, East 81st to East 90th Street Promenade over FDR Drive, and Chambers Street Pedestrian Bridge Decks.

**DELAMINATION** - The subsurface separation of concrete or steel into layers. Delaminated areas give off a hollow "clacking" sound when tapped with a hammer or chain drag. Hammer-sounding of large areas generally proves to be extremely time consuming. More productive sounding methods are available when working with horizontal flat surfaces. Chain dragging accomplishes the same result as hammer-sounding. As the chain is dragged across a concrete surface, a distinctly different sound is heard when it crosses over a delaminated area. When a delaminated area completely separates from the member, the resulting depression is called a SPALL.



Hollow Sounding And Delaminated Concrete Areas With Exposed Rebars on the Sunrise Highway Bridge Westbound over Laurelton Parkway in 2014.

**DESIGN-BUILD CONTRACTS** - A delivery procedure where one company is retained to perform both design and construction, thus expediting the capital bridge rehabilitation program.

**DIAPHRAGMS** - Structural members used to tie adjoining girders together to improve the lateral stability of the girder and to distribute forces among adjacent longitudinal elements.

**DOLPHIN** - A group of PILES driven close together and placed to protect portions of a bridge or other structure exposed to possible damage by collision with marine traffic.



2014: Union Street Bridge Dolphins. Greenpoint Avenue Dolphin & Fender System. (Greenpoint Credit: Peter Basich) Hunters Point Avenue Dolphins. (Credit: Michele N. Vulcan)

DRAINAGE SYSTEM - A collection of surface and/or subsurface drains and pumps that are used to remove surface or ground water.

**DRILLED SHAFT** - A cylindrical structural column transmitting loads to soil and/or rock. The drilled shaft is constructed in a hole with a circular cross section. The hole is filled with concrete and may be reinforced with a steel REBAR CAGE.

EFFLORESCENCE - White salts that water movement brings to the surface of porous construction materials.



Moderate Efflorescence on the Brooklyn Bridge Brooklyn Tower North Gothic Arch in 2004. (Credit: NYSDOT) Efflorescence on the Underside of the Masonry Stones on the End Abutment of the Margaret Corbin Drive Bridge over Pedestrian Path Near Café. Heavy Efflorescence on End Abutment Stem Wall of Bridge Over Dam at Clove Lake.

**ELECTRICAL MAINTENANCE** - Preventive maintenance to electrical systems on the East River bridges (e.g., travelers, lighting systems) and the movable bridges (e.g., contacts, relays, switches, controls, limit switches, and lighting systems).

**ELEVATION VIEW** - A photograph or drawing of the side view of a structure.



Elevation View of Roosevelt Island Bridge. (Credit: NYSDOT)

(EIS) ENVIRONMENTAL IMPACT STATEMENT - A comprehensive study of potential social, economic and environmental impacts related to a federally-assisted project. Projects for which an EIS is required are defined in the National Environmental Policy Act of 1969, as amended.

**EXPANSION JOINTS** - Located between bridge spans, expansion joints are located in the deck, directly above the BEARINGS. Expansion joints allow parts of the structure to expand independently and therefore relieve stresses that may otherwise cause damage.



Constructing an Expansion Joint on the Riverside Drive Viaduct in 1918.

**EXTREME EVENT** - A rare occurrence, such as an earthquake, flood, hurricane or collision, presenting higher than usual demands to infrastructure networks.

**EYEBARS** - Steel bars with each end shaped like the eyes of giant needles. They provide total anchorage of the suspension cable and are buried deep within the ANCHORAGE structure.

FACE - The outer, exposed surface of a MASONRY unit.

**FALSEWORK** - Any temporary structure that facilitates the construction, modification, or removal of a bridge. Types of falsework include: work platforms, temporary bents, erection towers, and COFFERDAMS.

FATIGUE - Cause of structural deficiencies (such as metal fracture) due to repetitive (or cyclic) loading over time.

**FENDER** - A structure that acts as a buffer to protect the portions of a bridge exposed to floating debris and water-borne traffic from collision damage.



Metropolitan Avenue Bridge Fender. Rikers Island Dolphin & Fender System. (Credit: NYSDOT) Installing the Fresh Creek Bridge Fender System in 2013.

**FINGER DAM** - EXPANSION JOINT in which the opening is spanned by meshing steel fingers or teeth. Finger plate joints are made up of two loosely interlocking pieces of steel plates that cantilever out into the deck joint opening. The cantilevered portion of each plate is made up of rows of finger shaped protrusions that fit into the row of grooves in the opposing plate. The finger plates are anchored into the deck slab or directly attached to the underlying superstructure steel. Whenever the bridge spans undergo a movement, the finger plates move back and forth into the opposing grooves and accommodate this movement.



Manhattan Bridge Finger Dam. (Credit: Jagtar Khinda)

FIRE HAZARD - Accumulation of debris, where the debris is of sufficient quantity, in a location where, if it caught fire, it would compromise the structural integrity of the bridge.

FIXED PRICE CONTRACT - A contract with an overall predetermined price for the project work.

**FLAG CONDITIONS** - A "Flag" is a hazardous or potentially hazardous condition on a bridge. A "Flag" is classified as either Red, Yellow, or Safety. A "Red Flag" requires prompt evaluation and, possibly, corrective action. A "Yellow Flag" is used to report a potentially hazardous structural condition, which if left unresolved will most likely become a danger to the soundness of the bridge and a hazard to the public. In the case of a "Safety Flag," there is no danger of partial or complete structural failure of the bridge; however, if left unattended, those conditions can present a vehicular or pedestrian hazard.

FLOORBEAMS - Horizontal members placed crosswise to the bridge's major BEAMS, girders, or TRUSSES to support the deck.



South Transit Floorbeams, Stringers, and Bracing Members on the Manhattan Bridge. Ed Koch Queensboro Bridge North Outer Roadway Floorbeam. (Credit: NYSDOT)

**FOOTINGS** - Part of the substructure known as the bridge foundation, they are masses of reinforced concrete which can be found beneath the ABUTMENTS and PIER and which spread the load to allow the soil to support the structure above.

**FORMS** - The temporary molds that hold concrete in place while it is hardening; also known as form work.



West 252<sup>nd</sup> Street Bridge Formwork at the Pier and West Abutment in 2007. Formwork for the Westbound Roadway of the Rockaway Parkway Bridge in 2010. (Rockaway Bridge Credit: Eric Callender) Gerittsen Inlet Bridge in March 2014: Putting up Insulated Forms in Preparation for the Placement of Concrete at the West Abutment Wingwall. The Insulation Helps Protect the Concrete From the Elements and Fluctuating Temperatures During the Curing Period.

**FULL STEEL PAINTING** - A bridge painting technique that involves cleaning of steel surfaces using approved environmentally safe paint removal techniques (blasting, power tools, or hand tools). A full primer, intermediate and finish coat are applied using combinations of brush, roller, or (if necessary) spray painting.

FUNCTIONALLY OBSOLETE - A status used to describe a bridge that, because of its geometry, is no longer functionally adequate for its task. Reasons for this status include that the bridge doesn't have enough lanes to accommodate the traffic flow, it may be a drawbridge on a congested highway, or it may not have space for emergency shoulders. "Functionally Obsolete" does not communicate anything of a structural nature. A functionally obsolete bridge may be perfectly safe and structurally sound, but may be the source of traffic jams or may not have a high enough CLEARANCE to allow an oversized vehicle.

**GENERAL CONTRACTOR** - has overall responsibility for a construction project. The general contractor may break down the project into smaller pieces to be handled by subcontractors.

**GEOMETRIC IMPROVEMENT** - Roadway improvements other than a surface treatment, such as shoulder and lane widening, curb and gutter, or roadway alignment.

GIRDER SPAN BRIDGES - are primarily employed in bridging short distances, and may be classified as either simple or continuous. The steel girders carry the roadway and roadway load to end supports. The Midtown Highway, Hook Creek, Little Neck and Brooklyn Third Avenue Bridges are of this type.



Hook Creek Bridge and Brooklyn's Third Avenue Bridge. (Credit: NYSDOT)

 $\ensuremath{\textit{GRADE}}$  - The degree of inclination of the ground surface.

GRID FLOORING - A steel floor system comprising a lattice pattern which may or may not be filled with concrete.



Installation of Full Width Grid Deck Panels on the Manhattan Bridge Lower Roadway in 2006. Pouring the Concrete. Grand Street Deck. (Grand Street Credit: NYSDOT)

GRIZZLY - A coarse screen used to remove oversize pieces from ASPHALT or earth.



New Grizzly Under Fabrication for the Agency Hamilton Asphalt Plant. (Credit: Russell Holcomb)

GUSSET PLATE - A metal plate connecting truss members.



Grand Street Bridge Span 1 Truss Diagonal Member Gusset Plate.

GUTTER - A paved drain commonly constructed in conjunction with the curbs of the roadway.

(I/D) INCENTIVE/DISINCENTIVE - Predetermined adjustment to the total contract amount for each day or portion thereof that the work is completed ahead of or behind a specific milestone, phase or contract completion date.

JACKING - The mechanical lifting or sliding of an element.



Ed Koch Queensboro Bridge Bent Column Ready for Jacking in 2005.

**JERSEY BARRIER** - A low, gradually narrowing, reinforced concrete wall used as a highway divider and as a means of preventing a vehicle from crossing a median or leaving the roadway. These barriers were first used on the New Jersey Turnpike.

**LEAF** - The movable portion of a BASCULE bridge that forms the SPAN of the structure.



Leaves of the Hamilton Avenue Bridge.

LIVE LOAD - The weight of the traffic crossing a bridge and of other external loads applied to the structure (excluding the weight of the bridge itself.)

**LOAD RATING** - A value that indicates the LIVE LOAD capacity of a bridge. This is determined by analytic and experimental procedures specified by ASSHTO, using design documents and information gathered from field inspection and testing.

**LUBRICATION MAINTENANCE** - Lubrication of mechanical parts of the East River bridges (e.g., travelers, cables, solid rod SUSPENDERS, and EYEBARS), and the movable bridges (e.g., bearings, brakes, limit switches, and gates).

MAINTENANCE AND PROTECTION OF TRAFFIC - The control plan for traffic around and through a construction site.

**MAP CRACKING (CRAZE CRACKING)** - Large pattern cracking can be caused by alkali-silica reaction within the concrete. Environmental conditions such as low humidity, high outside temperatures, direct sunlight, and wind can create high rates of evaporation from the surface layer of concrete. Resistance to shrinkage from the underlying concrete causes stress that is relieved by map cracking.



Union Street Bridge over Brooklyn-Queens
Expressway in 2012 – Extensive Map Cracking
With Efflorescence on the Underside of the Deck.
(Credit: NYSDOT)

MARINE BORERS - Mollusks and crustaceans which live in water and destroy wood by digesting it.

MARINE NAVIGATIONAL LIGHTING - The lights maintained on a bridge for the protection of marine navigation.



Northern Boulevard Bridge - Bridge and Pier Marine Navigational Lighting.

Grand Street – Left Side Channel Light.

MASONRY - Construction materials made of concrete, brick, tile, or stone.







Brooklyn Bridge Cliff Street Arch Masonry. Cleaning the Masonry of the North Face of the Manhattan Bridge's Brooklyn Anchorage and of the North and East Faces of the Roosevelt Island Pier of the Ed Koch Queensboro Bridge. Masonry of the East Drive Bridge Over Eastwood Arch.

**MORTAR** - Mixture of cementitious materials, fine AGGREGATE, and water, which may contain ADMIXTURES, and is usually used to bond MASONRY units.

**MOVABLE BRIDGE** - A type of bridge which carries vehicular or pedestrian traffic over a navigable waterway, and which opens to permit the passage of a ship, barge or boat. The 24 movable bridges currently under the jurisdiction of the New York City Department of Transportation include the Harlem River group (Broadway, West 207<sup>th</sup>/West Fordham Road, Macombs Dam, 145<sup>th</sup> Street, Madison Avenue, Third Avenue, Willis Avenue, and **Wards Island**); the Bronx group (Hutchinson River Parkway, **Shore Road**, and Bruckner Expressway/Westchester Creek); the Queens group

(Borden Avenue, Grand Street, Greenpoint Avenue, Hunterspoint Avenue, *Pulaski Avenue*, and *Roosevelt Island*); and the Brooklyn group (Hamilton Avenue, Ninth Street, Third Street, *Carroll Street*, Union Street, Metropolitan Avenue, and Mill Basin.)



Roosevelt Island Bridge in 2013. (Credit: Stephen Mallon). Shore Road Bridge in 2009. (Shore Road Credit: George Kern) Wards Island Pedestrian Bridge in 2009. (Credit: Duane Bailey-Castro) Pulaski Bridge in 2010. (Credit: Sergey Parayev) Carroll Street Bridge in 2012. (Credit: NYSDOT)

MOVING LOAD - A LIVE LOAD that is moving, for example, vehicular traffic.

**NECKLACE LIGHTS** - The necklace lights are those lights on the main cables of suspension bridges which, when illuminated at night, resemble a necklace.



Repairing a Manhattan Bridge Necklace Light. Bridge Repairer and Riveter Neil Dalton Installing a New Light on the Williamsburg Bridge in 2012. (Credit: Hany Soliman) Manhattan Bridge Side Necklace Light. (Credit: NYSDOT)

NONDESTRUCTIVE TESTING - A method of checking the structural quality of materials that does not damage them.

**NOTICE TO PROCEED** - The formal document authorizing the contractor to commence work under its contract.

**OPERATOR'S HOUSE** - The building containing the power plant and operating machinery and devices required for the operator's (bridge tender's) work in executing the complete cycle of opening and closing a MOVABLE BRIDGE span.



Metropolitan Avenue Bridge over English Kills and Grand Street Bridge Operator Houses.

ORTHOTROPIC DECK - A lightweight decking system that uses closely spaced open or closed steel ribs and a horizontal steel deck plate.

PANEL POINT - The point at which two members of a TRUSS cross.

PARAPET - A low wall along the outmost edge of the roadway of a bridge to protect vehicles and pedestrians.



East 81st to East 90th Street Promenade over FDR Drive – Right Parapet at Span 45. West 65th Street Entrance Eastbound over Bridle Path West End – View From End of Left Side Parapet. Belt Parkway Bridge over Rockaway Parkway – Right Side Parapet. (Promenade and Rockaway Parkway Credit: NYSDOT)

PEDESTRIAN BRIDGES - Bridges designed and constructed to provide means of crossing for pedestrian traffic only.



West 181st Street, PS-5, Carroll Street over Franklin Shuttle, and Chambers Street Pedestrian Bridges

**PIER** - Part of a bridge's substructure, piers are the intermediate supports or columns which support a multi-span bridge. Piers may be composed of steel or reinforced concrete, and can appear as columns or solid walls.



Pier 1 (Looking Southeast) of Minthome Street Pedestrian Bridge. Pier 17 of Rikers Island Bridge. Pier 2 of Broadway Bridge. Pier 35 of Macombs Dam Bridge. (Credit: NYSDOT)

**PILES** - A concrete, steel or timber column located beneath the FOOTINGS of a bridge and embedded in the soil. Piles are employed in bridges only if the soil directly below the footing is not firm enough to support the bridge loads. Piles are also used to found a structure below the depth of potential scour.

**PLAZA** - An area designated for use by pedestrians, which may vary in size and shape; which may abut a sidewalk and is located fully within the bed of a roadway; may be at the same level as the roadway or raised above the level of the roadway; may be physically separated from the roadway by curbing, bollards, or other separators; may be treated with special markings and materials; and may contain benches, tables, or other facilities for pedestrian use.



Manhattan Bridge Brooklyn Plaza. Evening View of the Plaza Looking Southeast With Benches, Lights, and Granite Pavers in Foreground. Aerial View of the Plaza. Looking South From the Pedestrian Entrance. Delancey Street Plaza Near the Williamsburg Bridge.

PLUMB BOB - A weight hanging on a string (plumb line), used by bridge inspectors to show the direction of the vertical distance.

**POINTING** - The compacting of the mortar in the outermost portion of a joint and the troweling of its exposed surface to secure water tightness or desired architectural effect.



Pointing Joints on the East Face of the Brooklyn Anchorage of the Manhattan Bridge.

Pointing the Masonry on the East Drive Bridge (East Wood Arch).

**PORTLAND CEMENT CONCRETE** - The most common concrete used in construction. It was patented in England in 1820, and is so named because when hard, it resembles Portland stones from Dorset. Portland cement is made with the following raw materials: limestone - provides lime, quartz or cement rock - provides silica, claystone - provides aluminum oxide, and iron ore - provides iron oxide.

POSTED - An announcement or sign limiting dimension, speed, or loading, indicating that larger dimensions and higher speeds and loads cannot

be safely taken by the bridge.



Roosevelt Island Bridge Vertical Clearance Restriction and Posted Weight Signs. (Credit: NYSDOT)

**POTHOLE** - A hole in a roadway or pavement, usually caused by heavy vehicular traffic or weathering.

PRECAST CONCRETE - Concrete members that are cast and cured before being placed into their final positions on the construction site.

**PREVENTIVE MAINTENANCE** - Preventive maintenance involves cleaning, protecting, and performing minor repairs of bridge components to prevent deterioration from becoming so extensive that major REHABILITATION or RECONSTRUCTION is needed. Specified interval maintenance, such as cleaning DRAINAGE SYSTEMS and lubrication, are done on a scheduled basis. Other maintenance is carried out when inspectors point out the need for it, such as resealing an EXPANSION JOINT or replacing the wearing surface. Preventive maintenance tasks on the bridges include: the cleaning of drainage systems, gratings, and expansion joints; the washing of the deck area and salt splash zones; full-steel, salt splash, and spot painting; the patching of sidewalks; the maintenance of electrical devices; and the oiling of mechanical components.



Power Washing the Corrosive Deicing Solvents Within the Range of the Roadway Splash Zone on The Manhattan Bridge in October 2007. Particular Attention is Directed to Cleaning the Gusset Plate. (Credit: Albert Hong) Performing Wear and Tear Resurfacing Work on the Roosevelt Avenue Bridges in April 2010: Assistant City Highway Repairer Victor Magagna, Supervisor Highway Repairer Joseph Palemine, Assistant City Highway Repairer Jonathan Adorno (Obscured), Assistant City Highway Repairer Anthony Montalbano, and Area Supervisor Highway Maintenance Edward Pedersen. Assistant City Highway Repairers Jonathan Adorno and Victor Magagna. (Credit: Joseph Flood)

**PRIMER** - The first layer of paint used to cover the unsealed surface. This is followed by at least one more coat of paint.

PUNCH LIST - A catalogue of minor items still outstanding at the end of a construction project.

**QUALITY ASSURANCE** - An independent evaluation of a service (i.e., an inspection) to establish that a pre-described level of quality has been met.

**RAILING** - A fence-like construction built at the outermost edge of the roadway or the sidewalk portion of a bridge to protect pedestrians and vehicles.



University Heights Bridge Railing. (Credit: NYSDOT) Manhattan Bridge Railing. (Credit: Russell Holcomb) Greywacke Arch Railing. 37th Street Bridge over Brooklyn-Queens Expressway Railing.

**RAILROAD FORCE ACCOUNTS** - Railroad force accounts are contracts between the Agency and railroads by which the railroads supply flag personnel so the Division can perform repair work on bridges that cross over railroad tracks.

**REBAR CAGES** - Rebar cages are placed in large cast-in-place concrete columns (DRILLED SHAFTS), and are fabricated from steel reinforcing bars. The reinforcement will typically include concentric hoops (or spirals) along the length of the cage, which are tied to longitudinal bars perpendicular to the hoops.



City Island and Gerittsen Inlet Bridge Rebar Cages.

**REHABILITATION** - Extending the useful life of a bridge by painting, repairing or replacing the DECK or selected elements of the SUBSTRUCTURE or SUPERSTRUCTURE. This type of work is performed primarily on those structures not classified as deficient, but which contain specific components that have low condition ratings.

**REPLACEMENT** - That type of work where an existing bridge is removed and is fully replaced at the same site, or at an adjacent location, by a substitute bridge, as part of the same project.

**RETAINING WALL** - A structure designed to restrain and hold back a mass of earth.



Kappock Street Retaining Wall in Riverdale, Before and After Repairs. The Existing 300-Foot Long Parallel Concrete Roadway Retaining Walls on Both Sides of Kappock Street Were Deteriorated and Leaning, and Were Replaced with New Modular Retaining Walls in the Summer of 2009. Inspecting a Bulge in a Retaining Wall Along Douglas Road in Staten Island in 2014.

RETARDING AGENT - A chemical added to mortar to slow down the set.

**RETRACTILE BRIDGES** - Retractile bridges are movable bridges that are mounted on tracks that are positioned to one side of a navigational channel. To open, the bridge is withdrawn or "retracted" to shore. Although fascinating to observe and efficient to operate, retractile bridges are considered obsolete because of the expansive land areas that must be condemned in order to accommodate their tracks. The New York City Department of Transportation currently possesses two retractile bridges - the **Borden Avenue** and **Carroll Street** bridges, rare examples of the bridge builders' art.





Borden Avenue Bridge. (1st and 2nd Credit: Peter Basich, 3rd: Vadim Sokolovsky Carroll Street Bridge. (1st Credit: NYSDOT, 2nd: Russell Holcomb)

**RETROFIT** - Upgrading parts of an existing structure to meet current standards.

RIGHT-OF-WAY - A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes.

**RIPRAP** - Irregularly broken, random-sized pieces of rock used for a foundation or to prevent soil erosion.



Eroded Riprap Pier Protection at Pier 11 of Old Willis Avenue Bridge in 2008. (Credit: NYSDOT) Riprap Installed in 2013 on South Side of Belt Parkway Bridge over Fresh Creek, Facing East.

**ROADWAY** - The portion of the road intended for the use of vehicular traffic.



University Heights Roadway and Sidewalk in 1922.

ROCKER BEARING - A bridge support that accommodates expansion and contraction of the superstructure through a rocking action.

**ROUTINE INSPECTION** - Regularly scheduled inspection or condition assessment that consists of observations and/or measurements needed to determine the physical and functional condition of the bridge, to identify any changes from initial or previously recorded conditions, and to ensure that the structure continues to satisfy present service requirements.

**SADDLE** - A special curved casting atop a SUSPENSION BRIDGE tower into which the cables are placed to avoid sharp bends in directional changes of the cable.



Manhattan Bridge Saddle. (Credit: Jagtar Khinda)

**SAFETY HARNESS** - Harness with shoulder, leg, and waist straps of approved OSHA design used as personal fall protection in conjunction with appropriate lanyards and tie off devices.

Executive Director of Bridge Preventive Maintenance and Repair Thomas Whitehouse Hoisted in the Air While Wearing a Full Body Harness - Demonstrating How to Deploy and Use the Foot Stand to Prevent Orthostatic Intolerance (Commonly Referred to as Suspension Trauma), Which Can be Fatal if Not Prevented. (Credit: Gean Pilipiak)

**SALT SPLASH ZONE PAINTING** - A bridge painting process that involves preparation of the area to be painted by power wash, using clean water or steam. After power washing, hand and power tools are used in areas which have started to show deterioration from accumulated de-icing agents. Solvent cleaning is done in locations where oil and grease need to be removed from the steel surface. A spot PRIMER coat and finish coat are then applied by brush or roller. Occasionally, when there is no danger of overspray, spray painting may be performed.

**SCALING** - Also known as surface breakdown, scaling is the gradual and continuing loss of concrete's surface mortar and aggregate over an area due to the chemical breakdown of the cement bond. Scaling is accelerated when the member is exposed to a harsh environment.

SCOUR - The washing away of stream bed material around or underneath the bridge abutments or piers that is caused by water channel flow.



Scour on Pier 2 End Face of Mosholu Parkway Bridge Over Bronx River in 2008. (Credit: NYSDOT)

SCREED - A long section of metal or wood which is dragged across freshly placed concrete to both smooth the surface and consolidate the concrete.



Screed at East 8th Street Ramp in 2011, and at West Approach of Gerritsen Inlet Bridge in 2014.

SCUPPER - An opening in the floor portion of a bridge to provide means for rain or other water accumulated upon the roadway surface to drain through it into the space beneath the structure.



SET - When the consistency of mortar changes from plastic to hard.

**SHORING** - Temporary bracing to support a structure.



2014: Timber Shoring at Spans 7 and 8 of the Harlem River Drive over Ramp to and From Northbound Harlem River Drive. Steel Shoring of the Damaged Column at Pier 4 of the Crocheron Park Pedestrian Bridge. Timber Shoring at Piers 5 and 6.

**SHOTCRETE** - MORTAR or small-AGGREGATE concrete that is conveyed by compressed air through a hose and applied at high velocity to a surface. Also known as gunite and sprayed concrete.

SOFFIT - The underside of a structural component, such as a beam or arch.

**SOUNDING** - A method of checking for voids or DELAMINATIONS in concrete by striking a hammer against the structure and listening for a hollow sound.

SPALLING - The flaking or breaking out of concrete parallel to the main surface, caused by a blow, or by the action of weather or pressure.



Spalled Section of Curb on the East 8th Street Bridge in 2006. (Credit: NYSDOT) Spalling With Exposed Rebar on the Beginning Abutment Joint Header of the Westchester Avenue Bridge over the Bronx River in 2011.

SPAN - Portions of the bridge SUPERSTRUCTURE between consecutive supports or joints.

SPECIFICATIONS OR SPECS - A detailed listing of required construction materials and methods to be used in the project. This information is a supplement to the blue prints and working drawings.

**SPLAY CASTING** - A steel or cast-iron collar fitted around a bridge suspension CABLE at the location where it spreads out (splays) into separate bundles of wires which are then attached to the ANCHORAGE EYEBARS. It is used to control the degree and location of the splay. These castings are usually located at the entry point of the cable into the anchorage chamber.

**SPOT PAINTING** - When the surface to be painted is contaminated with de-icing salts, sea salt, bird excrement, or other corrosive agents, the area is prepared by power washing, using clean water or steam. When grease or oil is present, it is removed by solvents. Mechanical cleaning with hand and/or power tools is performed in the areas containing deteriorated paint. A spot PRIMER coat and a single finish coat are applied by brush or roller. Occasionally, when there is no danger of overspray, spray painting may be performed.

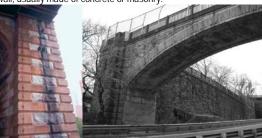
**STAGED CONSTRUCTION** - Construction done so that traffic may be maintained on a portion of an existing bridge structure while a longitudinal section of a new structure is constructed. Traffic is then shifted over to that portion of the new structure while the existing structure is removed and the new structure is completed.

**STEEL ARCH BRIDGES** - Steel arch bridges consist of either a single arch or a series of arches fashioned from steel or concrete. Aesthetically one of the more attractive bridge types. Arch structures can prove economical to construct if the bridge spans between high ABUTMENTS. At present, there is only one bridge of this kind in steel under the guardianship of the NYCDOT; the twin-arched **Washington Bridge**, positioned over the Harlem River at 181<sup>st</sup> Street. This bridge opened to traffic in December 1888 and, with its approaches, is 2,375 feet long.



Washington Bridge. (Credit: NYSDOT) Washington Bridge in 2008. (Credit: Duane Bailey-Castro) 2010.

STEM - The vertical part of a retaining wall, usually made of concrete or masonry.



East Face of Brooklyn Bridge North Stem Wall. (Credit: NYSDOT) West 176<sup>th</sup> Street Pedestrian Bridge Beginning Abutment Stem Wall.

**STOPPING SIGHT DISTANCE** - The distance required for a vehicle to stop before hitting a stationary object in its path. It is equal to the distance required for the driver to react and apply the brakes plus the distance required for the vehicle to stop once the brakes are applied.

STRAIN GAUGE TESTING - Small strips of material (imagine a small band-aid) are glued onto part of a structure to measure the stress in the material under load. Inside the small "band-aid" are tiny electrical wires. When a structure is under load it stretches (tension) or contracts (compression). When this happens, the resistance in the tiny wires in the strain gauge changes, resulting in a change in the wire's current. What is actually being measured are changes in the electrical current in the tiny wires. Knowing the physical properties of the structural member that the gauge is attached to, (such as steel), a calculation is can then be made to convert these changes in current to changes in stress. The readings are taken with special instruments that record the information over the desired period of time or loading sequences.



June 2012 - Metropolitan Avenue Bridge. Summer College Intern Nikita Gupta Unsealing the Wire for Strain Gauge Testing. July 2012 – Unionport Bridge. Summer College Intern Kevin Hillery Setting up Inclinometer Calibration. August 2012 – Hunters Point Avenue Bridge. Kevin Hillery Checking Strain Gauge Connections With a Millimeter. (Credit: Vera Ovetskaya)

STRAND - Comprised of hundreds of thin wires laid parallel to form a bundle, strands comprise the base element in the CABLES, or main cables, on a SUSPENSION BRIDGE or cable stayed bridge.

STRINGER - A part of a bridge's SUPERSTRUCTURE, a stringer is essentially a BEAM parallel to the span used to support the road DECK.



Stringers on the Manhattan Bridge. (Credit: NYSDOT) Bridge Repairer and Riveter Joseph Antony Repairing a Red-Flagged Stringer on the Bridge. (Credit: Hany Soliman)

**STRUCTURAL DEFICIENCY** - An engineering term-of-art used by the Federal government to indicate that there are elements of the bridge that need to be monitored and/or repaired. It covers a wide range of conditions and does not reflect the fundamental integrity of a structure. Any city bridge deemed unsafe would be shut to the public.

**STRUCTURAL HEALTH MONITORING** - The continuous or regular monitoring of the condition of a structure or system using built-in or autonomous sensory systems, and any resultant intervention to preserve structural integrity.

**Borescope Investigations**: The borescope is a high-tech device combining fiber-optic technology with digitized computer memory. It allows scanning and photographing of otherwise inaccessible locations.

Corrosion Sensors: Corrosion sensors were developed for the first time under a FHWA contract specifically for New York City's suspension bridges.

**Fiber Optic Sensors:** Fiber optic sensors can measure very small displacements as well as strain gauges, but are more resilient and insensitive to temperature changes. The information is readily transmitted online and lends itself to real-time monitoring.

*Ground Penetrating Radar.* Ground penetrating radar uses the propagation and retraction of high frequency waves through materials such as concrete to detect the presence of voids.



Director of Bridge Management Kevin McAnulty Inspecting the Bridge Carrying the Belt Parkway over Ocean Parkway, Utilizing the Unit's Borescope. Experimental Corrosion Sensors Installed for a Test on Cable D of the Manhattan Bridge in 2011 (Left Corner). A Fiber Optic Sensor Monitoring a Crack in the Masonry of the Brooklyn Bridge's Manhattan Approach. A Ground Penetrating Radar Inspection of the Belt Parkway Bridge over Ocean Parkway. (Credit: Bojidar Yanev)

**SUBSTRUCTURE** - The name given to those elements below a bridge's road deck system, namely the ABUTMENTS, ANCHORAGES, BEARINGS, and PIERS.

**SUPERSTRUCTURE** - The superstructure is all that part of a structure above the bearings of simple and continuous spans, skewbacks of arches and top of footings of rigid frames; excluding backwalls, WINGWALLS and wing protection railings.

**SUSPENDER** - A wire rope or a short vertical rod that transmits forces from the roadway of a SUSPENSION BRIDGE to the supporting CABLES. The suspenders assist in supporting the bridge floor system and its superimposed loads by transferring loads to the main suspension members of the structure. They support other members against sagging, twisting, or other deformation due to its own weight.



Manhattan Bridge Suspenders. (Credit: NYSDOT and Jagtar Khinda)

SUSPENSION BRIDGES - Suspension bridges are high level bridges with spans that usually exceed 1,500 feet in length. Supported by large wire CABLES that are anchored to masses of concrete and which pass over the tops of towers, the road DECK is suspended at regular intervals by smaller cables called suspenders. While the main cables carry the entire live and dead load, stiffening TRUSSES are required to distribute the LIVE LOAD and prevent excessive deflection at any point. The Brooklyn, *Manhattan* and *Williamsburg* Bridges are noted New York City examples of this type.





Manhattan Bridge. (Credit: Bernard Ente) Williamsburg Bridge. (Credit: Peter Basich)

**SWING BRIDGES** - Swing bridges are movable bridges that are supported on a center PIER in the center of a waterway, and are opened by rotating the SUPERSTRUCTURE horizontally on wheels riding on a circular track. Two channels are provided on either side of the bridge for navigational ease when the bridge is in the open position. Because swing bridges are slow to operate and restrict channel width, they are rarely constructed today. Examples of swing bridges in New York City include the *Third Avenue, Madison Avenue, 145th Street, University Heights, Grand Street* and *Macombs Dam* Bridges.



Third Avenue and University Heights Bridges. (Credit: Michele N. Vulcan) Grand Street Bridge. (Credit: NYSDOT) Macombs Dam Bridge. (Credit: Michele N. Vulcan)

**TEMPORARY BRIDGE** - A pedestrian and/or vehicular bridge built to carry traffic around an active construction site in lieu of STAGE CONSTRUCTION. The structure is removed after the new bridge is open to traffic.



2011: Fresh Creek Temporary Bridge. 2004: Almost Completed New Third Avenue Span and Temporary Bridge. (Credit: Daniel Hom) 2005: Pontoon Bridge Used During the Emergency Reconstruction of the Ocean Avenue Pedestrian Bridge over Sheepshead Bay. (Credit: Russell Holcomb)

**THERMAL EXPANSION** - Temperature-induced changes in the lengths of steel and other materials used to construct bridges. Thermal expansion governs the design of joints and can, in extreme cases, impact the operation of movable bridges.

TORSION - Twisting force usually caused by unbalanced or asymmetrical loading.

**TOWER** - Often the most majestic element in a SUSPENSION or cable stayed bridge, the *tower* serves as a support for the structure's main CABLES.



Inspectors on Manhattan Bridge Tower. (Inspector Credit: NYSDOT) Manhattan Bridge Tower. (Credit: Michele N. Vulcan) Manhattan Bridge Tower Detail. (Credit: Russell Holcomb) Brooklyn Bridge Tower. (Credit: Earlene Powell) Brooklyn Bridge Brooklyn Side Tower Detail. (Credit: Jagtar Khinda)

**TRAVELER MAINTENANCE** - The maintenance of a traveler (movable underdeck platform) that runs under the East River Bridges so maintenance, inspections and repairs can be performed to the underside of the bridge. A traveler platform is typically perpendicular to the girders and the platform runs on a rail system between substructure elements.



Manhattan Bridge Traveler. (Credit: NYSDOT)

**TREMIE SEAL** - concrete placed under water through the use of a tremie placement tube. As the concrete is placed, water is displaced and the tube is gradually raised keeping the outlet below the level of the placed concrete. Tremie seals are usually used where piers need to be constructed in fairly deep water and it is difficult to dewater the excavation.

**TRENCH DRAIN** - These drainage structures consist of a slotted opening with bars perpendicular to the opening. Trench drains (also known as slotted drains) function as weirs with flow entering from the side. They can be used to intercept sheet flow, collect gutter flow with or without curbs, modify existing systems to accommodate roadway widening or increased runoff, and reduce ponding depth and spread at grate inlets. The two types of trench drains in general use are the vertical riser type and the vane type.



Manhattan Bridge Trench Drain.

TRUSS - A rigid framework built of interconnecting steel beams, creating a large "girder" to support the floor system and transfer loads to the substructure over a longer span.



Brooklyn Bridge Franklin Square Truss. (Credit: Andy Hoang). General view of Manhattan Bridge Trusses B and C From the Lower Roadway on the Main Span. (Credit: NYSDOT) Chambers Street Pedestrian Bridge Truss. Madison Avenue Bridge Truss Swinging. (Credit: NYSDOT)

**TRUSS BRIDGES** - Truss bridges possess road decks that are supported by Steel TRUSSES that rest on PIERS and ABUTMENTS, and which span short distances. The 174th Street Bridge in the Bronx is an example of a truss bridge.



East 174th Street Truss Bridge over Sheridan Expressway. (Credit: NYSDOT)

**TURBIDITY CURTAIN** - A flexible, impermeable barrier used to trap sediment in water bodies. This curtain is generally weighted at the bottom to ensure that sediment does not travel under the curtain, which is supported at the top through a flotation system. Turbidity curtains prevent the migration of sediment from a work site in a water environment into the larger body of water. Also known as a turbidity barrier or silt curtain.



Installation of a Turbidity Curtain to Protect the Shore During Construction of the Temporary City Island Bridge in 2014.

VERTICAL LIFT BRIDGES - Vertical lift bridges are movable bridges which have road DECKS that operate in much the same fashion as an elevator. Comprised of supporting end CABLES that are attached at one end to the road DECK and at the other to rotating drums, these bridges are raised and lowered to allow for the safe passage of marine traffic. The Roosevelt Island Bridge, 103rd Street - Wards Island Pedestrian Bridge, Ninth Street Bridge, and Broadway Bridge are examples of this type of bridge.



Lifted Roosevelt Island Bridge. (Credit: NYSDOT). Wards Island Pedestrian Bridge. Ninth Street Bridge. (9th Street Credit: Bojidar Yanev)
Broadway Bridge. (Credit: Bernard Ente)

**VIADUCT BRIDGES** - Viaduct bridges are multi-span bridges containing two end spans and any number of intermediate SPANS. The end spans are supported by an ABUTMENT on one end and a PIER on the other. The intermediate spans held aloft by piers.



Park Avenue Viaduct Bridge. Experiencing the Viaduct in a Whole New Way During Summer Streets 2012.

**WARNING GATE** - Warning gates are installed at movable bridges to decrease the likelihood of vehicles and pedestrians passing the stop line and entering an area where potential hazards exist because of bridge operations. The gates are striped with 16-inch alternate vertical, fully reflectorized red and white stripes. Flashing red lights are included on the gate arm and they are only operated if the gate is closed or in the process of being opened or closed.



Metropolitan Avenue Bridge over English Kills Warning Gates. (Credit: NYSDOT) West 207th Street//West Fordham Road Bridge Warning Gate.

**WATERPROOFING MEMBRANE** - A protective sheet placed between a WEARING SURFACE and concrete DECK to shield the concrete deck from water and corrosive chemicals which could cause DELAMINATION and SPALLING.

**WEARING SURFACE** - The topmost layer of material applied on the DECK or roadway that receives the traffic loads; also known as wearing course. Wearing surfaces perform two functions in protecting the deck: they provide a seal and prevent water and deicing chemicals from penetrating into the deck slab, and they provide a smooth, skid-resistant surface for vehicular traffic, minimizing impact forces to the structure.



Brooklyn Bridge Wearing Surface. Manhattan Bridge Wearing Surface and Safety-Shaped Barriers. (Credit: NYSDOT) West 86<sup>th</sup> Street Pedestrian Bridge (Southwest Reservoir Bridge) Wooden Wearing Surface.

WELD - To fasten together metals by bonding with molten metal.



Welding Steel Packs for the Southbound Bruckner Expressway Bridge.

**WINGWALL** - Walls of reinforced concrete or stone that prevent the soil behind the ABUTMENT from eroding away and leaving a void beneath the APPROACHES of the bridge. Wingwalls may extend over longer distances into retaining walls. Wingwalls are extensions of ABUTMENT STEMS, not supporting direct loads from the SUPERSTRUCTURE.



Broadway Bridge, Bay Ridge Avenue Bridge, Ed Koch Queensboro Bridge, Belt Parkway over Rockaway Parkway, Grand Street, and Center Drive (Playmates Arch) Wingwalls. (First Five Credit: NYSDOT)

WINTER INSPECTION - Inspection of a site known to have a greater hazard potential during winter. This may be due to low ambient temperatures, accidental or deliberately set fires.



Timber Shoring Supporting a Failing Steel Beam – a Potential Winter Hazard. (Credit: Bojidar Yanev)

1/15/15

#### **Bridge Protection through Dirt and Water Control**

**Cleaning of Abutment and Pier Tops** Removal of debris, dirt and vegetation from abutment and pier tops; cleaning and lubrication of bridge bearings.

#### Pier Top Cleaning of Bridges Over Water (including Pigeon Waste Removal)

This work consists of removing all debris, including pigeon waste, from bridge abutments and pier tops. Workers pull the material from the edges into the center of the pier with a broom or shovel while supervisors monitor the work to ensure that, to the maximum extent practicable, material is not pushed from the pier during the cleaning process. Using hand tools, debris is collected and removed for disposal. When removing pigeon waste, a 3.5 gallon manual spray canister is used to apply a bleach/water solution to the waste and to the area to be cleaned. The solution is sprayed at a low height to limit aeration and prevent material from falling into the waterway. Once the waste has been sufficiently treated, it is removed for proper disposal.

#### Cleaning and Lubrication of Bearings of Bridges Over Water

This work consists of cleaning bearings, as well as removing old and applying new lubricant where required. For bearings on flat, solid surfaces, located 12 inches or more from the edge of the structure, no containment/bulkhead will be used. A containment/bulkhead will be used when cleaning or lubrication bearings located less than 12 inches from the edge of the structure. Dirt and old lubricant are collected and disposed of properly.

**Debris Removal**Removal of spilled trash; removal of rocks, wood, plastic or metal objects, tires, mufflers, wheel covers, and other traffic droppings; removal of paper products, bottles, cans, accumulated dirt and other trash. Debris removal is also required for walkways and plazas. For movable bridges and bridges over water, the protective fender systems need to be cleared of debris. The removal of debris from bridges is an important and critical component of maintenance. Debris can cause safety and hazard conditions. In addition, debris traps moisture and salts on the structure and prevents proper drainage.



Assistant City Highway Repairer Lashawn Elam and Highway Repairer Anita Ramos Removing Vegetation and Other Debris. Assistant City Highway Repairer E'boni Brown Removing Debris under the Henry Hudson Parkway at 58<sup>th</sup> Street. (HHP Credit: Edward Pedersen)

Cleaning of Drainage System

Removal of debris, dirt and vegetation from drainage systems, including gutter gratings, gutters and leaders, scuppers, down spouts and scupper piping systems. The cleaning of surface gratings and gutters requires hand tools, brooms and brushes. In some cases, an air compressor might be needed to blow out some gutters. Cleaning the scuppers and scupper piping systems requires specialized equipment.



Drain Truck on Brooklyn Bridge Ramp. (Credit: Peter Basich) Drain Cleaning on the Williamsburg Bridge in September 2011. (Credit: Shaikh Islam) Cleaning Catch Basins on the Manhattan Bridge. Drain Crew: Highway Repairer Anthony Irizarry, Supervisor Highway repairer Michael Parise, and Assistant City Highway Repairer Giavonni Caballero. (Crew Credit: James Campbell)

**Cleaning of Expansion Joints** Removal of debris and dirt from the troughs using compressed air or water; and cleaning and resealing of the joints. Performed on all bridges. Expansion joints are located at the surface level where they are subjected to impact and vibration and are exposed not only to the elements such as water, dust, grit, ultra-violet rays and ozone, but also to the effect of chemicals such as salt solutions, cement alkalis and petroleum derivatives. In addition to regular lubrication of moving parts, penetration of water, silt and grit must be effectively prevented or provision made for their removal.



Manhattan Bridge Expansion Joint Cleaning in 2008: Supervisor Highway Repairer Thomas Cruz, Assistant City Highway Repairer Antonio Asaro, Highway Repairer Louie Dumeng, and Oiler Stanley Karolewicz. Assistant City Highway Repairers Jonathan Adorno and Antonio Asaro, Oilers Stanley Karolewicz and Ronald Grady. (Credit: Thomas Whitehouse)



Expansion Joint Cleaning on the Williamsburg and Ed Koch - Queensboro Bridges in September 2011. (Credit: Shaikh Islam)

**Cleaning of Open Grating Decks** Removal of debris and dirt from open-grating decks and washing with high-pressure water jets.

**Sweeping** sweeper along each curb.

Sweeping each bridge with a mechanical



Mechanical Sweeper - Side and Rear Views. (Credit: Peter Basich)

**Washing of Decks and Salt Splash Zones** Washing of decks and salt splash zones to remove remnants of de-icing salts; use of compressed air and water jets to clean tight corners.



Washing the Williamsburg Bridge in July 2011 and the Ed Koch Queensboro Bridge in August 2011.

#### **Roadway Surface Maintenance**

**Crack Sealing in Pavement and Curbline Sealing** Cleaning of cracks and filling them with sealant; sealing with mastic material along the curb line to prevent water leakage onto bridge components. This maintenance function is sensitive to weather conditions.

**Repair of Sidewalks and Curbs**Sidewalk repair to restore sidewalk to original condition. Curb repair to be undertaken along with this task.



Sidewalk Repairs in August 2010 at Houston Street Bridge over the FDR Drive: Tractor Operator Robert Noordzy (in Tractor), Bricklayer Vincent Sciulla, Cement Masons Frank Finizio and Victor Porowski, and Bricklayer Luigi Cuffari. Bridge Repairer and Riveter Brook Budd and Bricklayer Luigi Cuffari. Tractor Operator Noordzy (in Tractor), Cement Masons Frank Finizio (Foreground) and Victor Porowski (Background), and Bricklayer Vincent Sciulla. Bricklayer Vincent Sciulla, Bridge Repairer and Riveters James Philip and Brook Budd, Bricklayer Luigi Cuffari, Tractor Operator Robert Noordzy, Supervisor Bricklayer Edward Alfano, and Cement Masons Frank Finizio and Victor Porowski. (Credit: Russell Holcomb)

**Replacement of Wearing Surfaces**Removal of old wearing surface; preparation of exposed concrete slab or steel plate; installation of new wearing surface. The wearing surface is a two-inch course of bituminous concrete. Also includes minor deck repair, cleaning and waterproofing of deck.



Resurfacing the Deck of the Queens-Bound Upper Roadway of the Ed Koch - Queensboro Bridge in June 2014. (Credit: Sunil Desai)



Repairing the Concrete Overlay on the South Upper Roadway of the Ed Koch – Queensboro Bridge in June 2013. (Credit: Sunil Desai)



Repaving the Williamsburg Bridge in 2011.

# **Electrical and Mechanical Component Maintenance of the 4 East River Bridges and 24 Movable Bridges**

Maintenance of Electrical Devices

Checking and servicing electrical systems such as travelers, relays, auxiliary contacts, meters, overload relays, time delay relays, span and tail locks, brake systems, transmitters, transformers, fuses, wiring, resistors, etc. Also includes checking interior anchorage lighting, caution lighting, navigation lighting, and necklace lighting. During inspection, the travelers of the East River Bridges are operated to ensure proper calibration of electric motors. If motors are not calibrated properly, the travelers may rotate and jam along their guides. Many of the movable bridges are very old and replacement parts are difficult to find or may not be available any longer. When necessary, Division personnel fabricate machine parts such as shafts, and brake and warning gate components. In addition to inspection

of systems, the electrical technicians replace poor condition components with electric systems before corrective maintenance is required. This preventive maintenance strategy avoids disruption of bridge service to motorists. This is important, because once corrective maintenance is necessary, it may require the bridge to be out of service for lengthy periods.



Construction Project Manager Gholamali Mozaffari, and Electricians Nelson Crooks and Gary Emmanuel Fixing Machinery in the Ninth Street Bridge Operator House in April 2008. (Credit: Vera Ovetskaya) Repairing the Navigation Lighting on the Hunterspoint Bridge. On the Bridge: Oilers Carl Wharton, Richard Morreale, and Paul Califano, Mozaffari Ali, Electrician Naum Golburt, and Highway Repairers Manny Nardiello and Kevin Donahue. In the Snooper Bucket: Harry Parmaman and Supervisor Electrician Jose Done. (Credit: Samuel Teaw)

**Maintenance of Mechanical Components** Cleaning and lubrication of all movable parts and bridge cables for the four East River Bridges and the twenty-four movable bridges. Cleaning and lubrication of travelers; cleaning, wedging and oiling of the main cable strands and eyebars; cleaning of truss bearings; cleaning and lubricating air and fire line valves. Cleaning and lubrication is required to keep components from corroding and becoming immobile. Allowing components to seize could cause operating failure and introduce unsafe structural stresses.



Repairing the Brooklyn Bridge Standpipe System, 130 Feet Below the Roadway. Maintenance Crew Conducting the Annual Cleaning and Lubrication of the Solid Rod Suspenders Spherical Bearings on the Brooklyn Bridge. 2<sup>nd</sup> Photo - Oilers Steven Marxhausen, Rene Francis, Richard Morreale, Thomas McAuliffe, and Andrew Sorrentino. (Credit: Anatoly Orlov) Oiler T. McAuliffe at the 9th Street Bridge



Oiler Tom Strommen Maintaining the Hydraulic Power Unit at the Hamilton Avenue Bridge in February 2010. (Credit: Vera Ovetskaya) Cleaning and Lubricating the Broadway Bridge. (Credit: Reza Taheri) Executive Director of Bridge Preventive Maintenance and Repair Thomas Whitehouse (Wearing Yellow Jacket) Inspecting the Broadway Bridge Machinery Room and Instructing the Contractor. (Credit: Albert Hong) Assistant Mechanical Engineer Vera Ovetskaya Climbing to the Brooklyn Bridge Tower in 2008. (Credit: Gennadiy Kaplun)

# Steel Protection - Painting\*\*

Total Paint Removal and Repainting Constructing negative pressure containment (Class 1A); washing and surface blasting to commercial-blast or near-white metal condition (Society for Protective Coating SP-6 or SP-10); constructing Class 3P containment; power tool cleaning to bare metal condition (Society for Protective Coating SP-11 or SP-15); lead monitoring and disposal; applying lead-free paint; primer, intermediate coat and top coat. Surface preparation is

accomplished by abrasive blasting. The containment materials include tarps, plywood, scaffolding, and cables. Equipment includes blasting machines, needle guns, spray pumps, compressors, dust collectors, filters, and ductwork.



Assembly of Containment System at Franklin Square – in July and September 2010. Brooklyn Bridge Side Span Containment System – in November 2010.

The Division treats all lead paint waste as hazardous waste, and stores and disposes of it according to the Resource Conservation and Recovery Act (RCRA). Waste is stored in approved leak-proof drums and containers which are, in turn stored temporarily in a fenced, secured area on-site until they are transferred to a disposal/recycling facility.

**Full-Steel (Overcoating)** Overcoating of the entire bridge. Solvent cleaning and cleaning of steel surfaces in areas with deteriorated paint is conducted using approved environmentally safe paint removal techniques, and either power tools, hand tools or combination hand/power tools. Power tool cleaning is performed in a Class 3P containment, and hand tool cleaning in a Class 4 containment. Combination hand/power tool cleaning is performed in a Class 3P containment. A localized primer coat and a single finish coat are then applied by brush, roller, or spray over the entire bridge.

Salt Splash/Spot Painting This is a new process that combines salt splash with spot painting. It involves preparation of the area to be painted by power wash, using clean water or steam. Solvent cleaning is done in locations where oil and grease need to be removed from the steel surface. Areas to be power washed and painted are: the superstructure (up to six feet upwards from the deck), the underdeck steel (up to three feet from each side of the center line of the expansion joints), and the outside of the bridge's steel faces. In addition to these painted areas, we now perform localized surface preparation and painting of any deteriorated locations as mentioned in our spot painting definition above. After power washing, hand and power tools are used in areas that have started to show deterioration from accumulated de-icing agents. Power tool cleaning is performed in a Class 3P containment, and hand tool cleaning in a Class 4 containment. Combination hand/power tool cleaning is performed in a Class 3P containment. A spot primer coat and finish coat are then applied by brush or roller. Occasionally, when there is no danger of overspray, spray painting may be performed.



Williamsburg Bridge in June 2010: Application of Finish Coat at North Truss Diagonal. Salt Splash Painting on the Williamsburg Bridge. (Salt Splash Credit: Fouad Althaibani). Inspection of Blasting Surfaces Inside the Franklin Square Arch Containment in September 2010. Brooklyn Bridge Main Span Painting in December 2010.

TASK	IMPACT*
Debris Removal	6.1%
Sweeping	5.3%
Clean Abutments & Piers	8.1%
Clean Open Grating	7.0%
Clean Expansion Joints	9.1%
Wash Deck & Splash Zones	5.1%
Paint	4.2%

TASK	IMPACT*
Spot Paint	3.7%
Drain Cleaning	10.6%
Sidewalk & Curb Repair	2.5%
Pavement & Crack Sealing	12.2%
Wash Underside	15.9%
Mechanical Device Maintenance	6.7%
Replace Wearing Surface	3.5%

#### \*IMPACT ON BRIDGE RATING



Cleaning the Brooklyn Bridge Brooklyn Anchorage in July 2007. (Credit: Serag Saad) Bridge Repairer and Riveter James Philip Using a Track-Mounted Torch to Bevel the Edge of a Steel Plate in September 2012. (Credit: Thomas Whitehouse) Checking the Navigation Lights at Pier #5 of the Third Avenue Bridge.

\*Consortium of Civil Engineering Departments of New York City Colleges and Universities. Preventive Maintenance Management System For New York City Bridges: Update 1998. Technical Report No. 98-1. 1999. \*\*Descriptions modified in November 2003.

# MAINTENANCE PERSONNEL RESOURCES IN 2014

Preventive maintenance, corrective repair, flag repair, and painting work on the bridges and other structures within the City is performed by mechanics and supervisors in a variety of trades. The bridge operators provide safe and expedient passage to all marine and vehicular traffic under and on movable bridges. A breakdown of this work force by trade is:

	SUPERVISORS	MECHANICS
BRICKLAYERS	1	3
BRIDGE OPERATORS	22	70
BRIDGE PAINTERS	6	22
BRIDGE REPAIRERS/RIVETERS	3	39
CARPENTERS	3	16
CEMENT MASONS	-	9
ELECTRICIANS (INCLUDES HELPERS)	5	23
HIGHWAY REPAIRERS (INCLUDES ASSISTANTS & SEASONAL WORKERS)	22	69
MACHINISTS	-	1
MOTOR GRADER OPERATORS	-	1
OILERS	-	14
TRACTOR OPERATORS	-	1
TOTALS	62 SUPERVISORS	268 MECHANICS



Bridge Repairer Riveter Damian Venezia Squeezing Between the Girders to Access a Floor Beam That Needed to be Reinforced on the Ed Koch Queensboro Bridge – August 2010. (Credit: Hany Soliman) Carpenters John Horgan and Ruben Urena, and Assistant Civil Engineer Fouad Althaibani Repairing the PS-5 Bridge in November 2011. (Credit: Thomas Whitehouse) Cement Mason Victor Porowski Spreading Sodium Acetate on the Walkway of the Brooklyn Bridge in 2013. (Credit: Paul Schwartz).



Supervisor Bridge Operator Delonda Bates-Pinkney at the Controls of the 9th Street Bridge. She has worked for the Department since 1989. (Credit: Keith Burrowes) SBO Bates-Pinkney Preparing to Check the Bridge's Mechanisms. (Credit: Vera Ovetskaya) Deputy Director of In-House Painting Earlene Powell on the Brooklyn Bridge. Bridge Repairer and Riveter Kevin Clarkson Installing Anemometers on the Ed Koch-Queensboro Bridge in July 2013. (Credit: Paul Schwartz). Administrative Superintendent of Bridge Operations George Kern inspecting the Battery Park Underpass after Hurricane Sandy. (Credit: Alexander Engel)

Revised 11/17/14

# MAINTENANCE PERSONNEL RESOURCES IN 1900

A breakdown of the Department of Bridges work force by trade in 1900:

	SUPERVISORS	MECHANICS
AXEMAN		8
BLACKSMITH	1	2
BOILERMAKER		1
BRICK MASON	1	4
BRIDGE TENDER	15	137
CARPENTER	1	23
DOCKBUILDER		1
DRIVER		11
FIREMAN		18
FITTER		3
GATEMAN		7
INSPECTOR (INCLUDING STEEL)		10
LABORER (INCLUDES HELPERS)	7	111
LEVELER		4
LINEMAN		3
MACHINIST (INCLUDING HELPERS)		13
MASONRY INSPECTOR		7
MECHANIC	1	2
PAINTER	1	16
RIGGER		11
RIVETER	1	6
RODMAN		4
SHIP CARPENTER		4
SOUNDER		4
STABLEHAND		3
STEAM ENGINEER (INCLUDES DYNAMO)		15
STONE CUTTER/STONE MASON	1	2
SUPERINTENDENT ELECTRIC LIGHT	1	
SUPERVISOR (INCLUDES ASSTS)	12	
TOOLMAN		2
TRANSITMAN		7
TRIMMER		2
TOTALS	42 SUPERVISORS	441 MECHANICS



Willis Avenue Bridge Curbing and Road Repair in the Early 1920's. Madison Avenue Bridge Center Pier Under Construction in September 1909, and Constructing New Guardrail in September 1934. City Island Bridge Concreting in 1912. University Heights Bridge Roadway Repair in 1923.

# BRIDGE INSPECTION EQUIPMENT LIST

Inspector Equipment	Inspection Team Equipment	Inspection Van Equipment
Boots-Knee High	5 Boro Map	Tool Chest
Dust Masks (Disposable)	Binoculars, Broom	Clip Boards
Safety Goggles	Digital Camera, Camera Card Reader	Flashlight (3 "D" Cell)
Hard Hat With Liner	Hand Compass	Fire Extinguisher & First Aid Kit
Rain Hat & Jacket	Screwdriver Set (Regular & Phillips)	3 Safety Flags
Work Gloves Long Cuff	Dye Penetrant Kit	Step Ladder 6' or 8'
Work Gloves Unlined & Unlined	Rotational Distance Meter	Traffic Regulation Barrels
Spring/Winter Jackets	Lantern D-Meter With Test block	10 Traffic Cones
Work Boots & Overalls	Marking Paint Spray	Special Equipment for Inspection of Bridges Over Railroads
Chipping Hammer	Retract Survey Rod 25	Third Rail Insulating Mat
Clip Boards	Portable Laser Distance Meter, Handheld Computer	Put In Trucks By Highway Repairers When Needed
Deceleration Lanyards	Thermometer, Spray Penetrating Oil	Generator
Flashlight (2 "D" Cell) Safety Vest	Cell Phone/Radio, Vernier Calipers Wrenches 12", Tool Pouch	Oil For Generator Extension Ladder 32'
Level 9" (Magnetic)	Lumber Crayons, Spray Paint	Extension Ladder 24'
Tool Bags (24")	Awl, Calipers, Hacksaw	Extension Ladder 16'
Class III Body Harness	Hacksaw Blades (Extra), Paint Scraper	Shovel
Lanyards	Inspection Mirror, Level 24"	Push Broom
Bridge Inspection Manual (New York State)	Pliers 8", Vinyl Coated	Dust Pan & Sweep Broom
Technical Advisories For Inspection Manual	Plumb Bob, Pocket Knife	Bottled Water
Emergency Procedure Instructions	Ruler 25' or 30' (Metal)	Bolt Cutter
OSHA Approved Respirator & Filters	Ruler 100' (Fiberglass), Scraper Blades (Extra)	Flood Lights
Belt With Two Drop Forged D-Rings	Wire Brush, Folding Ruler 8'	Approved Safety Gasoline Can
Hard Hat Flashlight	Rope 5/8" With 100' Coil	Sledge Hammer (8 lbs.)
	Digital Angle Gauge	Extension Cord Winder
	expansion joint standard expansion joint sidewalk wearing surface bearing surface bearing surface primary member palint secondary member palint pedestal cap beam solid stem pier	
Team Leader Thirugnanam Mohan Inspecting City Island Bridge. (Credit: Bojidar Yanev). Diver Checking Steel Sheeting at the Fresh Creek Cofferdam Pier 2 in June 2012.	Typical Simple Span With Superstructure, Abutment and Pier Elements. (Credit: Bojidar Yanev)	Ed Koch - Queensboro Bridge Biennial Inspection in October 2012 – Tower 1, Looking West. Inspecting Bridge Over Dam at Clove Lake in May 2014 Using Small Boats and Scaffolding.
Sheeting at the Fresh Greek Cultertain Plet 2 in Julie 2012.		at Giove Lane III May 2014 Ushing Shilali Duats ahu Scaliululiig.

<sup>\*</sup>New York City Department of Transportation, Division of Bridges. *Inspections and Bridge Management Section Equipment Checklist*. 2006, Revised 11/15/10 and 12/31/13.

Adeli, Hojjat, and Kim, Hongjin. Wavelet-Based Vibration Control of Smart Buildings and Bridges. Taylor & Francis, 2009.

Åkesson, Björn. Fatique Life of Riveted Steel Bridges. CRC Press, 2010.

Åkesson, Björn (editor). Plate Buckling in Bridges and Other Structures. Taylor & Francis, 2007.

Åkesson, Björn (editor). Understanding Bridge Collapses: From the Horizon of the Structural Engineer. Taylor & Francis, 2008.

Ansari, Farhad (editor). Sensing Issues in Civil Structural Health Monitoring. Springer, 2010.

Azizinamini, Atorod, Yakel, Aaron, Abdelrahman, Magdy, (editors), and United Engineering Foundation. *High Performance Materials in Bridges: Proceedings of the International Conference.* American Society of Civil Engineers, August 2003.

Barker, Richard M., and Puckett, Jay A. Design of Highway Bridges: An LRFD Approach. John Wiley & Sons, 3rd edition, 2013.

Beard, Jeffrey L., Wundram, Edward C., and Loulakis, Michael C. Design-Build: Planning Through Development. McGraw-Hill Professional, 2001.

Benaim, Robert. The Design of Concrete Bridges. Taylor & Francis, 2007.

Biondini, Fabio, and Frangopol, Dan M. (editors). Bridge Maintenance, Safety, Management, Resilience and Sustainability: Proceedings of the Sixth International IABMAS Conference, Stresa, Lake Maggiore, Italy. CRC Press, 2012.

Birnstiel, Charles, Foerster, George, and Bowden, William. Movable Bridge Design. ICE Publishing, 2015.

Blakstad, Lucy (editor). Bridge: The Architecture of Connection. Birkhauser Verlag, 2002.

Blockley, David. Bridges: The Science and Art of the World's Most Inspiring Structures. Oxford University Press, USA, 2010.

Branco, Fernando, A., and de Brito, Jorge. Handbook of Concrete Bridge Management. American Society of Civil Engineers, 2003.

Brown, David J. Bridges: Three Thousand Years of Defying Nature. Motorbooks International, October 2001.

Burke Jr., Martin P. Integral and Semi-Integral Bridges. Wiley-Blackwell, 2009.

Chatterjee, Suhken. Design of Modern Steel Bridges. Blackwell Science Inc., 2nd edition, 2003.

Chen, Airong, Frangopol, Dan M., and Ruan, Xin (editors). Bridge Maintenance, Safety, Management and Life Extension – IABMAS'14: Proceedings of the Seventh International Conference on Bridge Maintenance, Safety and Management, Shanghai, China, 7-11, 2014. CRC Press, 2014.

Chen, Wai-Fah, and Duan, Lian (editors). Bridge Engineering Handbook, Five Volume Set: Fundamentals, Superstructure Design, Substructure Design, Seismic Design, and Construction and Maintenance. CRC Press, 2<sup>nd</sup> edition, 2014.

Cho, Yoon-Ho, Tayabi, Shiraz D., Won, Moon C., and Yuan, Jianbo (editors). *New Technologies in Construction and Rehabilitation of Portland Cement Concrete Pavement and Bridge Deck Pavement (GSP 196*). (Proceedings of the GeoHunan International Conference: Challenges and Recent Advances in Pavement Technologies and Transportation Geotechnics). American Society of Civil Engineers, 2009.

Chotickai, Piya. Fatigue Life of Steel Bridges: Structural Evaluation and Reliability-Based Analysis Method. VDM Verlag, 2009.

Collings, David. Steel Concrete Composite Bridges. Thomas Telford Ltd., 2005.

Construction Institute Committee on Specification. *Preparing Requests for Proposals and Specifications for Design-Build Projects.* American Society of Civil Engineers, 2008.

Cossons, Neil, and Trinder, Barrie. Iron Bridge: Symbol of the Industrial Revolution. Phillimore & Company, Limited, 2002.

Cruz, Paulo J. S., Frangopol, Da M., and Neves, Luis C. (editors). Advances in Bridge Maintenance, Safety Management and Lifecycle Performance. Taylor & Francis, 2006. (With CD-ROM).

Cunha, Alvaro (editor). Topics in Dynamics of Bridges, Volume 3: Proceedings of the 31st IMAC, A Conference on Structural Dynamics, 2013 (Conference Proceedings of the Society for Experimental Mechanics Series). Springer, 2013.

Datta, T. K. Seismic Analysis of Structures. Wiley, 2010.

Dawe, Peter. Traffic Loading on Highway Bridges. American Society of Civil Engineers (Thomas Telford, Ltd.), 2004.

Day, Robert W. Geotechnical Earthquake Engineering Handbook. McGraw-Hill, 2001.

Deng, Linzhong. Artificial Intelligence Techniques for Bridge Reliability Assessment. VDM Verlag, 2009.

Denison, Edward, and Stewart, Ian. How to Read Bridges: A Crash Course In Engineering and Architecture. Rizzoli, 2012.

Denny, Mark. Super Structures: The Science of Bridges, Buildings, Dams, and Other Feats of Engineering. The Johns Hopkins University Press, 2010.

Eggert, Helmut, and Kauschke, Wolfgang. Structural Bearings. John Wiley & Sons, 2003.

Erdem, Arda. Seismic Design of Bridges. LAP Lambert Academic Publishing, 2010.

Ettouney, Mohammed, and Alampalli, Sreenivas. Infrastructure Health in Civil Engineering (Two-Volume Set): Theory and Components, & Applications and Management. CRC Press, 2011.

Frangopol, Dan M., Sause, Richard, and Kusko, Chad (editors). Bridge Maintenance, Safety and Management - IABMAS'10: Proceedings of the Fifth International IABMAS Conference, Philadelphia, USA, 11-15 July 2010. CRC Press, 2010.

Fu, Chung C., and Wang, Shuqing. Computational Analysis and Design of Bridge Structures. CRC Press, 2014.

Galloway, Patricia D. The 21st-Century Engineer: A Proposal for Engineering Education Reform. American Society of Civil Engineers, 2007.

Gao, Lubin. Load Rating Highway Bridges: In Accordance with Load and Resistance Factor Rating Method. Outskirts Press, 2013.

Ger, Jeffrey, and Cheng, Franklin Y. Seismic Design Aids for Nonlinear Pushover Analysis of Reinforced Concrete and Steel Bridges. CRC Press, 2011.

Gere, James M. Mechanics of Materials. Brooks/Cole Publishing, 5th edition, 2000.

Ghali, A., Favre, R., and Elbadry, M. Concrete Structures: Stresses and Deformations: Analysis and Design for Sustainability. Spon, 4th edition, 2011.

Ghosh, Uptal K. (editor). Design and Construction of Steel Bridges. Taylor & Francis, 2007.

Ghosh, Uptal K. Repair & Rehabilitation of Steel Bridges. Balkema Publishers, 2000.

Gimsing, Niels J., and Georgakis, Christos T. Cable Supported Bridges: Concept and Design. Wiley, 3rd edition, 2012.

Gohler, Bernhard, and Pearson, Brian. Incrementally Launched Bridges: Design and Construction. John Wiley & Sons, 2000.

Gonzalez, Arturo. Development of a Bridge Weigh-In-Motion System: A technology to convert the bridge response to the passage of traffic into data on vehicle configurations, speeds, times of travel and weights. LAP Lambert Academic Publishing, 2010.

Gottemoeller, Frederick. Bridgescape: The Art of Designing Bridges. John Wiley & Sons, 2nd edition, 2004.

Gransberg, Douglas D., Koch, James E., and Molennar, Keith R. *Preparing for Design-Build Projects: A Primer for Owners, Engineers, and Contractors*. American Society of Civil Engineers, 2006.

Grigg, Neil S., Criswell, Marvin E, Fontane, Darrell G., and Siller, Thom. Civil Engineering Practice in the Twenty-First Century: Knowledge and Skills for Design and Management. American Society of Civil Engineers, 2001.

Hewson, Nigel R. Prestressed Concrete Bridges. ICE Publishing, 2<sup>nd</sup> edition, 2011.

Idelberger, Klaus, and Wilharm, Linda (Translator). The World of Footbridges: From the Utilitarian to the Spectacular. Wiley-VCH, 2011.

Imhof, Daniel. Risk Assessment of Existing Bridge Structures: Evaluation of the Risk of Structural Collapse. VDM Verlag, 2008.

Jaffe, Rochelle C. Masonry Instant Answers (Instant Answer Series). McGraw-Hill Professional, 2003.

Jurado, J. A., Hernandez, S., Nieto, F, and Mosquera, A. *Bridge Aeroelasticity: Sensitivity Analysis and Optimum Design (High Performance Structures and Materials).* WIT Press / Computational Mechanics, 2011.

Kappos, Andreas J. (editor). Dynamic Loading and Design of Structures. E & F N Spon, 2001.

Kappos, Andreas J., Saiidi, M. Saiid, Aydinoglu, M. Nuray, and Isakovic, Tatjana. (editors). Seismic Design and Assessment of Bridges: Inelastic Methods of Analysis and Case Studies (Geotechnical, Geological and Earthquake Engineering). Springer; 2012.

Kardon, Joshua A. (editor). Guidelines for Forensic Engineering Practice. American Society of Civil Engineers, 2nd edition, 2012.

Kawada, Tadaki, Ohashi, Harukazu (Translator), Scott, Richard (Editor). History of the Modern Suspension Bridge: Solving the Dilemma between Economy and Stiffness. American Society of Civil Engineers, 2010.

Kennedy-Reid, Ian L. Concrete Bridge Strengthening and Repair. Thomas Telford Ltd., 2009.

Khan, Mohiuddin A. Bridge and Highway Structure Rehabilitation and Repair. McGraw-Hill Professional, 2010.

Khan, Mohiuddin A. Accelerated Bridge Construction: Best Practices and Techniques. Butterworth-Heinemann, 2014.

Khan, Mohiuddin A. Flood Scour for Bridges and Highways: Prevention and Control of Soil Erosion. McGraw-Hill Professional, 2014.

Kim, Jai B., Kim, Robert H., Eberle, Jonathan, with Mante, Dave M., and Weaver, Eric J. Simplified LRFD Bridge Design. CRC Press, 2013.

Kim, Yail Jimmy (editor). Advanced Composites in Bridge Construction and Repair (Woodhead Publishing Series in Civil and Structural Engineering). Woodhead Publishing, 2014.

Klein, Lawrence A. Sensor Technologies and Data Requirements for ITS Applications. Artech House, 2001.

Koglin, Terry. Movable Bridge Engineering. John Wiley & Sons, 2004.

Koh, Hyun-Moo, and Frangpol, Dan M. (editors). Bridge Maintenance, Safety, Management, Health Monitoring and Informatics: Proceedings of the Fourth International Conference, Seoul, Korea, 13-17 July 2008. Taylor & Francis, 2008.

Kratkey, Richard J. (Editor). Assessment of Performance of Vital Long-Span Bridges in the United States. American Society of Civil Engineers, 2003.

Lee, George C., Sternberg, Ernest, and Pierro, David C. (illustrator). Bridges: Their Engineering and Planning. SUNY Press, 2015.

Leitch, Kenneth. Close-Range Photogrammetric Measurement of Bridge Deformations: A Non-Contact Analysis Method. LAP Lambert Academic Publishing, 2010.

LePatner, Barry B. Too Big to Fall: America's Failing Infrastructure and the Way Forward. Foster Publishing, 2010.

Mahmoud, Khaled M. (editor). Innovations in Bridge Engineering Technology: Selected Papers, 3<sup>rd</sup> NYC Bridge Conference, 27-28 August 2007. CRC. 2007.

Mahmoud, Khaled M. (editor). Safety and Reliability of Bridge Structures: Selected Papers, 5th New York City Bridge Conference. CRC, 2009.

Mahmoud, Khaled M. (editor). Modern Techniques in Bridge Engineering: Proceedings of 6th New York City Bridge Conference, 25-26 July 2011. CRC, 2011.

Malhotra, V. M., and Carino, N. J. (editors). Handbook on Nondestructive Testing of Concrete. Auerbach Publishing, 2nd edition, 2004.

Measures, Raymond M. Structural Monitoring With Fiber Optic Technology. Academic Press, 2001.

Mort, Michael. A Bridge Worth Saving: A Community Guide to Historic Bridge Preservation. Michigan State University Press, 2008.

Moutassem, Fayez. High Strength Concrete Prestressed Bridge Girders: Evaluation and Modification of the Allowable Stresses. VDM Verlag, 2010.

Obrien, Eugene, Keogh, Damien, and O'Connor, Alan. Bridge Deck Analysis. CRC Press, 2nd edition, 2014.

O'Connor, Colin O., and Shaw, Peter A. Bridge Loads. Routledge, 2000.

Outerbridge, Graeme (photographer), and Outerbridge, David. Bridges. Harry N Abrams, 1989.

Paipetis, Alkiviadis S., Matikas, Theodore E., Aggelis, Dimitrios G., and Van Hemelrijck, Danny (editors), *Emerging Technologies in Non-Destructive Testing V: Fifth Conference on Emerging Technologies in Non-Destructive Testing (loannina, Greece, 19–21 September 2011).* CRC Press, 2012.

Parke, G. A. R., and Disney, P. (editors) *Bridge Management 5: Fifth International Conference on Bridge Management, 2005.* Thomas Telford, Ltd., 2005.

Parmley, Robert O. Civil Engineer's Illustrated Sourcebook. McGraw-Hill Professional, 2003.

Pearce, Martin, and Jobson, R. Bridge Builders. John Wiley & Sons, 2002.

Petroski, Henry. Pushing the Limits: New Adventures in Engineering. Vintage, 2005.

Proske, Dirk, and van Gelder, Pieter. Safety of Historical Stone Arch Bridges. Springer, 2009.

Proulx, Tom (editor). Dynamics of Bridges, Volume 5: Proceedings of the 28th IMAC, A Conference on Structural Dynamics, 2010 (Conference Proceedings of the Society for Experimental Mechanics Series). Springer, 2011.

Raina, V. K. Raina's Concrete Bridge Practice Construction, Maintenance and Rehabilitation. Shroff Publishers and Distributors Pvt. Ltd., 2nd Edition, 2010.

Rasenberger, Jim. High Steel: The Daring Men Who Built The World's Greatest Skyline, 1881 to The Present. HarperCollinsUS, 2010.

Ratay, Robert T. (editor). Forensic Structural Engineering Handbook. McGraw-Hill Professional, 2000.

Ratay, Robert T. Structural Condition Assessment. John Wiley & Sons, 2005.

Reece, Martin B. Strengthening Historic Covered Bridges to Carry Modern Traffic. Nova Science Publishers, 2009.

Richardson, Mark. Fundamentals of Durable Reinforced Concrete. E & F N Spon, 2002.

Rosignoli, Marco. Bridge Construction Equipment. ICE Publishing, 2013.

Rosignoli, Marco. Bridge Launching. ICE Publishing, 2nd edition, 2014.

Ruddock, Ted (editor). Masonry Bridges, Viaducts and Aquaducts. Ashgate Publishing Company, 2000.

Russell, Jeffrey S. (editor). Perspectives in Civil Engineering: Commemorating the 150th Anniversary of the American Society of Civil Engineers. American Society of Civil Engineers, 2003.

Ryall, Michael J. Bridge Management. Butterworth-Heinemann, 2nd edition, 2009.

Ryall, Michael J., Parke, G. A. R., and Harding, J. E. *Manual of Bridge Engineering*. American Society of Civil Engineers (Thomas Telford, Ltd.), 2000

Ryall, M. J., Parke, G. A. R., and Harding, J. E. (editors). *Bridge Management Four: Inspection, Maintenance, Assessment, and Repair.* (Proceedings of the Fourth International Conference on Bridge Management). American Society of Civil Engineers (Thomas Telford, Ltd.), 2000.

Scheer, Joachim, Wilharm, Linda (translator), and Menn, Christian (forward). Failed Bridges: Case Studies, Causes and Consequences. Wiley-VCH. 2010.

Simiu, Emil, and Miyata, Toshio. Design of Buildings and Bridges for Wind: A Practical Guide for ASCE-7 Standard Users and Designers of Special Structures. John Wiley & Sons, 2006.

Strasky, Jiri. Stress Ribbon and Cable-supported Pedestrian Bridges. ICE Publishing, 2nd edition, 2011.

Strømmen, Einar. Theory of Bridge Aerodynamics. Springer, 2nd edition, 2010.

Sussman, Joseph M. Perspectives on Intelligent Transportation Systems (ITS). Plenum US, 2005.

Taly, Narendra. Highway Bridge Superstructure Engineering: LRFD Approaches to Design and Analysis. CRC Press, 2014.

Tilly, Graham, Gifford, and Partners. Bridge Conservation: A Guide to Good Practice. Taylor & Francis, 2002.

Tonias, Demetrios E., Garrabrant, Richard, and Chen, Stuart. *Bridge Engineering: Design, Rehabilitation, and Maintenance of Modern Highway Bridges.* McGraw-Hill Professional, 2<sup>nd</sup> edition, 2004.

Transport Association of Canada. Guide to Bridge Hydraulics. American Society of Civil Engineers (Thomas Telford Ltd), 2nd edition, 2004.

Troyano, Leonardo Fernýýndez. Bridge Engineering: A Global Perspective. American Society of Civil Engineers (Thomas Telford, Ltd.), 2004.

Unsworth, John F. Design of Modern Steel Railway Bridges. CRC Press, 2010.

Wenzel, Helmut. Health Monitoring of Bridges. Wiley, 2009.

Whitney, Charles S. Bridges of the World: Their Design and Construction. Dover Publications, 2003.

Williams, Alan. Civil & Structural Engineering: Seismic Design of Buildings & Bridges. Kaplan, 5th edition, 2005.

Xu, You-Lin. Wind Effects on Cable-Supported Bridges. Wiley, 2013.

Xu, You Lin, and Xia, Yong. Structural Health Monitoring of Long Span Suspension Bridges. CRC Press, 2012.

Yanev, Bojidar. Bridge Management. Wiley, 2007. (Also available in Chinese and Japanese editions.)

Yanev, Bojidar. Comparing Bridge Condition Evaluations with Life-Cycle Expenditures. Chapter 22 in Frangopol, Dan M., and Tsompanakis, Yiannis (editors). Maintenance and Safety of Aging Infrastructure: Structures And Infrastructures Book Series, Volume 10. CRC Press, 2014.

Yeomans, David. How Structures Work: Design and Behaviour from Bridges to Buildings. John Wiley & Sons, 2009.

Zhao, Jim J., and Tonias, Demetrios E. *Bridge Engineering: Design, Rehabilitation, and Maintenance of Modern Highway Bridges.* McGraw-Hill Professional, 3<sup>rd</sup> edition, 2012.

New York City Bridge Conference: A Special Issue of the Journal of Bridge Engineering: Proceedings of the 1st New York City Bridge Conference. American Society of Civil Engineers, 2001.

#### History and Images

Adeli, Hojjat. Historic Bridges: Evaluation, Preservation, and Management. CRC Press, 2012.

Baus, Ursula, Schlaich, Mike, Dechau, Wilfried (photographer), Rieser, C. (translator), and Toovey, Richard (translator). Footbridges. Birkhäuser Basel, 2007.

Beck, Haig, and Cooper, Jackie. Kurilpa Bridge: Brisbane's New Bridge. The Images Publishing Group, 2012.

Cleary, Richard L. Bridges. (Norton/Library of Congress Visual Sourcebooks in Architecture, Design & Engineering.) W. W. Norton, 2007.

Cooper, Alan. Bridges, Law and Power in Medieval England, 700-1400. Boydell Press, 2006.

Cortright, Robert S. (photographer), and Cortright Neff, Jeane (editor). Bridging the World. Bridge Ink, 2003.

Cruickshank, Dan. Dan Cruickshank's Bridges: Heroic Designs That Changed the World. Collins, 2010.

Dyble, Louise N. Paying the Toll: Local Power, Regional Politics, and the Golden Gate Bridge (American Business, Politics, and Society). University of Pennsylvania Press, 2009.

Frampton, Kenneth, Tischhauser, Anthony, and Webster, Anthony C. (editors). Calatrava Bridges. Birkhauser (Architectural), 3rd edition, 2004.

Fujino, Yozo, Kimura, Kichiro, and Tanaka, Hiroshi. Wind Resistant Design of Bridges in Japan: Developments and Practices. Springer, 2012.

Fuller, Robert G., Lang, Charles R., and Lang, Roberta H., (editors). *Twin Views of the Tacoma Narrows Bridge Collapse*. American Association of Physics Teachers, 2000.

Graf, Bernhard. Bridges That Changed the World. Prestel USA, 2002.

Guth, David W. Bridging the Chesapeake: A 'Fool Idea' That Unified Maryland. Old Line Publishing LLC, 2013.

Hadlow, Robert W. Elegant Arches, Soaring Spans: C. B. McCullough, Oregon's Master Bridge Builder. Oregon State University Press, 2001.

Harrison, David. *The Bridges of Medieval England: Transport and Society 400-1800.* (Oxford Historical Monographs). Oxford University Press, 2007.

Jamieson, Eric. Tragedy at Second Narrows: The Story of the Ironworkers Memorial Bridge. Harbour Publishing Company, 2008.

Kemp, Emory L. (editor). American Bridge Patents: The First Century, 1790-1890. West Virginia University Press, 2005.

Knapp, Ronald G., and Ong, A. Chester (photographer). Chinese Bridges: Living Architecture From China's Past. Tuttle Publishing, 2008.

MacDonald, Donald, and Nadel, Ira. Bay Bridge: History and Design of a New Icon. Chronicle Books, 2013.

Mackay, Sheila. The Forth Bridge: A Picture History. Birlinn Ltd., 2011.

Miller, Terry E., Knapp, Ronald G., and Chester Ong, A. (photographer). *America's Covered Bridges: Practical Crossings - Nostalgic Icons.* Tuttle Publishing, 2014.

Nielsen, Stuart S., and Olson, Kimball. The New Keosauqua Bridge - Construction of the New Bridge in Keosauqua, Van Buren County, Iowa. NieKo, 1st edition, 2013.

Pascoe, Michael. 150 Years of Clifton Suspension Bridge: A Photographic History. The History Press, 2014.

Robinson, John V. Building the Benicia-Martinez Bridge. Carquinez Press; 2007.

Ruddock, Ted. Arch Bridges and their Builders 1735-1835. Cambridge University Press, 2008.

Scheer, Joachim, and Wilharm, Linda (translator). Failed Bridges: Case Studies, Causes and Consequences. Wiley, John & Sons, Incorporated, 2010.

Scott, R. In the Wake of Tacoma: Suspension Bridges and the Quest for Aerodynamic Stability. American Society of Civil Engineers, 2001.

Solomon, Brian. North American Railroad Bridges. Voyageur Press, 1st edition, 2008.

Sweetman, John. The Artist and the Bridge: 1700-1920. Ashgate Publishing, Limited, 2000.

Thienel, Phillip M. Mr. Lincoln's Bridge Builders: The Right Hand of American Genius. White Mane Publishing Company, Incorporated, 2000.

Van den Berg, Christa, and Nijenhuis, Gerhard. Bridging the Dutch Landscape: Design Guide for Bridges. Bis Publishers, 2009.

Van Uffelen, Chris. Link It!: Masterpieces of Bridge Design. Braun Publishing, 2014.

Watson, Wilbur J. Great Bridges: From Ancient Times to the Twentieth Century. Dover Publications, 2006.

Wells, Matthew, and Pearman, Hugh (introduction). 30 Bridges. Watson-Guptill Publications, 2002.

Wisely, William H., Fairweather, Virginia, and Caballeros, Harold A. *The American Civil Engineer 1852-2002: The History, Traditions, and Development of the American Society of Civil Engineers*. American Society of Civil Engineers, 2002.

#### **New York City Bridges**

Abrahams, Michael J. Seismic Retrofit of Two New York City Bridges. Proceedings of Structures Congress 2001. . American Society of Civil Engineers.

Agrawal, A. K., Yi, Z., Alampalli, S., Ettouney, M., King, L., Hui, K., and Patel, M. Remote Corrosion Monitoring Systems for Highway Bridges. Practice Periodical on Structural Design and Construction, Volume 14, Issue 4, November 2009.

Arzoumanidis, Serafim G, Savage, Itunumi, and Zhang, Jun. In-Depth Seismic Investigation of the Williamsburg Bridge: A Major East-Coast Suspension Bridge. Proceedings of Structures Congress 2000. American Society of Civil Engineers.

Ashraf, Syed, Jayakumaran S., and Chen, Lihui. Case History: Pile Driving and Vibration Monitoring for Avenue P Bridge in Brooklyn, New York. Proceedings of the International Deep Foundations Congress 2002.

Barbas, Jamey A. Saving the Williamsburg Bridge. Civil Engineering, Volume 70, Issue 10, 2000.

Barbas, Jamey A., and Matusewitch, Peter. *Reconstruction of the Williamsburg Bridge: Transition to a Modern Structure*. Proceedings of the Third National Congress on Civil Engineering History and Heritage. American Society of Civil Engineers, 2007.

Barelli, Michael, White, Joshua, and Billington, and David P. *History and Aesthetics of the Bronx-Whitestone Bridge*. Journal of Bridge Engineering, Volume 11, Issue 2, March 2006.

Bashir, Tariq M., McCotter, Michael, Haight, Roger Q., and Dinmore, Gary M. *Alexander Hamilton Bridge – Construction Challenges and Solutions*. Transportation Research Board Annual Meeting, 2014.

Begonja, K. The Belt Parkway Bridge Replacement. Concrete Engineering International, Volume 8, Number 4, 2004.

Betti, Raimondo, Khazem, Dyab, Carlos, Mark, Gostautas, Richard, and Virman, Y. Paul. Corrosion Monitoring Research for City of New York Bridges. U.S. Department of Transportation Federal Highway Administration. FHWA Publication No.: FHWA-HRT-14-023, May 2014.

Brown, Jeff L. The Bridges of Central Park. Civil Engineering, Volume 83, Issue 2, 2013.

Buyson, Marco, and Shams, Mohammad. A Yankee Clip: Bronx Bridge Project Packs Plenty of Speed, Precision. Roads & Bridges, Volume 48, Number 11, November 2010.

Coates, Andrew, Yegian, Mishac, Kishore, Kamal, Jin, Sajjan Jain, Patel, Jay, Pizzi, John, Connolly, Paul, and Yin, Beile. Foundation Retrofit of the Third Avenue Bridge in New York. Proceedings of GeoTrans 2004. American Society of Civil Engineers.

Coates, Andrew C., Bluni, Sean A., Connolly, Paul J., Patel, Jay A., and Chandiramani, Balram. Swinging into Action: The Recently Completed Replacement of New York City's 108-Year-Old Third Avenue Bridge Required Complex Staged Construction and the Use of a Temporary Structure to Limit Disruptions to Bridge and Marine Traffic. Civil Engineering, Volume 75, Issue 12, 2005.

Coates, Andrew C., Bluni, Sean A., and Connolly, Paul J. Replacement of the Third Avenue Bridge over the Harlem River. Proceedings of the 2005 Structures Congress and the 2005 Forensic Engineering Symposium, American Society of Civil Engineers.

Csogi, Ralph D., Reconstructing the Manhattan Bridge. Civil Engineering, Volume 85, Issue 1, 2015.

Dubin, Earl E., and Yanev, Bojidar S. Managing the East River Bridges in New York City. Federal Highway Administration, 2012.

Fanjiang, G. N., Gajer, R. B., and Ye, Q. Seismic Evaluation and Retrofit of the Manhattan Bridge. Proceedings of Structures Congress 2001. American Society of Civil Engineers.

Greater Astoria Historical Society, and Roosevelt Island Historical Society. Images of America: The Queensboro Bridge. Arcadia Publishing, 2008.



Brooklyn Bridge in 2009. (Credit: Jagtar Khinda) Ed Koch Queensboro Bridge in 2006. (Credit: Russell Holcomb)

Griggs, Jr., Francis. E. Bridge Across the Hudson. Journal of Bridge Engineering, Volume 14, Issue 5, September 2009.

Griggs, Jr., Francis. E. John A. Roebling and His East River Bridge Proposals 1847 — 1869. John A. Roebling: A Bicentennial Celebration of His Birth 1806-2006: Proceedings of the Conference. American Society of Civil Engineers, 2007.

Griggs, Jr., Francis. E. *The Manhattan Bridge: A Clash of Titans*. Journal of Professional Issues in Engineering Education and Practice, Volume 134, Issue 3, 2008.

Haight, Roger, Chang, Sherry, and Kushmock, Robert . *Orthotropic Deck Rehabilitation at the Throgs Neck Bridge*. Proceedings of the 2005 Structures Congress and the 2005 Forensic Engineering Symposium.

Haw, Richard. The Brooklyn Bridge: A Cultural History. Rutgers University Press, 2005.

Haw, Richard. Art of the Brooklyn Bridge: A Visual History. Routledge, 2008.

Hay, Thomas R. Bridge Cable Inspection with Long Range Ultrasound. NCHRP-IDEA Program Project Final Report, 2012.

Hecox, Doug, Guterman, Josh. Working Work of Art: At 130, The Brooklyn Bridge Still Does the Job it Was Built For. Better Roads, Volume 83, Issue 5, May 2013.

Hill, David. Suspension System of New York's Manhattan Bridge Gets Long-Awaited Update. Civil Engineering, Volume 83, Issue 11, 2013.

Holman, Terence P., Tuozzolo, Thomas J., Davis, Kyle, and Pastore, Joseph A. *Micropile Construction for the Willis Avenue Bridge Replacement – Geologic Challenges Meet Urban Construction Logistics.* Proceedings of the 28th Annual International Bridge Conference, 2011.

Jayakumaran, S., Bergmann, Michael, Ashraf, Syed, and Norrish, Charles. Case Study: A Jointless Structure to Replace the Belt Parkway Bridge Over Ocean Parkway. Proceedings of Integral Abutment and Jointless Bridges (IAJB 2005), 2005.

Jones, Jenny. NYC Pedestrian Bridge Blends Rustic Simplicity With Urban Modernism. Civil Engineering, Volume 81, Issue 7, 2011.

Khinda, Jagtar S. *The New Performance Based Seismic Design Criteria for New York City*. Proceedings of Structures Congress 2013: Bridging Your Passion with Your Profession. American Society of Civil Engineers

Krstic, Vedrana, Mankbadi, Raymond, and Ramakrishna, Aravinda. Willis Avenue Swing Bridge: Design and Construction of Drilled Shaft Foundations. Selected Papers of the 2009 International Foundation Congress and Equipment Expo, American Society of Civil Engineers, 2009.

Lai, Chee K., and Hubbard, Stephen. Prestressed Concrete Box Beams with Curved Soffits. Proceedings of Structures Congress 2000.

Levy, Matthys. Unusual Arrangement: A New Form of Cable-Stayed Bridge Has Been Developed to Join Two Parts of the Campus of New York City's Rockefeller University. Civil Engineering, Volume 75, Issue 11, 2005

Levy, Matthys. Rockefeller University Bridge and Plaza. Metropolis & Beyond: Proceedings of the 2005 Structures Congress and the 2005 Forensic Engineering Symposium. American Society of Civil Engineers, 2005...

Mahmoud, Khaled. Accessible and Cost-Effective Approach for Seismic Retrofit of Highway Bridges. Proceedings of Structures Congress 2001. American Society of Civil Engineers.

Manbeck, John. Historic Photos of the Brooklyn Bridge. Turner Publishing Company, 2009.

Mayer, Lorenzo, Yanev, Bojidar S., Olson, Larry D., and Smyth, Andrew W. *Monitoring of Manhattan Bridge for Vertical and Torsional Performance with GPS and Interferometric Radar Systems.* Transportation Research Board 89<sup>th</sup> Annual Meeting Compendium of Papers DVD, 2010.

Metals in Construction, Fall 2004, Pages 48 – 51. Steel Hits Home Run in Macombs Dam Bridge Rehabilitation.

Metals in Construction, Fall 2005, Pages 26 – 29. Third Avenue Bridge: Steel Bridge Barges in to Replace Its Predecessor.

Metals in Construction, Spring 2007, Pages 36 – 41. Williamsburg Bridge Rehabilitation Contract 8: 100-Year-Old Steel Bridge Ready For 100 Years More.

Metals in Construction, Spring 2008, Pages 38 – 43. Manhattan Bridge Rehabilitation: Steel is the East River Workhorse.

Metals in Construction, Spring 2012, Pages 36 - 41. Paerdegat Basin Bridge.

Mumford, Jason L. *Planning the Brooklyn Bridge: John A. Roebling and 19th Century Project Development.* John A. Roebling: A Bicentennial Celebration of His Birth 1806-2006: Proceedings of the Conference. American Society of Civil Engineers, 2007.

Nikolaou, Sissy, Mylonakis, George, and Edinger, Peter. Evaluation of Site Factors for Seismic Bridge Design in New York City Area. Journal of Bridge Engineering, Volume 6, Issue 6, November/December 2001.

Pantoli, E., Vincenzi, L., Savoia, M., and Testa, R. *The Effect of Local Vibrations on Fatigue in Old Steel Riveted Bridges: A Case Study, the Manhattan Bridge.* Proceedings of the 8th International Conference on Structural Dynamics, EURODYN 2011.

Puri, Satinder P. S. Aesthetics of Central Park's Cast Iron Bridges. Proceedings of the 2006 Structures Congress.

Rastorfer, Darl. Six Bridges: The Legacy of Othmar H. Ammann. Yale University Press, 2000.

Reid, Robert L. Security-Related Traffic Changes on George Washington Bridge Accelerated Structural Cracking. Civil Engineering, Volume 81, Issue 12, 2011.



Gapstow Bridge (East 62<sup>nd</sup> Pedestrian Bridge) During the Exhibition *The Gates, Project for Central Park, 1979-2005.* (Credit: Russell Holcomb) Center Drive Bridge (Playmates Arch) in 2008. West 62<sup>nd</sup> Pedestrian Bridge (Pinebank Arch). West 77<sup>th</sup> Street Pedestrian Bridge (Ladies Pond Bridge). East 77<sup>th</sup> Street Pedestrian Bridge (Glade Arch) in 2010. Greywacke Arch (East Drive Bridge Opposite East 80<sup>th</sup> Street) in 2011. Reier, Sharon. *The Bridges of New York*. Dover Publications, Incorporated, 2000.

Rockland, Michael A. The George Washington Bridge: Poetry in Steel. Rutgers University Press, 2008.

Rosenthal, Andrea, and Scozzari, Samuel. Modern Delivery of Construction Management Services with Emphasis on Environmental Risk Management for Projects in Marine and Tidal Areas. Proceedings of the Eleventh Triennial International Conference. American Society of Civil Engineers, 2007.

Sayenga, Donald (editor). Washington Roebling's Father: A Memoir of John A. Roebling. American Society of Civil Engineers, 2008.

Schmidt, J. C. The 2006 Rope Access Inspection of the Brooklyn Bridge Towers: A New View of an Old Bridge. (Proceedings of the 4th New York City Bridge Conference). Taylor & Francis/Balkema, 2007.

Schultz, Allison R., and Billington, David P. History and Aesthetics of the East River Bridges. John A. Roebling: A Bicentennial Celebration of His Birth 1806-2006: Proceedings of the Conference. American Society of Civil Engineers, 2007.

Sharif, Mo. Protecting New York City's Bridge Assets. Public Roads, Volume: 68, Issue 6, 2005.

Shi, Yuwei, Deodatis, George, and Betti, Raimondo. Random Field-Based Approach for Strength Evaluation of Suspension Bridge Cables. Journal of Structural Engineering, Volume 133, Issue 12, 2007.

Spiegler, Jennifer C., and Gaykowski, Paul M. The Bridges of Central Park. Arcadia Publishing, 2006.

Stamm, Rolan, Marcic, David M., and Drugge, H. Everett. Seismic Evaluation and Retrofit Design of the Harlem River Lift Bridge. Proceedings of Structures Congress 2001.

Sutherland, Cara. Bridges of New York City (Portraits of America). Friedman/Fairfax Publishing, 2002



Southern Boulevard, Madison Avenue, and Mosholu Parkway Bridges. (Credit: Russell Holcomb) 17th Avenue Pedestrian Bridge. (Credit: Peter Basich) Wards Island Pedestrian Bridge in October 2011. (Credit: Rafael Lopez) University Heights Bridge in July 2011. (Credit: Russell Holcomb)

Talebinejad, Iman, Fischer, Chad, and Ansari, Farhad. A Hybrid Approach for Safety Assessment of the Double Span Masonry Vaults of the Brooklyn Bridge. Journal of Civil Structural Health Monitoring, June 2011.

Talebinejad, Iman, Fischer, Chad, Ansari, Farhad, and Yanev, Bojidar S. Structural Health Monitoring of the Masonry Arch Approach Spans in Brooklyn Bridge. Transportation Research Board 89th Annual Meeting Compendium of Papers DVD, 2010.

Talese, Gay, Davidson, Bruce (photographer), and Rethi, Lili (illustrator). *The Bridge: The Building of the Verrazano-Narrows Bridge.* Walker & Company, 2002.

Tsakopoulos, Paul A., and Fisher, John W. Full-Scale Fatigue Tests of Steel Orthotropic Decks for the Williamsburg Bridge. Journal of Bridge Engineering, Volume 8, Issue 5, September/October 2003.

Winpenny, Thomas R. Manhattan Bridge: The Troubled Story of a New York Monument. Moore, Hugh Historical Park & Museums, Incorporated, 2003.



Ed Koch Queensboro Bridge in 2009. (Credit: Bernard Ente) The Manhattan Bridge Brooklyn Plaza in 1916: The Statues Represent Manhattan and Brooklyn. Manhattan Bridge in 2009. (Credit: Bernard Ente) Brooklyn Bridge Flag in June 2011.

Yanev, Bojidar S. *Bridge Maintenance Life Cycle Cost Assessment*. Proceedings of First US-Japan Workshop on Life-Cycle Cost Analysis and Design of Civil Infrastructure Systems. American Society of Civil Engineers, 2000.

Yanev, Bojidar S. Deck Joints: the Weak Link in Bridge Structures and Life-Cycles. Transportation Research Board Annual Meeting, 2014.

Yanev, Bojidar S. Joints: the Weak Link in Bridge Structures and Lifecycles. Smart Structures and Systems, Volume 15, No. 3, 2015.

Yanev, Bojidar S. Williamsburg Bridge-12 Years After. Proceedings of Structures Congress 2001. American Society of Civil Engineers.

Yanev, Bojidar S., and Richards, George. *Bridge Maintenance in New York City: Network- and Project-Level Interaction*. Transportation Research Record: Journal of the Transportation Research Board, No. 2220, 2011.

Yanev, Bojidar S, and Richards, George A.C. *Designing Bridge Maintenance on the Network and Project Levels.* Structure and Infrastructure Engineering, Volume 9, Issue 4, 2013.

Yegian, M. K., Arzoumanidis, S., Kishore, K., Patel J., Jain, S. K., Strohman, B. P., and Edwards, N. Seismic Soil-Foundation Investigation of the Brooklyn Bridge. Proceedings of the Geotechnical Earthquake Engineering and Soil Dynamics IV Congress, American Society of Civil Engineers, 2008.

Yegian, Mishac. K., Arzoumanidis, Serafim, Strohman, Bryan P., Kishore, Kamal, and Patel, Jay. *Appraising the Brooklyn Bridge*. Civil Engineering, Volume 79, Issue 2, 2009.

#### For Children

Aaseng, Nathan. Construction: Building the Impossible. Oliver Press, Incorporated, 2000.

Adkins, Jan (illustrator). Bridges: From My Side to Yours. Roaring Brook, 2002.

Baxter, Nicola. Bridges. Scholastic Library Publishing, 2000.

Harris, David W. Truss Fun. BaHa Enterprises, 2nd edition, 2004.

Landau, Elaine. Bridges. (True Books: Buildings and Structures). Children's Press, 2000.

Levy, Matthys, and Panchyk, Richard. Engineering the City: How Infrastructure Works - Projects and Principles for Beginners. Chicago Review Press. 2000.

Macaulay, David. Building Big. Houghton Mifflin Company, 2000.

Manzano, Sonia, and Gibbons, Noelle S. (illustrator). The Lowdown on the High Bridge: The Story of How New York City Got its Water. Bronx Children's Museum, 2015.

Maxwell, Yolonda. Famous Bridges of The World: Measuring Length, Weight, And Volume. PowerKids Press, revised edition, 2005.

Nardo, Don. Roman Roads and Aqueducts. Gale Group, 2000.

Nelson, Robin. From Cement to Bridge (Start to Finish). Lerner Publications, 2004. (Also available in a Spanish edition.)

Parker, Janice. Science of Structures. Weigl Publishers, Incorporated, 2001.

Richards, Julie. Bridges. Smart Apple Media, 2003.

Simon, Seymour. Bridges (Seemore Readers). Chronicle Books, 2005. (Winner of the Oppenheim Toy Portfolio Best Book Award Gold Seal.)

Simon, Seymour, Fauteux, Nicole, and Cushman, Doug (illustrator). Let's Try It Out with Towers and Bridges: Hands-On Early-Learning Activities. Atheneum, 2003.

Squire, Ann O. Extreme Bridges (True Books). Children's Press, 2014.

Stone, Lynn M. *Bridges*. Rourke Publishing, 2002.

Vanderwarker, Peter, and Keller, John (editor). Big Dig: Reshaping an American City. Little, Brown Children's Books, 2001.

Weitzman, David. Skywalkers: Mohawk Ironworkers Build the City. Flash Point, 2010.

Willard, Keith, and Richardson, Adele. Bridges. The Creative Company, 2000.

Wolny, Philip. High Risk Construction Work: Life Building Skyscrapers, Bridges, and Tunnels. (Extreme Career Series). The Rosen Publishing Group, 2008.

Zaunders, Bo, and Munro, Roxie (illustrator). The Great Bridge-Building Contest. Harry N. Abrams, 2004.

#### **Teaching Children About Bridges- Internet**

ABCD's Bridge Design Tips for Kids. http://www.abcdpittsburgh.org/kids/kids.htm (accessed August 18, 2009).

American Institute of Steel Construction. Student Steel Bridge Competition. <a href="http://www.aisc.org/content.aspx?id=780">http://www.aisc.org/content.aspx?id=780</a> (College level) (accessed August 18, 2009).

ASCE. Welcome to ASCEville. http://content.asce.org/asceville/index.html (accessed November 30, 2009).

Brenner, Brian, Gravel, Brian, and Carroll, Julia. *Buildable Bridge Models*. {The models are available for use for engineering outreach for grades K-12} Proceedings of the ASEE New England Section 2006 Annual Conference. <a href="http://www.wpi.edu/News/Conf/ASEE/PDFs/1-e-brenner.pdf">http://www.wpi.edu/News/Conf/ASEE/PDFs/1-e-brenner.pdf</a> (accessed August 22, 2014).

Carroll, Douglas R. Bridge Engineering for the Elementary Grades. Department of Basic Engineering, University of Missouri-Rolla. <a href="http://web.umr.edu/~dougc/bridge/Web\_Instructions.htm">http://web.umr.edu/~dougc/bridge/Web\_Instructions.htm</a> (accessed November 19, 2007).

The Children's Museum of Memphis. Build-A-Bridge Classroom Activities. <a href="http://www.cmom.com/wp-content/uploads/2013/10/Build-A-Bridge-Curriculum-Guide.pdf">http://www.cmom.com/wp-content/uploads/2013/10/Build-A-Bridge-Curriculum-Guide.pdf</a> (accessed August 22, 2014).

Cooper, James D., and Munley, Eric. *Bridge Research: Leading The Way to The Future*. United States Department of Transportation - Federal Highway Administration - Turner Fairbanks Highway Research Center. <a href="http://www.tfhrc.gov/pubrds/summer95/p95su23.htm">http://www.tfhrc.gov/pubrds/summer95/p95su23.htm</a> (accessed November 19, 2007).

Cridlebaugh, Bruce S. Bridge Basics - A Spotter's Guide to Bridge Design. http://pghbridges.com/basics.htm (accessed November 19, 2008).

DeMember, Don. Discovery School.com. 2007. Bridges: Technology Lesson Plan (Grades 6 – 8). http://school.discoveryeducation.com/lessonplans/programs/bridges/index.html (accessed November 19, 2007).

East Prairie School Bridge Building Unit. http://www.eps.n-cook.k12.il.us/teched/bridge/bridge.htm (accessed November 19, 2007).

Engineering a Bridge Lesson (Grade: 4-6). http://www.scholastic.com/browse/lessonplan.jsp?id=1509 (accessed August 22, 2014).

Engineer Your Life Coalition. Engineer Your Life. http://www.engineeryourlife.org/ (accessed November 30, 2009).

Erickson, Lars. The Toothpick Bridge. http://www.pisymphony.com/toothpick/toothpick1.htm (accessed August 22, 2014)

Expedition Engineering (In association with the Institution of Structural Engineers Educational Trust). Bridge Builders' Teacher Pack. http://expeditionworkshed.org/assets/Bridge\_builders\_teacher\_pack.pdf (accessed August 22, 2014).

Expedition Engineering (In association with the Institution of Structural Engineers Educational Trust). *Bridge Building Competition: A Group Design, Build and Test Competition.* http://expeditionworkshed.org/assets/Bridge\_building\_competition.pdf (accessed August 22, 2014).

Expedition Engineering (In association with the Institution of Structural Engineers Educational Trust). *Materials Interactive Fact File*. <a href="http://expeditionworkshed.org/assets/Materials\_fact\_file.pdf">http://expeditionworkshed.org/assets/Materials\_fact\_file.pdf</a> (accessed August 22, 2014).

González, Luis Alberto Segovia, Morsch, Inácio Benvegnu, and Masuero, João Ricardo. *Didactic Games in Engineering Teaching – Case: Spaghetti Bridges Design and Building Contest.* (Proceedings of the 18<sup>th</sup> International Congress of Mechanical Engineering, 2005.) <a href="http://www.ppgec.ufrgs.br/segovia/espaguete/arquivos/COBEM2005-1756.pdf">http://www.ppgec.ufrgs.br/segovia/espaguete/arquivos/COBEM2005-1756.pdf</a> (for college teachers). (accessed August 18, 2009)

Harris Middle School. *Building Bridges: An Internet WebQuest on The Study of Bridges* http://volweb.utk.edu/Schools/bedford/harrisms/bridge.htm (accessed August 18, 2009).

History of Wire Rope in Suspension Bridges - The Roebling Story. <a href="http://www.inventionfactory.com/history/RHAgen/rstory/rsfound.html">http://www.inventionfactory.com/history/RHAgen/rstory/rsfound.html</a> (accessed November 19, 2007).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. *Curricular Unit: Bridges. Lesson 1: Bridging the Gaps. (Grade 8).* <a href="http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson01.xml">http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson01.xml</a> (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. Hands-on Activity: Bridge Types: Tensile and Compressive Forces. (Grade 8).

http://www.teachengineering.org/view\_activity.php?url=http://www.teachengineering.org/collection/cub\_/activities/cub\_brid/cub\_brid\_less\_on01\_activity1.xml&rights=true#image1.jpg (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. *Hands-on Activity: Straw Bridges.* (*Grade 8*). <a href="http://www.teachengineering.org/view\_activity.php?url=collection/cub\_/activities/cub\_brid/cub\_brid\_lesson01\_activity2.xml">http://www.teachengineering.org/view\_activity.php?url=collection/cub\_/activities/cub\_brid/cub\_brid\_lesson01\_activity2.xml</a> (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. *Curricular Unit: Bridges. Lesson 2: Designing Bridges.* (Grade 8). <a href="http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson02.xml">http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson02.xml</a> (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. *Hands-on Activity: Load It Up! (Grade 8).*<a href="http://www.teachengineering.org/view\_activity.php?url=collection/cub\_/activities/cub\_brid/cub\_brid\_lesson02\_activity1.xml">http://www.teachengineering.org/view\_activity.php?url=collection/cub\_/activities/cub\_brid/cub\_brid\_lesson02\_activity1.xml</a> (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. *Curricular Unit: Bridges. Lesson 3: A Good Foundation.* <a href="http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson03.xml">http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson03.xml</a> (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. *Hands-on Activity: Shallow and Deep Foundations. (Grade 8*).

http://www.teachengineering.org/view\_activity.php?url=collection/cub\_/activities/cub\_brid/cub\_brid\_lesson03\_activity1.xml (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. *Curricular Unit: Bridges. Lesson 4: Strength of Materials.* (Grade 8). <a href="http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson04.xml">http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson04.xml</a> (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. *Hands-on Activity: Breaking the Mold. (Grade 8).* http://www.teachengineering.org/view\_activity.php?url=collection/cub\_/activities/cub\_brid/cub\_brid\_lesson04\_activity1.xml (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. *Curricular Unit: Bridges. Lesson 5: Show Me the Money. (Grade 8).* <a href="http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson05.xml">http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson05.xml</a> (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. *Hands-on Activity: Cost Comparisons. (Grade 8).* http://www.teachengineering.org/view\_activity.php?url=collection/cub\_/activities/cub\_brid/cub\_brid\_lesson05\_activity1.xml (accessed August 22, 2014)

Johns Hopkins Virtual Laboratory: Bridge Designer. http://www.jhu.edu/virtlab/bridge/truss.htm (accessed August 18, 2009).

Junior Engineering Technical Society. http://www.jets.org/students/index.cfm (accessed November 30, 2009).

Lalupu, Heather, and Burgoyne, Chris (In association with the Institution of Structural Engineers Educational Trust). *Teaching Material for Use in Schools - Bridge Design*. <a href="http://www-civ.eng.cam.ac.uk/cjb/schools/bridges1/index.html">http://www-civ.eng.cam.ac.uk/cjb/schools/bridges1/index.html</a> (accessed August 22, 2014).

National Academy of Engineering. Engineer Girl. The EngineerGirl website is part of an NAE project to bring national attention to the opportunity that engineering represents to all people at any age, but particularly to women and girls. <a href="http://www.engineergirl.org/">http://www.engineergirl.org/</a> (accessed August 11, 2011).

National Building Museum. Bridge Basics: Educator's Resource Packet (Grades 4 – 8). <a href="http://www.nbm.org/assets/pdfs/youth-education/bridges\_erpacket.pdf">http://www.nbm.org/assets/pdfs/youth-education/bridges\_erpacket.pdf</a> (accessed August 22, 2014)

The National Partnerships for Afterschool Science – A Project of the Education Development Center. Design It! Engineering in After School Programs: Paper Bridges. <a href="http://npass2.edc.org/sites/npass2.edc.org/files/Paper%20Bridges%20Sample.pdf">http://npass2.edc.org/sites/npass2.edc.org/sites/npass2.edc.org/files/Paper%20Bridges%20Sample.pdf</a> (accessed August 22, 2014)

PBS Bridge Basics. 2000 – 2001. Building Big: Bridges. http://www.pbs.org/wqbh/buildingbig/bridge/ (accessed November 19, 2007).

Pelland, Beth C., and Fischer, Gideon. *The Golden Gate Bridge: From U.S. History to Physics. (Part of the Wright Center for Science Education Innovative Curriculum Series.)* http://goldengatebridge75.org/assets/ggb75-pdfs-docs/wright-ggb.pdf (accessed August 22, 2014).

Popsicle Bridge. http://www.tryengineering.org/lesson\_detail.php?lesson=56 (accessed December 30, 2010).

Ranson, Anna. Designing and Building Bridges Activity. <a href="http://theimaginationtree.com/2013/04/designing-and-building-bridges-activity.html">http://theimaginationtree.com/2013/04/designing-and-building-bridges-activity.html</a> (accessed August 22, 2014).

Reitherman, Robert, Anagnos, Thalia, and Meluch, Wendy. Building Bridges Between Civil Engineers and Science Museums. Consortium of Universities for Research in Earthquake Engineering, 2008. <a href="http://www.curee.org/projects/ce-museums/docs/cem\_monograph.pdf">http://www.curee.org/projects/ce-museums/docs/cem\_monograph.pdf</a> (accessed August 22, 2014).

Ryan. V. Structures (42 lessons). http://www.technologystudent.com/struct1/struindex.htm (accessed August 22, 2014).

Schunn, Christian D. How Kids Learn Engineering: The Cognitive Science Perspective. The Bridge on K-12 Engineering Education, Volume 39, Number 3, Fall 2009. https://www.nae.edu/Publications/Bridge/16145/16214.aspx (accessed August 22, 2014).

Science Buddies Staff. The Effect of Bridge Design on Weight Bearing Capacity. <a href="http://www.sciencebuddies.org/science-fair-projects/project\_ideas/CE\_p011.shtml#summary">http://www.sciencebuddies.org/science-fair-projects/project\_ideas/CE\_p011.shtml#summary</a> (accessed August 22, 2014).

Society of Women Engineers. SWE Scholarships. The SWE Scholarship Program provides financial assistance to women admitted to accredited baccalaureate or graduate programs, in preparation for careers in engineering, engineering technology and computer science. <a href="http://societyofwomenengineers.swe.org/index.php?option=com\_content&task=view&id=222&Itemid=229">http://societyofwomenengineers.swe.org/index.php?option=com\_content&task=view&id=222&Itemid=229</a> (accessed August 11, 2011).

Unicycle NYC Bridge Tour. Unicycle enthusiasts Keith Nelson and Rob Hickman are on a mission to cross every bridge in New York City -- all 2,078 of them -- on one wheel. <a href="http://unicyclenycbridgetour.blogspot.com">http://unicyclenycbridgetour.blogspot.com</a> (accessed November 12, 2010)

U.S. Department of Transportation. DOT Women and Girls Initiative - Pilot Entrepreneurial Training and Technical Assistance - Spelman College. <a href="http://www.dot.gov/wg/spelman.html">http://www.dot.gov/wg/spelman.html</a> (accessed September 25, 2009).

U. S. Millitary Academy at West Point. West Point Bridge Design Contest. http://bridgecontest.usma.edu/ (accessed November 19, 2007).

Washington State Department of Transportation. Tacoma Narrows Bridge Lesson Plan. (Grades 1 - 4).

http://www.wsdot.wa.gov/tnbhistory/Lessons/BridgeCrossing.htm (accessed August 22, 2014).

WGBH. 1997. Nova Online - Super Bridge. http://www.pbs.org/wgbh/nova/bridge/ (accessed November 19, 2007).

Yale-New Haven Teachers Institute. 2001, Volume V. Bridges: Human links and innovations. <a href="http://www.yale.edu/ynhti/curriculum/units/2001/5/">http://www.yale.edu/ynhti/curriculum/units/2001/5/</a> (accessed November 19, 2007).

#### For Children And Young Adults- Careers

Baine, Celeste. Is There A Civil Engineer Inside You? A Student's Guide to Exploring Civil Engineering. Professional Publications, Incorporated, 2004.

Baine, Celeste. Is There A Civil Engineer Inside You? A Student's Guide to Exploring Careers in Civil Engineering and Civil Engineering Technology. Bonamy Publishing; Kindle edition, 2012.



Assistant Mechanical Engineer Vera Ovetskaya. Construction Project Manager Beatriz Duran and Administrative Engineer Bhaskar Gusani in the Battery Park Underpass. (Credit: Tamara Berlyavsky) Brooklyn Bridge Engineer-in-Charge Ohene Duodu. Administrative Manager Christopher Brathwaite Assisting in Strain Gauge Balance Testing on Unionport Bridge in October 2010.



Associate Project Manager Richard Solomon. Component Rehabilitation Engineer Malgorzata Banka. Assistant Civil Engineer Andrew Hoang. (Credit: Peter Basich) Civil Engineer Tiffany Wong on the Brooklyn Bridge Traveler. (Credit: Andrew Hoang)

Bulleit, William M. What Makes an Engineering Education an Engineering Education? Proceedings of the Structures Congress 2012.

Canel, Annie, Oldenziel, Ruth, and Zachman, Karin, (editors). Crossing Boundaries, Building Bridges: Comparing the History of Women Engineers, 1870s-1990s. Gordon & Breach Publishing Group, 2000.

Hatch, Sybil E., and Vanoni, Vito A. (Editor). Changing Our World: True Stories of Women Engineers (ASCE Manuals and Reports on Engineering Practice, No. 109.) American Society of Civil Engineers, 2006.

Layne, Margaret Edith (editor). Women in Engineering: Pioneers and Trailblazers. American Society of Civil Engineers, 2009.

Layne, Margaret Edith (editor). Women in Engineering: Professional Life. American Society of Civil Engineers, 2009.

Pasternak, Ceel, and Thornburg, Linda. Cool Careers for Girls in Construction. Impact Publications, 2000.



Civil Engineers Tiffany Wong and Maria Mikolajczyk, Civil Engineer Aldona Ulanecka, Civil Engineer Simona Finkelstein, Staff Analyst Keisha Atkins, Civil Engineer Malgorzata Banka, and Associate Staff Analyst Raisa Rapoport. (Credit: Jagtar Khinda) Executive Director of Management and Support Services Dorothy Roses. Associate Staff Analyst Vera Ribakove and Community Assistant Shahnaz Begum.



Deputy Director of In-House Painting Earlene Powell. (Credit: Michele N. Vulcan) Assistant Highway Transportation Specialist Ajda Ozyurt. Project Manager Tamara Berlyavsky, Construction Project Manager Beatriz Duran. Assistant Mechanical Engineer Nancy Guernsey. . (Credit: Kamran Sikandar). Computer Associate (Software) Laurie Oberson. (Credit: Michele N. Vulcan) Associate Staff Analyst Barbara Pedersen. Assistant Civil Engineer Olga Goranova-Rouyne, Civil Engineer Svetlana Kaganovskaya, and Assistant Civil Engineers Evgenia Campbell and Elena Marresova. (Credit: Paul Schwartz)

Society of Women Engineers Corporate Partnership Council. Be That Engineer: Inspiration and Insight from Accomplished Women Engineers: Submissions from Members of the Society of Women Engineers' Corporate Partnership Council (CPC). Society of Women Engineers, 2014.

Walesh, Stuart G. Engineering Your Future: The Professional Practice of Engineering. Wiley, 2012.

Weingardt, Richard G. Engineering Legends: Great American Civil Engineers (32 Profiles of Inspiration and Achievement). American Society of Civil Engineers, 2005.

Williams, F. Mary, and Emerson, Carolyn J. Becoming Leaders: A Practical Handbook for Women in Engineering, Science, and Technology. American Society of Civil Engineers, ASME Press, and Society of Women Engineers, 2008.

#### For Children - Brooklyn Bridge

Bildner, Phil, and Pham, LeUyen (illustrator). Twenty-One Elephants. Simon & Schuster Children's Publishing, 2005.

Curlee, Lynn. Brooklyn Bridge. Simon & Schuster Trade, 2001.

Cobblestone Magazine: Discover American History. The Great Bridge (Special Issue Focus on the Brooklyn Bridge). March 2010, Volume 31, Number 3

Mann, Elizabeth, and Witschonke, Alan (illustrator). The Brooklyn Bridge: The Story of the World's Most Famous Bridge and the Remarkable Family That Built It. Mikaya Press, 2006.

Muaddi Darraj, Susan. Brooklyn Bridge. (Building America: Now and Then Series.) Chelsea House Publishers, 2009.

Prentzas, G. S. The Brooklyn Bridge (Building America: Then and Now). Chelsea House Publications, 2009.

Prince, April Jones, and Roca, Francois (illustrator). Twenty-One Elephants and Still Standing. Houghton Mifflin, 2005. (Also available in a Spanish edition.)

Ratliff, Tom, and Bergin, Mark. You Wouldn't Want to Work on the Brooklyn Bridgel: An Enormous Project That Seemed Impossible. (You Wouldn't Want to...Series) Scholastic Library Publishing, 2009.

Tieck, Sarah. Brooklyn Bridge. ABDO Publishing Company, 2008.

Weiner, Vicki. The Brooklyn Bridge: New York City's Graceful Connection. Children's Press, 2004.



Brooklyn Bridge: 2009 Tower Closeup, 2010 View, 2010 Biennial Inspection. (2009 Credit: Emily Goodman, 2010 Credit: Jagtar Khinda, Inspection Credit: NYSDOT)

#### Shorts, Video, Videodisc, and DVD

Across Brooklyn Bridge. American Mutoscope & Biograph, silent black and white, 1899.

Barnes, Michael. Nova: Secrets of Lost Empires II - China Bridge. WGBH Boston, 2000.

Bitzer, G.W. "Billy". *The Opening of the Williamsburg Bridge*. American Mutoscope & Biograph, silent black and white,1904. Library of Congress - The Life of A City: Early Films of New York, 1898 to 1906. <a href="http://lccn.loc.gov/00694395">http://lccn.loc.gov/00694395</a> (accessed May 29, 2014).

Bonine, Robert K. Parade of Horses on Speedway. American Mutoscope and Biograph Company, 1903. (High Bridge and Washington Bridge.) Library of Congress - The Life of A City: Early Films of New York, 1898 to 1906. http://lccn.loc.gov/00694402 (accessed May 29, 2014).

Burns, Ken. Ken Burns' America: Brooklyn Bridge. PBS Home Video, DVD-2003, Video - 1982.

Fuller, Robert G., Zollman, Dean A., and Campbell, Thomas C. *The Puzzle of the Tacoma Narrows Bridge Collapse.* John Wiley & Sons, Videodisc - 1982.

Klein, Larry. Building Big with David Macaulay: Bridges. WGBH Records, 2000, WGBH Boston, DVD, 2004.

Bob the Builder: On Site - Roads and Bridge. Lyons/Hit Entertainment, DVD, 2008. (For Children.)

Classic Famous Bridge Films DVD: 1930 - 1950s Golden Gate Suspension Bridge, Bridge Collapse Disaster, & Bridge Construction, Design And Engineering History Pictures Films. Quality Information Publishers Inc., DVD, 2007.

Design For Safety & Quality: The Inspection and Auditing Process of Bridges, and Some Important Lessons Learned. Cimwareukandusa.com, DVD, 2006.

Eckerson Jr., C. Streetfilms: Counting Bicyclists on NYC's Manhattan Bridge! <a href="http://www.streetfilms.org/counting-bicyclists-on-nycs-manhattan-bridge/">http://www.streetfilms.org/counting-bicyclists-on-nycs-manhattan-bridge/</a> (accessed December 31, 2014).

Eckerson Jr., C. Streetfilms: East River Bridges: 100 Years of Free Rides Take Their "Toll." <a href="http://www.streetfilms.org/east-river-bridges-100-free-years-take-a-toll/">http://www.streetfilms.org/east-river-bridges-100-free-years-take-a-toll/</a> (accessed October 6, 2011).

Eckerson Jr., C., and Press, E. Streetfilms: NYC Bike to Work Day, 2009. http://www.streetsblog.org/2009/05/15/streetfilms-nyc-bike-to-work-day-2009/ (accessed December 1, 2009).

Eckerson Jr., C. Streetfilms: Pulaski Bridge: Six Lanes for Cars; One Cramped Path for Bikes and Peds. <a href="http://vimeo.com/76018201/">http://vimeo.com/76018201/</a> (accessed November 14, 2013).

Eckerson Jr., C. Streetfilms: The Queensboro Bridge Turns 100. <a href="http://www.streetsblog.org/2009/06/01/streetfilms-the-queensboro-bridge-turns-100/">http://www.streetsblog.org/2009/06/01/streetfilms-the-queensboro-bridge-turns-100/</a> (accessed December 1, 2009).

Eckerson Jr., C. Streetfilms: The Sands Street Bike Path, a New Kind of Bridge Approach. <a href="http://www.streetsblog.org/2009/09/25/streetfilms-the-sands-street-bike-path-a-new-kind-of-bridge-approach/">http://www.streetsblog.org/2009/09/25/streetfilms-the-sands-street-bike-path-a-new-kind-of-bridge-approach/</a> (accessed December 1, 2009).

Eckerson Jr., C. Streetfilms: Turning NYC's Oldest Bridge Into Its Newest Bike-Ped Amenity. [High Bridge] <a href="http://www.streetsblog.org/2009/11/30/streetfilms-turning-nycs-oldest-bridge-into-its-newest-bike-ped-amenity/">http://www.streetsblog.org/2009/11/30/streetfilms-turning-nycs-oldest-bridge-into-its-newest-bike-ped-amenity/</a> (accessed December 1, 2009).

Extreme Engineering Season 2 - Episode 5: Oakland Bay Bridge. Discovery, DVD, 2006.

Extreme Engineering Season 2 - Episode 6: Cooper River Bridge. Discovery, DVD, 2006.

Farrell, Stephen. *An Umbrella's View of Snowy New York*. <a href="http://www.nytimes.com/2015/03/06/nyregion/video-an-umbrellas-view-of-snowy-new-york.html">http://www.nytimes.com/2015/03/06/nyregion/video-an-umbrellas-view-of-snowy-new-york.html</a> (accessed March 6, 2015.)

Maillart's Bridges a.k.a. Maillarts Brücken. 451, DVD, 2008.

Mega Movers - Massive Bridges. A&E Home Video, DVD, 2007. Modern Marvels: Brooklyn Bridge. A&E Home Video, DVD, 2005.

Modern Marvels: The Golden Gate Bridge. A&E Entertainment, Video, 1994, A & E Home Video, DVD, 2004.

Modern Marvels: George Washington Bridge. A&E Home Video, DVD, 2006.

Modern Marvels: New York Bridges. A&E Home Video, DVD, 2006.

Modern Marvels: The World's Longest Bridge. A&E Home Video, DVD, 2006.

New Brooklyn to New York via Brooklyn Bridge, No. 1and No. 2. Edison Manufacturing Company, silent black and white, 1899.

Nova: Super Bridge. WGBH Boston Video, 1997, DVD, 2007. Oregon Covered Bridges. Travelvideostore.com, DVD, 2005.

Panorama of Brooklyn Bridge, River Front, and Tall Buildings from the East River. Edison Manufacturing Company, silent black and white, 1901.

Passengers Descending from the Brooklyn Bridge. Lumière, silent black and white, 1896.

Porter, Edwin S. *Panorama of Blackwell's Island, N.Y.* (Shows the piers for the Queensborough or 59<sup>th</sup> Street Bridge beginning at Frame 2388.) Thomas A. Edison, Inc., 1903. Library of Congress - The Life of A City: Early Films of New York, 1898 to 1906. <a href="http://lccn.loc.gov/00694366">http://lccn.loc.gov/00694366</a> (accessed May 29, 2014).

Porter, Edwin S. *Panorama Water Front and Brooklyn Bridge From East River*. (Shows the Brooklyn Bridge beginning at Frame 4202.) Thomas A. Edison, Inc., 1903. Library of Congress - The Life of A City: Early Films of New York, 1898 to 1906. <a href="http://lccn.loc.gov/00694364">http://lccn.loc.gov/00694364</a> (accessed May 29, 2014).

A Remarkable Fire (Brooklyn Bridge). American Mutoscope & Biograph, silent black and white, 1902.

Ross, Daniel, and Rezvani, Bijan. *The City Concealed: High Bridge.* <a href="http://www.thirteen.org/thecityconcealed/2011/01/11/high-bridge/">http://www.thirteen.org/thecityconcealed/2011/01/11/high-bridge/</a> (accessed June 9, 2015)

Smith, James Blair. *Opening of New East River Bridge, New York.* (Opening of Williamsburg Bridge.) Thomas A. Edison, Inc., 1903. Library of Congress - The Life of A City: Early Films of New York, 1898 to 1906. <a href="http://lccn.loc.gov/00694396">http://lccn.loc.gov/00694396</a> (accessed May 29, 2014).

View of Brooklyn Bridge from a Ferryboat. American Mutoscope & Biograph, silent black and white, 1899.

Woolard, William. Wonder of Science: Bridging the Future. DigicomTV, DVD, 2009.



Manhattan Bridge Plaque Detail. (Credit: Peter Basich)

Revised 2/25/15